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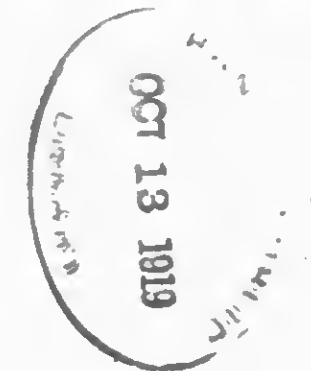
OFFICIAL
GAZETTE
UNITED STATES
PATENT OFFICE
VOL. 264 - 265

JULY - AUGUST
1919

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OFFICIAL GAZETTE

OF THE



UNITED STATES PATENT OFFICE.

VOLUME CCLXIV.

JULY.

1919.

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ERRATA.

- 1,308,231, page 41, in heading, assignment, after the word "assignor" insert the words *of one-half*.
 1,308,474, page 85, first claim, line 4, for the word "rotation" read *relation*.
 1,309,796, page 396, first claim, line 13, for the word "valve" read *valve*.
 1,311,210, page 720, in heading, after residence of patentees, insert the words *assignors to Bradney Machine Company, Inc., Middletown, N. Y., a Corporation of New York*.
 1,311,353, page 746, strike out all after the number, heading, drawing, and claim and insert the word *WITHDRAWN*.
 53,590, (design,) page 514, in heading, after residence of patentee, insert *assignor to A. C. Clark & Company, Chicago, Ill., a Corporation of Illinois*.
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THE OFFICIAL GAZETTE OF THE United States Patent Office.

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Interference Notice

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

Washington, D. C., June 20, 1919.

Romm & Company, their assigns or legal representatives,
take notice:

An interference having been declared by this Office between the applications of John Wanamaker, New York, of Broadway and Tenth streets, New York, N. Y., and Diana Waist Co., Inc., of 22 West Fifteenth street, New York, N. Y., for registration of trade-marks and trade-mark registered July 2, 1907, No. 63,738, to Romm & Company, of 23 East Eighth street, New York, N. Y., and a notice of such declaration sent by registered mail to said Romm & Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Romm & Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Adverse Decisions in Interference.

PATENT No. 1,197,343.

On May 27, 1919, a decision was rendered that Harry Charlesworth was not the first inventor of the subject-matter covered by claim 2 of his Patent No. 1,197,343, subject, "Incubator-brooder system," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,265,987.

On May 31, 1919, a decision was rendered that William H. Banzett was not the first inventor of the subject-matter covered by claims 1, 2, 3, 4, 9, and 11 of his Patent No. 1,265,987, subject, "Machines for making window-envelopes," and no appeal having been taken within the time allowed such decision has become final.

Amendments.

RULE 73. In every amendment the exact word or words to be stricken out or inserted in the application must be specified and the precise point indicated where the erasure or insertion is to be made. All such amendments must be on sheets of paper separate from the papers previously filed, and written on but one side of the paper. Erasures, additions, insertions, or mutilations of the papers and records must not be made by the applicant.

Amendments and papers requiring the signature of the applicant must also, in case of assignment of an undivided part of the invention, be signed by the assignee. (Rule 11, 107.)

Notaries Public.

[PUBLIC—No. 302.]

An act to amend section five hundred and fifty-eight of the Code of Law for the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled: That section five hundred and fifty-eight of the Code of Law for the District of Columbia, relating to notaries public, be amended by adding at the end of said section the following: "Provided, That the appointment of any person as such notary public, or the acceptance of his commission as such, or the performance of the duties thereunder, shall not disqualify or prevent such person from representing clients before any of the Departments of the United States Government in the District of Columbia or elsewhere, provided such person so appointed as a notary public who appears to practice or represent clients before any such Department is not otherwise engaged in Government employ, and shall be admitted by the heads of such Departments to practice therein in accordance with the rules and regulations prescribed for other persons or attorneys who are admitted to practice therein: And provided further, That no notary public shall be authorized to take acknowledgments, administer oaths, certify papers, or perform any official acts in connection with matters in which he is employed as counsel, attorney, or agent or in which he may be in any way interested before any of the Departments aforesaid."

Approved, June 20, 1906.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 27, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 15	May 8	319
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Jan. 31	Mar. 22	871
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 8	Dec. 17	131
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Feb. 12	May 21	443
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Mangle-Making; Music; Printed Matter; Tying Cords or Strands.	Mar. 21	Jan. 27	178
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Mar. 15	Mar. 18	328
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	Apr. 23	May 6	282
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 26	Apr. 19	173
271	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Feb. 7	Apr. 11	294
228	10. Carriages and Wagons; Motor Vehicles.	Feb. 21	Apr. 28	664
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 12	Apr. 26	258
222	12. Journal-Boxes, Fullers, and Shafting; Machine Elements.	Dec. 10	Dec. 2	1042
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 26	May 22	632
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 20	Mar. 17	186
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Feb. 28	May 1	554
111	16. Radiant Energy; Telegraphy; Telephony.	Feb. 8	Feb. 12	679
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 10	Apr. 24	241
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 10	Apr. 3	460
338	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 21	Apr. 1	273
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	May 17	May 16	258
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Dec. 10	Mar. 13	280
249	22. Aeronautics; Firearms; Ordnance.	May 1	May 17	266
217	23. Accoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 14	May 3	346
141	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 2	Mar. 14	477
315	25. Agitating; Batching; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 10	May 17	119
106	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Nov. 15	Feb. 6	658
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 7	Apr. 22	424
225	28. Internal-Combustion Engines.	Feb. 6	Apr. 29	561
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 28	613
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Apr. 21	June 4	299
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 20	Mar. 5	323
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Jan. 2	Apr. 10	662
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roads and Pavements; Roofs.	Feb. 4	Feb. 21	397
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 2	May 14	249
57	35. Buckles, Buttons, Clips, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	May 16	June 2	318
234	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	Apr. 28	Mar. 15	653
197	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Feb. 22	Mar. 31	640
376	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice-Harvesting; Stationery; Stone-Working; Wells.	May 23	May 5	178
230	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Dec. 2	Dec. 26	540
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 21	Mar. 24	404
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 1	Mar. 8	384
111	42. Electricity, Conductors; Electricity, Transmission to Vehicles; Electricity, Conduits; Electric Signaling.	Mar. 4	Feb. 24	474
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 8	May 3	114
263	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	Apr. 22	May 9	113
379	45. Churches; Lubrication; Motors; Railway Brakes.	Mar. 14	Mar. 20	250

Oldest new case, Nov. 15; oldest amended, Dec. 3.
Total number of applications awaiting action.....

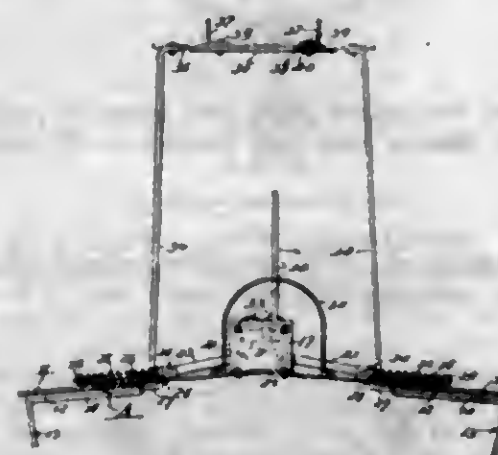
17,735

103	TRADE-MARKS, DESIGNS, LABELS AND PRINTS			
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	Designs.....	Apr. 29	May 19	563
	Labels and Prints.....	May 27	May 29	297

PATENTS

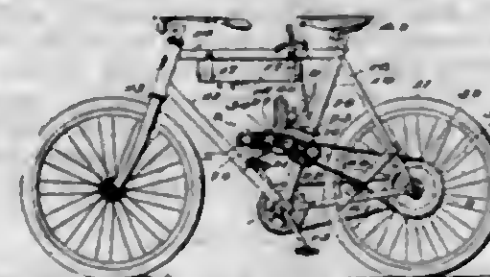
GRANTED JULY 1, 1919.

1,308,021. BRICK-CARRIER. WILLIAM H. ALLEN, Mokenzie, Ill., assignor of one-third to Ernest A. Kramer, Grant Park, Ill. Filed May 10, 1917. Serial No. 167,781. 4 Claims. (Cl. 57-9.)



1. In a device of the character described, a frame of substantially arched conformation, guides on the under face of said frame and on opposite sides of the peak of the arch of the latter, a plurality of gripping jaws provided each with slides engaging the said guides, a hand lever pivotally mounted on the frame, means for engagement by the hand lever to lock it in various angular positions, and positive connections between the hand lever and the gripping jaws whereby opposed jaws may be moved toward or away from each other so as to effect a gripping operation on a row of bricks or the release of such row after having once been gripped.

1,308,022. MOTOR-BICYCLE. TYVALD CHRISTENSEN, Port Richmond, N. Y. Filed Jan. 24, 1919. Serial No. 272,887. 2 Claims. (Cl. 180-33.)

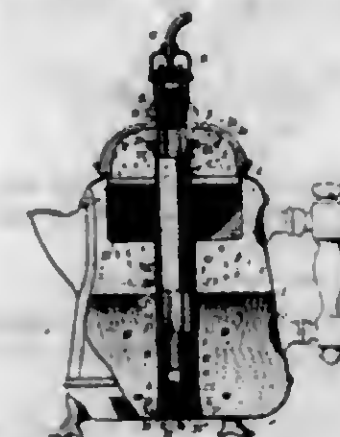


1. A clutch mechanism for a bicycle motor including a tubular casing associated with a bicycle frame and motor, a hollow shaft disposed through the casing, a sprocket wheel rigidly mounted on one end of the shaft, a second shaft rotatably and slidably disposed within the first shaft, a sprocket wheel on the end of said shaft adjacent the first sprocket and movable toward and away from said first sprocket, friction elements carried by said sprockets, and means for moving the second sprocket toward and away from the first sprocket.

1,308,023. PERCOLATOR. THEODORE ANTHEYER, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 28, 1913. Serial No. 757,354. Renewed Nov. 16, 1917. Serial No. 202,424. 10 Claims. (Cl. 219-41.)

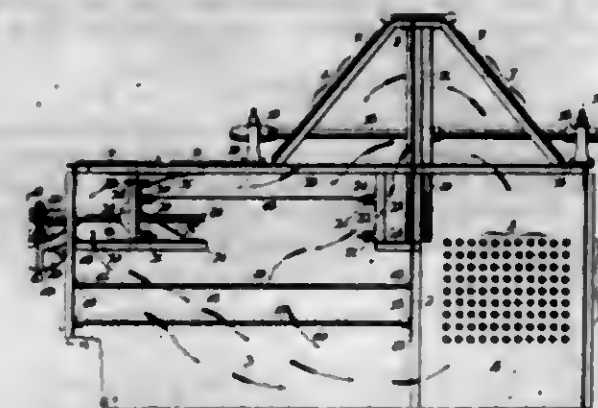
1. A percolator embodying a fountain tube and means for holding said tube in position, a removable heating

member having an electric heating element of tubular form disposed in the bottom thereof, said member being concentrically disposed in and slightly spaced from said



tube, supply conductors for said element disposed within said heating member, and a gravity-type valve disposed in the bottom of said tube.

1,308,024. DRYING-MACHINE. THOMAS ALLSOP and WALTER W. SIMON, Philadelphia, Pa., assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1918. Serial No. 120,615. 2 Claims. (Cl. 26-16.)

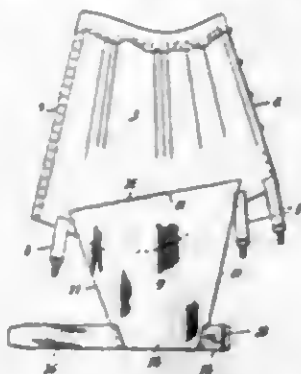


1. A drying machine including in combination, a drying compartment, paired chainways extending longitudinally of said compartment, means for supporting one of said chainways in fixed position in said compartment, and means for supporting the other chainway whereby it may be adjusted toward and from the first-named chainway, means for bodily shifting the adjustable chainway, endless chains running in each pair of chainways, each chain having laterally projecting extensions formed integral with the chain links, and pins carried by the outer ends of said extensions.

1,308,025. ATTACHMENT FOR CORSETS. ANNA M. ANCHOSTER, New York, N. Y. Filed Oct. 22, 1917. Serial No. 197,768. 2 Claims. (Cl. 2-189.)

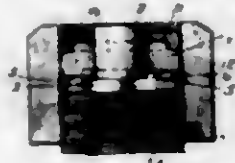
1. As a new article of manufacture, an attachment for corsets comprising a body portion of elastic material, one for each side of the corset, said body portion having four edges, a top edge long enough to extend from near

the front edge of the corset to near the rear edge of the corset, the front edge of the body portion being longer than the rear edge thereof and the bottom edge being



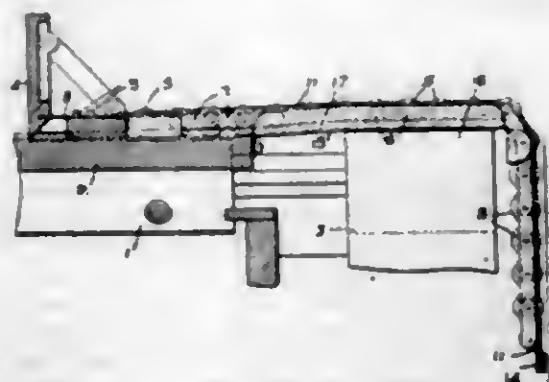
substantially shorter than the said top edge, and means for securing the said bottom edge to the leg of the wearer below the knee.

1,308,026. LOCK-BOLT. EMIL C. ANDERSON, Denver, Colo. Filed Feb. 18, 1918. Serial No. 217,972. 7 Claims. (Cl. 151-19.)



1. A lock-bolt comprising a bolt reduced at the threaded end to form a projecting guiding stem, the annular face about the stem provided with a shouldered cam face, in combination with a cooperating part of a diameter corresponding to that of the bolt and similarly screw-threaded, provided with a cooperating and shouldered cam face and a cooperating part for the guiding stem, and means for engaging a tool with said part to rotate the same.

1,308,027. SAFETY-GUARD FOR MACHINE-TOOLS. CARL B. AUEL and DAVID C. FULNEX, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 18, 1916. Serial No. 132,053. 12 Claims. (Cl. 144-231.)

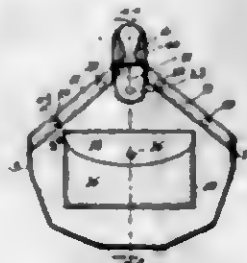


1. A guard for machine tools and the like comprising a series of flanged rollers flexibly connected together and a flexible apron supported upon the said rollers.

1,308,028. COMFORT-BAG. KATHARINE S. BANNING, Los Angeles, Calif. Filed Jan. 16, 1918. Serial No. 212,140. Renewed May 12, 1919. Serial No. 296,544. 2 Claims. (Cl. 150-7.)

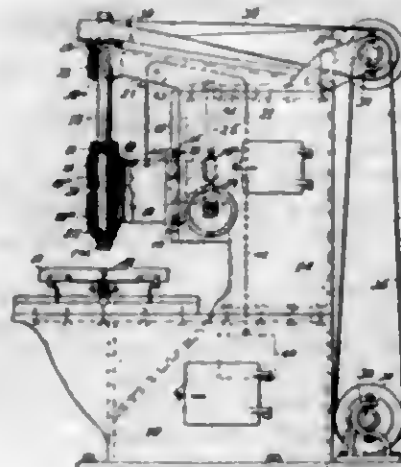
1. A bag comprising side members, straps fastened to the side members respectively and forming handles,

spaced flaps on one of the side members, a flap on the other side member between the first named flaps and adapted to extend through the handle of the side mem-



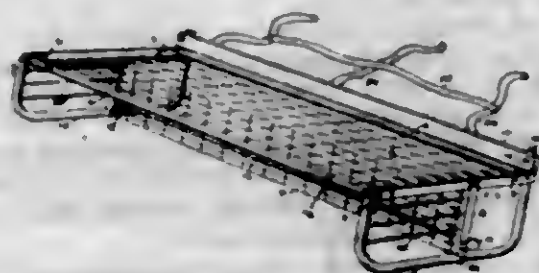
ber having the spaced flaps, and means to detachably fasten the flaps of each side member to the other side member.

1,308,029. MILLING-MACHINE. WILLIAM H. BARKWILL, Akron, Ohio. Filed Apr. 19, 1918. Serial No. 229,494. 4 Claims. (Cl. 90-16.)



1. In a milling machine, a bed, an upstanding stand and thereon provided with a guide-way, a head engaging said guide-way and mounted for vertical movement, a bearing at the front of said head and movable with said head, a fixed bearing supported at the top of said stand and directly above the bearing carried by the movable head, a spindle driving member rotatably supported in said bearing, and a vertical rotary spindle journaled in the bearing of said head and in said upper spindle driving member and having a key-way connection with the latter.

1,308,030. COMBINED BED AND SEAT. JOSEPH D. BALL, San Francisco, Calif. Filed July 24, 1915. Serial No. 41,688. 3 Claims. (Cl. 5-48.)



1. A collapsible combined bed and seat, comprising a bed frame, a seat pivotally attached thereto on a longitudinally-extending axis, end pieces pivoted to the bed frame to swing either behind it and closely adjacent thereto, or forwardly thereof, and means for securing the said end pieces in the latter position the ends of the seat

extending from the bed frame at an angle such that the bed frame can form a back for the seat, one end of each end piece being extended behind the bed frame to form stable supports therefor when used as a seatback.

1,308,031. DISPLAY-RACK. MARK J. BALL, Minneapolis, Minn., assignor to Leo Shapiro & Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 24, 1916. Serial No. 133,160. 1 Claim. (Cl. 211-24.)



The combination with two aligned members to be connected, of a plate folded upon itself to afford a longitudinally divided coupling sleeve to receive the abutting ends of the members, the end portions of the plate outward of the sleeves being in diverging relation to afford a holder, each of said members having a lug interlocked with a seat in the coupling sleeve to hold the members against axial separation and also to hold the coupling sleeve against rotation on the members.

1,308,032. FLASH-LIGHT. BERNARD BARNETT, New York, N. Y., assignor to Traders Metal Goods Co. Inc., New York, N. Y., a Corporation of New York. Original application filed Feb. 7, 1914, Serial No. 817,090. Divided and this application filed Jan. 19, 1918. Serial No. 212,582. 14 Claims. (Cl. 240-8.5.)

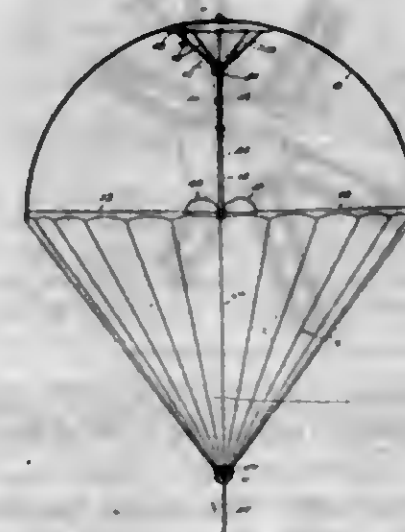


13. A portable electric light comprising an elongated battery-containing and lamp-carrying casing, a circuit-controlling slide mounted on the casing for sliding circuit-controlling movement longitudinally of the casing, and means carried by the slide for supporting the light and adapted to maintain the slide in a desired circuit-controlling position by reason of the weight of the light.

1,308,033. PARACHUTE. FRANK W. BENTON, Wilson, N. C. Filed Jan. 6, 1919. Serial No. 290,779. 9 Claims. (Cl. 244-21.)

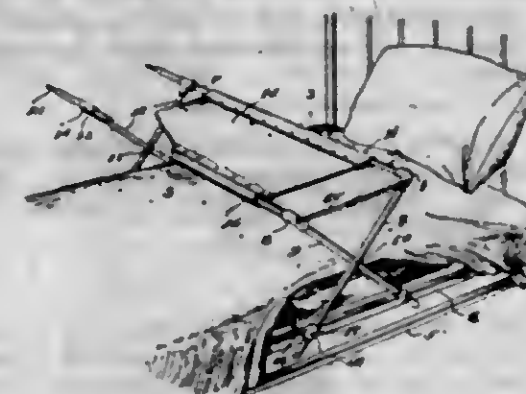
6. A parachute including the usual body having an opening therein, a staff in said parachute, a valve for controlling said opening, a sleeve on said staff, arms connecting said sleeve with said valve, a head within said

staff, the said staff having an elongated opening, a screw member passing through said sleeve slot and into said head, a spring within said staff normally maintaining



said head at the limit of its movement in one direction, and a cord secured to said head and passing downwardly beyond the lower end of said staff.

1,308,034. BED-SUPPORTED TABLE. WEST B. BONNIFIELD, Ottumwa, Iowa. Filed May 27, 1918. Serial No. 236,805. 1 Claim. (Cl. 45-82.)

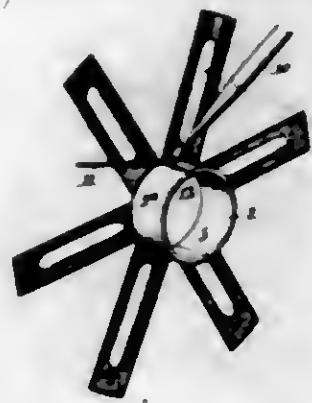


A bed supported table comprising a pair of top rails, a table top carried thereby, a pair of pivotally connected cross legs having their upper ends connected with adjacent ends of the top rails, coupling members adjustably slidable on the opposite end portions of the top rails, a second pair of pivotally connected cross legs having their upper ends secured to the coupling members, detachable extension sections for the ends of the top rails adjacent the coupling members and seating feet carried by and extending inwardly from the legs adjacent their lower ends.

1,308,035. METAL PULLEY AND PROCESS FOR THE MANUFACTURE THEREOF. RUSSELL H. BOWAN, Philadelphia, Pa., assignor to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 12, 1918. Serial No. 226,535. 3 Claims. (Cl. 64-17.)

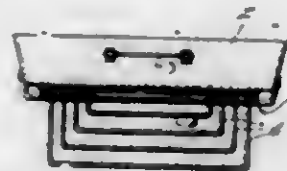
2. The heretofore described improvement in whole pulleys, comprising two separate, but individually complete oppositely-facing elements, each composed of two metallic spiders whose hub bands are integrally united

at their abutted ends by an integrally welded joint; a metallic hub member clamped in position by the metal



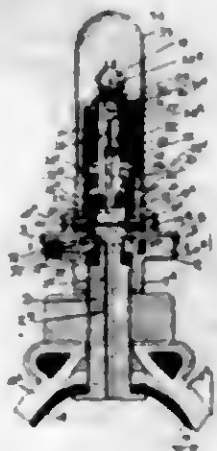
of each hub-band annulus under expansive tension; and rim members secured to extremities of the spoke members.

1,308,036. FRUIT AND VEGETABLE DRIER. FLORENCE E. BOYD, Lenox, N. C. Filed Aug. 2, 1918. Serial No. 248,059. 3 Claims. (Cl. 34-17.)



1. A fruit and vegetable drier comprising a plurality of flared receptacles adapted to be positioned one above the other and also to be positioned one within the other, and a plurality of legs carried by said receptacles for supporting them at various distances apart and over a heating source.

1,308,037. SAFETY-VALVE MECHANISM AND PRESSURE-GAGE. JOSEPH HUGHES, Oak Park, Ill. Filed Mar. 26, 1917. Serial No. 157,560. 2 Claims. (Cl. 152-12.)

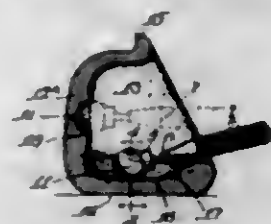


1. A valve mechanism comprising a valve body, a vertically movable tubular valve member within the body, an expandible member connected to the valve member and to the body, a valve in said valve member, a valve stem connected to the movable part of said valve, and a disk underlying one end of the expandible member, said disk cooperating with the valve stem to limit movement thereof in the outward direction.

2. A valve mechanism comprising a gage chamber to be secured to the valve stem of the tire, a tube removably secured to the chamber, an expandible member secured at its lower end to the chamber by said tube, a tubular valve member slidable in the tube and connected

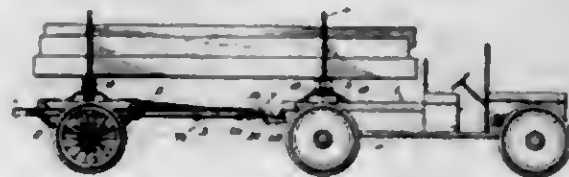
to the upper end of the expandible member, a valve in said valve member and including a stem, and means carried by the chamber to limit movement of said stem in the outward direction.

1,308,038. DENTAL-AMALGAM MIXER. IRA A. BURNETT, Chicago, Ill. Filed Apr. 28, 1919. Serial No. 293,255. 5 Claims. (Cl. 83-10.)



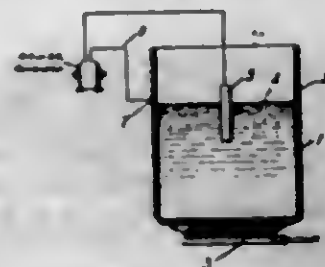
1. A mixing receptacle having in the wall of its cavity a trough or groove extended longitudinally between the open end of said cavity and the closed end thereof and of substantially semi-circular cross section.

1,308,039. MEANS FOR TRANSPORTING LOGS OR THE LIKE. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor to Warner Manufacturing Company, South Beloit, Ill., a Corporation of Wisconsin. Filed Jan. 28, 1918. Serial No. 214,093. 11 Claims. (Cl. 21-137.)



1. A device of the character described, having, in combination, a drawing unit and a trailer truck each having a pivoted load-supporting bolster, and an inflexible and automatically extensible draw-bar connecting said drawing unit and trailer together, said draw-bar having a pivotal connection with the rear end of the drawing unit at a point rearwardly of the axis of the bolster of said unit.

1,308,040. LIQUID-HEATING METHOD AND APPARATUS. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 30, 1915. Serial No. 37,317. 12 Claims. (Cl. 204-25.)

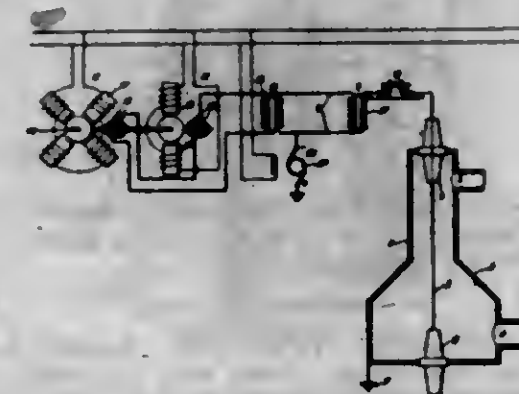


1. The method of increasing the energy developed in liquid-heating devices that comprises establishing a difference of electric potential between the said liquid and its container while the latter is being heated.

7. A liquid-heating device comprising a container for the liquid to be heated having its liquid-engaging surface provided with an asymmetric conducting film, an elec-

trode adapted to be immersed in the said liquid, and an electric circuit including the said electrode and the said container.

1,308,041. METHOD OF AND APPARATUS FOR PRODUCING ASYMMETRIC POTENTIAL WAVES. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 14, 1915. Serial No. 39,886. 11 Claims. (Cl. 175-363.)



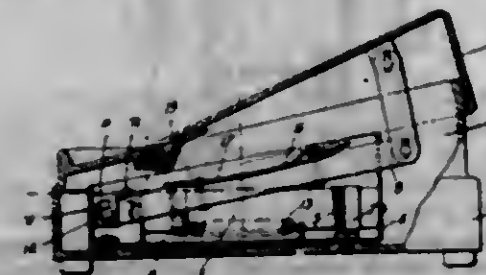
1. The method of producing electrical discharges in one direction only which consists in superimposing upon a discharge circuit a plurality of relatively low-potential, alternating-current-potential impulses of substantially sine-wave form and of different frequencies which are so cyclically displaced as to produce resultant asymmetrical potential waves having periodic accessions of potential in one direction only that are in excess of the potential values at which said circuit discharges.

1,308,042. FUSE FOR ELECTRIC CIRCUITS. HENRY MANNING COOK, Brooklyn, N. Y. Filed Apr. 13, 1917. Serial No. 161,886. 5 Claims. (Cl. 175-273.)



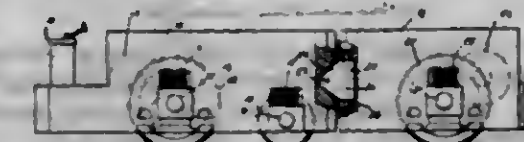
4. A cartridge fuse having a cylindrical member, and perforated metallic caps arranged one at each end thereof, thimbles secured in said metallic caps and supporting a gauze disk for ventilating the interior of said cartridge, as herein set forth.

1,308,043. CONTROLLER. JOEL R. COOK, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 6, 1915. Serial No. 38,158. 11 Claims. (Cl. 219-56.)



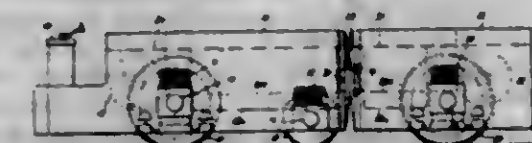
9. In a controller, the combination of a resistor, a resilient conducting member for coating therewith, and a pivotally and slidably mounted lever connected to said member.

1,308,044. ELECTRIC LOCOMOTIVE. PETER P. COOPER, Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 14, 1918. Serial No. 211,776. 12 Claims. (Cl. 105-50.)



1. In an electric locomotive, the combination with a main section having a plurality of axles and wheels thereon and equipped with electric motive means, of a two-wheel auxiliary section equipped with motive means, and coupling means for flexibly connecting said sections.

1,308,045. STORAGE-BATTERY LOCOMOTIVE. PETER P. COOPER, Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 14, 1918. Serial No. 211,777. 10 Claims. (Cl. 105-50.)



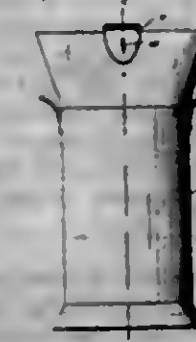
1. In a locomotive, the combination with a four-wheel main section equipped with motive means, of a two-wheel auxiliary section equipped with motive means, power-storing means on each of said sections and a coupling means for connecting said sections.

1,308,046. REVERSIBLE BRAKE-BEAM FULCRUM. MILLARD F. COX, Louisville, Ky. Filed Apr. 5, 1919. Serial No. 287,583. 2 Claims. (Cl. 185-22.)



1. A reversible brake beam fulcrum including a post slotted in different directions to form four corner members, oppositely arranged longitudinally aligned shoulders on each of said corner members, a pivot pin for a brake lever receivable transversely in either of said slots, said pin being provided with means for engaging said shoulders for holding the pin and brake lever in operative position.

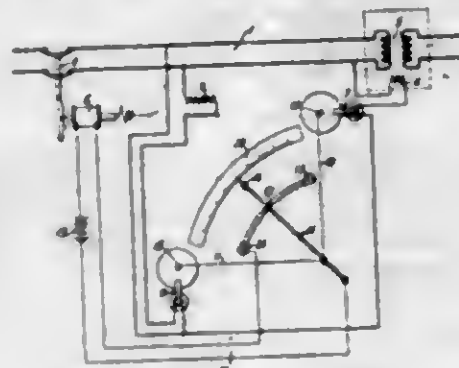
1,308,047. MILK-CAN. HARRIETT A. CRAWLEY, Brooksville, Ky., assignor of one-half to Orvil Cummins, Falmouth, Ky. Filed Apr. 28, 1916. Serial No. 94,166. 1 Claim. (Cl. 81-77.)



In a milk can of the class described, a cover including an upper and a lower disk arranged in abutting relation,

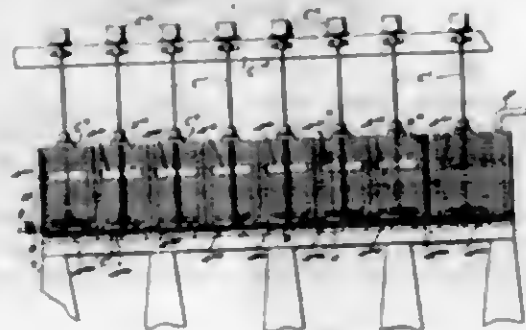
means securing the disks together, the edges of the disks being bent angularly in opposite directions to provide flanges for engaging the walls and neck of the milk can, and a handle formed integral with and struck up from the upper disk, as and for the purpose specified.

1,308,048. ELECTRICAL DEVICE. LEONIE N. CRITCHER, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1916. Serial No. 89,173. 5 Claims. (Cl. 175-294.)



2. In an electric circuit, the combination with a translating device, of means operatively connected to the circuit that is responsive to changes in the temperature of the translating device, a resistor having substantially zero temperature co-efficient, a second responsive means operatively connected in series with the resistor to the circuit, and a protective device adapted to be actuated in accordance with the ratio of the forces of the said responsive means.

1,308,049. APPARATUS FOR CONCENTRATING ORES. FRAN DE MIRA, Picher, Okla., assignor to himself and Arthur E. Bendelari, Picher, Okla. Filed Apr. 26, 1918. Serial No. 230,574. 7 Claims. (Cl. 83-85.)

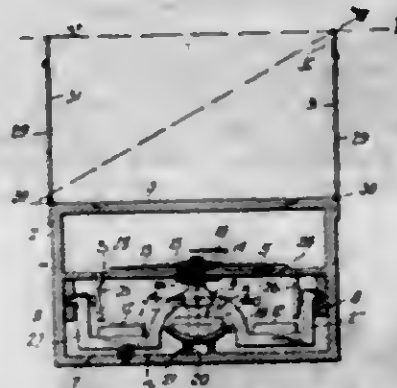


1. Flotation apparatus comprising in combination a series of agitator compartments, a series of agitator cells having lower ports connected with said compartments, all so arranged that each adjacent pair of said compartments are connected to one another through the lower end of a corresponding cell, and the lower ends of each adjacent pair of cells are connected to one another through a corresponding compartment, said cells also having upper feed outlets into said compartments, and means for agitating the contents of said cells.

1,308,050. HAND TRANSIT. JAMES E. DICK, Denver, Colo. Filed May 23, 1918. Serial No. 236,176. 11 Claims. (Cl. 33-60.)

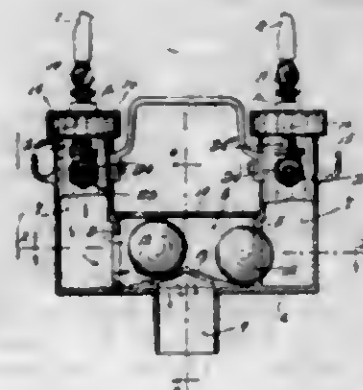
1. In an instrument of the character described, the combination with a support and means thereon for sighting along a determinate line, of a pivoted dial balanced

on the support to maintain a horizontal position, a magnetic needle cooperating therewith, a vertical scale on



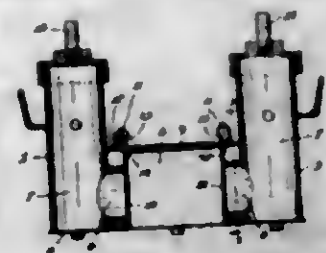
the support for measuring the angular position of the sight-line relative to the horizontal, and a pointer on the dial cooperating with the scale.

1,308,051. MILKING APPARATUS. REuben H. Dismaw, St. Paul, Minn. Filed May 21, 1917. Serial No. 169,914. 2 Claims. (Cl. 31-98.)



1. In a milking apparatus, the combination with two vacuum chambers connected by a common chamber and having valve seats that open into said common chamber, said common chamber having a depending discharge passage and ball supporting rails, of ball check valves mounted on said rails and arranged to be gravity seated to normally close said valve seats, milk tubes independently connected to said vacuum chambers, and means for producing suction pulsations in said two vacuum chambers.

1,308,052. VALVE MECHANISM FOR MILKING APPARATUS. REuben H. Dismaw, St. Paul, Minn. Filed Oct. 6, 1917. Serial No. 195,162. 2 Claims. (Cl. 31-98.)



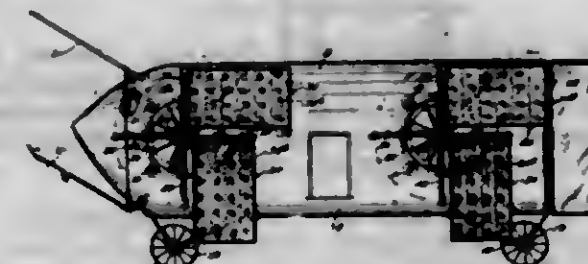
1. A casing having a port with an approximately vertical face, and a plate above said port, said plate having a vertical slot in approximate alignment with the face of said port, and a valve in the form of a flat plate insertible through said slot, and having an offset ledge serving as a fulcrum therefor, and supporting the same gravity seated against the face of said port, the said valve being readily removable.

1,308,053. MILKING APPARATUS. REuben H. Dismaw, St. Paul, Minn. Filed Oct. 6, 1917. Serial No. 195,163. 6 Claims. (Cl. 31-98.)



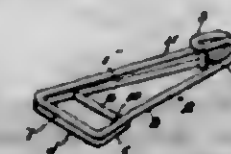
1. In a milking apparatus, a group of test cups and a corresponding group of strippers and cooperating stripper actuating devices, the said strippers operating independently adjacent to the upper portions of the respective test cups.

1,308,054. FLYING-MACHINE. ROBERT O. DOWNIE, Minneapolis, Minn. Filed May 10, 1918. Serial No. 233,770. 3 Claims. (Cl. 244-16.)



2. A machine of the kind described comprising a body, rotary wing carriers mounted on said body, means for rotating said wing carriers, wings hinged to said wing carriers, and means for projecting and retracting said wings and for producing in the wing movements a secondary oscillating or quivering movement under rotation of said wing carriers.

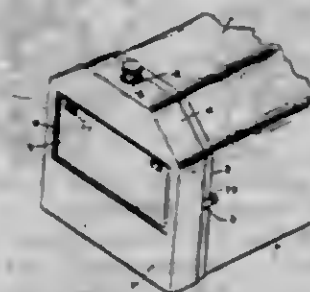
1,308,055. SNAP-HOOK. WILLIAM T. DURHAM, Ridge Spring, S. C. Filed Apr. 2, 1918. Serial No. 226,274. 2 Claims. (Cl. 24-237.)



2. A snap hook formed of a single strand of wire bent upon itself at an intermediate point to provide a pair of arms diverging from the bending point, the portions of said arms near the point of bending being curved in the general direction of the arms and forming a bill, the said strand near the end of one of said arms being bent transversely, rearwardly and inwardly to provide a loop of substantially rectangular shape and offset from the arm of which it is a part, the other arm extending over and lying upon the said backwardly bent portion and then being bent so as to overlap the said transversely bent portion, the remainder of the said arm being then bent so as to provide a spring tongue overlying a part of the first

mentioned arm and having its end disposed within and against the bill, and the extremity of said tongue being bent at substantially right angles to the body thereof and disposed between the divergent ends of the arms and closing the end of the bill.

1,308,056. RADIATOR COVER. FLOYD K. EASTMAN, Indianapolis, Ind. Filed Feb. 26, 1918. Serial No. 219,201. 8 Claims. (Cl. 257-132.)



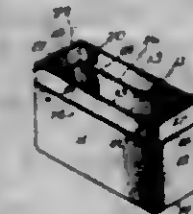
1. A shutter structure for automobile radiators including vertical guides adapted to be connected with the lateral portion of the radiator, a shutter vertically movable in said guides in front of the radiator, and also adapted to have movement in said guides toward or away from the radiator, and means for supporting the shutter in its closed position away from the radiator adapted to be released by inward movement of the shutter toward the radiator caused by the suction of the air through the radiator after the engine of the automobile is under operation, whereby the shutter would drop down into open position.

1,308,057. ANTISLIPPING DEVICE FOR TIRES. WILLIAM J. EDWARDS, Fluvanna, Tex. Filed Sept. 4, 1918. Serial No. 252,576. 1 Claim. (Cl. 152-10.)



An anti-slipping device for tires, comprising a series of plates linked together at their ends to form a flexible belt adapted to fit one side of the tire, and a similar belt for the opposite side of the tire, the plates constituting the belts having tread portions provided with outstanding flanges, the plates of one belt being opposite the plates of the other belt, and the flanges of opposite plates being laterally spaced, links seating between and connecting the flanges of opposite plates, and cover plates around said links between the flanges.

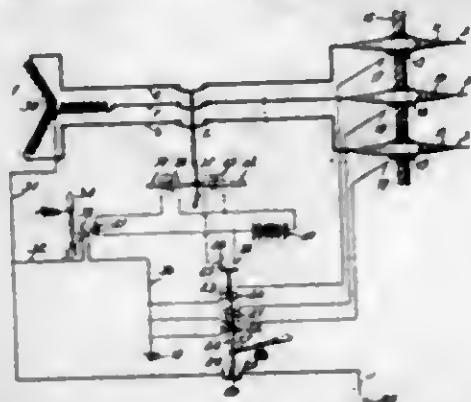
1,308,058. PASTEBOARD BOX AND METHOD OF MANUFACTURE. ARTHUR J. EVERS, Chicago, Ill. Filed Aug. 24, 1918. Serial No. 251,201. 2 Claims. (Cl. 229-16.)



1. A pasteboard-box composed of a single piece of pasteboard having a bottom-wall, side-walls upstanding from said bottom-wall and inwardly offset at their upper portions to unitedly constitute the neck of the box, box-body corner-tabs integral with some and overlapping and adhered to other of said side-walls, and box-neck corner-

ears independent of said box-body tabs integral with some and overlapping and adhered to other of the neck sections of the box, substantially as described.

1,308,059. DISTRIBUTING SYSTEM. CHARLES L. O. FOATESQUE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 14, 1915. Serial No. 28,125. 10 Claims. (Cl. 175-294.)



10. The method of operating a polyphase transmission system which comprises grounding a neutral point thereof during switching operations and operating normally with and ungrounded neutral.

1,308,060. DYESTUFF. HANS A. FRANCH, New York, N. Y. Filed Jan. 10, 1917. Serial No. 143,981. 8 Claims. (Cl. 8-1.)

1. In the process of producing dyestuffs from petroleum, exposing constituents thereof to reaction with inorganic acids and exposing the product to the action of an inorganic compound containing oxygen and a halogen.

1,308,061. GAS-ENGINE-CONTROLLING MECHANISM. JOHN E. GILSON, Port Washington, Wis., assignor to Gilson Manufacturing Company, Port Washington, Wis., a Corporation of Wisconsin. Filed May 17, 1915. Serial No. 28,584. Renewed Apr. 24, 1919. Serial No. 292,423. 10 Claims. (Cl. 123-164.)



1. A controlling mechanism for internal combustion engines comprising independently cam-actuated igniter and valve-rods, a governor-controlled stop-arm engageable with one of the rods for cutting out movement of the same imparted thereto by its associated cam, and abutting shoulders on the two rods for cutting out movement of the other rod imparted thereto by its cam actuating mechanism.

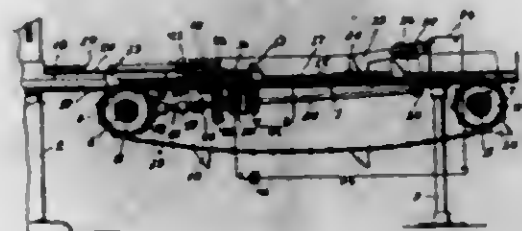
1,308,062. TRACTION-WHEEL. CARL GLIBCHS, Berlin, Germany, assignor to Stock Motorpfad Gesellschaft mit Beschränkter Haftung, Berlin, Germany, a Corporation of Germany. Filed Oct. 27, 1914. Serial No. 863,920. 9 Claims. (Cl. 21-215.)



1. The combination, with a gripper adapted to extend over the outer surface of a wheel rim, of clamps bear-

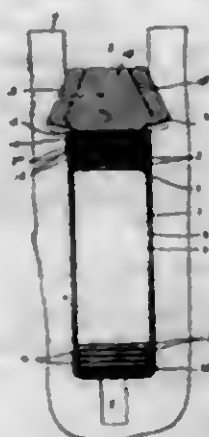
ing on said gripper and adapted to engage the inner surface of the wheel rim, means for connecting the said clamps with the gripper, and a stud secured to the gripper eccentrically to said connecting means and projecting inwardly from said gripper to engage the rim.

1,308,063. CAN-END-SORTING APPARATUS. JAMES A. GRAY, San Francisco, Calif., assignor to American Can Company, San Francisco, Calif., a Corporation of New Jersey. Filed Nov. 11, 1915. Serial No. 60,968. 24 Claims. (Cl. 83-92.)



1. In a can end sorting apparatus, in combination: carrying means for successively transporting can ends to a normal place of deposit; a movable device for separating certain of said can ends from said carrying means to be removed to a separate place of deposit; means for actuating said movable device; and means comprising a movable finger and mechanism for moving it toward and from the surfaces of the can ends whereby certain can ends cause the automatic separating action of said actuating means.

1,308,064. COIL-INSULATING DEVICE. ISRAEL L. GRIFFITH, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 4, 1915. Serial No. 32,225. 6 Claims. (Cl. 171-252.)

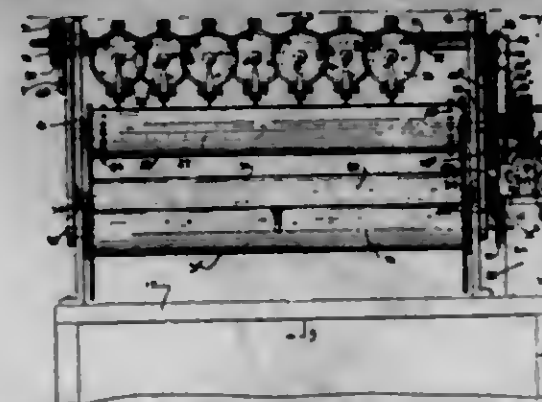


2. In a dynamo-electric machine, the combination with a slotted core structure having ventilating ducts located at the bases of the slots thereof of a metallic member of U-shape disposed within each of said slots and constituting one wall of the adjacent ventilating ducts, coils disposed within said members, and means adapted to exert a wedging action on said coils to retain them in position.

1,308,065. PHONOGRAPH. JOSEPH HAJAK, East Pittsburgh, Pa. Filed Dec. 15, 1917. Serial No. 207,334. 1 Claim. (Cl. 274-11.)

A phonograph comprising a motor, a single flexible record having a plurality of independently recorded sound waves, means for synchronously reproducing said waves, a pair of rollers arranged to receive said record in

its movement from one roller to the other, means for moving said record propelled by said motor, means for



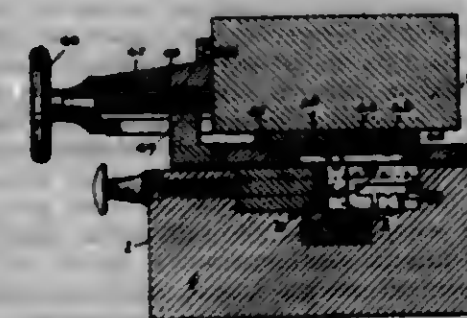
reversing the movement of said record, and means for simultaneously laterally shifting said reproducing means.

1,308,066. PAINT-BUCKET HANGER. ROLLIS R. HAYES, Peoria, Ill. Filed Mar. 24, 1917. Serial No. 157,226. 1 Claim. (Cl. 248-22.)



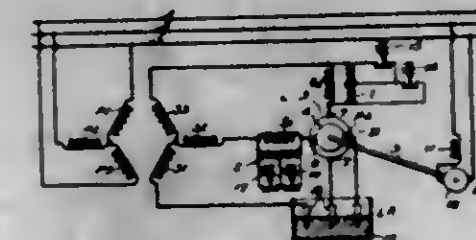
A paint bucket hanger comprising a base provided with a thin edge, a supporting member attached thereto and formed into a loop for receiving the ball of a bucket and a hook by means of which the device may be attached to a ladder, and a pointed member forming part of said supporting member and passing through an aperture in said base and adapted to engage the siding of a building when the device is attached thereto.

1,308,067. METHOD FOR MAKING TYPOGRAPH-MATRICES. ARTHUR H. HEDLY, Chicago, Ill., assignor to The Ludlow Typograph Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 21, 1914. Serial No. 857,868. Divided and this application filed Aug. 13, 1917. Serial No. 165,857. 1 Claim. (Cl. 76-4.4.)



The method of making matrices for typograph machines, and the like, which consists in driving a punch bearing a relief character into the matrix blank, gaging the depth of the strike with reference to the back of such blank, and then trimming the face thereof back to a predetermined distance from such back.

1,308,068. SYSTEM OF CONTROL. RUDOLF E. HALLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 7, 1915. Serial No. 54,539. 6 Claims. (Cl. 172-274.)



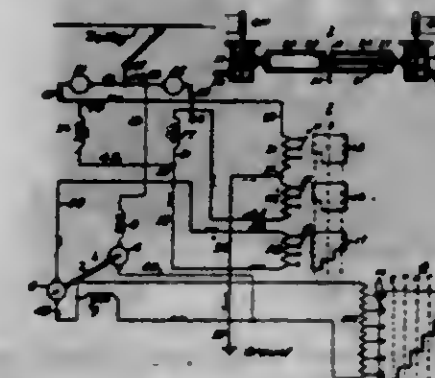
5. A phase-advancer comprising an armature having a plurality of independent phase windings, a set of brushes for each winding, a field-magnet structure having a plurality of commutating notches respectively corresponding to the several brushes, and a plurality of field-magnet windings severally adapted to magnetize relatively small portions, only, of the remaining polar face area of the field-magnet structure.

1,308,069. SYSTEM OF CONTROL. RUDOLF E. HALLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 2, 1917. Serial No. 165,852. 7 Claims. (Cl. 172-179.)



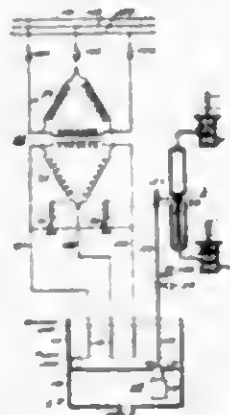
1. In a system of control, the combination with a plurality of main dynamo-electric machines severally having armatures and field windings, of an auxiliary machine for exciting said field windings and energized partially in accordance with the main-machine current and partially in accordance with auxiliary-machine current, and means for automatically maintaining a substantially equal distribution of load between the main-machines.

1,308,070. SYSTEM OF CONTROL. RUDOLF E. HALLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 18, 1917. Serial No. 162,968. 13 Claims. (Cl. 172-179.)



1. In a system of regenerative control, the combination with a dynamo-electric machine, and means for nor-

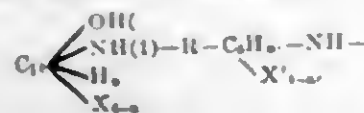
mally operating said machine in accordance with predetermined operating conditions during the regenerative



period, of a mechanical braking system, and means dependent upon the employment of said braking system for automatically modifying said operating conditions.

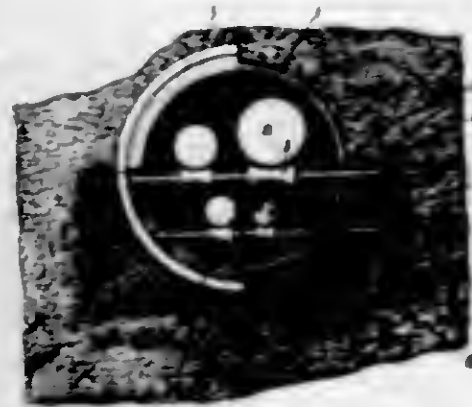
1,308,071. UREIDS OF SUBSTITUTED AMINONAPHTHOL SUBSTANCES. BERNHARD HUEMANN, Wiesdorf-on-the-Rhine, Oskar JESSEL, Mülheim-on-the-Rhine, RICHARD KOTHE, Vohwinkel, near Elberfeld, and ANTON OSSENBERG, Cologne-on-the-Rhine, Germany, assignors to Synthetic Patents Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 19, 1914. Serial No. 825,868. 12 Claims. (Cl. 23-24.)

1. The process of producing ureids having valuable therapeutic properties which comprises treating with phosgen a naphthalene derivative whose molecule contains the following atomic grouping:



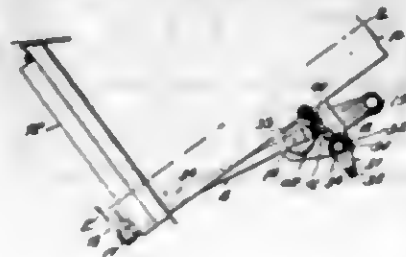
In which R stands for a divalent group containing an acyl radical, a, a number less than 7, X for substituting groups, a' a number less than 5, and X' for substituting groups, the aryl nucleus, which is most remote from the naphthalene nucleus represented above by C₆, having a free amino group attached thereto.

1,308,072. CONVEYER SYSTEM FOR STEAM AND OTHER SUBSTANCES. ALBERT C. HENSEL, New York, N. Y. Filed May 4, 1916. Serial No. 95,404. 11 Claims. (Cl. 137-75.)



1. In combination with a sectional conduit provided with adjacent bell and spigot ends, a pipe supporting rod having its extremities disposed between the bell and spigot ends, and a cementitious filler within said bell to permanently maintain said rod in supporting position.

1,308,073. HOPPER-CAR. EDWARD D. HILLMAN, Larchmont, N. Y., assignor to Benjamin A. Hegeman, Junior, North Plainfield, N. J. Filed Dec. 7, 1915. Serial No. 85,462. 8 Claims. (Cl. 105-313.)



1. In a car having a discharge door, a door operating shaft extending transversely entirely across the car and operable from either end thereof, mechanism intermediate said shaft and door, an auxiliary shaft parallel with said operating shaft and also extending transversely entirely across the car and operable from either end thereof, means at each end of said operating shaft for locking said shaft in the closed position of the door comprising a toothed plate on each end of said shaft and a movable dog to engage the same at each side of the car, and means on both ends of said auxiliary shaft for releasing said dogs from said plates on the rotation of said auxiliary shaft.

2. In a hopper car having a hinged discharge door, a door operating shaft and mechanism intermediate said shaft and door for effecting the opening and closing of the door from said shaft, an auxiliary shaft, means for locking said operating shaft in the closed position of the door comprising a toothed plate on said shaft and a pivoted pawl or dog arm to engage the same, and means for releasing said arm from said plate on the rotation of said auxiliary shaft comprising a crank on said auxiliary shaft having a loose connection with said arm, said arm being slotted at its lower end and said crank carrying a bolt extending through said slot.

3. In a hopper car having hinged discharge doors, a door operating shaft and mechanism intermediate said shaft and doors for effecting the opening and closing of the doors from said shaft, said shaft being extended across the car to receive at either end a suitable operating tool, an auxiliary shaft extending across the car to receive at either end an operating tool, means for locking said operating shaft in the closed position of the doors comprising a toothed plate on said shaft and a pivoted pawl or dog arm to engage the same, and means for releasing said arm from said plate on the rotation of said auxiliary shaft comprising a crank on said auxiliary shaft having a loose connection with said arm.

4. In a hopper car having hinged discharge doors, a door operating shaft and mechanism intermediate said shaft and doors for effecting the opening and closing of the doors from said shaft, said shaft being extended across the car to receive at either end a suitable operating tool, an auxiliary shaft extending across the car to receive at either end an operating tool, means for locking said operating shaft in the closed position of the doors comprising a toothed plate on said shaft and a pivoted pawl or dog arm to engage the same, and means for releasing said arm from said plate on the rotation of said auxiliary shaft comprising a crank on said auxiliary shaft having a loose connection with said arm, said arm being slotted at its lower end and said crank carrying a bolt extending through said slot.

5. In a hopper car having hinged discharge doors, a door operating shaft and mechanism intermediate said shaft and doors for effecting the opening and closing of the doors from said shaft, said shaft being extended across the car to receive at either end a suitable operating tool, an auxiliary shaft extending across the car to receive at either end an operating tool, means at both sides of the car for locking said operating shaft in the closed position of the doors comprising toothed plates on

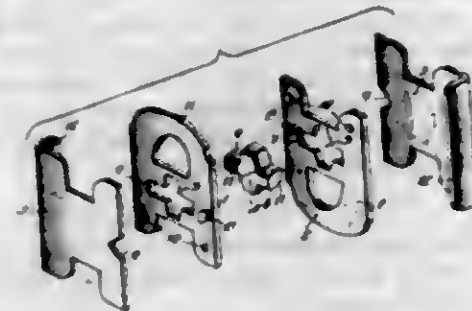
said shaft and pawl arms to engage the same, and means for releasing said arms from said plates on the rotation of said auxiliary shaft comprising cranks on both ends of said auxiliary shaft having a loose connection with said arms.

1,308,074. HANGER FOR BRUSHES. GEORGE A. HILTON, Irvington, N. J., assignor of one-half to Louis E. Hecht, Irvington, N. J. Filed Mar. 18, 1919. Serial No. 283,316. 2 Claims. (Cl. 248-50.)



2. A hanger comprising a sheet metal body portion with substantially triangular sides and having a rib at the top of each side wall, a hook made of a single piece of wire having a transverse portion hinged to the small end of the triangular body portion and having two hooks adapted to be swung outward to suspending position or inward to retracted position, the hook ends having a slight tension toward one another so that they can be sprung under the ribs to hold the hook in retracted position.

1,308,075. FUSIBLE LINK. MORTON K. HOPKINS, Chicago, Ill., assignor to John L. Kennedy, Chicago, Ill. Filed Sept. 21, 1918. Serial No. 255,130. 6 Claims. (Cl. 169-26.)



1. A fusible link comprising two substantially duplicate plates each provided with an end adapted for engagement with a cooperating part, and each having an aperture formed therein for a key, whereby upon placing the parts one upon the other with the engagement ends extending in opposite directions, the key aperture in the two will register with one another to complete the key seat, in combination with a cooperating key formed to loosely fit within the aperture thus formed, and cover plates each adapted to cover one flat face of the associated plates and the key aperture, whereby upon assembling the parts as described with solder they form an integral link for the purpose stated.

1,308,076. STARTING-COUPLING FOR HIGH-TENSION MAGNETOS. FREDERICK H. HORSING, Chicago, Ill., assignor to The Swiss Magneto Company, Chicago, Ill., a Corporation of New York. Filed Jan. 30, 1915. Serial No. 5,242. 8 Claims. (Cl. 123-149.)

1. A starting coupling for igniter magnetos comprising co-axial, relatively rotatable driving and driven members, a shiftable, spring held locking dog normally connecting said members to positively hold the same against relative rotation, an actuating spring interposed between

said members, a trip mounted on the stationary part and arranged to successively engage and release said locking dog and arrest said driven member to thereby

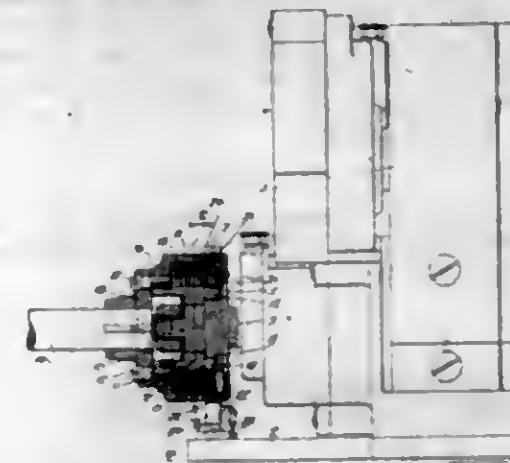
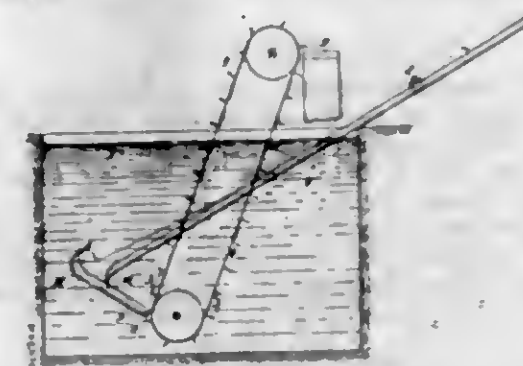


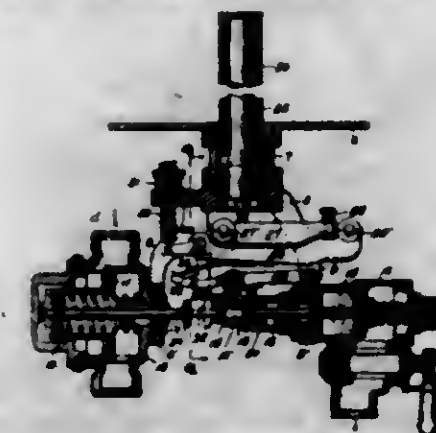
plate said spring under tension and means for automatically shifting said trip to thereby release said driven member.

1,308,077. MEANS FOR REMOVING HARDENED ANNULAR BODIES FROM THE HARDENING LIQUID. ARNE GUSTAF EMANUEL HULTBERG, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Dec. 22, 1917. Serial No. 208,494. 4 Claims. (Cl. 264-6.)



1. In a hardening device for annular bodies, the combination of an incline on which the bodies roll into the hardening liquid, the lower part of said incline being formed so as to cause the rolling bodies to tilt and slide on the incline in a lying position, and means for continuously removing the hardened bodies from the hardening liquid, substantially as described.

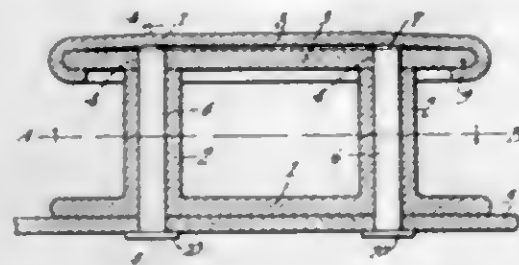
1,308,078. WATER-HEATER. HERBERT S. HUMPHREY, Kalamazoo, Mich. Filed June 24, 1916. Serial No. 105,656. 10 Claims. (Cl. 126-351.)



1. In a water heater, the combination of movable controlling mechanism for a water heating medium, means

for normally maintaining said mechanism so that the flow of such medium is shut off, a water pressure operated motor for the controlling mechanism adapted to be actuated upon the release of water, and thermostatic means controlled by the heated water for locking said controlling mechanism in position to permit the heating medium to flow so long as the heated water is below a predetermined temperature while said motor is permitted to return to normal position.

1,308,079. BUTTON. ADLER G. JOHNSON, Fort Scott, Kans. Filed Mar. 20, 1919. Serial No. 283,700. 3 Claims. (Cl. 24—90.)

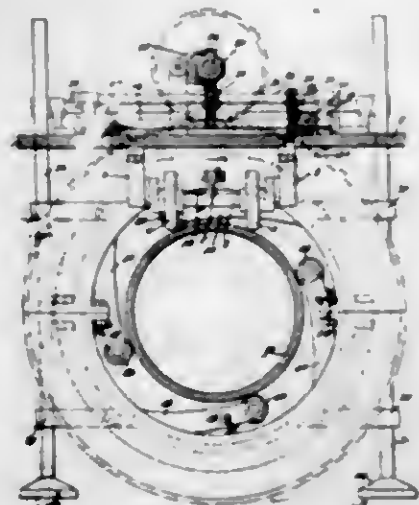


3. A button comprising a base having a post; a head supported on the post; a securing device passing through the post and engaging the head, the securing device being extended beyond the base to form an attaching means for the button; and a cap assembled with the head and housing the head-engaging end of the securing device.

1,308,080. MANUFACTURE OF ALUMINUM CHLORIDE. GEORGE H. KING and GERALD I. ROBERTS, Port Arthur, Tex., assignors to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Apr. 10, 1919. Serial No. 289,116. 4 Claims. (Cl. 23—13.)

1. The process of producing aluminum chloride which comprises mingling hot producer gas with chlorine, contacting the mixture with alumina and cooling to recover vapors of aluminum chloride.

1,308,081. MACHINE FOR CLEANING PIPE-LINES. FRANK KINIRACH, Sourlake, Tex. Filed Jan. 19, 1919. Serial No. 212,807. 3 Claims. (Cl. 83—64.)



1. A machine for cleaning the exterior surfaces of pipe lines, including a carriage, a motor thereon, a cleaner connected to the carriage, motor operated means for rotating the cleaner about a pipe to clean the same, and wheels mounted on said carriage and having their edges biting the said pipe to movably support the carriage and hold it against rotation thereon.

1,308,082. TEAT-CUP FOR MILKING-MACHINES. WILLIAM H. KOCH and MICHAEL KOCH, Independence, Iowa. Filed July 24, 1918. Serial No. 246,573. 3 Claims. (Cl. 31—102.)



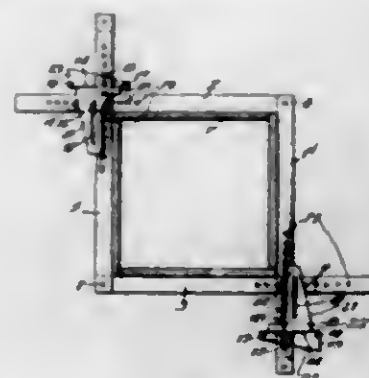
1. In combination, a rigid housing, a rigid baffling-sleeve mounted therein and spaced therefrom removably with its ends closed against the housing, and a flexible teat-cup positioned within the sleeve and spaced therefrom with its ends closed against the sleeve, said sleeve having ports adjacent its end at the outwardly-opening end of the teat-cup, and said housing having a port communicating with the interspace of the housing and sleeve.

1,308,083. METAL STRUCTURE. LAURENCE S. LACHMAN, New York, N. Y., assignor to Universal Electric Welding Company, New York, N. Y., a Corporation of New York. Filed Sept. 15, 1914. Serial No. 861,747. 9 Claims. (Cl. 189—78.)



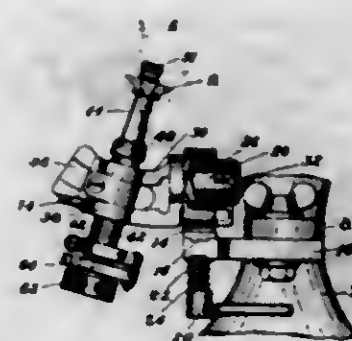
1. A metal structure the parts of which are held together by a countersunk nut the threads of which terminate below the level of the edge of the countersink and welded to said parts by the edge of the countersink, said nut affording by its threaded part a means for the ready attachment or detachment of another part or piece and a screw cooperating with said nut.

1,308,084. COLUMN-CLAMP. HENRY H. LAMPERT, Chicago, Ill. Filed Dec. 6, 1916. Serial No. 135,313. 8 Claims. (Cl. 144—291.)



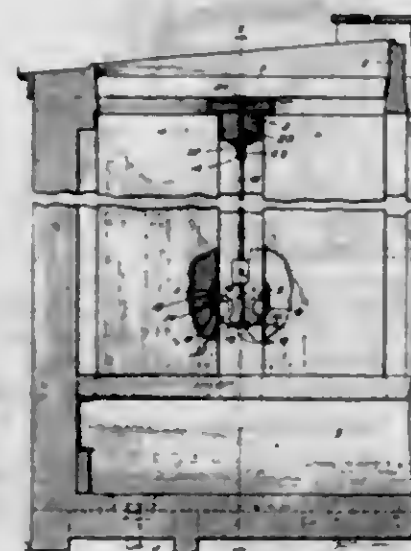
1. A clamp comprising two members arranged in crossed relation and each slidable lengthwise on the other, a wedge having its inner wedging face bearing against one of said members and slidable longitudinally thereon with its head substantially parallel with the other member, a second wedge having its inner wedging face bearing against the head of said first wedge and slidable longitudinally thereon, and stops on said members bearing respectively upon the outer wedging faces of the wedges.

1,308,085. CUTTER-GRINDING DEVICE. ALBERT LATHAM, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 24, 1916. Serial No. 80,278. 25 Claims. (Cl. 51—7.)



1. A device for grinding rotary toothed cutters comprising, in combination, a grinding member and a cutter positioning member relatively movable to effect alternate engagement and disengagement of the grinding member and the front face of a tooth to be ground, said members being relatively adjustable about an axis coinciding substantially with the line of intersection of the plane of one end face of the cutter and the plane of the front face of a tooth when the tooth is in position to be ground.

1,308,086. BRINE-RETAINING VALVE. GEORGE F. LAUGHLIN, Chicago, Ill. Filed Sept. 13, 1916. Serial No. 119,943. 7 Claims. (Cl. 62—19.)

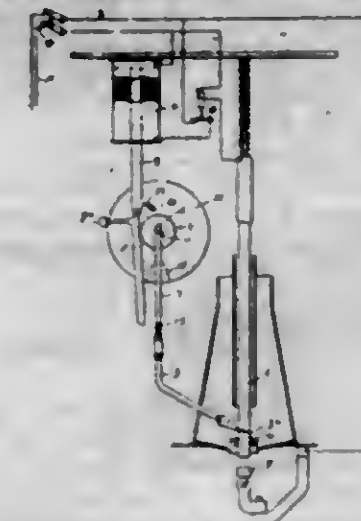


1. In a device of the kind described and in combination, a plurality of tanks, each provided with a discharge port, a valve for each port arranged to normally close the same, an operating rod, means for operatively connecting said rods and valves, and means for controlling the movement of said rod, comprising a lever arranged to cooperate with said rod and move the same lengthwise, and means for positively operating said lever or preventing the operation thereof.

1,308,087. STARTING DEVICE FOR ARC-LAMPS. GEORGE M. LITTLE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 11, 1914. Serial No. 837,730. 8 Claims. (Cl. 176—64.)

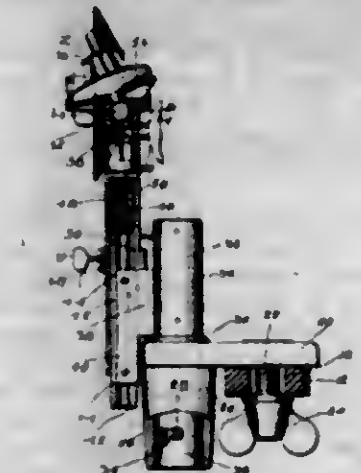
8. An arc lamp comprising a rotatable ratchet wheel, an electrode holder eccentrically and pivotally supported by the same, a rack for the ratchet wheel, means causing the said rack to impart a rotative movement to the said ratchet wheel, and means for normally holding the said

ratchet wheel in a predetermined position with respect to its axis under non-operative conditions and for returning



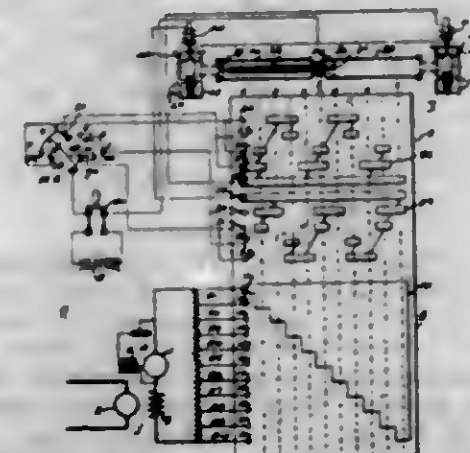
it to the same position at the cessation of the said rotative movement.

1,308,088. GRINDING-MACHINE. HENRY M. LOOMER, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 11, 1916. Serial No. 136,223. 22 Claims. (Cl. 51—7.)



1. A device of the class described having, in combination a grinding wheel, a carrying member guided for straight line reciprocating movement toward and from the grinding wheel and a cutter holder having a connection with said carrying member for universal adjustment relatively to and about the longitudinal axis of the carrying member.

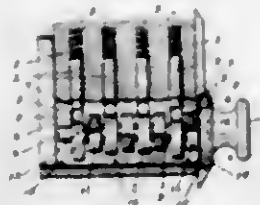
1,308,089. CONTROL SYSTEM. PAUL L. MANTON and ARTHUR J. HALL, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1917. Serial No. 174,448. 3 Claims. (Cl. 172—179.)



1. In a system of control for a dynamo-electric machine, the combination with a main controller having a

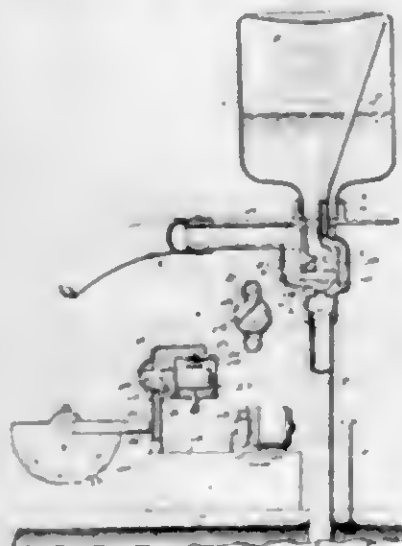
rheostat drum for governing the excitation of the dynamo-electric machine, an interlock drum for governing the movement of the controller, and a fluid motor for operating the controller, of a six-position switch associated with said interlock drum and the fluid motor for moving the main controller automatically and at will in a forward and in a reverse direction.

1,308,090. COMBINATION CYLINDER-LOCK. DANIEL RICHARD MARKLEY, Lancaster, Pa. Filed Mar. 25, 1919. Serial No. 285,072. 1 Claim. (Cl. 70-53.)



In a permutation lock of the class described, the combination with a cylinder lock having a rotatable cylinder and a series of plungers, of a graduated knob mounted adjacent to the end of the cylinder, a shaft secured to said knob and rotatably mounted in said cylinder, disks secured to said shaft, cams rotatably mounted on said shaft adjacent to said plungers and adapted to raise the same, and means carried by said disks for rotating said cams for moving said plungers into an unlocking position.

1,308,091. APPARATUS FOR DISPENSING LIQUID. HENRY E. MAHER, JR., Springfield, Ill., assignor of one-half to Harry L. Ide, Springfield, Ill. Filed Dec. 10, 1918. Serial No. 266,045. 9 Claims. (Cl. 221-102.)

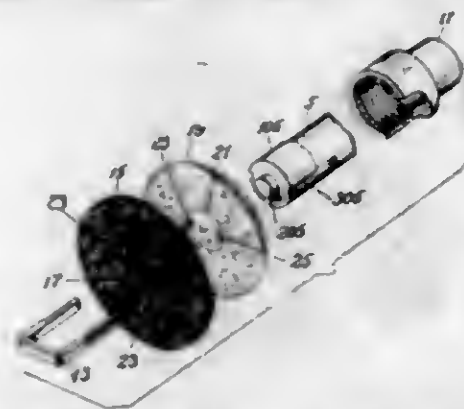


1. Liquid dispensing apparatus including a dispenser liquid container; means for introducing liquid into the container; means for exhausting air from the container; means enabling the discharge of liquid from said container; a rotary valve structure having valve formations respectively individual to said means to control the functioning thereof; a valve for checking the exhaustion of air from the container; and a chamber for the valve in communication with the upper portion of the container to receive liquid from such upper container portion, said valve being movable to a checking position by the liquid received in said chamber.

1,308,092. COLORING LIQUOR AND METHOD OF STAINING METALS. FRANK C. MATHERS and JACOB PAPISH, Bloomington, Ind., assignors, by mesne assignments, to Frank C. Mathers & Jacob Papish, Bloomington, Ind., a firm composed of Frank C. Mathers and Jacob Papish. Filed Sept. 22, 1917. Serial No. 102,791. 10 Claims. (Cl. 134-48.)

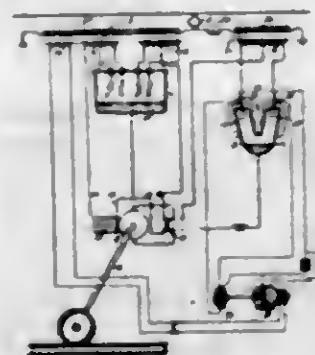
6. The method of staining a metal consisting in treating said metal with a solution of basic tellurium nitrate in hydrochloric acid.

1,308,093. ABRASIVE TOOL. FRANK R. MERRITT, Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 17, 1917. Serial No. 107,152. 7 Claims. (Cl. 51-17.)



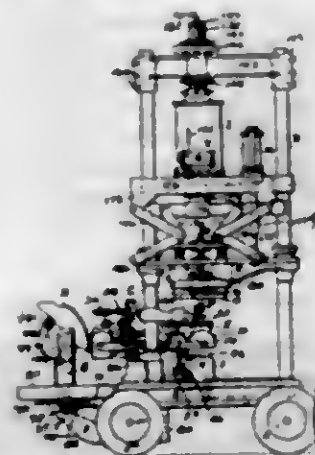
1. The combination with an abrasive pad, of a rotary member to which the pad is to be fastened, a clamping member having prongs extending through holes in the pad, and means for engaging the prongs and drawing the clamping member against the pad.

1,308,094. SYSTEM OF CONTROL. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 10,081. 5 Claims. (Cl. 175-363.)



3. A vacuum electric device embodying means for simultaneously rectifying alternating-current energy and de-rectifying direct-current energy within a single container, said de-rectifying means being reversible in function.

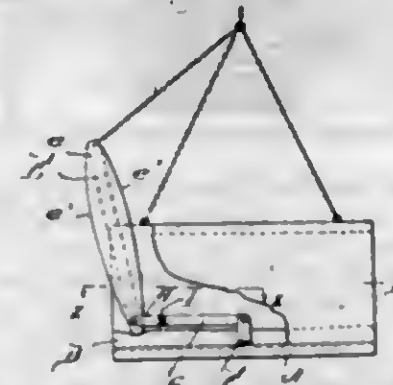
1,308,095. APPARATUS FOR MANUFACTURING ARTICLES OF GLASS. WILLIAM J. MILLER, Swissvale borough, Pa. Filed Aug. 11, 1917. Serial No. 185,647. 15 Claims. (Cl. 40-5.)



1. In a machine of the character described, a fluid pressure cylinder, a false head in said cylinder, a sleeve connected to said false head and extending up through the upper head of said cylinder, a piston in said cylinder, a piston rod extending down from said piston through the

lower head of said cylinder, a pressing element operatively connected to the lower end of said piston rod, a stem connected to said piston and extending up into said sleeve, and means for supplying fluid pressure to the lower end of said cylinder and to the upper end of said sleeve.

1,308,096. HAMMOCK. HABAY MINTZ, Boston, Mass. Filed Mar. 26, 1919. Serial No. 285,243. 3 Claims. (Cl. 5-61.)



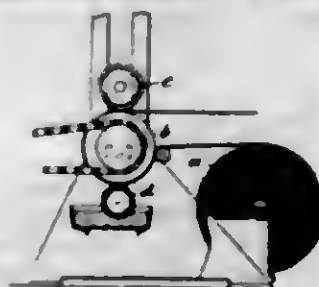
2. A hammock comprising a seat having end rails, a lug fast on each end rail at approximately the center thereof, links pivoted on said lugs, a back having end rails, links pivoted at one end to said end rails and at their opposite ends to said first named links, whereby said back can be disposed along either side of said seat and adjusted in angular relationship thereto.

1,308,097. GARMENT-SUPPORTER. HARLAN MOORE, New York, N. Y. Filed July 15, 1915. Serial No. 40,011. 2 Claims. (Cl. 241-6.)



2. A hose supporter comprising a triangular member formed of two downwardly converging straps and a horizontal strap, the latter being elastic and removably attached at its ends, hose-engaging means at the bottom of said member and a leg-encircling band attached to the top of said member.

1,308,098. METHOD OF MAKING MULTICOLOR-PRINTED PAPER. EMIL T. NESEN, Ridgewood, N. J., assignor to Neben Manufacturing Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 10, 1917. Serial No. 185,451. 2 Claims. (Cl. 41-26.)



1. The method of producing a multicolor-printed material which consists in dampening the material and causing it to slip or slide in contact with a printing surface charged with soluble pigment in variegated colors.

1,308,099. FRICTION SHOCK-ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Sept. 18, 1918. Serial No. 254,574. 1 Claim. (Cl. 213-64.)

In a friction draft rigging for railway cars, the combination with a standard draw bar and a yoke strap having a single pocket, both the yoke strap and draw bar being of relatively small size, the yoke corresponding in length and height to a yoke for a tandem spring gear

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employing springs of relatively small diameter; of a relatively narrow follower within the yoke; and a friction shock absorbing mechanism also mounted within the yoke, the over-all length of said friction mechanism substantially equaling the sum of the length of two springs, the thickness of three followers and the width of a yoke thimble of a tandem spring gear such as said yoke corresponds to in length and height, said friction mechanism



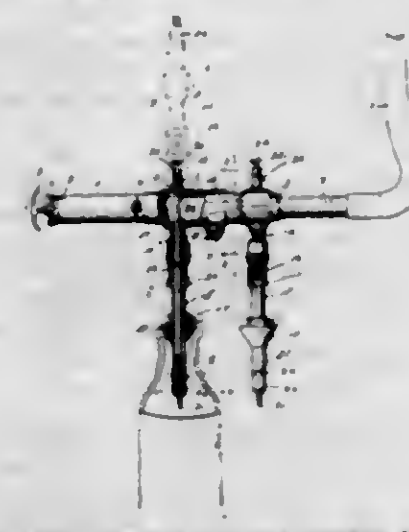
including a shell substantially equal in height to the vertical space between the yoke arms, friction elements, and spring elements having an over-all length substantially equal to the combined length of two springs of a tandem spring gear, the diameter of said spring elements substantially equaling the space between the arms of the yoke.

1,308,100. ANTIFRICTION-BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Sept. 21, 1918. Serial No. 255,041. 4 Claims. (Cl. 64-64.)



1. In a device of the character described, adapted to be interposed between two relatively movable elements, the combination with a retaining member adapted to be secured to one of said elements, of a plurality of antifriction rollers carried by said member, the latter being provided with roller-supporting tracks having upwardly curved end portions, said rollers having trunnions co-operable with said tracks, one end roller being elevated upon the corresponding upwardly curved end portions of the tracks upon actuation of the device and thereby adapted, upon release of pressure, to itself return to normal under the influence of gravity and force the remainder of the rollers also to normal position.

1,308,101. BOTTLE-FILLER. JOHN OPTEDAUHL, Hanley Falls, Minn. Filed Aug. 7, 1916. Serial No. 113,464. 4 Claims. (Cl. 226-24.)



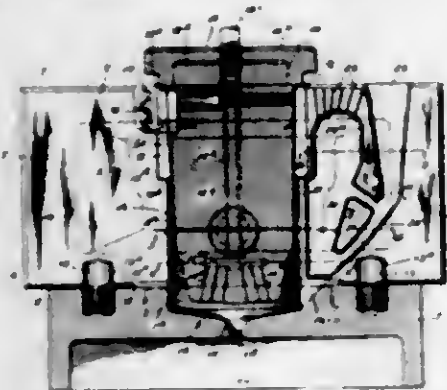
1. A bottle filler having a liquid supply head comprising two telescopically connected members, each having a filling tube, and means for locking the members of the head against rotary movement with respect to each other and in different axial adjustments to vary the distance between said tubes.

1,308,102. LOCOMOTIVE-FIRE-BOX CONSTRUCTION. LE GRAND PARISH, New York, N. Y. Filed May 15, 1914. Serial No. 838,655. 4 Claims. (Cl. 122-08.)



1. A locomotive fire box construction comprising in combination outside and inside sheets spaced apart to provide a steam space and water legs, a circulation tube connecting front and rear water legs and having its forward end extending through both sheets of the front water leg, and a circulation extension member establishing communication with the boiler having a flange adapted to be secured to the outside sheet over the end of said tube and a flange for attachment to the boiler sheet.

1,308,103. MOLD AND METHOD OF CASTING. FREDERIC A. PARKHURST, Cleveland, Ohio, assignor to The Aluminum Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 2, 1919. Serial No. 286,970. 6 Claims. (Cl. 22-209.)



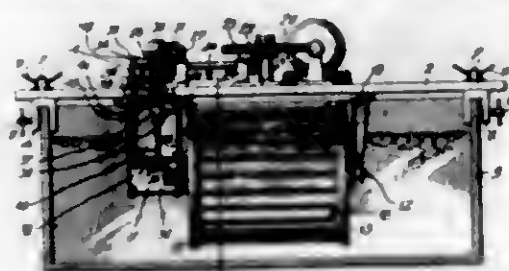
1. A mold having a cavity for the casting proper and provided with a gate comprising an upright feeder cavity adjacent the casting cavity and communicating with the latter cavity at various levels between the bottom and top thereof through a short narrow passage, an inlet passage extending downwardly and laterally and opening into the bottom of the casting cavity, and a second inlet passage extending laterally from the first inlet passage into the upper part of the feeder cavity.

5. The method of introducing molten aluminum alloys or the like into a mold which consists in delivering the molten metal into the bottoms of the casting cavity and an upright feeder cavity arranged at one side of the casting cavity, causing the metal to rise in said casting and feeder cavities from the bottoms thereof as the pouring continues, introducing molten metal into the upper part of the feeder cavity after the casting and feeder cavities have been partially filled from below to complete the filling of the same, and causing the metal to flow from the feeder cavity at various levels into the casting cavity to compensate for crystallization shrinkage.

1,308,104. ALTERNATING ROTARY DRIVE FOR WASHING-MACHINES. GEORGE K. PARSONS, Detroit, Mich. Filed Feb. 18, 1918. Serial No. 217,785. Renewed Apr. 28, 1919. Serial No. 293,310. 2 Claims. (Cl. 74-50.)

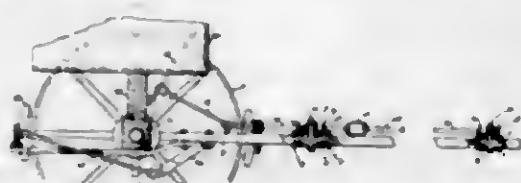
1. In a washing machine, the combination of a support, a rotatable drum carried thereby, a casing at one end of said drum, a screw-threaded shaft in said casing adapted to rotate said drum, spaced beveled gears loose on the upper end of said screw threaded shaft, a motor

driven shaft having a beveled gear meshing with said beveled gears adapted to impart movement to said gears in different directions, a clutch on said screw-threaded shaft adapted for establishing a driving relation between either of said spaced gears and said screw-threaded



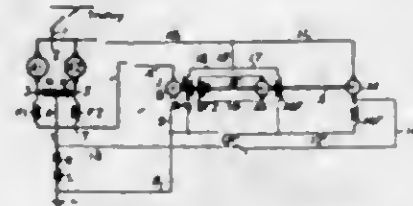
shaft and controlling the operation of said shaft by said motor driven shaft, a shiftable rod adapted to actuate said clutch, arms on said rod and a nut on said screw-threaded shaft adapted to travel thereon and alternately impinge against said arms and shift said rod.

1,308,105. AUTOMATIC BRAKE. FRANK R. PEETS, Merrill, N. Y. Filed July 31, 1918. Serial No. 247,696. 1 Claim. (Cl. 21-9.)



An automatic brake for vehicles comprising, in combination with the brake and wagon tongue thereof, said tongue having a slot, guide means located below the slot, a brake actuating rod, a whistle tree, a support for said whistle tree having a portion positioned in the plane of said rod for attachment of the rod to the whistle tree support, and a bolt extending through said slot in the tongue and connecting said guide and attaching means and whistle tree together for slidable movement upon the tongue.

1,308,106. SYSTEM OF CONTROL. LAURENCE M. FRANKS, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1916. Serial No. 82,628. 12 Claims. (Cl. 172-179.)



1. In a system of control, the combination with a supply circuit and a dynamo-electric machine adapted for regeneration thereto and having an armature and a field winding, of auxiliary exciting means for said field winding during the regenerative period, and means cooperating with said exciting means affected by changes in voltage of the dynamo-electric machine incident to an interruption of supply-circuit voltage for preventing a dangerous rise of regenerated voltage upon an interruption of supply-circuit voltage.

1,308,107. SPARK-PLUG. ALEXANDER JOSEPH PEARSON, Sparta, Wis. Filed Aug. 14, 1918. Serial No. 249,588. 5 Claims. (Cl. 123-169.)

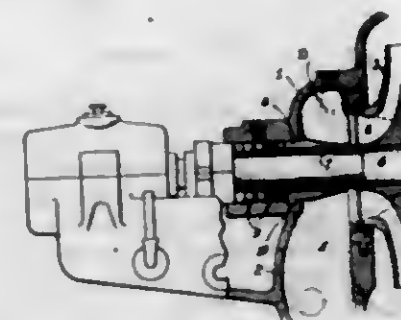
1. A spark plug, comprising a central electrode, and a shell having an electrode slot for receiving the point of said electrode to form the spark gap, said shell being entirely closed with the exception of said slot for the pro-

tection of said electrode and the exclusion of substances from the interior of the shell, and having an inclined



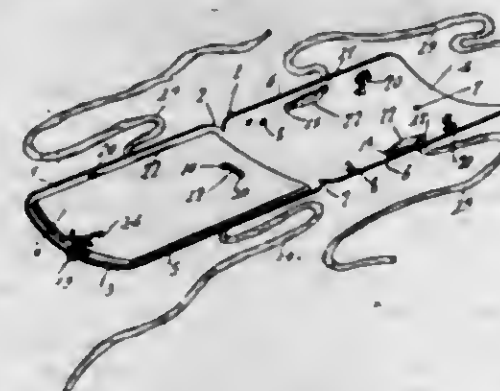
floor acting as a reflector to expel the gas and clear said slot and spark point.

1,308,108. CENTRIFUGAL PUMP. PER ARVID PETERSON, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed Sept. 20, 1916. Serial No. 121,099. 3 Claims. (Cl. 253-194.)



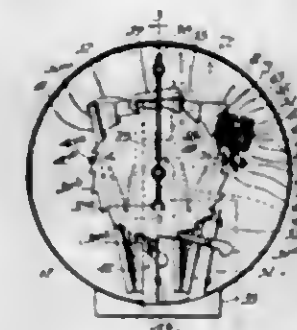
1. In a centrifugal pump, the combination with a pump case having a suction chamber, and an impeller within that case having an inlet in a plane transverse to the plane of rotation, to which inlet said suction chamber leads, of a shaft for such impeller, and a housing surrounding such shaft and provided with a baffle located in such suction chamber and arranged to reduce whirling of the fluid passing through such chamber on its way to the impeller.

1,308,109. KNEE-PROTECTOR. RAY L. PRUGH, Oklahoma, Okla. Filed Sept. 11, 1918. Serial No. 253,587. 2 Claims. (Cl. 2-130.)



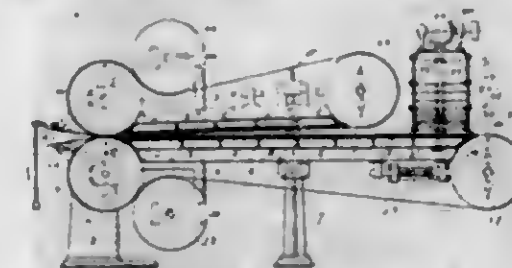
1. A knee protector comprising relatively foldable angularly disposed parts of substantially equal length and connected at their inner ends; an internal pad substantially equal in length to each of said parts; and means for mounting the pad detachably on either of said parts to permit an end for end reversal of the protector.

1,308,110. MUSICAL INSTRUMENT. WILLARD L. POLLARD, Evanston, Ill., assignor to The Cable Company, Chicago, Ill., a Corporation of Illinois. Filed May 12, 1915. Serial No. 27,521. 7 Claims. (Cl. 84-193.)



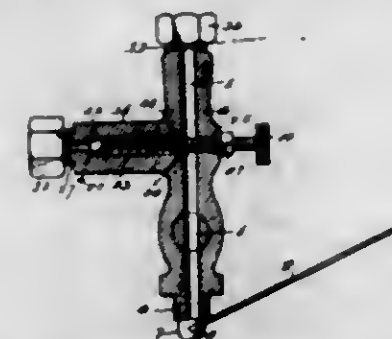
1. The combination with an automatic musical instrument controlled by a note-sheet, and a phonograph, of an indicator comprising indicating means separate from and controlled by said note-sheet, and also comprising indicating means controlled by said phonograph.

1,308,111. VULCANIZING-MACHINE. JOSEPH LONZEL, Buffalo, N. Y., assignor to City Trust Company, Buffalo, N. Y. Filed Jan. 9, 1918. Serial No. 211,087. 6 Claims. (Cl. 18-6.)



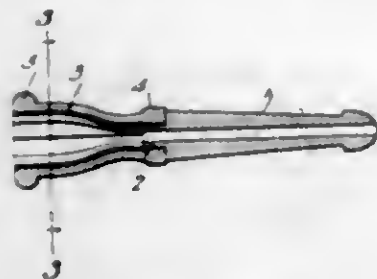
1. In a machine of the type described, the combination with two metal belts arranged one above the other, drums for driving said belts and drums for tensioning said belts, of platens, arranged within the reaches of said belts and adapted to holding said belts in slightly converging planes of travel, chambers in said platens for the heating fluid, valved connections between said chambers for regulating the pressure of the fluid therein progressively from front to rear end of said platens, adjusting means for regulating the angularity of the surfaces of said platens and a spreading device for spreading rubber upon the surface of one of said belts.

1,308,112. VALVE FOR EXPLOSIVE-ENGINES. HARVEY C. RAY, Salem, Ill. Filed June 13, 1918. Serial No. 239,695. 4 Claims. (Cl. 277-7.)



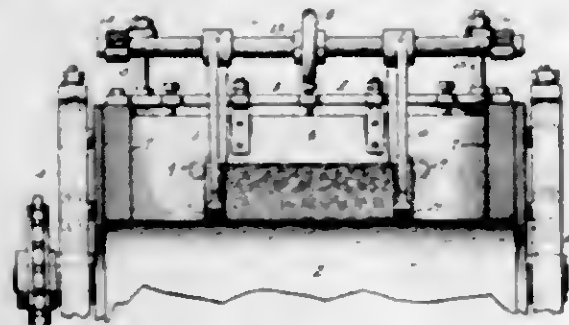
1. In a device for the purpose described, a casing having a longitudinal bore therethrough, a rotary valve controlling said bore, and combined check and needle valves disposed transversely to said bore disposed in a common passage transverse to said bore and controllable by the same means.

1,308,113. CIGAR-HOLDER. EPHRAIM N. RITTASE, Baltimore, Md. Filed May 22, 1918. Serial No. 236,002. 1 Claim. (Cl. 131-10.)



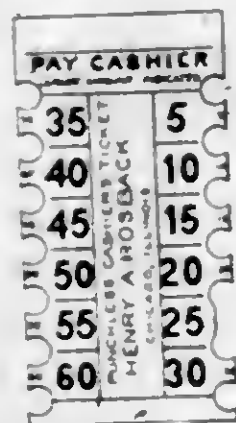
A cigar holder including a non-yielding mouth piece, a resilient cigar holding element, strips of heat insulating material arranged within and circumferentially of the cigar holding element, each strip being secured to the resilient cigar holding element, along one longitudinal edge thereof, the opposite edge of each strip overlapping the secured edge of the adjacent strip.

1,308,114. INKING MECHANISM FOR PLATE-PRINTING MACHINES. OSCAR ROESEN, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Nov. 19, 1915. Serial No. 60,853. 1 Claim. (Cl. 101-365.)



In a plate printing machine, the combination of an ink distributing cylinder, an ink fountain superposed above the cylinder including front and rear walls extending downwardly about the cylinder and having their bottoms shaped to conform to the cylinder curvature, end walls, a top frame uniting the end walls, standards rising from the top frame, cross arms carried by the standards, a right and left hand screw shaft supported in the cross arms, partitions in the fountain above the distributing cylinder and in contact therewith between which the ink is confined supported from the screw shaft, and a hand wheel supported from the screw shaft between the partitions for operating the shaft to move the partitions toward and from each other to vary the width of the ink column delivered to the cylinder.

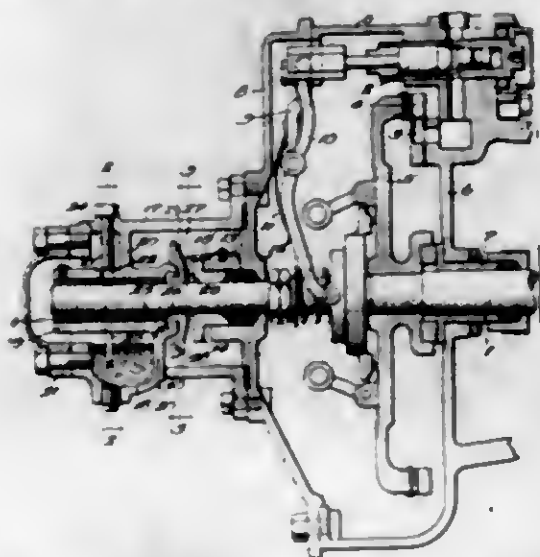
1,308,115. CASHIER'S TICKET. HENRY A. ROSBACK, Chicago, Ill. Filed Mar. 19, 1915. Serial No. 15,506. 7 Claims. (Cl. 283-60.)



1. A cashier's ticket formed of cardboard and having a row of numerals printed thereon, and a plurality of

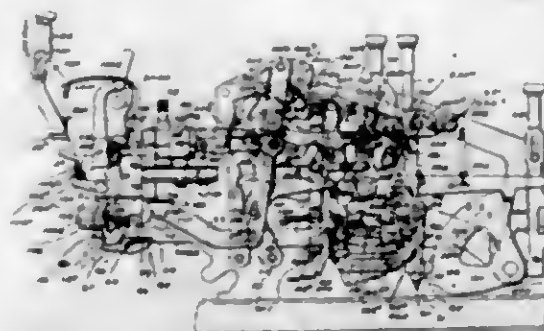
apertures therethrough, adjacent to and outwardly from said numerals with respect to the adjacent edge of the ticket, one of said apertures being located on a line substantially midway between each pair of successive numerals, whereby a detachable portion is formed opposite each numeral.

1,308,116. STEAM-TURBINE. MARK A. ROSS, Chicago, Ill. Filed Aug. 15, 1918. Serial No. 250,004. 2 Claims. (Cl. 64-31.)



1. The combination with a substantially closed lubricant container; of a sleeve therein; a bearing in said sleeve; a loose lubricant feeding ring upon the shaft and dipping into the lubricant in the container, there being a slot formed in the upper portions of said sleeve and bearing in which the ring is disposed to enable it to engage the shaft, there also being clearance between the container and sleeve to permit the ring to be moved along the sleeve in the process of assembly; and a guard positioned to engage the ring and prevent it from leaving said slot.

1,308,117. CALCULATING-MACHINE. MAX SCHUPPE, Brooklyn, N. T., assignor to Welen Adding Machine Company, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Apr. 27, 1918. Serial No. 231,111. 121 Claims. (Cl. 235-58.)

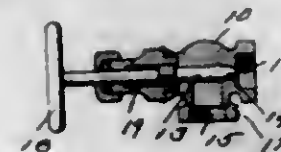


1. In a listing machine; the combination with a shiftable paper carriage; an actuator and means to feed the carriage in one direction; of means to positively drive the carriage in the opposite direction against the tension of the carriage feed means, including a drive bar to which the carriage is connected; teeth on the bar; a gear in mesh with the teeth; a train of mechanism to rotate the gear, including a coupling shiftable into and out of the path of the actuator; and adjustable means to normally hold the coupling disabled.

37. In a listing machine, the combination with a paper carriage; means to drive the carriage in one direction, the carriage adjustably connected to said drive means; and means to effect the printing of totals; of means controlled by the carriage, and by the total printing means, to disable the carriage drive means.

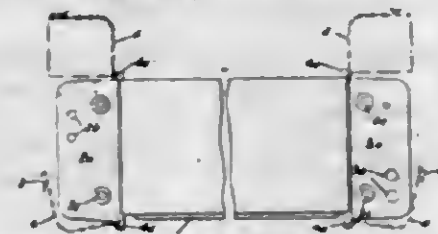
76. In a listing machine, the combination with a shiftable paper carriage; and means to drive the carriage in one direction; of an adjustable mechanism to control the carriage drive means, to render the latter effective and ineffective automatically on alternate operations of the machine.

1,308,118. VALVE. ROY H. SHANE, Quinter, Kans. Filed Apr. 25, 1917. Serial No. 164,527. 1 Claim. (Cl. 251-77.)



A valve including a casing having oppositely arranged and aligned threaded nipples, a nipple formed on the casing and projecting between the first-named nipples, the casing having a longitudinal central circular bore opening at its ends through the first-named nipples, said bore communicating with the projecting nipple by a narrow flat passage, one end of the bore being formed with a tapered seat, and a pointed valve stem disposed in the bore and arranged to engage with said tapered seat, the side of the said stem covering and controlling said flat passage, the pointed end of the said stem being arranged to be seated and unseated to control the flow of fluid through the adjacent nipple and the flat passage.

1,308,119. CASING FOR CONTROL APPARATUS. KARL A. SIMMON, Edgewood Park, and LYNN G. RULEY, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 10, 1914. Serial No. 566,161. 4 Claims. (Cl. 220-20.)



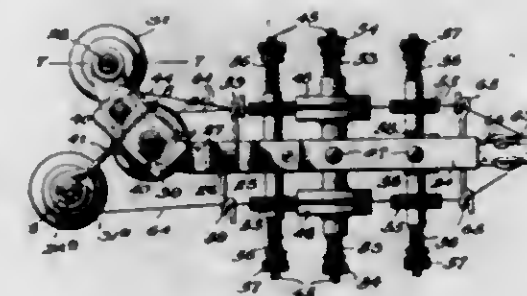
1. A casing comprising a frame, a plurality of end plates secured to the frame, side cover members hinged to the frame and adapted to inclose the bottom and sides of the space between said end plates, and cover members hinged to the said end plates and adapted to form distinct compartments therewith.

1,308,120. PROTECTIVE DEVICE FOR TROLLEY SYSTEMS. KARL A. SIMMON, Edgewood Park, and LOUIS M. ASPINWALL, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 28, 1915. Serial No. 47,882. 11 Claims. (Cl. 191-50.)



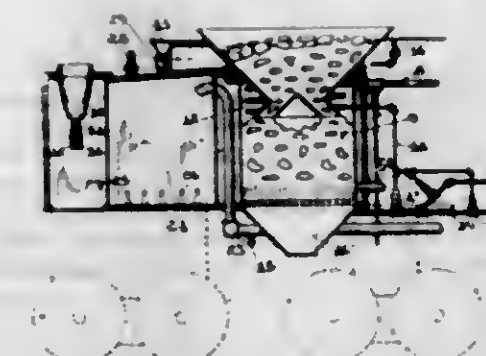
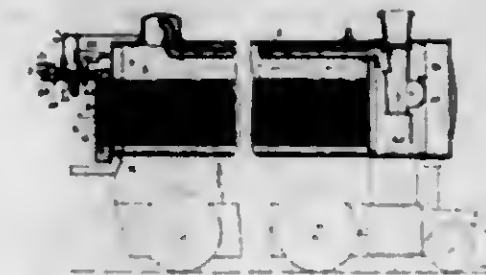
1. An electric vehicle comprising an overhead trolley and means responsive to the movements of a person ascending to the roof of the vehicle for automatically lowering the trolley.

1,308,121. TENSIONING DEVICE FOR LOOMS. ANGELO SOTTO, Altoona, Pa. Filed Aug. 10, 1918. Serial No. 249,248. 10 Claims. (Cl. 139-59.)



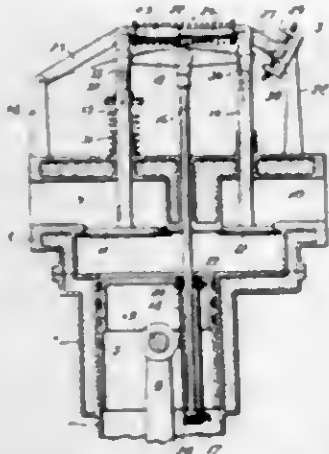
1. The combination with a loom provided with means for supporting spools, on which "catch cords" are wound, of spring actuated means arranged intermediate of the spool support, and the warp thread guide roll of the loom for subjecting the "catch cords" to a uniform tension.

1,308,122. STEAM-GENERATING PLANT. JOSEPH F. STIEGEL, Toronto, Ontario, Canada. Filed Mar. 10, 1917. Serial No. 155,264. 2 Claims. (Cl. 60-03.)



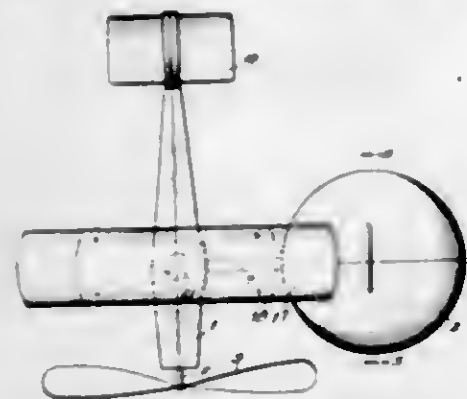
1. The combination of a boiler; a fluid burner for firing the same; means for utilizing the energy of steam generated by the boiler; an exhaust steam pipe; a feed water tank separated from the boiler; a pipe leading therefrom to the boiler; means for condensing steam from the exhaust pipe to mingle with the feed water; a producer gas generator located within the tank so as to be jacketed by the water therein; a supply pipe leading from the generator to the fluid burner, and an automatic valve in said gas supply pipe controlled by the steam pressure in the boiler.

1,308,123. INTERNAL-COMBUSTION ENGINE. GREGORY J. SROHAKA, East Orange, N. J., assignor of one-half to Charles E. Van Vleck, Montclair, N. J. Filed July 2, 1917. Serial No. 178,080. 17 Claims. (Cl. 123-91.)



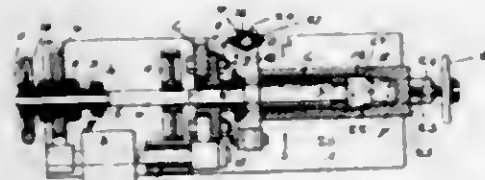
1. A four-cycle internal combustion engine comprising the combination of a cylinder, a piston, an engine shaft to which the piston is connected, inlet and exhaust valves for the cylinder, a single spring for moving both the inlet and the exhaust valves to their closed positions, and a connection from the piston to the valves including a part reciprocated directly by the piston through which the piston opens the valves alternately during successive revolutions of the engine shaft; substantially as described.

1,308,124. TOY. JOHN STACK, Chicago, Ill. Filed Aug. 19, 1918. Serial No. 250,527. 5 Claims. (Cl. 46-14.)



1. In a device of the kind described, a rotatable shaft, a spool loosely mounted on the shaft, cords oppositely wound upon the spool and extending in opposite directions therefrom, in combination with a ratchet member carried by one of said parts and a cooperating pawl by the other, whereby upon drawing upon one of the cords the spool and shaft will be rotated together, and upon drawing on the other cord the spool will be loosely rotated on the shaft in a reverse direction.

1,308,125. RECTIFYING MACHINE FOR SHELLS. WILLIAM HENRY SUMBLINO, Toronto, Ontario, Canada. Filed June 8, 1918. Serial No. 238,954. 2 Claims. (Cl. 77-3.)



1. A shell-rectifying machine comprising a pair of standards spaced apart; means for rotatably holding the boring-bar in said standards comprising means in the rear standard for feeding the bar forward, and an elongated

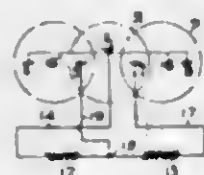
gated bushing located at the forward standard and carried thereby at one end, the other end projecting into the bore of the work operated upon and supporting the boring-bar near its point of operation on the work, and means for clamping the work in position on the machine.

1,308,126. METAL-CUTTER. CHARLES HAVELOCK TAYLOR, Toronto, Ontario, Canada. Filed Sept. 23, 1910. Serial No. 121,788. 5 Claims. (Cl. 90-4.)



1. In a metal cutting machine a head-stock and a turret, a rotary stock holder carried by the head-stock, a driving spindle carried by the head-stock and having a pair of segments with spiral ends and a pin carried rigidly and centrally between them, means rotatively connecting the stock holder to the driving spindle; an attachment carried by the turret and consisting of a carrier having mounted thereon a driven steel arbor consisting of a sleeve containing a pair of segments with their outer ends having spiral faces; a rotary metal cutting tool with its axis obliquely disposed relatively to the stock and adapted to come into cutting relation therewith when the turret moves to operative position, the said attachment being chambered to receive the stock.

1,308,127. TERMINAL DEVICE FOR ELECTRIC APPLIANCES. FRANK THORNTON, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 7, 1916. Serial No. 129,964. 8 Claims. (Cl. 219-20.)

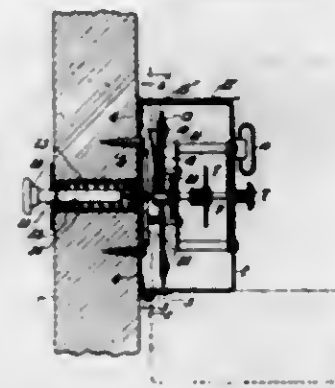


1. A terminal device for electric current-consuming apparatus comprising a plurality of contact members disposed in alignment and equally spaced, another contact member displaced from the line of the said first-named contact members and disposed substantially equidistant from certain of the said contact members, and means adapted to cooperate with said contact members to connect them in selectively different combinations, said means comprising a contact receptacle that is positioned on said contact members in a plurality of aligned positions.

1,308,128. TIME-RECORDER. WALTER J. TIDD, Springfield, Mass., assignor to Tidd Recording Clock Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 13, 1917. Serial No. 180,262. 3 Claims. (Cl. 234-38.)

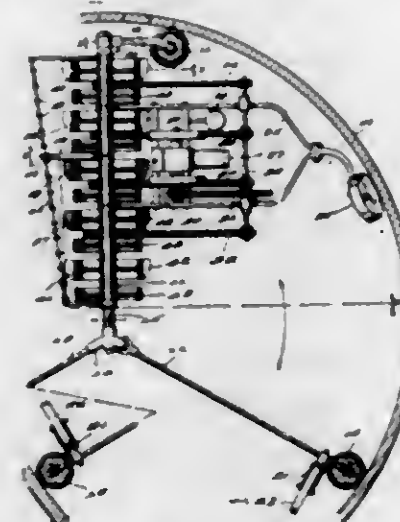
1. A watchman's time recorder comprising in combination with a suitable enclosing casing having an open end, a clock movement therein, the open end of said casing being pivotally secured to the inside of a door or other support, means for holding the casing in a closed position, said movement having a plate fixed to the frame work of the movement, a time recording disk temporarily secured to the fixed plate by means of pins on the fixed plate, means for perforating the disk comprising a pin on a spring arm and an arm to which the spring arm is attached by means of a hollow rivet carried by the

hour-post of the movement and a ring operable from the outside of the door, or other support, for engaging the



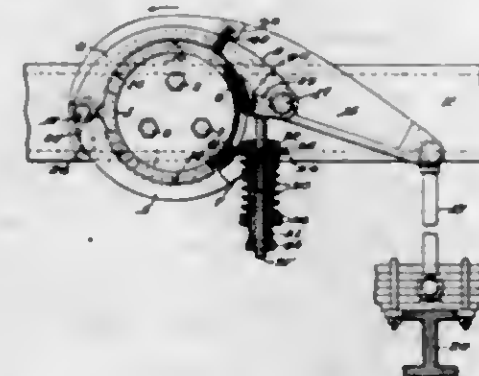
spring arm at any point in its path of rotation for forcing the pin against the disk for perforating the same.

1,308,129. ENSILAGE-PACKER. THEODORE WANSTRATH, New Point, Ind. Filed July 12, 1918. Serial No. 244,537. 8 Claims. (Cl. 100-50.)



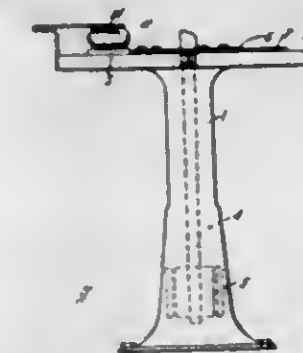
1. A silo packer, comprising an arm, a plurality of drive wheels mounted on said arm, a power device, connections of different speed ratios from said power device to said drive wheels for driving them at different speeds, and a guide arm associated with said first arm, said first arm and said guide arm being adapted to cooperate with the silo wall to guide the movements of the packer.

1,308,130. RECOIL-CHECK. JOHN W. WATSON, Wayne, Pa. Filed July 29, 1916. Serial No. 111,965. 29 Claims. (Cl. 21-105.)



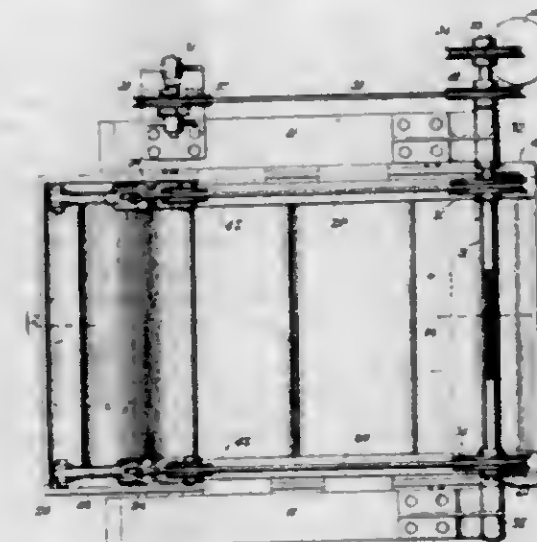
1. Mechanism having relatively movable members which when relatively moved in one direction bring into play a continuously-stressed spring to cause frictional resistance to such movement and which when relatively moved in the opposite direction permit said spring to act to render itself inoperative to cause frictional resistance to such movement regardless of the extent of such movement.

1,308,131. PAD FOR SHEET-SEPARATING MACHINES. JOHN E. WEBSTER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1914. Serial No. 829,403. 5 Claims. (Cl. 125-24.)



5. A mica-splitting machine comprising a table for supporting a block of mica, means for splitting successive sheets from the bottom of the block, and a pad adapted to rest upon the top of the block and conform to its surface, the said pad comprising a hollow elongated body of rubber, means for closing the ends of the said elongated body, and means for supporting the said body in operative relation to the work-supporting table.

1,308,132. ATTACHMENT FOR PLASTIC-MIXING MILLS. HARRY A. WELTON and HOMER J. HOTT, Detroit, Mich., assignors to Morgan & Wright, a Corporation of Michigan. Filed Feb. 4, 1915. Serial No. 6,015. 9 Claims. (Cl. 18-2.)

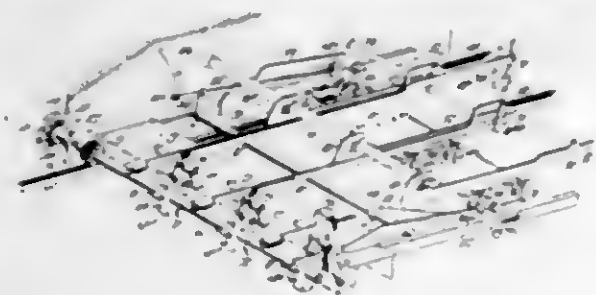


1. In apparatus of the kind described, in combination, mixing rolls, an apron contacting with material passing through said rolls, members for supporting said apron comprising a contact member holding said apron in contact with part of the surface of said rolls, a support for said contact member, and weight operated means for yieldingly resisting movement of said contact member toward its support when material of increased thickness is passing the apron and for automatically returning said member when the material has passed.

1,308,133. COMBINED TYPE-WRITING AND COMPUTING MACHINE. HORATIO WHITING, New York, N. Y., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Mar. 13, 1915. Serial No. 14,061. 70 Claims. (Cl. 235-60.)

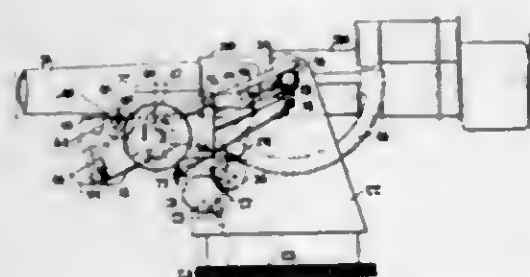
1. The combination with a computing head comprising computing wheels, of a general operator for simultaneously turning said wheels, and a state-controlling

mechanism adapted to be advanced by said general operator step by step to govern the activity and character



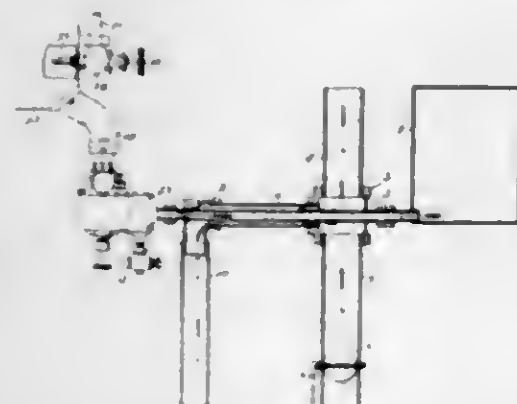
of activity of said computing head according to a predetermined plan.

1,308,134. SIGHTING OF GUNS AND APPARATUS FOR USE THEREIN. JOHN SIGISMUND WILSON, Westminster, and WILLIAM ERNEST DALBY, Ealing, London, England, assignors of one-third to Sir W. O. Armstrong-Whitworth and Company, Limited, Newcastle-upon-Tyne, England. Filed Aug. 7, 1917. Serial No. 184,979. 1 Claim. (Cl. 33-48.)



Sighting apparatus for sighting a gun on a moving object comprising in combination two pairs of sighting elements, a speed indicator controlling said pairs of sighting elements, one pair of said sighting elements being arranged for sighting in the vertical plane and the other pair for sighting laterally, means for automatically setting one element of one of said pairs by the movement of elevating the gun, means for setting one element of the other of said pairs by the movement of training the gun, to allow for the speed of the target, as set forth.

1,308,135. HYDROCARBON HEATER FOR CARBURETORS. FRANK WINCHELL, Waterloo, Iowa. Filed Sept. 21, 1917. Serial No. 192,594. 1 Claim. (Cl. 257-241.)



In combination, a tank, a conduit in communication with said tank, a pipe for carrying a heated fluid under head and traversed transversely by said conduit, a throttle valve in said pipe located beyond the place of traversing of said conduit, and a by-pass in communication with said pipe at the location of its traversing by

said conduit, the conduit being carried through a part of said by-pass interiorly in spaced relation thereto.

1,308,136. PASTE CALCIMINE. JOHN HEATH WOOD, Chicago, Ill., assignor to Oso Chemical Company, a Corporation of Illinois. Filed Oct. 25, 1916. Serial No. 127,533. 5 Claims. (Cl. 134-46.)

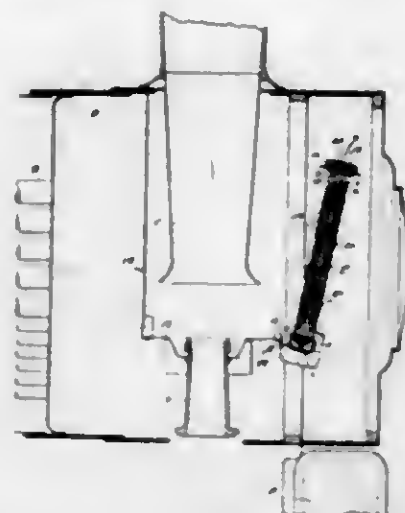
3. A paste calcimine containing three hundred fifty (350) pounds of whiting, eleven (11) gallons of water, and ninety four (94) pounds of vegetable glue comprising the reaction products of starch, water, caustic soda, resin size, and acid.

1,308,137. APPARATUS FOR USING POWDERED FUEL. CHARLES D. YOUNG, Altoona, Pa. Filed Mar. 31, 1916. Serial No. 88,928. 3 Claims. (Cl. 110-28.)



3. In apparatus for burning pulverized fuel the combination with a fire-box, of an air and fuel mixing conduit discharging into the fire-box, an opening in the wall thereof through which the fuel enters, a plurality of converging blast air inlet tubes terminating at their inner ends in a discharge nozzle, and a supplementary air inlet surrounding said tubes, the tubes with their nozzles extending into the mixing conduit to a point adjacent the rear side of the fuel entry opening.

1,308,138. FEED-WATER HEATER. CHARLES D. YOUNG, Altoona, Pa. Filed Apr. 20, 1916. Serial No. 92,351. 2 Claims. (Cl. 122-426.)

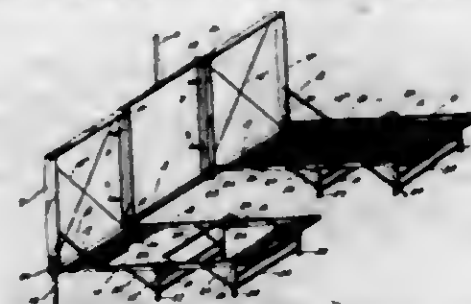


1. The combination with a locomotive having a smoke box with a passageway for the gases from the locomotive fire-tubes, of a water heater located in such passageway and having its heat absorbing surfaces comprising closely spaced relatively small water tubes and transverse plates contacting with the tubes and arranged to form a spark and cinder netting.

1,308,139. CAMPING OUTFIT. FRANK ZAGELMEYER, Bay City, Mich. Filed May 7, 1918. Serial No. 233,062. Renewed May 10, 1910. Serial No. 297,567. 11 Claims. (Cl. 5-9.)

6. A camping outfit including a frame, a pair of cases hinged to the frame and arranged to swing horizontally to fold them against the frame, foldable berths hinged to

the said cases at the bottom and arranged to swing vertically within the same and composed of inner and outer sections, the outer sections being foldable on the inner sections.



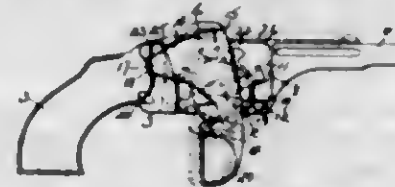
sections, the outer sections being foldable on the inner sections.

1,308,140. SNAP-FASTENER. CHRISTOPHER F. BACKMYER, Chicago, Ill. Filed May 11, 1918. Serial No. 233,839. 3 Claims. (Cl. 24-224.)



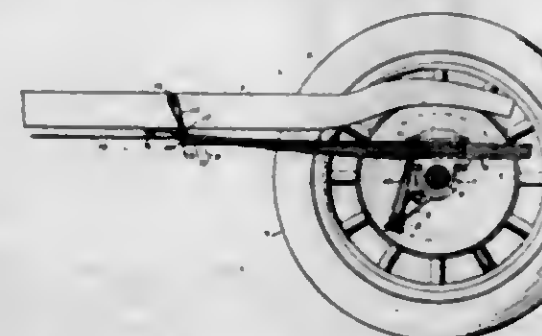
1. A snap fastener, including a female element, said female element having a slotted aperture and an enlarged opening in which said slotted aperture terminates, a male member, said male member having a button, said button having a neck or constricted portion, and a spring member, said spring member comprising two curved members and a cross bar connecting said curved members at one of their ends, the curvature of said spring members being such that medially of their length they are in close proximity of each other, said cross member being fixedly connected to the female element, the ends of the curved spring members being movably held to the female member.

1,308,141. TOY PISTOL. CHARLES A. BAILEY, Cromwell, Conn. Filed Dec. 30, 1918. Serial No. 268,837. 5 Claims. (Cl. 42-54.)



1. In a toy pistol, a frame, a wheel mounted on the frame to slide substantially in a right line, a pivot on which said wheel rotates, means for guiding the wheel in its sliding movement, and means for operating the wheel.

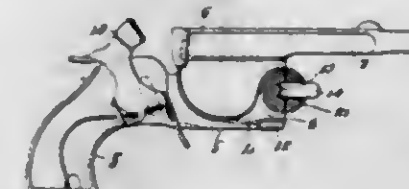
1,308,142. BRAKE MECHANISM. WALTER C. BAKER, Lakewood, Ohio, assignor to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 22, 1918. Serial No. 246,050. 3 Claims. (Cl. 21-8.)



2. In a motor vehicle, the combination of the frame of the vehicle, a driving axle, a driving wheel on said axle,

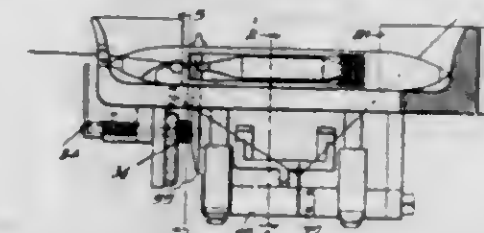
a spring operatively connecting said axle and said frame and permitting the axle to oscillate under the influence of driving and braking torque, a brake for said wheel, an arm connected with said brake, and operating means connected with said arm at a point substantially coincident with the axis about which the said axle oscillates under the influence of the driving and braking torque.

1,308,143. TOY PISTOL. CHARLES A. BAILEY, Cromwell, Conn. Filed Feb. 26, 1919. Serial No. 279,265. 6 Claims. (Cl. 42-57.)



1. A toy pistol including a frame having an anvil, means for delivering a blow against said anvil, and a spring guide extending backwardly and curved upwardly and terminating back of said anvil to direct the movement of a tape, whereby force applied to a tape to move it endwise along said guide to feed it to said anvil will release the guide from said anvil.

1,308,144. WEEF-REPLENISHING LOOM. WILLIAM L. BARKELL, Lawrence, Mass. Filed May 22, 1914. Serial No. 840,200. Renewed Sept. 19, 1917. Serial No. 192,230. 14 Claims. (Cl. 130-85.)



1. In a weef-replenishing loom, means arranged to interchange a spent shuttle and a filled shuttle, means arranged to insert a full bobbin in the spent shuttle and force the spent bobbin out of said shuttle, means arranged to cut the thread running from the fabric to the spent bobbin, and thread-engaging means arranged to move said thread into position to be cut by said cutting means.

1,308,145. FUEL-REGULATING DEVICE FOR EXPLOSIVE ENGINES. EDMUND S. CHURCH, Chicago, Ill., assignor to Automatic Carburetor Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1910. Serial No. 70,564. 3 Claims. (Cl. 251-144.)



1. A regulating device for controlling the supply of a fluid to explosive engines comprising a nipple having means at one of its ends adapted for attachment to the intake of an engine, a tubular valve slidably mounted in said nipple, a diaphragm secured to the outer end of said valve, an admission port controlled by said valve, a suction chamber disposed at the outside of the diaphragm, and means secured to the valve and diaphragm extending through the nipple and communicating with said chamber and the chamber in the intake.

1,308,140. FASTENER. EDMUND S. CHREACH, Chicago, Ill., assignor to Automatic Carburetor Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1918. Serial No. 218,977. 0 Claims. (Cl. 24-211.)



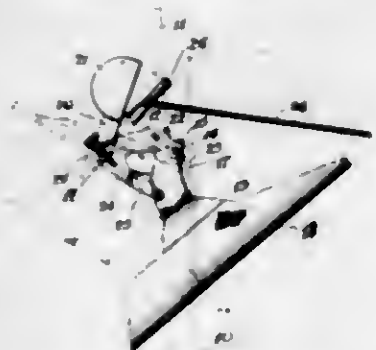
1. In a fastener, the combination of a stud, means whereby it may be secured to a support, a latch movably mounted in the stud and means whereby the latch may be manipulated either from the outside or the inside of the support for the stud.

1,308,147. SLEEPING-CAR LADDER. WILLIAM A. COOPER, Montreal, Quebec, Canada. Filed Feb. 19, 1917. Serial No. 149,513. 1 Claim. (Cl. 228-12.)



A ladder divided substantially midway its length into two parts hingedly connected together, each part consisting of side bars and steps, the step at the hinge connection being divided longitudinally substantially midway of its width, one half being carried by the lower part and the other by the upper, and means constructed and arranged to automatically rigidly lock the parts when brought into alignment, said means consisting of a plate rigidly carried by one part and a resilient member carried by the other part and having a lug on its lower end adapted to engage the said plate.

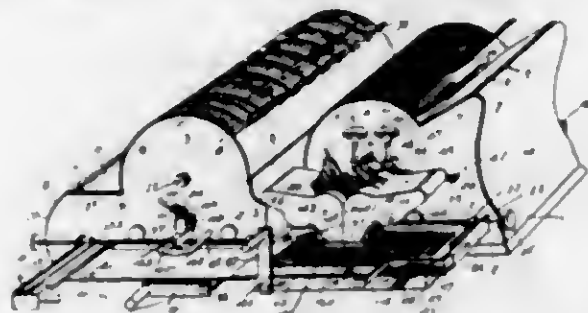
1,308,148. DISCHARGE SPOUT FOR CONCRETE MIXERS. LLOYD HARRY DRATGER, Milwaukee, Wis., assignor to T. L. Smith Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 24, 1917. Serial No. 192,933. 7 Claims. (Cl. 193-29.)



1. A discharge spout for concrete mixers and the like, comprising a pivotally suspended spout member, an operating shaft, a toggle connection between the operating shaft and the spout, and a stop on the operating shaft

engaging the spout member for limiting the movement of the toggle connection after it has passed its straight line position.

1,308,149. CHECK-WRITING MACHINE. GEORGE AATHUA EATINGTON, Buffalo, N. Y., assignor, by direct and mesne assignments, of sixty per cent. to Willia E. Waterman and twenty per cent. to Maude E. Waterman, Buffalo, N. Y. Filed Nov. 25, 1910, Serial No. 133,456. Renewed May 15, 1919. Serial No. 297,439. 13 Claims. (Cl. 101-95.)



5. A dating or numbering mechanism comprising a rectangular supporting bar secured to a suitable base, a sleeve slidably mounted thereon, a standard extending upwardly from the sleeve having a horizontally extending bearing portion, a spring plunger held within such bearing portion, a collar slidably mounted upon the supporting bar at each end of the aforesaid sleeve, guideways formed integral with each collar, guide bars carried by the casing slidably fitting within the guideways, a tube having a closed upper end and an open lower end and a vertical slot extending from such open lower end and secured to the casing, a hanger extending from the sleeve having a foot piece extending through the slot and fitting within the tube, a compression spring extending between such foot piece and the top of such tube, and means for locking the mechanism in position upon the supporting rod.

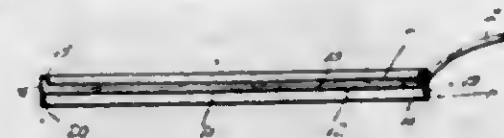
12. In a device of the class described, a type carrier having cross grooves and edge recesses, type pieces located in the grooves, lugs extending from such type pieces through the recesses, and spring fingers secured at one end to the carrier and bearing at their opposite end against the lugs.

1,308,150. EXCAVATING-BUCKET. WILLIAM M. VENABLE, Pittsburgh, Pa., assignor to Blaw Steel Construction Company, a Corporation of New Jersey. Filed Feb. 3, 1917. Serial No. 146,562. 16 Claims. (Cl. 214-115.)



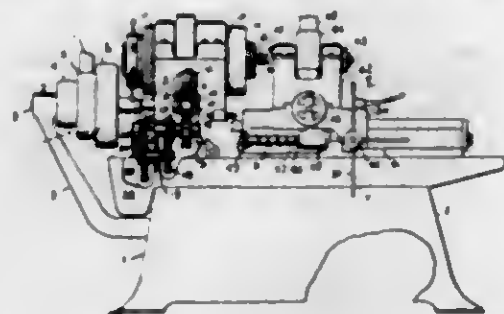
1. In combination in an excavating mechanism, a holding line secured to a fixed support, a bucket, a holding drum about which is wound the line, and means for preventing the drum from winding up on the line except when the bucket is closed, said drum held stationary by said means when the bucket opens.

1,308,151. GRIDDLE. GEORGE VOGEL, Washington, D. C. Filed Feb. 3, 1919. Serial No. 275,103. 1 Claim. (Cl. 53-5.)



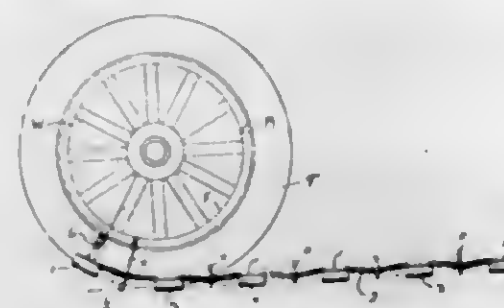
In a reversible griddle, the combination of a pair of spaced plates, a sheet of asbestos between said plates, one of said plates having a raised or rolled peripheral flange and a rim portion, said rim portion having a portion thereof folded inwardly upon itself to form a flange and a pocket and the other of said plates adapted to be supported on said flange and having an angular peripheral flange adapted to seat in said pocket, the rolled peripheral flange and the inwardly folded portion of said first mentioned plate serving to retain the hot fat on one or the other of said plates according to which side of the griddle is placed on the stove.

1,308,152. MACHINE-TOOL. MILTON A. WERTMAN, Toledo, Ohio, assignor to The Biggs-Watterson Co., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1918. Serial No. 228,813. 5 Claims. (Cl. 10-154.)



2. A machine tool including a drive embodying a rotatable member, a holder, an element mounted on the member to be moved thereby, means for clamping the element to the holder to move the holder, and spring means automatically operable upon release of the clamping means for resetting the element.

1,308,153. WHEEL-TREAD. LEVI M. WHEAT, Woodville, Tex. Filed Dec. 28, 1918. Serial No. 268,608. 3 Claims. (Cl. 152-14.)

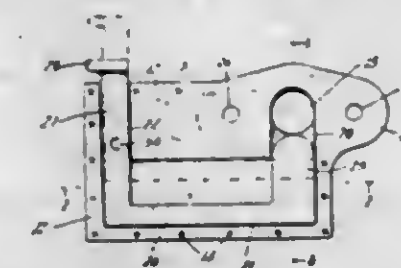


2. A wheel tread including side members and curved holding arms pivotally engaged with the side members inwardly of the inner ends of said curved arms, said arms being substantially transversely aligned with the inner portions thereof pivotally connected directly one to the other.

1,308,154. MANIFOLD-LOCK. RAYMOND OTTIS WONES, Maplewood, Ohio. Filed Mar. 25, 1919. Serial No. 285,013. 7 Claims. (Cl. 251-6.)

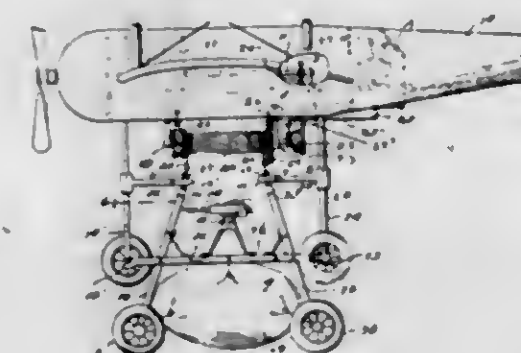
1. A manifold lock comprising a thin casing having an opening therein adapted to register with the passage through the manifold, a substantially U-shaped member

slidably mounted in said casing to move into and out of position closing the manifold passage, said member hav-



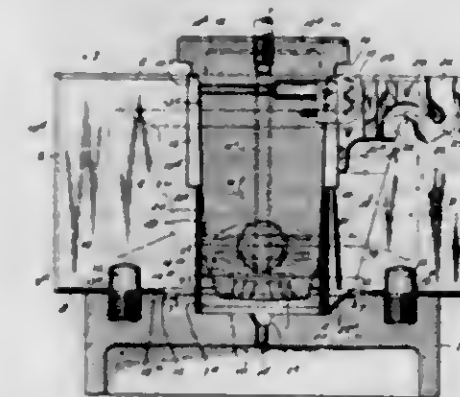
ing a projecting handle portion rigid therewith, and means for locking said member in position closing the manifold passage.

1,308,155. AIRCRAFT. PERDE ADAMS, Newton, Ga. Filed June 21, 1918. Serial No. 241,281. 1 Claim. (Cl. 244-1.)



The combination with an aircraft, of a gun carriage suspended below the same and including a gun platform, a buoyant body supported below said platform, a plurality of cables detachably connected to the gun carriage for supporting the same below the aircraft, and drums carried by the aircraft and operated by the motive power thereof to wind the cables upon said drums and raise the gun carriage to a position directly beneath the aircraft, said cables being adapted to be unwound from the drums by the weight of the gun carriage, and a lock device associated with said drums for preventing rotation thereof whereby to support the gun carriage at different distances below said aircraft.

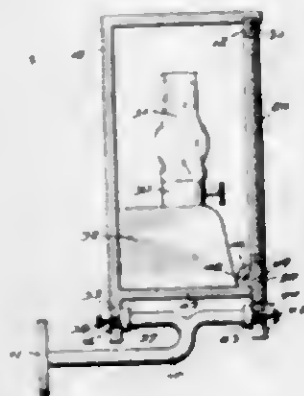
1,308,156. MOLD. CLARA J. AMICK, Cleveland, Ohio, assignor to The Aluminum Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 2, 1919. Serial No. 286,883. 3 Claims. (Cl. 22-155.)



1. A mold having a cavity for the casting proper and provided with a gate comprising an upright feeder cavity adjacent the casting cavity and communicating with the casting cavity at various levels between the bottom and top thereof through a short narrow passage, said feeder

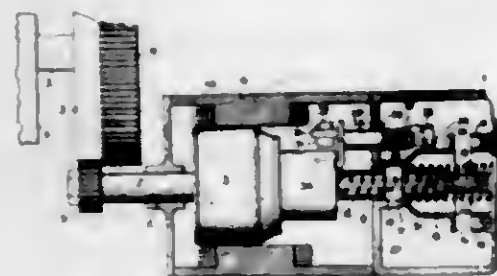
cavity having its lateral wall opposite the casting cavity inclined downwardly and laterally toward said casting cavity, and a supply passage extending from the gate inlet opening to the top of the feeder cavity, the discharge end of said supply passage being arranged to discharge the molten metal into the feeder cavity only on lines substantially parallel to the inclined wall of said cavity.

1,308,157. TRANSPARENT SIGN. GEORGE WILLIAM BALOGH and LADISLAW POSKI, Buffalo, N. Y. Filed Aug. 15, 1917. Serial No. 186,329. 1 Claim. (Cl. 40—132.)



In a transparent sign, the combination with a hollow rectangular casing and a light carried thereby, supports for said casing, outwardly extending lugs formed in the interior with said casing, said lugs containing an arcuate recess, a translucent plate upon which colored characters are formed, said plate being engaged by grooves formed in the upper part of said casing, other lugs at the bottom of said plate engageable within the mentioned recess and means for rigidly clamping said plate to said casing.

1,308,158. ELECTRICAL APPARATUS. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company, a Corporation of Delaware. Filed Nov. 18, 1914. Serial No. 872,702. 15 Claims. (Cl. 290—38.)

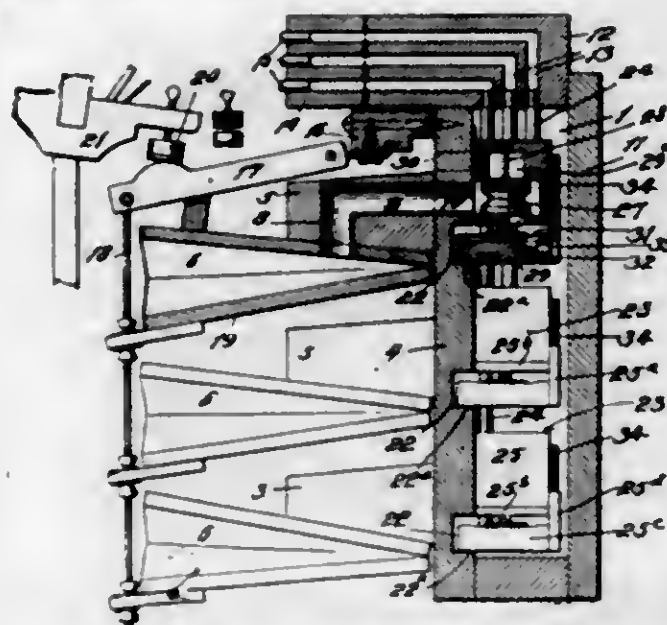


4. In apparatus of the class described, in combination, an internal combustion engine, an electric motor, means adapted to drive said engine from said motor, and means adapted to lead current to one brush of said motor through a resistance and subsequently lead it directly to another brush without said resistance.

1,308,159. UNIT-ACTION FOR PNEUMATIC MUSICAL INSTRUMENTS. GEORGE P. BUANO, New York, N. Y. Filed Oct. 3, 1916. Serial No. 123,477. 48 Claims. (Cl. 84—178.)

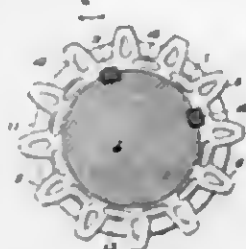
1. A unit action comprising a complete action chest, individual valve actions within said chest, player pneumatics exteriorly arranged upon one wall of said chest,

a removable duct piece having tracker duct connections for the valve actions and ducts connecting said valve



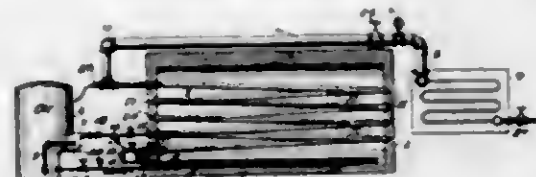
actions with the player pneumatics, said duct piece being continuous of the member to which it is affixed.

1,308,160. SECTIONAL GEAR. WALTER BRINTON, Wilmington, Del., assignor to American Manganese Steel Company, Augusta, Me., a Corporation of Maine. Filed Mar. 21, 1919. Serial No. 284,167. 5 Claims. (Cl. 74—28.)



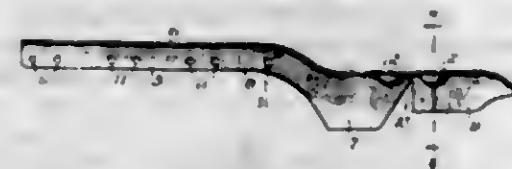
1. A gear composed of a plurality of transversely arranged sections formed of cast manganese steel, each section including a continuous ring-like body having teeth projecting therefrom, said teeth provided with recesses extending inwardly from the side walls thereof.

1,308,161. PROCESS OF TREATING HYDROCARBON OILS. ROY H. BROWNLEE, Pittsburgh, Pa. Filed Mar. 29, 1917. Serial No. 158,165. 9 Claims. (Cl. 196—25.)



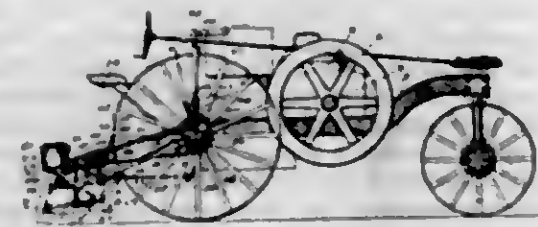
1. The process of treating hydrocarbon oils to increase the yield of low boiling potet liquid products, which consists in introducing a carrying current of gas adjacent the lower extremity of a vertically extending pipe system heated and maintained under pressure, introducing the oil below the upper extremity of said pipe system, continuously separating the heavier components from the lighter vaporized products, and permitting a continuous reflux of the former through the system counter to the current of gas introduced therein so that the heavier components separated at any point in the system undergo a further treatment in the presence of a lesser concentration of the lighter vapors than at the point of their separation.

1,308,162. CUTTING APPARATUS FOR MOWING-MACHINES. EDWARD W. BURGESS, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed July 5, 1916. Serial No. 107,077. 7 Claims. (Cl. 56—44.)



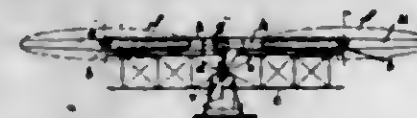
4. A blank from which a knife head may be formed, having a vertical web and a plurality of separated horizontal webs extending on the same side of said vertical web, and semi-spherical bosses projecting outwardly from said vertical web, one of said bosses being disposed over each of said horizontal webs.

1,308,163. CORN-PLANTER. EDWARD W. BURGESS, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Aug. 26, 1916. Serial No. 116,948. 3 Claims. (Cl. 111—63.)



3. In a planter, a transversely disposed frame member, a planter boot, a furrow opener connected with said boot, parallel drag bars pivotally connecting said boot with said frame member to operatively maintain said boot in the same operative position when it is raised and lowered, a rock shaft, pressure arms secured thereto, and spring pressure mechanism connecting said pressure arms with certain of said drag bars.

1,308,164. AEROPLANE. LUCIEN CHAUVIERRE, Paris, France, assignor to Societe Anonyme l'Helice Integrale (Anclens Etablissements L. Chauviere), Paris, France. Filed Mar. 14, 1918. Serial No. 222,460. 4 Claims. (Cl. 244—12.)

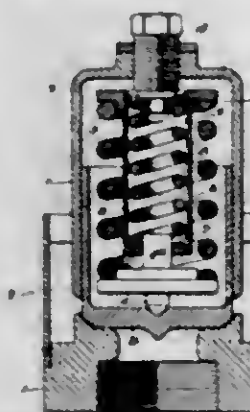


1. An aeroplane comprising a substantially flat surface of greater width than length, said surface being rotatably mounted in a plane slightly inclined to the horizontal plane of the aeroplane, said plane, in its rotation, approximating, in proportion to its speed, the effectiveness of a plane of an area corresponding to that comprised within the circumference described by the tips of the rotating plane.

1,308,165. SPRING. GEORGE H. CLARK, Cambridge, Mass., assignor to Crosby Steam Gate & Valve Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1916. Serial No. 115,076. 1 Claim. (Cl. 137—53.)

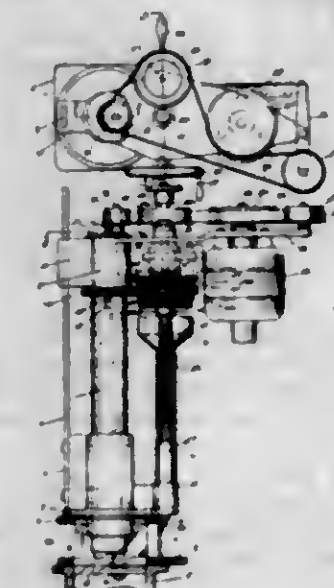
In a safety valve of the character described, in combination, a valve casing; a valve disk seated therein; a helical spring surmounting the valve disk; a chamber open at the top, suspended from the upper end of said

spring and extending downwardly encircled by the coils of said spring; and a second helical spring disposed in said chamber and confined between the bottom thereof



and an abutment in the casing, all so arranged that, when the valve disk rises from its seat, compression of the outer spring raises said chamber thereby compressing the inner spring.

1,308,166. CYLINDER-GRINDING MACHINE. ALBERT H. COMBS and FRANK A. BULLINGTON, Portland, Ore.; said Bullington assignor of one-half of the whole right to Earl O. Smith, Portland, Ore. Filed Jan. 25, 1917. Serial No. 144,451. 16 Claims. (Cl. 51—4.)

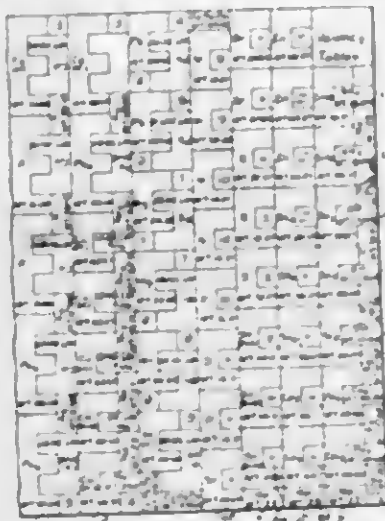


1. In a grinding machine of the character referred to, in combination, a cylindrical member rotatably and movably mounted, a tubular bearing member rotatably mounted eccentrically to said cylindrical member, a driving shaft rotatably mounted eccentrically through said tubular bearing member and provided at its end with a grinding element, said driving shaft having its bearings in said tubular bearing member, a motor, and driving connections from said motor for simultaneously rotating said cylindrical member and said driving-shaft at different speeds and for automatically moving said cylindrical member and said driving shaft longitudinally at a greatly reduced speed.

1,308,167. VALENCY-CHART. WILLIAM C. COOPER, Chicago, Ill., assignor of one-half to J. Courtland Cooper, Chicago, Ill. Filed July 15, 1918. Serial No. 244,933. 9 Claims. (Cl. 35—12.)

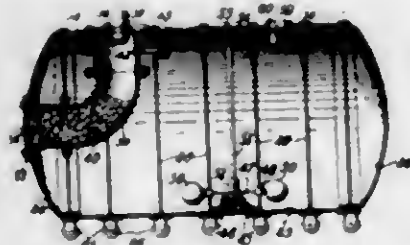
1. In a valency chart, a sheet showing in outline thereon a plurality of rectangularly formed sections that

fit together on the sheet and which, when cut out, represent different chemical elements or radicals, and which



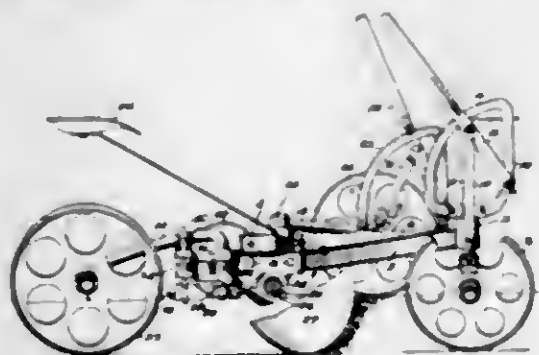
have means to indicate the valence of the element or radical represented by each section.

1,308,168. PONTOON FOR RAISING SHIPS. ANDREW COMPTON, Huguenot Park, N. Y. Filed Apr. 25, 1918. Serial No. 230,650. 1 Claim. (Cl. 114-53.)



A device of the character described comprising a plurality of tanks, an elbow element in each of the tanks adapted to form a chamber for the reception of calcium carbide, a pipe connecting said elbow element with the body of the tank, a pipe within said elbow element adapted to be coupled to a flexible hose in permanent communication with the atmosphere, a check valve in said first named pipe, preventing the inlet of water but permitting the escape of gas from said element or chamber into the tanks, a valve at the bottom of each tank permitting the expulsion of the water normally contained in the tanks under the pressure of the gas passing the check valve, a safety gas valve on top of each tank, a plurality of brackets secured at spaced intervals to each tank, rollers mounted in said brackets, hook eyes on each tank, and cables connecting the hook eyes of the neighboring tanks.

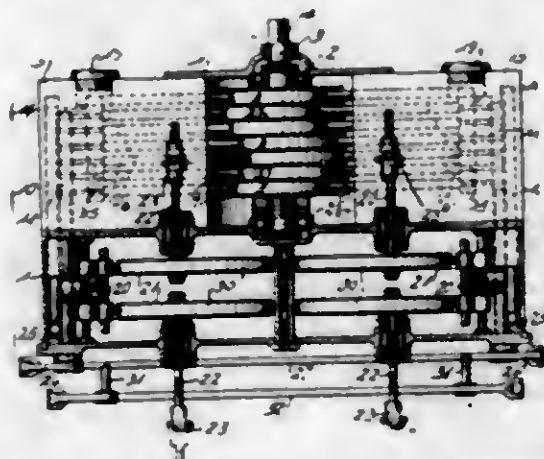
1,308,169. DEEP-TILLING MACHINE. PETER B. CHARR, Long Lake, Minn. Filed Sept. 17, 1915. Serial No. 51,180. 14 Claims. (Cl. 97-40.)



1. A tilling machine comprising a frame, carrying wheels for the forward portion of said frame, one of said wheels being mounted to run in the furrow and the other on the land, an arm whereon said land wheel is mounted having a horizontal axis in the rear of said wheel, a

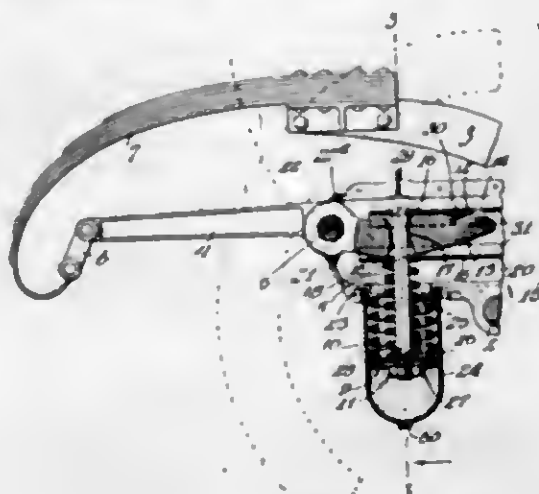
single plow disk, journaled on the opposite side of said frame at an angle to the axis of said land wheel arm and opposite thereto and a wheel in the rear of said disk mounted to travel in the furrow last made thereby.

1,308,170. FLUID POWER TRANSMISSION. DIMITRI SENBAUD DE LATAUD, New York, N. Y. Filed June 14, 1917. Serial No. 174,091. 6 Claims. (Cl. 60-54.)



1. In a fluid power transmission, the combination comprising a plurality of reciprocating pumps, a main fluid delivery passage, a main fluid suction passage, branch passages leading from each pump to both said main passages, a single common valve member interposed in all said branch passages and provided with a plurality of passages, and an operative connection between the pumps and the valve member for actuating the valve member to place certain passages of the valve member successively in suction communication with certain of the branch passages and simultaneously to place certain other of the passages of the valve member in delivery communication with certain of the branch passages.

1,308,171. SHOCK-ABSORBER. GEORGE HINER DOREY, Montreal, Quebec, Canada. Filed Mar. 12, 1917. Serial No. 154,324. 13 Claims. (Cl. 267-8.)

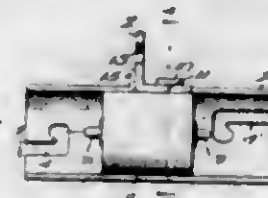


2. The combination with two parts between which there is relative movement, of a shock absorber controlling such movement and having therein spring mechanism, a differential lever presenting a convex parabolic operating surface and being pivotally connected to each of said parts and fulcrumed between its power and weight arms, and movable plates in operative connection with the spring mechanism and adapted to be acted upon by the operating surface of the lever.

6. The combination with two parts between which there is relative movement, of a shock absorber controlling said movement and having a main load resisting spring, a secondary spring and a lever acting upon said springs and adapted when moved in one direction to compress both springs simultaneously, such lever reduc-

ing the leverage exerted upon one of said springs in proportion to increased movement of the lever in said direction and reducing the leverage exerted upon the other spring in proportion to increased movement of the lever in the opposite direction.

1,308,172. CIRCUIT-CONNECTOR. HARRY A. DOUGLAS, Bronson, Mich., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich., a Corporation of Michigan. Original application filed Oct. 24, 1917, Serial No. 198,339. Divided and this application filed May 23, 1918. Serial No. 236,083. 6 Claims. (Cl. 173-328.)

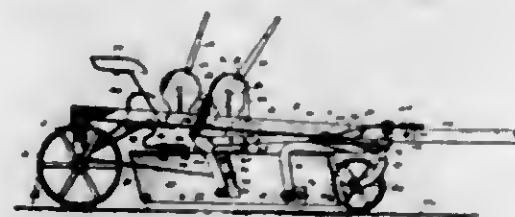


5. A shell having an outwardly bulging portion, a lateral opening at the bulging portion, and a projecting lug near said bulging portion; in combination with an angular lug having one arm received in said bulging portion and its other arm projecting through said opening and engaging the first aforesaid lug.

1,308,173. MANUFACTURE OF ACETIC ACID FROM ACETALDEHYDE. HENRY DARTFUS, Basel, Switzerland. Filed Jan. 19, 1918. Serial No. 212,504. 5 Claims. (Cl. 23-24.)

1. A process of making acetic acid from acetaldehyde, which comprises passing a gas containing free oxygen at substantially atmospheric pressure through liquid acetaldehyde maintained at a temperature between about 0° C. and about 10° C., while insuring thorough subdivision of the entering gas and intimate contact thereof with the liquid acetaldehyde by strong agitation, substantially as described.

1,308,174. ROAD-WORKING MACHINE. ALONZO G. DUNNICK, Concordia, Kans. Filed Aug. 30, 1917. Serial No. 189,019. 4 Claims. (Cl. 37-7.)

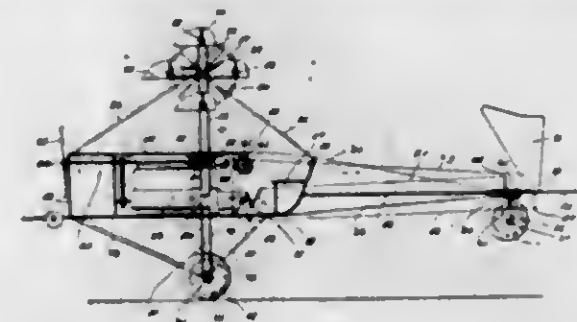


1. A road-working machine comprising a wheeled frame, a draft arm pivotally carried by said frame, a grading member supported near its midpoint from said draft arm and provided with a loose pivotal connection thereto permitting independent vertical movement of the opposite ends of said grading member with reference to said pivotal connection, and yielding means associated with said draft arm and exerting a downward pressure thereon for holding said grading member in resilient engagement with the road surface.

1,308,175. FLYING-MACHINE. FREDERICK FREDERICK, New York, N. Y. Filed Oct. 22, 1918. Serial No. 259,217. 1 Claim. (Cl. 244-14.)

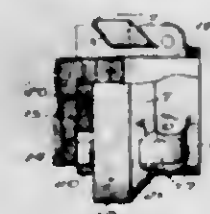
In an aeroplane of the character described, a car, a motor contained therein, a propeller actuated by said motor, substantially box-like lifting planes above said car, a horizontal rudder pivotally engaged at the rear of said aeroplane, a vertical rudder fixed upon the upper sides of said horizontal rudder, a transverse shaft in said car, cable drums on said shaft, a hand wheel for operating said shaft, and cables connecting said drums

and said rudders for operating the same, levers pivoted to the car, springs controlling said levers, and cables secured to said levers and the horizontal rudder, means for



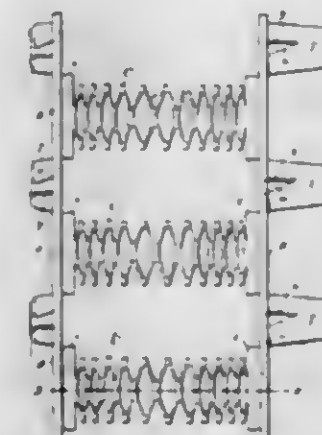
operating said lifting planes from the motor, brackets in said car, and a clutch lever sliding in said brackets for controlling said means for operating the lifting planes from the motor.

1,308,176. STOCK CENTERER AND CHUCK. THOMAS H. FIELD, Archbold, Ohio. Filed Mar. 20, 1918. Serial No. 224,729. 4 Claims. (Cl. 270-107.)



1. In a stock centering means, a threaded shell having slots formed therein, a plurality of centering members pivoted at their ends to the shell and located in the slots, the centering members having cam surfaces extending diagonally with respect to the length of the centering members and located intermediate the free ends of the centering members and their pivots, a ring threaded on to the shell and having cam surfaces fitting between the cam surfaces of the centering members.

1,308,177. EXPANDED-METAL RAILROAD OR TRACK. GUION F. GREENWOOD, Georgeville, Quebec, Canada. Filed Nov. 5, 1918. Serial No. 261,204. 4 Claims. (Cl. 238-45.)

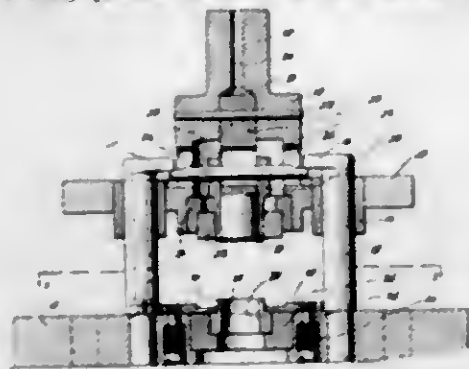


1. An integral expanded metal railroad section including rails and cross ties.

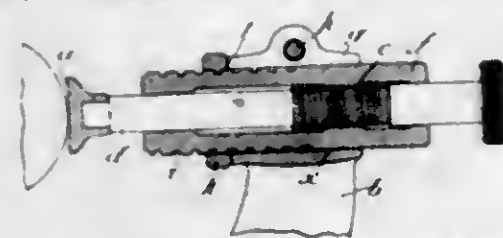
1,308,178. DIE. OTTO KASSEL, New York, N. Y. Filed Feb. 5, 1919. Serial No. 275,234. 3 Claims. (Cl. 164-32.)

1. In a punch and die for cutting washers, the combination with a die plate, a die removably engaged therein, a pressure plate for holding said die against said die

plate, a punch holder, a center punch removably engaged therein, a ring punch secured in said punch holder circumferentially adjacent to said center punch, and a pressure sleeve slidably engaged between said center punch and said ring punch.



1,308,179. MEASURING APPARATUS. HERMANN KLÄGER, Stuttgart, Germany, assignor to the Firm of Fortuna-Werke, Spezialmaschinenfabrik, G. m. b. H., Stuttgart-Cannstatt, Germany. Filed May 13, 1915. Serial No. 27,839. Renewed Nov. 23, 1918. Serial No. 263,937. 3 Claims. (Cl. 33-104.)



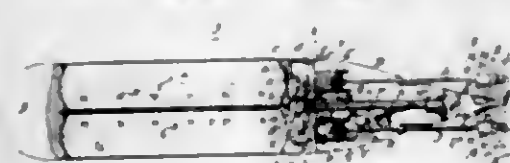
3. In an accurate measuring apparatus, in combination, a bearing, a directly shiftable measuring bolt disposed in said bearing, said measuring bolt having an external screw threaded portion protruding from said bearing, said bearing constituting clamping means whereby said bolt may be firmly positioned, and auxiliary means for insuring positive positioning of said measuring bolt consisting of a counter nut placed on the threaded portion of said measuring bolt and adapted to be brought in contact with said bearing.

1,308,180. AUTOMOBILE TORPEDO. FRANK M. LEAVITT, Smithtown, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed June 13, 1918. Serial No. 103,391. 3 Claims. (Cl. 114-20.)



1. An automobile torpedo comprising propelling mechanism, stern propeller screws, two parallel longitudinal shafts extending through the bow of the torpedo and driven from said propelling mechanism, and a pair of revolving net-cutting screws mounted on said shafts forward of the torpedo.

1,308,181. AUTOMOBILE TORPEDO. FRANK M. LEAVITT, Smithtown, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Apr. 22, 1916. Serial No. 92,869. Renewed May 23, 1919. Serial No. 299,381. 9 Claims. (Cl. 114-20.)



1. An automobile torpedo having two elongated cylindrical parallel longitudinal air ducts forming part of the

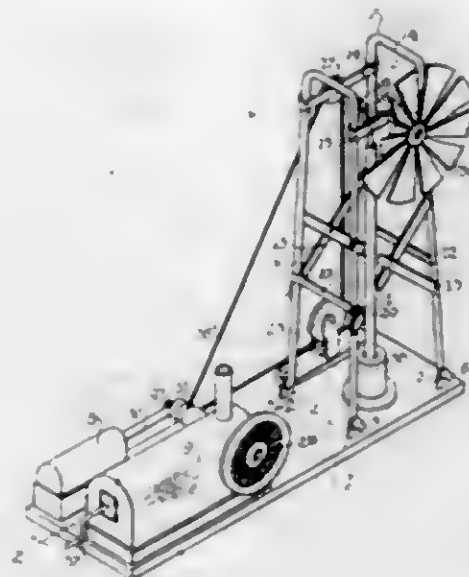
transverse contour of the torpedo hull, and comprising propulsive mechanism driven by air supplied from both ducts.

1,308,182. COMBINED MIRROR, FLAG, AND LAMP HOLDER. WILLIAM LEUCKERT, Astoria, N. Y. Filed Aug. 6, 1918. Serial No. 248,627. 1 Claim. (Cl. 240-2.)



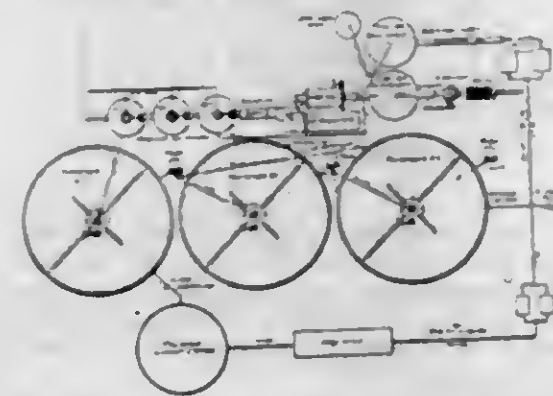
In a device of the class described, the combination with a tubular standard and a hollow substantially spherical head formed therewith, of a casing partially enveloping said head, an opposite disposed casing, a cup movable over said second casing, sockets extending laterally from said cup, a mirror, a casing to which said mirror is held, a concave plate formed with the back of said mirror casing adapted to connect with said cup, a bolt for drawing said concave plate against said cup and head, and means permitting said mirror to move limitedly in any direction.

1,308,183. TOY. HERMAN E. LUNDGREN, Chicago, Ill. Filed Feb. 25, 1918. Serial No. 218,999. 6 Claims. (Cl. 46-37.)



1. In a toy, a pump having a reciprocating plunger, a tower surrounding said plunger, a driving shaft at the top of the tower operatively connected to the plunger, an engine, a belt operatively connecting the engine with said shaft, and means for driving said engine.

1,308,184. PROCESS OF RECOVERING THE ALKALI USED IN PULP DIGESTION. DANIEL SHIELDS McAFEE, New York, N. Y., assignor to The Dorr Company, a Corporation of Delaware. Filed Aug. 16, 1918. Serial No. 250,125. 17 Claims. (Cl. 23-22.)



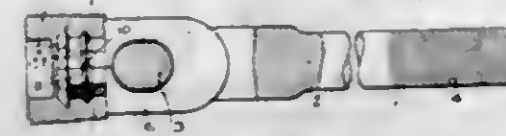
9. The process of causticizing soda ash which comprises grinding unslaked lime with a liquid lime-slaking agent, and bringing the sodium carbonate of the soda ash to be causticized into contact therewith during said grinding operation; substantially as described.

1,308,185. STAY-BOLT. ROBERT J. MCKAY, Pittsburgh, Pa. Filed May 5, 1915. Serial No. 26,130. 4 Claims. (Cl. 85-1.5.)



1. A stay-bolt comprising a shank having a loop, an eye-head having an eye-loop engaging the loop of said shank, said eye-head comprising an eye-loop portion formed with a longitudinally divided tail-piece, and a cap inclosing said tail-piece.

1,308,186. STAY-BOLT. ROBERT J. MCKAY, Pittsburgh, Pa. Original application filed May 5, 1915. Serial No. 26,130. Divided, and this application filed July 29, 1916. Serial No. 112,050. 4 Claims. (Cl. 85-1.5.)



1. A stay-bolt comprising a shank having a loop, an eye-head having an eye-loop engaging the loop of said shank, said eye-head comprising an eye-loop portion formed with a longitudinally-divided tail-piece, an enlargement on said tail-piece, an interlocking connection between said tail-piece portions, and a cap inclosing said tail-piece and engaging said enlargement.

1,308,187. SELF-COMPENSATING COT. JOSEPH H. MILLS, Richmond, Ind. Filed Oct. 10, 1918. Serial No. 237,577. 3 Claims. (Cl. 5-5.)

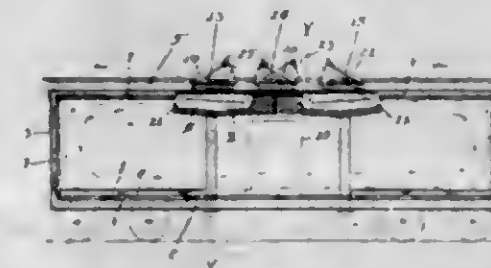


1. A self compensating cot construction, comprising in combination, a pair of two-part side rails each having a

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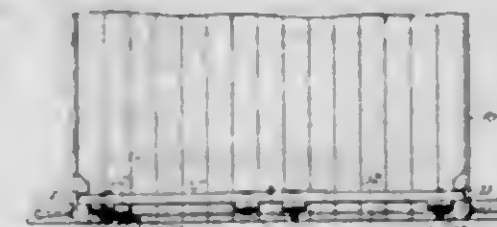
channel therein extending longitudinally thereof with a mouth opening from said channels through the inner edges of the rails, a strip located slidably in each of said channels, a fabric element having its longer edges secured to the respective strips and passing loosely through said mouths without frictional contact with the members of the rails, and rails spacing said side rails apart and retaining the fabric element tight therebetween, means for permanently securing one end of the fabric to one of said end rails, and means for adjustably securing the other end of said fabric.

1,308,188. VENTILATING SYSTEM FOR CARS. CHARLES A. MOORE, St. Paul, Minn. Filed Mar. 23, 1914. Serial No. 826,780. Renewed Dec. 28, 1916. Serial No. 139,405. 2 Claims. (Cl. 95-23.)



2. A car body inclosing a lading chamber, said body being provided with an air inlet and an air outlet spaced apart and located near the median portion of the upper part between the ends of said body, an overhead lee bunker placed below said inlet and outlet having open ends forming a communication between the bunker and lading chambers, a cover over said inlet slanted forwardly to act as an air scoop during the forward movement of the car, and a cover over said outlet slanted rearwardly to act as an air cowl and protect said outlet from inward draft said inlet and outlet being so spaced apart as to cause air during the forward movement of the car to pass through said inlet into said bunker and out of said outlet from said bunker, the floor of said bunker being arranged to deflect the ingress of air in a well defined current longitudinally, said longitudinal current of air being diverted downwardly at the rear end of said lading chamber, then forwardly over the floor of the car, then upwardly at the forward end of said lading chamber, then backwardly along the forward upper portion of the lading chamber into said bunker and finally expelled through said outlet to the outer atmosphere.

1,308,189. FOLDING END-GATE. JAMES A. MOLEY, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed May 17, 1915. Serial No. 28,603. 6 Claims. (Cl. 21-21.)



1. In a folding end-gate, a pair of hinged sections, a supporting member having a substantially flat engaging portion secured to one of said sections extending substantially across both of said sections and having a lateral projection extending outwardly from the substantially flat portions of said supporting member, and a locking member secured to the other section, said locking member having a portion to prevent a relative movement of the supporting member in one direction, and another portion cooperating with said projection to prevent relative movement in another direction.

2. In a folding end-gate, a pair of hinged sections, a supporting member therefor, a locking member for said

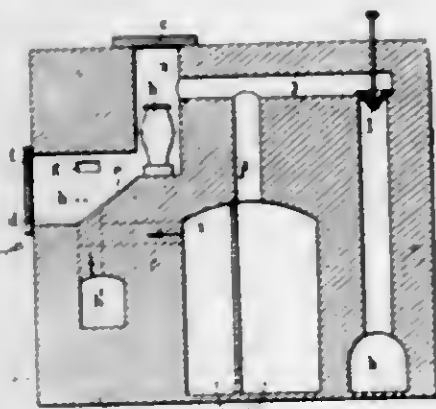
supporting member, said locking member being provided with an arcuate slot, and a stud on said supporting member to coact with said slot.

3. In a folding end-gate, a pair of hinged sections, a flexible bar for supporting said sections, a locking member for said bar provided with an arcuate slotted portion, and means on said bar to enter the slot.

4. In a folding end-gate, a pair of hinged sections, a spring metal bar spaced from and secured to one of said sections, a locking member on the other section to engage with said bar, said locking member being provided with an arcuate slot, and a stud carried on said bar to coact with the slot.

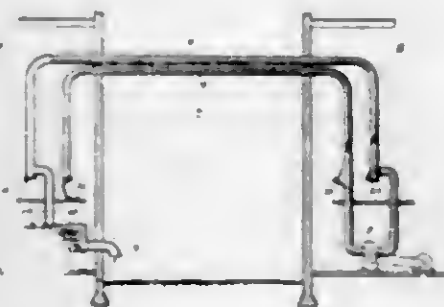
5. In a wagon bed, vertical cleats arranged on each side of said bed near the end thereof and spaced apart, hinged end-gate sections received within said cleats, a flexible supporting member arranged on the end-gate and secured to one of the hinged members, said supporting member having a stud and a locking member on the other one of said hinged members to engage with the supporting member, said locking member being provided with means to engage with the stud of said supporting member to hold it against flexing movement.

1,308,190. CRUCIBLE-FURNACE FOR MELTING METALS. PAUL VICTOR PARROT, Paris, France. Filed Dec. 26, 1910. Serial No. 138,987. 2 Claims. (Cl. 263-14.)



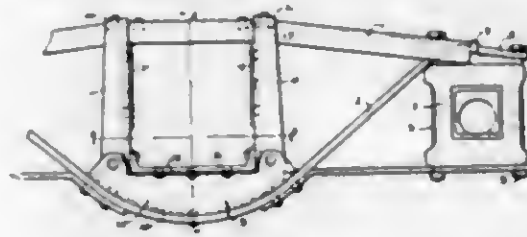
1. In a crucible melting furnace the combination with a crucible and a melting chamber surrounding said crucible, of a combustion chamber located at a lower level than and connected by a siniping passage with the bottom of said melting chamber, gas and air conduits opening into the upper part of said combustion chamber, and a door for permitting the removal of molten matter from said combustion chamber.

1,308,191. PNEUMATIC-DESPATCH-TUBE SYSTEM. EMMETT R. DEARNE, Minneapolis, Minn. Filed Mar. 4, 1918. Serial No. 220,115. 5 Claims. (Cl. 243-1.)



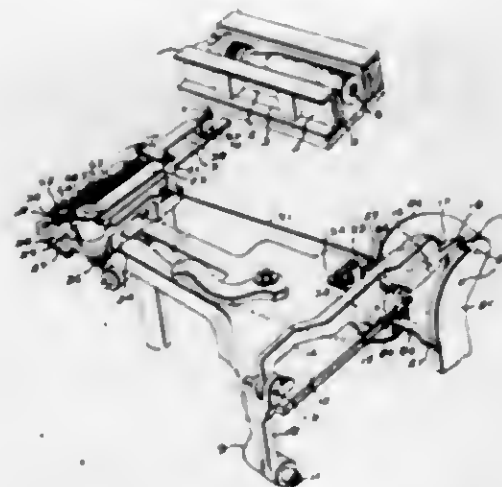
1. The process of conveying carriers through spaces of varying temperature in a pneumatic despatch tube system which consists in taking the air for the system from a supply of cold air, heating the air before it enters the system, and then raising said air to circulate through the system.

1,308,192. CAR-TRUCK SIDE FRAME. JOHN A. PILCHER, Roanoke, Va. Filed Dec. 22, 1917. Serial No. 208,410. 19 Claims. (Cl. 105-204.)



2. In a car truck side frame, a pair of vertically spaced arch bars converging at their ends, oil boxes secured to the ends thereof, and an inner and an outer securing bolt for each box, the inner bolt passing through both of said arch members and the outer one through the bottom arch member.

1,308,193. FEELER-MOTION FOR LOOMS. ALONZO E. RHODES, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 19, 1917. Serial No. 192,188. 22 Claims. (Cl. 139-85.)

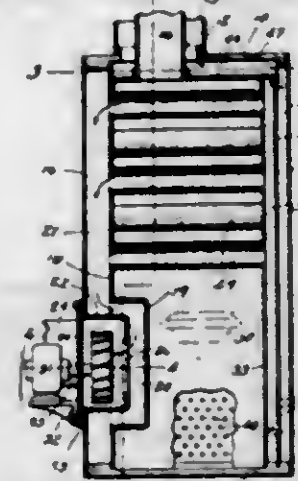


1. In a feeler motion for looms, the combination of a feeler having a filling engaging portion to engage and be held by the filling from movement longitudinally of the shuttle on a detecting beat until substantial exhaustion of the filling occurs, means tending to move the feeler longitudinally of the shuttle on each detecting beat of the lay, and a locking member for normally preventing feeler movement longitudinally of the shuttle until the filling has reached a predetermined degree of exhaustion and then being moved frontwardly independent of the feeler movement by engagement with the shuttle wall and freeing the feeler that the feeler may respond to the means tending to move it longitudinally of the shuttle when the filling becomes substantially exhausted.

1,308,194. CAR-HEATER. JAMES J. RONAN, St. Louis, Mo., assignor of one-half to Thomas W. Cummings, St. Louis, Mo. Filed June 8, 1918. Serial No. 238,890. 3 Claims. (Cl. 126-117.)

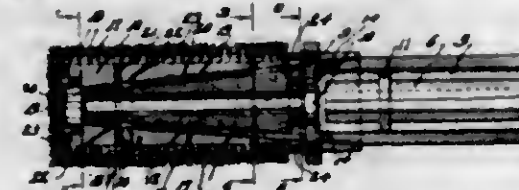
1. In a car heater, a heater body in the form of a housing, partitions arranged therein to form a series of communicating air circulating chambers, a series of open tubes seated in certain of the partitions to establish communication from one heating chamber to another, a burner arranged below said tubes, a fan housing removably positioned in one of the outer walls of the heater body, said fan housing being provided with an opening

which communicates with one of the air circulating chambers within the heater, a suction fan within said fan housing and a motor carried by said fan housing and connected to said fan.



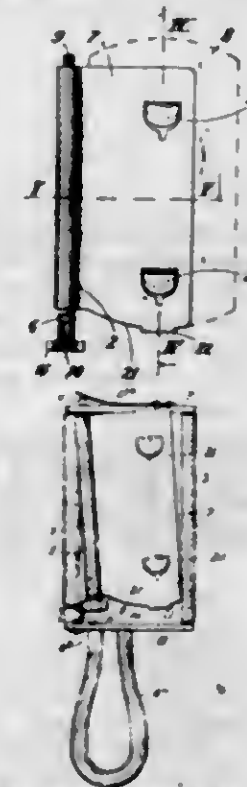
1. In receptacle cleansing apparatus, the combination with a rotary support, of a tubular conical core outstanding therefrom, and a brush slidingly engaging the core to slide longitudinally thereof while revolving therewith.

1,308,195. RECEPTACLE-CLEANSING APPARATUS. JAMES M. RUPE, Covington, Ky. Filed Mar. 4, 1918. Serial No. 220,211. 20 Claims. (Cl. 141-7.)



1. In receptacle cleansing apparatus, the combination with a rotary support, of a tubular conical core outstanding therefrom, and a brush slidingly engaging the core to slide longitudinally thereof while revolving therewith.

1,308,196. MECHANISM FOR STROPPING OR HONING RAZOR-BLADES. SYDNEY ERNEST RUTTER, London, England, assignor to Dorothy Jay Harris, London, England. Filed Dec. 20, 1917. Serial No. 208,175. 3 Claims. (Cl. 51-16.)



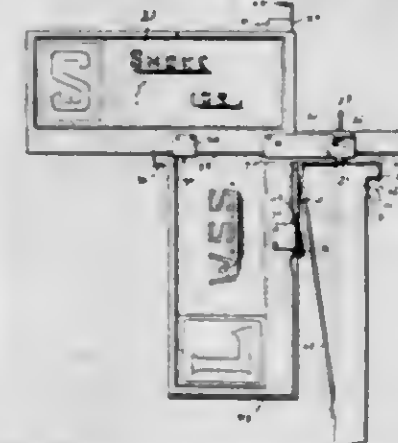
3. A mechanism for stropping or honing razor blades comprising in combination a rotary actuator, a rotatable blade holder in engagement with and detachable from the actuator, a guide member, bearing plates in which the opposite ends of the actuator, blade holder and guide member are journaled at the points of a triangle and a handle connected to one of the bearing plates substantially as described.

1,308,197. MEANS FOR LOCKING CAN-COVERS. LINUS J. SCHILLINGER, Syracuse, N. Y. Filed Mar. 24, 1919. Serial No. 284,579. 3 Claims. (Cl. 220-55.)



1. The combination with a can having an annular bead, and a cover having a depending flange encircling said bead, of a locking device comprising an L-shaped body, one arm of said body folded upon itself to provide a flexible latch, said latch having a shoulder engaging the bead of the can and having a tongue which pierces the flange of the cover and said arm, the said body adapted to be tilted on said tongue for freeing said shoulder from said bead.

1,308,198. DIRECTION-SIGNAL FOR AUTOMOBILES. JOHN A. SHEA, Wilkes-Barre, Pa. Filed Feb. 17, 1919. Serial No. 277,020. 8 Claims. (Cl. 40-67.)



1. A direction signal including a support, a signal arm pivoted to the support for movement in a vertical plane into or out of a display position, and a locking member, movable in a direction at right angles to the plane of movement of the signal arm and resiliently urged into a locking position but manually shiftable out of said locking position, the signal arm having a recess in its side face with which said locking member engages when the signal arm is swung into a horizontal display position.

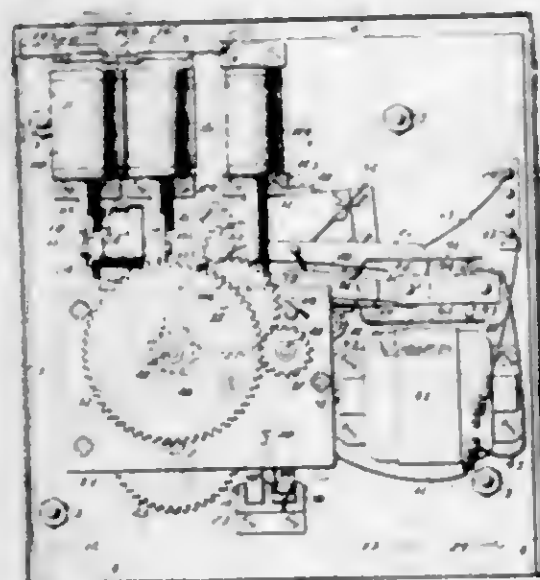
1,308,199. BUILDING STRUCTURE AND PLASTER-BOARD-ANCHORAGE MEANS. CLEO G. SHUMAN, Chicago, Ill., assignor to Gyp Steel Products Company, Chicago, Ill., a Corporation of Missouri. Filed Apr. 9, 1917. Serial No. 160,862. 1 Claim. (Cl. 72-118.)



In a building structure of the class described, the combination of a structure formed of hydraulically setting material, with a series of book-shaped fastening elements embedded in said hydraulically setting material, said elements being provided with elongated shanks adapted to protrude from the hydraulically setting material, sheet metal spacer-members being throughout their lengths substantially V-shape in cross-section with the longitudi-

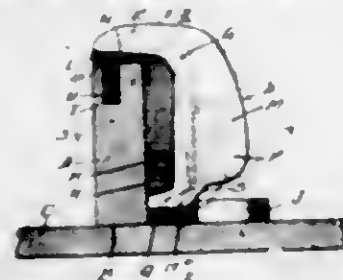
nal edges disposed laterally outward adapted to rest against the hydraulically setting material, said edges being slit from opposite ends of the members so as to provide flexible portions of tongues, while the apex portions of the members are adapted to project away from said hydraulically setting material, the apex portions being provided with openings at a point intermediate of the ends of the members adapted to receive the shanks of the respective hook-shape element, and sectional plaster-boards disposed between adjacent rows of fastening elements and supported at the ends on the spacer members, with the flexible tongue at one end of each spacer member bent about the end of one plaster-board, while the other tongue of each spacer member is bent about the abutting end of a second plaster-board.

1,308,200. DISPLAY APPARATUS. THOMAS W. SMALL, Cleveland, Ohio. Filed May 20, 1915. Serial No. 30,484. 22 Claims. (Cl. 45-53.)



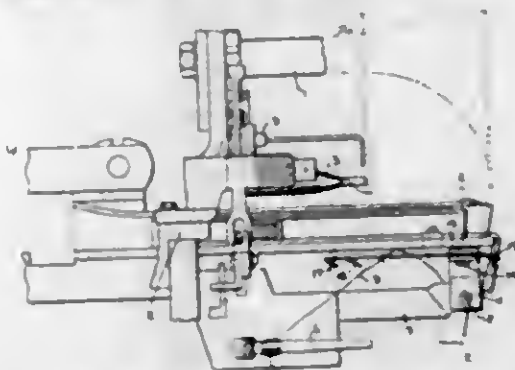
1. In a device of the character described, the combination with a movable strip and means for propelling the same, of contact members actuated by the movement of the strip to close an electrical circuit, means in said circuit for arresting the operation of said propelling means, means operating subsequently to such arresting for breaking said circuit, means outside of said circuit for repeating the operation of said propelling means, and means for restoring said circuit prior to the next actuation of said contact members.

1,308,201. PROPELLING DEVICE OR SHOOTER FOR TOYS. ANDREW SMITH, Chicago, Ill. Filed Sept. 18, 1917. Serial No. 191,981. 8 Claims. (Cl. 124-1.)



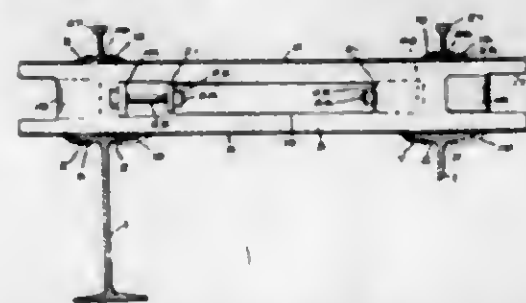
1. A device of the character specified comprising a relatively fixed base member, a relatively movable member pivotally mounted on the base member adjacent to its upper end, a depending arm on said movable member terminating at its free end adjacent to the lower end of the base and adapted for contact with a disk, or the like, for propelling same away from the base, and means normally holding said arm in retracted position, a second arm rigid with said movable member adapted to be struck by the hand to cause said depending arm to propel a disk or the like.

1,308,202. FILLING-CATCHER FOR LOOMS. EDWARD S. STRIMSON, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 13, 1918. Serial No. 249,647. 2 Claims. (Cl. 139-85.)



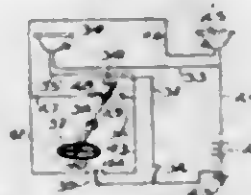
1. A loom comprising means for ejecting a spent filling carrier from the shuttle when at the end of its pick, a clamping bracket secured to the transfer end of the lay, a looped wire member having its looped portion clamped and held in said bracket with its free ends projecting along the front of the lay adjacent the path of the trailing filling from the ejected filling carrier through the shuttle eye and having its free ends formed into a plurality of longitudinally separated hooks located between the said trailing filling and the opposite side of the loom whereby as the shuttle starts on the reverse pick the trailing filling is caught and retarded by one or the other of the said hooks and thus drawn out from the shuttle.

1,308,203. METAL TIE. HERMAN A. STOCKSTILL, Toledo, Ohio, assignor of one-half to Thomas L. Gifford, Toledo, Ohio. Filed Feb. 4, 1910. Serial No. 274,885. 6 Claims. (Cl. 235-38.)



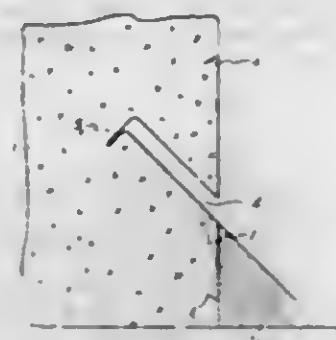
1. A railroad track comprising flanged base rails, a flanged carrying girder extending in the general direction of a rail and therebelow, and a tie extending transversely of the rail and girder, said tie including a pair of members longitudinally movable toward each other into assembled relation to engage the girder and thereby lock the tie to the girder.

1,308,204. DIRIGIBLE HEADLIGHT. WILFRED OAKLEY STOUT, St. Paul, Minn. Filed Mar. 10, 1917. Serial No. 134,054. 7 Claims. (Cl. 240-61.)



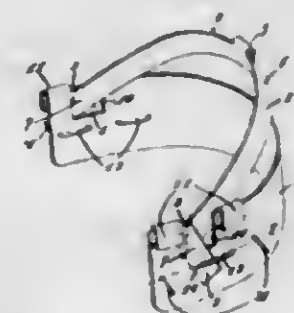
1. In a dirigible headlight revolving mechanism, the combination of a stationary bracket, a movable bracket journaled in said stationary bracket, an arm connected to said movable bracket, a solenoid mounted on said stationary bracket, a plunger acting in said solenoid and connected with said arm so as to rotate said bracket when said solenoid is excited.

1,308,205. FLASHING-RECEIVABLE. GEORGE E. SWANSON, Philadelphia, Pa., assignor to The Barrett Company, a Corporation of New Jersey. Filed Apr. 8, 1918. Serial No. 227,344. 7 Claims. (Cl. 108-20.)



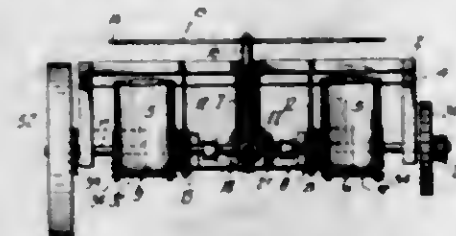
1. A concrete wall having a narrow, upwardly and inwardly inclined groove of substantially parallel sides lined on both sides with a thin sheet of smooth material, said sheet being anchored in said wall at the edges and near the central portion of said sheet.

1,308,206. OVERSHOE ATTACHMENT. WILLIAM H. TULLSON, Quincy, Ill. Filed Mar. 12, 1910. Serial No. 282,144. 1 Claim. (Cl. 36-55.5.)



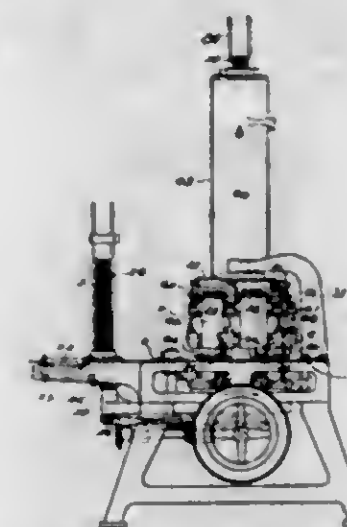
An overshoe attachment comprising a U-shaped ball fashioned from a ribbon-like strip of metal folded upon itself along diagonal lines adjacent to its ends to form arms disposed approximately at right angles to the body portion of the ball, and to form double-thick reinforcements at the places where the arms merge into the body portion of the ball; a carrier; and means for pivoting the arms to the carrier.

1,308,207. METHOD AND APPARATUS FOR PRODUCING MOTION-PICTURES. HARRY A. TOLLES and GEORGE H. ERNSBARGER, Florence, Colo., assignors of one-half to Joseph D. Blunt and Delbert A. Hiesick, Florence, Colo. Filed Aug. 30, 1916. Serial No. 117,715. 8 Claims. (Cl. 88-10.6.)



1. An instrument for the production of motion-pictures comprising a flexible plate mounted at a point between its extremities, to flex at opposite sides thereof, lenses mounted on said plate at opposite sides of said point, means for flexing the plate at opposite sides of said point whereby to vary the angle of convergence of said lenses, a shutter-element operating to cover said lenses alternately during determinate periods, and mechanism for movably mounting film-sections in register with the openings of said lenses, including elements for alternately feeding said sections a determinate distance while the respective lenses are covered by the shutter-element.

1,308,208. COMPOUND APPLYING AND DRYING MACHINE. NELSON TROTTA, Seattle, Wash., assignor to Seattle Astoria Iron Works, Seattle, Wash., a Corporation of Washington. Filed June 18, 1917. Serial No. 175,406. 10 Claims. (Cl. 34-11.)



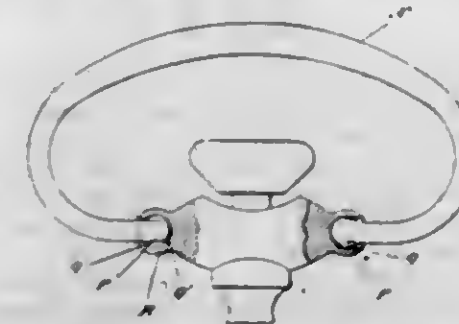
1. In a device of the kind described, a drying mechanism for the can tops comprising two parallel rods threaded and spaced apart to receive opposite edges of the can tops between their threads, and retaining bars engaging the edges of the can tops between said threaded rods.

1,308,209. AUTOMOBILE-TOP. JAMES G. TRUMBLY, Chicago, Ill. Filed Dec. 17, 1917. Serial No. 207,411. 3 Claims. (Cl. 21-62.)



1. In combination with a vehicle having doors and an affixed top, a surtop shaped to fit snugly over the said top and depending upon the said top for its support, the said surtop having doors in continued alignment with the vehicle doors, means attachable to the vehicle doors for operating the surtop doors, and means for attaching the surtop to the sides of the vehicle.

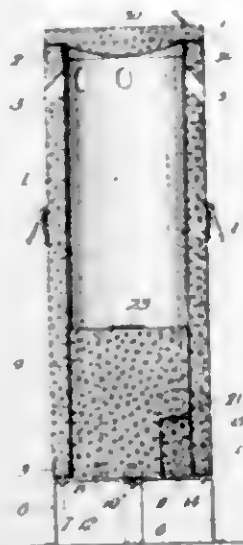
1,308,210. WATCH-BOW. LOUIS E. F. WACHTER, New York, N. Y. Filed Mar. 8, 1917. Serial No. 153,528. 1 Claim. (Cl. 58-96.)



In a watch, an elongated pendant terminating in part spherical ends, a part spherical socket in each end, a slot on one side of one of said end sockets, a bow, part spherical ends on said bow, one of said bow ends being of greater diameter than the adjacent portion of the bow and the end being flattened to a thickness permitting its passage through the slot in the pendant end, whereby in

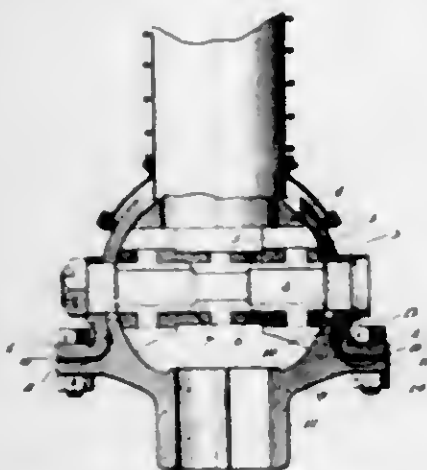
an abnormal position of the bow said flattened end may be inserted, and in normal position is held against displacement in its socket the other spherical end being of greater diameter than the adjacent portion of the bow.

1,308,211. ELECTRIC HEATER. EDWARD WALDEA, Kansas City, Mo. Filed Oct. 7, 1918. Serial No. 257,115. 3 Claims. (Cl. 210—38.)



1. An electric heater, comprising an upright hollow body or shell provided with discharge openings at its upper end, a cover for the body, a core within the lower end of the body of substantially cross shape in end view, a series of resistance devices arranged in the spaces between the arms of the cross-shaped core and electrically connected together in series, and conductors connected to opposite ends of the series of resistance devices.

1,308,212. UNIVERSAL JOINT. FREDERICK G. WALKER, Detroit, Mich. Filed Jan. 31, 1917. Serial No. 145,610. Renewed Apr. 25, 1919. Serial No. 292,698. 1 Claim. (Cl. 64—91.)

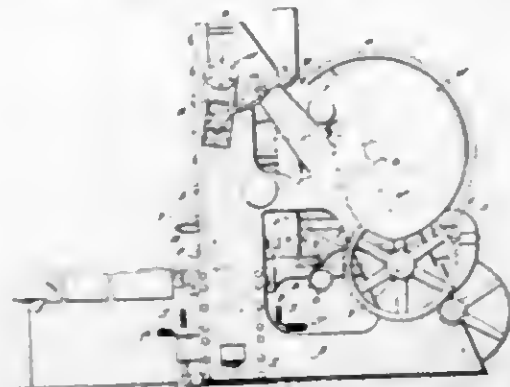


In a universal joint, a socket member, a ball member having a universal movement therein, and a combined cap and ball retaining member having a peripheral flange connected to said socket member, a shaft coupling sleeve centrally thereof, and a skirt extending into said socket member, said skirt having a wall meeting the inner end of said sleeve and serving as a continuation of the inner wall of said socket member, and against which said ball member rides during universal movement thereof.

1,308,213. TILE-PRESS. FRANK B. YINGLING, Hamilton, Ohio. Original application filed May 9, 1914. Serial No. 837,536. Divided and this application filed Oct. 4, 1918. Serial No. 123,678. 13 Claims. (Cl. 25—103.)

8. In a tile press, the combination of a lower die, an upper die, a power shaft, connections between the power

shaft and dies for moving the latter to and from each other, a charging device, means connecting the power shaft and charging device and acting to reciprocate the charging device over the lower die when the dies are suitably separated, a pair of bell cranks mounted on opposite sides of and projecting forward from the charging device, a brush supported in the forwardly extending



arms of said bell cranks, and means for rocking the bell cranks to lower the brush into position to contact with the upper surface of the lower die as the charging device is moved between the dies and to return the brush to its normal elevated position as the charging device commences to move in the opposite direction.

1,308,214. ELECTRICAL CONNECTION. WILLIAM H. YOUNG, Keyport, N. J. Filed Mar. 10, 1913. Serial No. 755,469. 5 Claims. (Cl. 173—269.)



1. An electrical connection comprising an elastic one-piece split sleeve of approximately constant diameter; a pair of inwardly pointing inter-engaging cones in said sleeve; and a flexible conductor permanently connected to one of said cones and along which the other cone is adapted to slip for assembling the connection.

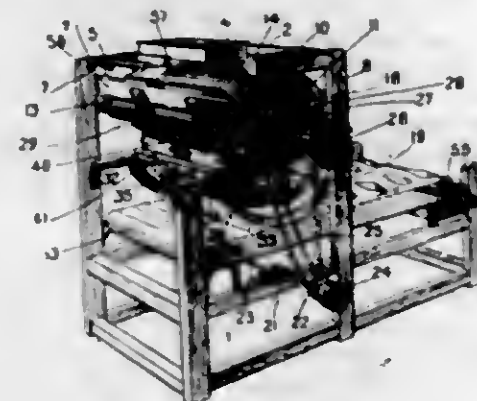
1,308,215. AUTOMATIC CANDLE-EXTINGUISHER. JAMES HATFIELD, Ardmore, Papakura, New Zealand. Filed Feb. 7, 1918. Serial No. 215,819. 2 Claims. (Cl. 67—24.)



1. A candle extinguisher comprising a support formed of a T-shaped sheet metal blank bent substantially upon itself along the center of its shank to form a channel shaped standard, the two halves of the head of the T extending in parallel relation from the lower end of the side flanges of said standard and being bulged outwardly between their ends to form a seat for the candle, means for drawing said halves together to grip the candle, an angular lever whose elbow is positioned between the side flanges of said standard, a pivot pin passing through said flanges and said elbow, a candle extinguishing cap on the

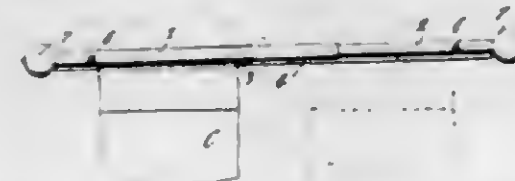
upper end of said lever, and a prong on the lower end thereof to penetrate the candle and hold said lever in position to support said cap free of the candle until said prong is released by melting of the candle.

1,308,216. PANNING-MACHINE. JUAN BALCELLS and JUAN SERRAVALLO, Mexico, Mexico. Filed Nov. 1, 1918. Serial No. 260,639. 6 Claims. (Cl. 107—9.)



1. A panning machine comprising a drum having embossments, adjustable rollers cooperating with said drum to extend pieces of dough into tongues, a swinging folder on the roller shaft, an adjustable curved curler pan over which the folded tongues are rolled, and an adjustable curved molder adapted to receive the curled tongues of dough and gradually compress them toward its delivery end.

1,308,217. CURTAIN-POLE. THOMAS J. BISHAM, Kansas City, Mo. Filed May 20, 1918. Serial No. 235,742. 3 Claims. (Cl. 156—19.)



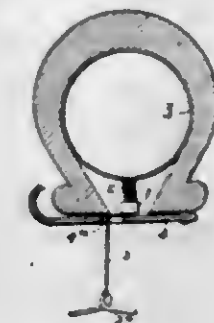
1. A tubular curtain pole having a longitudinal slot therein, a plate for insertion through said slot having a notch in one edge, a bolt extending transversely through said pole to draw the edges of the slot toward each other to clamp the plate between them, the notch in said plate fitting around said bolt.

1,308,218. LETTER-OPENER. EARL S. BJONERUD, Calmar, Iowa. Filed Jan. 23, 1918. Serial No. 213,378. 9 Claims. (Cl. 164—80.)



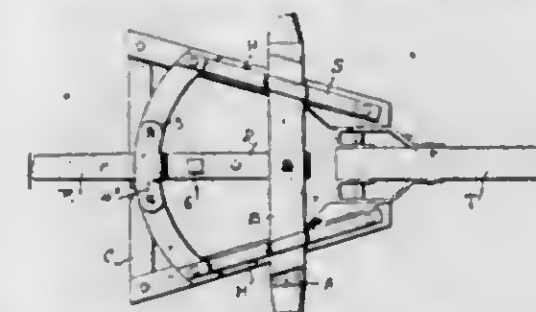
3. A letter opener comprising a trough, gripping and guiding jaws within the trough, a bracket carried by the trough, and a cutting blade releasably connected with the bracket and extending into the trough between the jaws.

1,308,219. VALVE-FISHING TOOL. FERDINAND FRANCIS BAUCKER, Akron, Ohio. Filed Apr. 8, 1919. Serial No. 288,553. 5 Claims. (Cl. 152—12.)



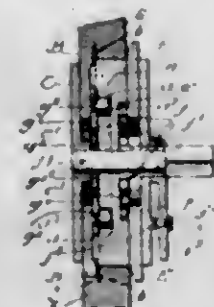
1. A device for use in mounting tires on rims comprising a flexible element having at one end means for attachment to a valve stem.

1,308,220. RUNNING-GEAR FOR VEHICLES. ROBERT BRADFORD, Calgary, Alberta, Canada. Filed May 29, 1918. Serial No. 237,250. 1 Claim. (Cl. 21—39.)



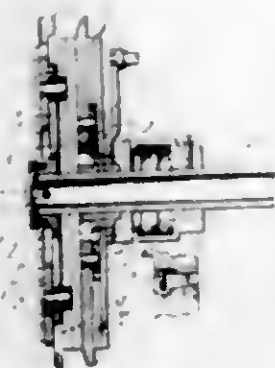
The combination with an axle, hounds carried by the axle, a bolster supported by the hounds above the axle, and vertically spaced cross members connecting the rear portions of the hounds; of vertically spaced plates extending between and secured to the axle and the bolster and extending rearwardly thereof, a spacing block positioned between the forward end portions of the plates, each of said plates having its rear end portion connected to one of the cross members connecting the hounds, a reach extending between said cross members and between the rear end portions of the plates, and means for pivotally connecting said reach to the plates.

1,308,221. HAND-HOLE SCRAPER. GIDEON P'ILLOW BROWN, Lake Bluff, Ill., assignor to Blanche Wright Brown, Lake Bluff, Ill. Filed Oct. 31, 1913. Serial No. 798,423. Renewed Nov. 8, 1918. Serial No. 261,715. 14 Claims. (Cl. 83—64.)



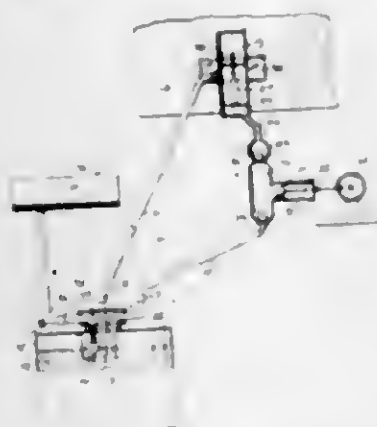
1. A scraper for cleaning the edges of oval or other non-circular hand holes, comprising knives for engaging the edges of the hole, means for rotating the knives about an axis substantially central of said hole, and a support for said means, serving to keep the scraper in proper position, held against movement by engagement with the structure around said hole, and means for causing said knives to move toward and away from the said axis to follow the contour of said hole.

- 1,308,222. HAND-HOLE SCRAPER. GIDEON PILLOW HADWIN, Lake Forest, Ill., assignor to Blanche Wright Brown, Lake Bluff, Ill. Filed Feb. 9, 1914. Serial No. 517,454. Renewed Nov. 8, 1918. Serial No. 261,716. 16 Claims. (Cl. 83-64.)



1. A scraper comprising a stationary support, a shaft extending through said support, a rotary head on said shaft, one or more blades carried on said head, and a filler between said head and support, permitting movement of said head toward the support to take up wear on said blade or blades, disposed between the opposing surfaces thereof.

- 1,308,223. SIGHT STORAGE-BATTERY TESTER. EMMETT CAMP, San Diego, Calif. Filed July 2, 1917. Serial No. 178,227. 4 Claims. (Cl. 265-45.)



1. In an automobile having a dashboard and a storage battery, means for testing the electrolyte therein including a transparent testing chamber mounted upon the dashboard and having a tubular connection to the battery cell, a hydrometer within the testing chamber, a pump operatively connected to the testing chamber to cause liquid from the cell to flow into the testing chamber, and means for returning liquid to the cell.

- 1,308,224. STOCK-RELEASING DEVICE. ALOIS CHARVAT, Clinton, Kans. Filed Sept. 25, 1918. Serial No. 255,626. 2 Claims. (Cl. 110-115.)



1. In an animal releasing device, the combination with a stationary support, of a plurality of U-shaped castings fixed thereto, and having parallel spaced side plates, said side plates and the ends of the support having axially aligned openings, said side plates having additional openings axially aligned and offset from the first openings, a shaft provided with slotted ends and axially shiftable through the first openings of the side plates and the ends of the support, arms fixed on the shaft each extending at right angles thereto and to one side of a casting, the

end parts of the arms having lateral pins movable axially through the additional openings of the side plates, when the shaft is shifted, for engagement with the devices adapted to be interposed between the side plates, the ends of the support having transverse recesses on their outer faces, a pair of levers, one pivoted in one of the recesses of one of the ends, whereby long and short arms are provided, the other pivoted in the recess of the other end, whereby only a single long arm is provided, a link pivotally connecting one of said slotted ends of the shaft and the arm of the last mentioned lever, whereby upon an outward swinging movement of said arm of the last mentioned lever, the shaft may be moved axially in one direction, and a link connecting the other slotted end and the shorter arm of the first lever, whereby upon an outward swinging movement of the first lever, the shaft may be moved axially in the same direction as when the last mentioned lever is operated.

- 1,308,225. LUBRICATION OF CAM-SHAFTS FOR INTERNAL-COMBUSTION ENGINES. LOUIS COATALLEN, Wolverhampton, England. Filed July 23, 1918. Serial No. 246,332. 1 Claim. (Cl. 184-6.)



In internal combustion engines, the combination comprising a cam-shaft inclosing casing, glands in said casing, valve tappets passing through said glands, pipes in communication with said glands, and a pump by which oil is continuously withdrawn from said glands through said pipes, substantially as described.

- 1,308,226. MILK-BOTTLE TOP. JOHN THOMAS COOKY, Denver, Colo. Filed Dec. 27, 1918. Serial No. 268,567. 3 Claims. (Cl. 215-50.)

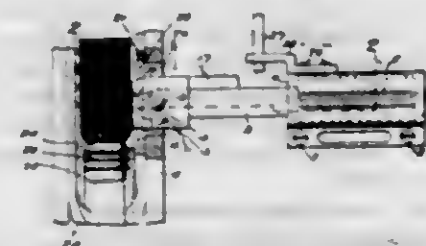


1. A milk bottle top comprising a disk adapted to be forced into the top seat of a milk bottle neck, said disk having a weakened hinge line to permit substantially half of the disk to swing upwardly, and a curved spout carried by the lower side of said upwardly swinging disk half, normally confined in the bottle neck, and adapted, when said half is raised, to spring into the aforesaid seat.

- 1,308,227. FEELER-MOTION FOR LOOMS. FRANK B. DAVIS, Hopedale, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 7, 1916. Serial No. 89,715. 12 Claims. (Cl. 130-85.)

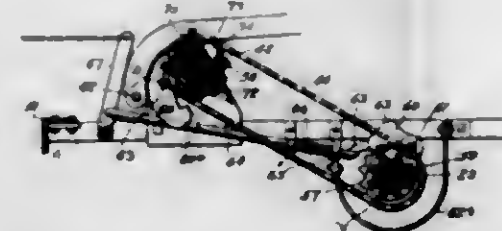
1. A feeler motion for looms, comprising a feeler member to directly engage the filling in the shuttle on a detecting beat and bodily displaced longitudinally of the shuttle by the forward pressure when the filling is substantially exhausted, an actuator combined with said feeler member having a reciprocating stroke, a controller

adapted to be moved by the actuator in its normally-directed stroke when the feeler member has been bodily displaced longitudinally, and means for preserving the



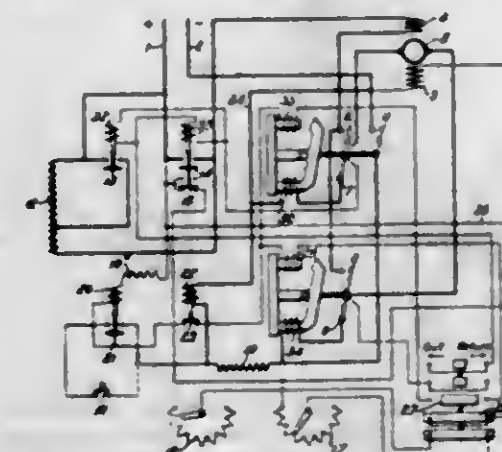
angular relation of the shuttle and feeler member unchanged as the feeler member is bodily displaced longitudinally of the shuttle by the forward push.

- 1,308,228. PLOW. FRANK E. DAVIS and WILLIAM W. CAMERON, La Crosse, Wis., assignors to La Crosse Plow Co., La Crosse, Wis., a Corporation of Wisconsin. Original application filed Apr. 18, 1913. Serial No. 761,928. Divided and this application filed Oct. 21, 1918. Serial No. 259,668. 2 Claims. (Cl. 97-70.)



1. The combination with a frame, a series of plow-carrying structures, a lifting connection for each of said structures, carrying wheels comprising a traction wheel, an axle on which the traction wheel is mounted, a clutch mounted on the axle and driven by said traction wheel, power-operated mechanism for operating said lifting-connections comprising a shaft having means thereon for operating the connections, a driving-connection between the clutch and said shaft, and controlling means including an automatic throw-out for the clutch on the axle, the driving-connection between the clutch and the shaft being inoperative when the clutch is disconnected and being operative only when the shaft is being operated, said shaft being driven intermittently in one direction by the power operated mechanism.

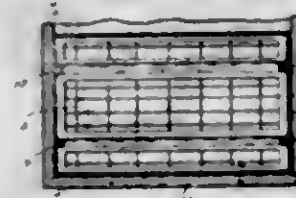
- 1,308,229. MOTOR-CONTROL SYSTEM. EDWARD J. DACTSCH, Cincinnati, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1917. Serial No. 174,475. 7 Claims. (Cl. 172-240.)



1. In a motor-control system, the combination with an electric motor, and reversing switches therefor having actuating coils, of a relay for preventing the energiza-

tion of said coils under predetermined conditions, a no-voltage relay for said coils, a dynamic braking resistor and a switch mechanically connected to one of said reversing switches for controlling a shunt circuit for said resistor.

- 1,308,230. STORAGE BATTERY. SAMUEL DILLER, Des Moines, Iowa. Filed Oct. 16, 1917. Serial No. 196,959. 2 Claims. (Cl. 204-29.)



2. In a battery, a container, a central plate or pile of one electrical polarity, spaced opposite plates or piles of another polarity, each pile consisting of a series of grids spaced one above the other, said grids having at their ends vertically extending ribs or flanges of substantially the full width of the grids, whereby the grids are held spaced apart, the ends of the grids of each pile being fused together to form a wide post, means for electrically connecting the adjacent ends of the grids at the opposite ends of the plates, non-conducting spacing members between the ends of the different plates, whereby a cell is formed having a plurality of plates, spaced from each other without the use of insulator plates, each pile or plate being formed with a series of grids spaced from each other without the use of insulator plates, the grids of each plate being connected together to permit the passage of electricity from grid to grid with a minimum of resistance.

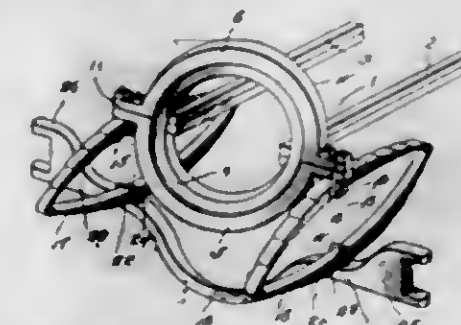
- 1,308,231. ARTIFICIAL LEATHER AND METHOD OF PRODUCING IT. RICHARD F. DREN, Providence, R. I., assignor to George H. Gabb, Bloomfield, Conn. Filed Aug. 14, 1918. Serial No. 249,908. 10 Claims. (Cl. 91-70.)



1. A method of making artificial leather which comprises coating a base of textile fabric with an oxidized oil coat having a solvent which is a solvent for pyroxylin, and applying a pyroxylin film to the coated base, having a solvent which is also a solvent for the oxidized oil coat.

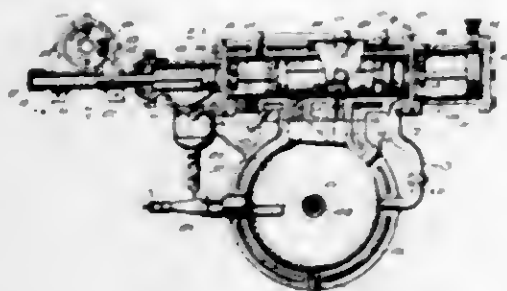
10. An artificial leather comprising a base of textile material having a coating of oxidized oil directly applied thereto and a pyroxylin film superimposed upon the oil coating, the two having been applied with a solvent of both coatings.

- 1,308,232. VEHICLE. GEORGE E. END, Stevens, Oreg. Filed Mar. 29, 1918. Serial No. 225,560. 14 Claims. (Cl. 21-182.)



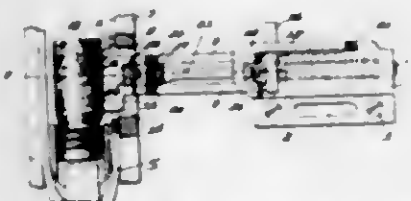
1. In a vehicle having an axle and a frame, means whereby the axle has oscillating movement relative to and independent of the frame, said means consisting of a pair of vertically disposed rings.

1,308,233. FIRING APPARATUS. GEORGE ERLINGSSON, Milwaukee, Wis., assignor of one-half to Albert O. Trostel, Milwaukee, Wis. Filed Nov. 15, 1916. Serial No. 131,605. 17 Claims. (Cl. 60-41.)



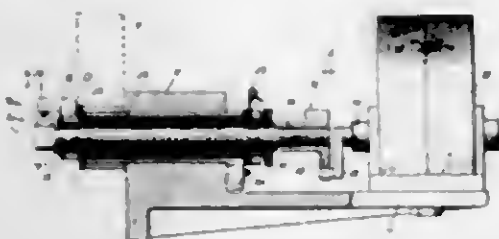
5. The combination of a combustion chamber provided with an inlet port for introducing fuel into said chamber and an outlet port for delivering the products of combustion, valve means associated with said outlet port, a valve-actuating cylinder, and a by-pass connecting said combustion chamber with said cylinder for conducting fluid from said chamber to said cylinder to actuate said valve.

1,308,234. FEELER DEVICE FOR FILLING-REFILLING LOOMS. THOMAS FRAGGON, Lowell, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 24, 1914. Serial No. 873,824. 2 Claims. (Cl. 139-85.)



1. A feeler mechanism for looms, comprising in combination, an impinging member and a penetrating member, the former having an extended impinging surface, the penetrating member having two penetrating points separated a distance less than the length of and between the ends of the impinging surface of the impinging member and normally projecting beyond the impinging surface of the impinging member and adapted to sink into the filling before the impinging surface engages the filling when a working supply is presented opposite either of the penetrating portions, so that relative movement of the impinging and penetrating members on a detecting beat will be effected only when the filling is substantially exhausted opposite both penetrating points of the penetrating member.

1,308,235. IGNITION MECHANISM FOR INTERNAL-COMBUSTION ENGINES. HARRY F. GEIST, Racine, Wis., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 20, 1915. Serial No. 51,632. 2 Claims. (Cl. 123-149.)



1. In combination with an internal combustion engine, a framework secured to the engine cylinder, a shaft bearing in the framework, a pair of electrodes within the cylinder one of which is mounted on said shaft, a magneto removably supported by the framework having the

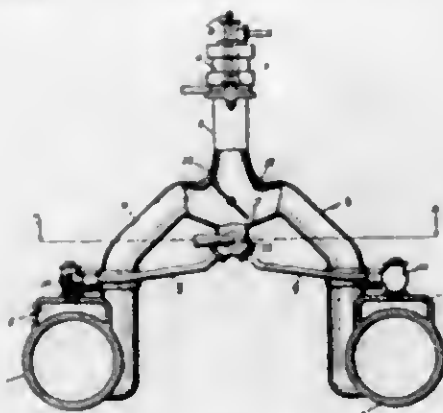
rotor thereof detachably connected with said shaft, means connected with the shaft arranged to be engaged by an engine driven member to oscillate the shaft and rotor together with spring means positively connected with said shaft whereby said shaft is incapable of movement except in opposition to said spring means, said spring means arranged quickly to return the shaft and parts connected therewith to normal to effect the operation of the electrodes and generate a current in the magneto when the shaft is oscillated by the engine driven member and released.

1,308,236. VENTILATOR. JAMES A. GLASS, Walkerville, Ontario, Canada. Filed Feb. 28, 1919. Serial No. 279,691. 2 Claims. (Cl. 98-31.)



1. A ventilating device comprising a sill having a passage at the upper and outer walls of said sill, a closure member on said sill and cooperating therewith in providing a passage through said sill that has its ends open at the inner and outer sides of said sill, a screen carried by said sill and said closure member at the outer end of the sill passage, an adjustable damper at the inner end of the sill passage and supported by said closure member for closing said sill passage, and a conduit throughout the length of said sill passage for conducting a heating agent to heat air passing through said sill passage.

1,308,237. INTERNAL-COMBUSTION ENGINE. LEO D. GOFF, EARL D. GLIDDEN, and CHARLES O. MAHANA, Three Rivers, Mich., assignors, by mesne assignments, to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1918. Serial No. 217,828. 14 Claims. (Cl. 123-52.)



9. The combination with an internal combustion engine comprising a cylinder, a compression chamber, an inlet passage from the compression chamber to the cylinder, of a carburetor, a manifold connected to said compression chamber and provided with a sump disposed to receive liquid fuel from the carburetor, a priming pas-

sage connecting said sump to said inlet passage, a check valve for said priming passage, and a valve controlling said priming passage.

1,308,238. DOUBLE-CYLINDER PUMP. JAMES CASTILL GORMAN, JR., Mansfield, Ohio, assignor to Barnes Manufacturing Company, Mansfield, Ohio, a Corporation of Ohio. Filed Aug. 21, 1918. Serial No. 250,790. 5 Claims. (Cl. 103-77.)

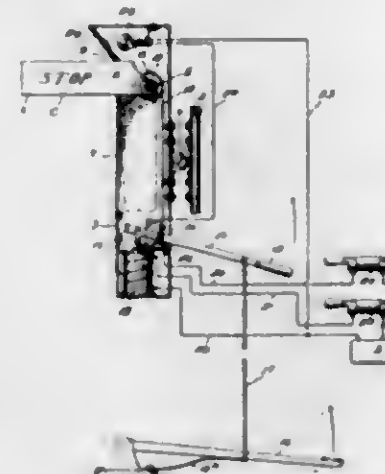


1. In combination, a pump body or casing and a jack external thereto and integral therewith, said jack having integral shaft-supporting bearings thereon and said pump body or casing comprising a pair of cylinders arranged in the same horizontal plane and in the plane of the jack and each open at both ends, and means for closing the open end of the cylinder adjacent the jack comprising a plug fitting the opening in the cylinder head, a bolster resting upon lugs integral with said jack, and seated thereagainst, and a set screw carried by said bolster and impinging against said plug, whereby the latter is firmly and removably secured in place.

1,308,239. CASE-HARDENING MATERIALS. WILLIAM S. HARLEY, Milwaukee, Wis., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Filed Oct. 15, 1917. Serial No. 186,636. 2 Claims. (Cl. 148-30.)

2. The herein described cementing material containing the following materials united in substantially the following proportions: 24 pounds of charcoal, 6 pounds of petroleum carbon, 1 pound of soda ash, 1 pound calcium carbonate, 5 cups of oil.

1,308,240. AUTOMOBILE DIRECTION-INDICATOR. WILLIAM J. HUERNES and JOSEPH W. HUERNES, Milwaukee, Wis. Filed Feb. 23, 1918. Serial No. 218,726. 1 Claim. (Cl. 40-67.)



A signaling device comprising an elongated casing adapted for securement in vertical position to a vehicle and provided with a longitudinal slot in its outer side, a signal arm having one end pivotally mounted in the upper portion of the casing, the said end having a rounded surface, the major portion of the arm being offset outwardly from said end portion in normal suspended position of the signal arm in the casing, a lever pivoted to the outer side of the casing below the slot and extending transversely in the casing, a strap secured to the signal arm and trained about the rounded surface thereof and secured to the lever at the inner side of the casing, an electro-magnet disposed in casing below the lever and an armature for said magnet connected in the lever between the strap and the pivot connection of the lever for swing-

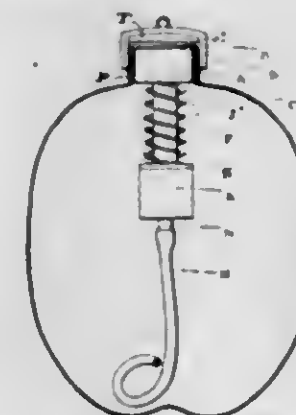
ing said lever to consequently swing the signal arm outwardly of the casing.

1,308,241. DRIER. WILLIAM AUGUSTUS HUTCHINSON, Charleston, S. C. Filed Sept. 3, 1918. Serial No. 252,862. 2 Claims. (Cl. 263-24.)



1. In a drier comprising a heater and provided with a drier floor constructed over said heater, an agitator comprising an endless apron with agitator arms pivoted on transverse carriers at intervals and dragging therefrom, said agitator arms being formed with angular ends and arranged with part extending in one direction and part in another direction, whereby the material is agitated back and forth across the drier bottom and carried from end to end thereof, substantially as set forth.

1,308,242. CANTEEN-FILTER. TATSUJIRO IMAHUMI, Seattle, Wash. Filed Nov. 6, 1918. Serial No. 261,356. 6 Claims. (Cl. 221-93.)

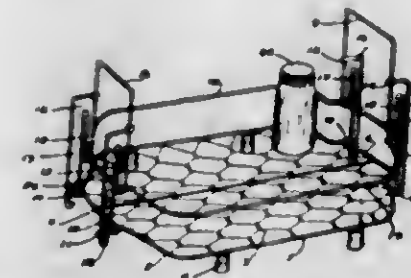


1. A drinking device for canteens comprising a suction tube, a base piece fitting within the canteen mouth and through which the mouthpiece of the tube may project, and a spring connecting said base piece and tube and acting to project the mouth piece.

1,308,243. PROCESS FOR TREATING COMMERCIAL CALCIUM CARBIDE. LAZAR JANOWSKY, Toronto, Ontario, Canada. Filed Sept. 18, 1917. Serial No. 191,995. 2 Claims. (Cl. 23-11.)

2. A process which comprises removing the water from (sodium silicate) water glass to produce a powder and then mixing such powder in the proportion of fifteen per cent. thereof with eighty-five per cent. of fatty matter.

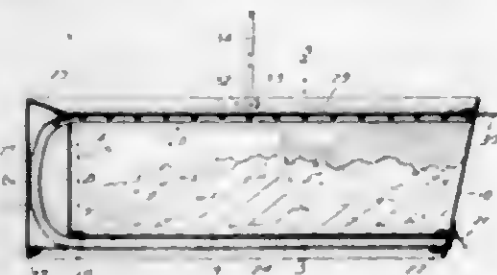
1,308,244. PRESERVING AND CANNING RACK. MARY ROBB JOHNSON, Bollesville, Manitoba, Canada. Filed Apr. 22, 1918. Serial No. 230,154. 1 Claim. (Cl. 53-1.)



A collapsible rack comprising a base, a guard frame, handles pivotally connected to the base, each handle including a pair of guide loops, each loop comprising portions of unequal length communicating at their upper

ends, the guard frame having end portions slidably held in the guide loops, being suspended in the short loops normally above the base and adapted to escape in the folding of the handles into the longer loops.

1,308,245. ASH PAN. JOHN KLUCINA, Cicero, Ill. Filed Feb. 19, 1917. Serial No. 149,468. Renewed May 20, 1919. Serial No. 298,553. 5 Claims. (Cl. 126-244.)



1. An ash pan having front and side walls, and inner and outer spaced apart rear walls, of which the inner rear wall and said front and side walls form an ash-holding receptacle, said side walls having guides along their inner surfaces, and portions of which extend within the space between said rear walls, and a flexible closure adjustable in said guides to cover and uncover the ash-holding receptacle and forming a part of the pan in both positions.

1,308,246. FEELER MECHANISM FOR LOOMS. FRED LACEY, Lowell, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 23, 1915. Serial No. 57,587. 19 Claims. (Cl. 130-85.)



1. A feeler mechanism for looms, comprising a feeler member, a feeler finger mounted on said feeler member for movement with and relative thereto, means for moving the feeler member longitudinally of the shuttle to initiate filling replenishment when the filling has become substantially exhausted, and means rendered effective by movement of the feeler finger relative to the feeler member for returning the feeler member laterally to feeling position.

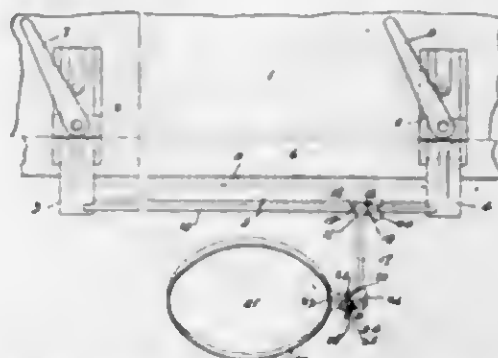
1,308,247. SAW FILING GAGE. WILLIAM LA CLAIR, Oakville, Wash. Filed May 7, 1918. Serial No. 233,110. 3 Claims. (Cl. 33-262.)



1. In a saw filing gage, a body having an opening and including parts which overhang the opening at the ends thereof and at the outer edge of the body; a gage plate movable in the opening toward and away from the base of the opening and having a slot for the reception of a raker tooth; adjusting devices forming a permanent connection between said parts and the plate and constituting the sole means for adjusting the plate toward and away from the base of the opening.

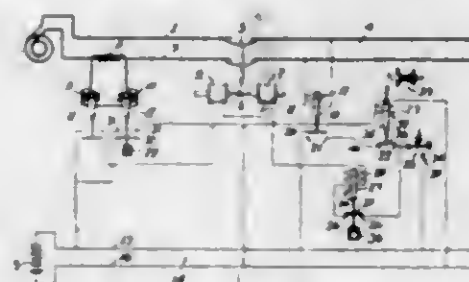
from the base of the opening; and a member mounted on the body adjacent to the base of the opening, independently of the plate, and movable on the body toward and away from the plate, and cooperating with the plate to constitute a file holder.

1,308,248. ATTACHMENT TO SAW VISES. ARCHIBALD FINDLAY MCKENZIE, Whyteford, Manitoba, Canada. Filed May 17, 1917. Serial No. 160,290. 1 Claim. (Cl. 88-39.)



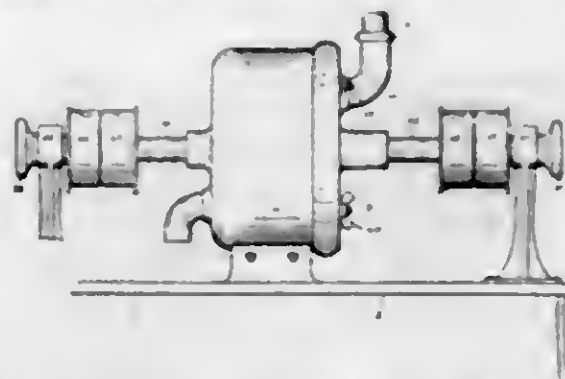
In an attachment to saw vises, the combination with adjustable end brackets and a clamping jaw connecting the brackets, of a horizontal bar secured to the brackets and parallel with and to the outer side of the jaw, an upstanding standard mounted on the bar and slidable endwise of the bar, a rod pivotally secured to the upper end of the standard and adjustable in the vertical plane and a magnifying glass suspended from the rod and located at right angles thereto and adjustable outwardly and inwardly on the rod.

1,308,249. ARC-EXTINGUISHING DEVICE. PAUL MACGAHAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 7, 1916. Serial No. 113,462. 5 Claims. (Cl. 175-294.)



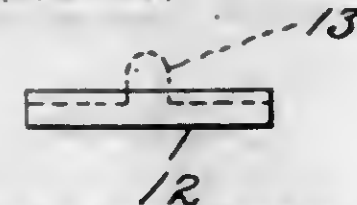
2. In a system of distribution, the combination with a circuit interrupter and means for tripping the same when an overload traverses the system, of means for reclosing the interrupter when the voltage on the system drops substantially to zero, and means controlled by the number of times the voltage drops substantially to zero for limiting the number of times the interrupter may be reclosed.

1,308,250. EMULSER. CORNELIUS MORTENSEN, Louisville, Ky. Filed Mar. 8, 1917. Serial No. 153,280. 10 Claims. (Cl. 99-11.)



8. In a device as characterized, the combination of two disks having communicating passages, said disks mounted to rotate, said passages so pitched as to move a fluid therethrough in lines parallel with the axis of the disks.

1,308,251. METHOD OF MAKING SEAMLESS STEMMED METAL PLATES. SIMON MYERSON, Cambridge, Mass. Filed Dec. 17, 1918. Serial No. 267,173. 5 Claims. (Cl. 29-148.)



1. The method of making a seamless stemmed metal plate, which consists in first forming a relatively thick metal blank, then displacing some of the metal of the blank to form a plate of the desired thickness and a projecting bead integral with the plate, and finally converting said bead into an operative stem.

1,308,252. GRAIN-DRILL. HENRIET NELSON, Harpree, Saskatchewan, Canada. Filed May 24, 1918. Serial No. 236,383. 4 Claims. (Cl. 221-122.)



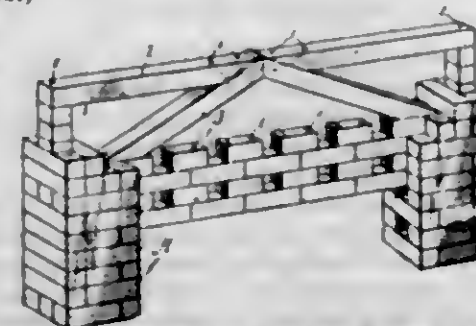
4. In combination with a grain drill hopper and a cover for closing certain grain outlets thereof, the same comprising a main portion and upstanding side portions having openings therein, a ratchet post connected with the cover, and a fastenlog comprising oppositely disposed catches, an intermediate connecting portion, and spring loops.

1,308,253. SEED-CORN HOLDER. JOHN OPTEDAHL, Hanley Falls, Minn. Filed Aug. 12, 1918. Serial No. 249,484. 3 Claims. (Cl. 34-26.)



1. A seed corn holder constructed from a single piece of wire bent to form a stem and a spiral base, said stem being insertible into the pith of the cob, and said base being adapted to rest upon a horizontal support, said base, at the end of its spiral having a projecting barb adapting it to be hung from an overhead support.

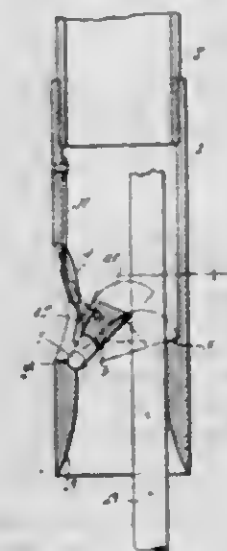
1,308,254. TOY BUILDING-BLOCKS. ADOLPH OSCAR OTTO, Oak Park, Ill., assignor to The American Toy Shop, Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1917. Serial No. 152,510. 10 Claims. (Cl. 46-35.)



1. In toy building blocks, a plurality of blocks having holes therein, adapted to be laid in courses like bricks,

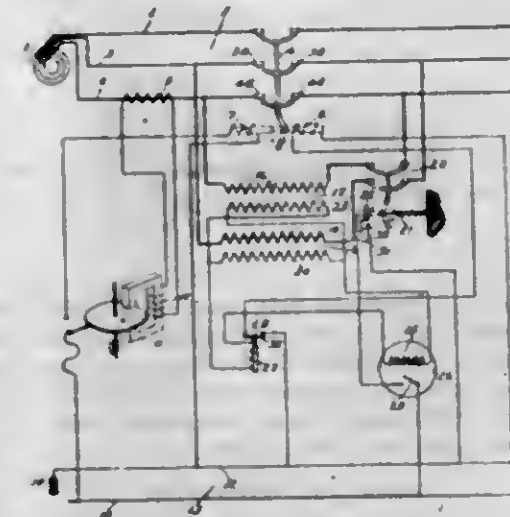
and tight fitting rods to extend through said holes from one block to another and through successive courses from the bottom to the top thereof to hold the blocks rigidly and firmly together, having provisions whereby one or more of the blocks will provide an inclined or an oblique support when necessary, to form the desired structure, said rods having their ends flush with the structure, some of said blocks being rectangular in form, and other blocks being each curved at one side thereof.

1,308,255. TRAP. TIM PENWELL and HARRY E. BROWN, Eldorado, Kans. Filed Nov. 10, 1918. Serial No. 262,899. 1 Claim. (Cl. 57-9.)



A device of the class described comprising a tubular member provided with upper and lower bores, there being a side opening in the member, the lower bore being of smaller diameter than the upper bore to form an intermediate shoulder and to form a thickened part in the wall of the member below the shoulder, said thickened part having a transverse passage communicating intermediate its end with the lower bore; a grip adapted to move into the opening and to rest on the shoulder, the grip having trunnions insertible into the passage by way of the bores; and a removable member in the passage, the member cooperating with one trunnion.

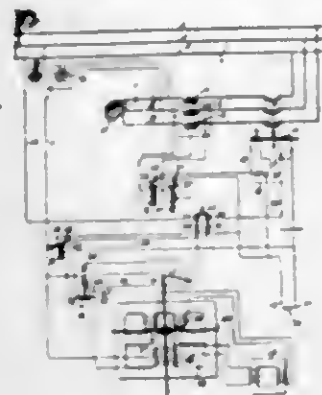
1,308,256. ARC-EXTINGUISHING DEVICE. RAYMOND T. FISACK, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1918. Serial No. 215,386. 8 Claims. (Cl. 175-294.)



1. In a system of distribution, the combination with a circuit interrupter and means for opening it when an arc obtains on the system, of a transformer connected across the interrupter, a relay dependent upon the voltage of the transformer for reclosing the interrupter, and a time-

limit relay for open-circuiting the transformer after the interrupter has been opened and closed a predetermined number of times.

1,308,257. ARC-EXTINGUISHER. FOSBERT E. RICKERTS, Baltimore, Md. Filed Mar. 13, 1916. Serial No. 83,786. 12 Claims. (Cl. 175-294.)



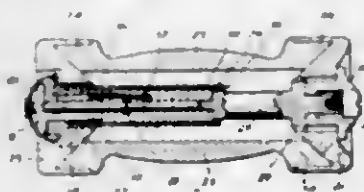
2. In a system of distribution, the combination with a circuit interrupter and means for opening it when an arc obtains on the system, of a relay so connected across the interrupter that, when a difference in potential obtains thereacross, the interrupter will be reclosed, and means for so controlling the operation of said relay that the interrupter will be precluded from reclosing when the arc persists for a predetermined period of time.

1,308,258. LIQUID-SOAP DISPENSER. WILLIAM H. ROSE, Jersey City, N. J. Filed May 6, 1919. Serial No. 295,054. 1 Claim. (Cl. 221-102.)



In a liquid soap dispenser of the positive intermittent discharge type, a downwardly directed discharge tube or duct disposed with its axis substantially vertical and having its lower end surface inclined to the horizontal, the lower edge of this end surface being toward the front of the dispenser and the high edge toward the rear thereof, whereby the normal discharge of soap will be vertically downward and abnormal discharge in a forward direction will be prevented.

1,308,259. SPRING GRIP DUMB-BELL. EUGEN SANDOW, London, England. Filed Oct. 19, 1917. Serial No. 197,474. 5 Claims. (Cl. 46-69.)



1. A spring grip dumb bell, having in combination, a spring, means for varying the effective length of said spring, means for visibly indicating the value of the strength required to overcome the resistance offered by said spring, and means for giving an audible indication when the full grip has been given.

1,308,260. GLASS-CUTTER. MICHAEL J. SCULLIN, Newark, N. J. Filed Jan. 23, 1918. Serial No. 213,330. 1 Claim. (Cl. 40-52.)

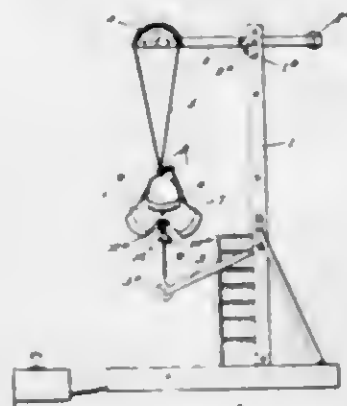
In a glass tube cutter including a tubular casing with a cutter rotatably protruding therefrom, and having a

slot opposite to the cutter, comprising a substantially L-shaped lever with its elbow fulcrumed in the slot of the casing so that one arm of the lever is movable backwardly and forwardly in the passage of the casing, while the second arm is movable inwardly and outwardly of the



slot laterally with relation to the casing and the arm of the lever within the casing being slotted, and a rod movable in the casing, having at one of its ends a pin which is movably disposed in the slot of said lever.

1,308,261. MAIL-BAG-DELIVERING DEVICE. JAY GRABHART SHULENBERGER and LEE WHITRIGHT, Lodi, Ohio. Filed Sept. 29, 1915. Serial No. 53,173. 3 Claims. (Cl. 258-26.)

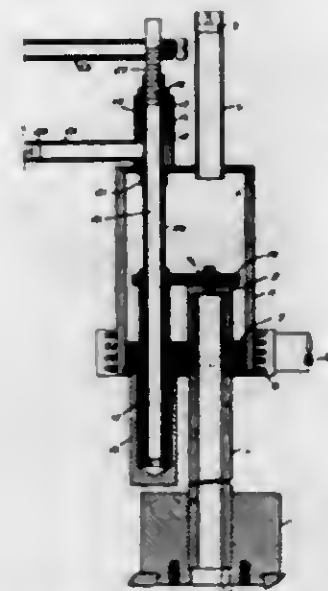


1. In a mail bag delivering device, a single length of cable folded upon itself forming a hook receiving loop at one end and a double mail bag receiving and suspending loop at the other, the members of the latter being each provided with a slip plate adjustably clamping said cable below said hook receiving loop.

1,308,262. OPERATING MECHANISM FOR VALVES. EDMUND F. SIEPKA, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 7, 1917. Serial No. 134,813. 8 Claims. (Cl. 251-20.)

3. In a valve, the combination with a casing provided with an aperture, a pool of sealing fluid surrounding said aperture, and a sealing member adapted to be submerged in said pool, and means for evacuating the casing, of a tube carried by the casing and projecting below the surface of said pool, an operating rod slidably mounted on

the casing and having an operating portion projecting outside thereof and another portion located within said



tube, and means for evacuating the space between said rod and the walls of the tube above the surface of said pool.

1,308,263. CARRYING AND DRAG BAG. ALLEN W. SMITH, New York, N. Y. Filed May 11, 1918. Serial No. 233,911. 6 Claims. (Cl. 150-1.)

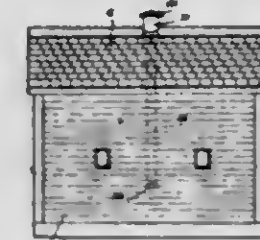


6. As an article of manufacture, a carrying and drag bag comprising a bag body of a textile material and open at the top and closed at the bottom, an outstanding marginal auxiliary rope reinforcement at the bottom of the body, an outstanding exterior rope reinforcement surrounding the body a distance above the said bottom reinforcement, a rope reinforcement at the top edge of the body, outstanding side rope reinforcements each made of a single rope attached at its ends to the corners of the bottom reinforcement, extending convergently upon and attached to the corresponding body connecting with the said auxiliary and the said top edge reinforcements and projecting beyond the latter in the form of a handle, and an outstanding single rope reinforcement attached exteriorly to the front, back and bottom of the body and connecting with the said top edge reinforcement, passing through and connected to the said bottom reinforcement and the said auxiliary reinforcement, the middle portion of the said single reinforcement being formed at the bottom into a dumping handle projecting from the bottom of the bag.

1,308,264. VENTILATOR. WILLIAM JAMES SMITH, Portage La Prairie, Manitoba, Canada. Filed Sept. 26, 1918. Serial No. 255,826. 1 Claim. (Cl. 98-27.)

A ventilator for a two-story barn comprising an upgoing interior fresh air flue following the wall and roof of the barn and opening at the bottom through the wall to the exterior air and at the top through the peak of the roof to exterior air, an upwardly inclining foul air pipe leading from the ceiling of the first story of the

barn to the interior of the flue and having one side thereof forming a baffle plate extending upwardly at an angle



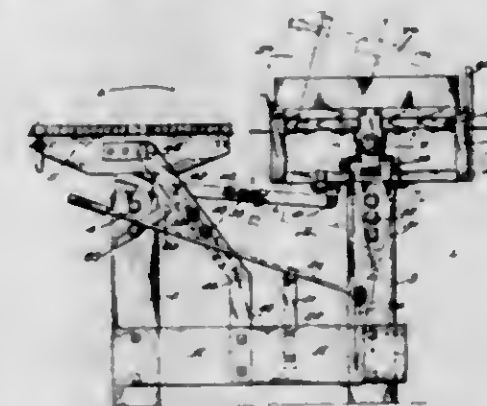
partially across the flue and an adjustable valve controlling the entrance end of the foul air pipe.

1,308,265. BUILDING-CLIP. JOHN ROBERT SPEAR, Winnipeg, Manitoba, and JAMES MILTON BEATTIE, Calgary, Alberta, Canada. Filed Apr. 16, 1918. Serial No. 228,945. 2 Claims. (Cl. 72-118.)



1. A wall board clip comprising a closed sided metallic plate presenting centrally thereof and at one side a pair of transversely extending spaced and oppositely directed substantially L-shaped catches, the said catches being cut from the plate and the said plate being formed with comparatively large perforations in the body part and with perforations passing transversely thereacross centrally between the bases of the catches.

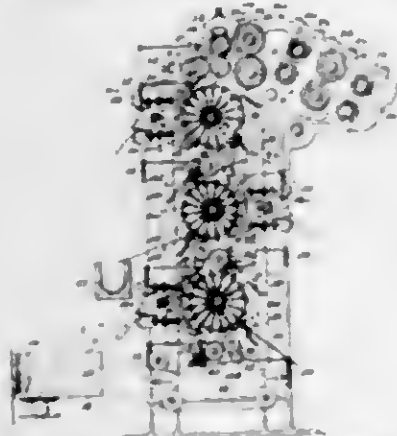
1,308,266. SUGAR PACKING AND BOXING MACHINE. JOHN D. SPECKELER, Jr., and RICHARD LABORDA, San Francisco, Calif. Filed June 24, 1918. Serial No. 241,491. 15 Claims. (Cl. 107-45.)



14. A sugar packing and boxing machine comprising a main frame, a pair of arms pivotally mounted on said frame, a receiving table pivotally mounted in the upper ends of said arms, a rest for the table adapted to support it in a horizontal position, a pair of standards on the main frame, a guide frame pivotally mounted between said standards, a base member vertically slidable in said guide frame, a plurality of receiving platforms mounted on said base member, means for assembling cube sugar on receiving tables, so that they will be arranged in a series of separate squares, said tables, together with the arms between which they are pivotally mounted being adapted to be swung forwardly toward the receiving platforms, and tilted upwardly toward the receiving platforms, and tilted upwardly against the same by an operator, and means for transmitting the said movement to tilt the guide frame and the receiving platforms carried thereby toward the receiving table when this is tilted to permit the arranged sugar to be transferred from the receiving table to the receiving platforms, and means controlled by the operator for transmitting a receding movement to the base and the receiving platforms carried thereby, which is equal to the

depth of one layer of cube sugar after a layer of cube sugar has been deposited upon the receiving platform, said means comprising a pivotally mounted rack bar by which the base member and the receiving platform are supported, a keeper with which the teeth of the rack bar are engageable, and means for rocking the rack bar to bring alternate teeth into and out of engagement with the keeper to permit the base member and the receiving platform to recede step by step as the respective layers of cube sugar are deposited upon the receiving platform, and means adjacent each receiving platform for guiding the respective layers of cube sugar deposited thereon, and for preventing disarrangement of the respective layers of cubes, means for counterbalancing the weight of the base member and to receiving platform, and means for counterbalancing the weight of the sugar as it is being deposited upon the receiving platform.

1,308,267. DECORTICATING-MACHINE. CHARLES P. STEWART, Walla Walla, Wash. Filed Apr. 25, 1917. Serial No. 141,562. 5 Claims. (Cl. 13-18.)



1. In a machine for extracting and collecting vegetable fiber from fibrous material, the combination with a plurality of pairs of crushing rollers, of a plurality of pairs of holding rollers, a plurality of scraper rollers furnished each with radially withdrawable and projectable scraper blades, said holding rollers feeding the material to said scraper rollers, a plurality of cooperating concaves, provided for each scraper roller, a plurality of cleaner blades, one for each scraper roller, an endless conveyor receiving the fiber after it has been scraped, and a revolving collecting table upon which the fiber is delivered by said conveyor, substantially as specified.

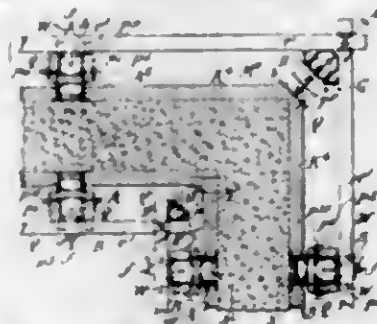
1,308,268. CONTAINER. CHARLES WAGNER, Grantwood, N. J., and AUGUST HOMER, New York, and CASSIMIA J. VIERI, Brooklyn, N. Y. Filed Dec. 28, 1917. Serial No. 209,232. 3 Claims. (Cl. 150-49.)



3. A container comprising a circular lazy-tongs support and a flexible receptacle having eyelets adjacent the periphery thereof, the alternate bars of said lazy-tongs projecting slightly above the adjacent bars thereof, said eyelets of greater number than said alternate bars and adapted to be engaged by the ends of said projecting bars for suspending said receptacle within said lazy-tongs, whereby the projecting end of each of said alternate bars may be engaged by one or more of said eye-

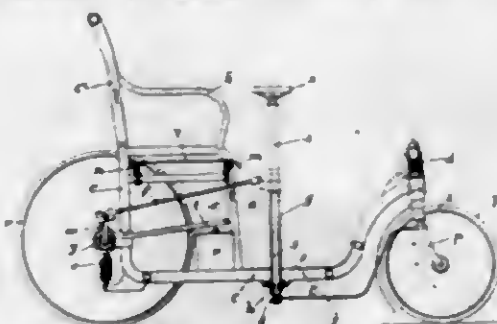
lets, thereby providing adjustability in the size of the container, said lazy-tongs belled outwardly providing an enlarged cavity when collapsed for retaining said folded container.

1,308,269. MOLD FOR CONCRETE CONSTRUCTION. ROWLAND T. WALES, Sewaren, N. J. Filed Aug. 5, 1915. Serial No. 43,732. 10 Claims. (Cl. 25-131.)



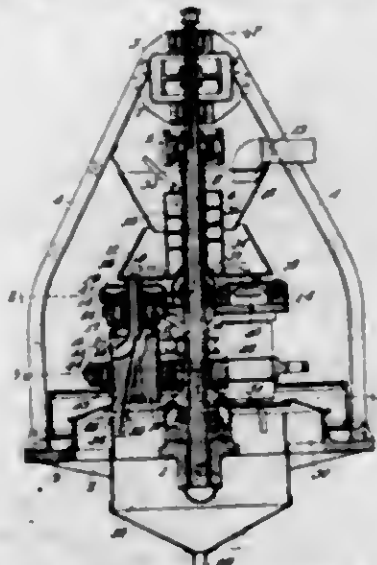
10. A mold for concrete comprising a plate formed of permanently connected channels, the webs of such channels forming an unbroken mold surface.

1,308,270. HAND-PROPELLED VEHICLE. CHARLES BASSETT, Paris, France. Filed Apr. 30, 1919. Serial No. 293,822. 3 Claims. (Cl. 208-33.)



1. A hand propelled chair comprising in combination a frame, two rear propelling wheels, a front steering wheel, an axle upon which both propelling wheels are fixed, a crank formed on said axle, a connecting rod engaging with said crank, a hollow reciprocable driving member to which said connecting rod is connected, a rotary member freely mounted on the driving member, means extending through the driving member and connecting the rotary member to the steering wheel, bearings in which the rear axle is mounted, tension springs connecting the frame to said bearings, and pivotally mounted struts connecting the bearings to a part of the frame, remote from said bearings.

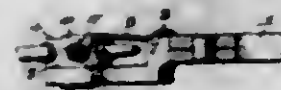
1,308,271. CENTRIFUGAL SEPARATOR. EVEREST A. HAYLIN, El Paso, Tex. Filed Aug. 23, 1915. Serial No. 46,961. 35 Claims. (Cl. 233-25.)



1. A centrifugal separator including a central shaft, drums carried and rotatable with said shaft and also rotatable about their own axes, each of said drums having a rifled separating surface, means for driving the

central shaft, means for rotating the drums therefrom, and means for varying the angle of the axes of the drums with relation to the central shaft.

1,308,272. PUNCH. JOHN L. BANGLED, Bridgeport, Conn., assignor to The Smith & Egge Mfg. Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 29, 1915. Serial No. 225,426. Renewed May 20, 1919. Serial No. 298,547. 2 Claims. (Cl. 104-122.)



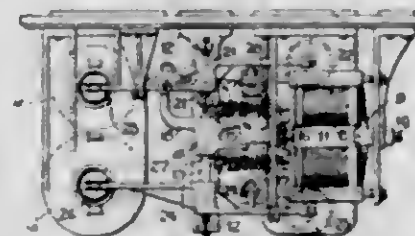
1. In a punching tool, a pair of levers pivotally connected to provide handle portions and jaw portions, an anvil carried by one of the jaws, a hub journaled on the other jaw, radially extending punches fixed on the periphery of the hub for selective cooperation with the anvil when the jaws are closed, and a spring catch secured to the jaw which carries the hub and provided with a notch which is in direct alignment with the anvil when the jaws are in closed position, said notch being in the path of the punch bases when the hub is revolved, whereby the punches will engage with the notch and thereby be in direct alignment with the anvil.

1,308,273. ELECTRIC FURNACE. JAMES BIDAY, London, England. Filed Mar. 6, 1919. Serial No. 251,055. 5 Claims. (Cl. 204-64.)



1. In an electric furnace, annular hole closing means, comprising a segmentally divided ring of curvilinear shape in cross section the inner peripheral portion being thinner than the outer peripheral portion, substantially as described.

1,308,274. RAILWAY LIGHTING APPARATUS. JOSEPH BIDAY, New York, N. Y., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Original application filed Dec. 1, 1910. Serial No. 595,070. Divided and this application filed Sept. 6, 1917. Serial No. 159,911. 6 Claims. (Cl. 171-229.)



1. In apparatus of the class described, in combination, a pressure controlled variable resistance medium comprising a plurality of contacting members, a movable member bearing on said resistance medium through which the pressure thereon is varied, a rotatable member, a toggle interposed between said members, a lever fixed to said rotatable member, a coil controlling the position of said lever, a second lever intermittently connected with said rotatable member, and a second coil controlling the position of said second lever.

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1,308,275. AUTOMATIC CUT-OUT FOR ELECTRIC GENERATORS. HENRY E. BONGER, Newark, N. J., assignor to Splittdorf Electrical Company, Newark, N. J. Filed Aug. 24, 1917. Serial No. 167,944. 9 Claims. (Cl. 175-310.)



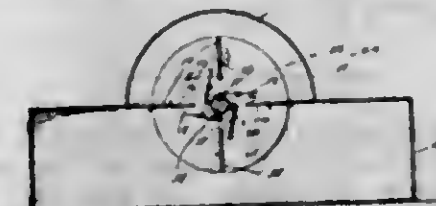
1. In an automatic cutout for electrical generators, the combination of a shaft having a hollow end, a pin extending through the hollow end of said shaft, a thrust member seated in said hollow shaft end and adapted to be acted on by said pin, a circular member supported on said shaft by said pin and adapted to be acted on by centrifugal force as said shaft rotates, a fixed spring member carrying a contact and a movable member carrying a contact and adapted to be operated by said thrust member whereby the movement of said circular member operates said contacts.

1,308,276. METALLIC DOOR-FRAME BUCK AND TRIM-FASTENING. ANDREW J. CONNELL, College Point, N. Y., assignor to Empire Art Metal Co., Inc., a Corporation of New York. Filed Aug. 15, 1914. Serial No. 857,287. 12 Claims. (Cl. 150-16.)



3. A sheet-metal buck for door-frames and the like bent to provide a jamb and a side-wall portion, the latter having formed intermediate its edges a groove having a relatively wide body portion and a contracted mouth, a trim, and independent fastening means having a part substantially similar in conformation to, and cooperating with the said groove for securing the trim in place.

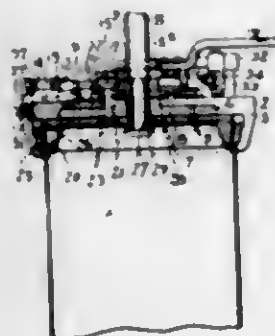
1,308,277. ANIMAL-TRAP. JOHN R. CORRIGAN, Prior Lake, Minn. Filed Aug. 9, 1918. Serial No. 249,120. 1 Claim. (Cl. 43-24.)



An animal trap including a receptacle having an opening in the top thereof, a rotatable member disposed in said opening and having a pair of parallel spaced disks, radially extending blades secured between and spacing the disks apart, a shaft fixed across the opening and

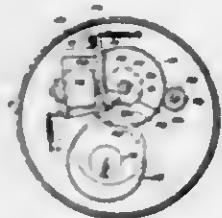
having the disks and blades loosely rotatable thereon, said shaft having a notch therein, detent members pivotally mounted on the disks and disposed therebetween and having noses for engagement in said notch to hold the rotatable member against movement in one direction until released by the signal, each of said detents being disposed within the angle formed by each pair of blades, and a member disposed in covering relation to a part of the upper portion of the rotatable member.

1,308,278. GLASS-BAIT. GEORGE C. DEBAY, Springdale, Pa., assignor to Universal Glass Company, New Kensington, Pa., a Corporation of Delaware. Filed Aug. 2, 1917. Serial No. 184,144. 3 Claims. (Cl. 49—17.1.)



2. A bait for drawing glass cylinders having a downwardly extending flange portion, a contracting plate having a peripheral portion forming with the first-named flange portion an annular cavity to receive the glass, and means for moving said contracting plate to increase the size of said cavity whereby the strain on the head of the cylinder is relieved.

1,308,279. ASSEMBLY-VOTING MACHINE. FRANK L. DYER, Montclair, N. J. Original application filed Feb. 2, 1915. Serial No. 5,601. Divided and this application filed Mar. 23, 1917. Serial No. 156,822. 7 Claims. (Cl. 235—52.)

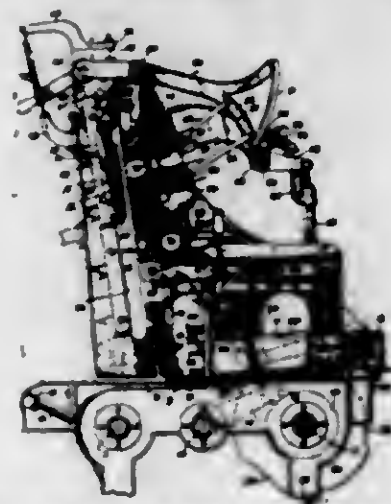


1. In a transmitter for assembly voting apparatus of the type described, the combination with a shaft, a contact device carried thereby, means for locking the shaft in any one of its successive positions, a spring for returning the shaft to its normal position when released, and means for retarding the return movement of the shaft, substantially as set forth.

1,308,280. BOTTLE-LABELING MACHINE. EDWARD RAYMOND, New York, N. Y. Filed Nov. 20, 1917. Serial No. 203,030. 22 Claims. (Cl. 216—13.)

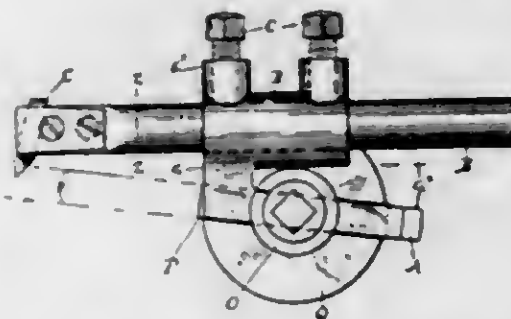
7. A labeling machine comprising in combination, a conveyor for moving articles to be labeled through the machine past a point where labels are applied, a reciprocating and oscillating picker frame provided with a plurality of pickers, a plurality of label boxes, means for reciprocating said picker frame up and down, means for

oscillating said picker frame on its upward movement, to force said pickers into engagement with said label boxes



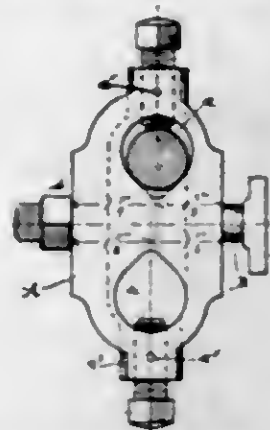
to remove labels therefrom, and means for applying to the articles, labels carried by said pickers.

1,308,281. TOOL-POST-BORING-BAR HOLDER. EDWARD F. G. GIBBS, Washington, D. C. Filed Oct. 15, 1915. Serial No. 55,999. 4 Claims. (Cl. 29—99.)



4. A tool post boring bar holder, comprising a stock; and a bar-holding member; indirectly connected at their front ends by an intervening neck integral with both, all of which stock, neck and member begin on a line perpendicular to the bar seat of the said member; and having a deep slightly angular opening between the said stock and member from the neck to the rear end of the said member; and means for holding a boring bar in the said bar seat, by forcing it in a horizontal direction, and toward the said stock; all substantially as set forth.

1,308,282. REVERSIBLE BORING-BAR HOLDER. EDWARD F. G. GIBBS, Washington, D. C. Filed Oct. 15, 1915. Serial No. 56,000. 7 Claims. (Cl. 82—36.)



6. A universal boring bar holder, comprising a reversible block having two similar, horizontal, vertically opposite, bearing surfaces adapted to bear on the tool seat of an engine lathe; having a transverse, horizontal, bar holding aperture through each end, the said apertures

differing with each other in elevations to an extent equal to the difference between the two intermediate elevations of the block; in combination with an elevating liner whose thickness added to the lowest elevation of the block, is equal to the highest elevation of the block plus the difference between the two intermediate elevations; means for clamping the said holder to the tool seat of an engine lathe; and means for clamping boring bars in the said apertures; all substantially as set forth.

1,308,283. TELESCOPE-PRISM MOUNTING. ALBERT GABER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 18, 1918. Serial No. 258,727. 4 Claims. (Cl. 88—33.)



2. In a telescope ocular prism system the combination of a single reflecting prism provided with a universal tilting adjustment, of a double reflecting prism provided with a transverse shifting adjustment relatively to said single reflecting prism.

1,308,284. AUTOMOBILE-SIGNAL. JACKSON C. HOTT, Denver, Colo. Filed Sept. 29, 1916. Serial No. 122,810. 3 Claims. (Cl. 177—329.)

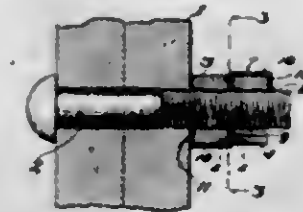


1. A vehicle signal comprising a movable semaphore pivotally connected with the vehicle, a supporting arm secured to the vehicle and extending laterally therefrom in a plane parallel to that in which the semaphore moves, a rest on the outer end of said arm to support the free end of the semaphore when in signalling position, said rest comprising a lateral offset on the end of said arm having an upwardly projecting lip, and lips on said arm adjacent its free end, said last named lips constituting electric contacts, contacts on the semaphore to engage therewith when in signalling position, all of said lips constituting means to prevent lateral movement of the semaphore on said arm.

1,308,285. NUT-LOCK. HORACE W. JENNER, Lawrenceville, Ill. Filed Aug. 10, 1918. Serial No. 249,297. 3 Claims. (Cl. 151—18.)

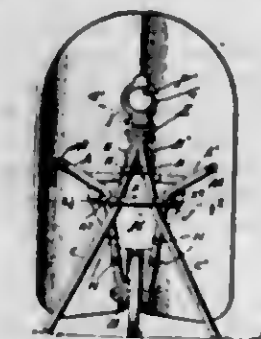
3. In a nut lock, the combination with a bolt of the same diameter throughout its length, said bolt provided with right and left threads intersecting each other, of a pair of nuts mounted upon said threads, one of said nuts provided with right hand threads, and the other nut pro-

vided with left hand threads, whereby the rotation of the bolt will tightly clamp the nuts together, each nut provided on its inner face with intersecting grooves extending to the edges of the nut, said grooves producing at the corners of each nut square tooth portions, a ductile washer positioned upon the threaded portion of the bolt and between said nuts and provided at its outer ends



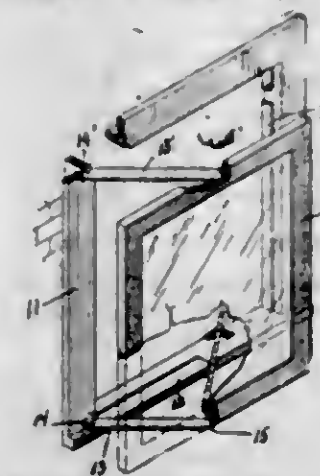
with notches, and said nuts by the rotation of the bolt being adapted to clamp tightly the washer at the square tooth portions at corners of the nuts and forces the metal slightly into the intersecting grooves for preventing the washer from accidentally rotating out of position, and the ends of the washer folded over the outer faces of the nuts and partly surrounding the threaded portion of the bolt, substantially as shown and described.

1,308,286. CARRIAGE FOR ARTILLERY. RALPH H. KOAN, New York, N. Y. Filed Mar. 25, 1918. Serial No. 224,535. 4 Claims. (Cl. 89—36.)



3. In a gun carriage, a frame, a wheel carried at the lower end thereof, said frame comprising three pairs of members, one of said pairs forming a stand or base for the carriage, another of said pairs joined to said first mentioned pair and bent at one end to form handles and extending down to the base of the frame to form the axle bearing for the carriage wheel and the third pair extending down to the base to cooperate with said last mentioned pair in forming the axle bearing and extending upward to cooperate with the first mentioned pair of members to form the apex of the frame, and means swiveled at the apex for mounting the gun.

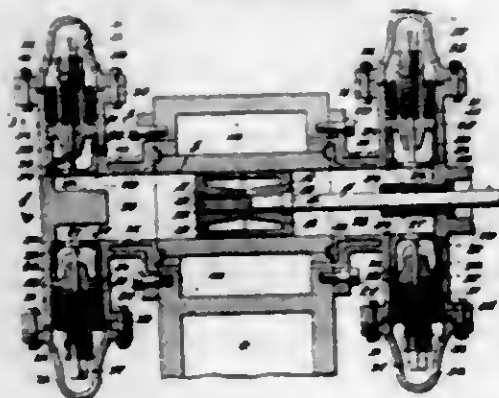
1,308,287. SASH-LOCKING BAR. OSCAR LIEDTKE and JOHN M. BIEN, Newark, N. J. Filed May 25, 1917. Serial No. 170,857. 2 Claims. (Cl. 268—15.)



1. A notched locking bar for a movable sash pivotally secured to the sash at the lower end thereof and having

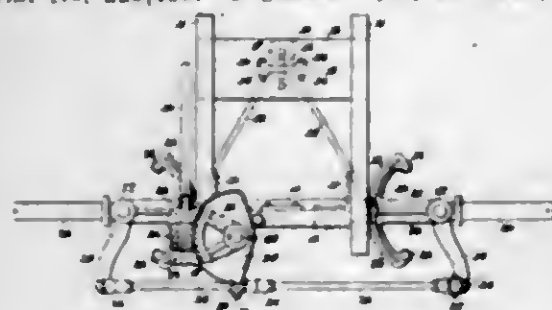
a hinge joint between its ends, and an arcuate notched member adapted to be secured to the window sill and to receive notched portions of said bar and thereby hold and lock the sash in position, said arcuate locking member being placed with one end directed substantially longitudinally of the window sill and the other end directed outwardly.

1,305,288. AMMONIA-COMPRESSOR. JOSEPH HARVEY McCAIN, Philadelphia, Pa. Filed Dec. 29, 1916. Serial No. 139,671. 2 Claims. (Cl. 230—34.)



1. In an ammonia compressor, the combination of a valve casing having a reduced inner end, a valve seat member removably fitted against the inner end of the casing, a barrel having an enlarged head engaging the seat member, valve mechanism carried by the valve, a retaining member threaded into the valve casing, set screws carried thereby for holding the barrel and removable seat member in position, a gas tight closure for the end of the barrel and threaded therein and a cap separate from said retaining member and closure, closing the outer end of the casing.

1,308,289. TILTING FRONT AXLE FOR VEHICLES. EDDY T. MCKAIG, Waukegan, Ill. Filed Apr. 12, 1918. Serial No. 229,459. 5 Claims. (Cl. 21—197.)

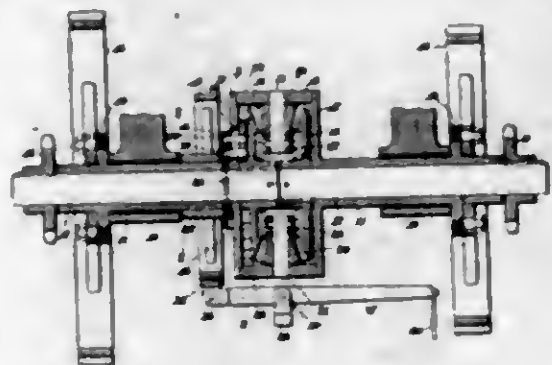


1. The combination of a pair of parallel plates having lateral extensions formed integral therewith; a plurality of separators between said plates; a securing bolt extending through each separator and said plates; non-revoluble stub axles having hubs interposed between and pivoted to the ends of said plates; rollers on the inner ends of said axles adapted to travel between said lateral extensions and limited in their movement in opposite directions by certain of said separators; an arm on each hub; a connector between said arms; and means for moving said stub axles about their pivots.

1,308,290. LOCKING DEVICE FOR DIFFERENTIAL GEARS. EDDY T. MCKAIG, Waukegan, Ill. Filed June 13, 1918. Serial No. 241,073. 17 Claims. (Cl. 74—100.)

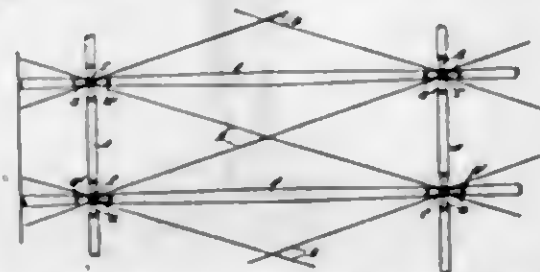
1. In a device of the class described, two aligned shafts; a driving member on each shaft; a casing loosely mounted on said shafts and having outwardly extending hubs surrounding the inner ends of said shafts; gears secured to said hubs; a revoluble bevel pinion carried by said casing; a bevel gear secured to the inner end of each shaft

within said casing and meshing with said pinion; a brake drum freely revoluble on one of said hubs; means



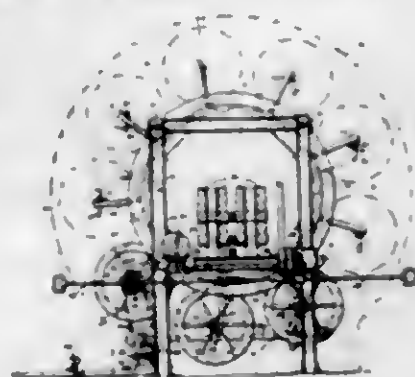
for applying a brake to said drum; and means controlled by said drum for locking one of said gears to said casing.

1,308,291. AEROSTAT STRUCTURE OF RIGID AIR-SHIPS. JAMES MCKECHNIE and HARTLEY RUTH PATT, Barrow-in-Furness, England, assignors to Vickers Limited, Westminster, London, England. Filed Mar. 25, 1919. Serial No. 285,109. 5 Claims. (Cl. 244—3.)



1. An aerostat structure for rigid airships, comprising a girder construction formed of inflatable flexible tubes attached at their ends to adjoining members to form transverse frames connected together by longitudinal tubular girders, for the purpose specified.

1,308,292. BEAD-DRYING APPARATUS. GEORGE McNEILL, Detroit, Mich., assignor to Morgan & Wright, a Corporation of Michigan. Filed Aug. 10, 1916. Serial No. 114,149. 3 Claims. (Cl. 34—29.)

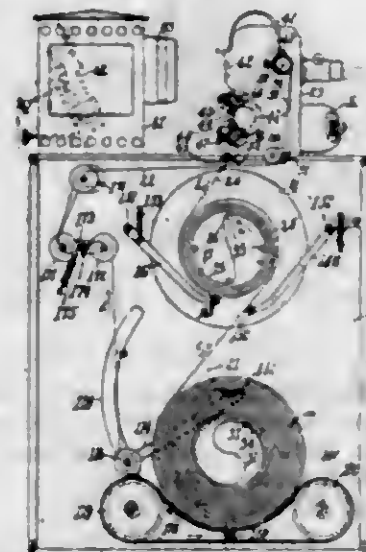


2. A bead drying apparatus, comprising a revoluble magazine, revoluble reels on the magazine for the beads, heating means inside the magazine, a casing for the magazine having a receiving end and a discharge end for the beads, and drive means for imparting step rotation to the magazine including a rack device, a driving pinion engaging said rack device and a rod adapted to throw the drive means into and out of operation and operable from both the receiving and discharge ends of the casing.

1,308,293. MOTION-PICTURE APPARATUS. ELISHA E. MANSARD, Morehead, Ky. Filed Mar. 13, 1916. Serial No. 83,832. 19 Claims. (Cl. 88—157.)

1. The combination of a motion picture head, feeding means for an endless picture-strip, loop forming and

winding means for the strip comprising a pair of plates between which said loop is wound, said plates converging toward the point at which the strip stretch is received between them from said picture head and diverging in the release direction of the winding, and means for releasing the winding.



4. In a device of the character described, the combination of rotatable means for forming a loop in an endless picture-strip and winding said loop, shifting means for releasing said winding for movement thereof to unwinding position and for relief of driving relation of said loop-forming and winding means, means for preventing reverse rotation of said rotatable means, and means actuated by movement of said winding for return of said shifting means to operative position and of said rotatable means to driving relation.

1,308,294. METHOD OF FORMING STITCHES. EDWARD J. MALONEY, Long Island City, N. Y., assignor to Andrew Wolf, New York, N. Y. Filed Feb. 27, 1914. Serial No. 821,367. 3 Claims. (Cl. 112—34.)

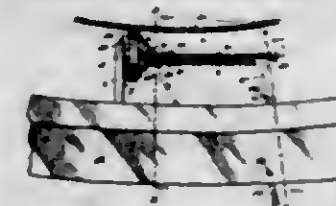


3. The herein described method of forming a stitch, which consists in passing the thread through the goods and through a previously formed loop by a thread carrying member forming a second loop, casting off the first formed loop, then passing the newly formed loop through the goods, casting off the second formed loop and thence passing the thread carrying member through the goods without the thread.

1,308,295. MEASURING DEVICE. MATTHEW MOUNTS, Norwich, Conn., assignor to The Norwich Woolen Mills Company, Norwich, Conn., a Corporation of Connecticut. Filed July 29, 1918. Serial No. 247,223. 12 Claims. (Cl. 33—132.)

1. In a device of the character described, an instrumentality having means to move it proportionately to

the movement of goods to be measured, an indicator moved by said instrumentality, graduated means carried by said device for determining the extent of movement of



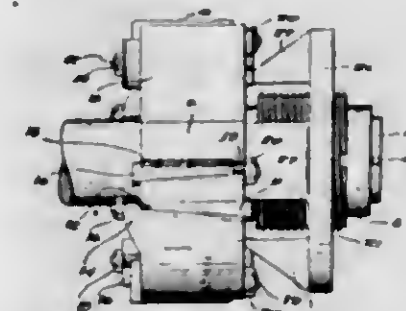
said indicator, and cut-out means operated by said indicator by means of the movement imparted to it by said instrumentality after having completed its graduated movement.

1,308,296. HAT-FASTENER. HENRY MOSES, Eltham, New Zealand. Filed Aug. 10, 1918. Serial No. 250,129. 1 Claim. (Cl. 132—23.)



A hat fastener comprising parallel pins arranged through opposite sides of a hat, a duplex sleeve-like socket fixed to each pin and through which the other pin is slidable, the portions of the sockets through which the pins are slidable being provided with slots, leaf springs fixed to the sockets near one end of the slots therein and arranged in the slots for frictional engagement with the adjacent pins, and crinkled flexible prongs carried by the pins and bent downwardly and inwardly and arranged on opposite sides of the sockets.

1,308,297. CUTTER-HEAD. MAGNUS OLSON, Golden, British Columbia, Canada. Filed Oct. 14, 1918. Serial No. 258,067. 9 Claims. (Cl. 144—230.)

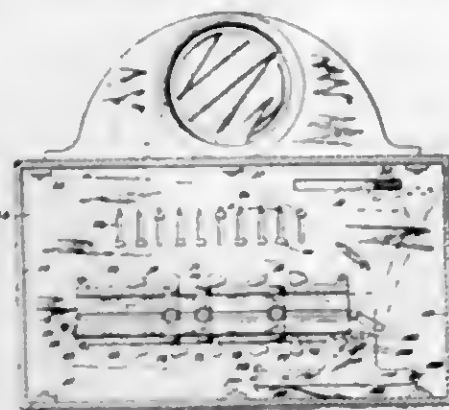


1. In a rotary cutter head, the combination, of a body provided with a plurality of circumferentially spaced recesses, a plurality of knife carrying blocks pivotally seated in said recesses, means for adjusting the longitudinal angle of said block, comprising substantially triangularly shaped lugs for engagement with the inner surface of the block and for facial engagement with the inner wall of the recess to provide a firm support for the blocks.

1,308,298. AUTOMOBILE-LOCK. JOSEPH PODCVALY, Detroit, Mich. Filed Dec. 4, 1917. Serial No. 205,415. 2 Claims. (Cl. 70—54.)

1. In a lock, the combination with a casing and a plate normally covering the front thereof, of a rigid vertical plate secured centrally in said casing, a plate parallel thereto and movable longitudinally within said casing, a slide bar mounted on said rigid plate to move longitudinally of said casing, means for normally maintaining said bar in one position, a tooth formed on said bar, a pawl

pivoted in said casing, a plurality of teeth formed on said pawl engaging with said tooth, means for pressing said teeth normally in engagement, a knob and a grooved handle carried by said plate, a bent latch attached to the inner end of said knob engaging the groove in said handle



for holding said plate in a normally closed position, for limiting the movement of said sliding plate, a lever engaged with and operable by said slide bar, and means for progressively actuating said slide from the exterior of said cover plate.

1,308,299. METAL CAR. RALPH V. SAO, Philadelphia, Pa. Filed May 21, 1918. Serial No. 235,762. 8 Claims. (Cl. 105-406.)



1. A flanged bar forming the upper stiffening member of a car side comprising a channel having a web, a flange projecting angularly from each edge of said web, and an integral downwardly projecting lateral flange extending from one of the aforesaid flanges thereof.

1,308,300. CAR CONSTRUCTION. RALPH V. SAO, Philadelphia, Pa. Filed May 21, 1918. Serial No. 235,763. 8 Claims. (Cl. 105-406.)



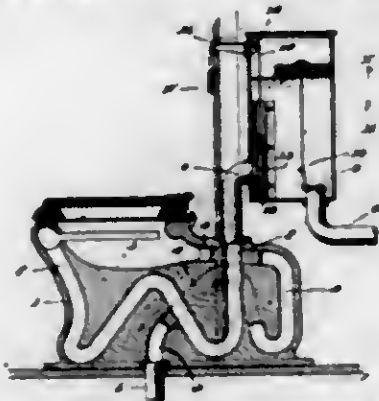
1. An integral flanged bar secured at or near the upper edge of a car side comprising a pair of web members spaced apart, a flange joining one pair of extremities thereof, flanges projecting outwardly from the other extremities and a lateral flange extending from one of the flanges approximately parallel to the pair of webs.

1,308,301. TOILET FLUSHING DEVICE. MARUOAKU SAKOAWA, Oakland, Calif. Filed Jan. 31, 1917. Serial No. 145,717. 2 Claims. (Cl. 4-3.)

1. A toilet comprising a base formed with a bowl and with a large tortuous inlet conduit and a large tortuous outlet conduit, leading to and from said bowl respectively, and means for flushing the toilet through said inlet conduit, bowl and outlet conduit.

2. A toilet comprising a base formed with a bowl end with a large tortuous inlet conduit and a large tortuous

outlet conduit leading to and from said bowl respectively, and noiseless means for controlling the introduction of water through said inlet conduit, bowl and outlet conduit.



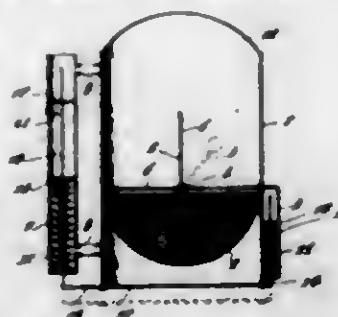
tion of water through said inlet conduit, bowl and outlet conduit.

1,308,302. ELECTRODE-THREADING APPARATUS. WILLIAM SHAW, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,350. 6 Claims. (Cl. 10-87.)



4. In lathes for boring and threading electrodes, a lathe bed, a head thereon, a main shaft slidably arranged in said head, a gear spined to said shaft, means for rotating said gear, a housing outside of said shaft and secured to said head, an internally threaded bushing secured in said housing, a threaded follower secured to said shaft, means for moving said follower into and out of engagement with the threads of said bushing, a second shaft threaded into the first mentioned shaft, a feed wheel threaded on said second mentioned shaft and rotatably secured in said head, means for preventing longitudinal movement of said feed wheel, means for locking said feed wheel from rotary movement, a power stopping device slidably arranged in said head, limit stops spaced apart on said device and means secured to said first mentioned shaft adapted to engage said stops at its limits of movement.

1,308,303. FLOUR SIFTER AND SCALE. GEORGE W. SHUCK, Lawrence, Kans. Filed July 22, 1918. Serial No. 240,145. 6 Claims. (Cl. 83-60.)



1. A combined sifter and scale comprising a cylindrical receptacle open at both ends, a sieve arranged in said receptacle, tubular casings carried by said receptacle, a member movable toward and away from the lower end of said receptacle, supporting rods connected with said member and extending into said casings, stops on said rods in said casings, coiled springs surrounding said rods and bearing against said stops to normally hold the member in operative position, and cooperating means carried by one of said rods and one of said casings for indicating the weight of the contents of the receptacle.

1,308,304. COUNTERBORE. FRANCIS N. SIMMONS, San Francisco, Calif. Filed Jan. 18, 1918. Serial No. 212,475. 4 Claims. (Cl. 77-58.)



1. In a tool of the character described, a stock having a tapering axial bore and diametrically aligned slots communicating with said bore and extending axially of the stock from the lower end thereof, a tapered securing pin adapted to fit into said bore and being provided in its upper portion with an axially extending diametrical slot, and a cutter fitting snugly into the slots of said stock and pin, said cutter being provided with cutting edges on its outer projecting edges.

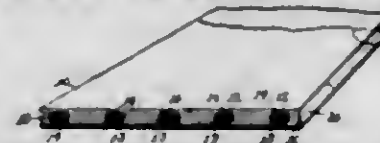
1,308,305. MOTOR-DRIVEN MACHINE FOR THE MANUFACTURE OF BOOTS AND SHOES. FRANK JOHN SPENCER and WILLIAM JOHN KETLY, Leicester, England, assignors to Gimson & Co., (Leicester) Limited, Leicester, England, a Corporation of Great Britain. Filed Mar. 16, 1916. Serial No. 84,702. 12 Claims. (Cl. 172-126.)



3. A machine of the character described comprising an oscillatory armature and a tool adapted to be oscillated thereby, a pair of electro-magnetic coils adapted and arranged, when energized, to oscillate said armature, means to control the current to said coils to cause alternate energization thereof, and means, acting by induction, for causing the energizing current of each coil to produce a de-energizing effect on the other coil.

5. A machine of the character described comprising a spindle, knife-edge bearings upon which said spindle is mounted to rock, a tool supporting flament on said spindle, springs arranged to resist oscillation of the spindle in either direction from a position in which the springs are balanced and to hold the spindle on its bearings against pressure of the work, and electrically operated means for oscillating said spindle.

1,308,306. COMPOSITE SLAB FOR BUILDING PURPOSES. PEREZ M. STEWART, New York, N. Y., assignor to Gertrude F. Stewart, New York, N. Y. Filed May 15, 1917. Serial No. 108,659. 2 Claims. (Cl. 72-40.)



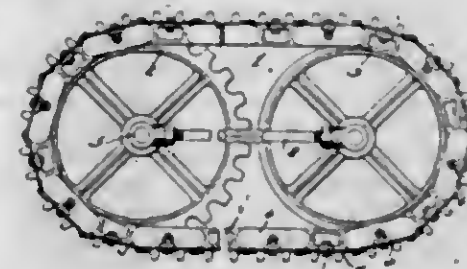
1. A composite slab comprising a body portion of substantially light relatively fragile plastic material, a section of plastic cementitious material of greater strength embedded in said body portion and bonded therewith, and a metal reinforcement embedded in said section.

1,308,307. SHAFT-COUPLING. JOHN W. STOSBY, Atlanta, Ala. Filed Mar. 20, 1919. Serial No. 283,705. 3 Claims. (Cl. 21-87.)



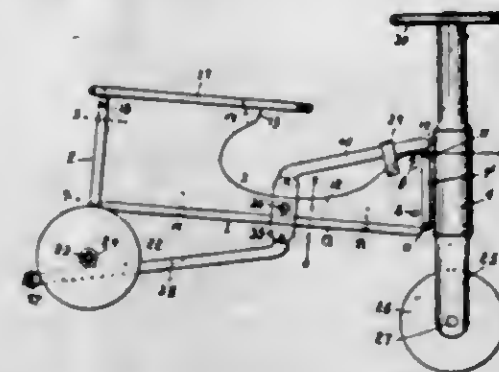
1. A device of the class described, comprising a pair of members adapted to be secured to a vehicle axle and having cooperating means for pivotally securing the shaft of a vehicle, and a single spring-actuated means for securing said members to the vehicle axle and the shaft to said members.

1,308,308. TRACTOR-CHAIN. EDWARD F. SULLIVAN, Oakland, Calif. Filed Feb. 7, 1916. Serial No. 76,800. 6 Claims. (Cl. 21-150.)



2. An endless traction chain comprising a plurality of pairs of links, contacting intermeshing lugs formed on said pairs of links to form a rolling contact therebetween, lips formed on one of said pairs, and abutments formed in the other of said pairs of links to prevent bending of said chain in one direction.

1,308,309. VELOCIPED. ARTHUR A. THOMPSON, Oakland, Calif. Filed July 9, 1918. Serial No. 244,074. 3 Claims. (Cl. 208-165.)



2. A velocipede including a frame, said frame including a beam and a steering post turnably mounted on said beam, rear wheels journaled on the rear of said frame, said beam being T-shaped in cross section and including an upright member and a horizontal member secured to the lower edge of said upright member, a front wheel journaled in said steering post, and a seat on said frame.

1,308,310. TRACK-LINING JACK. FREDERICK VOGEL, Wyeth, Oreg. Filed Jan. 2, 1919. Serial No. 269,198. 5 Claims. (Cl. 254-44.)



1. A device of the character described, comprising a base, a rocking lever supported within the base for rais-

ing and lowering movement, a fulcrum block for said lever, means for raising and lowering the fulcrum block, and a lifting bar having link connection with said lever.

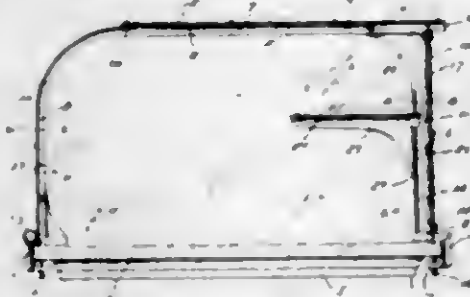
5. A track lifting jack comprising a channel base frame having slots in its sides, a rocking arm arranged between the sides and having a pivot pin slidable in the slots, a fulcrum block mounted on the pivot pin, a wedge shape member to raise and lower the fulcrum block, a foot in advance of the rocking arm and resting upon the base, a lifting bar swingingly connected to the foot, and a link pivot connecting the lifting bar and rocking lever.

1,305,311. EAVES-TROUGH PROTECTOR. HARRY I. WARD, Washington, Iowa. Filed Mar. 28, 1919. Serial No. 283,777. 2 Claims. (Cl. 108—30.)



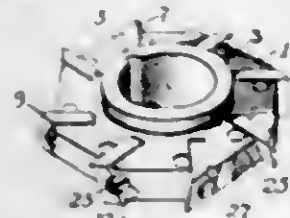
1. The combination with an eaves trough having its outer edge rolled downward and inward, of a protector consisting of a strip of netting of greater width than the eaves trough adapted to extend inside the inner edge of the eaves trough in position to engage the under edge of the shingles of the roof, and a holder consisting of a strip of sheet material coextensive in length with the strip of netting folded to include the outer edge of the strip of netting having its folded edge curled downward and inward to engage the rolled edge of the trough.

1,305,312. DISPLAY CASE. ANTON WARE, Oakland, Calif. Filed Oct. 25, 1915. Serial No. 57,702. 2 Claims. (Cl. 211—25.)



1. A display case comprising in combination, a counter top, brackets extending between the front and rear of said top and fastened thereto, said brackets comprising a vertical front portion, a horizontal top portion extending from said front portion and a curved rear portion extending tangentially from said horizontal portion to the said top, said horizontal portion and said curved portion having grooves along their inner edges, a flexible fabric screen, flexible metallic strips attached to the edges of said screen and extending into said grooves, reinforcing rods attached to said screen and extending between said flexible metallic strips, said screen forming a closure for the rear of said case.

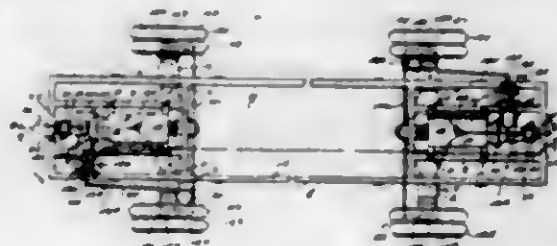
1,305,313. ROTARY CUTTER. WILLIAM M. WHITNEY, Winchendon, Mass. Filed Mar. 23, 1917. Serial No. 156,970. 1 Claim. (Cl. 29—105.)



A rotary cutter comprising in construction, a body having blade receiving recesses, the front and rear walls

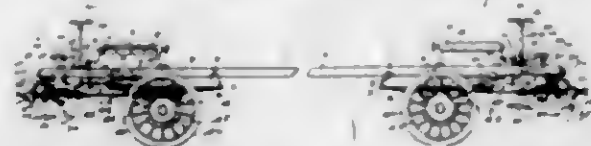
of which extend uninterruptedly from the outer to the inner limits of the recesses, blades mounted in said recesses and provided with uninterrupted front and threaded rear faces, a screw of uniform dimension from end to end engaging the rear threaded face of each blade, said screw and its associated blade being adapted to be inserted in a recess of the body in assembled relation, transversely extending wedge receiving openings formed in the body transversely of, and communicating with the blade receiving openings through the front walls thereof, and flat faced wedges adapted to be inserted in said transversely extending wedge shaped openings and acting to force the screws into close contact with the threaded rear face of the blades and against the smooth unthreaded rear walls of the recesses to lock the blades and permit ready removal or insertion of the blades and screws while in assembled relation.

1,305,314. FRONT AND REAR DRIVEN MOTOR-VEHICLE. HOWARD WILCOX, Washington, D. C. Filed June 1, 1918. Serial No. 237,737. 17 Claims. (Cl. 180—45.)



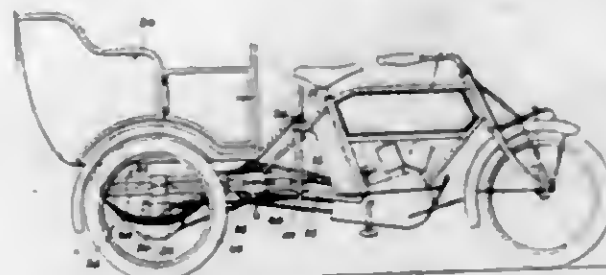
1. A motor driven vehicle having axles adjacent its ends, an engine and steering mechanism located at each end of said vehicle and located between each end of the vehicle and the axle adjacent thereto, said engines driving their adjacent axles.

1,305,315. MOTOR-DRIVEN-VEHICLE TRAIN. HOWARD WILCOX, Washington, D. C. Filed Oct. 21, 1918. Serial No. 258,966. 19 Claims. (Cl. 180—14.)



1. A motor driven vehicle train comprising a series of vehicles, each vehicle having engines located at its ends, said engines driving adjacent axles of the vehicle on which they are located and the axles of vehicles located forwardly and rearwardly of said vehicle.

1,305,316. MOTOR-CAR. MORRIS WORKMAN, New York, N. Y. Filed July 17, 1915. Serial No. 40,413. Renewed Dec. 7, 1918. Serial No. 265,790. 3 Claims. (Cl. 180—16.)



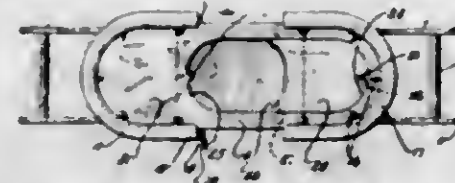
1. A trailer car attachment for motor cycles comprising in combination a car body, a frame, means for yieldingly connecting said car body with said frame, a pair of wheels, means for yieldingly connecting said frame with said wheels and means for firmly securing said frame to the rear frame of a motor cycle.

1,305,317. PAPER CAN AND OTHER CONTAINER. WILSON L. WRIGHT, Baltimore, Md., assignor to Sealright Co., Inc., Fulton, N. Y., a Corporation of New York. Filed Jan. 22, 1917. Serial No. 143,621. 10 Claims. (Cl. 229—3.)



1. A paper can having its body tapered for nesting and formed with a longitudinal approximately cylindrical upper end, said body formed by a stiff paper blank having its longitudinal edges overlapping and permanently secured together and forming a seam throughout the length of the body, and an exterior slip cover formed to snugly fit on and surround said cylindrical end and stiffen the same.

1,305,318. INFANT-ROCKER. STANLEY WROBEL, Cleveland, Ohio. Filed Mar. 14, 1919. Serial No. 282,571. 2 Claims. (Cl. 155—18.)



1. In a children's rocker, the combination with a pair of symmetrical rocker elements, having standards rising therefrom, a frame secured to said standards, chair backs on the ends of said frame, said frame containing an opening extending from the center to one end, a seat plate pivoted transversely in said opening, and means for supporting said seat plate at the ends of said opening, whereby seats are provided for either one or two children.

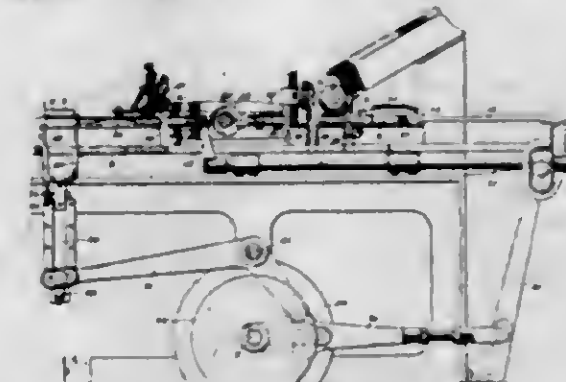
1,305,319. PADLOCK. WARTL ZADOROZNY, Mescham, Saskatchewan, Canada, assignor of one-half to Tony Zygiel, Hamilton, Ontario, Canada. Filed Mar. 13, 1919. Serial No. 282,432. 1 Claim. (Cl. 70—112.)



In a lock of the class described, the combination with a poly-pointed body, a cover thereover, a chamber formed in said body, and a bow pivotally engaged in said body, the opposite end of said bow to be enterable through an opening formed in the edge thereof, of a pair of disks rotatably engaged in said chamber, said disks having transverse recesses formed in their periphery, an annular row of graduations formed on said cover, elements engaged with said disks extending through said cover, and adapted to be brought into registration with any of the graduations impressed thereon, a tumbler pivoted in said body, said tumbler having a part engageable with said bow, an oppositely disposed extension formed with said tumbler engageable in said recesses when in alignment, a spring adapted to press said extension into engagement, a detent pivoted in said chamber, said detent having a portion engageable with said tumbler, whereby it is held

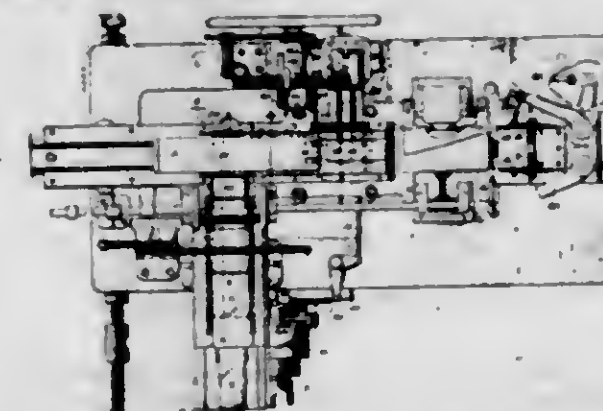
in an operative locked position, a block slidably engaged on said body, said block having a stem extending through a longitudinal slot formed therein and an operative connection between said stem and said detent whereby the detent may be removed from engagement with said tumbler upon actuating said lock.

1,305,320. WRAPPING-MACHINE. HARRY Y. ARMSTRONG, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1915. Serial No. 54,040. 9 Claims. (Cl. 93—2.)



1. In a wrapping machine, the combination with a tumble box having a pocket for the reception of a package with a wrapper partially folded about it, of two tuckers positioned, respectively, at opposite sides of said pocket, said tuckers being arranged to bear against the ends of the package to make end tucks in the wrapper as the package is forced into the pocket but being supported for movement away from the ends of the package, and means operative after the tuckers have made their tucks in the wrapper to relieve the pressure of said tuckers against the ends of said package.

1,305,321. WRAPPING-MACHINE. HARRY Y. ARMSTRONG, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 14, 1915. Serial No. 55,908. 17 Claims. (Cl. 93—2.)

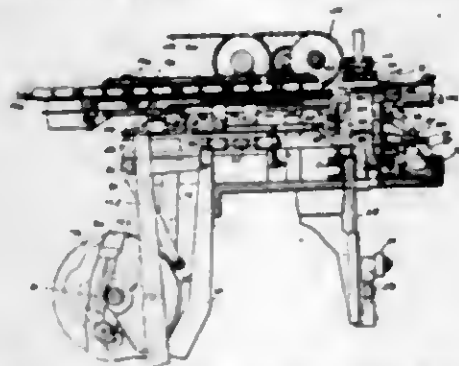


7. In a wrapping machine, the combination with wrapping mechanism and means for advancing articles to be wrapped one at a time to said mechanism, of a support along which said articles are moved by said advancing means, means for sustaining each article temporarily above said support, and means for delivering an insert on said support under each article while it is so sustained.

1,305,322. BANDING-MACHINE. HARRY R. ARMSTRONG, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Original application filed Oct. 7, 1915, Serial No. 54,646. Divided and this application filed May 17, 1918. Serial No. 235,168. 9 Claims. (Cl. 216—12.)

6. In a machine of the character described, the combination with means for affixing bands to packages, of

means for advancing packages one at a time for the banding operation, means operative to position a pair of



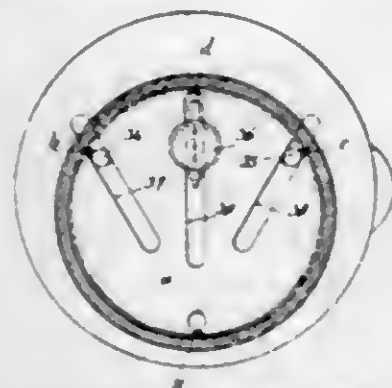
bands in the path of each package, and means cooperating with said advancing means to align each pair of bands properly in said path.

1,308,323. DIRECTION-INDICATOR. ERNEST R. BARNUM, North Bangor, N. Y. Filed Mar. 25, 1916. Serial No. 86,757. 4 Claims. (Cl. 40-61.)



1. A direction indicator comprising a casing, a door for said casing, said door being provided with a double arrow slot, a door for covering each end of said double arrow slot, an overlapping door for covering the central portion of said slot, and means for opening said doors.

1,308,324. DEVICE FOR GAGING CIRCULAR WORK. PAUL MARIE HELLARD, Ivry Port, France, assignor to Compagnie D'Applications Mecaniques, Ivry Port, France. Filed Mar. 9, 1917. Serial No. 153,552. 8 Claims. (Cl. 33-178.)



1. A device for gaging circular work comprising in combination, a first contact piece, a second contact piece and an index contact piece, a support carrying said contact pieces in such relative positions that the first contact piece and the index contact piece are normally at the ends of the hypotenuse of a right angled triangle and the second contact piece at the apex of the right angle, and means connected to the index contact piece and adapted to show the distance between the normal position of said index contact piece and its actual position when in contact with the circular work to be gaged.

1,308,325. DOOR-KNOB. MILTON W. BIRD, Wenatchee, Wash. Filed May 1, 1917. Serial No. 165,769. 1 Claim. (Cl. 70-85.)

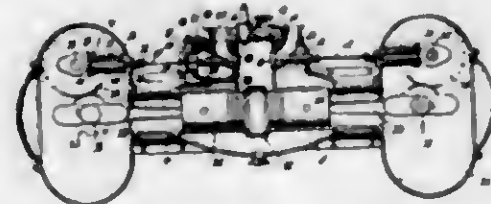
In a device of the class described, a knob shank having a polygonal socket formed in its walls with threads terminating short of the corners between said walls, a polygonal spindle of dimensions less than the dimensions

of the socket, the said spindle being formed in its corners with threads to fit the first-mentioned threads when the corners of the spindle are opposite the walls of the socket and to disengage from the said threads when the spindle and shank are relatively rotated to present the corners of the spindle to the corners of the shank socket, each face of the spindle being formed with a longitudinally extending groove, the ends of the screw



threads being beveled whereby to be flush with the faces of the spindle and the outer edges of the screw threads being transversely curved concentric to the axis of the spindle, and a set screw threaded through the shank with its inner end entering the said socket in the angle between the two adjacent walls of the socket and when tightened bearing against the adjacent face of the shank between the threads at the corners of said face and seating in the respective groove.

1,308,326. INTERNAL-COMBUSTION ENGINE. JAMES L. BLACK, Alexandria, Minn. Filed Jan. 23, 1918. Serial No. 213,408. 3 Claims. (Cl. 123-51.)



3. An internal combustion engine consisting of a horizontal cylinder of double length enlarged annularly between its ends and cast with an upstanding combustion chamber communicating with the enlargement, a water-jacket whose shell incloses the annular enlargement and the combustion chamber, the end walls of the latter having intake and exhaust ports, valves for the same, valve stems extending parallel with and above the cylinders, crank casings at the outer ends of the latter, crank shafts therein, cams connected with the crank shafts and actuating the valve stem and pistons driven by the cranks and mounted in said cylinder.

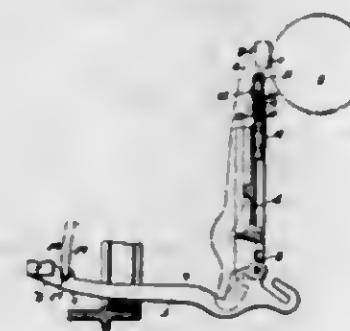
1,308,327. MACHINE FOR FIXING CLASPS. ALEXANDER BLUMENTHAL and JACK BLUMENTHAL, Paris, France. Filed Dec. 26, 1913. Serial No. 808,582. 2 Claims. (Cl. 1-48.)



2. In a machine for fixing clasps to packets, a frame comprising a horizontal portion and spaced vertical portions connected at their upper ends by said horizontal portion and providing horizontal grooves at the tops

of the vertical portions and under the horizontal portion, an anvil normally having one end fitted in said grooves and having its other end extending from said grooves, and means on said horizontal portion to cooperate with said anvil in fixing the clasps to the packets.

1,308,328. TYPE-WRITING MACHINE. HERBERT E. BRIDGWATER, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 28, 1918. Serial No. 225,272. 37 Claims. (Cl. 197-43.)



5. In a typewriting machine, the combination of a series of type bars which strike at a common center, a single center guide roller, and guiding means on each type bar which co-act with said single guide roller to prevent lateral deflection of each type bar in opposite directions.

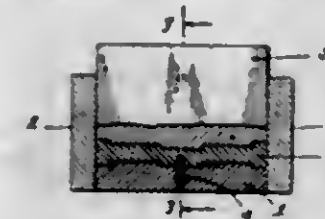
1,308,329. PROCESS AND APPARATUS FOR TREATING TYPE-BARS FOR TYPE-WRITING AND LIKE MACHINES. HERBERT E. BRIDGWATER, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 3, 1918. Serial No. 232,247. 34 Claims. (Cl. 90-11.)



1. The process of forming guiding surfaces on type bars of typewriting and like machines and in which the relation of each guide surface to its bar differs from that of every other bar, which process consists in cutting the guiding surface on each bar by moving the bar against a cutting tool or tools and causing the bar during such movement to receive the same movement which is given it in its printing operation in the type-writing or like machine in which the bar is to be used.

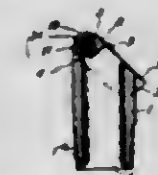
12. A device of the character described comprising a type bar carrier mounted for movement to different converging planes corresponding to the converging planes of movement that the type bars have in the machine in which they are to be used and mounted also for movement in each of said planes to correspond to the printing movement of each type bar.

1,308,330. METHOD OF COMPOSITE MOLDING. KIRK BROWN, Montclair, N. J., assignor to Condensite Company of America, Bloomfield, N. J., a Corporation of New Jersey. Filed Sept. 21, 1918. Serial No. 253,199. 4 Claims. (Cl. 18-59.)



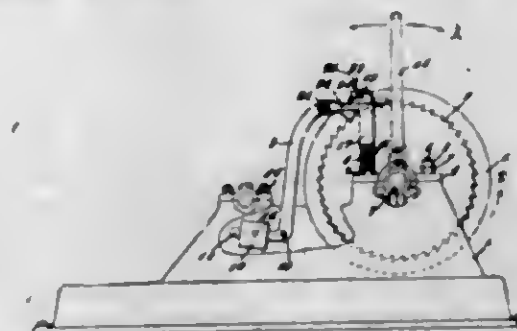
1. A method of molding a phenolic condensation product article having a projecting part of such character as to make the article difficult to mold, comprising fitting a piece of fibrous material coated or impregnated with a phenolic condensation product, of desired shape and size, into a recess in one of the mold members, so as to extend above the surface of the member, filling the mold about the extended portion of said piece with a phenolic condensation product adapted to be hardened to infusibility by heat, and applying heat and pressure to said product to mold the desired article with said inserted piece homogeneously bound thereto and projecting therefrom.

1,308,331. OIL-CUP. WILLIAM H. BROWN, Cleveland, Ohio. Filed Feb. 5, 1917. Serial No. 146,708. 3 Claims. (Cl. 184-91.)



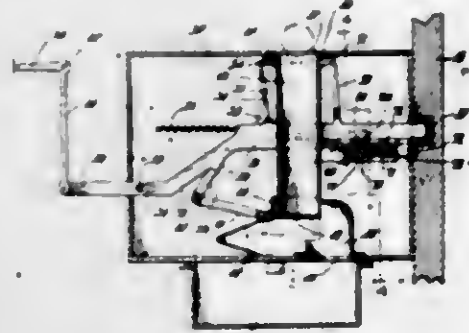
3. An oil cup having a straight tubular body adapted at its lower end to be secured to the apparatus which it is to serve and having an inclined top surface surrounding the oil receiving aperture, the metal of the tubular body being bent inwardly at the top of its high side to overhang a portion of the said oil receiving aperture, a hinge pin extending transversely through the body portion in the angle formed by said inclined top surface and the high side of said body portion, and a closure for said aperture having a cover portion resting upon said top surface and having depending side flanges hinged upon said pins, said cover portion being bent along its rear edge to conform to the bent in portion of said body.

1,308,332. DOG-CONTROLLING MEANS. WILLIAM M. CAMPBELL, Jr., Baltimore, Md. Filed Mar. 18, 1919. Serial No. 283,337. 2 Claims. (Cl. 74-16.)



1. In a device of the class described, a shaft; a drum; a clutch lever for connecting the drum to the shaft; a dog controlling the rotation of the drum; a second lever operated by the clutch lever; a fulcrum for the second lever; a connection between the second lever and the dog; and automatically operating means independent of the lever and the connection for moving the dog out of operative relation to the drum.

1,308,333. AUTOMATIC WARDROBE. JOHN CHOMA, Pittsburgh, Pa., assignor of one-half to Basil Merenko, Passaic, N. J. Filed Apr. 17, 1918. Serial No. 229,025. 1 Claim. (Cl. 194-32.)



In a lock of the character described, a casing, a bolt slidable in said casing, a bell-crank lever pivoted in said casing, having its shorter arm secured to an extension of said bolt, its longer arm formed with a cup adapted to form the bottom of a coin chute, a spring for retracting said bolt upon the operation of said longer arm of the bell crank lever by a coin, an arm secured to the upper edge of said bolt having an interned upper end adapted to enter through an opening into the coin chute, a lever pivotally secured intermediate its ends to said casing, and with its lower end pivotally secured to the upper edge of said bolt, a sliding element pivoted to the upper end of said lever and adapted to enter said coin chute opposite to said interned upper end of said arm, and means for retracting said bolt after its operation.

1,308,334. FLASH-LIGHT CABINET. FRANK E. COOPER, Oakland, Calif. Filed Jan. 25, 1916. Serial No. 74,136. 5 Claims. (Cl. 67-30.)

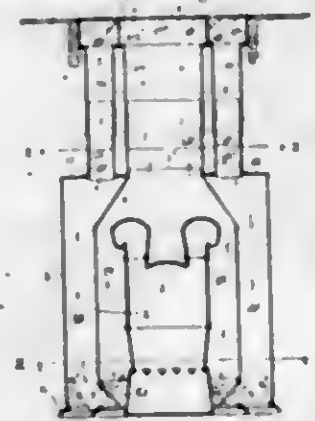


1. A flash light cabinet including a hood provided with an opening in an upper wall thereof, a reticulated fire screen arranged across the opening, and a loose and unsupported porous cover arranged on the exterior of the hood and secured about the edges of the opening in the latter to permit expansion of gases within the hood.

1,308,335. HEATING SYSTEM. EARL V. COGLATON, Rock Island, Ill. Filed Mar. 19, 1917. Serial No. 155,873. 6 Claims. (Cl. 126-99.)

1. In heating systems, a heating element containing a hot air due; a surrounding casing containing a cold air due communicating with said hot air due; a register; a box below such register and communicating with the

apertures thereof; and telescoping pipes joining said hot air due and said box, the upper pipe being dependently



supported from the box and the lower pipe being supported by the element forming the hot air due.

1,308,336. CARD-CASE. ALLEN B. CARR, San Francisco, Calif., assignor of one-half to Antone J. Cardoza, San Francisco, Calif. Filed Feb. 3, 1919. Serial No. 274,698. 1 Claim. (Cl. 281-30.)



The combination with a card case having a flexible member attached to the inner surface and near the top of the back thereof and passing through an aperture in the front thereof and forming a loop to support cards placed therein, of a pencil attached to the free end of said ribbon and forming a stop for said ribbon when said cards are in position in said case and freely available for use when said cards are partly ejected from said case.

1,308,337. GLASS-CARRYING ROD FOR GLASS-ANNEALING LEERS. JAMES W. CRUICKSHANK, Pittsburgh, Pa., assignor to J. W. Cruickshank Engineering Company, Pittsburgh, Pa. Filed Apr. 18, 1917. Serial No. 163,056. 1 Claim. (Cl. 49-45.)

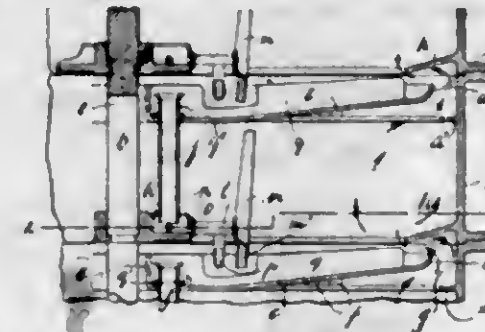


In a sheet glass annealing leer, a carrying rod having a glass supporting surface of a material of less conductivity than iron comprising in combination two steel sections having their web members or longest dimension in a vertical plane, a material such as asbestos bolted between them so as to form a nailing strip by which a strip of non-conducting material can be secured at the upper edge of the steel sections.

1,308,338. GAS AND LIQUID CONTACT APPARATUS. WILLIAM BROWN DAVIDSON, Huddersfield, England. Filed Mar. 15, 1918. Serial No. 222,722. 12 Claims. (Cl. 261-89.)

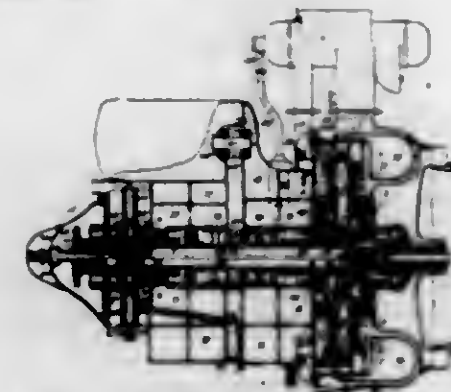
1. In apparatus for bringing liquids into intimate contact with gases, vapors, fumes, and the like, the combination of a casing formed by a plurality of superposed

chambers, a base to each chamber, rotating means in said chambers, spraying devices on said rotating means in said chambers, a passage at the outer edge of said base in each chamber, and liquid overflows passing through said



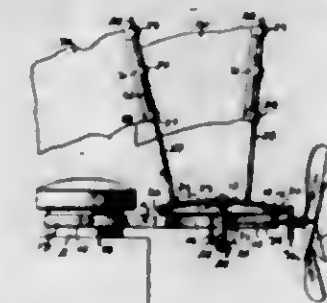
base in each chamber, said overflows projecting above the bottom of said base and depending below said base well within the circular path described by the spraying means.

1,308,339. ROTARY INTERNAL-COMBUSTION ENGINE. HENRY GEORGE DENHAM, London, England. Filed Apr. 11, 1917. Serial No. 161,314. 24 Claims. (Cl. 123-16.)



1. In a rotary internal combustion engine, a casing inclosing a drum mounted upon a shaft and carrying a number of pistons controlling the admission of gas to a passage in the drum leading to combustion chambers, a non-return valve in the passage, and a cam path causing each piston to move radially and to form one side of a combustion chamber.

1,308,340. FLAG-HOLDER. CHRISTOPHER S. DUFFAL and LESLIE E. LAWLER, Youngstown, Ohio. Filed Nov. 21, 1917. Serial No. 203,175. 7 Claims. (Cl. 40-14.)

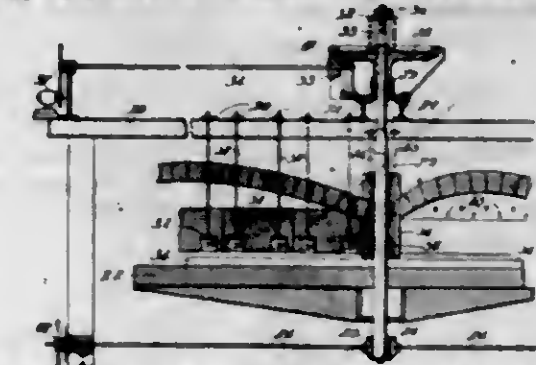


1. In a flag holder, the combination of a supporting frame, a turn table rotatably carried by the frame and adapted to support a row of flags, a spindle projecting forwardly from the frame, a friction disk mounted on the spindle, an annular friction ring upon the marginal edge of the turn table and adapted to engage said friction disk and a wind wheel connected to the disk for turning the same to rotate the said turn table.

1,308,341. FLATTENING-OVEN. HARRY E. DE VAUGHN, Morgantown, W. Va., assignor to Walter A. Jones, Morgantown, W. Va. Filed Oct. 6, 1916. Serial No. 124,093. 14 Claims. (Cl. 40-44.)

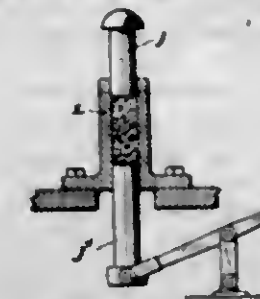
1. A flattening oven for glass ware comprising a suspension frame, a vertically disposed rotatable shaft extended through said suspension frame, a driving member

rotatably supported upon said suspension frame, means whereby said shaft is yieldably suspended from said driv-



ing member, and a flattening wheel attached to the lower end of said shaft.

1,308,342. PROCESS OF MAKING EXPLOSIVE BLACK POWDER. EUGENE DE PONT, Wilmington, Del., assignor to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 29, 1913. Serial No. 69,167. 8 Claims. (Cl. 52-4.)



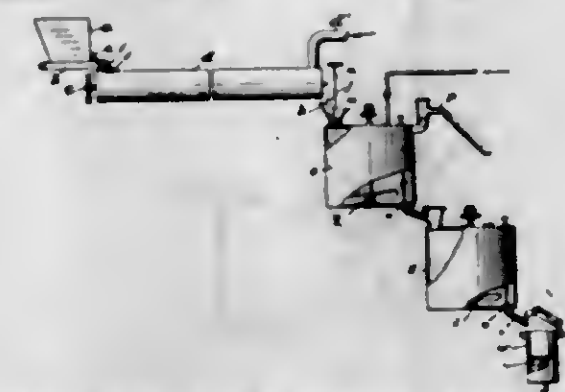
1. The process of manufacturing explosive black powder which consists in incorporating the solid ingredients thereof with a liquid having no solvent or chemical action upon the ingredients and with water and then molding the explosive.

1,308,343. SMOKELESS POWDER AND PROCESS OF COATING SAME. FRANCIS I. DE PONT, Wilmington, Del., assignor, by direct and mesne assignments, to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Filed May 2, 1916. Serial No. 94,945. 8 Claims. (Cl. 52-3.)



1. As a new article of manufacture, a smokeless powder grain having a relatively quick burning body and an exterior coating composed of a relatively slow burning composition which contains an ingredient having a lubricating quality.

1,308,344. PROCESS OF MAKING SMOKELESS POWDER. FRANCIS I. DE PONT, Wilmington, Del., assignor, by direct and mesne assignments, to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Filed May 2, 1916. Serial No. 94,946. 3 Claims. (Cl. 52-3.)



1. The process of manufacturing smokeless powder, which consists in first mixing nitrocellulose with ether,

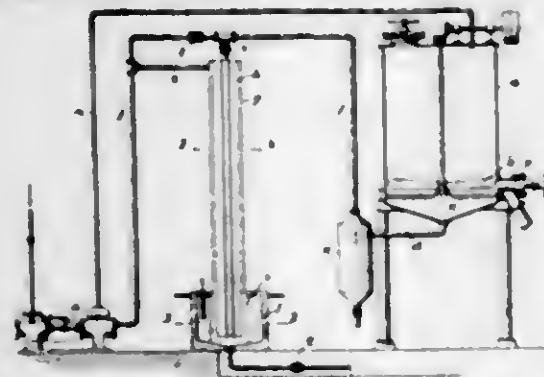
then expelling the excess of ether with pressure, and then mixing the nitrocellulose with alcohol to form a gelatinous or colloidal mass.

1,308,345. EXPLOSIVE CHARGE FOR THE CENTRAL TUBES OF SHRAPNEL-SHELLS. FRANCIS I. DE PONT, Wilmington, Del., assignor to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Filed May 2, 1916. Serial No. 94,947. 5 Claims. (Cl. 102-29.)



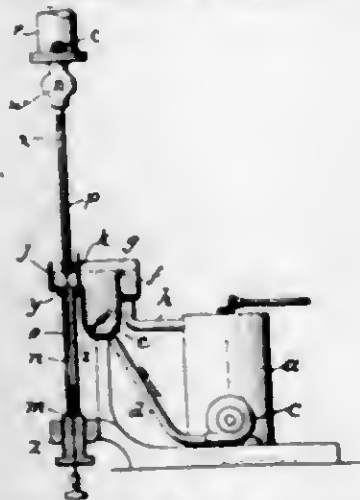
1. In a shrapnel shell, the combination with the central tube, of a unitary longitudinally perforated powder charge within and extending substantially throughout the length of the tube.

1,308,346. PROCESS OF MAKING SMOKELESS POWDER. FRANCIS I. DE PONT, Wilmington, and ELEUTHERE PAUL DE PONT, Montchanin, Del., assignors to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 25, 1917. Serial No. 103,106. 12 Claims. (Cl. 52-3.)



1. In the manufacture of smokeless powder, the process which comprises expelling water from guocotton by means of ether.

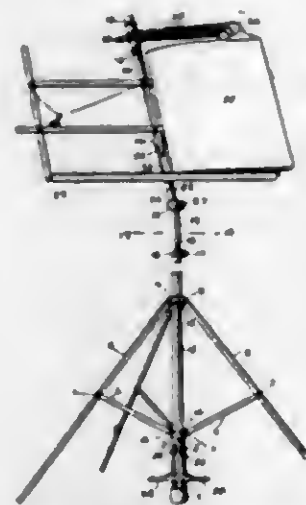
1,308,347. PROCESS OF PREPARING EXPLOSIVE CHARGES FOR SHELLS. FRANCIS I. DE PONT, Wilmington, Del., assignor to Ball Grain Explosives Company, Wilmington, Del., a Corporation of Delaware. Original application filed May 2, 1916, Serial No. 94,947. Divided and this application filed Mar. 8, 1918. Serial No. 221,310. 3 Claims. (Cl. 86-20.)



1. The process of packing an explosive powder charge tightly within a tubular container, which consists in mix-

ing the powder with a liquid having no solvent or chemical action upon the explosive and successively compressing fractional parts of the mixture to expel a portion of the liquid therefrom and consolidate the powder into a uniform, dense, hard and solid mass held in rigid relationship with the container.

1,308,348. MUSIC-LEAF TURNER. ALBERT EICSSON, Oakland, Calif. Filed June 23, 1917. Serial No. 176,628. 10 Claims. (Cl. 84-17.)



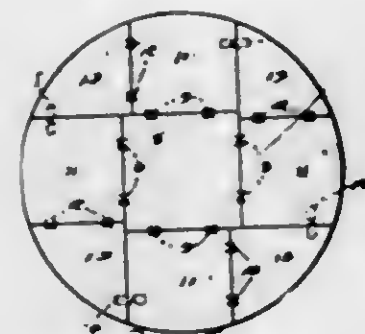
1. An improved leaf turner comprising a plurality of rotatable disks mounted to rotate independently and each having clutch pins, leaf engaging arms attached to said disks, an actuator, a control member engaged with said actuator and having clutch pins complementary to the pins of said disks, and means for imparting movement to said actuator.

1,308,349. PENHOLDER. EDWARD D. FELDMAN, Chester, N. Y. Filed Sept. 12, 1918. Serial No. 253,755. 5 Claims. (Cl. 123-42.)



1. In a pen holder, the combination with a barrel having a recess in one of its ends with a yielding retainer for removably holding a pen point in the recess, of a concave elongated yielding strip protruding from the retainer so that the concavity of the strip will be in opposition to the underside of the pen point and the strip having an opening centrally of its concavity, and a lug on the free end of the strip.

1,308,350. FOLDABLE TABLE. VERNER M. GAY, Danbury, Conn. Filed Apr. 30, 1918. Serial No. 231,716. 1 Claim. (Cl. 45-116.)



A foldable table including a supporting means, a central table top section rigidly secured to said supporting means, table top sections hinged to the edges of the cen-

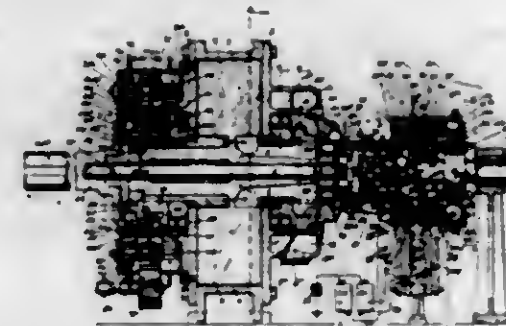
tral table top section, each hinged section having one side flush with the adjacent parallel side of the central section and its other side inwardly offset from the corresponding other side of the central section, a table top section hinged to each inwardly offset side and means for holding the table top sections in extended position, the offset of the second mentioned sections being such as to permit the third mentioned sections to lie wholly beneath the central sections when the hinged sections are folded.

1,308,351. EXCAVATING-MACHINE. EDGAR H. GRANBERRY, Jacksonville, Ark. Filed Apr. 12, 1916. Serial No. 90,601. 3 Claims. (Cl. 37-25.)



1. In a ditching machine, a substantially rectangular dirt receiving body having its bottom open, excavating means carried thereby and projecting forwardly of the body, means operable longitudinally of the body for discharging earth from the excavating means into the same, a shaft extending longitudinally of the body and disposed centrally thereof, oppositely directed downwardly and outwardly inclined deflectors rockably mounted at their upper edges upon said shaft, the deflectors extending through the bottom of the body so as to direct soil delivered upon the upper faces of the deflectors laterally of a ditch formed by the excavating means, and means for adjusting said deflector about the shaft so as to vary the distance at which the soil is deposited from the ditch.

1,308,352. ROTARY GAS-ENGINE. JAMES WILLIAM GREEN, Portland, Ore. Filed Feb. 24, 1919. Serial No. 279,458. 18 Claims. (Cl. 123-11.)

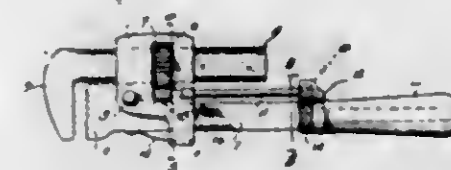


1. In a rotary gas engine, a piston casing, two pairs of pistons rotatably mounted therein in crossed relationship with each other, means for intermittently locking said pistons against backward movement, means providing inlet and exhaust ways around the axis of said pistons, longitudinally thereof, control valves for gas supply movable longitudinally around the axis of said pistons, and control valves for exhaust movable transversely of said axis, whereby the inlet and exhaust is controlled, substantially as described.

1,308,353. PIPE-WRENCH. JOHN D. HAMAN, Wilmington, Del. Filed Sept. 25, 1918. Serial No. 255,658. 4 Claims. (Cl. 81-105.)

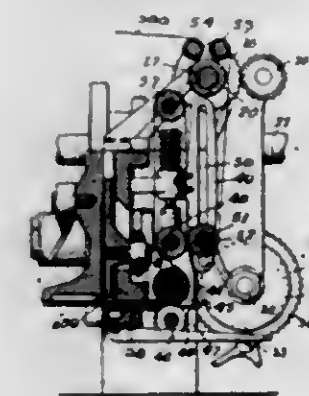
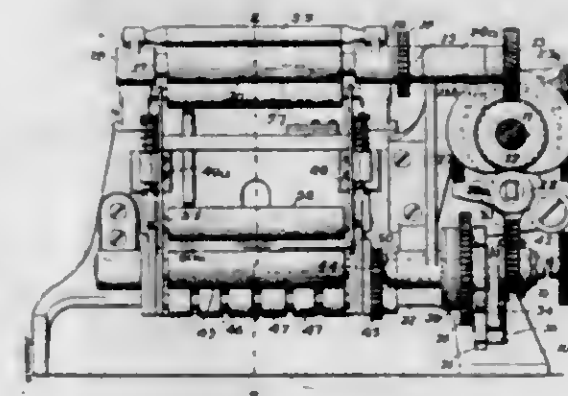
1. A wrench, comprising a shank having a fixed jaw, a frame pivoted on the shank, a movable jaw having a

threaded shank slideable in the said frame, a gear nut mounted in the frame and receiving the said threaded shank, a shaft mounted on the shank of the fixed jaw, a pinion at the front end of the shaft rotatable therewith



and in mesh with the gear nut, and operating means at the rear end of the shaft and including an element adjacent the grip or handle end of the wrench for imparting rotary movement to the shaft.

1,308,354. ENVELOPE MACHINERY. VINCENT E. HEYWOOD, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed Dec. 20, 1916. Serial No. 138,932. 8 Claims. (Cl. 273.)



3. In a device of the class described, a continuously rotating feed cylinder, means for rotating said cylinder, idlers adapted to hold a strip of paper in contact with the peripheral surface of said feed cylinder whereby said cylinder shall advance said strip when the strip is under tension, but shall rotate freely relative to the strip when there is no tension on the strip, intermittent acting feed rolls to receive and feed the strip after it has passed some distance from said feed cylinder, and a compensating tension device between said continuously rotating feed cylinder and said intermittent feed rolls, the peripheral surface of the continuously rotating feed cylinder being greater than the surface feed of the said intermittent feed rolls when the said latter rolls are rotating.

- 1,308,355. ROLLER WRITING GUIDE AND REST. DE REYTER M. HOLLINS, New York, N. Y. Filed Dec. 13, 1918. Serial No. 264,607. 5 Claims. (Cl. 120-53.)
2. A support for the hand in writing comprising a carriage mounted on rollers, a wrist engaging member ro-



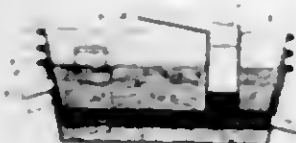
tatably mounted on the carriage, and roller bearings between said member and carriage.

- 1,308,359. APPARATUS FOR THE MANUFACTURE OF DIIPHENYLAMINE. ARTHUR EARL HOULEMAN, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed May 25, 1917. Serial No. 170,807. 12 Claims. (Cl. 22-3.)



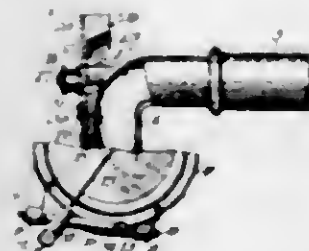
1. An apparatus comprising an autoclave adapted to withstand high pressure and having a column of substantial length thereon.

- 1,308,357. CREAM-COOLER. THOMAS EDWARD HOOKER, Los Angeles, Calif. Filed Oct. 6, 1916. Serial No. 124,075. 2 Claims. (Cl. 257-208.)



1. In combination, three superimposed pans, the outer pan being provided with an outlet and having a portion of one of its upright walls cut away, a spout on the intermediate pan extending through said cutaway portion of said outer pan, communicating means between the innermost pan and the outer pan, and a funnel leading through the innermost pan into the intermediate pan.

- 1,308,358. REPRODUCER FOR TALKING-MACHINES. ALBERT A. HUSEBY, Chicago, Ill. Filed Apr. 18, 1917. Serial No. 162,877. 6 Claims. (Cl. 274-24.)



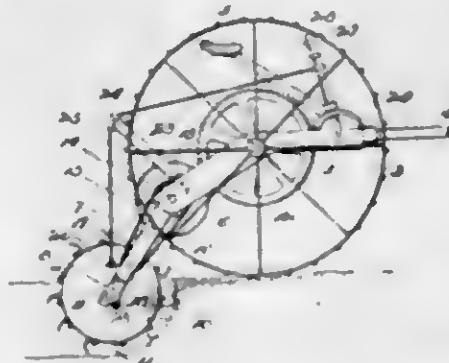
1. The combination with a swiveled tone arm extension, and a sound box connected to the free end of said extension, of a weight mounted on said tone arm extension with capacity for adjustment to either side of the swivel axis of the latter.

- 1,308,359. COMBINATION PADDLE AND TONGS. DAVID W. INMAN, Vermillion, Ohio. Filed Nov. 29, 1918. Serial No. 264,627. 2 Claims. (Cl. 68-6.)



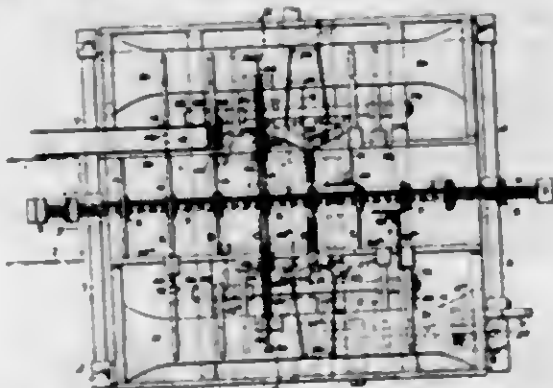
1. The combination with spaced parallel tongs having wedge-shaped ends, of straps securing said tongs in spaced relation, a tong having a wedge-shaped end secured between said first mentioned tong, a pivotal pin supporting said second mentioned tong between said first mentioned tong and bridle surrounding said tong.

- 1,308,360. PLOW. BIRNEY W. JACKSON, Philadelphia, Pa. Filed Oct. 5, 1918. Serial No. 257,635. 3 Claims. (Cl. 55-83.)



1. In an agricultural implement, the combination of a wheeled frame, a drum supported upon the rear end of the frame, an internal gear upon the drum at the end of the same, a stub shaft mounted upon the frame, a pinion upon said shaft meshing with said internal gear, a countershaft mounted upon the frame, and means whereby said countershaft will be driven by the wheels of the frame in a direction contrary to the travel of said wheels and the stub shaft will be driven in the same direction as the countershaft.

- 1,308,361. TORPEDO-MAKING MACHINE. GEORGE H. JACKSON, Guelph, Ontario, Canada. Filed Aug. 15, 1916. Serial No. 115,063. 44 Claims. (Cl. 93-6.)



1. The combination, in a torpedo-making machine, of an endless carrier for receiving open-ended torpedo tubes

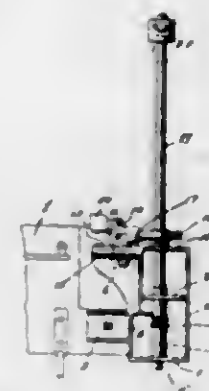
disposed with their longitudinal axes in horizontal planes, horizontally reciprocating means in line with the longitudinal axes of the tubes for successive action upon both ends of said tubes to shape the same, and means for introducing charges of detonating material within the respective tubes.

- 1,308,362. NON-REFILLABLE CONTAINER. WILLIAM J. KOLTS, Kingston, N. Y. Filed Mar. 19, 1918. Serial No. 223,422. 1 Claim. (Cl. 215-104.)



A device of the class described, including a cylindrical container open at its bottom and tapering abruptly at its other end to form a neck, said bottom being thickened with its surface formed smooth and parallel to the walls of said container to provide a valve seat said thickened portion tapering toward the bottom to form a conical entrance, the inner surface of said container being formed with circumferential sharp edged ribs directed toward the lower end of said container, a removable disk shaped bottom with a circumferentially grooved boss, formed on one side, said bottom having a circumferential groove, said bottom being adapted to fit on said seat a compressible packing ring held in said groove, and a split wire ring held in said bottom groove arranged to engage the inner wall of said container said ring being of such a size as to lie over the union of said bottom and container, whereby a liquid tight connection is formed, all arranged as and for the purpose set forth.

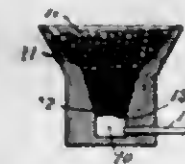
- 1,308,363. BRAKE-STAFF. CHARLES F. KEENE and PATRICK DONAHER, Oakland, Calif. Filed May 1, 1916. Serial No. 94,663. 3 Claims. (Cl. 186-52.)



1. A brake operating device comprising in combination a box-like member, arms on said member at right angles to each other adapted to be attached to the side and end of a flat car, a brake-staff pivotally mounted in said member, a ratchet carried by said staff, lugs removably attached to said member, a pawl pivotally mounted in said lugs and an operating handle secured to said brake-staff.

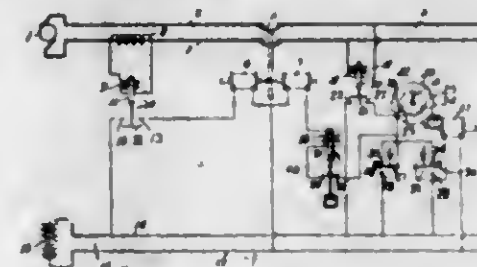
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- 1,308,364. APPARATUS FOR BURNING EXPLOSIVE GASEOUS MIXTURES. CHARLES E. LOCKE, New York, N. Y., assignor to Gas and Oil Combustion Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1912. Serial No. 721,660. 3 Claims. (Cl. 158-90.)



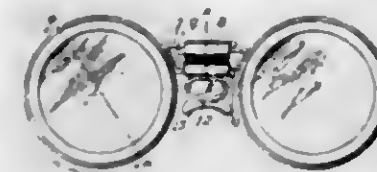
1. An apparatus for burning explosive gaseous mixtures comprising in combination a porous and permeable combustion bed of greater permeability in one portion than in another, and means for causing the explosive mixture to flow through the bed in the direction from the portion of lesser to the portion of greater permeability and with an initial velocity greater than the normal rate of propagation of inflammation of the mixture where it enters the bed.

- 1,308,365. ARC-EXTINGUISHING DEVICE. PAUL MACGAHAN, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 10, 1916. Serial No. 114,162. 7 Claims. (Cl. 175-204.)



1. In an electric circuit, the combination with a circuit interrupter and means for opening and closing the same, of an overload relay for controlling the opening of the interrupter when an overload occurs upon the circuit, a no-voltage relay for controlling the reclosing of the interrupter when the voltage of the circuit is substantially zero, and a time-limit overload relay for opening the circuit of the reclosing means if the overload persists for a predetermined period of time.

- 1,308,366. EYE-PROTECTOR. HAROLD K. PARSONS, Southbridge, Mass. Filed Feb. 19, 1917. Serial No. 149,567. 3 Claims. (Cl. 88-43.)



1. In an eye protector, the combination with lens receiving frames, of means for connecting the frames, including a bridge having telescoping portions, a sleeve mounted on said telescoping portions adapted to be locked in desired adjusted relation thereto, a ring carried by the sleeve and depending therefrom, and a crest pad carried by the ring and adjustable by bending of the latter.

- 1,308,367. APPARATUS FOR HANDLING PULVERIZED FUEL. WILLIAM O. RENKIN, Oradell, N. J., assignor to Quigley Furnace Specialties Co., Inc., a Corporation of New York. Filed Nov. 30, 1917. Serial No. 204,788. 5 Claims. (Cl. 193-13.)

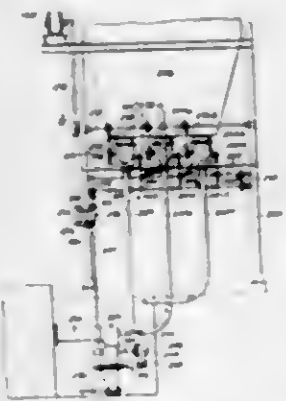
1. In an apparatus for feeding pulverized fuel the combination, of a receptacle having a circular opening in one of its substantially vertical walls, an exterior cylindrical

conduit registering with said opening, a conveyor comprising a shaft with a helix surrounding the same extending from the interior of said receptacle out through said opening and along said conduit, and having its helix in-



interrupted for a short distance just inside the receptacle wall, means for continuously rotating said conveyor at a uniform speed, a pair of cut-off blades pivoted to the inner face of the perforated wall above the opening therein and adapted to fit into the space in the interrupted helix and having their inner edges cut away to closely embrace the conveyor shaft at said point and meet along a substantially vertical line above and below it, thereby preventing the passage of any material out through the opening in the receptacle wall, and means for simultaneously moving said blades more or less toward or from one another whereby a passage of variable width but of a height equal to the vertical diameter of the conduit is opened between receptacle and conduit, through which varying passage the constantly rotating conveyor will force correspondingly variable quantities of material.

1,308,368. COMBINED AIR AND PULVERIZED-FUEL CONTROL. WILLIAM O. RENKIN, Oradell, N. J., assignor to Quigley Furnace Specialties Co., Inc., a Corporation of New York. Filed Jan. 31, 1918. Serial No. 214,751. 2 Claims. (Cl. 110-105.)

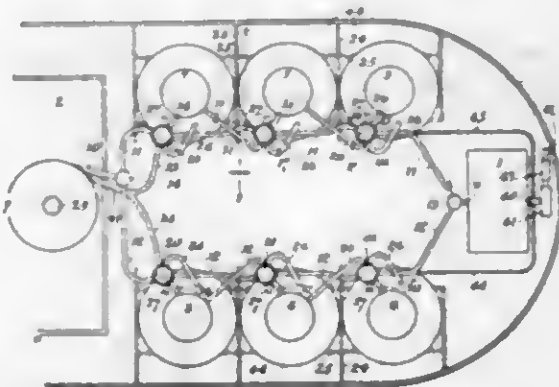


1. An apparatus for burning finely powdered fuel which has, in combination, means for producing a constant jet of high pressure air for injecting the fuel into a combustion chamber, separate means for feeding air for combustion to said chamber, apparatus for varying the amount of fuel fed to the high pressure jet, a valve for varying the amount of air supplied to the furnace for combustion, and a device for connecting these fuel and air controlling sets of means together so that they will operate synchronously and proportionately.

1,308,369. APPARATUS FOR STORING AND HANDLING PULVERIZED FUEL. WILLIAM ORAN RENKIN, Oradell, N. J., assignor to Quigley Furnace Specialties Co., Inc., a Corporation of New York. Filed Oct. 3, 1918. Serial No. 256,780. 12 Claims. (Cl. 193-10.)

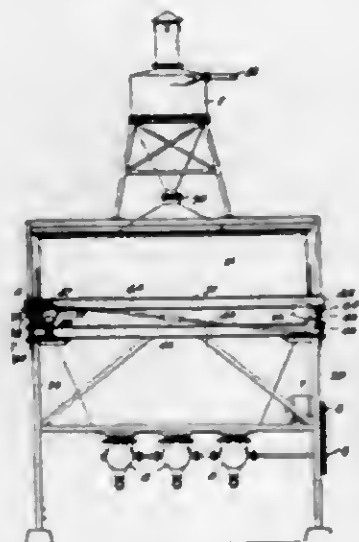
6. In an apparatus of the character herein described the combination of a series of closed storage bins and a furnace bin to be supplied therefrom and equipped with a vent opening for spent air, a conduit extending along the series of storage bins to the furnace bin, means for forcing compressed air and powdered materials through said conduit, vent pipes connecting the upper portions of all

the bins, connections from the conduit to each of the storage bins, and a valve for each storage bin controlling passage through the vent pipe, the main conduit and the bin connections, whereby material may be forced through the conduit and charged into any one storage bin, the



vent pipes being opened from that bin to the furnace bin through intervening bins, or compressed air alone may be delivered through the conduit to any one bin and a discharge passage for the contents thereof opened through the remainder of the conduit to the furnace bin.

1,308,370. YIELDING SUPPORTING AND VERTICALLY-GUIDING APPARATUS. WILLIAM O. RENKIN, Oradell, N. J., assignor to Quigley Furnace Specialties Co., Inc., a Corporation of New York. Original application filed July 29, 1918. Serial No. 247,268. Divided and this application filed Nov. 22, 1918. Serial No. 263,693. 7 Claims. (Cl. 193-10.)

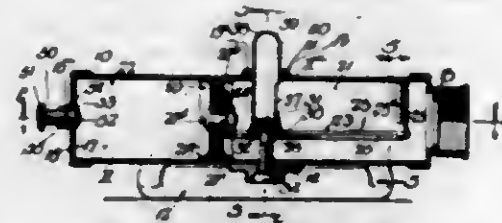


1. A yieldingly supported storage bin for pulverized fuel and the like which comprises in combination the bin, a base frame, means for guiding the bin toward and from said base frame along vertical lines, a series of cams journaled on said frame and supporting the bin, connecting mechanism whereby all said cams are compelled to move in unison, and one or more compression springs mounted on the frame and bearing on the under side of certain of the cams.

1,308,371. LAWN-SPRINKLER. FINIS EWING ROACH, Chicago, Ill. Filed Oct. 16, 1916. Serial No. 125,858. 12 Claims. (Cl. 137-135.)

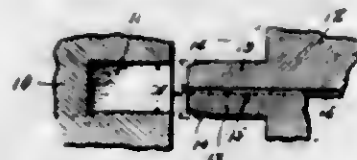
12. A sprinkler device comprising a tubular casing providing a water pressure chamber and a resistance fluid chamber, a piston movable therein, a piston stem, a rotatable spraying nozzle extending into and communicating with the water chamber and operated by the movement of the piston stem against the resistance of

the fluid in said resistance chamber, said nozzle having a discharge end without the casing, a base for said casing and a yoke clamping said casing to said base, said



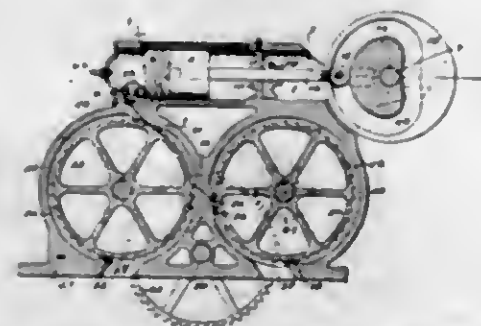
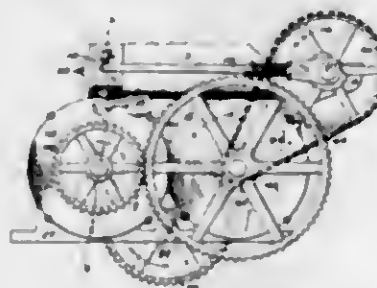
yoke surrounding said nozzle without the casing and having means providing a pressure tight joint between said casing and spraying nozzle.

1,308,372. WOODEN-STRUCTURE JOINT. BYRD C. ROCKWELL, Camden, Ark. Filed Jan. 5, 1918. Serial No. 210,568. 2 Claims. (Cl. 20-82.)



1. In a permanent wooden joint structure a member having a mortise, a pair of panel members arranged edge to edge, the engaging edges of said panel members having a tongue and groove connection, complementary tenons formed integral with and projecting outwardly from the ends of said panel members adjacent to the meeting edges thereof, the greatest width of the combined tenons being greater than the breadth of the mortise, and the outer ends of said tenons being tapered so as to readily enter the mortise.

1,308,373. INTERNAL-COMBUSTION ENGINE. FRED ROMBACH, Tonawanda, N. Y., assignor of one-fourth to Robert P. Reagan and one-fourth to Albert M. Everhart, North Tonawanda, N. Y. Filed June 14, 1918. Serial No. 239,975. 2 Claims. (Cl. 60-13.)



1. In an internal combustion engine, the combination of a cylinder having a fuel inlet and an exhaust passage, a piston in said cylinder, actuating mechanism for the piston including means for holding it stationary during the explosion of the fuel-charge, a turbine-casing, a turbine in said casing, said casing having spaced internal abutments arranged in close proximity

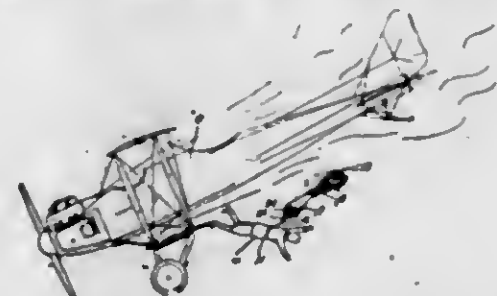
to the periphery of the turbine, said exhaust passage leading into said casing adjacent to one of said abutments, a discharge passage leading from the casing adjacent to the other abutment, and means for transmitting motion from said turbine to said actuating mechanism.

1,308,374. TOOTH-BRUSH. PIER J. ROTH, Brooklyn, N. Y. Filed Mar. 21, 1919. Serial No. 284,078. 3 Claims. (Cl. 15-39.)



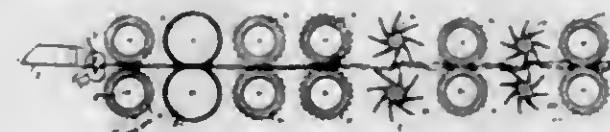
1. A tooth brush comprising a back portion having a recess in its under side and provided with a socket and a channel opening into opposite ends of said recess, a bristle-carrying head seated in said recess and provided with projections engaging in said socket and channel, a locking plate rotatably held to the under side of the back portion adjacent said channel having an eccentric portion and an oppositely disposed straight edge, and a handle detachably held to the inner end of the back portion and adapted to engage the straight edge of said plate to hold the plate in its locking position.

1,308,375. PARACHUTE. KURT S. SATRE, Hecla, S. D. Filed Jan. 2, 1918. Serial No. 209,816. 6 Claims. (Cl. 244-21.)



1. A parachute comprising a main hood, having a flexible inflatable expander, a charging head located below said hood and connected to said expander for inflating the same, and a non-collapsible expander ring secured within the open lower end of said charging head for normally holding the same open.

1,308,376. MEANS FOR TREATING FIBER-BEARING PLANTS. GEORGE WILLIAM SCHLICHTEN, San Diego, Calif. Filed Dec. 27, 1916. Serial No. 139,181. 59 Claims. (Cl. 13-21.)

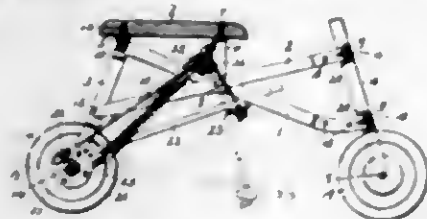


4. In an apparatus of the class described, the combination of means for first subjecting fiber bearing material to a crushing and denting action, means cooperating therewith for next subjecting said fiber bearing material to a splitting and spreading action, means cooperating therewith for next subjecting said fiber bearing material to a cleaning, combing, whipping, scutching and degumming action and means cooperating therewith for next subjecting said fiber bearing material to a more thorough breaking action.

1,308,377. VELOCIPEDE. WILLIAM E. SHAWWOOD, Canastota, N. Y. Filed Feb. 28, 1918. Serial No. 219,630. 4 Claims. (Cl. 208-36.)

2. In a tricycle, the combination of a front steering fork having means for supporting a steering wheel, rear

braces having means for supporting traction wheels, and lengthwise frame bars, having their front ends pivotally



supported between the arms of the steering fork and their rear ends secured to the braces.

1,308,378. SAFETY WATCH POCKET. JOHN TRANQUAT and EMIL TRAGARDH, Minneapolis, Minn. Filed Aug. 23, 1918. Serial No. 251,121. 7 Claims. (Cl. 2-15.)

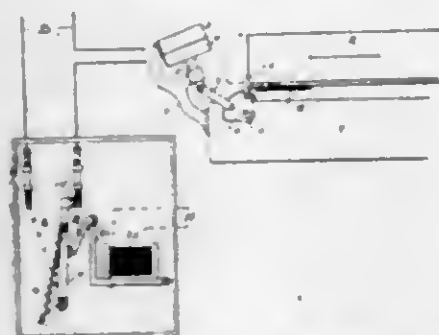


1. A safety pocket provided with an upwardly extending loop having an open edge, and a recess into which said loop may be folded, substantially as described.

1,308,379. PROCESS FOR MAKING PNEUMATIC-TIRE CASINGS. ELSON H. TRUMP, Akron, Ohio. Filed Mar. 26, 1918. Serial No. 224,725. Renewed Nov. 7, 1918. Serial No. 261,585. 7 Claims. (Cl. 154-14.)

1. That improvement of making pneumatic tire casings which consists in placing a strip of tread stock in each of two mold sections, subjecting each strip separately while in its respective mold section to the action of a former, clamping said members together about a fabric carcass containing a core, expanding said core and carcass to cause said carcass to adhere to said tread strips and said tread strips to unite the latter together in the presence of a vulcanizing heat.

1,308,380. HEATER. EDMUND FRANCIS TWISDY, Glenbrook, Conn. Filed Jan. 31, 1918. Serial No. 214,655. 7 Claims. (Cl. 34-18.)

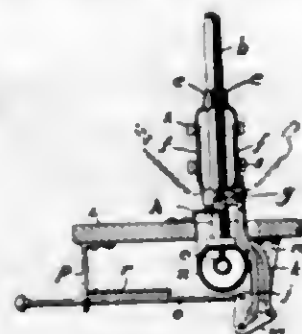


4. A heater in two parts and having a plurality of heating coils in one of said part and automatically operated means for moving the other said part and means for automatically connecting and disconnecting the current supply to said coils to control the heating of both said parts.

1,308,381. GARMENT DRYING APPARATUS. JULIUS OTTO VON STETTIN and HARRY J. PRESSMAN, Philadelphia, Pa., assignors to Philadelphia Metal Drying Form Company, New Castle, Del., a Corporation of Delaware. Filed Nov. 17, 1917. Serial No. 202,564. 7 Claims. (Cl. 223-17.)

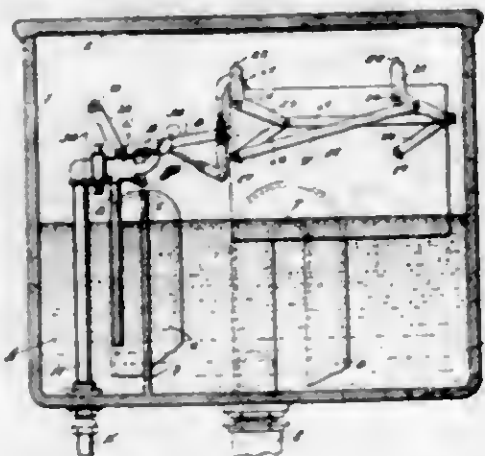
1. In a garment drier, the combination with a hollow form over which a tubular garment to be dried is adapted

to be stretched, of a clamp adapted to confine the open end portion of the garment against the outer wall of the form, said clamp comprising a member consisting of a



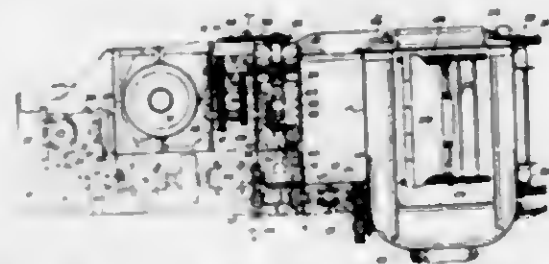
longitudinally extensible and contractible frame to enable it to be adjusted to adapt it to garments of different length.

1,308,382. FLUSHING APPARATUS. WILLIAM A. VAN DUSEN, Cleveland, Ohio. Filed Feb. 2, 1917. Serial No. 146,049. 10 Claims. (Cl. 137-104.)



6. In flushing apparatus the combination with a tank, of an open bottom float, a pair of yokes having each its opposite ends pivotally supported adjacent the opposed walls of the tank, the ends of the yokes constituting arms, a link having one of its ends pivoted to the free end of one of the arms of the respective yokes, the opposite ends of said links being pivotally connected to the float, a link connecting the pivotal connection of one yoke and link to the corresponding parts of the other yoke and link, connections between one yoke and the float whereby the open bottom of the float is maintained substantially horizontal, means for actuating the yokes to depress the float, a supply valve, and operative connections between said valve and float.

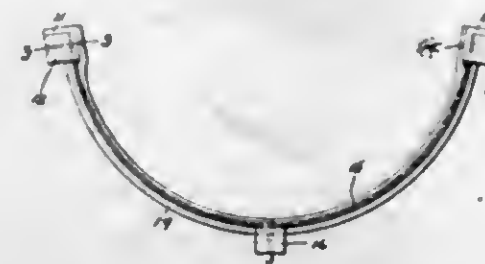
1,308,383. ROAD GRADING AND EXCAVATING MACHINE. WALTER M. WICKHAM, Chicago, Ill. Filed Apr. 17, 1916. Serial No. 91,521. 43 Claims. (Cl. 37-11.)



1. In a machine of the character described, a main shovel, means for actuating it through successive digging strokes, a series of auxiliary shovels, and means coordinated with the aforesaid means for moving the auxiliary shovels through the main shovel during successive cycles

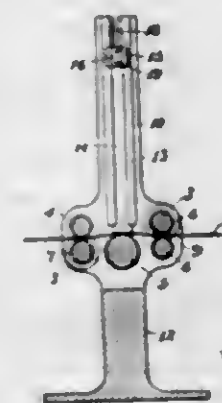
of the main shovel in such time relation thereto as to cause each shovelful dug by the main shovel to be taken up by the auxiliary shovels and thus relieve the main shovel mechanism of the load imposed thereon by each shovelful of material and clear the main shovel for the reception of the next shovelful which is to be dug.

1,308,384. CAGE FOR REDUCING-MACHINES. MILTON F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 22, 1918. Serial No. 213,202. 1 Claim. (Cl. 83-11.)



The herein-described reducing machine cage comprising a reticulated plate curved lengthwise, transversely disposed reinforcing bars applied to the underface of said plate at both ends and near the center thereof, the inner faces of said reinforcing bars being notched at points adjacent to their centers, a longitudinally disposed reinforcing bar applied to the underface of the reticulated plate and occupying the notches in said transversely disposed reinforcing bars, strips applied to the inner face of the curved plate adjacent to the side edges thereof, packing strips interposed between said strips and the reticulated plate, and fastening devices seated in the curved plate, the transversely disposed reinforcing bars, the longitudinally disposed reinforcing member, the strips, and the packing strips.

1,308,385. MEANS FOR LUBRICATING FILMS. ALEXANDER WEISS, Cleveland, Ohio, assignor of one-half to Earl H. Beighlee, Cleveland, Ohio. Filed Jan. 9, 1917. Serial No. 141,502. 2 Claims. (Cl. 91-36.)

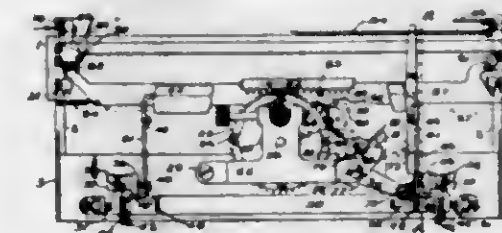


1. Means for lubricating a film for motion picture projecting machines, comprising a pair of guides, sticks of lubricating material in the guides adapted to rest upon the film, a weight slidably arranged between the guides and resting upon both sticks of lubricating material, and means for actuating the film, substantially as described.

1,308,386. TYPE-WRITER. CHARLES W. BARNABY, New York, N. Y. Filed May 19, 1917. Serial No. 169,676. 19 Claims. (Cl. 197-82.)

1. In a typewriter, the combination with a reciprocable carriage provided with a rack, of escapement mechanism

comprising a pinion meshing with said rack, said pinion being power driven, a vibratory lever provided with a double-jawed dog, the jaws of said dog being adapted by the movement of said vibratory lever to move into and out of positions respectively between adjacent teeth of



said rack and between adjacent teeth of said pinion, and a vibratory dog movable into and out of engagement with said pinion.

1,308,387. COMPOUND AIR-PUMP. CHARLES G. BARZA, Brooklyn, N. Y. Filed June 1, 1917. Serial No. 172,177. 1 Claim. (Cl. 230-27.)

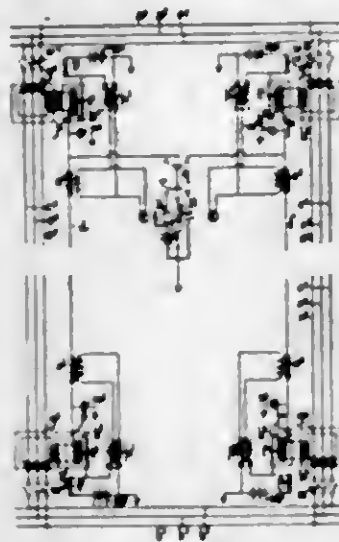


In a pump of the class described, a closing cap for the high pressure cylinder comprising a lower portion fitting said cylinder and having an extension for receiving the valved end of the delivery pipe, said portion having a horizontal flange supporting a packing; in combination with an upper portion provided with a packing gland and having its periphery turned first downward and then inward and compressed under the flange and packing of the lower cap portion.

1,308,388. DETECTIVE AND PROTECTIVE DEVICE FOR ELECTRIC CABLES. CHARLES JAMES BEAVER, Hale, ARTHUR FRANCIS WARD RICHARDS, Brooklands, and EMMETT ALEXANDER CLAREMONT, High Legh, England. Filed Sept. 25, 1918. Serial No. 255,623. 3 Claims. (Cl. 175-294.)

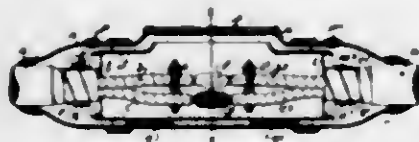
1. In an alternating electric distributive system detective and protective apparatus consisting of the combination of (a) a cable provided with an auxiliary normally insulated conductor surrounding the main insulated conductors or conductor and concentric with the outer covering (b) balancing transformers with the primary windings in connection with the main conductors and secondary winding in connection with a solenoid which when energized will operate a switch to connect the auxiliary conductor to earth through a battery the main circuit breaker

trip coil and a reactance coil and (c) apparatus whereby the said auxiliary conductor can be readily connected alternatively to earth through a voltmeter or an ammeter,



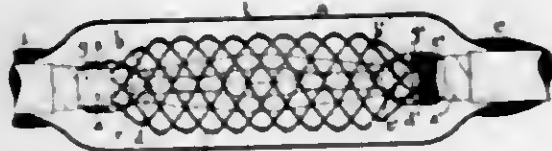
or to earth through a battery and shunted galvanometer, and/or to an electrostatic voltmeter.

1,308,389. SHEATH COUPLING FOR ELECTRIC CABLES. CHARLES JAMES BEAVER, Hale, and ERNEST ALEXANDER CLAREMONT, High Legh, England. Filed Oct. 30, 1918. Serial No. 260,397. 2 Claims. (Cl. 173-324.)



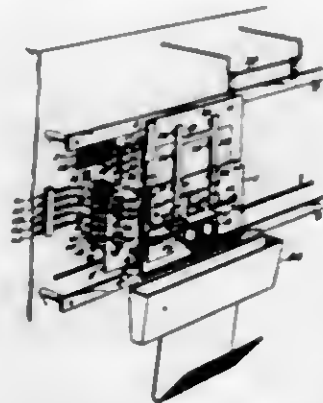
1. In a coupler between sections of a lead covered electric cable containing a subsidiary conductor for detective and/or protective purposes, in which the joint is inclosed in a metal box or sleeve plumbed or otherwise electrically connected to the lead covering, the combination of a thin metal conductor substantially similar in shape to the said box or sleeve, but of smaller dimensions, and so shaped as to completely surround and envelop the joint and operate as a continuation of the subsidiary conductor across the joint, said metal conductor being connected to the subsidiary conductor of each section of cable and insulated from the main conductor or conductors and from the said box or sleeve.

1,308,390. SHEATH COUPLING FOR ELECTRIC CABLES. CHARLES JAMES BEAVER, Hale, ARTHUR FRANCIS WARD RICHARDS, Brooklands, and ERNEST ALEXANDER CLAREMONT, High Legh, England. Filed Nov. 7, 1918. Serial No. 261,533. 2 Claims. (Cl. 173-268.)



1. In a joint for sections of an electric cable containing a subsidiary conductor surrounding the main conductor or conductors and used for detective and/or protective purposes the combination of a sleeve composed of metal wire conductors intertwined to form an open netting threaded over the joint of the main conductor or conductors and electrically joined to the subsidiary conductors in each section of the cable.

1,308,391. DISTRIBUTING SYSTEM. JOHN HENRY BELL, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 29, 1917. Serial No. 188,730. 14 Claims. (Cl. 186-16.)



1. In an article distributing system, a plurality of points to which articles are to be distributed, means for conveying the articles to said points, a plurality of contact springs at each point so connected as to electrically distinguish certain points from other points, a plurality of plungers individual to said article conveying means, means for rendering said plungers responsive only to the electrical condition existing at certain given points, and means operated by said plungers to release an article from said article conveying means.

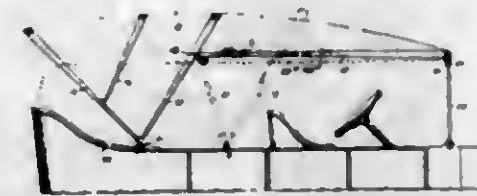
2. In an article distributing system, a plurality of points to which articles are to be distributed, means for conveying the articles to said points, a plurality of switches at each point so connected as to distinguish certain points from other points, electroresponsive means individual to said article conveying means, means for rendering said electroresponsive means responsive only to the electrical condition existing at certain given points, and means operated by said electroresponsive means to release an article from said article conveying means.

3. In an article distributing system, a plurality of points to which articles are to be distributed, means for conveying the articles to said points, a plurality of switches at each point, a plurality of electromagnetic devices at each point cooperating with said switches and so connected as to distinguish certain points from other points, electroresponsive means individual to said article conveying means, means for rendering said electroresponsive means responsive only to the electrical conditions existing at certain given points, and means operated by said electroresponsive means to release an article from said article conveying means.

4. In an article distributing system, a plurality of points to which articles are to be distributed, a guiding way extending to such points, a carrier adapted to travel on said guiding way, a plurality of contact springs at each point so connected as to electrically distinguish that point from certain other points, electroresponsive means individual to said carrier, means for rendering said electroresponsive means responsive only to the electrical condition existing at certain given points, and means operated by said electroresponsive means to release an article from said carrier.

5. In an article distributing system, a plurality of points to which articles are to be distributed, a guiding way extending to such points, a carrier adapted to travel on said guiding way, said carrier including a chute adapted to receive an article to be delivered, a holding frame pivotally mounted on said chute and means for normally holding said frame against said chute, means at each point for electrically distinguishing that point from certain other points, electroresponsive means individual to said carrier and operable to release an article from the carrier, and means for rendering said electroresponsive means responsive only to the electrical condition existing at certain given points.

1,308,392. FOLDING COVER, TOP, AWNING, AND THE LIKE. DOUGLAS E. BONNER, New York, N. Y. Filed Jan. 6, 1914. Serial No. 810,576. 0 Claims. (Cl. 21-62.)



4. The combination of a vehicle, a supporting element thereon, a folding cover mounted on said vehicle and having its one end contiguous to said supporting element in the raised position of said top and cooperating locking members on said supporting element and top respectively arranged to be secured together against separation in vertical directions whereby said one end of said top is connected with said supporting element to lock the top against collapse, said locking members, when operatively engaged, being freely movable relatively to each other in a horizontal direction without becoming disengaged to permit a relative vibration of said cover in directions transverse to said supporting element.

1,308,393. PRIMING CHARGE. WILLIAM H. BUELL, New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1917. Serial No. 189,115. 18 Claims. (Cl. 52-2.)

1. A priming charge consisting of a mixture one of the constituents of which is a tri-nitro-resorcinate of an alkali-forming metal.

1,308,394. CHARGE FOR PRIMERS. WILLIAM H. BUELL, New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1917. Serial No. 189,117. 11 Claims. (Cl. 52-2.)

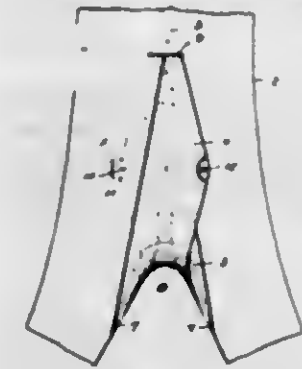
1. A priming charge substantially free from fulminate of mercury containing tetra-nitro-methyl-anilin as the essential detonating constituent.

1,308,395. WOODEN-BOTTOMED SHOE. JESSE A. CASE, Brockton, Mass., assignor of one-third to Ellis F. Copeland, Brockton, Mass. Filed Apr. 11, 1919. Serial No. 289,266. 3 Claims. (Cl. 36-13.)



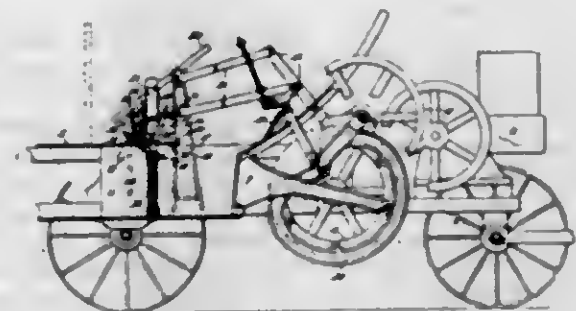
1. A wooden-bottomed shoe comprising a wood inner sole, a vamp laced thereon, the intumed edge of the vamp being permanently secured on the under side of the inner sole, a wood outer sole, a continuous welt of compressible material attached to the upper side of the outer sole and bearing on the intumed edge of the vamp, said welt and intumed edge sparring the outer and inner soles from each other, a compressible sound-dampening member in the space surrounded by the welt and the intumed edge, and fastenings securing the outer sole to the inner sole and clamping the opposed faces of said soles against said member to compress the latter, said fastenings also maintaining the welt and the intumed edge of the vamp under compression between said faces.

1,308,396. UNDERGARMENT. FRANKLIN CHATFIELD, Minneapolis, Minn., assignor to Northwestern Knitting Company, Minneapolis, Minn., a Corporation. Filed Oct. 11, 1912. Serial No. 725,206. 1 Claim. (Cl. 2-144.)



A bifurcated undergarment, having a permanently closed crotch, formed by a pair of correspondingly shaped seat-piece insertions, each having its lower angle formed into a single thigh-gore extension, seamed to the edge of the front side inseam of the corresponding leg, from the point of said extension upwardly to and beyond the front median line of the garment and lapping by the corresponding portion of the other seat-piece insertion and stitched thereto by a row of stitches extending downwardly at one side of the front median line of the garment, one of the lateral edges of each seat-piece being joined to the edge of the corresponding rear side body and leg portion of the garment, from the point of the thigh-gore extension to a point above the seat, the other lateral edge of said seat-piece left free from the lower end of the front row of stitches, joining it to the other seat-piece, to a point above the seat, and means for detachably connecting the free edge of each seat-piece at a point substantially mid-way of its length to the body of the garment beyond the line of permanent attachment of the other seat-piece, substantially as described.

1,308,397. Baling Press. HARRY C. CLAY, Columbus, Ind., assignor to Emerson-Brantingham Company, Rockford Ill., a Corporation of Illinois. Original application filed Sept. 18, 1916, Serial No. 120,870. Divided and this application filed Jan. 29, 1918. Serial No. 214,369. 5 Claims. (Cl. 100-24.)

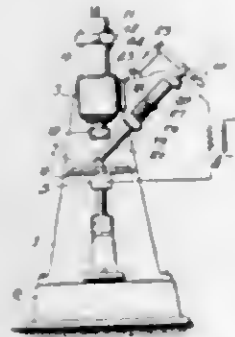


1. In a baling press, the combination of a division block guide comprising a frame adapted to receive a division block and movable to carry the block from a receiving position to a set position, a spring pressed detent or stop carried by the frame and serving to yieldingly oppose passage of the block therethrough, and means for causing said detent to act as a positive stop when the block guide is in receiving position and permitting the detent to function as a yieldable stop to allow the block to be passed through the guide when the latter is in said set position.

1,308,398. PROCESS OF PURIFYING CAMPHOR. JAMES E. CRANE, Newark, N. J., assignor to The Arlington Company, Arlington, N. J., a Corporation of New Jersey. Filed May 20, 1916. Serial No. 100,152. 18 Claims. (Cl. 23-24.)

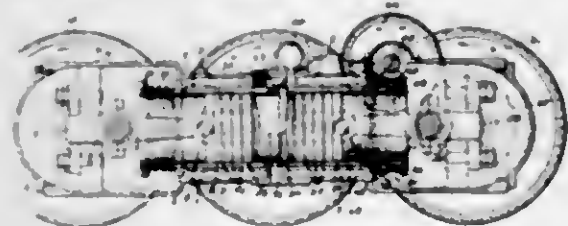
1. A process which comprises heating camphor containing camphor oil for a sufficient length of time to change the camphor oil into a product more amenable to separation from the camphor than is camphor oil.

1,308,399. ELECTRIC METAL-WORKING APPARATUS. GEORGE ALBERT CUTLER, Dedham, Mass., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 4, 1918. Serial No. 260,939. 5 Claims. (Cl. 219-2.)



8. An electric riveting apparatus, comprising a frame-work provided with a support upon which the work is placed with the rivet passing upwardly through the work, a pneumatic hammer mounted in the head of the frame-work and bodily movable toward and from the work, an operating lever for bodily moving the hammer, controlling devices for the hammer mounted on said lever, an angularly disposed electrode mounted on one side of the frame-work and adapted to move into the path of the hammer to engage the rivet end and means for automatically withdrawing said electrode from the path of the hammer.

1,308,400. INTERNAL-COMBUSTION ENGINE. FRITZ C. L. DIX, Brooklyn, N. Y. Filed Oct. 7, 1914. Serial No. 865,443. 1 Claim. (Cl. 123-51.)

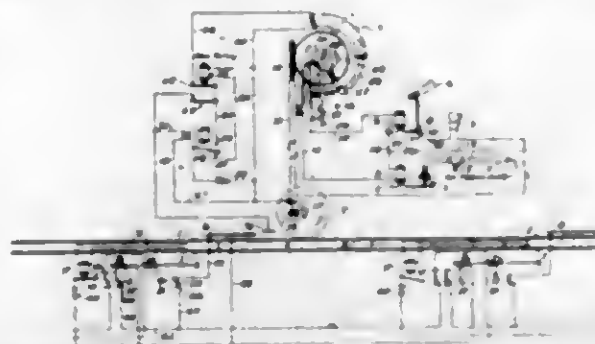


An internal combustion engine including in combination a cylinder open at both ends, two shafts at opposite ends of said cylinder, two pistons in said cylinder, one piston connected to one of said shafts and the other piston connected to the other of said shafts, a longitudinally reciprocable cylindrical sleeve within said cylinder and about said pistons, said sleeve projecting from said cylinder at both ends, a spring acting on said sleeve at one end of the cylinder to impel it toward one end of its stroke, a cam ring mounted loosely on the opposite end of said sleeve and having an internal cam groove and an external driving gear, connections from the engine shaft for driving said gear, and a member on the sleeve working in the cam groove to reciprocate the sleeve.

1,308,401. TRAFFIC-CONTROLLING SYSTEM. ALBERT V. T. DAY, New Rochelle, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Continuation of application Serial No. 637,774. Filed July 10, 1911. This application filed July 12, 1911. Serial No. 639,229. 8 Claims. (Cl. 246-52.)

1. A railway traffic-controlling system comprising a train stop and a signaling apparatus carried on a rail-

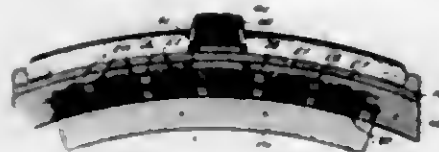
way vehicle, the train stop having an automatic tendency to retard the train and the signaling apparatus having an automatic tendency to assume the danger position, the signaling mechanism being constructed and



arranged to assume danger position in advance of the train retarding mechanism, controlling mechanism for the train stop and signaling apparatus having a controlling and non-controlling condition and having an automatic tendency to change from controlling to non-controlling condition in accordance with movement of the train and to permit the train stop and signaling apparatus to retard the train and assume the danger position respectively, and extraneous controlling means responsive to clear traffic conditions in advance to reset the controlling mechanism away from controlling condition.

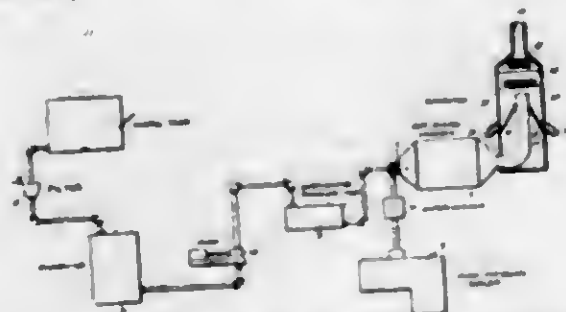
4. In combination, a railway vehicle, means on the vehicle arranged to change progressively toward an ultimate condition, and arranged when reset to automatically resume its progressive change toward ultimate condition, a warning signal on the vehicle operated through said means before it reaches its ultimate condition, a device on the vehicle to cause an application of the brakes and operated through said means when it reaches its ultimate condition, and devices located in the track-way adapted under one set of conditions to permit the said means to cause an operation of said signal and said brake applying device or either of them, and under another set of conditions to reset the said means before an operation of the signal or brake applying device or either of them.

1,308,402. BRAKE SHOE. FRANK T. DICKINSON, Toledo, Ohio. Filed Feb. 15, 1909. Serial No. 477,859. Renewed Feb. 10, 1917. Serial No. 147,980. 11 Claims. (Cl. 188-82.)



1. In connection with a hanger and its connecting key, a brake shoe having a stiffening back, a body of cast metal, and a separate attaching lug fixed in said body and of box-like form, and a reinforce for said lug.

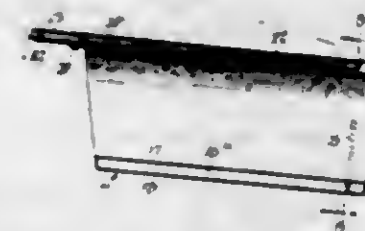
1,308,403. PROCESS OF PRODUCING DEHYDRATED MINERAL SALTS. LOUIS DOONAN, Bend, Oreg. Filed Dec. 27, 1917. Serial No. 209,153. 5 Claims. (Cl. 127-9.)



1. The herein described process of producing dehydrated mineral salts, which consists in providing a hot,

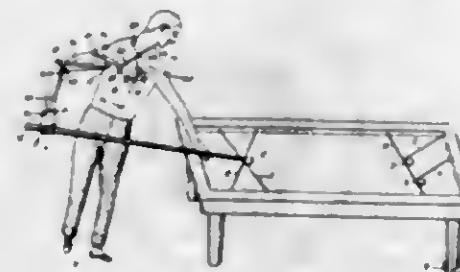
saturated solution of the salt, superheating the solution under pressure, to a point just below the boiling point of the solution at the pressure to which it is subjected, atomizing the superheated solution by means of a hot gas, and maintaining the atomized solution and gas at a temperature sufficient to keep all the moisture of the salt in a state of dry steam, and separating the dry salt from the dry steam.

1,308,404. OPEN-HEARTH FURNACE. GEORGE F. DOWNS, Buffalo, N. Y. Filed Mar. 5, 1918. Serial No. 220,454. 6 Claims. (Cl. 122-0.5.)



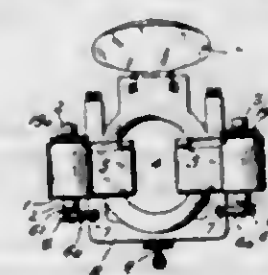
1. In combination with an open hearth furnace of the kind described, a straight, metallic, tubular flue supported within said furnace, said flue connecting the gas uptake with the interior of the furnace, means providing a jacket space entirely surrounding said flue, pipes for admitting water to, and for discharging it from, said jacket space, and a nozzle pipe in said jacket space and movable lengthwise of the same from without the furnace for agitating the cooling water in said jacket space.

1,308,405. MECHANICAL BILLIARD-PLAYER. CHRISTIAN ENGLEMAN, Vancouver, Wash. Filed Aug. 14, 1918. Serial No. 240,769. 5 Claims. (Cl. 46-40.)



1. In a mechanical billiard player, the combination of an automatic figure standing before a billiard table, having a flexible arm, having a cue attached to said arm, having a head pivotally attached to the figure, and means to reciprocate the cue and nod the head in unison, with a billiard table, a plurality of balls on the table, said balls being permitted to scatter freely within certain boundaries but always returning to a predetermined position, the balls being carambolled by the automatic figure while the head is simultaneously enacting a decided backward jerk.

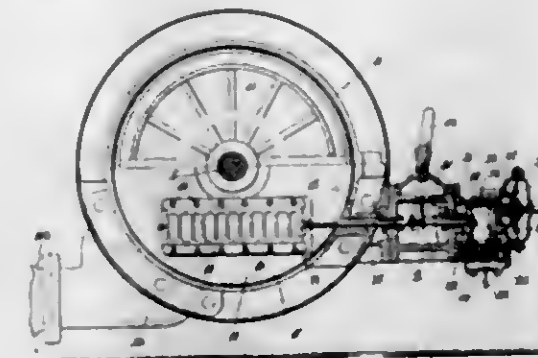
1,308,406. SANITARY WATER-CLOSET SEAT. CHRISTIAN ENGLEMAN, Vancouver, Wash. Filed Mar. 17, 1919. Serial No. 283,097. 2 Claims. (Cl. 4-18.)



1. In a device of the character described, the combination of two floor stands side by side, rotary drums

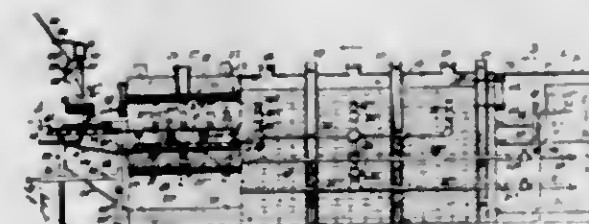
adapted to receive rolls of toilet paper attached to the floor stands, wings projecting from the drums, a treadle between the floor stands, operating mechanism between treadle and drums capable of oscillating said wings to and from each other, gearing mechanism between drums and wings, said gearing mechanism on operation of the treadle being capable of drawing the toilet paper over one side of the wings and exposing the loose ends for severance.

1,308,407. TURBINE BLEEDER-VALVE. BENJAMIN GRAVELLY FERNALD, New York, and JAMES LEONARD MOORE, Wellsville, N. Y., assignors to The Kerr Turbine Company, Wellsville, N. Y., a Corporation of New York. Filed June 18, 1916. Serial No. 103,946. 37 Claims. (Cl. 60-07.)



1. A turbine casing having a detachable section, a diaphragm therein having a similar detachable section and a bleeder valve of the throttle type carried entirely by the remaining portion of said diaphragm.

1,308,408. PROCESS AND APPARATUS FOR MAKING GLASS-PLATE LETTERS. ADOLPH W. GAST, Chicago, Ill., assignor to Chicago Miniature Lamp Works, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1918. Serial No. 218,626. 23 Claims. (Cl. 49-7.)



1. The process of making glass letter plates which consists in heating a glass plate of a size required to contain the letter within its outline, the heat being applied in such manner as to evenly and equally heat the plate throughout, and being continued until the glass of the plate becomes pliable and capable of being affected by pressure against a die, of then subjecting the glass plate to pneumatic pressure exerted from below the glass plate against a die engaged against the top of the glass plate and containing a depression or depressions defining the outline of the letter to be produced, said pressure being substantially in excess of atmospheric pressure as described, and of then annealing the glass letter plate with the formed letter faced upwardly as it is left after the operation of the die.

1,308,409. WHEEL-VEHICLE. JOHN WELSBY GELLING, Mexico, Mexico. Filed Jan. 21, 1919. Serial No. 272,229. 3 Claims. (Cl. 106-108.)

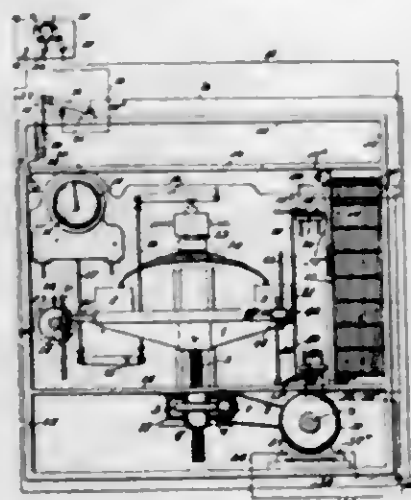
2. A vehicle comprising in combination, a rigid frame, three or more axes mounted on the frame, wheels on said axes, each being sustained by the frame against downward movement with relation thereto, pre-strained

springs acting upon said axes to hold them down against the frame but permitting the wheels to rise individually when in passing over an obstacle the limit to which the springs are pre-strained is exceeded.



dividually when in passing over an obstacle the limit to which the springs are pre-strained is exceeded.

1,308,410. SPRING-TESTING MACHINE. CHRISTIAN GIAL, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 24, 1915. Serial No. 36,042. 11 Claims. (Cl. 265-19.)



1. The combination, with a testing machine comprising a movable part, of a safety gate for said machine, and adjustable means for driving said movable part in reverse directions, said means including a normally-open electric circuit, and means controlled by the closing of the gate to close said circuit.

1,308,411. TYPE-WRITING MACHINE. GEORGE GOULD GONG, Middletown, Conn., assignor to The Noiseless Typewriter Company, Middletown, Conn., a Corporation of Connecticut. Filed Mar. 31, 1916. Serial No. 87,910. 12 Claims. (Cl. 197-72.)



1. In a typewriting machine, in combination, a shiftable part having three printing positions, a floating lever pivotally movable selectively about either of two spaced axes and connected to shift said part, and means engaging a portion of said lever to stop the same in each position corresponding to a printing position of said part.

1,308,412. SMOKEHOOD FOR COOKING UTENSILS. ABRAHAM J. GREEN, New Haven, Conn. Filed Feb. 28, 1919. Serial No. 279,775. 6 Claims. (Cl. 126-41.)



1. A smoke hood for cooking utensils formed at its rear with a downwardly and rearwardly extending lip

and provided with a transverse partition connected with the front and side walls of the hood and separated from the rear wall, said partition formed with a series of openings.

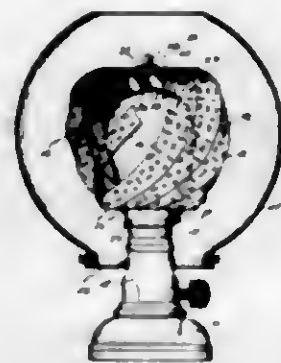
1,308,413. PROCESS FOR MAKING ETHANOL-TRIALKYL-ARSONIUM HYDROXIDS. MARCUS GUGGENHEIM, Basel, and ERNST HUG, Riehen, near Basel, Switzerland, assignors to The Hoffmann-La Roche Chemical Works, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1916. Serial No. 135,354. 6 Claims. (Cl. 23-24.)

1. That step in the process of making ethanol-trialkyl-arsonium-hydroxid which consists in heating a halogen salt of halogen-ethyl-trialkyl-arsonium with water until an ethanol-trialkyl-arsonium-halogenid is formed substantially as and for the purpose described.

1,308,414. ETHANOL-TRIALKYL-ARSONIUM HYDROXIDS AND PROCESS OF MAKING THE SAME. MARCUS GUGGENHEIM, Basel, and ERNST HUG, Riehen, near Basel, Switzerland, assignors to The Hoffmann-La Roche Chemical Works, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1916. Serial No. 135,355. 5 Claims. (Cl. 23-24.)

1. An ethanol-trialkyl-arsonium-hydroxid substantially as described.

1,308,415. ILLUMINATED ADVERTISING DEVICE. ARTHUR V. GULLBORG, Chicago, Ill., assignor to Commercial Utilities Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1918. Serial No. 218,650. 2 Claims. (Cl. 240-49.)

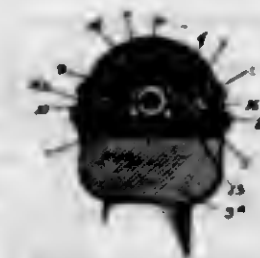


2. In a device of the class described, the combination with an electric light bulb positioned vertically with its tip extending upwardly, of a wire supporting frame having a loop at its lower end for encircling the lower part of the bulb, a bend near the upper part of said frame forming a small substantially closed loop for intimately receiving and surrounding the bulb tip, the upper end of said frame extending vertically substantially in alignment with the bulb axis, a rotor member provided with vanes and having a bearing thimble for receiving the upper end of said frame, and a washer surrounding said thimble and abutting against the outer surface of said rotor and having detent projections engaging with said thimble.

1,308,416. TIRE CONSTRUCTION FOR VEHICLE WHEELS. CHARLES H. GUNN, Emeryville, Calif. Filed Sept. 3, 1918. Serial No. 252,322. 3 Claims. (Cl. 152-9.)

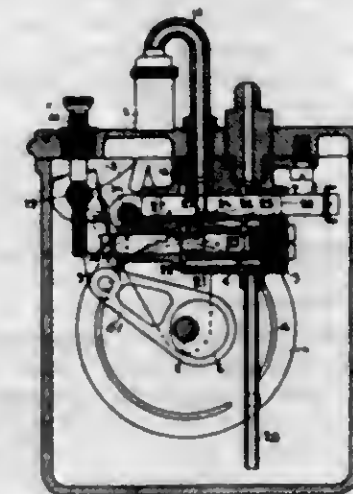
2. A tire for vehicle wheels comprising an endless flanged rim adapted to be pressed onto a wheel, an arched band having its edges turned outwardly to form V-shaped grooves, the edges being seated between and adjacent the flanges of the rim, a strip of segment-shaped material po-

sitioned between the band and the rim, tread blocks of rubberized fabric secured to the band and spaced slightly therefrom, and laminations of canvas between the blocks



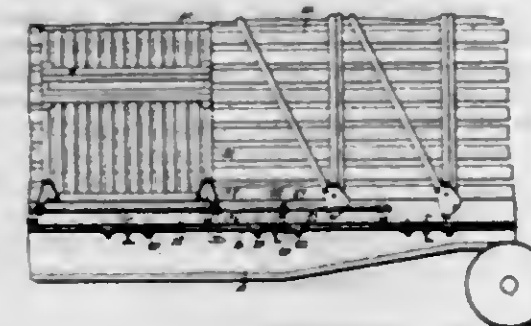
and the band, whereby a cushion between the blocks and the band will be formed.

1,308,417. FORCE-FEED LUBRICATOR. CARL GUSTAFSON, Södertelje, and KNUT APPELGREN, Ljusne, Sweden. Filed Aug. 6, 1918. Serial No. 248,539. 3 Claims. (Cl. 184-27.)



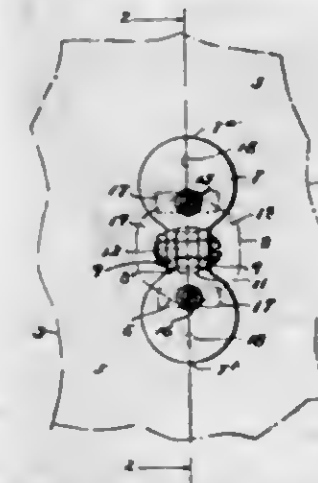
2. In a force-feed lubricator the combination with an oil reservoir of a number of pump units, each comprising a pump cylinder, a plunger and a reciprocating valve, a common driving shaft for the plungers of said units, another common shaft for driving the valves of said units, means for transmitting motion from said first-mentioned shaft to said last-mentioned shaft, suction pipes, sight-feed conduits controlled by said valves and returning to the reservoir, discharge passages likewise controlled by said valves, and means for independently adjusting the length of the hub of the plungers, said means comprising a rocking operating lever for each plunger and means for adjusting the operative length of said rocking lever.

1,308,418. LOCKING MECHANISM FOR CAR DOORS. HARRY S. HART, Chicago, Ill. Filed Oct. 25, 1917. Serial No. 198,384. 12 Claims. (Cl. 105-244.)



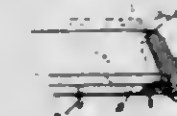
1. In a railway car, the combination of a movably mounted door in the floor of the car, a side door, and means whereby the door in the floor of the car must be closed before the side door can be closed.

1,308,419. SUPPORTING STRUCTURE. KENNETH ROBINSON HAMMERLY, South Bethlehem, Pa. Filed Sept. 30, 1918. Serial No. 256,199. 4 Claims. (Cl. 72-101.)



1. The combination of a support having a hole extending therethrough from its outer to its inner surface; and a supporting member adapted to be placed against the front surface of said support and having toggle bolts extending through said hole in the support, said hole in the support being of less length but of greater width than that of said member to permit the toggles of said bolts to be moved to span said hole and engage the inner surface of said support whereby said member is held to the support, substantially as described.

1,308,420. CABINET FOR TALKING-MACHINES. JOHN HANCOCK, Saginaw, Mich. Filed Feb. 12, 1918. Serial No. 216,760. 2 Claims. (Cl. 45-52.)



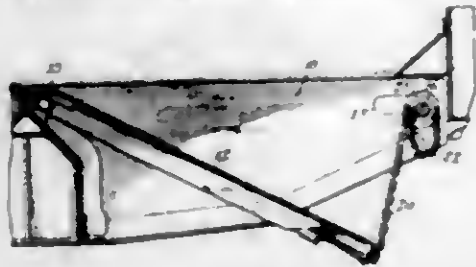
1. A cabinet having a top adapted to support the casing of a talking machine, an inner frame formed of cleats fixed to said top, an outer frame comprising four integral cleats, the opening of said outer frame adapted to permit the body of said casing to pass vertically through said outer frame when the outer frame is lowered into position, the cleats of said outer frame having their inner sides overhanging and forming an inclosure for the outwardly projecting base of said machine and adapted to engage therewith, to secure said base and cabinet together, and means for removably securing said inner frame and said outer frame together.

1,308,421. HOPPER CAR. EDWARD D. HILLMAN, Larchmont, N. Y., assignor to Benjamin A. Hegeman, Jr., North Plainfield, N. J. Filed Mar. 6, 1917. Serial No. 152,625. 6 Claims. (Cl. 105-248.)



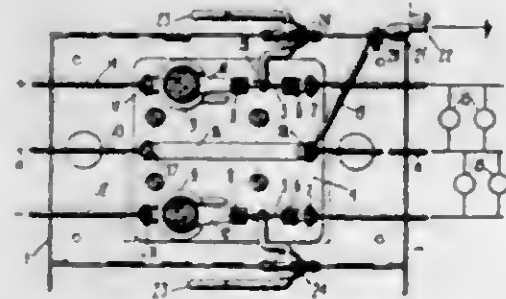
6. A hopper car having downwardly and inwardly inclined end plates, center sills, hoppers at each side of said center sills, an operating crank shaft connected with said doors for operating the same, and an auxiliary shaft having a crank portion thereon for initiating the operating shaft in motion, said operating and auxiliary shafts extending transversely of the car and being exposed at both ends so that the shafts may be operated from either side of the car.

1,308,422. RAILWAY-CAR-DOOR-CONTROL MECHANISM. DAVID HINDAHL, Chicago, Ill. Filed Oct. 25, 1917. Serial No. 198,443. 5 Claims. (Cl. 105-244.)



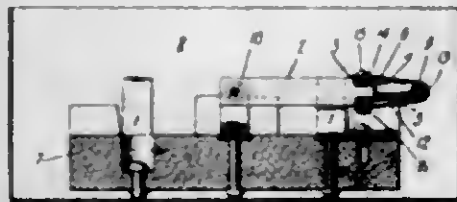
1. In a railway car, a drop door, an operating shaft therefor, a collar loosely mounted on said shaft, a connection between said collar and said door, and a flexible member connecting said collar and said shaft whereby the shaft may be actuated a given amount without transmitting movement to said door.

1,308,423. ELECTRICAL SWITCH. BAYSON DEXTER HOUTON, Detroit, Mich. Filed Mar. 24, 1915. Serial No. 16,910. 4 Claims. (Cl. 247-13.)



1. In a switch of the character described, a metallic housing provided with a cover, circuit controlling instrumentalities mounted within said housing, but insulated therefrom, said instrumentalities including a neutral wire connection grounded to the casing and a pair of single pole switches mounted in the casing and independently operable from the exterior thereof.

1,308,424. ELECTRICAL SWITCH. BAYSON DEXTER HOUTON, Detroit, Mich. Filed July 13, 1916. Serial No. 108,984. 2 Claims. (Cl. 175-282.)

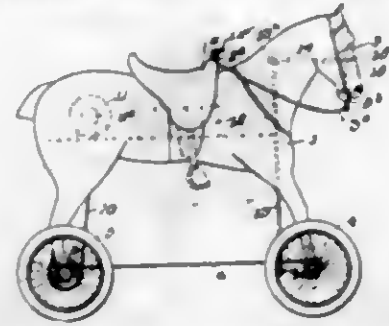


1. An electrical switch provided with a plurality of independent knife blades, each blade being independently pivotally mounted at one end, a cross head connecting the blades at the other end and forming the sole connection therebetween, an operating member provided with a portion extending parallel to said cross head and a strap member passing around the said parallel portion of the operating member and having its ends fastened on opposite sides of the cross head.

1,308,425. MOTOR-PROPELLED HORSE. CHARLES L. JOHNSON, San Diego, Calif., assignor to Electric Horse Manufacturing and Amusement Co., Phoenix, Ariz., a Corporation of Arizona. Filed Dec. 26, 1916. Serial No. 138,822. 2 Claims. (Cl. 205-42.)

1. In a device of the class described, the combination with a motor propelled horse mounted upon a carriage of means for steering the same consisting of a vertical shaft

in the head of said body, a horizontal bar secured on the lower end thereof, reins with their extended ends secured to the opposite ends of said bar, another vertical

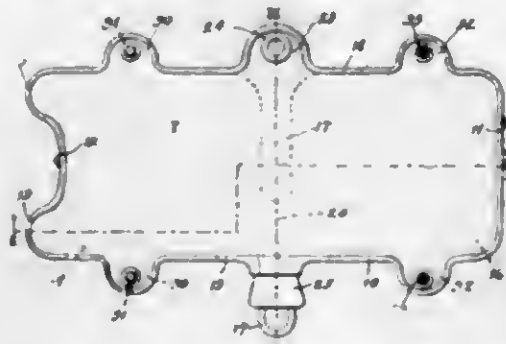


shaft revolvably mounted in said body, means operatively connecting said shafts and means connecting the lower end of said shaft that is mounted in the body with the front wheel of the carriage.

1,308,426. PROCESS OF MANUFACTURING TRANSPARENT SURFACES. OTTO W. KEIL, New York, N. Y., assignor of one-half to Oscar C. Stets, Woodhaven, N. Y. Filed June 12, 1917. Serial No. 174,401. 2 Claims. (Cl. 91-68.)

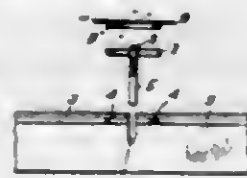
1. A process of making a semi-transparent substitute for glass, which comprises applying to a relatively rigid foraminous base, a relatively heavy coat of concentrated water glass, allowing the same to dry, and thereafter applying a waterproof varnish, and allowing the same to dry.

1,308,427. COMBINED HOT-WATER BOTTLE AND DOUCHE-BAG. ANNE LABORDE, New York, N. Y. Filed Dec. 15, 1916. Serial No. 137,189. 11 Claims. (Cl. 128-39.)



1. In a hot water bottle, opposed sides connected at their edge portions, said sides being of substantially elongated rectangular form with a rectilinear end and a concavely arcuate end provided with spaced convexly arcuate portions, a web portion transversely of the bottle immediately of the length thereof, and a filling and draining means for the bottle.

1,308,428. METAL SASH OR FRAME. LAURENCE S. LACHMAN, New York, N. Y., assignor to Universal Electric Welding Company, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1914. Serial No. 561,348. 1 Claim. (Cl. 183-36.)



A metallic sash or frame comprising T-shaped intersecting members arranged with the flanges of said members in the same plane, ridges rising from the top of said members, a button provided with welding projections

superimposed over the intersection of said members and welded thereto by said projections and ridges and a depending flange on the edge of said button adapted to bear against the flanges of said members.

1,308,429. TREATMENT OF CLAYS AND EARTHS. FRANK LANGFORD, Eureka, Calif. Filed Nov. 23, 1917. Serial No. 203,566. 21 Claims. (Cl. 23-13.)

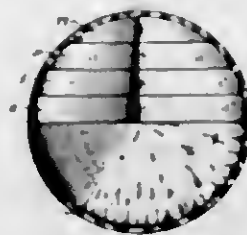
20. The process of treating aluminous earths and like materials which comprises roasting to a dry condition a mixture of the material to be treated and sulfuric acid.

1,308,430. TOOL-HOLDER FOR GRINDING THREAD-CUTTING TOOLS. AMBROSE LENTZ, West Hoboken, N. J. Filed May 14, 1918. Serial No. 234,412. 12 Claims. (Cl. 51-7.)



1. A tool holder, comprising a body, means thereon for holding a tool to be ground, said body carrying on one of its sides a flat surface substantially parallel to the tool axis of said tool holder, and an adjustable member carried by said body and having a surface arranged in an adjustably angular relation to said axis, said surfaces being adapted to support the tool holder firmly and truly upon a plane surface having a known relation to the effective part of a grinding tool.

1,308,431. LENS. CHARLES A. LESTER, Winona, Minn. Filed June 25, 1918. Serial No. 241,775. 4 Claims. (Cl. 240-48.4.)



3. In combination, a parabolic reflector, a source of light arranged substantially at the focus thereof and having non-focal portions, a lens arranged at the periphery of said reflector, the said lens embodying a series of superposed segments, the front surfaces of the segments above said axis, and the rear surfaces of the segments below said axis having a conical contour, and the respective opposite surfaces of said segments being hyperbolic, the base angle of said conical surfaces being equal to the angle of a prism which will deviate the light rays the required maximum number of degrees.

1,308,432. DOLL AND METHOD OF MAKING SAME. ELEANOR A. LOCHMIDKE, Long Beach, Calif. Filed June 12, 1918. Serial No. 239,568. 3 Claims. (Cl. 46-40.)

1. A doll formed of soft material throughout and comprising head and body portions of knit webbing, and a

belt or band of folded webbing similar to that of the body portion folded along the bottom edge and encircling said body portion to simulate the upturned edge of a



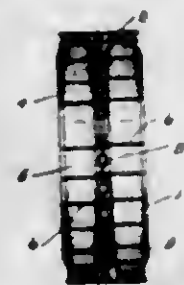
sweater, said band being secured to and in direct contact with the webbing of such body portion.

1,308,433. SHARPENER FOR SLICING-MACHINES. AUGUST R. LUSCHKA and JOSEPH FOLK, Laporte, Ind., assignors to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed Mar. 23, 1918. Serial No. 224,216. 11 Claims. (Cl. 51-7.)



1. A sharpener for slicing machine knives comprising a spindle having grinders carried at the opposite ends thereof, means for shifting said spindle to bring either of said grinders into position adjacent the knife to be sharpened, a spring for resiliently holding said grinders in engagement with said knife, and a device for exerting pressure on said spring and for positively shifting said spindle to move said grinders out of engagement with said knife.

1,308,434. TIRE ATTACHMENT. JOHN W. MCKENZIE, Bay City, Mich. Filed Jan. 30, 1918. Serial No. 214,496. 3 Claims. (Cl. 152-2.)



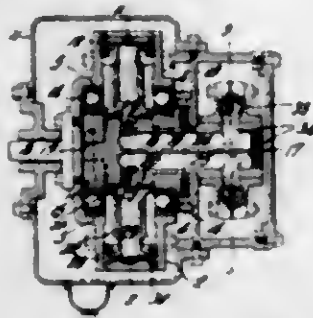
1. An anti-skidding tire attachment, comprising a securing member adapted to be fastened to a tire, and a transversely extending gripping member pivotally mounted on the securing member and adapted to be held thereby across the tread of the tire for a limited pivotal movement about a radial axis.

1,308,435. DRIVE FOR PUMPS. AUGUSTE MAIRE, Route de Bezons, Argenteuil, France, assignor to Société Lorraine Des Anciens Etablissements De Dietrich & Cie. De Lunéville, Paris, France. Filed Feb. 18, 1918. Serial No. 217,868. 2 Claims. (Cl. 172-239.)



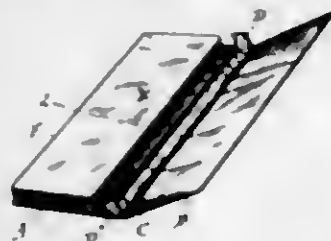
1. A drive for pumps comprising in combination: a fluid tight box, a permanent magnet adapted to rotate substantially in contact with the inside face of a wall of said box, driving means for the pump, controlled by said permanent magnet, blocks of a magnetic material provided in said wall, a fluid tight casing surrounding said wall and adapted to contain a lubricant, a shaft journaled in said fluid tight casing, a structure adapted to be traversed by a magnetic field said structure being carried by said shaft and having parts thereof which rotate substantially in contact with the outside face of said wall and means for rotating said shaft.

1,308,436. COMBINED FLUID-PRESSURE PUMP AND MOTOR. ROBERT MAW and WILLIAM B. McLEAN, Montreal, Quebec, Canada, assignors, by direct and mesne assignments, to The Universal Machinery Company, Limited, Montreal, Canada. Filed May 29, 1914. Serial No. 841,969. Renewed Nov. 27, 1918. Serial No. 264,466. 7 Claims. (Cl. 103-44.)



1. A device of the character described comprising a stationary casing, a revoluble casing therein, a shaft mounted in said casing for bodily lateral movement from one side to the other of the rotative casing axis and held against revolution, cooperative pump members mounted between the shaft and rotative casing, fluid inlet and outlet passages in said shaft, and shaft shifting means forming supply and discharge pipes communicating with the shaft passages.

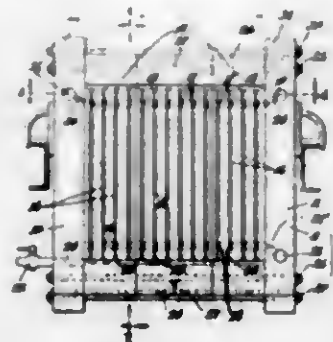
1,308,437. POCKET MEMO CASE. HENRY METCALFE, Cold Spring, N. Y. Filed May 6, 1919. Serial No. 295,057. 3 Claims. (Cl. 281-30.)



1. A pocket memo case comprising a pair of stiff covers, a connecting section of substantial width arranged between the two covers in such manner as to swing relatively to both when the case is opened, a pad located be-

tween the two covers when closed and of such width as to leave a longitudinal recess between the two covers, the connecting section and the pad, and a pair of end flanges located to close the ends of such recess, whereby a loose pencil may be securely retained in the closed case but lies easily accessible when the case is opened.

1,308,438. FILTER-PRESS PLATE. GEORGE F. MILLER, New York, N. Y. Filed Jan. 22, 1919. Serial No. 272,484. 10 Claims. (Cl. 210-13.)

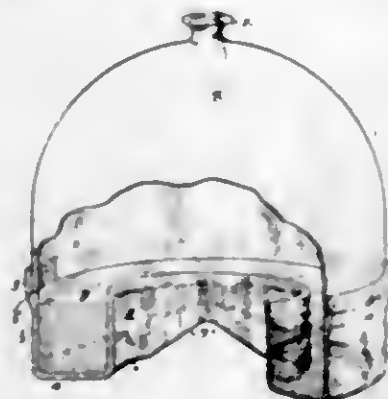


1. In a filter press plate, in combination, side members, a central field, a reinforcing member dove-tailed into the upper portions of the side members, and a reinforcing member dove-tailed into the lower portions of the side members.

2. In a filter press plate, in combination, side members, a central field and reinforcing members dove-tailed into and connecting the side members.

3. In a filter press plate, in combination, side members, a central field, a reinforcing member dove-tailed into the upper portions of the side members, a reinforcing member dove-tailed into the lower portions of the side members and means for preventing lateral movement of the reinforcing members.

1,308,439. FLY-TRAP. JOHN MORIAK, Akron, Ohio. Filed Oct. 30, 1918. Serial No. 260,383. 1 Claim. (Cl. 43-22.)



A fly trap including a trough-like annularly formed base member having spaced inner and outer side walls connected by a bottom wall, said side walls and bottom wall being inclined upwardly at one place to form an entrance to the space enclosed by the inner wall, and a cover mounted upon the outer wall.

1,308,440. WRENCH. JAMES S. MONTAGN, Eliot, Mich. Filed Nov. 19, 1916. Serial No. 130,557. 3 Claims. (Cl. 81-179.)

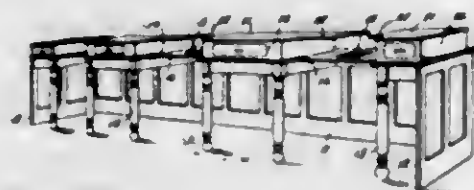
1. In a wrench having a pair of fixed jaws, a pawl slidably mounted on one of said jaws, said pawl including a beveled face tongue, said beveled face merging into a rounded face at the outer end of the pawl to

permit a cam action between the tongue and the work, and a shoulder on said pawl disposed at an angle with the beveled face of said tongue at its lower end, said



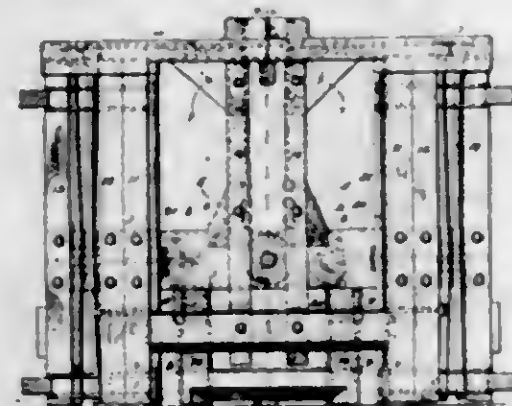
shoulder adapted to cooperate with the opposite jaw of the wrench for turning the work.

1,308,441. ADDING-MACHINE CABINET. JOHN M. MYERS, Yonkers, N. Y. Filed Apr. 17, 1919. Serial No. 290,697. 2 Claims. (Cl. 45-6.)



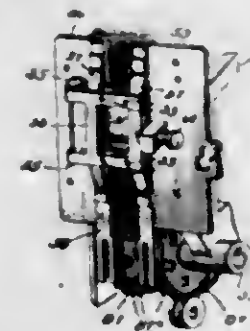
1. An adding machine cabinet comprising a table top arranged to support an adding machine, said table top having an unobstructed portion extending across the back of the machine and other portions separated by at least the width of the machine extending forwardly from the machine, and covers spaced above said table top above the forwardly extending portions thereof with their rear edges situated in front of the transversely movable parts of the machine, said covers having shelf extensions extending nearly to the sides of the stationary part of the machine.

1,308,442. RAILROAD-CAR. JOHN O. NEIKIRK, Lombard, Ill. Filed June 22, 1916. Serial No. 105,188. 4 Claims. (Cl. 105-230.)



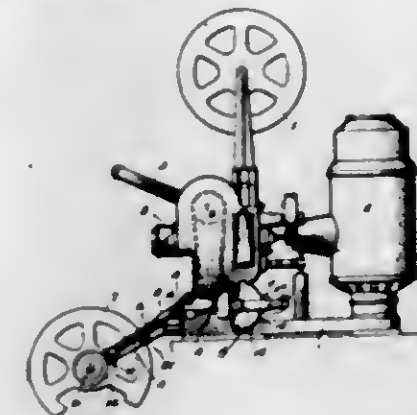
1. A car underframe comprising a metallic subframe having spaced longitudinal sills for the reception of a hopper and bogie out of line with the draft sills and extending only between the bolsters, said subframe including bolsters, the central parts of which have double supporting flanges and the outer ends of which have single central supporting flanges carrying the horizontal stresses, and a superframe comprising the longitudinal sills resting on the bolsters and transmitting vertical load to the bolsters.

1,308,443. FILM-GUIDE. JOSEPH G. R. O'HARA, St. Louis, Mo., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo., a Corporation of Missouri. Original application filed Sept. 18, 1916, Serial No. 120,731. Divided and this application filed Aug. 15, 1917. Serial No. 180,377. 1 Claim. (Cl. 88-17.)



In a motion picture machine, a tracker plate provided with a view aperture, portions of said plate to the sides of said apertures being compressed with respect to the face of the plate to form continuous parallel film tracks, a presser gate hinged to said plate to one side of said opening and film tracks, said presser gate being provided with an opening which coincides with the view aperture in the tracker plate, pressure bars positioned beneath the side portions of the presser gate and adapted to engage the edges of the film positioned on the film tracks, cross bars connecting said pressure bars, screws loosely positioned in said presser gate and seated in said cross bars, and flat springs interposed between the sides of the presser gate and the pressure bars.

1,308,444. MOTION-PICTURE-PROJECTING MACHINE. JOSEPH G. R. O'HARA, St. Louis, Mo., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo., a Corporation of Missouri. Filed June 8, 1918. Serial No. 239,024. 2 Claims. (Cl. 88-17.)

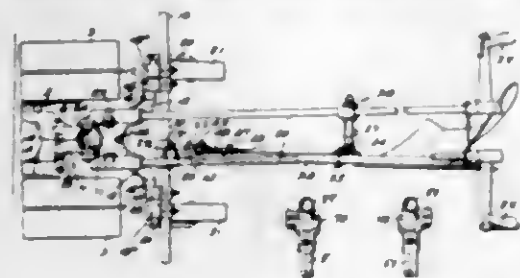


1. In a motion picture projecting machine, the combination of a base, a gear housing adjustably mounted thereon for "framing" the picture, said housing providing a bearing for the driving shaft, and a receiving reel driven by said shaft, said shaft having universal joints and telescopic connection whereby the receiving reel may be driven at a predetermined speed in any position of the gear housing.

1,308,445. PLOW-HITCH FOR WALKING-TRACTORS. SPENCER H. PHILIPS, Minneapolis, Minn., assignor to Beeman Garden Tractor Co., Minneapolis, Minn., a Corporation. Filed Apr. 27, 1918. Serial No. 231,243. 31 Claims. (Cl. 97-7.)

1. A machine of the class described comprising in combination a frame having carrying wheels, a steering device connected with said frame and having a vertical movement thereon, a ground-working implement having a

beam connected with said frame for vertical movement thereon, means connecting said steering device with said beam for raising it to guide said implement out of the



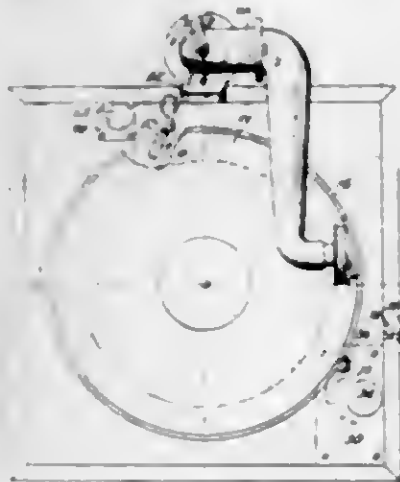
ground when said steering device is lifted and for forcing said beam downwardly to guide said implement into the ground when said steering device is depressed downward and lateral pressure on said steering device oscillating said wheels on a vertical axis to guide the machine.

1,308,446. CLASP. ALEXANDRE G. PLANCHENAU, Coyteville, N. Y., assignor to National Clasp Co., Inc., New York, N. Y., a Corporation of New York. Filed June 25, 1918. Serial No. 241,739. 4 Claims. (Cl. 24—217.)



4. In a clasp the combination comprising a socket member and a stud member, said socket member having apertures extending therethrough and said apertures being larger at the bottom than at the top and said apertures having oblique adjacent edges, said stud member having studs which taper upwardly and which are provided with oblique adjacent faces corresponding in angularity to the oblique edges whereby the same are adapted to be inserted into said apertures from the bottom only.

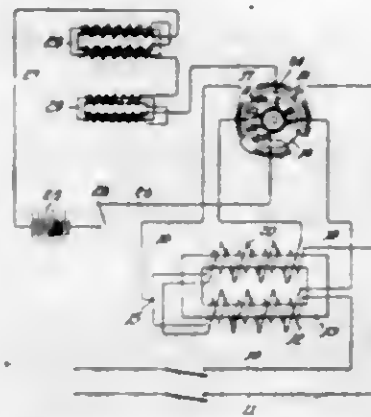
1,308,447. PHONOGRAPH-STOP. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed July 5, 1916. Serial No. 107,581. 2 Claims. (Cl. 74—46.)



1. In a phonograph, the combination with a record table and a tone-arm adapted to swing in an arc thereabove, of a brake mechanism mounted adjacent the edge of said table and having a lever provided with an arm having a friction surface adapted to engage the edge of said table, a spring connected with said lever for normally maintaining such engagement, means for holding said friction surface in inoperative position while a record is being played, an electromagnet coacting with said means, means for manually releasing said friction

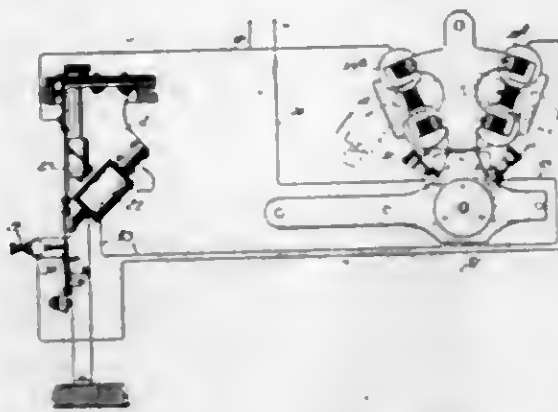
surface and simultaneously imparting a starting impulse to said table, a plate provided with a cam-slot for guiding said arm to cause the friction surface to impart such starting impulse and then move out of contact with said table, and a contact mechanism actuated by said tone-arm and electrically connected with said electromagnet to release said friction surface holding means and permit the application of said brake when the playing of the record has been completed.

1,308,448. RECTIFYING ALTERNATING CURRENTS. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed June 18, 1917. Serial No. 175,372. 3 Claims. (Cl. 175—364.)



1. The combination with a commutator rectifying system of a transformer for supplying alternating current to the rectifying commutator thereof, said transformer having a core member proportioned to operate at low flux density and single turn primary and secondary windings distributed on such core member.

1,308,449. ELECTRIC MOTOR AND GOVERNING MECHANISM THEREFOR. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed July 14, 1917. Serial No. 180,586. 8 Claims. (Cl. 171—222.)

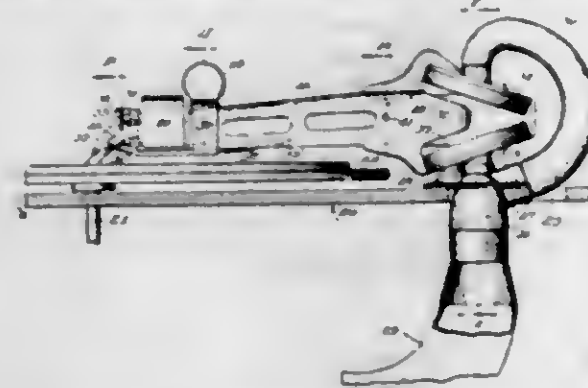


1. A motor comprising a plurality of magnetic metal sections arranged in a circle to constitute a rotatable armature, an electromagnet arranged in operative relation to the said armature, a current-interrupting device in series with the said electromagnet and asynchronously driven from the said armature and a second circuit-interrupting device in series with said first device comprising a contact member having a reciprocatory movement of determined periodicity.

1,308,450. PHONOGRAPH. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed July 23, 1918. Serial No. 246,288. 4 Claims. (Cl. 274—25.)

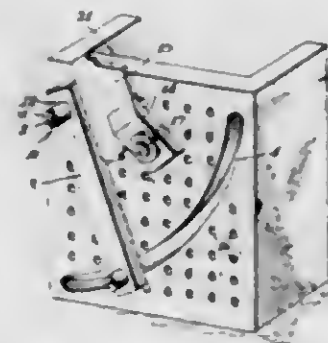
1. In a phonograph, a pair of stationary independent sound-amplifying horns, a single diaphragm-head mov-

ably mounted with respect to the said horns, two independent diaphragms carried by the said head, means forming a separate sound-conduit from each diaphragm to



its respective horn, and two independent needles arranged to travel in the same record-groove, one in advance of the other, each of said needles being connected with one of said diaphragms.

1,308,451. SINE BAR. ABRAHAM SCHACHAT, Brooklyn, N. Y., assignor to Slocum, Avram & Slocum Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 8, 1917. Serial No. 173,511. 3 Claims. (Cl. 33—93.)



1. A device of the class described, comprising a supporting block having a slot therein struck on the arc of a circle, a sine bar pivoted near one end to said block at the center of the circle from which said slot is struck, means carried by said sine bar and engaging through said slot for clamping the free end of said bar in any adjusted position and means for clamping said bar in any adjusted position at its pivotal point.

1,308,452. KEROSENE BLOW-TORCH. HOWARD A. SMOCK, Indianapolis, Ind., assignor of one-tenth to Thomas Cohen, Indianapolis, Ind. Filed Jan. 28, 1919. Serial No. 273,639. 4 Claims. (Cl. 158—53.)



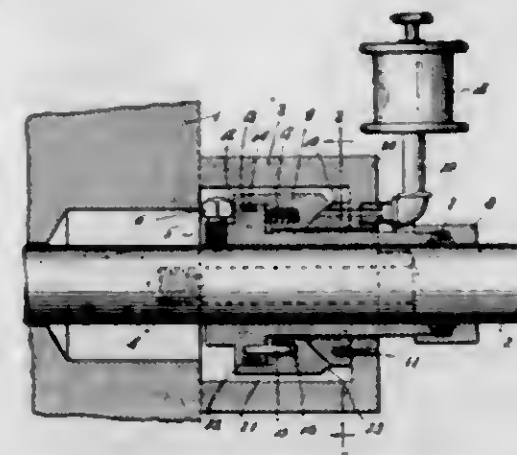
1. A kerosene blow-torch comprising a base having a basin, a standard secured to the base, a sleeve adjustably secured to the standard, a barrel adjustably connected to the sleeve and having a generating chamber extending about the bore of the barrel, an inlet pipe and an outlet pipe connected with the chamber, and a jet-nozzle arranged at one end of the barrel and connected with the outlet pipe.

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1,308,453. FERTILIZING METHOD AND MATERIAL. WALTER O. SNELLING, Allentown, Pa. Original application filed Apr. 17, 1915, Serial No. 22,005. Divided and this application filed July 23, 1918. Serial No. 246,321. 2 Claims. (Cl. 51—9.)

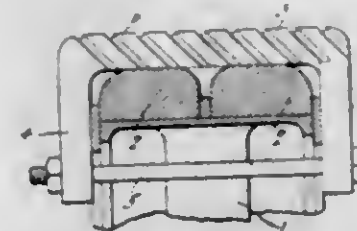
1. An explosive containing an explosive ingredient having soil fertilizing properties, the said ingredient being present in a greater amount than is required for explosive action.

1,308,454. PACKING FOR TURBINE-SHAFTS AND THE LIKE. WALTER F. SOMES, Boston, Mass. Filed Aug. 9, 1918. Serial No. 240,050. 13 Claims. (Cl. 286—27.)



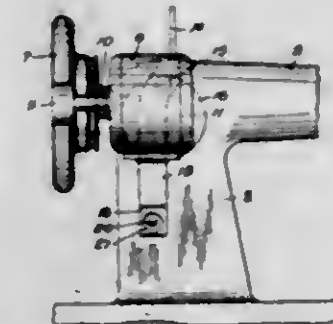
3. A packing for turbine shafts and the like comprising a packing ring rotatable with the shaft, and a non-rotatable ring having a side face fitting against a side face of the rotatable ring so as to prevent steam from escaping therebetween, the rotatable ring being arranged to be subjected to no unbalanced steam pressure longitudinally of the shaft.

1,308,455. ANTISKID DEVICE. LAWRENCE C. STROTH, Wellston, Ohio. Filed Apr. 6, 1918. Serial No. 227,062. 1 Claim. (Cl. 152—2.)



As a new article of manufacture, an antiskid device consisting of a bar disposed horizontally throughout its length and having an outer curved and grooved tread surface and an inner flat face to rest upon the tire, and a yoke formed on said bar to embrace the tire and rim.

1,308,456. MOTOR SUPPORT FOR SEWING-MACHINES. WILLIAM O. TAYLOR, Montreal, Quebec, Canada. Filed Nov. 12, 1918. Serial No. 262,236. 2 Claims. (Cl. 248—20.)



1. A bracket support for attachment to sewing machines comprising a strap having a vertical portion adap-

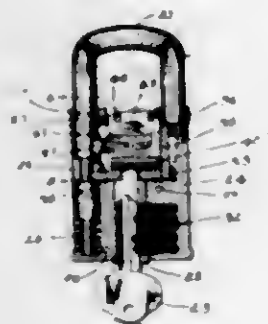
ed to be fastened to the vertical arm of a sewing machine, a horizontal portion perforated to fit over the spool spindle of the sewing machine, and a U-shaped bend on the foot of the bracket adapted to support the post of an electric motor substantially as described.

1,308,457. GARMENT. FRANCIS W. TULLY, Brookline, Mass. Filed Nov. 12, 1917. Serial No. 201,441. 3 Claims. (Cl. 2—122.)



1. A garment of the class having relatively loose tubular portions terminating in ends adapted to be fitted closely, the tubular portions being adapted to blouse over said ends when the ends are fitted in normal position, characterized by supports extending between the exterior of the ends and points within the tubular portions above a relaxed position of the ends whereby to prevent the ends from slipping down.

1,308,458. PADLOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 12, 1916. Serial No. 125,197. 7 Claims. (Cl. 70—110.)

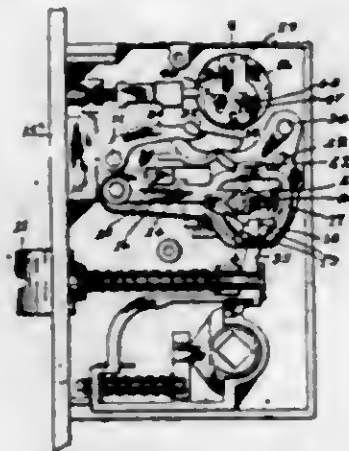


1. In a padlock, the combination of a core, a shackle carried by the core at one end, pin tumbler lock mechanism housed in the core at the opposite end, a registering counter operated by said shackle for registering the actuations of the padlock, including a counter case set in a cut-away portion formed in the core between the lock mechanism and the shackle end of the core, and a shell inclosing the locking mechanism and the counter and having a slight opening through which the counter is visible; substantially as described.

1,308,459. LOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Original application filed June 12, 1916, Serial No. 103,250. Divided and this application filed Sept. 17, 1917. Serial No. 191,751. 5 Claims. (Cl. 70—46.)

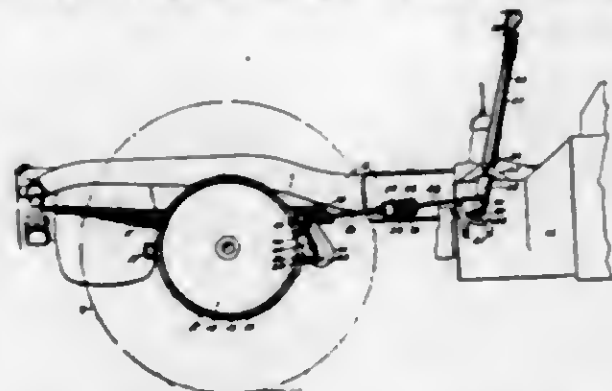
2. A cylinder lock having a casing, a key plug rotatable therein having a projecting inner end, and a rollback

slidably mounted upon the inner face of said key plug, said rollback having a groove formed in its inner face for



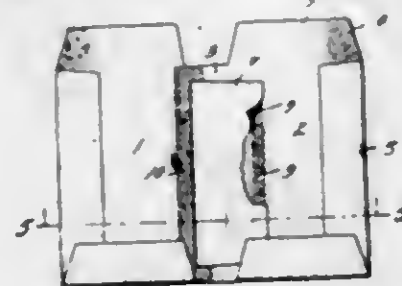
slidably receiving and inclosing the projecting inner end of said key plug; substantially as described.

1,308,460. MOTOR-VEHICLE. STANLEY D. WALDON, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 4, 1916. Serial No. 134,842. 3 Claims. (Cl. 21—8.)



1. The combination with a brake drum and a band member adapted to co-act externally of the flange of said drum, of means for applying the brake mechanism comprising an operating lever adapted to be retained in a set position and elastic connections between the operating portion of said lever and said mechanism.

1,308,461. ADJUSTABLE BOOK-COVER. ALBERT T. WALRAVEN, Dallas, Tex. Filed May 23, 1919. Serial No. 209,246. 3 Claims. (Cl. 251—34.)



3. A book cover composed of two sections each having fixed pockets along its bottom and outer edges, a foldable flap at the top of each section, one of the sections having a tongue with an adhesive panel on its outer face contiguous to its longitudinal edge, and an extension on the outer section having an adhesive panel on its inner face contiguous to its longitudinal edge, said extension having a slit formed therein to receive the tongue whereby the sections may be adjusted to a book, the tongue and slit forming a means for holding the sections from separation, the flaps being adapted to fold inward and form pockets for the book covers.

1,308,462. SHOE-POLISHER. CHARLES D. WATKINS, Newark, N. J. Filed July 6, 1918. Serial No. 248,528. 3 Claims. (Cl. 15—16.)

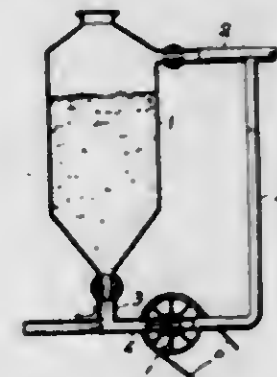


1. A polisher of the character described comprising two resilient strips operatively connected to each other at their ends and normally urged by their resiliency into parallel relation, a strip of rubbing material attached to the outer face of one of the strips, the opposite strip constituting a handle, and means for holding said strips expanded including members hingedly connected to one of the strips on each side of the middle of the strip to which the members are attached and shiftable from a position parallel to said strip into a position at right angles thereto and against the inner face of the opposite strip.

1,308,463. INCENDIARY COMPOSITION. GEORGE WILLIAM CUTLER WEBB, Dartford, England, assignor to Vickers Limited, Westminster, England. Filed Sept. 25, 1918. Serial No. 255,617. 6 Claims. (Cl. 52—6.)

1. An incendiary composition comprising granulated metal, an oxidizing agent and an alkaline earth, the mixture being made into a coherent mass by compression to a high pressure.

1,308,464. APPARATUS FOR PNEUMATIC CONVEYANCE OF MATERIALS. JENS WREATLY, Lysaker, near Christiania, Norway, assignor to Snlletma Aktiebolag, Helsingborg, Sweden. Filed Mar. 19, 1917. Serial No. 155,940. 3 Claims. (Cl. 193—10.)

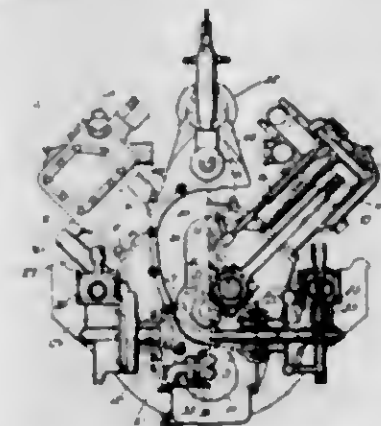


1. Apparatus for the conveyance of fine ore and other materials in the state of a loose powder to metallurgical furnaces by means of a current of gas under pressure, comprising a closed vessel acting as a reservoir for the material to be conveyed and containing the material in the state of rest, means to maintain a gas pressure in said vessel, a closed channel for conducting material from said vessel into the metallurgical furnace, said channel being constantly in open connection with the vessel, a conduit for supplying compressed gas to said channel, a valve inserted in said conduit and means for intermittently opening and closing said valve to produce sudden and frequent variations of gas pressure in the closed conveyer channel.

2. Apparatus for the conveyance of fine ore and other materials in the state of a loose powder to metallurgical furnaces by means of a current of gas under pressure comprising a closed vessel acting as a reservoir for the material to be conveyed and containing the material in the state of rest, means to maintain a gas pressure in said vessel, a closed channel for conducting material from said vessel into the metallurgical furnace, said channel being in open connection with the vessel, a conduit of the same cross sectional area as said channel for supplying compressed gas to said channel, and a constantly revolving valve inserted in said conduit.

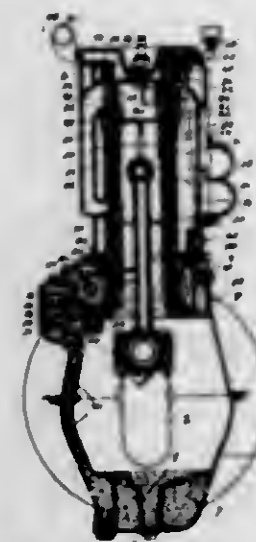
3. An apparatus for supplying powdered material to metallurgical furnaces, comprising a closed vessel containing the material in a state of rest, a pipe for supplying compressed air to the vessel to maintain a constant pressure above the material, a vertical discharge spout communicating with the bottom of the vessel, a closed channel into which the spout discharges arranged at right angle to the latter and adapted to conduct the material to the furnace, and means for intermittently projecting a charge of compressed air across the open end of the spout into the channel, whereby a constant flow of material from the spout is maintained.

1,308,465. HYDROCARBON-MOTOR. D'ORSAY McCALL WHITE, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 11, 1915. Serial No. 60,812. 37 Claims. (Cl. 123—55.)



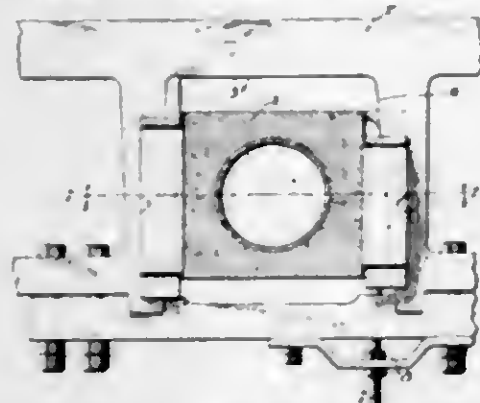
1. In a hydrocarbon motor, the combination with a crank shaft, a cam shaft driven thereby, and another shaft parallel with said cam shaft, of means intermediate the ends of said latter shaft for driving the same from said cam shaft, a pump driven from one end of said parallel shaft and a fan driven from the other end of said parallel shaft.

1,308,466. ENGINE. MARTIN L. WILLIAMS, South Bend, Ind., assignor, by mesne assignments, to American Sleeve-Valve Motor Company, a Corporation of Delaware. Filed Dec. 7, 1914. Serial No. 875,701. 3 Claims. (Cl. 123—59.)



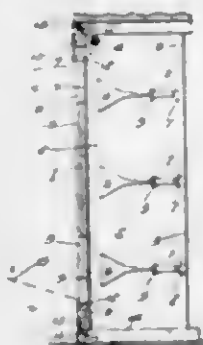
1. In a gas engine, the combination with a plurality of cylinders, of a ported rotary valve sleeve in each cylinder, gearing at the lower end of said sleeves for actuating said sleeves, a drive shaft for said gearing, a supplementary casing inclosing said shaft, means for supplying lubricant to said supplementary casing, oil pipes leading from the casing to the upper end of each cylinder, and a channel member at the upper end of each cylinder for receiving oil from the oil pipe.

1,308,467. ATTACHMENT FOR LOCOMOTIVES. GEORGE COX ACKER, Jacksonville, Fla. Filed Sept. 19, 1918. Serial No. 254,738. 4 Claims. (Cl. 64-10.)



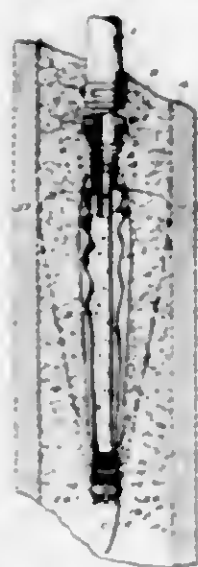
1. In a locomotive driving box, the combination with the box, of a shoe and a wedge arranged at opposite sides thereof between the same and the frame, both shoe and wedge being channel shaped and being cut away or rabbeted on the outer face intermediate the ends to receive a lining or facing of alloy, said lining or facing and the wedge or shoe having means for holding the lining or facing in place.

1,308,468. RETICULATED MOTION-PICTURE CURTAIN. EDWARD H. AMET, Redondo Beach, Calif. Filed Aug. 20, 1912. Serial No. 716,102. 3 Claims. (Cl. 88-24.)



1. A motion picture curtain comprising a woven wire flyscreen heavily coated with light reflecting paint so as to produce a smooth undulating surface characterized by a multiplicity of uniform tiny cup-shaped reflectors having holes in their bottoms.

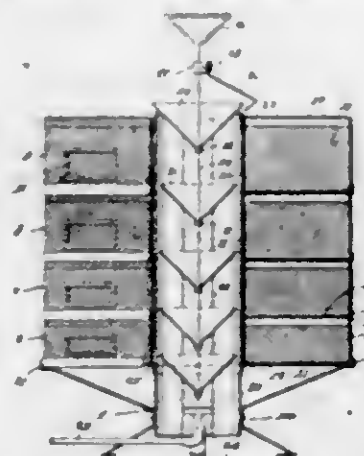
1,308,469. DRAIN PIPE CLEANER. EDWARD H. AMET, Redondo Beach, Calif., assignor of one-half to Charles J. Funk, Redondo Beach, Calif. Filed Apr. 3, 1919. Serial No. 287,339. 9 Claims. (Cl. 137-70.)



1. A pipe cleaner, comprising a head provided with a collapsible and expansible bag, and a hose adapted to

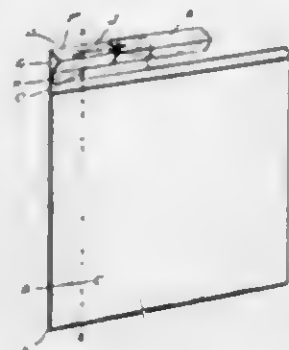
supply fluid pressure inside the bag to expand the same, said hose being also adapted to serve as a handle by which the head may be driven into or worked past obstructions in the pipe.

1,308,470. POULTRY-BROODER. MORRIS ALBERT AXELSSON, Newark, Ohio. Filed Oct. 3, 1918. Serial No. 256,710. 3 Claims. (Cl. 119-32.)



1. A brooder comprising a flue; superposed compartments about the flue; deflectors in the flue and individual to the compartments; means for raising and lowering the deflectors together; and a source of heat supply at the lower end of the flue.

1,308,471. INDEX ARRANGEMENT. JAMES BARBER, Ann Arbor, Mich. Filed May 4, 1918. Serial No. 232,426. 3 Claims. (Cl. 129-16.8.)



2. The combination with a body section having an index tab member, of a removable sheath member engaging said tab member, one of said members having an inwardly extending resilient lug and the other having an opening in which said lug engages.

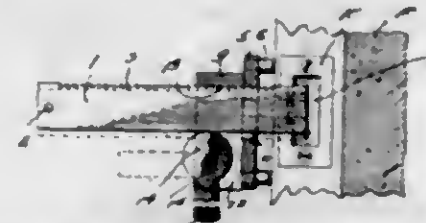
1,308,472. ATMOSPHERIC GAS-BURNER. WILLIAM BARRETT, Coburg, Victoria, Australia. Filed Apr. 2, 1919. Serial No. 287,049. 1 Claim. (Cl. 158-118.)



The herein described burner comprising a hollow member forming a mixing chamber, provided in its side wall with air inlet openings and at one end with an opening for the reception of a gas jet; a nozzle detachably connected to the opposite end of the said member and projecting therefrom, an outer nozzle open at its inner end and in which the first named nozzle is ar-

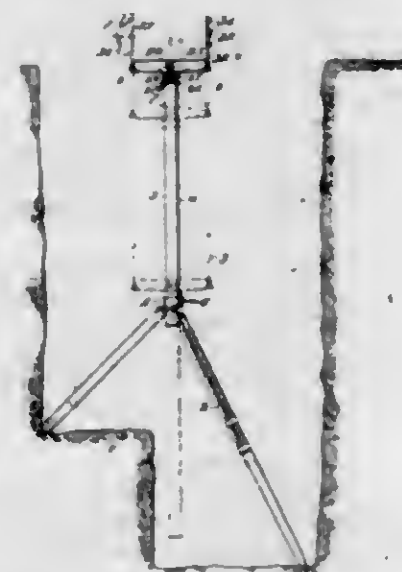
ranged, said outer nozzle being directly permanently connected to and carried by the first named nozzle and detachable therewith from said member, and the open rear end of said outer nozzle forming an air intake independently of the mixing chamber, and regulating means to vary the effective area of the air inlet opening of the said first named member.

1,308,473. DOOR-LOCK. LOUIS V. ROEMER and HAROLD THOMASSEN, Dayton, Ohio. Filed Nov. 26, 1918. Serial No. 264,200. 1 Claim. (Cl. 16-8.)



In a door securer, the combination with a strip toothed along its upper edge and hooked at its front end; of a plate having an opening through which said strip passes, a pair of feet projecting forward from the plate at one side of the opening, a set screw through the plate at the other side of its opening; a boss carried by the rear side of said plate and having an upright slot aligned with the opening therein, the top of the slot and opening being toothed, and an eccentric comprising a head pivoted within the slot in the boss and a handle pendant therefrom, for the purpose set forth.

1,308,474. APPARATUS FOR LOCATING SNIPERS AND FOR OTHER PURPOSES. DAVID W. BAUNTON, Denver, Colo. Filed Sept. 14, 1917. Serial No. 191,465. 17 Claims. (Cl. 33-46.)



1. In an apparatus for locating snipers and for other purposes, a decoy or target having a pair of spaced-apart perforable plates adapted to be penetrated by a flying object and when so penetrated the rotation of the holes made therein serving to indicate the direction from which the object came and affording a basis for determining the location of the origin of flight, an adjustable support therefor, and means for maintaining the device against indeterminate movement.

6. In an apparatus for locating snipers and for other purposes, a support, a pair of plates stationarily applied thereto and forming a decoy or target, a table adjustably mounted upon said support, means for projecting said plates to a position wherein they may be in the line of flight of a bullet or other object and be perforated thereby, and means for adjusting said table independently of the plates to correspond with the direction

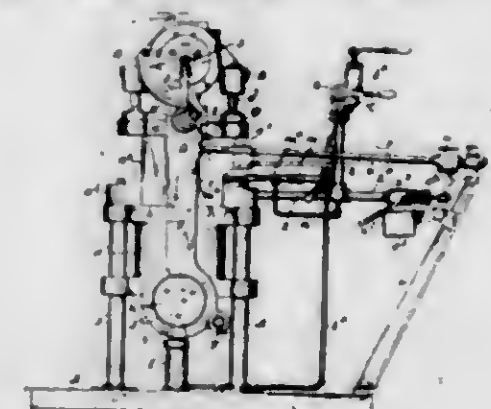
and inclination of the line of flight of said object as indicated by the perforations in said plates.

9. In an apparatus for locating snipers and for other purposes, a stand, a support mounted on an upright carried in said stand, a rack on said upright and a gear on said stand by which said support may be vertically adjusted, means for adjusting said support angularly with respect to said upright, a pair of plates carried by said support at opposite ends thereof, a table mounted on said support independently of the plates and angularly adjustable with relation thereto, and a telescope adapted to be mounted on said table, for the purpose specified.

14. In an apparatus for locating snipers and for other purposes, a decoy or target by which the line of flight of a bullet or the like may be indicated, a support for said decoy, and a telescope table rotatably mounted on said support and angularly adjustable with relation thereto independently of the decoy or target and having parallel rulings whereby it may be brought into alignment with the line of flight of the bullet or the like as indicated by the decoy.

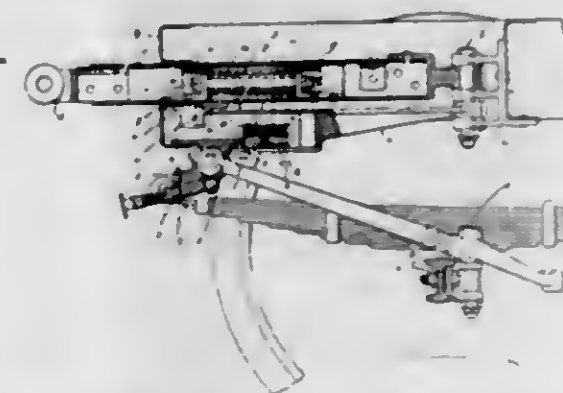
15. In an apparatus for locating snipers and for other purposes, the combination of decoy or target plates, a leveling support on which they are mounted, a leveling head on which said support is mounted, an adjustable tripod carrying said head, and means for maintaining the decoy or target plates against indeterminate movement in azimuth.

1,308,475. TILTING HEAD FOR MOLDING-PRESSES. CHARLES F. BRUBORGH, East Orange, N. J. Filed Feb. 7, 1918. Serial No. 215,822. 11 Claims. (Cl. 18-5.3.)



1. A molding-press having a seat to support the mold-bottom, a head operated to move the mold-cope to and from such bottom in the pressing operation and movable laterally from the mold-bottom to expose the same and having means for tilting such head to turn the mold-cope into an accessible position.

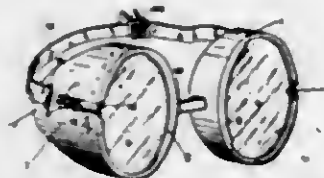
1,308,476. DRAFT AND STEERING GEAR. KENNETH M. BYRON, Detroit, Mich., assignor to Orra E. Byron, Washington, D. C. Filed May 8, 1918. Serial No. 233,196. 7 Claims. (Cl. 21-137.)



7. In a vehicle, an axle, a chassis, springs for supporting the chassis on the axle, a draw bar pivoted to the

chassis, a lever pivoted to the chassis co-axially with the draw bar, a latching arrangement between the lever and the draw bar, and a steering arm pivoted to the axle co-axially with the said lever and the said draw bar.

- 1,308,477. GOGGLES. WILLIAM N. BLANCHARD, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 20, 1918. Serial No. 223,589. 4 Claims. (Cl. 2-149.)



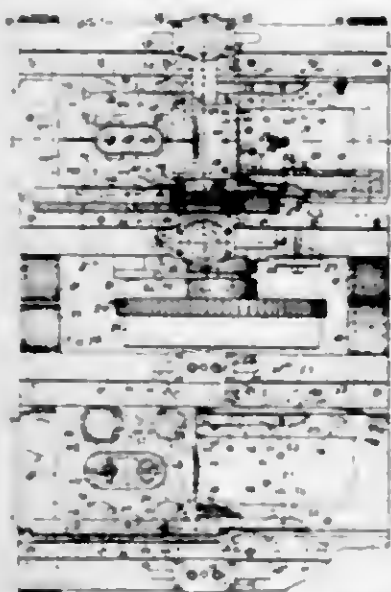
1. The combination with a frame having a lens-receiving seat, of a movable keeper attached to one side of the frame and adapted for engagement with a lens to retain the same in position on the seat, a screw pin carried by the frame and engaging the keeper whereby to lock the same in position.

- 1,308,478. PARACHUTE. EVERARD RICHARD CALTHROP, London, England. Filed Nov. 10, 1916. Serial No. 130,975. 6 Claims. (Cl. 244-21.)



1. The combination with a parachute of a skeleton or wheel like support for said parachute and its rigging, means for attaching said support and parachute to the back of the wearer and means for releasing and actuating the said support to bring the same into operative position.

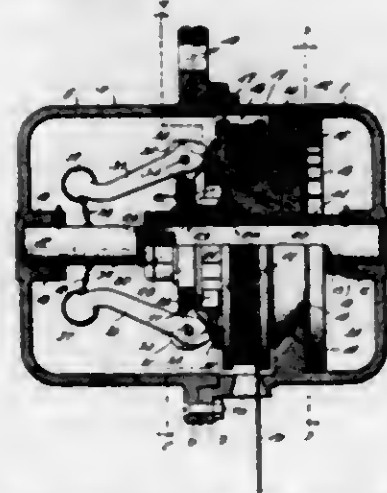
- 1,308,479. TRIMMING-MACHINE FOR RUBBER ARTICLES. DEXTER R. CAMPBELL, Boston, Mass., assignor to Frank Romill, Newton, Mass. Filed July 29, 1918. Serial No. 247,161. 11 Claims. (Cl. 164-19.)



1. A machine of the character stated, comprising a frame having guides, a slide movable on said guides, a

trimming die carried by the slide, a rotary pressure roll adapted to cooperate with said die and adjustable relatively thereto, the frame being provided with means permitting adjustments of the roll toward and from the slide, means for reciprocating the slide, and torque-transmitting connections between the slide and roll, including a rack attached to the slide, a primary gear meshing with the rack and having a fixed axis, a secondary gear attached to the roll and adjustable therewith, said gears having pitch lines of equal diameter, and a connecting gear having a fixed axis and meshing with said primary and secondary gears.

- 1,308,480. FIRE-ESCAPE. MARCEL CAOCETTE, Clifton, N. Y. Filed Aug. 24, 1918. Serial No. 251,302. 5 Claims. (Cl. 254-157.)

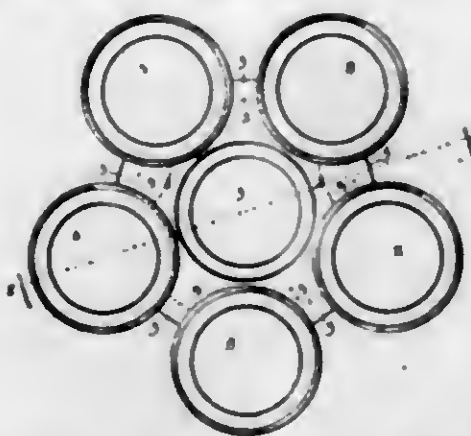


1. In a fire escape of the character described, a support, a rotatable shaft carried thereby, a clutch element secured to the support, a drum rotatable upon the shaft and having a coasting clutch element, a cable to be wound upon the drum, a centrifugal governor carried by the shaft and adapted to shift the drum longitudinally thereof in one direction, a ratchet wheel secured to the shaft to rotate therewith and serving to rotate the centrifugal governor, and a pawl pivotally connected with the drum and engaging the ratchet wheel.

- 1,308,481. PROTECTING REFRACTORY FURNACE-LININGS. HOWARD F. CHAPPELL, New York, N. Y. Filed June 12, 1918. Serial No. 239,668. 3 Claims. (Cl. 266-43.)

1. The method of protecting refractory furnace linings containing silica, from fusion and disintegration, which consists in supplying aluminiferous material in a finely-divided condition to the exposed surfaces of the lining when such surfaces are brought to such a temperature as to partially fuse or soften them; substantially as described.

- 1,308,482. CULINARY UTENSIL. ALBERT COHN and LOUIS H. DESS, Chicago, Ill. Filed May 20, 1918. Serial No. 235,495. 5 Claims. (Cl. 53-6.)



1. A culinary utensil comprising a binder placed between a series of cups and provided at its edge with a

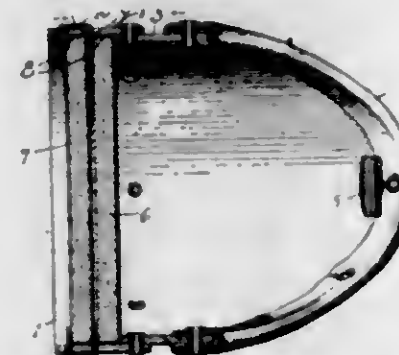
series of recesses of an area sufficient to but partially surround the cups to be secured therein, and a series of cups fitting at a portion of their edges in said recesses and secured therein.

- 1,308,483. STOCKING. THOMAS G. CRAIGHEAD, Seattle, Wash. Filed Mar. 31, 1919. Serial No. 256,382. 1 Claim. (Cl. 2-23.)



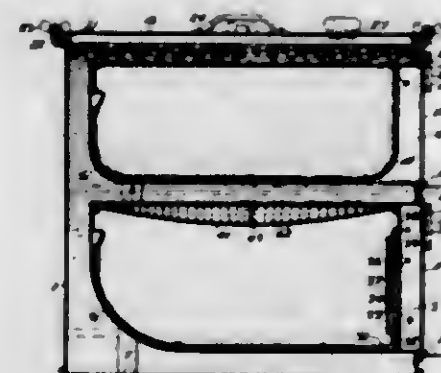
A stocking having a leg portion and a foot portion, the end of the foot portion having individual stalls for the toes, the material of the foot at the base portions of the stalls being of increased length transversely of the foot as compared with the similar length of material beyond such point, whereby to provide a permanent relatively increased space within the stocking at the entrance to the toe stalls.

- 1,308,484. OPHTHALMIC MOUNTING. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 25, 1917. Serial No. 144,403. 3 Claims. (Cl. 2-149.)



1. A device of the character described including frame members having rear stops, lenses fitting within the frames and certain of said lenses bearing against the stops, and locking devices having portions projecting into the field of the lenses for securing the lenses within the frames and retaining them in spaced relation with respect to each other.

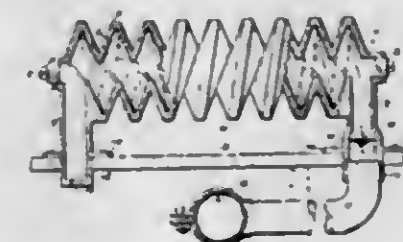
- 1,308,485. COOKER. ALFRED M. DEMUTH, San Francisco, Calif., assignor to John A. Kelly, Chicago, Ill. Filed Sept. 13, 1916. Serial No. 119,857. 9 Claims. (Cl. 126-20.)



1. In a cooker, the combination of a boiler having an opening in one wall thereof, a door movably secured to

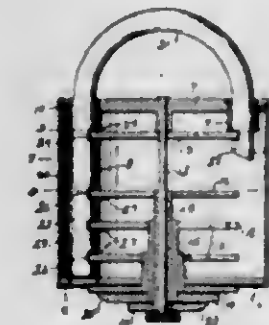
said wall and closing said opening, means for filling said boiler with water, a chamber extending into said boiler and closed except at said opening and the walls of which are secured to said wall around said opening, and a cooking vessel movable into said chamber through said opening, said vessel fitting snugly within the chamber and with the walls of the vessel contacting with the chamber walls, the wall of the chamber forming a closure for the vessel.

- 1,308,486. AUTOMOBILE-HEATER. GEORGE H. EARLE, Valparaiso, Ind. Filed Dec. 18, 1915. Serial No. 67,586. 8 Claims. (Cl. 257-16.)



3. A heat radiator, comprising a screw shaped member having an open center, a screw formed passage surrounding the same and continuously connected therewith, suitable inlet and outlet openings thereto, and means for controlling passage through the member.

- 1,308,487. PERMUTATION-PADLOCK. FRED L. HATON, Rew, Pa. Filed Aug. 21, 1918. Serial No. 250,524. 2 Claims. (Cl. 70-118.)



1. In combination, a casing, a tube extending longitudinally therethrough, a shackle having relatively long and short arms and the longer arm being rotatably and longitudinally movable in said tube, said tube being provided with a series of spaced openings and the longer shackle arm having spaced notches to register therewith, said tube being also provided with a slot disposed longitudinally thereof, an outstanding member carried by the longer shackle arm and extending within said slot, a series of permutation locking disks disposed through said openings and engaged in the notches and each having a notch in its periphery to register with the notch in the shackle arm when the disk is rotated to a predetermined position, the longer arm of the shackle having an additional notch therein, the short arm of the shackle being adapted to extend into one end of the casing and also having a notch therein, and an additional rotatable locking disk having notches in its periphery at diametrically opposite points and adapted for engagement in the latter notches in the shackle arms.

- 1,308,488. FASTENING FOR DETACHABLE WHEELS. JAMES LEBLIE EDWARDS, Birmingham, England. Filed Dec. 6, 1917. Serial No. 205,800. 4 Claims. (Cl. 21-31.)

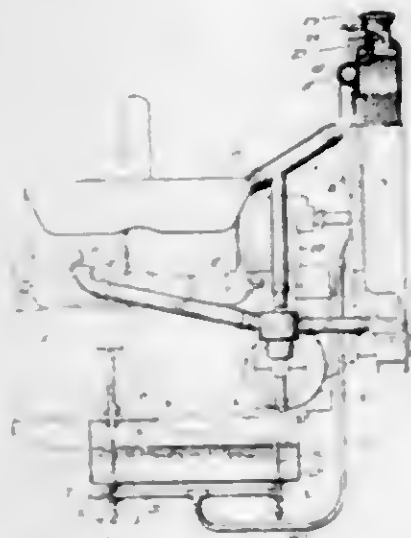
1. In a wheel, a removable wheel body, a rotatable locking ring carried thereby, springs to urge said ring to

one direction a stud on said ring an arm pivoted on the wheel body and manually engageable with said stud to move the ring against the tension of said springs said



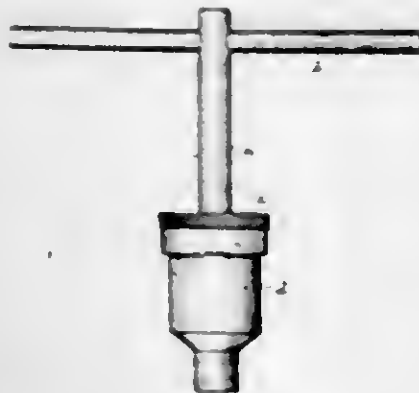
arm being adapted to engage said stud and thereby hold said ring in unlocked position.

1,308,489. HYDROCARBON-MOTOR. WILLIAM E. FOLTZ, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1916. Serial No. 78,409. 10 Claims. (Cl. 123-174.)



1. In a liquid circulating system, a plurality of tanks, a pipe connecting them, one of said tanks being a closed receptacle and adapted to normally carry a supply of liquid therein, another of said tanks having a vent leading to the atmosphere, the arrangement of said pipe and connections being such that vapors generated in said first tank shall be condensed and carried to said second tank, and means for draining the liquid in said tank at a selected predetermined level.

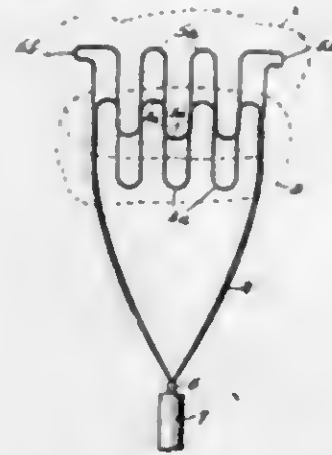
1,308,490. STUD-DRIVER. FRANK M. FUNK, Detroit, Mich. Filed Jan. 29, 1919. Serial No. 273,734. 6 Claims. (Cl. 81-55.)



1. A stud driver, having in combination, a stem provided with an opening in its side, a sleeve having a threaded outer end and adapted to fit onto and be se-

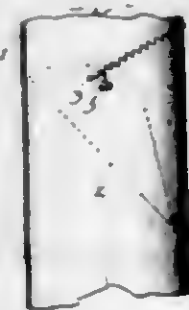
cured to the stem, a ring fastened to the sleeve provided with an opening, one of said openings being an oblique slot, and a ball in the space formed by the overlapping of said openings.

1,308,491. CLEANING IMPLEMENT. DOROTHY GAMBLE, New York, N. Y. Filed June 19, 1917. Serial No. 175,556. 1 Claim. (Cl. 15-59.)



An implement for window cleaning comprising a handle, a pair of flat resilient wire frames having reentrant portions, one of said frames being of greater extent than the other, and a pair of cleaning cloths, each independently engaged in the reentrant portions of one frame and held against the other by the resiliency of the frames.

1,308,492. DAMPER FOR STOVEPIPES. JOSEPH HUTCHINSON and CLIFFORD C. HAMILTON, Gull Lake, Saskatchewan, Canada. Filed Feb. 8, 1919. Serial No. 275,865. 1 Claim. (Cl. 126-292.)



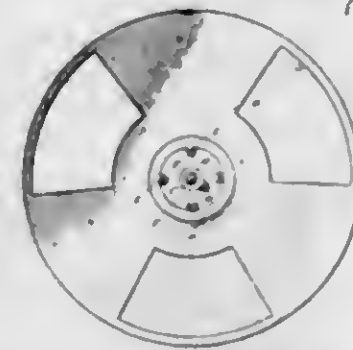
The combination with a draft pipe, of a damper arranged therein and adapted to be controlled by the draft, the said damper having journal pins engaging the pipe and extending through the same, a corrugated wire having its ends secured to the journal pins and partially embracing the pipe and spaced apart therefrom to swing freely with respect thereto, and a counterweight adjustable on the wire.

1,308,493. GAGE. FERNANDO OSCAR JAGUES, Jr., Providence, R. I., assignor to The Central Tool Company, Cranston, R. I. Filed Jan. 22, 1919. Serial No. 272,568. 3 Claims. (Cl. 33-168.)



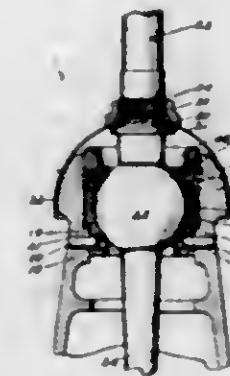
1. A gage having a solid oblong handle, and provided with a depression at each end, a ball on each end of the handle and seated in said depression, a locking cap on each end of the handle, each locking cap having an opening through which a ball protrudes, said locking caps being in screw-threaded engagement with the handle of the gage.

1,308,494. MOTION-PICTURE SHUTTER. CHARLES FRANCIS JENKINS, Washington, D. C. Filed July 18, 1918. Serial No. 245,483. 3 Claims. (Cl. 68-19.3.)



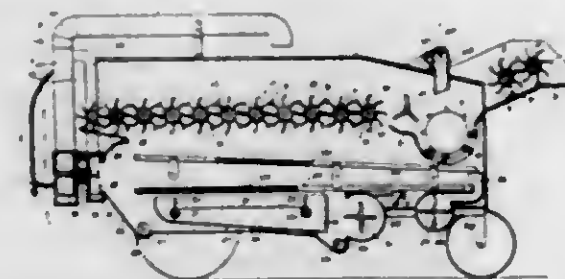
1. A shutter having a hub with a slightly raised concentric boss of a diameter many times that of the shutter shaft, a thin shutter plate perforated to fit over the boss, a concentric annular clamping plate resting upon the shutter plate outside the peripheral line of the boss, and adjustable clamping devices carried by the boss and overlapping upon the clamping plate.

1,308,495. MOTOR-VEHICLE GEAR-SHIFTING LEVER. FRANK JOHNSON, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 20, 1916. Serial No. 132,311. 5 Claims. (Cl. 74-39.)



1. In a device of the class described, the combination with a supporting member having a metallic cup portion therein, and a ball member arranged in said cup portion and having the center thereof below the top of said cup, of a resilient member capping said cup and retaining said parts together.

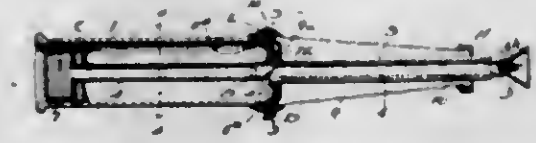
1,308,496. GRAIN-SEPARATOR. ROY R. JOHNSTON, Cosmopolis, Wash. Filed Mar. 24, 1916. Serial No. 86,400. Renewed Nov. 19, 1918. Serial No. 263,235. 1 Claim. (Cl. 193-21.)



In a grain separator structure, the combination, with a separator including a casing, of a straw retaining housing positioned at the rear end of the separator and having its bottom inclining downwardly to the longitudinal center thereof, a fan casing extending upwardly from the center of said bottom, a fan in said casing rotatable transversely to the direction of feed of straw through the separator, a blower pipe, a branch pipe communicating with

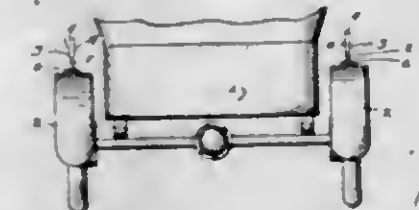
said housing at the bottom thereof and extending upwardly along one side of the separator casing, said branch pipe communicating with said blower pipe, said fan casing provided with an opening aligning with the communicating opening between said housing and said branch pipe.

1,308,497. INSECT-CATCHER. BENJAMIN R. JOLLY, Raleigh, N. C. Filed July 6, 1918. Serial No. 243,635. 9 Claims. (Cl. 43-1.)



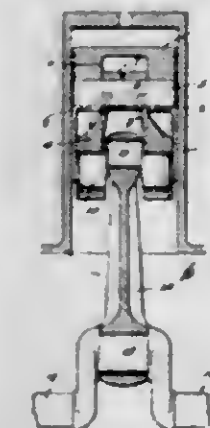
1. An insect catcher comprising a tube, a piston within the tube, a spring for operating the piston, a catch for holding the spring in compressed condition, a trigger for releasing the catch, a removable receptacle secured to one end of said tube and a forwardly projecting intake tube having communication with the interior of said receptacle.

1,308,498. SIGNALING DEVICE. CHARLES F. KAT, Spokane, Wash. Filed July 7, 1916. Serial No. 107,904. 3 Claims. (Cl. 240-7.)



1. A traffic indicator, comprising in combination, a hollow base supporting a bearing pin, a rotatable standard mounted upon said base and upon said pin, a reflector ring carried by said standard, and having said standard projected therein, an illuminating element on the upper end of said standard, an electro-magnet mounted within said base, a movable core for said magnet carried by said rotatable standard, means for connecting said illuminating element into an electric circuit, said circuit being closed and said casing being rotated when said electro-magnet is energized to attract said core and means for restoring the casing to normal position.

1,308,499. INTERNAL-COMBUSTION ENGINE. FRED L. KUTCHENAKITEA, Springdale, Pa. Filed Sept. 4, 1918. Serial No. 252,506. 1 Claim. (Cl. 74-17.)



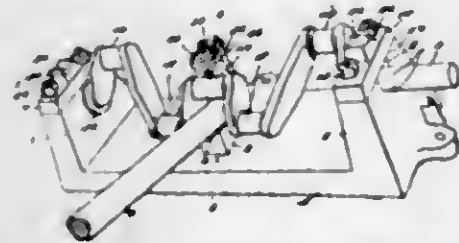
The combination with the piston and the crank shaft of an internal combustion engine, of hangers in the piston, the outer ends of the hangers being spaced; a retainer engaging the piston and the inner ends of the hangers; and a pitman connected with the crank shaft; a second shaft journaled in the outer ends of the hangers and including means operating in the space between the outer ends of the hangers for connecting the second shaft eccentrically with the pitman.

1,308,500. BACK-REST. ERNEST G. LINDBLOM, Providence, R. I. Filed May 9, 1918. Serial No. 233,499. 1 Claim. (Cl. 155-22.)



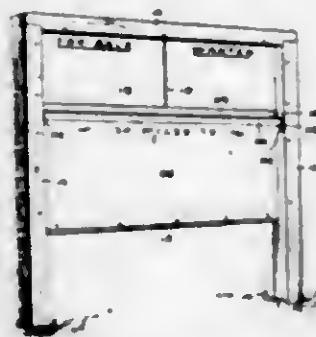
A backrest including a substantially rectangular frame member comprising parallel side bars, each provided at each end with an eye bolt, hook members swingingly connected to the eye bolt in one of the said side bars, and having their free ends provided with books adapted to engage the eye members on the other side bar whereby the two side bars may be held in spaced relation when the backrest is in operative position, a canvas covering having its marginal longitudinal edges fastened to the said parallel bars whereby the said canvas covering is held under a tension when the said hook members are in operative position, props pivotally connected to the upper ends of the said side bars, and means connected to the said props substantially intermediate their ends to maintain the props in parallel relation.

1,308,501. CRANK OR CAM SHAFT ALINEMENT-INDICATOR AND STRAIGHTENER. WILLIAM S. LUTYLL, Spokane, Wash. Filed Mar. 19, 1919. Serial No. 283,655. 8 Claims. (Cl. 153-32.)



1. As a means of detecting dis-alignment in a crank or cam shaft and straightening the same, a base having end blocks for rotatively holding the end journals of the shaft, alignment indicating means for peripherally engaging the central journal of the shaft to indicate dis-alignment as the shaft is rotated, and means for engagement with said central journal to stress or straighten the shaft into an aligned condition.

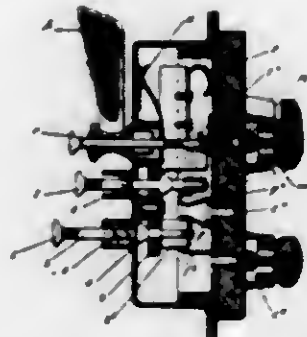
1,308,502. COMBINED SIGN AND BULLETIN BOARD. FRED H. LOVELESS, Chicago, Ill., assignor of two-thirds to James Rowan and William M. Hastey, Marion, Ind. Filed Aug. 24, 1918. Serial No. 231,334. 6 Claims. (Cl. 40-125.)



1. A combined sign and bulletin board comprising a frame, a sign board composed of two or more sections with an air gap between the edges of the sections, and a

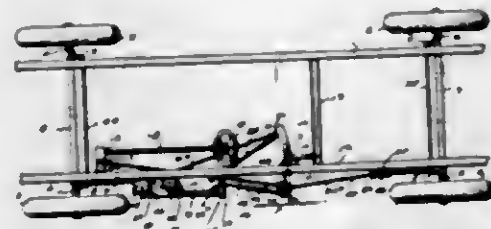
water-table arranged along the upper edge of the lower section for protecting the latter against the water drained from the upper section of the sign board.

1,308,503. IGNITION-MAGNETO SWITCH FOR INTERNAL-COMBUSTION ENGINES. GIUSEPPE DI PIETRO MARTINI, Milan, Italy. Filed May 21, 1918. Serial No. 235,841. 2 Claims. (Cl. 123-148.)



1. The combination with a plurality of ignition magnetos for internal combustion engines, of a switch comprising a lever with which the engines are started in succession through a single starting magneto, and a contact-button disk for each motor, by means of which disks each motor is connected up to one or the other or both of its ignition magnetos, each contact-button actuating a spindle fitted with a cone adapted to slide in a hole formed in the disk, and each disk being loaded by a spring that tends to maintain the disk holes eccentric relative to the spindle cones so that, when a contact-button is depressed and the corresponding spindle and cone move axially, the disk swings through a certain angle and lets the cone of the actuated spindle pass through the corresponding holes and allows the spindles of the buttons previously depressed to spring back.

1,308,504. STEERING APPARATUS. ROBERT W. MORRICK and EDWARD H. DREW, Madison, Wis. Filed Jan. 10, 1919. Serial No. 270,553. 3 Claims. (Cl. 21-193.)



1. The combination with a vehicle frame, of front and rear wheel spindles rockably mounted therein, a steering frame rockably supported by said vehicle frame, front and rear steering rods connected to the front and rear spindles, respectively, for rocking the same, connections between said steering frame and the steering rods for causing movement of said rods to rock said spindles when the steering frame is rocked, the connections for said rods being independently adjustable longitudinally of the steering frame so as to be positioned at either side of the axis thereof or at the axis of said frame, optionally, and means for rocking said steering frame.

1,308,505. NUT-LOCK. HAROLD PARKER, Hartford, Wis. Filed Nov. 24, 1917. Serial No. 203,757. 1 Claim. (Cl. 151-5.)

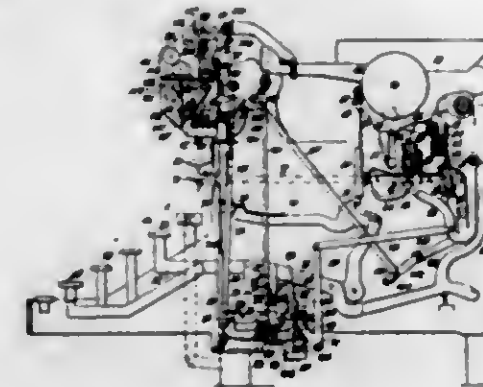
A nut lock including a bolt having a pair of longitudinal grooves therein, said grooves being positioned coincident with lines setting off a quadrant upon a cross section of the bolt, a nut having an annular recess in the top thereof around the threaded opening therethrough and communicating therewith, said nut being

further provided with a pair of oppositely arranged L shaped grooves communicating with the annular recess therein, and a washer adapted to fit in said annular



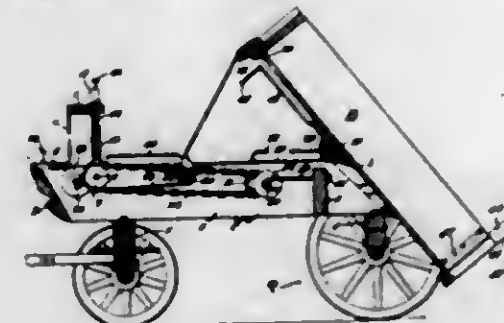
recess in the nut and provided upon its outer periphery with oppositely arranged extensions to be received in the L shaped grooves, said washer being further provided upon the edge of the central opening therethrough with a single inwardly extending extension to fit one of the grooves in the bolt, said extension being arranged at right angles to said oppositely disposed extensions for the purpose set forth.

1,308,506. COMBINED TYPE-WRITING AND COMPUTING MACHINE. HENRY L. PUTMAN, East Orange, N. J., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1915. Serial No. 24,390. 99 Claims. (Cl. 235-59.)



1. The combination with a totalizer, of numeral keys for controlling computing operations carried on by said totalizer, typewriting mechanism controlled by said numeral keys, and including a case-shift to enable the writing of upper and lower-case characters by said numeral keys, a master wheel for said totalizer, connections including a single universal shaft between said numeral keys and said master wheel whereby each numeral key positively drives said master wheel by its depression, and case-shift-operated means for interrupting said connections at said shaft.

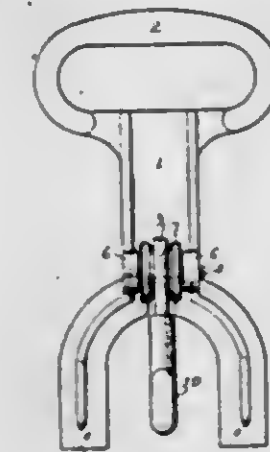
1,308,507. DUMP-BOX AND FRAME. FLOYD K. RICKS, Canton, Ill. Filed Oct. 11, 1917. Serial No. 195,974. 1 Claim. (Cl. 298-14.)



In a device of the class described, a frame comprising side members and a rear cross bar; a forward shaft journaled in the side members; a rear shaft; means for mounting the rear shaft on the side members, for rotation and for adjustment longitudinally of the frame; an endless chain assembled with the shafts and comprising links; retainers mounted on the upper edges of the side members and having overhanging ends spaced to define

an opening in the top of each retainer; a body having side trunnions insertible into the retainers through the openings, the trunnions being mounted to rock in the retainers and to move longitudinally of the retainers, thereby permitting a tilting of the body and a reciprocatory sliding movement thereof; a depending projection on the body in front of the trunnions, the projection being bifurcated to receive one of the links of the chain, and being adapted to be received between adjoining links of the chain whereby the chain may advance the body; a tightener mounted on the rear cross bar and cooperating with the rear shaft to position said link for reception between the bifurcations of the projection, the trunnions cooperating with the forward ends of the retainers to cause the projection to engage with said links; and means at the forward end of the frame for rotating the forward shaft.

1,308,508. PLATING-HOOK. OTTO ROEDER, Jersey City, N. J. Filed Sept. 4, 1918. Serial No. 252,510. 9 Claims. (Cl. 204-8.)

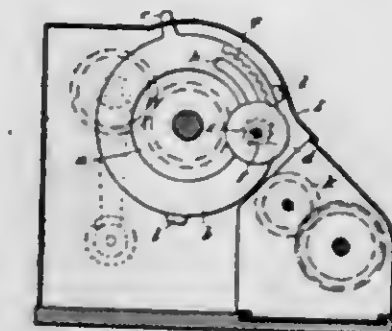


3. A plating hook comprising a shank, a lip on said shank adapted to rest on a bus bar, a bifurcated extension below the lip, blocks on the bottoms of the bifurcations, a bushing detachably secured on the shank and a hook proper secured to the bushing.

1,308,509. PROCESS FOR THE PURIFICATION OF ALKALI-METAL-CHLORIDE SOLUTIONS. CLAUD NISSEN RITNER, Trondheim, Norway, assignor to Norsk Alkali A/S, Trondheim, Norway. Filed Dec. 12, 1918. Serial No. 266,518. 5 Claims. (Cl. 204-58.)

1. In the process of electrolyzing alkali metal chloride solutions, the step which consists in filtering the solution to be electrolyzed at a temperature not less than that of the electrolyzer.

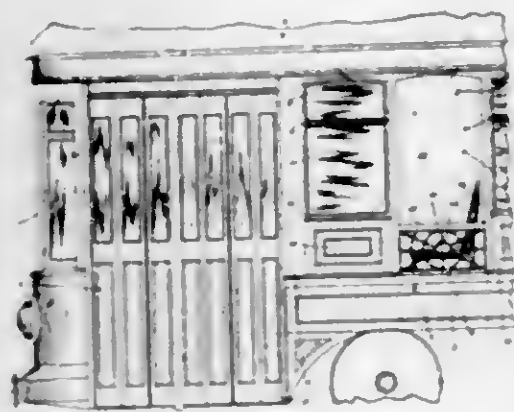
1,308,510. REVOLUTION-COUNTING MECHANISM FOR CALCULATING-MACHINES. KARL VIKTOR RUDIN, Stockholm, Sweden. Filed Mar. 26, 1918. Serial No. 224,821. 2 Claims. (Cl. 235-73.)



1. A calculating machine including a main shaft, a cam, and a setting disk rotatably mounted thereon, a gear formed upon the cam disk, the teeth of which pro-

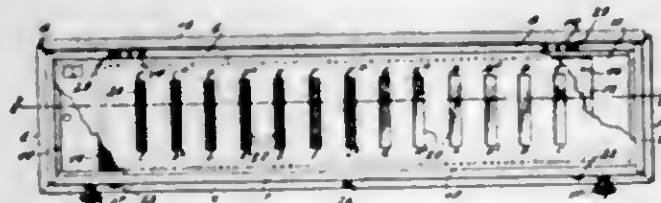
ject inwardly, such cam disk being further provided with an arc slot below such gear, an indicating wheel rotatably mounted upon a shaft secured to such setting disk, and a pinion mounted upon such latter shaft, each pinion engaging said gear.

1,308,511. CONVERTIBLE CAR. CHARLES BREWSTER STEELE, New York, N. Y. Filed Mar. 23, 1917, Serial No. 157,052. Renewed Mar. 15, 1919. Serial No. 282,880. 43 Claims. (Cl. 103—332.)



1. A car having a roof, walls, and floor, seats above the floor, openings in the walls terminating at a point intermediate the seat rests and floor, members filling the openings flexibly attached to one another all movable under the roof in elongated sequence.

1,308,512. MEANS FOR DETERMINING COLOR COMBINATIONS. HENRY FITCH TAYLOR, New York, N. Y. Filed May 19, 1917. Serial No. 169,011. 17 Claims. (Cl. 88—1.)



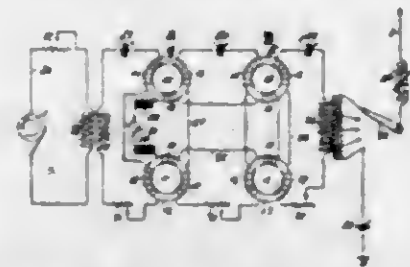
1. An instrument of the character described, comprising a representation of the solar spectrum, and means comprising a representation of a musical tone harmony associated therewith for selecting a harmonious color combination.

1,308,513. TRACTION WHEEL. FRIEDRICH VOGELI, Berne, Switzerland. Filed Mar. 27, 1919. Serial No. 285,672. 4 Claims. (Cl. 21—211.)



1. In a traction wheel of the character described, the combination with a hub and a perforated rim, of a member connecting said hub and said rim, a soil gripping member having one end pivotally supported adjacent said rim and provided with projections adapted to extend through the perforations in the rim, and means whereby the other end of said soil gripping member may be releasably locked to said hub.

1,308,514. TRANSMITTING APPARATUS FOR WIRELESS TELEGRAPHY AND TELEPHONY. GEORG VON ANCO and ALEXANDER MEISSNER, Berlin, Germany. Original application filed Mar. 6, 1914. Serial No. 822,901. Divided and this application filed Mar. 23, 1917. Serial No. 156,894. 9 Claims. (Cl. 172—281.)



1. An arrangement for increasing the frequency of alternating currents by means of stationary frequency changers, having a plurality of mono-inductive alternating current resistances, comprising a closed iron core carrying primary and secondary alternating current windings and an auxiliary magnetizing winding and means for supplying current to said magnetizing windings, the effective number of ampere turns of the primary alternating current winding being substantially equal to the number of ampere turns of the auxiliary magnetizing winding.

1,308,515. METHOD OF AND APPARATUS FOR PUMPING CORROSIVE LIQUIDS. CHARLES F. WALLACE, Tompkinsville, and MARTIN F. TIERNAN, Jamaica, N. Y. Filed Mar. 14, 1918. Serial No. 222,303. 16 Claims. (Cl. 103—75.)



8. In a device of the kind described, a pump comprising a cylinder, a piston, an intermediate connection between the cylinder and the source of liquid being pumped, valves whereby upon one movement of said piston liquid will be drawn into said intermediate connection and upon the opposite movement the liquid will be forced out of said connection, the relative volumes of the intermediate connection and the piston displacement being such that the liquid being pumped will never enter said cylinder, and means for continually adding small quantities of liquid to the liquid within said intermediate connection.

1,308,516. LACE-TIPPING TOOL. LEON WEINSTEIN, St. Louis, Mo. Filed July 19, 1918. Serial No. 245,741. 2 Claims. (Cl. 81—15.)



1. A manually usable clenching tool of the kind described comprising, in combination, a pair of cooperating opposed jaws, a die-member mounted upon one of the jaws, said die-member being provided longitudinally with a channel convexly rounded at its base and adapted to receive a lace-string-end and a tip partly clenched thereupon, a second die-member mounted upon the other jaw

for cooperation with the first die-member to tightly clench and indent the tip upon the lace-string end, and lever-handles for actuating the jaws and their carried die-members, said second die-member including a block adapted to fit within, and provided longitudinally on its lower face with a channel oppositely disposed to, the channel of the first die-member, the block being also longitudinally provided with a slot opening into its said channel, and a blade provided along one edge with a series of indenting-teeth, the blade being disposed in said slot and fixed rigidly to the block with its said teeth projecting into the said channel of the block.

1,308,517. VULCANIZER. JOHN K. WILLIAMS, Akron, Ohio, assignor to The Williams Foundry and Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 10, 1917. Serial No. 207,827. 4 Claims. (Cl. 18—18.)



1. In a vulcanizer, the combination of heating chambers adapted to receive a tire casing therebetween, said chambers being provided with inset shoulders in their adjacent walls, tire-engaging bead members adapted to fit against such shoulders, and a member slidably mounted between said chambers, said member conforming with the tread surface of the tire casing and having its edges adapted to smoothly meet the walls of said chambers.

1,308,518. FUSE-PLUG. WALTON D. WOOLLEY, Chicago, Ill., assignor to Killark Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed July 17, 1917. Serial No. 181,048. 12 Claims. (Cl. 175—277.)

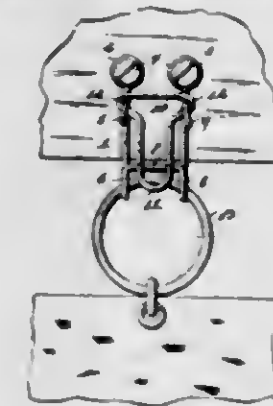


10. A fuse-plug shell comprising a ring of insulation material, an insulation-window seated in the ring, to close the aperture thereof, and a threaded metallic tube having one end fixed in the ring and permanently holding the window to its seat.

1,308,519. AWNING-HOOK. DAVID C. BAKER, East Orange, N. J. Filed Sept. 9, 1918. Serial No. 253,184. 2 Claims. (Cl. 24—228.)

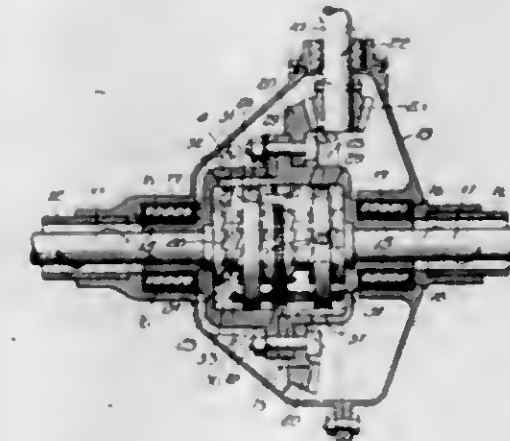
1. A hook formed from a continuous piece of material provided with suitable parts for securing the same in position, formed at one end thereof, a curved bill formed at the opposite end, oppositely arranged loops formed intermediate of said ends, and a tongue formed from a continuous piece of material provided with a U-shaped portion at one end and oppositely arranged curved portions

at its opposite end, said curved portions of the tongue being connected with the oppositely arranged loops of the hook and the said U-shaped portion of the tongue en-



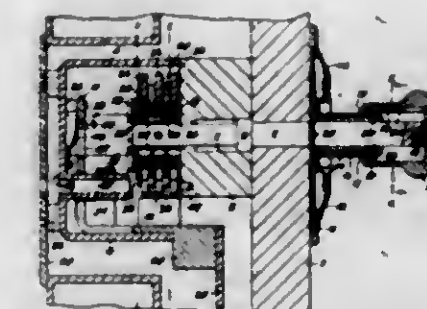
gaging with and overlapping the curved bill to form a normally closed hook.

1,308,520. DIFFERENTIAL MECHANISM. WILLIAM H. BAOWN, Chicago, Ill. Filed July 16, 1917. Serial No. 180,733. 7 Claims. (Cl. 74—7.)



1. In a differential mechanism, the combination of a drive shaft, separate driven shafts, an intermediate driven member, comprising shiftable members provided with ratchet teeth, said shiftable members being rotatively mounted on said driven shafts between sets of ratchet teeth on said driven shafts, and means including a member engaging said driven shafts between said shiftable members for effecting the shifting of the latter into and out of engagement with the sets of ratchet teeth on said driven shafts upon the relative rotation of said driven shafts and said shiftable members.

1,308,521. PERMUTATION-LOCK. FRANCIS JOSEPH BUTTER, Wolverhampton, England, assignor to Chubb and Son's Lock and Safe Company, Limited, London, England. Filed Oct. 12, 1916. Serial No. 125,144. 2 Claims. (Cl. 70—53.)



1. In a permutation lock in combination, a plurality of rotatable permutation disks, rings surrounding the operating spindle, said disks being resiliently secured to

the external surfaces of said rings, plates carried by the lock casing in which said rings are mounted, means for rotating said rings, means on said spindle for limiting the extreme extent of its longitudinal movement, means for defining the intermediate positions of said longitudinal movements, means for rotating said spindle, and means mounted on said spindle and engaging with a pin on the bolt-tail for the purpose of operating the bolt.

1,308,522. SELF-ADJUSTING BALL-BEARING. EYALD DELMAS, Stockholm, Sweden. Filed Dec. 29, 1918. Serial No. 268,367. 6 Claims. (Cl. 64-36.)



1. In a ball bearing, the combination of an outer track-ring having an uninterrupted spherical ball-race, an inner track-ring and balls inserted between said rings, the inner ring having a flange formed at the one end thereof extending in radial direction toward the nearest edge of the outer ring, and a filling opening for the balls formed therein, substantially as and for the purpose set forth.

1,308,523. CONVERTIBLE TABLE, BED, AND SETTEE. JONATHAN O. FOWLER, New York, N. Y. Filed Nov. 12, 1918. Serial No. 262,249. 4 Claims. (Cl. 5-17.)



1. In an article of furniture, a bed frame consisting of three sections hinged together, each section having legs of the same length adapted to support the bed frame in a single horizontal plane, and means to increase the length of the legs of the lower bed section without changing the other ones, thereby bending the hinges at each end of the intermediate section of the unfolded bed and causing the inner section to lie parallel with but in a plane higher than that of the outer one, and the intermediate section to assume an inclined relation between and intersecting the two said planes to constitute an inclined bed frame.

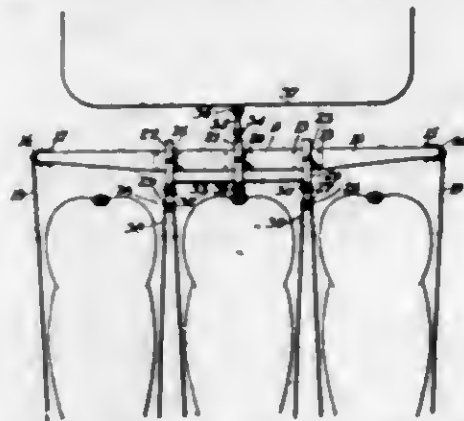
1,308,524. METHOD OF FORMING SAND FOUNDRY-CORES AND SUBSTANCE FOR USE THEREIN. ED-OUARD HAMÉLIUS, Marseille, France. Filed Nov. 26, 1918. Serial No. 264,252. 2 Claims. (Cl. 22-188.)

1. A mastie liquid for agglomerating white sand used for foundry cores composed by adding a small proportion of litharge to boiled linseed oil.

1,308,525. DRAFT-EQUALIZER. FRANK A. LYON, Milford, N. Y. Filed Feb. 11, 1919. Serial No. 210,433. 4 Claims. (Cl. 21-7d.)

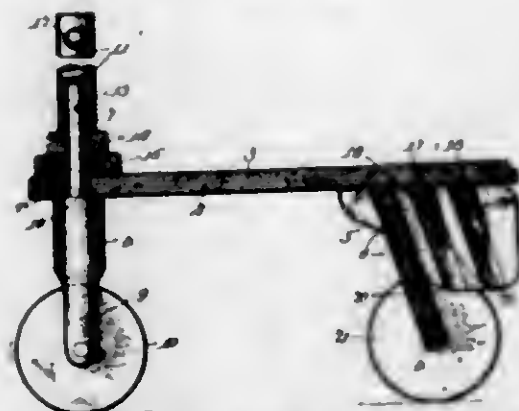
1. A whiffletree comprising a cross bar, a plurality of straps placed transversely of the cross bar extending ap-

preciable distances beyond the sides thereof and pivotally connected thereto, means for connecting one of said straps to the load to be drawn, and means for pivotally



connecting all of the said straps to each other at the draft ends thereof.

1,308,526. VEHICLE. WILLIAM E. McLAREN, Chicago, Ill., assignor to McLaren and Company, a Firm consisting of William E. McLaren, J. W. Sleight, and W. A. Sleight, Chicago, Ill. Filed Dec. 10, 1918. Serial No. 267,478. 4 Claims. (Cl. 208-165.)



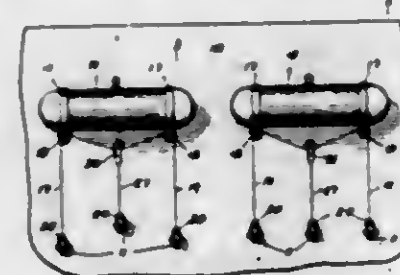
1. In a vehicle, the combination with a frame having a seat member provided near one of its ends with an opening and near its other end with a plurality of stepped guide-ways, of a wheeled steering post extended through said opening and provided below the same with an enlargement to support said member, a handle member detachably secured on the upper portion of the post, at least one collar removably mounted around the post between the seat member and the handle member, and a wheel carrying plate detachably secured in one of said guide-ways.

1,308,527. PROPELLER. LARS G. NILSON, Hoboken, N. J. Filed Sept. 28, 1917. Serial No. 193,627. 11 Claims. (Cl. 170-159.)



9. A propeller comprising a hub of rigid material, blades composed of molded material, and means incorporated in said blades to vary their lengthwise flexibility, whereby they may yield more readily toward their tips.

1,308,528. APPARATUS FOR RAISING SUNKEN VESSELS AND THE LIKE. KARL A. OLSON, Plainsfield, N. J. Filed July 23, 1918. Serial No. 246,339. 2 Claims. (Cl. 114-33.)



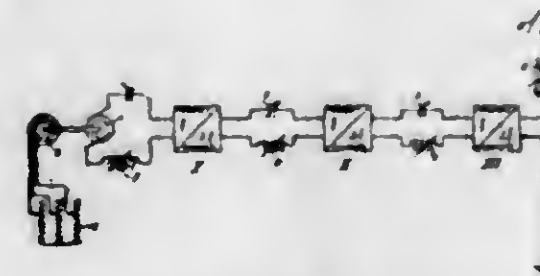
1. In an apparatus for raising sunken vessels, a plurality of pontoons, an equalizing mechanism for said pontoons comprising a plurality of pulleys suspended beneath each pontoon, a cable passed over and around said pulleys, couplings connected with the ends of said cable, a pulley device mounted on and movable longitudinally of said cable between said first named pulleys, a cable suspended from said last named pulley device and a coupling connected with said last named cable.

1,308,529. BOBBIN-WINDING MECHANISM. JOHN N. PETERSON, Milwaukee, Wis., assignor of one-half to Charles F. Zansig, Milwaukee, Wis. Filed Apr. 1, 1918. Serial No. 225,967. 12 Claims. (Cl. 242-22.)



1. A bobbin winding mechanism including a support, a carriage movable on the support and resiliently urged to movement in one direction, a latch member urged for engagement with the carriage to hold it against movement, a bobbin shaft on the carriage, a drive member on the shaft, means for releasing the carriage from the latch member, and means operable by release of the carriage from the latch member for clamping thread adjacent the carriage.

1,308,530. CONTROLLING WIRELESS-TELEGRAPH TRANSMITTERS. GUSTAV REUTH, Sayville, N. Y. Filed May 25, 1916. Serial No. 99,793. 8 Claims. (Cl. 250-17.)



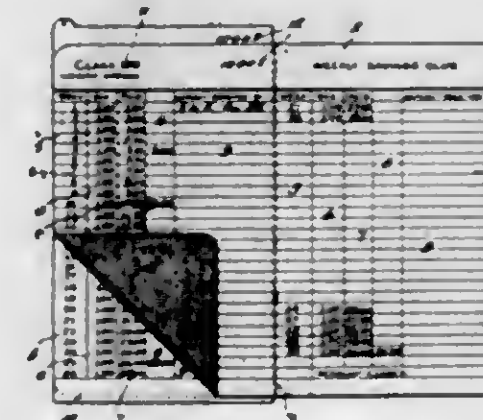
1. A radio transmitting system comprising an alternating current generator for generating current at a fundamental frequency, an antenna for radiating energy at a desired integral multiple of the fundamental frequency, a number of frequency-changers and connecting circuits therefor interposed between the generator and the antenna acting to raise the generator frequency to the desired multiple, the circuit containing the generator being detuned against resonance with its own frequency to the point of stability of the system.

1,308,531. METHOD OF TRANSFERRING CARBON-TISSUE PRINTS. CHARLES W. SAALBURG, Richmond Hill, N. Y., assignor to Multicolor Intaglio Press Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1917. Serial No. 151,165. 2 Claims. (Cl. 41-33.)



1. The process of transferring photographically sensitized carbon-tissue prints having face material of gelatinous content on a paper back, to the periphery of an etchable roll to be etched and subsequently used as a printing roll, consisting in attaching such a sensitized carbon-tissue print to a flexible mount with the back of the print opposed to the mount; in securing a margin of the mount to the etchable roll with the face of the print in position to contact with the roll; in moistening the face of the print to develop adhesiveness in the face; in progressively squeezing the mount and print on the etchable roll by the rolling pressure of a roll parallel to the etchable roll, and by such progressive pressure transferring the print to the etchable roll; in removing said pressure; in detaching the mount from the etchable roll and from the print back; and in detaching the paper back of the print.

1,308,532. BANK DEPOSIT-BOOK. OWLAND V. SMITH, Bridgeport, Conn. Filed Nov. 28, 1917. Serial No. 204,443. 2 Claims. (Cl. 283-57.)

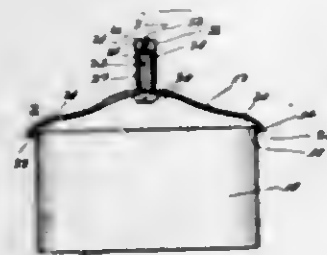


1. In combination with a depositor's bank book consisting of a foldable cover and a sheet secured to the cover along the line of fold and having a carbon surface on its side opposing the cover, the opposite side of the sheet being divided by the line of fold into two pages, each containing data relating to predetermined payments and validating spaces opposite the same, a reversible bank record card having similar prepayment data and validating spaces on each side corresponding respectively to that on the two pages, said card insertible beneath the opposite pages between the carbon surface and the cover.

1,308,533. VESSEL-LID. JAN SMOLARSKI, Omaha, Nebr. Filed Jan. 28, 1919. Serial No. 273,584. 1 Claim. (Cl. 220-57.)

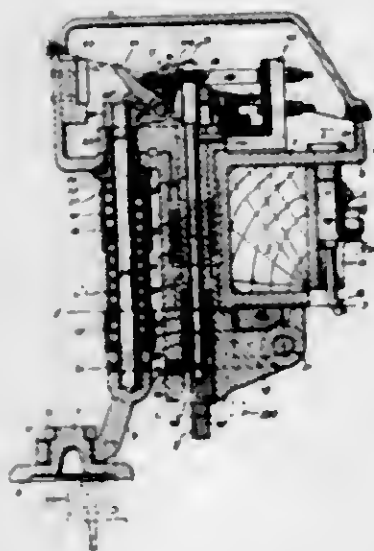
In a vessel lid, the combination with a vessel having a beaded upper edge, and a cover adapted to rest there-

upon, of a cylindrical extension rising from the center of said cover, a rod slidably engaged therein, a pair of oppositely disposed bent bars conforming to the interior contour of said cover, springs engaged with said bars, hooks formed with said bars, said hooks being engageable below said beading, a casing slidably engaged with said cylindrical extension, a spring between said leading



and said extension whereby said bars are normally held in a raised position, and means permitting said casing to be depressed, thereby lengthening said bars and releasing said hooks.

1,308,534. CONTACT-SHOE FOR AUTOMATIC TRAIN-CONTROL SYSTEMS. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Aug. 9, 1915. Serial No. 44,497. 20 Claims. (Cl. 246-150.)

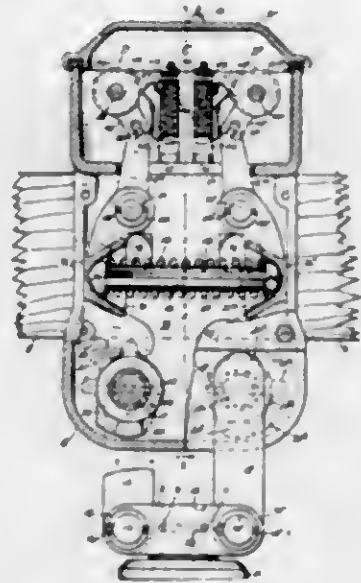


8. A contact shoe for automatic train control systems comprising a body portion provided with an inclosed casing, an oscillatory contact carrying member supported within said casing, a plunger, an arm secured to said member and extending over the end of the plunger, whereby movement of the plunger causes oscillation of the member and also holds it in its oscillated position, and means for operating the plunger.

1,308,535. CONTACT-SHOE FOR AUTOMATIC TRAIN-CONTROL SYSTEMS. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Sept. 21, 1915. Serial No. 51,791. 15 Claims. (Cl. 246-126.)

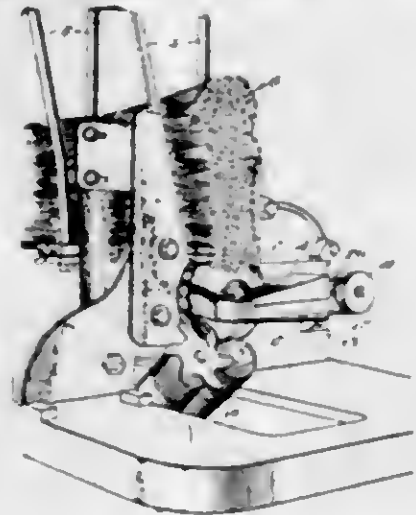
9. A contact shoe for automatic train control systems comprising a foot, parallel crank arms pivotally supported at one end and pivotally connected at the other

end to said foot, levers operated selectively from a normal position by the movement of said crank arms in opposite directions, separate circuit controlling devices



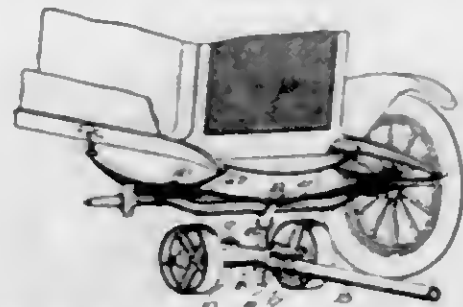
operated by said levers, and means for restoring said levers to their normal position.

1,308,536. GRASS-TWINE MACHINE. OSMAN T. WAITE, Oshkosh, Wis. Filed Sept. 10, 1917. Serial No. 190,583. 3 Claims. (Cl. 28-21.)



3. The combination with the selecting mechanism of a grass twine machine, of a combing blade, and means for moving said combing blade in a direction substantially parallel to the direction of the blades of grass, and through the position occupied by the butt ends of the blades of grass during the selecting operation, substantially as described.

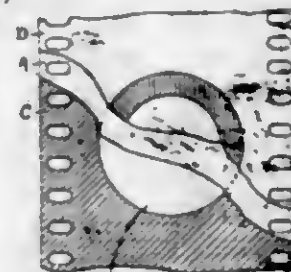
1,308,537. TOWING DEVICE. IRA A. WEAVER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Mar. 3, 1917. Serial No. 152,227. 1 Claim. (Cl. 21-120.)



10. A supporting and towing device for disabled ve-

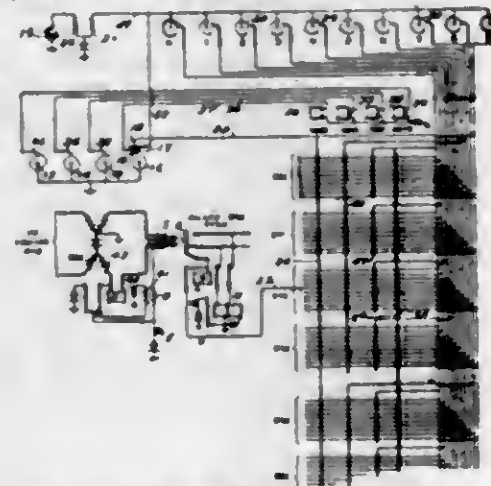
hicles, the combination of a truck having means for engaging a vehicle axle and provided with a flaring socket, a pole mounted on a vertical pivot in said socket, and means for securing said pole in one of a plurality of positions in said socket, substantially as described.

1,308,538. COLOR POSITIVE FILM. PRACY D. BAGWATER, East Orange, N. J., assignor to Brewster Film Corporation, Newark, N. J., a Corporation of New York. Filed Aug. 10, 1914. Serial No. 855,944. Renewed Oct. 16, 1918. Serial No. 258,391. 2 Claims. (Cl. 95-2.)



1. A photographic film consisting of a transparent support having an image in one color on one side, and a similar registering image on the other side consisting of a mixture of a silver salt and another suitable color.

1,308,539. NUMBER-INDICATING MEANS. HENRY P. CLAUSSON, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1916. Serial No. 132,559. 11 Claims. (Cl. 179-18.)



1. In a telephone system, a switch, an incoming line and a group of outgoing lines terminating at said switch, means at said switch for connecting said incoming line to any of said outgoing lines, and means common to said outgoing lines for signaling the number of the line to which the connection is established over said incoming line.

1,308,540. DEVICE FOR LINING TINS OR OTHER RECEPTACLES. JAMES S. CLINTON, Chicago, Ill. Original application filed June 13, 1912. Serial No. 708,442. Divided and this application filed Nov. 5, 1915. Serial No. 59,515. 17 Claims. (Cl. 93-36.)



1. In a cup rake machine in combination, means for giving a paper web an intermittent longitudinal movement, mechanism for cutting out portions of said web to form blanks, means for slitting the outer edge of said blanks, and a device for stamping said blanks into cake tins.

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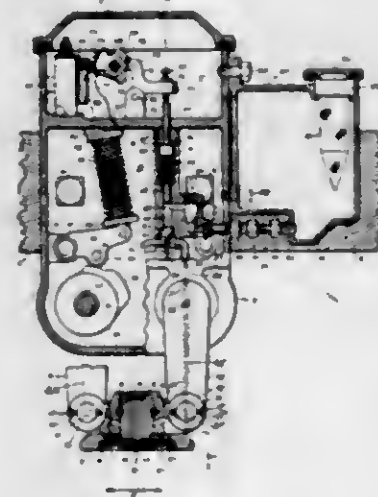
1,308,541. SEPARABLE-TOOTH SAW. WALTER E. CULLEY, Fitchburg, Mass., assignor to Simonds Manufacturing Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed May 3, 1919. Serial No. 294,410. 2 Claims. (Cl. 143-151.)



2. In a separable-tooth saw, a clamping bit or plate having its tip or upper end hardened to a high degree and the inner surface thereof roughened, whereby the projecting parts of the roughened surface will engage the softer metal of the tooth when the two are firmly pressed together and thereby prevent lateral movement of the one in relation to the other.

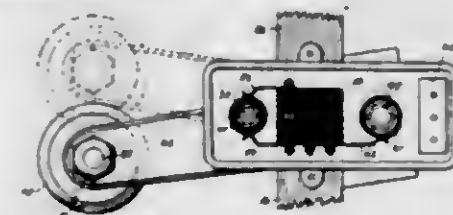
1,308,542. [WITHDRAWN.]

1,308,543. AUTOMATIC TRAIN-CONTROL SYSTEM. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed May 1, 1916. Serial No. 94,687. 18 Claims. (Cl. 246-196.)



11. Means for communicating between a trackway and a moving vehicle comprising, in combination: a contact shoe carried by the vehicle; ramps having relatively narrow contact surfaces and located at intervals along the trackway in position to be engaged by said shoe; and means for automatically applying a substantially uniform coating of oil over the contact surfaces of said ramps as said shoe successively engages them.

1,308,544. CONTACT-SHOE FOR AUTOMATIC TRAIN-CONTROL SYSTEMS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Original application filed July 6, 1915. Serial No. 38,132. Divided and this application filed July 24, 1916. Serial No. 110,948. 16 Claims. (Cl. 246-196.)



13. A contact shoe for automatic train control systems comprising a body portion, a member carried by said body

portion to turn on a vertical axis, an arm carried by said member and arranged to swing vertically, means yieldingly holding said arm in a predetermined lower position, a circuit controlling device operated by the vertical movement of said arm, and another circuit controlling device operated by the partial rotation of said member in one direction.

14. A contact shoe for automatic train control systems comprising a vertically movable arm, resilient means tending to hold said arm in a predetermined lower position, a circular foot having an upstanding bearing stud journaled on a vertical axis in the outer end of said arm, said foot being arranged to be rotated by its engagement with a ramp to scrape the contact surface thereof, and circuit controlling means operated by said arm.

1,308,545. FASTENER FOR CURTAINS AND THE LIKE. ERNEST N. HUMPHREY, New Britain, Conn. Filed Mar. 25, 1919. Serial No. 284,015. 10 Claims. (Cl. 24-211.)



1. A fastener comprising, the combination of a housing adapted to be secured to a curtain, a slide in the housing, a hinged member having an external finger piece for operating said slide and a stud adapted to be secured to a support and to be engaged by said slide.

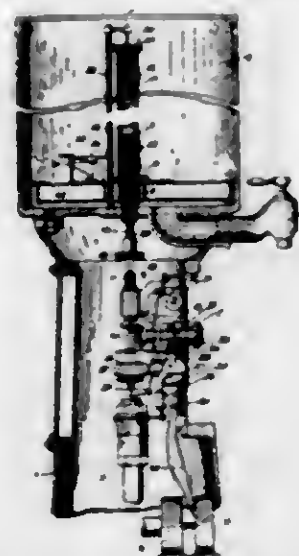
1,308,546. FIRE-EXTINGUISHER. ROBERT W. LEE, Brooklyn, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Nov. 18, 1915. Serial No. 62,115. 1 Claim. (Cl. 169-17.)



In a device of the class described, in combination, a cylindrical receptacle provided at one end with a discharge nozzle and an air inlet, said receptacle forming a piston cylinder and adapted to contain all of the liquid to be discharged, a piston positioned therein and normally standing adjacent the discharge end of said receptacle when the same is filled with the liquid, the liquid being held between said piston and the opposite or handle end of the receptacle, a hollow piston rod connected at one end to said piston and provided with openings adjacent the piston through which the liquid passes from said receptacle, said piston rod extending through the opposite end of the receptacle and being provided exteriorly thereof with a handle by means of which the piston is moved from its normal position at the discharge end of the receptacle to the opposite end thereof and discharges the entire liquid contents by one stroke, regardless of the position in which the device is held, and a tube secured at one end to the discharge nozzle and extending

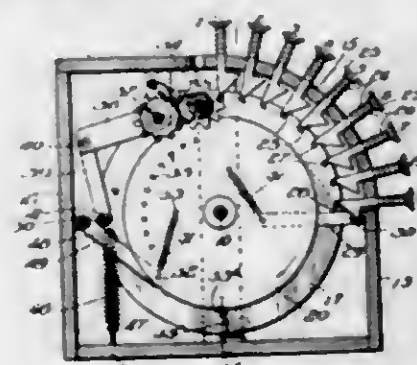
through the piston and interiorly of the hollow piston rod to the handle end thereof and providing therewith a passage for the liquid from the receptacle to the nozzle when the piston is moved from the discharge end to the opposite end of the receptacle, said air inlet admitting air from the exterior thereof directly to the interior space in the receptacle and piston cylinder between the piston and discharge end thereof.

1,308,547. LIQUID-DISPENSING APPARATUS. JOHN H. LONCEK, Toledo, Ohio. Filed July 11, 1918. Serial No. 244,483. 13 Claims. (Cl. 221-100.)



1. In an apparatus of the class described, a liquid receptacle, a float therein, means operable to deliver liquid to said receptacle, and mechanism having a plurality of stops and selectively adjustable to determine the quantity of liquid delivered to said receptacle and automatically operable by coaction of said float with a selected stop at a predetermined point in its upward movement to stop the delivery of liquid to said receptacle by said means.

1,308,548. ADDING OR CALCULATING MACHINE. DANIEL S. McELROY, Springfield, Ill. Filed Nov. 6, 1917. Serial No. 200,479. 8 Claims. (Cl. 235-79.)



1. In a machine of the class described, the combination with a fixed shaft, of a plurality of adding segments journaled thereon, an operating segment journaled on said shaft adjacent to each adding segment, an accumulating wheel corresponding to each adding segment, teeth on each adding segment adapted to mesh with the teeth of the corresponding accumulating wheel, nine numeral keys corresponding to each operating segment, instrumentalities in conjunction with each numeral key for advancing the operating segment a predetermined distance when said numeral key is depressed and simultaneously setting a stop for arresting movement of the adding segment at the corresponding numerical position, a yielding operating connection from each operating segment to the corresponding adding segment, means for placing the same under tension when the operating segment is advanced as aforesaid, means locking each adding

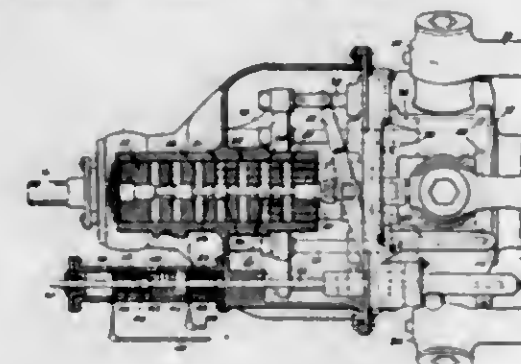
segment against forward movement until its operating segment has been moved forward by depression of a key, a yielding restoring connection from each operating segment to the corresponding adding segment, means for placing the same under tension when the operating segment is returned to its initial position, tension means for returning each operating segment to its initial position, an operative connection from each operating segment to the accumulating wheel of the corresponding adding segment for successively moving said accumulating wheel into and out of position for engagement by the adding teeth of the adding segment, and carrying mechanism in conjunction with the accumulating wheels for carrying tens, substantially as described.

1,308,549. RELEASING-HOOK. OWEN J. MCGOWAN, Brooklyn, N. Y. Filed Dec. 31, 1918. Serial No. 260,098. 6 Claims. (Cl. 9-23.)



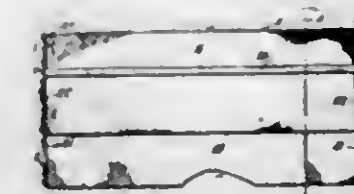
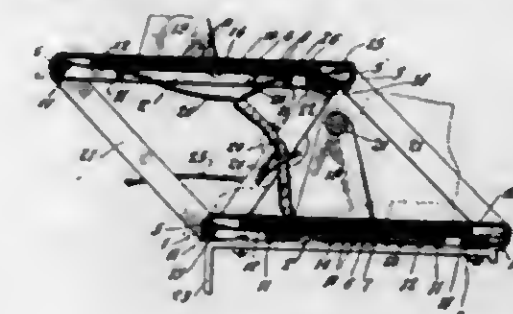
1. The combination in davit apparatus for raising and lowering life-boats of a body part and a hook adapted to be suspended from said davit apparatus and pivoted to said body part and capable of a small independent movement in said body part in addition to its pivotal motion therein whereby said hook is engaged with said body part to hold the hook in position to sustain the weight when said hook is locked and said hook is moved out of engagement with said body part when the strain of the weight comes off from said hook.

1,308,550. CONTROL APPARATUS FOR POWER-DRIVEN MECHANISM. CHARLES MATTHEWS MANLY, Freeport, N. Y. Filed Oct. 17, 1911. Serial No. 654,129. 20 Claims. (Cl. 60-53.)



1. In an apparatus of the class described, the combination of a member to be operated, power driven means for operating said member, movable means for causing said power driven means to operate said member at a speed proportional to the speed of operation of said movable means, and means for adjusting the speed ratio of said operated member and said movable means.

1,308,551. RACK FOR SHOES AND THE LIKE. EDGAR MILLNER, St. Louis, Mo. Filed Apr. 27, 1918. Serial No. 231,228. 8 Claims. (Cl. 219-19.)

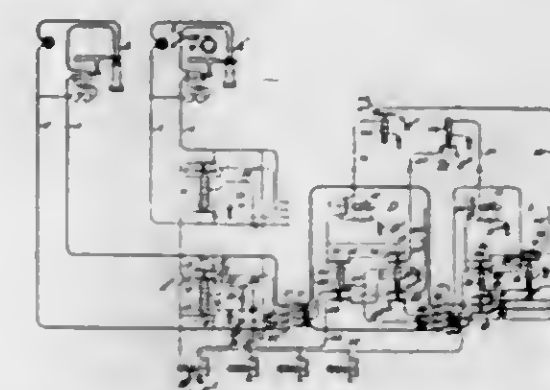


1. In a rack or the like, a heating shelf comprising a metallic section, and means for electrically heating said section, said means including a rigid section of incombustible material disposed beneath the metallic section, said incombustible section being provided with series of notches at its ends, and resistance wire adapted to be included in an electric circuit, said wire successively engaging said notches and being disposed in a series of approximately parallel strands upon said incombustible section.

1,308,552. PROCESS OF MANUFACTURING SULFID DYE FROM FILTER-CAKES OF SUGAR-JUICE. HAJIME NAOASHIMA, Taipei, Nanshinseki Sairi, Taiwan, Formosa, assignor to Taiwan Saito Kabushiki Kaisha, Tokyo, Japan. Filed Oct. 9, 1917. Serial No. 195,640. 4 Claims. (Cl. 8-1.)

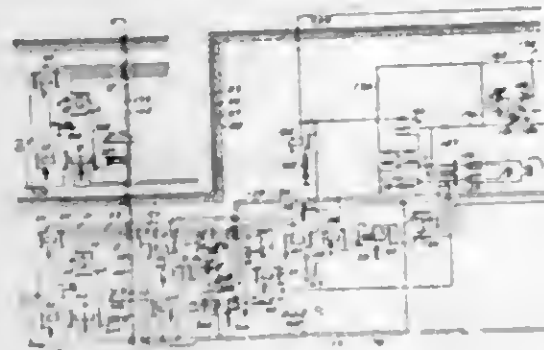
2. A process of manufacturing a sulfid dye-stuff from filter cakes of the juice of sugar cane which consists in adding to the cakes an acid to neutralize the alkali in the cakes, dissolving the lime contained therein, and then adding sulfur and alkali.

1,308,553. TELEPHONE-EXCHANGE SYSTEM. WINFRED T. POWELL, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 24, 1916. Serial No. 110,925. 47 Claims. (Cl. 179-18.)



1. In a telephone system, a plurality of subscribers' lines, a plurality of primary and secondary under switches for extending said lines when calling, a switching relay in each under, means for simultaneously starting a primary and secondary under responsive to a call, and means for thereafter simultaneously energizing the associated switching relays.

1,308,554. CALL-DISTRIBUTING SYSTEM. RALPH L. QUINN, Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1917. Serial No. 195,354. 24 Claims. (Cl. 179-27.)



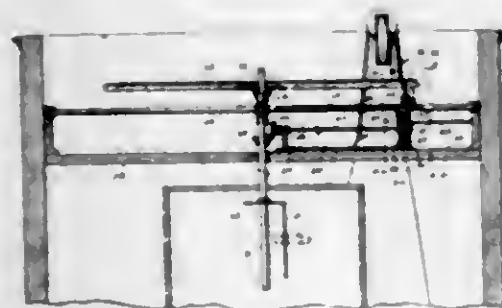
1. The combination with an operator's position, of means for selecting the same and extending calls thereto, a plurality of connecting circuits associated with said position for receiving said calls, a test conductor associated with each of said connecting circuits for controlling the establishing of connection therewith, a relay common to said test conductors and responsive to abnormal current flow therein, and means controlled in the response of said relay for rendering said position unselectable by said call-extending means.

1,308,555. MUSIC-LEAF TURNER. JOHN G. REED, Los Angeles, Calif. Filed Mar. 18, 1918. Serial No. 223,100. 1 Claim. (Cl. 84-17.)



The combination with a musical instrument including a tone modifying pedal; of a music leaf turner including a pivoted lever supported laterally of the pedal, a plate attached to the lever provided with vertically directed terminals arranged on opposite sides of the pedal and operable by the foot to oscillate the lever, a music leaf turning arm pivotally supported upon the instrument and means connecting the terminal of the lever with the turning arm.

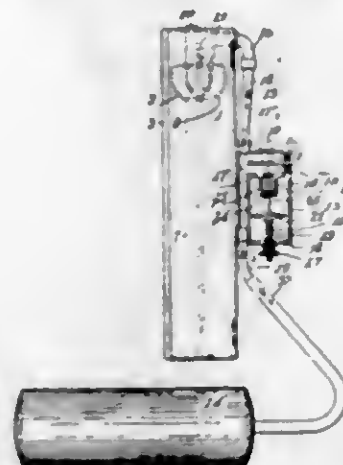
1,308,550. DRIVING MECHANISM FOR PHONOGRAPHS. THOMAS M. SHANK, Bidwell, Ohio, assignor of one-half to Thomas J. O'Meara, Cincinnati, Ohio. Filed Nov. 20, 1918. Serial No. 263,406. 2 Claims. (Cl. 74-26.)



2. A phonograph comprising a turntable, a sound producer, a roller adapted to be driven to rotate the turn-

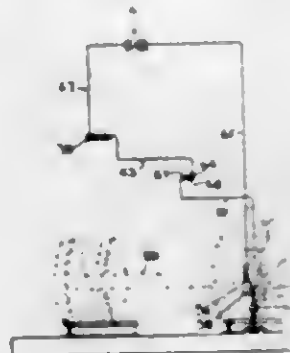
table, a feed screw adapted to move the roller toward the center of the turntable, mechanism adapted to rotate the roller and feed screw at a uniform speed whereby the speed of the turntable at the point of contact of the sound producer with a record located thereon will be uniform from start to finish of the record, and automatic means adapted to return the roller to starting position upon completion of the playing of a record, consisting of a lever adapted to remove the roller from operative connection with the feed screw, means for operating the lever, and a spring for returning the roller to a starting position.

1,308,557. CLIMB-INDICATOR FOR AIRCRAFTS. BENSON R. SHAW, Dayton, Ohio. Filed Oct. 11, 1918. Serial No. 257,733. 4 Claims. (Cl. 264-1.)



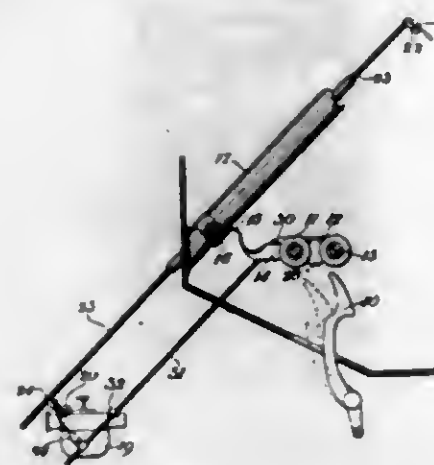
1. In a rate ascension and descension indicator for aircrafts, the combination with a calibrated scale, a transparent liquid-containing tube cooperating therewith in indicating the rate at which the aircraft is ascending or descending, said tube being open to atmospheric pressure, an atmospheric air container, a passage between said container and said tube, and an altitude control device through which regulated air pressure passes from the container to the atmosphere and from the atmosphere to the container, whereby the rise and fall of the liquid in said tube is controlled in accordance with the rate at which the aircraft is ascending or descending.

1,308,558. AUTOMATIC MOVING-VEHICLE CONTROL. PAUL JOHN SIMMONS, Buffalo, N. Y. Original application filed Apr. 14, 1908, Serial No. 427,080. Divided and this application filed May 5, 1915. Serial No. 26,086. 10 Claims. (Cl. 246-182.)



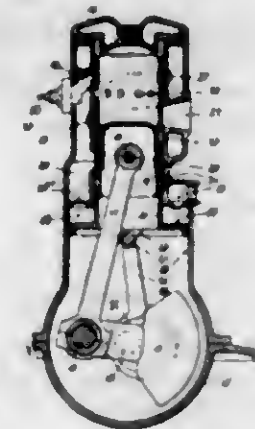
7. In apparatus of the character set forth, the combination with a vehicle and traffic controlling means, of controlling means operating in accordance with the speed of the vehicle, a mechanical trip-operated device, and mechanism controlled by said means operating in accordance with the speed of the vehicle after the trip-operated device has been actuated for initiating the operation of the traffic controlling means.

1,308,559. CONTROL MECHANISM. ALBERT F. STAPLES, Boston, Mass. Filed July 19, 1918. Serial No. 245,745. 12 Claims. (Cl. 74-81.)



9. Control mechanism, for a motor-vehicle, comprising: a pedal having three operative positions; two abutments between which the toe may be introduced when holding the pedal in its intermediate position; and an engine-controlling member located in position to be engaged by the toe when introduced between said abutments.

1,308,560. INTERNAL-COMBUSTION ENGINE. CHARLES LAWRENCE STORZA, Milong, via Young, New South Wales, Australia. Filed Apr. 25, 1910. Serial No. 93,441. 4 Claims. (Cl. 123-21.)



1. An internal combustion engine, comprising a cylinder closed at its inner or head end, a piston reciprocating therein, and a sleeve valve encircling the piston, said cylinder and sleeve valve having belts of ports adjacent the head end and the outer limit of piston travel, respectively, and likewise intermediate thereto, said belts of ports being alternately for inlet and exhaust, and means for supplying gaseous fluid under pressure for admission to the cylinder through the inlet ports, whereby the said fluid when admitted displaces the previous cylinder contents in opposite directions through fractional longitudinal distances to the exhaust.

1,308,561. LIFE-PRESERVING SUIT. BERT C. TERTUS, Ballclub, Minn. Filed June 6, 1918. Serial No. 238,535. 1 Claim. (Cl. 9-20.)

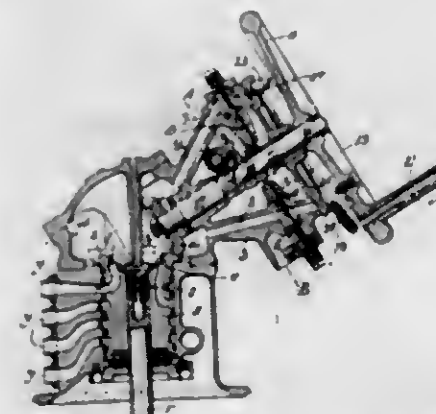
A life preserving suit including a body portion and trousers constructed of waterproof and elastic material, an enlarged portion formed on the waist portion of said trousers and adapted to have stretched thereover the lower end of the body portion, a metal reinforcing band embedded in said enlarged portion and transversely curved to retain said portion in shape, rings secured to said

band and extending exteriorly of said trousers, fasteners secured to the lower edge of the body and engaging the rings, and a strap secured to the front and rear of the



body portion and adapted to be passed through the crotch of the trousers.

1,308,562. INTERNAL-COMBUSTION ENGINE. TOM THORNYCROFT, Westminster, England, assignor to John L. Thornycroft & Co., Limited, Westminster, England. Filed Aug. 24, 1910. Serial No. 116,750. 14 Claims. (Cl. 123-41.)



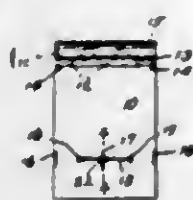
1. For starting and controlling a two stroke internal combustion engine, sources of air under different pressures, a valve chest, manually controlled means adapted to admit air at will from either of said sources to said valve chest, and means driven by the engine adapted to periodically admit air from said valve chest to the engine cylinder.

1,308,563. RECEPTACLE. WARREN B. UNDERWOOD and JOHN H. CASTLE, Rochester, N. Y., assignors to Willmot Castle Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 9, 1918. Serial No. 253,348. 4 Claims. (Cl. 220-32.)



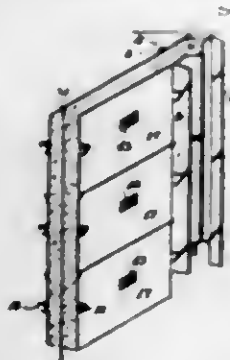
4. The combination of a receptacle and a tray arranged in said receptacle, of elevating means for the tray comprising two levers pivoted on different centers, connected together to operate simultaneously, and slidably engaging the tray at their free ends.

1,308,564. CLOTHES-RACK. CARL H. WALLING, Cat Spring, Tex. Filed July 30, 1918. Serial No. 247,380. 1 Claim. (Cl. 45-13.)



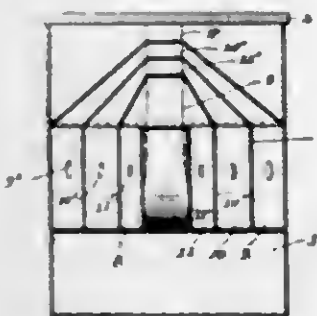
A clothes rack comprising a plate, rearwardly and downwardly projecting supporting members at the upper edge of the plate, a cover hinged to the plate and adapted to extend rearwardly over the same or to uncover the same, said plate having an opening therein in its lower portion, a pivot arranged transverse the opening and having a rearwardly extending and downwardly offset shank portion, a supporting hook projecting forwardly therefrom adjacent to said opening, and other supporting hooks carried by the plate at either side of said first named hook.

1,308,565. MOLD FOR CONCRETE SHIPS. PRACY S. WADMAN, Roselle, N. J. Filed May 11, 1918. Serial No. 233,996. 15 Claims. (Cl. 25-130.)



1. In a mold for concrete structures, the combination with standards skeletonizing the shape to be constructed, mold plates, outwardly extending flanges on said standards, and fingers on said mold plates secured to said flanges to anchor said plates to said standards and form the mold walls.

1,308,566. SOUND-REPRODUCING APPARATUS. CHRISTIAN J. F. WILFERT, Dorchester, Mass., assignor of one-half to himself, and one-half to George F. Wilfert, Jamaica Plain, Mass. Filed June 5, 1918. Serial No. 238,362. 12 Claims. (Cl. 181-27.)



10. In a phonograph, a walled casing including a sounding board, spaced partitions arranged in said sounding board and defining therewith and with the casing walls, independent tonal chambers coextensive with the sounding board, and an amplifier leading into said casing and having a plurality of openings, each discharging into a respective tonal chamber.

1,308,567. MAGNETIC INDUCTOR. JAMES M. WILSON, Newark, N. J. Filed Jan. 5, 1917. Serial No. 140,677. 5 Claims. (Cl. 123-149.)



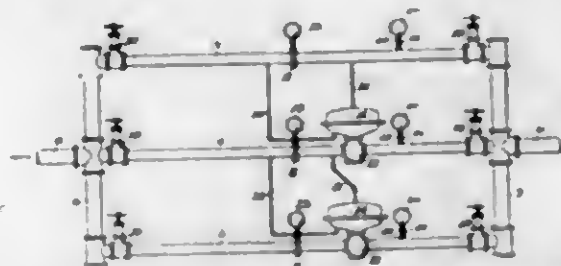
1. A battery magnetic inductor comprising an electro-magnet provided with pole pieces, a battery coil for energizing the same, a soft iron core provided with pole ends located between said electro-magnet pole pieces, primary and secondary coils about said core, a pair of magnetically insulated rotary inductors adapted to direct the magnetic flux through said core alternately in opposite directions, an interrupter in circuit with said primary coil and a multilobed cam rotating with said inductors for intermittently actuating said interrupter.

1,308,568. SWING. PETER J. WRETHNER, Dassel, Minn. Filed May 24, 1917. Serial No. 170,683. 2 Claims. (Cl. 46-27.)



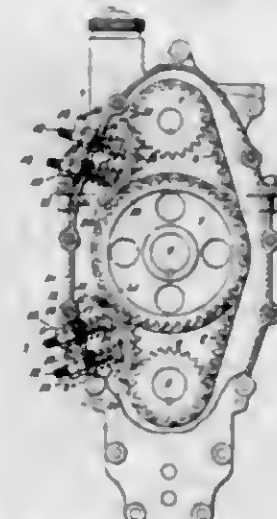
1. In a swing, a base having a pivot thereon, a cross bar rotatably engaged intermediate its ends with said pivot, seats carried upon opposite end portions of said cross bar, a drum rigidly mounted on the base about said pivot, a flexible clutch band positioned about the drum, a lever having its inner end portion loosely connected with one end of the clutch band, the second end portion of the band being loosely connected with the lever at a point intermediate its length, actuating levers mounted on the cross bar adjacent said seats, and a connecting rod engaged with the other end portion of the first mentioned lever and with one of the second mentioned levers.

1,308,569. APPARATUS FOR MEASURING GAS AND OTHER FLUIDS. THOMAS B. WYLLIE, Pittsburgh, Pa. Filed Aug. 27, 1914. Serial No. 858,877. 8 Claims. (Cl. 73-167.)



1. A gas metering device of the character described, comprising a plurality of meters connected in multiple between a supply main and a service main, control valves for some of the meters controlled by the differential pressure on opposite sides of the meters and acting automatically to successively cut in or cut out the meters as the flow of gas increases or decreases, substantially as described.

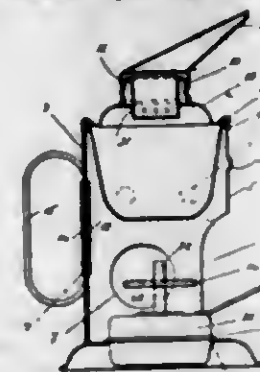
1,308,570. DEVICE FOR TAKING UP SLACK IN SPROCKET-CHAINS. DELANEY DEFEW ZANER, Irvington, N. J., assignor to Detroit-Cadillac Motor Car Co., New York, N. Y., a Corporation of New York. Filed Apr. 1, 1918. Serial No. 226,614. 7 Claims. (Cl. 64-5.)



1. In an automobile sprocket chain tightener, the combination, of a non-rotating pressure member provided with an applied anti-friction face element, and yieldable means for pressing the same against the chain.

7. In a sprocket chain tightener, the combination, with an automobile sprocket chain and a chain casing, of a curved, non-rotating pressure element provided with carrying arms passing through the chain casing and spring means operating between the casing and the pressure element to yieldably press the pressure element toward the chain.

1,308,571. VAPORIZER. GEORGE HENRY BELL, Brooklyn, N. Y.; Harriet L. Bell executrix of said George Henry Bell, deceased. Filed Feb. 26, 1918. Serial No. 219,248. 1 Claim. (Cl. 167-3.)



In a vaporizer, a tubular frame of sheet metal having its edges permanently secured together by a longitudinal joint, said frame having two relatively long longitudinal slots formed in it and arranged one on each side of the said joint, a clip plate having its middle part arranged to bear on the said joint on the inside of the frame and having its side portions inserted through the two slots and bent around to form eyes and to bear on the outside of the frame thereby strengthening the joint, handles engaging with the said eyes, a boiler provided with an outlet nozzle and supported by said frame, and means for heating the boiler arranged underneath it inside the frame.

1,308,572. MEASURING-TANK. JAMES HENRY BRADY, Louisville, Ky., assignor, by mesne assignments, to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky., a Corporation of South Dakota. Filed Sept. 11, 1916. Serial No. 119,358. 2 Claims. (Cl. 221-99.)

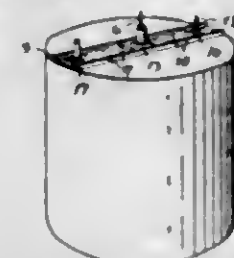
1. In a liquid dispenser, a tank, a delivery pipe therefor, a drain pipe and a service pipe located adjacent to each other, a valve in the drain pipe having a stem provided with a crank handle, a valve in the service

pipe having a stem provided with a crank handle, the latter having a lateral arcuate extension spaced apart from the handle proper by a notch or interval, the drain



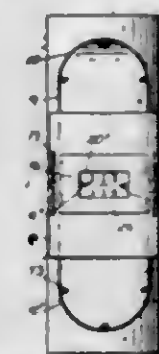
valve handle having a lateral extension adapted to engage said notch when the valve is opened to thereby lock the service valve from being opened, and to engage said arcuate extension when the service valve is opened to thereby lock the drain from being opened.

1,308,573. GASOLINE-TANK. JAMES HENRY BRADY, Louisville, Ky., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky., a Corporation of North Dakota. Filed Sept. 29, 1918. Serial No. 255,749. 1 Claim. (Cl. 220-28.)



A reservoir for gasoline and the like, consisting of a hollow tank having a bottom, and a top provided with a transverse diametric slot, a flat circular float of dimensions adapted to pass through said slot and located within the tank, a diametric reinforcing strap located above and closing said slot and having a rivet connection with the top of the tank, said strap having a central opening, a float rod attached to the float and extending upwardly and loosely engaging said central opening, said float having a central recess in its bottom and the bottom of the tank having a central projection fitting said recess, and a screw cap engaging said central opening and having a top engaging the upper end of the float rod.

1,308,574. INDICATOR. JAMES HENRY BRADY, Louisville, Ky., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky., a Corporation of North Dakota. Filed Feb. 13, 1919. Serial No. 276,733. 3 Claims. (Cl. 116-18.)



1. In a device of the character described, the combination of a tubular casing having a cylindrical wall,

of an indicator rod working longitudinally within said casing and having a flat graduated face opposite said cylindrical wall, the latter having a slot therein, and a vertical flat cover for said slot located close to the flat face of said rod and having a reading opening.

1,308,575. COATING COMPOSITION. SAMUEL CABOT, Union, Mass., assignor to Samuel Cabot, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1916. Serial No. 120,811. 9 Claims. (Cl. 134-26.)

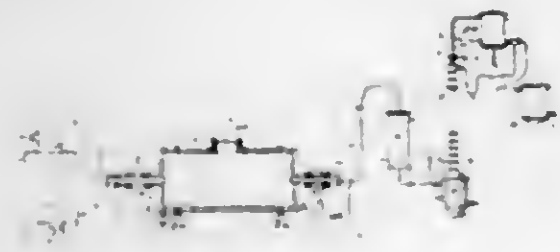
6. A light colored transparent coating composition, comprising a novel product, or hydrocarbon chlorination soluble in an organic solvent, free from dark colored polymerization and decomposition products, a volatile solvent and an extender consisting of aromatic products non-volatile at ordinary temperatures.

1,308,576. PRODUCTION OF METHYL BORATE AND BORIC ACID FROM CRUDE SODIUM NITRATE. ROBERT P. CALVERT and OTHO L. THOMAS, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 5, 1917. Serial No. 200,438. 14 Claims. (Cl. 23-1.)



1. The process which comprises separating boric acid from mixtures containing the same by adding a lower monohydric alcohol thereto and volatilizing the compound formed by the alcohol and the boric acid.

1,308,577. PROCESS OF OBTAINING BORIC ACID FROM MIXTURES CONTAINING BORATES. ROBERT P. CALVERT and OTHO L. THOMAS, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 5, 1917. Serial No. 200,439. 14 Claims. (Cl. 23-1.)

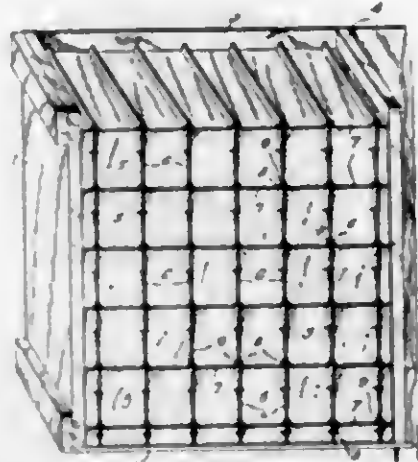


1. The process which comprises removing the borate from a mixture containing the same by liberating the boric acid from the borate, adding a lower monohydric alcohol thereto, and volatilizing the compound formed by the alcohol and the boric acid.

1,308,578. EGG-CASE FILLER. WILLIAM D. COIL, Muncie, Ind. Filed July 27, 1917. Serial No. 183,100. 3 Claims. (Cl. 217-31.)

1. In a structure of the character described, a case, a plurality of fillers, each filler consisting of a series of

longitudinal strips and a series of transversely arranged strips with the ends of the strips abutting the interior walls of said case, one of the edges of each strip of one series projecting beyond the corresponding edges of the strips of the other series, and a series of divisional walls, each divisional wall having grooved ribs to receive said projecting edges, the strips of said other



series having notches to receive the ribs of an adjacent divisional wall.

1,308,579. DIVER'S LANTERN. WILLIAM THOMAS COULSON, Anerley, London, England. Filed Jan. 23, 1918. Serial No. 213,353. 2 Claims. (Cl. 240-8.5.)

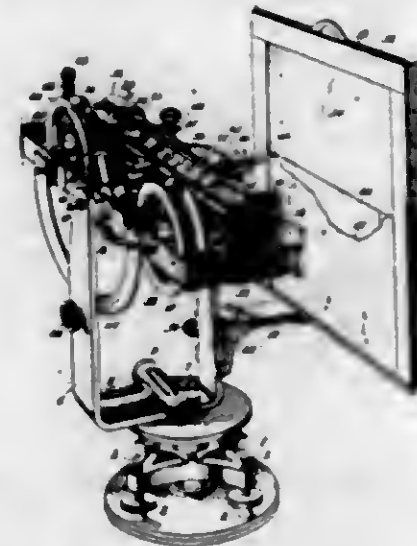


2. In a diver's lantern of the class specified constructed to replace the front or chest weight of diving dresses consisting of a casing having lenses in one side and at the top thereof, a lamp within the casing adjacent to each lens, the one lamp being adjustable to vary its focal range relatively to its lens, exteriorly operated means for moving the said adjustable lamp, pairs of spring contacts having a source of electrical energy connected thereto, each lamp being connected to one of the pairs of contacts, and a switch operative exteriorly of the casing and having an insulated arm movable between the pairs of contacts for alternately energizing the lamps, the whole apparatus being contained within the casing and the latter rendered water proof.

1,308,580. PROFILE MEASURING AND RECORDING DEVICE. MARSHALL MONES CRAM, North Mankato, Minn. Filed Nov. 25, 1918. Serial No. 264,019. 15 Claims. (Cl. 234-8.)

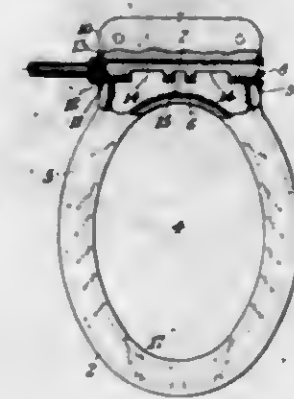
11. In a device of the class described, a holder for a record sheet, a marker carrier associated with the record sheet for producing a mark on the latter, a rockable member on which the marker carrier is mounted and along which it is movable, a marker on the carrier participating in the rocking movements of the rockable member, a line and connections therefrom to the marker

carrier, a target movable toward and from the rockable member and adapted to be connected to the line, and sighting means on the rockable member for following the



target in up and down movements of the latter by rocking the rockable member.

1,308,581. FLUID-CONDUIT IN CLOSET-BOWLS. HARRISON TAYLOR CRONK, New York, N. Y., assignor to Cronk-Salter Company, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1915. Serial No. 6,988. 6 Claims. (Cl. 4-18.)



1. A closet-bowl having a compartment therein opening through one side of the bowl and a pair of flushing conduits leading from said compartment, a tube insertible into said compartment and provided with a pair of spaced apart apertures leading to said flushing conduits and means for applying fluid to said tube.

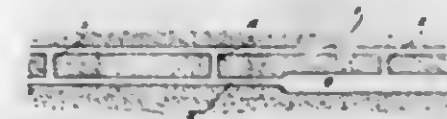
1,308,582. DESTRUCTIBLE CLOSET-TRAP. HARRISON TAYLOR CRONK, New York, N. Y., assignor to Cronk-Salter Company, New York, N. Y., a Corporation of New York. Filed Nov. 8, 1913. Serial No. 799,848. Renewed May 24, 1919. Serial No. 299,559. 3 Claims. (Cl. 182-12.)



1. As an article of manufacture adapted to be partly inserted in a refuse tank, a trap adapted to contain a fluid in its crotch to form a fluid seal permitting ingress of matter to the tank and preventing the passage of gases

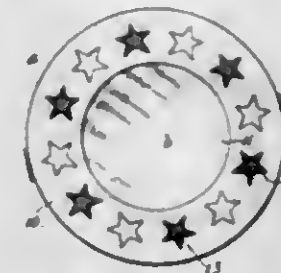
through said trap, said trap having an open ended conduit forming a part thereof, adapted to permit the egress of gases from the tank.

1,308,583. METHOD OF TUNNELING. ARTHUR CHAMFIELD DENNIS, Glacier, British Columbia, Canada. Filed Oct. 18, 1915. Serial No. 56,585. Renewed Jan. 15, 1919. Serial No. 271,334. 1 Claim. (Cl. 202-1.)



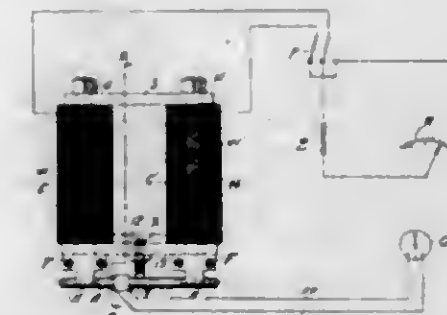
In a method of tunneling consisting in driving an auxiliary heading outside of the main tunnel section, excavating cross cuts from the auxiliary heading, driving a main heading to connect the cross cuts, drilling from the main heading for enlargement to the full tunnel section, and then excavating to the full tunnel section.

1,308,584. ILLUMINATED ORNAMENTAL EFFECT. GEORGE GIOVANNA, New York, N. Y. Filed Sept. 20, 1917. Serial No. 192,319. 3 Claims. (Cl. 240-10.)



1. In a device of the class described, the combination with a lens positioned to intercept the light rays from a suitable source, and clamping means for said lens, of a plate composed of opaque material positioned in contact with the surface of said lens and retained in operative relation thereto by said clamping means, said plate being provided with an unobstructed substantially central opening and with a plurality of other openings, and translucent light-modifying media positioned to cover said other openings in the plate.

1,308,585. METHOD AND APPARATUS FOR ADJUSTING ARMATURES OF ELECTROMAGNETIC DEVICES. CLINTON O. HARRINGTON, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1917. Serial No. 142,818. 4 Claims. (Cl. 175-21.)



1. An apparatus of the character described, comprising an electromagnet including an armature, a source of current for said electromagnet, means for varying the flow of said current as supplied to said electromagnet, means for determining the magnetic flux in the magnetic circuit of the electromagnet, and means for adjusting the closed position of said armature.

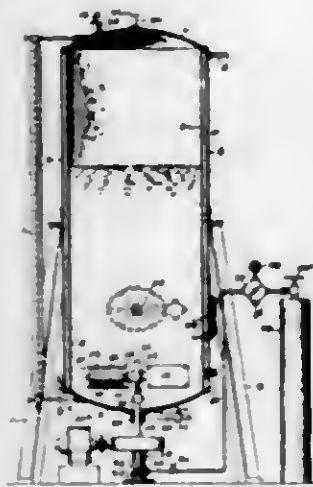
1,308,586. INDEX OR FILE. ROBERT D. HAYES, New Haven, Conn., assignor to Index Visible, Incorporated, New Haven, Conn., a Corporation of New York. Filed June 8, 1915. Serial No. 32,957. 19 Claims. (Cl. 129-16.)



12. An index card having a transparent strip extending across the front face thereof and around and back of at least one of its side edges; substantially as described.

14. In an index or file, a plurality of record members having tongues nesting them together in overlapped relation, one of said members having a pocket, and a record slip or insert held in place between said pocket and the tongue on the adjacent card; substantially as described.

1,308,587. APPARATUS FOR MAKING CARBONATED BEVERAGES. HERMAN HUESER, Chicago, Ill. Filed Apr. 5, 1917. Serial No. 159,910. 10 Claims. (Cl. 261-87.)



1. In an apparatus for the manufacture of carbonated beverages, a tank having a liquid gage for indicating a given quantity of syrup and a combined quantity of syrup and uncarbonated water commensurate to the ounce-value of the syrup, means for simultaneously stirring the mixture and introducing gas therein, and means to control the air pressure in the tank to carbonate the mixture under a given pressure and to evacuate the beverage under increased pressure on its top compensating for the loss of head of the beverage indicated by said liquid gage.

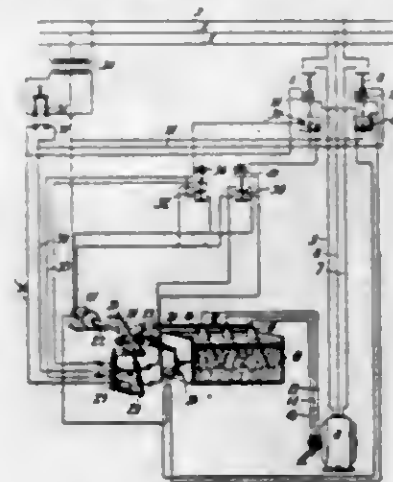
1,308,588. PREPARATION OF ALCOHOL-REDUCED BEER. HERMAN HUESER, Chicago, Ill. Filed Aug. 15, 1918. Serial No. 249,957. 3 Claims. (Cl. 195-1.)

3. The process of making alcohol-reduced beer light-proof which consists in subjecting alcohol-reduced beer to deoxygenation by treating it with from 4 to 12 grams of potassium pyrosulfite per barrel of beer.

1,308,589. MOTOR CONTROL SYSTEM. GEORGE W. HUEY, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 31, 1913. Serial No. 809,640. Renewed July 16, 1918. Serial No. 245,237. 22 Claims. (Cl. 172-289.)

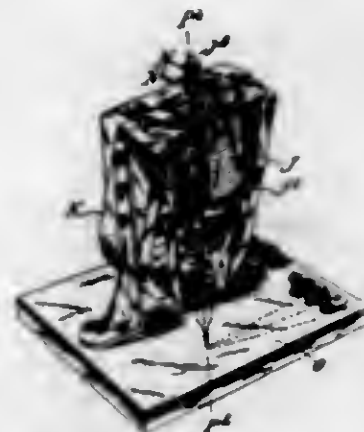
16. The combination with a main motor, of an auxiliary motor and a controller operated thereby to control

said main motor, said controller having an initial position in which it is ineffective, and means whereby said



position may be made to serve as a running position for said main motor.

1,308,590. ELECTRICAL INDICATOR AND LIKE APPARATUS. JAMES GEORGE HOOPER and FREDERICK RICHARD HOBLEY, Van, near Llanddow, Wales. Filed June 5, 1918. Serial No. 238,409. 4 Claims. (Cl. 172-293.)



1. In electrical indicating apparatus the combination of, a closed controller circuit, means to apply an electromotive force between two selectively adjustable points in the said controller circuit, means to produce a magnetic field, a three-phase rotary field coil-system carried upon a non-magnetic support rotatably mounted in the said magnetic field, and circuits connecting three terminal points on the said coil-system with three tappings in the said controller circuit, substantially as set forth.

1,308,591. MANUFACTURE OF SEAT-PILLAR STAYS AND CHAIN-STAYS OF CYCLE-FRAMES. GEORGE STEWART JAMES, Birmingham, England. Filed Oct. 23, 1917. Serial No. 198,118. 1 Claim. (Cl. 153-48.)



Means for forming and shaping a bend or crank in a tube length comprising complementary external shaping dies arranged one over the other, each having a horizontally flat face and a semi-circular cavity extending lengthwise thereof a short distance beyond one-half of the length of the die, each of said cavities having its inner terminal inclined in compound curved form, said cavities being reversely arranged and each, for a greater portion of its length, being opposite to a portion of the horizontally flat face of the opposing die,

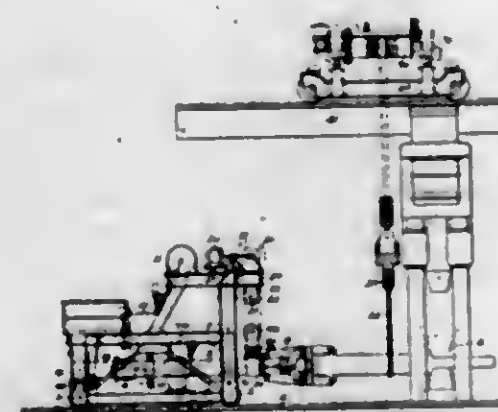
and two mandrels insertible within the tube to be bent and having inner solid ends corresponding in cross-sectional contour to and of less dimensions than the cavities of the dies and having inner curved blunt ends, the mandrels being provided with flexible shanks extending from the outer ends thereof, the heads of said mandrels adapted to be arranged in reverse positions in the tube to be cranked or bent with their inner curved ends close together and respectively opposite the inner curved terminals of the cavities in the dies.

1,308,592. MUSIC-SHEET. GEORGE B. KELLY, Jamaica Plain, Mass., assignor to The Aeolian Company, a Corporation of Connecticut. Filed May 13, 1915. Serial No. 27,852. 1 Claim. (Cl. 84-162.)



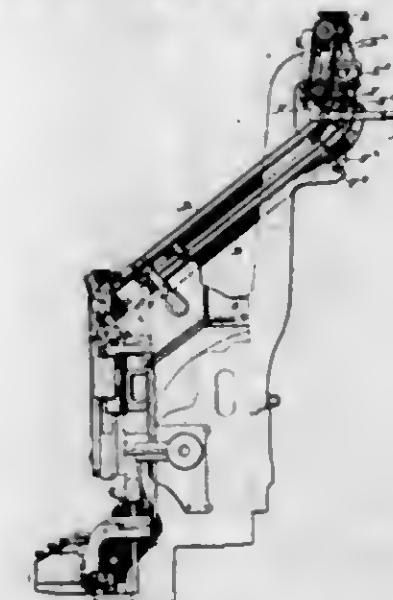
Companion music rolls composed of individual strips made from side-by-side components of the same sheet of paper, the respective rolls containing note perforations corresponding to and adapted to play the complementary parts of a musical composition, the respective rolls also containing perforations to cooperate with synchronizing means in the instrument in which the rolls are played and to thus synchronize the movements of the rolls while being played, the note and synchronizing perforations of each roll being so related to such perforations of the other roll that the rolls will play their respective complements of the musical composition in unison.

1,308,593. FORGING-MANIPULATOR. DAVID KENDALL, Alliance, Ohio, assignor to The Alliance Machine Company, Alliance, Ohio, a Corporation of Ohio. Filed Mar. 27, 1918. Serial No. 225,024. 13 Claims. (Cl. 78-96.)



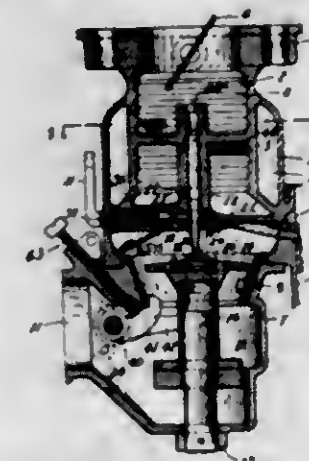
1. A forging manipulator, comprising a movable support or carriage, a movable manipulator member pivoted thereto at a point near its rear end, and a flexible suspension engaging the manipulator member in front of its pivotal point, substantially as described.

1,308,594. TYPOGRAPHICAL MACHINE. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Original application filed Sept. 28, 1915. Serial No. 52,990. Divided and this application filed Nov. 21, 1916. Serial No. 132,540. 29 Claims. (Cl. 199-40.)



1. In a typographical machine, the combination of distributing mechanism comprising a distributor bar and a set of conveying screws for propelling the matrices therealong, a movable supporting frame carrying the whole of said distributing mechanism, and manually operable means for shifting the supporting frame to and from its operative position, the said means comprising a hand lever pivoted to the machine frame and a cam connected thereto and arranged in engagement with a part of the supporting frame.

1,308,595. CARBURETER. WELLINGTON P. KIDDER, Boston, Mass. Filed Oct. 23, 1915. Serial No. 57,580. 15 Claims. (Cl. 261-50.)



8. In a carbureter, an air valve, a fuel valve resting at one end on the adjacent face of the air valve, and means anchoring said valves against permanent separation but permitting relative lateral movement of one of said valves.

1,308,596. ATTACHMENT FOR WATER-CLOSET SEATS. ALBERT KLEIN, New York, N. Y. Filed May 15, 1919. Serial No. 297,178. 2 Claims. (Cl. 4-18.)

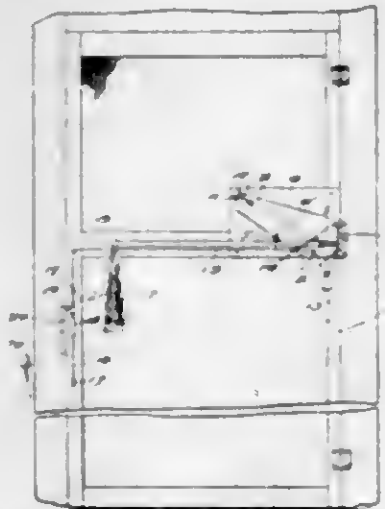
1. In combination with a water-closet including a binged seat, an attachment comprising a vertical rotary shaft having an actuating handle, a floor socket forming a bearing for the lower end thereof, a socket structure engaging the upper end of the shaft and including an arm extending from an attaching plate adapted to be secured to a wall, a bevel gear secured to the shaft in

intermediate of its ends and adjacent to the hinge-pintle of said seat, said pintle being extended on the side opposite the shaft and fast to the seat, and a bevel gear



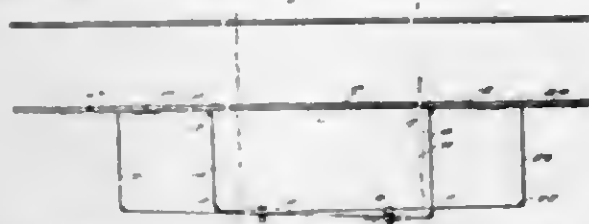
secured on said extension and in meshing relation with the first named gear to raise or lower the seat upon a manipulation of the actuating handle.

1,308,597. FLY GUARD. AGNES D. KUNY, Earlville, Ill. Filed June 12, 1918. Serial No. 239,571. 4 Claims. (Cl. 230-7.)



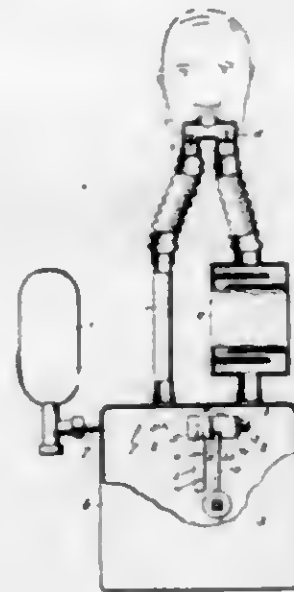
1. In combination with a hinged door, locking means therefor, a hinged support arranged adjacent the same and in the path of travel thereof, an arm pivoted to said support and extending therefrom, means connected to said arm for imparting oscillatory motion thereto upon operation of the locking means, and spring means engaged with said arm for prolonging the oscillatory motion.

1,308,598. AUTOMATIC RAILWAY-GATE. ANGELO LAT-TANZI, Vancouver, British Columbia, Canada. Filed Apr. 15, 1918. Serial No. 228,764. 2 Claims. (Cl. 246-298.)



1. In combination with a railway track, a gate including spaced pivoted arms, spaced trips pivoted to one side of said track and connected to said arms, spring arms arranged adjacent the track having certain of the ends thereof bent upwardly and adapted for engagement with said trips, said upwardly bent ends of the arms being connected to the oppositely disposed pivoted arms, and other trips pivoted to one side of the track at points distant from said first trips and connected to the upwardly bent ends of the spring arms.

1,308,599. BREATHING APPARATUS. FRIEDRICH M. LUCHS, Wilkensburg, Pa., assignor to American Atmos Corporation, Wilkensburg Station, Pittsburgh, Pa., a Corporation of New York. Filed June 27, 1918. Serial No. 242,179. 8 Claims. (Cl. 128-191.)



1. The combination with an inflatable equalizing chamber, of a conduit to admit respired air thereto, a valve for high-pressure gas discharging only within said chamber, said chamber having two movable walls and said valve actuated for both opening and closing by the movement of either or both of said walls.

1,308,600. CUTTING-MACHINE. HARRY E. MATHERS, Delta, Colo. Filed Jan. 5, 1918. Serial No. 210,559. 2 Claims. (Cl. 146-12.)



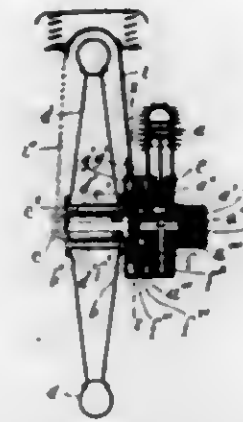
1. A cutting machine including a base, a carriage slidable on said base carrying ratchet teeth adjacent one longitudinal edge thereof, ratchet means slidably supported on the base engageable with said ratchet teeth, trip means adjustably connected to said ratchet means and normally held in a predetermined position, and an arm disposed transversely of the base and the carriage adapted to engage and actuate said trip member upon a raising of the arm.

1,308,601. SPRING. JOSEPH MEDITZ, Brooklyn, N. Y. Filed Mar. 17, 1919. Serial No. 283,226. 3 Claims. (Cl. 207-10.)



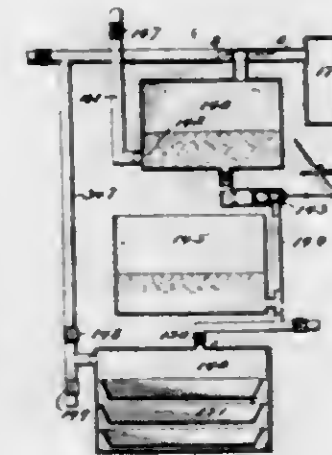
1. A spring consisting of a single coil of wire formed into intermeshing loops, the loops being formed in that portion of the wire not employed to form the coil.

1,308,602. MOTOR-VEHICLE. MARCEL MENNESSON, Neuilly-sur-Seine, France, assignor to M. Goudard & Mennesson, Neuilly-sur-Seine, France. Filed Dec. 9, 1916. Serial No. 136,098. 7 Claims. (Cl. 180-33.)



1. In driving means for the motive wheels of vehicles, and especially motorcycles, the combination of a motor having a casing, a change-speed gear, a clutch, and a driving shaft, the motor casing having a chamber housing the change-speed gear and the clutch, and an ignition magneto for the motor having its field magnets connected to the crank shaft of the motor and its armature fixed.

1,308,603. APPARATUS FOR EXHAUSTING AND COMPRESSING AIR. DAVID MORGAN, Launceston, Tasmania, Australia. Filed July 18, 1918. Serial No. 245,570. 4 Claims. (Cl. 230-16.)

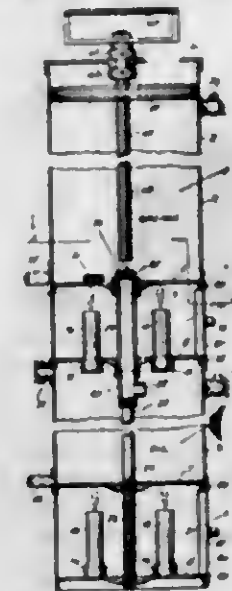


1. In an apparatus of the character described, in combination, a vacuum chamber, a working cistern, an exhaust pipe leading from said chamber to said cistern, means whereby said cistern may be alternately filled with water and emptied, an auxiliary cistern adapted to receive water from said working cistern, a valve controlled pipe leading from said auxiliary cistern to said chamber, and inlet and outlet valves for regulating the passage of air to and from said working cistern.

1,308,604. LUBRICATOR. LAUDIE J. MAUX, Butte, Mont. Filed Sept. 3, 1918. Serial No. 252,365. 5 Claims. (Cl. 184-195.)

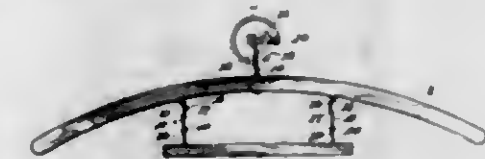
5. A lubricator formed of a single shell provided with partitions dividing it into separate chambers for lubricating material and heating chambers arranged one above another, said heating chambers having openings formed in the wall of the shell, and a brace secured between the

said partitions and extending through the said heating chambers and the chamber for lubricant extending between them, said brace having a tubular portion which



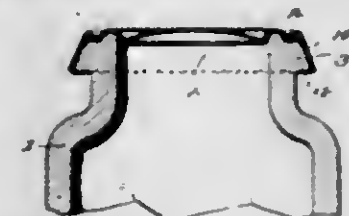
forms a pipe connection between the upper and lower chambers for lubricant.

1,308,605. CLOTHES-HANGER. JAKUB NAGASBET, Waterbury, Conn. Filed May 9, 1919. Serial No. 295,939. 2 Claims. (Cl. 211-13.)



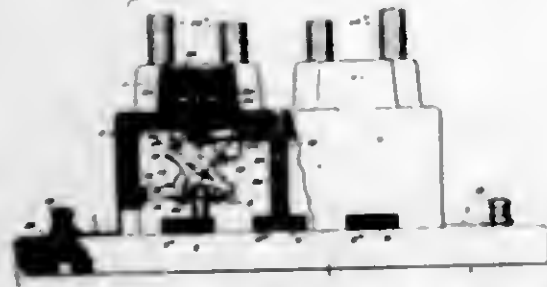
1. A device of the class described comprising a curved coat hanging bar, a suspending hook carried thereby, said hook having resiliently engaging ends forming an entrance opening to the suspending hook portion, eye-bolts carried by the under face of said bar, a ring secured in each eye-bolt, a pair of rings secured in the aforesaid ring, a pair of depending arms secured in the last named rings, trousers clamping bars carried by the lower ends of said arms and a spring extending between said arms adapted to hold the trousers clamping bars in adjacent position.

1,308,606. JAR-CLOSURE. EDWIN NORTON, deceased, by Lucy E. Norton, executrix, New York, N. Y., assignor to Perfect Vacuum Canning Company, New York, N. Y., a Corporation of Maine. Filed June 4, 1915. Serial No. 32,199. 1 Claim. (Cl. 215-83.)



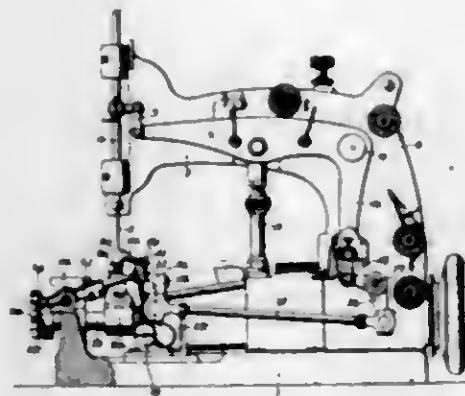
The combination with a jar having an outwardly extending flange provided with a tapered outer wall and a beading at its upper end, of a metal cap having an annular groove receiving the beading and a downwardly extending flange engaging the tapered wall of the flange, a paper lining between the metal cap and upper edge of the jar, and a split metal retaining ring having an intumed portion at its lower edge adapted to engage underneath the flange, said ring having a flange at its upper edge adapted to be rolled so as to clamp the cap against the jar and press the paper lining tight down upon the upper end of the jar.

1,308,607. PANEL-BOARD CONSTRUCTION. EDWIN A. OLLEY, Syracuse, N. Y., assignor to Cronse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 2, 1915. Serial No. 43,122. 9 Claims. (Cl. 247-13.)



1. A panel board comprising a base, bus bars mounted on the face of the base, and an electrical appliance including an insulating body detachably mounted on the base over the bus bar, and load circuit bars arranged at an angle to the bus bar and circuit controlling devices of different character supported by the body, substantially as and for the purpose described.

1,308,608. PICOT-EDGING MACHINE. LANSING OBERDORF, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 24, 1916. Serial No. 99,621. 10 Claims. (Cl. 112-24.)



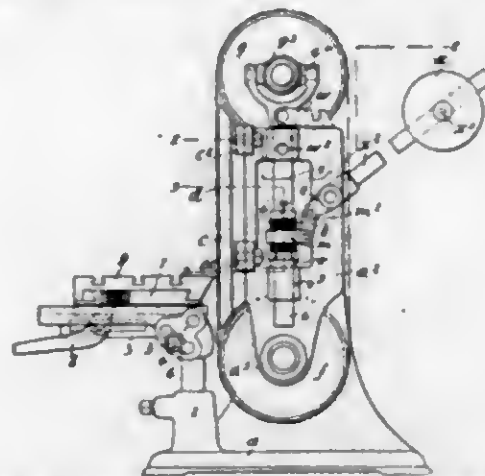
1. A sewing machine including in combination a work support, a needle, a looper cooperating with the needle beneath the work support, a second looper cooperating with the first named looper and with the needle above the work support, whereby over edge stitches are formed and means cooperating with the stitch forming mechanism for forming from one of the stitching threads picot loops.

1,308,609. HIT. WILLIAM SAT, London, England. Filed Dec. 4, 1916. Serial No. 134,984. 4 Claims. (Cl. 145-121.)



1. A bit comprising a stem having a boss at its lower end extending at substantially a right angle thereto, the boss having an opening in its lower end in vertical alignment with the axis of the stem and also having a slot near its free end opening outwardly through one side thereof, a rod secured in said boss opening and having a substantially straight pointed extremity, and a knife secured in said slot.

1,308,610. ENDLESS-BAND GRINDING AND POLISHING MACHINE. CHARLES RALPH TOWNSEND, Birmingham, England. Filed May 7, 1917. Serial No. 166,084. 4 Claims. (Cl. 51-13.)



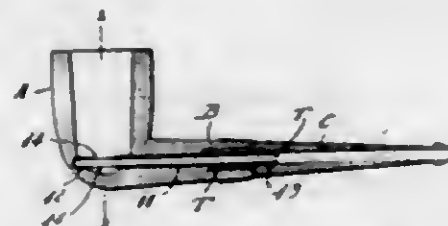
1. In an endless band grinding and polishing machine, the combination of two end pulleys over which the band runs, a table arranged between the two pulleys and over which one stretch of the band travels, a pair of rods carrying one of said pulleys, one at each end of said pulley and arranged, respectively, adjacent the longitudinal edges of said table and mounted for movement in a straight line longitudinally of said table, and a weight automatically operating on said rods to normally separate the two pulleys for tensioning the band and maintaining same, substantially as described.

1,308,611. GARMENT-FASTENER. JOSEPH P. TUCKER, Seattle, Wash. Filed Dec. 18, 1918. Serial No. 267,238. 2 Claims. (Cl. 24-228.)



1. A garment fastener of the character described, comprising a member including a transverse head and a longitudinal shank said shank having an eye formed therein near its forward end, and a cooperating member comprising a transverse portion provided with a depending holding element to enter the eye, said transverse portion being provided at its ends with substantially vertical loops and inwardly of and near the loops with approximately horizontal pivot cranks; and means to secure the members to the parts of a garment.

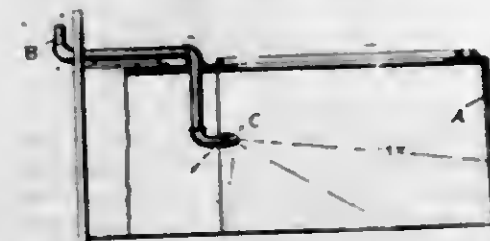
1,308,612. TOBACCO-PIPE. JOHN NATH WHITEHOUSE, New York, N. Y., assignor to WM. DEMUTH & Co., New York, N. Y., a Corporation of New York. Filed Sept. 13, 1918. Serial No. 253,908. 2 Claims. (Cl. 131-12.)



1. A smoking pipe comprising a bowl portion, a stem, a mouthpiece removably fitted in the stem, a tube removably fitted in the stem and projecting therefrom part-ways into the mouthpiece and formed with openings to

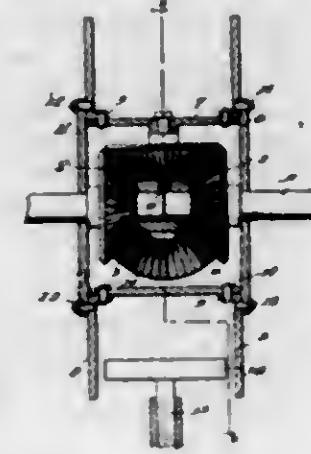
effect communication between the bowl of the pipe and the tube in any position to which the tube may be turned in the stem, said bowl portion being recessed above the bottom wall thereof to receive the forward end of said tube, and the mouthpiece being bored to freely accommodate the opposite end of the tube.

1,308,613. ASH-SPRAYING DEVICE FOR FURNACES AND BOILERS. EDWIN C. ANDERSON, St. Louis, Mo., assignor to The Buck's Store & Range Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 19, 1918. Serial No. 250,540. 1 Claim. (Cl. 137-80.)



An ash spraying device for the ash pits or boxes of furnaces and boilers, comprising a water supply pipe provided with a nozzle having an end wall equipped with a plurality of transversely disposed slots arranged at such angles that a plurality of substantially fan-shaped sprays of water will be discharged forwardly and downwardly, the spray from the upper slot extending substantially horizontally and extending substantially over the entire area of the ash-pit.

1,308,614. POWER TRANSMISSION. JOHN S. RALDOCK, Clayton, Ind. Filed May 21, 1917. Serial No. 169,982. 1 Claim. (Cl. 74-99.)



In a device of the class described, a drum having a plurality of inwardly directed bearings and outwardly directed annular members in spaced relation, said annular members having frictional confronting faces, closures for the ends of the drum and each having a shaft bearing, a two member axle mounted respectively in the bearings of the closure, a bevel gear carried by each of said axle members, a bevel gear associated with each of said drum bearings and meshing with the bevel gears of the axle members, and a frictional gear operating between the annular friction faced members and adapted to be engaged alternately therewith.

1,308,615. PULLING ATTACHMENT FOR MOTOR-DRIVEN VEHICLES. LAWRENCE BALL, Brazil, Ind. Filed July 3, 1918. Serial No. 243,149. 1 Claim. (Cl. 242-95.)

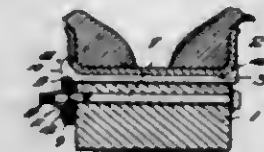
A device of the character described, comprising a tobi-form drum adapted to fit the hub of a wheel and having annular flanges at opposite ends, one of the flanges being of a considerably greater width than the other flange,

spaced parallel ears formed on the wider flange, and extending radially from the drum the full width of said flange, a plurality of arms having their inner ends ar-



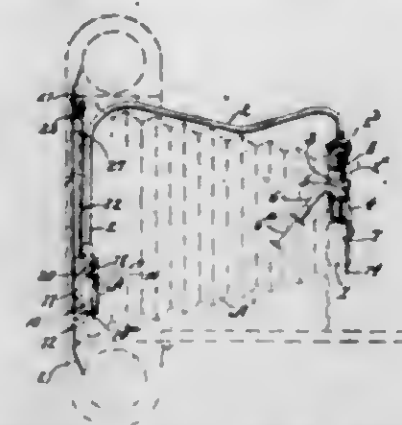
ranged between the ears, pivots swingingly connecting the inner ends of the arms to said ears, and spoke clamps at the outer ends of the arms adapted for detachable engagement with the spokes of the wheel when the drum is mounted upon its hub.

1,308,616. DEMOUNTABLE-RIM FASTENER. EDMOND J. BERGMAN, Vincennes, Ind. Filed Mar. 27, 1918. Serial No. 224,900. 3 Claims. (Cl. 152-21.)



1. The combination with a wheel having a fixed rim, a demountable rim, and means to secure said demountable rim upon the wheel rim, said means including a demountable rim carrying member interposed between said rims, laterally directed lugs on the carrying member confining the demountable rim against lateral movement with relation to the carrying member, an inwardly extending lug on one terminal of the carrying member disposed laterally of the fixed rim, a belt carried by the fixed rim extending through the inwardly directed lug, and means associated with the belt to clamp the lug and carrying member in position upon the fixed rim.

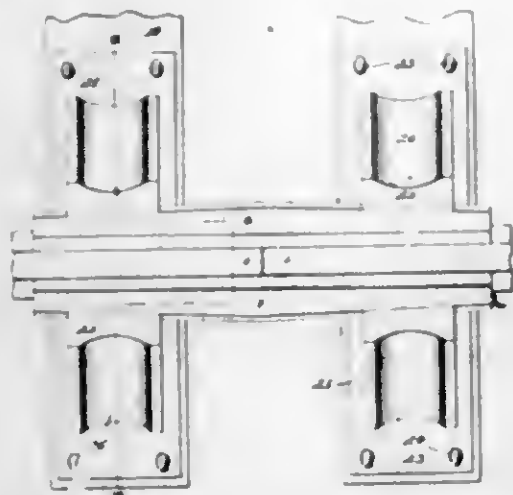
1,308,617. SHUTTER-CONTROLLING MECHANISM FOR FILM-CAMERAS. PEDRO JUAN BESOSA, New York, N. Y. Filed July 31, 1915. Serial No. 42,914. Renewed Nov. 28, 1917. Serial No. 204,455. 12 Claims. (Cl. 95-31.)



1. The combination with a shutter-operating member, of a supporting member positioned adjacent the path of a film, a shutter-locking member carried by the supporting member, means for operatively connecting the shutter-locking member with said shutter-operating member, and means cooperating with the shutter-locking member,

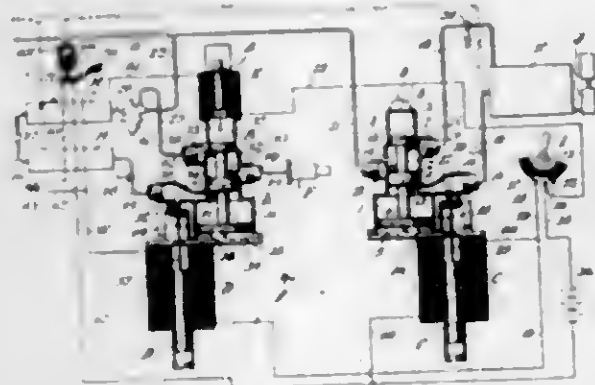
said last mentioned means being positioned for contact with a film and operated by the movement thereof to release the shutter-locking member from restraint.

1,308,618. RAIL-JOINT. JOHAN BOBIAN, Southwest, Pa. Filed Nov. 12, 1918. Serial No. 202,246. 4 Claims. (Cl. 238-188.)



1. In a rail joint, the combination with the meeting ends of rails, of a pair of splice bars arranged at opposite sides thereof and having interlocking connection with the base flanges of said rail ends, said splice bars being provided with oppositely tapered outer side walls, and tie blocks having tapered grooves slidably receiving said splice bars to wedgingly clamp the same against the rail ends, substantially as described.

1,308,619. ELECTRICALLY-OPERATED BRAKE MECHANISM. CHARLES W. BAEWSTER, New York, N. Y. Filed Nov. 25, 1916. Serial No. 133,297. 10 Claims. (Cl. 188-4.)

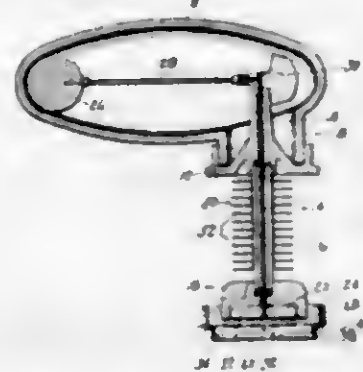


3. In a brake system, a valve provided with a by-pass, a second valve also provided with a by-pass, a brake cylinder controllable by the second valve, means for opening and closing the by-passes of the first valve and the second valve, and means for limiting the movement of the second valve for shutting off communication between the brake cylinder and the second valve whereby the braking fluid at a predetermined pressure may be retained in the brake cylinder.

1,308,620. WATER-LEVEL INDICATOR. CHARLES E. BACON, Newton, Mass., assignor to Stanley Motor Carriage Company, Newton, Mass., a Corporation of Delaware. Filed Dec. 24, 1917. Serial No. 208,552. 6 Claims. (Cl. 73-82.)

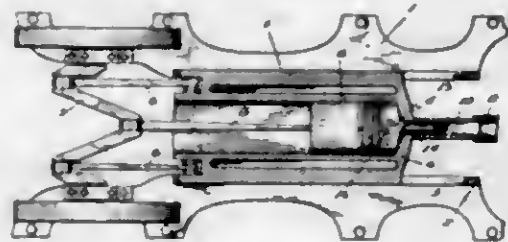
1. A water level indicating apparatus for high pressure boilers having, in combination, a float, a magnet located at a point relatively remote from said float,

means connecting said float and magnet arranged to transmit motion from the float to the magnet, a casing enclosing said float, magnet and transmission means, and



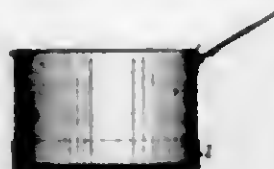
including an elongated portion provided with heat radiating means serving to prevent the transmission of a high degree of heat to said magnet, and indicating means arranged to follow the movements of said magnet through the action thereon of the field of force of the magnet.

1,308,621. INTERNAL-COMBUSTION ENGINE. THOMAS H. BUNNETT, Exchequer, Calif. Filed Sept. 24, 1918. Serial No. 255,451. 2 Claims. (Cl. 123-50.)



1. In an internal combustion engine comprising a base, a cylinder slidably mounted therein, a piston and cylinder being operatively connected with the crank shaft to move in relatively different directions, a spring seated valve adapted to move upwardly, positioned vertically in the under side of the cylinder ahead of the piston, and means independent of the movement of the cylinder, whereby the valve is opened at a predetermined point.

1,308,622. ENAMELED OR GRANITE WARE COOKING UTENSIL. JOHN A. CALDWELL, Vancouver, British Columbia, Canada. Filed Oct. 16, 1917. Serial No. 196,912. 3 Claims. (Cl. 220-73.)



1. The combination with an enameled cooking vessel or the like, the side of which is integral with the bottom, a removable attached protecting ring of sheet metal, around the bottom outside corner, and conforming to the outside wall of the vessel, the said ring having a narrow portion of the bottom edge turned inwardly, in contact and in a plane with the bottom of the vessel, thus forming a cushion and protection for the enamel on the bottom corner of the vessel, all as shown and described.

1,308,623. FLOWER-HOLDER. HARRIETTE CALKINS and ZELMA M. CALKINS, Vauxsburg, N. Y. Filed Oct. 11, 1918. Serial No. 257,711. 2 Claims. (Cl. 24-5.)

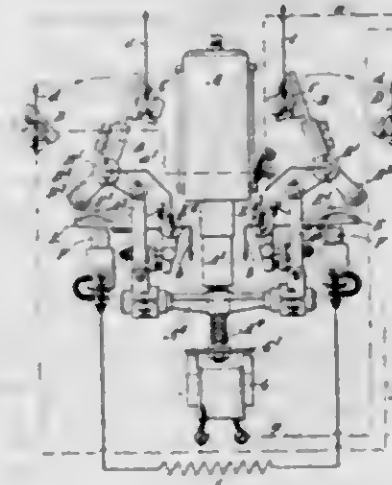
1. A button hole flower holder and corsage bouquet holder, comprising a shank having the upper end thereof

bent laterally to provide a restricted portion and then downwardly to provide a depending restricted portion adapted to receive the stem of a flower, and a coil



and transverse portion forming gripping members and adapted to accommodate the base of a flower.

1,308,624. ELECTRIC-ARC FURNACE. HENRY COATES, Watford, England. Filed Nov. 27, 1918. Serial No. 264,392. 4 Claims. (Cl. 204-64.)



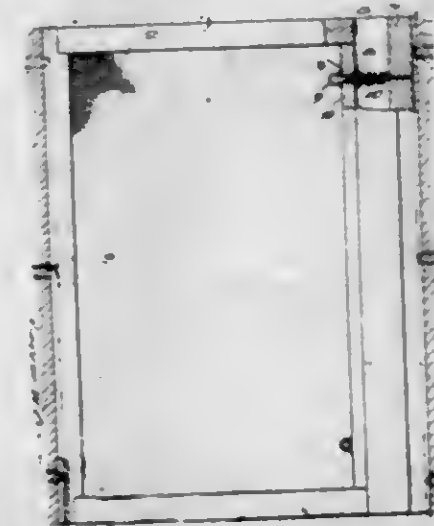
1. The combination with an arc-furnace automatic regulator controlled by the current-strength of the arc, of a voltage-controlled automatic switch having two or more positions controlled by the voltage at the arc and means so connecting the switch with the said regulator that in one position the switch permits the said automatic regulator to operate in its normal manner but in the other position cooperates with other parts of the apparatus so that the arc is lengthened at a more rapid rate than by the normal operation of the said regulator.

1,308,625. SCREEN-SASH. GEORGE W. CONOVER, Harrisburg, Ill. Filed Mar. 15, 1918. Serial No. 222,562. 1 Claim. (Cl. 156-38.)

A window screen including a rectangular frame, a boxing constructed of sheet metal substantially U-shaped in cross section and having the web portion engaged with one of the vertical members of said frame, guide sleeves extending through the web portion of the boxing and the adjacent vertical member of the frame, flanges at the opposite terminals of the guide sleeves engaging the web portion of the boxing and the adjacent member of the frame whereby the boxing is held in position thereon, a slide bar slidably fitted between the parallel portions of the boxing, screws secured in the bar extending inwardly through the guide sleeves and having enlarged lower terminals engageable with the inner flanged terminals of the sleeves to limit the out-

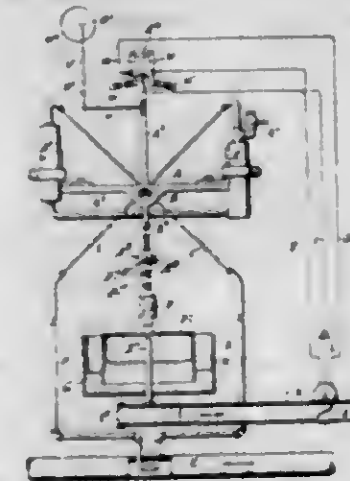
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ward movement with the slide bar with relation to the frame, and expansion springs confined between the outer flanged terminals of the guide sleeves and the slide bar,



coiled about the screws and normally maintaining the slide bar in outwardly projected position.

1,308,626. RATIO INDICATING AND RECORDING METER. WILLIAM J. CROWELL, JR., Wyncote, Pa. Filed Aug. 21, 1918. Serial No. 250,797. 7 Claims. (Cl. 73-167.)



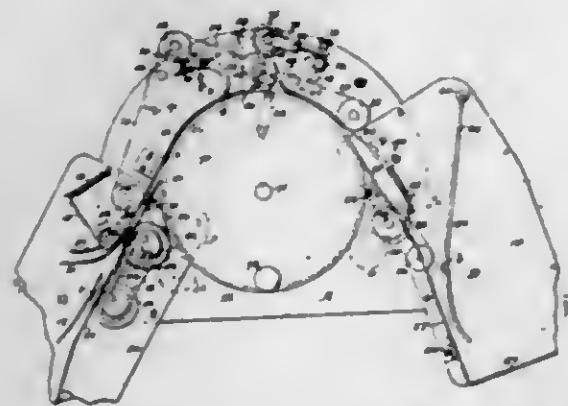
2. Differential pressure apparatus comprising a U gage pivoted to turn about a horizontal axis, and having an arm extending downward below said pivotal axis, and differential pressure means for loading said arm with a weight varying in proportion to the differential pressure to which said means are subjected.

1,308,627. COVER-OPENER FOR RECEPTACLES. EUGENE EDWARD FINNEGAN, Chicago, Ill., assignor to Continental Can Company, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Feb. 2, 1916. Serial No. 75,659. 2 Claims. (Cl. 220-43.)



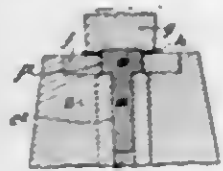
2. The combination with a can having a friction cover having an upstanding flange provided with a horizontal slot adjacent its upper end, of a lever formed of a single piece of wire having a looped portion forming a broad can engaging end, and a handle portion curved downwardly therefrom and loosely passing through the slot and engaging the upper face of the cover and its end extending upwardly forming a finger hold whereby the handle is raised and the cover removed from the can.

1,308,628. PRINTING MECHANISM. GEORGE H. GRAM, Jersey City, N. J. Filed July 8, 1912. Serial No. 708,141. 17 Claims. (Cl. 101-236.)



2. The combination of a carrier wheel, a printer coacting therewith, a feeding device for the articles at one side of said carrier wheel, a delivery device at the other side of the same, a leading tape coacting with the carrier wheel and extending in contact with the periphery thereof from the feeding device to the delivery device, and a guide coacting with the feeding device and extending beyond the initial point of contact of the tape with the wheel.

1,308,629. MANUFACTURE OF HEADED BOLTS, RIVETS, OR THE LIKE. FRANCIS HENRY GRIFFITHS, Handsworth, Birmingham, England. Filed July 23, 1918. Serial No. 246,316. 1 Claim. (Cl. 10-27.)



The method of manufacturing a headed bolt, rivet or the like, consisting in sizing and shaping the head thereof within a head-forming bore of a heading plate and retaining the head in firmly attached relation to the plate, and subsequently trimming and sizing the head by utilizing the plate as a drawing-through plate during separation of the head from the plate.

1,308,630. ADJUSTABLE LEVEL-STAND. DELFORD HATCH, Alta, Iowa. Filed July 26, 1917. Serial No. 182,907. 2 Claims. (Cl. 248-3.)



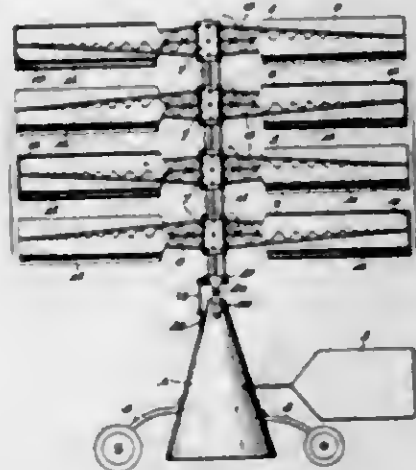
1. A stand of the character described including an upright, a level-supporting platform adjustably arranged on the upright and having a transverse depression formed therein adjacent one end, and a strip arranged in said depression and adapted for vertical adjustment with relation to the platform.

1,308,631. FOLDER FOR SEWING-MACHINES. JESSE J. HEAR, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 8, 1918. Serial No. 261,648. 3 Claims. (Cl. 270-34.)



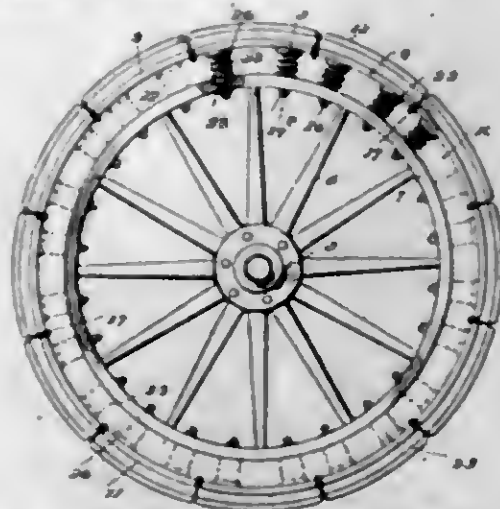
1. A folder for sewing machine comprising a base plate, a curved guiding plate carried thereby and supported so that the edge of an under fabric section may be directed beneath said curved guiding plate, said curved guiding plate being shaped so as to fold the edge of an upper fabric section and form a reentrant fold therein back from the folded edge, whereby the seam will have the appearance of having been covered by a tape.

1,308,632. FLYING-MACHINE. HOMER A. HILL, Lebanon, Tenn. Filed Aug. 22, 1918. Serial No. 250,999. 3 Claims. (Cl. 244-19.)



1. A flying machine comprising a car, a mast connected at its lower end with the car and comprising a series of spaced and superposed bearing and supporting heads, pairs of propellers mounted upon the mast, the propellers of each pair being adapted to rotate in opposite directions, said propellers having hubs disposed between adjacent heads and in bearing contact therewith, a shaft extending through the mast and to which the hubs of certain of said propellers are fixed, and drive gearing between said shaft and the hubs of the other propellers for driving said propellers in the reverse direction to the direction of rotation of the shaft.

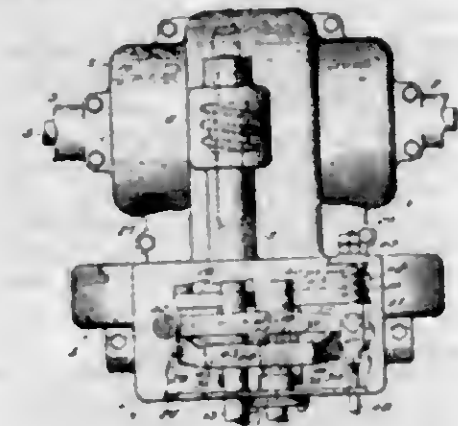
1,308,633. RESILIENT TIRE. JAMES A. HOANE, Washington, D. C. Filed Oct. 11, 1918. Serial No. 257,719. 5 Claims. (Cl. 152-8.)



1. The combination with a wheel including a felly having spaced conical shaped openings formed therein with

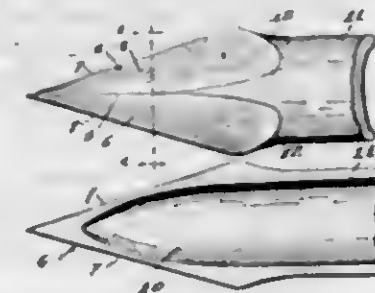
their large ends opening through the outer face of the felly and provided with seating recesses surrounding said openings, of a rim spaced from the felly and provided with centering flanges, eyes secured to the rim and centered within the flanges, bolts pivotally connected with the eyes and extending through the adjacent conical openings in the felly, coiled springs surrounding the bolts and having their opposite ends seated within the flanges and recesses in the felly respectively, a tire carried by the rim, and nuts engaging the bolts and bearing against the inner face of the felly.

1,308,634. DRIVING MECHANISM. MAURITZ C. INDAHL, Philadelphia, Pa. Filed Aug. 24, 1916. Serial No. 116,653. 31 Claims. (Cl. 180-17.)



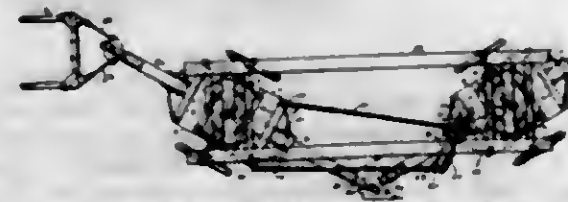
1. The combination of a driving member, a pair of members driven thereby through mechanism permitting said driven members to differentiate in speed, and means independent of the driving members for arbitrarily causing said members to be driven positively at variable ratios of differentiation.

1,308,635. HARROW-TOOTH. WILLIAM H. LEE, Syracuse, N. Y., assignor to Syracuse Chilled Plow Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 7, 1918. Serial No. 252,987. 3 Claims. (Cl. 55-36.)



1. A harrow tooth having a point provided with a concave bottom face, forwardly converging side edges and substantially flat top faces diverging downwardly and forwardly toward the side edges and forming an inclined ridge along the median line of the point, substantially as and for the purpose specified.

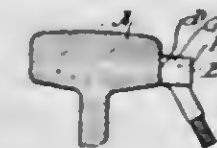
1,308,636. VEHICLE. OTTO H. MENNING, Houston, Tex. Filed May 20, 1918. Serial No. 235,659. 4 Claims. (Cl. 21-145.)



2. A vehicle including front and rear wheels, frames supported thereby, coupling poles connected to the frames

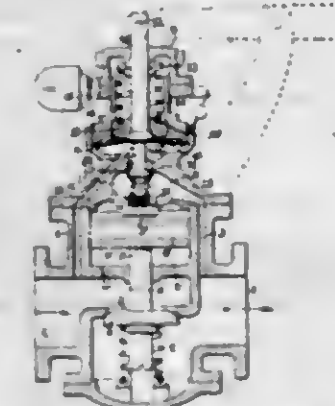
and flexibly connected together, a double-tree having oblong end bearings pivoted to one frame, clevises carried by the double-tree and movable in said bearings lengthwise relative to the double-tree, chains connected at one end to said clevises and at their other ends fastened to the other frame.

1,308,637. RAIL-BONDING. GUATAV A. MEAKT, Worcester, Mass., assignor to American Steel & Wire Company of New Jersey, a Corporation of New Jersey. Filed Feb. 15, 1917. Serial No. 148,705. 9 Claims. (Cl. 113-112.)



1. A method uniting a rail bond to a rail laid in a track which comprises applying a gas flame to a side face of a steel rail and thus heating it to a welding temperature, applying the end of a copper wire to the same while thus heated so as to melt and weld the copper on to the steel, continuing this operation over a suitable area of the rail face to form a rough coating of copper welded thereon, then placing adjacent to such copper coating a copper bond terminal the inner face of which is inclined upwardly and outwardly to form a trough, applying a gas flame to the inner adjacent faces of the coating and the bond terminal and thus heating them to a welding temperature lower than that to which the rail was first heated, melting the end of a copper wire in said flame so that the molten copper enters between and unites with the aforesaid adjacent faces throughout practically the entire height of the inner face of the bond terminal.

1,308,638. PRESSURE-REGULATOR. JULES P. METZGER, Carlstadt, N. J., assignor to The Leslie Co., Lyndhurst, N. J. Filed June 18, 1917. Serial No. 175,407. 3 Claims. (Cl. 50-11.)



1. In a locked or sealed pressure regulator, a casing, a diaphragm therein, a main valve, a spring-pressed valve for regulating the main valve having an upwardly extending valve stem engaging the lower face of the said diaphragm, a rod having at its inner end a head contacting with the upper face of the diaphragm, the upper end of the said rod projecting through the top of the casing to the outside of the regulator, a spring within the casing and bearing on the said rod head, and means connected with the projecting end of said rod for operating it.

1,308,639. MINE-WORKING MACHINE. NORTON A. NEWBICK, Columbus, Ohio, assignor to James Ellwood Jones, Switchback, W. Va. Filed Jan. 24, 1916. Serial No. 73,614. 7 Claims. (Cl. 202-8.)

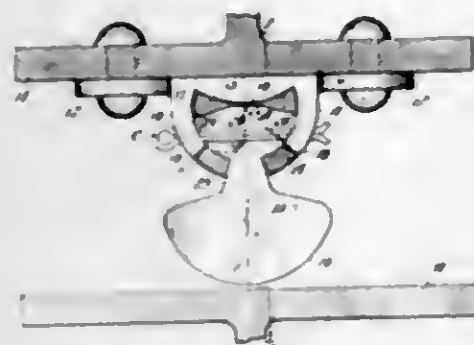
1. A mine working machine comprising a base unit, a conveyer structure supported thereby, a kerf cutting structure located above the front end of said conveyer

and relatively movable with respect to said conveyer structure to assume an operative or inoperative position, the means for driving said two structures independently



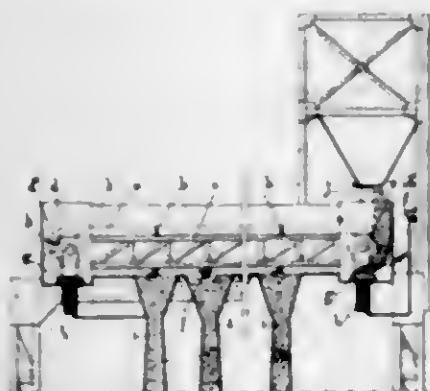
of each other and means for swinging said conveyer and keef cutting structures sidewise to cut the keef when said keef cutting structure is in operative position or to sweep the mine floor to gather the coal when said keef cutting structure is in inoperative position.

1,308,640. **ROCKER SIDE BEARING.** JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Sept. 21, 1918. Serial No. 255,042. 4 Claims. (Cl. 64—65.)



1. In a device of the character described, adapted to be interposed between two relatively movable elements, the combination with a retaining member adapted to be secured to one of said elements, of a rocker, said member and rocker having cooperating but oppositely curved bearing surfaces, said rocker having also another curved bearing surface adapted to engage the other of said elements, the two curved bearing surfaces of the rocker being concentric.

1,308,641. **CHARGING APPARATUS FOR CONTINUOUS VERTICAL OVENS, MORE PARTICULARLY COKE AND GAS OVENS.** JULIEN PIETRA, Paris, France. Filed Jan. 23, 1918. Serial No. 213,368. 4 Claims. (Cl. 214—21.)



1. In a coking oven, an oven chamber open at the top, a charging hopper open to said top, and means in said hopper for feeding the charge to said oven and compact-

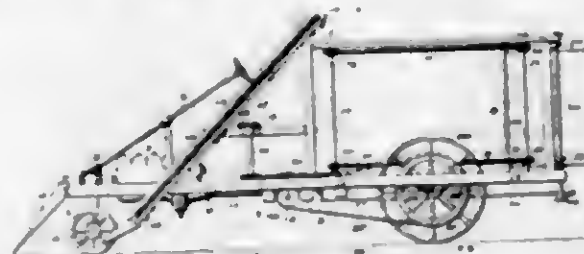
ing the upper portion of a charge therein to form a seal against the escape of gases from the top of the oven during the coking operation.

1,308,642. **SHUTTER-OPERATING ATTACHMENT FOR CAMERAS.** HARRY F. PREFONTAINE, Brooklyn, N. Y. Filed June 13, 1918. Serial No. 239,703. 1 Claim. (Cl. 95—53.)



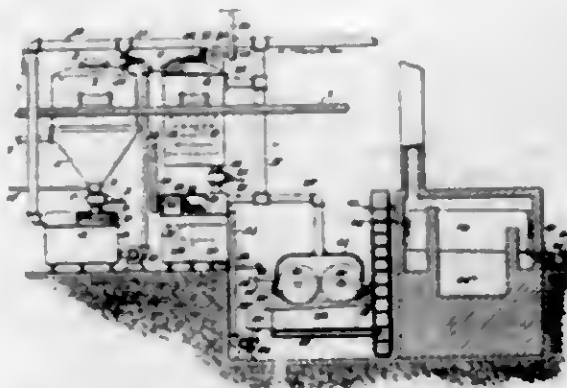
In an attachment for cameras having spring return shutter levers, a plate adapted to be secured to the face of a camera, said plate having an outwardly projecting lug, a bell crank lever pivoted to said lug and having an upper and a lower arm, a cord for connecting the lower arm of said bell crank to the shutter lever and an operating cord connected to the upper arm of said lever for moving said lower arm downwardly and thereby operating the shutter by means of said connecting cord.

1,308,643. **CORN-HARVESTING MACHINE.** CARLTON C. RINEHART, Loveland, Ohio. Filed July 21, 1917. Serial No. 182,023. 8 Claims. (Cl. 56—15.)



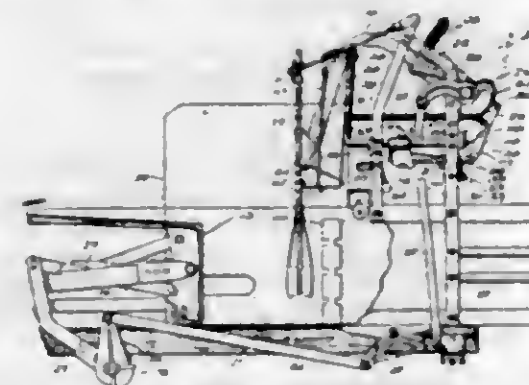
1. In a corn harvesting machine, the combination of a corn-supporting bed adapted to be opened and closed, stationary raceways at the sides of the bed, stationary platforms at the forward end of the bed and adjacent to the corn entrance end of the raceways, means for conveying the corn to the raceways, and means for guiding the corn onto the platforms and holding it there while the bed is open.

1,308,644. **RETARDER.** EDWARD E. ROLL, Cleveland, Ohio. Filed Apr. 21, 1915. Serial No. 22,757. 8 Claims. (Cl. 106—28.)



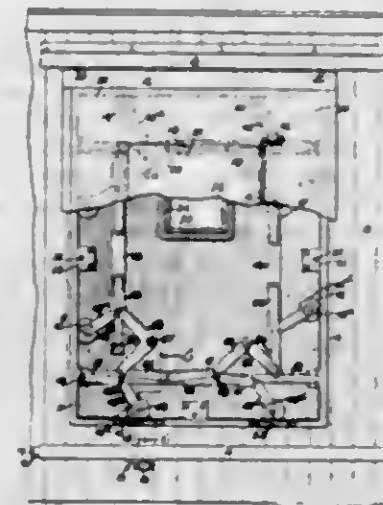
1. The process of producing a retarder which consists in heating glue-producing matter, alkali, and hydrated lime in about the proportions specified to produce therefrom a gluey liquid, mixing such liquid with hydrated lime in about the proportions specified, heating the mixture thereby to dry the same, cooling the mixture thus produced, and finally grinding the same.

1,308,645. **BALING-PRESS.** JAMES A. SHARP, Springfield, Ohio, assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Aug. 28, 1916. Serial No. 117,354. 24 Claims. (Cl. 100—24.)



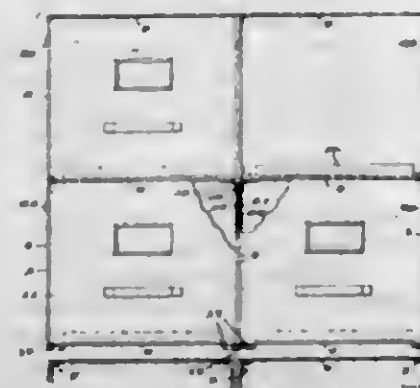
1. In a baling press having a frame, the combination of a block case, actuating means, means carried by the frame, operable by the actuating means and intermittently engageable with said block case to move said block case to block setting position.

1,308,646. **LOCKING MEANS FOR FREIGHT-CAR DOORS.** JOEL W. SMITH, Ardmore, Okla. Filed Jan. 30, 1918. Serial No. 214,456. 3 Claims. (Cl. 16—63.)



1. The combination with a structure having a door opening, of a door to close said opening, rockable locking elements on the door, said elements being each in the form of a mutilated worm, and coacting locking elements presenting teeth adapted for engagement by the rockable elements, and means to actuate said rockable elements to engage or disengage said fixed elements.

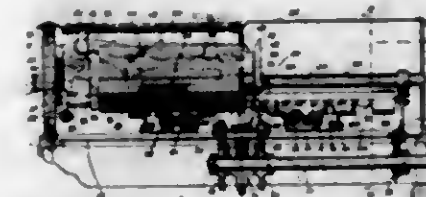
1,308,647. **SECTIONAL CABINET.** EVERETT STUCK, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 13, 1914. Serial No. 844,910. 10 Claims. (Cl. 45—2.)



9. A sectional filing cabinet including units designed to be mounted one upon the other and side by side, the

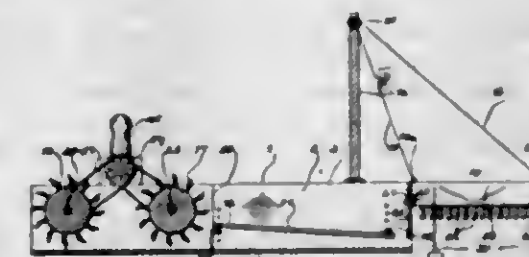
units of each tier having means which interlock with the unit of the next tier by a horizontal sliding movement, and the units of each tier having means which interlock with the adjoining unit of the same tier by the horizontal sliding movement which interlocks the first mentioned means of the units, substantially as and for the purpose specified.

1,308,648. **CHECKWRITER.** LIBANUS M. TODD, Rochester, N. Y., assignor, by mesne assignments, to Todd Protectograph Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 27, 1915. Serial No. 52,873. 9 Claims. (Cl. 197—6.2.)



1. In a check protecting machine, a casing having a work receiving slot therein and a supporting bed below the slot; a type carrier in the casing above the slot, provided with a plurality of separate type forms for printing words of varying lengths; means for applying ink to the printing surfaces of the type forms; a platen below the slot; a device for moving the type forms, individually, into printing contact with the platen, said carrier being movable to bring said forms, selectively, into position for movement by said device; and means actuated by the individual type forms for feeding the work variable distances corresponding to the lengths of the words printed.

1,308,649. **WATER-POWER PLANT.** ARTHUR G. WATKINS, Philadelphia, Pa. Filed July 29, 1918. Serial No. 247,313. 12 Claims. (Cl. 170—105.)

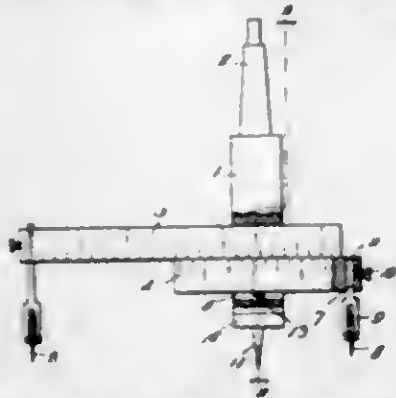


1. A water power plant for streams embracing a sluice way, water wheels in sluice way, means on plant for adjusting a V shaped flood guard operative to protect plant in flood times, said means consisting of a means on plant and guard for raising ends of guard adjacent to plant means on plant and guard for raising outer end of guard, said last means consisting of a cable operating over a pulley on a pole carried by the plant having one end secured to outer end of guard and other end secured to ends of guard adjacent to plant, means for utilizing the power from the operation of said water wheels.

1,308,650. **GASKET-CUTTER.** HAYTER C. WILSON, West Marion, S. C. Filed Oct. 8, 1918. Serial No. 257,371. 2 Claims. (Cl. 164—82.)

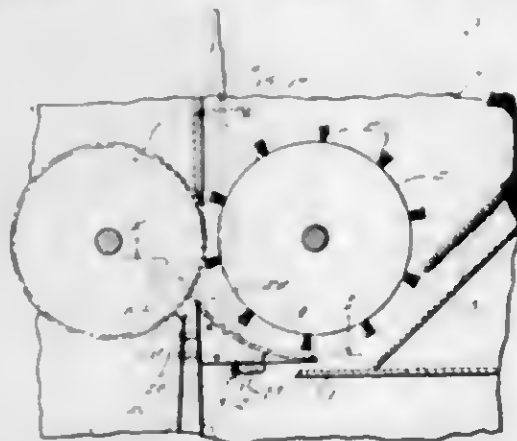
1. In a gasket cutter, the combination with an upright body having a transverse opening, a pair of arms lapping each other therein and having upright openings in their outer ends, forks whose shanks are mounted in said openings, set screws in the arms against said shanks for permitting their vertical adjustment, and rotary cutters

mounted in the forks of a centering point having a head at its upper end, and a threaded shank continuing the head upward and adapted to be screwed into the lower



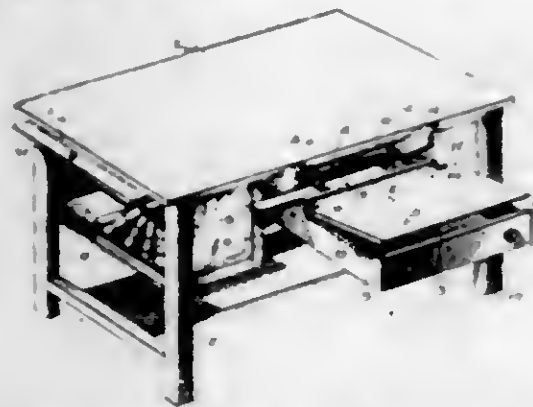
end of said body against the lowermost of said lapping arms, for the purpose set forth.

1,308,651. MOTE BOARD FOR COTTON-GINS. JAMES L. WOOLDRIDGE, Decatur, Tex. Filed Oct. 19, 1917. Serial No. 197,448. 8 Claims. (Cl. 13-9.)



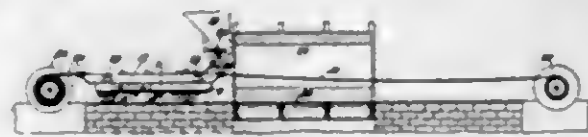
5. In a cotton gin structure, a saw cylinder, a rotary doffing brush, a pivotally supported mote board, a pair of walls attached to and extending downwardly from said mote board for forming a dust passage, said walls having their upper ends bent inwardly to form a constricted mouth for said dust passage, and a crank shaft engaging said mote board for adjusting the position of the mote board and dust passage with respect to said rotary doffing brush.

1,308,652. TABLE. JACOB F. AXNOLD, Bellevue, Ohio. Filed Dec. 15, 1916. Serial No. 137,258. 6 Claims. (Cl. 45-70.)



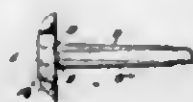
1. A table having a desk drawer supported for sliding forward and rearward therein, and a forwardly opening receptacle for writing material and the like supported in the drawer for rotating upon a transverse axis passing through a median portion of its body, the forward open end of the receptacle being rotated downward to an inaccessible position when the drawer is closed and upward to an accessible position when the drawer is opened.

1,308,653. RABBLE AND CLINKER-BREAKER. FREDERICK WILLIAM BOCKING, Van Buren, Ark. Filed Mar. 28, 1918. Serial No. 225,206. 5 Claims. (Cl. 263-23.)



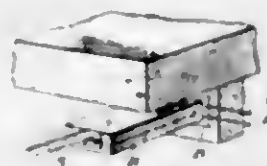
2. In a rabble and clinker breaker, a carriage, a series of rabbles on the carriage, each series being mounted to swing, a frame having a limited movement on the carriage, means for propelling the carriage secured to the frame, and means carried by said frame for engaging the rabbles, whereby said rabbles may be maintained in operative or in inoperative position.

1,308,654. LUMBER-RULE. SAMUEL P. BOPPE, Washington, D. C. Filed Aug. 23, 1918. Serial No. 251,172. 1 Claim. (Cl. 33-107.)



In a device of the class specified, the combination of a rule body, a head at one extremity thereof having a rectangular and outwardly flared central opening, and also formed with two pairs of prongs projecting in opposite directions, the prongs of each pair being arranged in spaced relation to each other laterally of the body of the rule, and a connector for securing said head to said rule body, said connector embodying rule body embracing and confining plate-like portions fastened to the body of the rule on opposite sides thereof, a crown portion connecting said plate-like portions and forming an integral part thereof, and a shank projecting from said crown through the central opening of the head and swaged to tightly fit said flared central opening.

1,308,655. ELECTRICAL HEATING DEVICE FOR WATCHMAKERS' USE. HERMAN EMERY BROWN, New Haven, Conn. Filed Apr. 26, 1919. Serial No. 292,821. 3 Claims. (Cl. 210-11.)

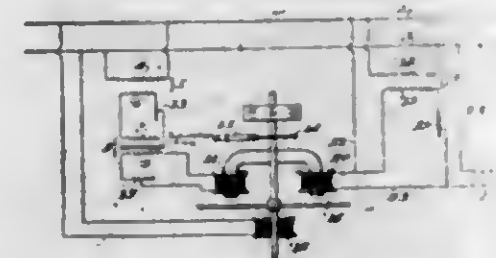


1. An electrical heater for jewelers' use for the adjusting of jewels on balance staffs, consisting of a pivotal member, jaws at one end, and terminals at the other, with conductors connecting the same and suitably insulated from said member, stationary terminals against which said terminals upon the member are adapted to contact as the latter is swung into operative position.

1,308,656. EXCESS-DEMAND METER. ALFRED W. BLAKE, Wynnewood, Pa. Filed Dec. 16, 1918. Serial No. 267,013. 8 Claims. (Cl. 171-34.)

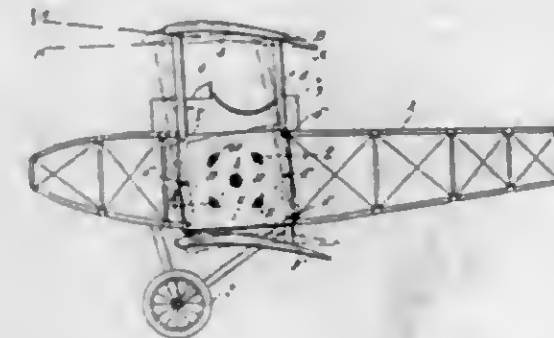
1. In an instrument for measuring electrical energy consumed in excess of a predetermined fixed rate, the combination of a movable element, means for producing thereon a positive torque which is a function of the rate of energy consumption, and means operative to produce thereon a substantially constant negative torque, the latter means comprising means for producing a negative

torque which is variable as a function of the line voltage, and means for producing a positive torque variable as a function of the line voltage, said two latter torques being



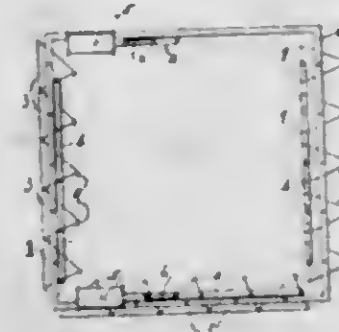
so related to each other as to produce in conjunction a constant negative torque.

1,308,657. AEROPLANE. HENRY CAMPBELL, Logan, Utah. Filed Oct. 28, 1918. Serial No. 260,000. 1 Claim. (Cl. 244-14.)



The combination with the body of an aeroplane, of upper and lower sustaining planes, uprights connecting the front and rear portions of the upper plane with the corresponding portions of the lower plane, said uprights and planes being rigidly connected, plates connecting the uprights at each side of the body, a transverse shaft journaled in the body and fixedly connected to the plate, means in the body for rotating the shaft and plate to bodily swing the uprights and planes about the axis of the shaft, means for locking the shaft against rotation, arcuate slots within each plate and means extending from the body and through the slots for limiting the rotation of the plates, uprights, and planes with the shaft, said planes being extended over and under the body, respectively.

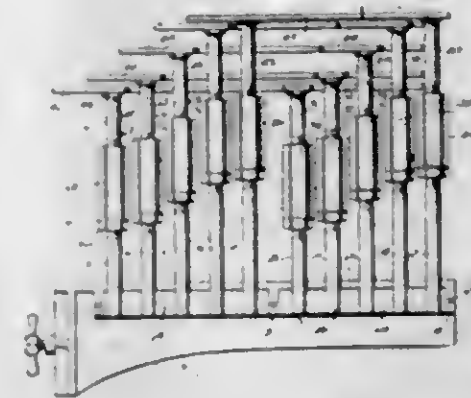
1,308,658. STREET-CROSSING SIGNAL. WILLIAM E. CASS, Seattle, Wash., assignor to Police Traffic Signal Company, Ltd., King county, Wash. Filed Sept. 20, 1916. Serial No. 121,302. 1 Claim. (Cl. 40-76.)



In a device of the class described the combination of isosceles triangular vanes with one side of each triangle lying in the same plane and adjacent each other, inwardly

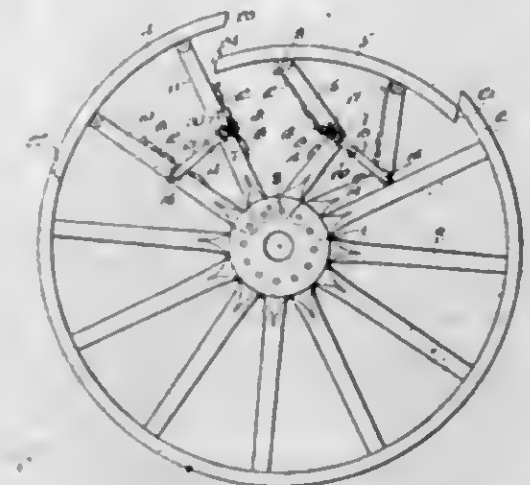
projecting lips on the edges formed by the intersection of the base and the sides of each vane, the projecting portion of one of the lips cooperating with the inclined face of the adjacent triangle, whereby the faces which lie in the same plane are held in proper alignment and the spaces between adjacent vanes are closed, a stationary pivot arranged centrally of each vane.

1,308,659. STOCK-GAGE. CHARLES W. CEDARSTROM, Westwood, Calif. Filed Dec. 30, 1916. Serial No. 139,787. 3 Claims. (Cl. 143-168.)



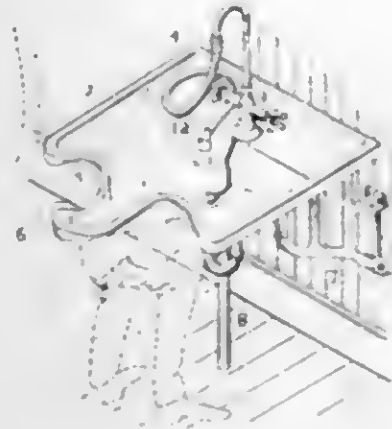
1. In a device of the class described, the combination of a base, a shaft carried by said base, a plurality of supporting rods arranged in pairs and having bearing portions on their inner ends, said bearing portions being carried by said shaft, elongated adjusting nuts screwed onto the forward ends of said rods, spacing rods carried by the forward ends of said nuts, and a plate carried on the forward ends of each pair of said spacing rods, whereby when said nuts are rotated said spacing rods will be moved either toward or away from the supporting rods, whereby said plate will be moved away from or toward said base.

1,308,660. COLLAPSIBLE WHEEL. CHARLES MOTLEY CLARK, Boston, Mass. Filed Oct. 10, 1917. Serial No. 195,855. 6 Claims. (Cl. 152-20.)



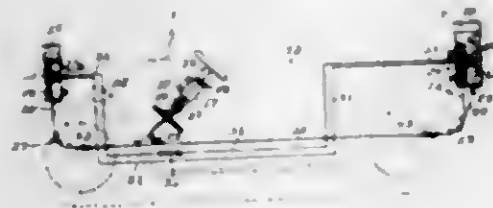
1. A collapsible wheel comprising a hub, a felly having a section detachable from the remaining portions thereof, an articulate spoke extending between said felly section and hub, and means for pivotally connecting the spoke to the felly section and to the hub respectively, whereby the felly section may be drawn inwardly away from the remaining portions of the felly.

1,308,661. PHYSICIAN'S STRADDLE-STAND. JAMES HAYARD CLARK, New York, N. Y., assignor to Archibald Wilson Mackintosh, Elizabeth, N. J. Filed Nov. 28, 1917. Serial No. 204,374. 2 Claims. (Cl. 4—24.)



1. A straddle stand provided with a bowl and a horizontally projecting horn having a seat inclined toward the bowl and the bowl having faces on each side of the horn which prevent the user from sliding forward from the seat, substantially as described.

1,308,662. AUTOMOBILE SIGNALING DEVICE. TIMOTHY JOSEPH COFFEY, East Providence, R. I. Filed May 10, 1918. Serial No. 233,714. 2 Claims. (Cl. 110—31.)



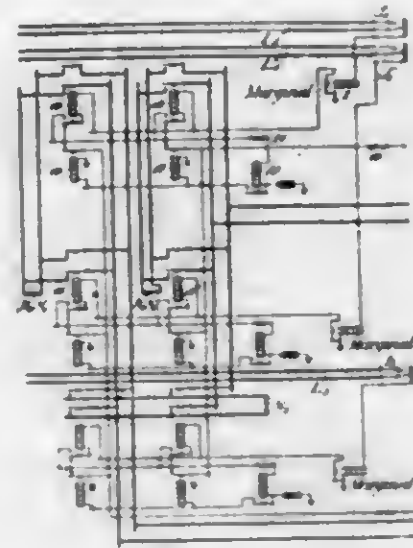
1. In an automobile, a signaling device comprising an indicator frame open on the sides and having an intermediate partition supporting a lamp, a stop signal in the form of a hand pivotally secured to a stud in the frame, a direction signal in the form of an arrow pivotally secured to a stud in the frame and having a T shaped cross arm on its pivot end, a wire operatively connected to the stop signal, a wire having an intermediate coil spring connection operatively connected to one end of the cross arm on the direction signal, a wire having an intermediate coil spring connection operatively connected to the other end of the cross arm on the direction signal, means for operating the wires, a stop signal lamp in the indicator frame, said indicator frame having an opening in front of the lamp, whereby when the stop signal is down it closes the opening in front of the lamp and when the stop signal is raised the light from the lamp shows through the opening in the frame, thereby giving a light stop signal at night.

1,308,663. [WITHDRAWN.]

1,308,664. RELAY SELECTING CIRCUIT FOR ARTIFICIAL LINES. CHARLES S. DEMAREST, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1917. Serial No. 174,886. 12 Claims. (Cl. 170—170.)

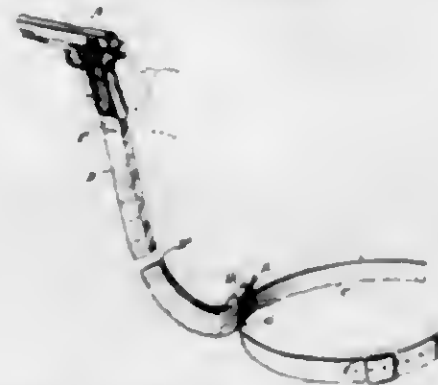
1. The combination with a repeater, of a plurality of transmission lines capable of being balanced by the same

artificial line, a plurality of balancing artificial lines and means comprising selecting relays for associating one of



said artificial lines with the repeater and one of said transmission lines.

1,308,665. MAGAZINE FOR FIREARMS. WALTER W. DOUGLAS, Savannah, Ga. Filed Oct. 5, 1918. Serial No. 257,047. 5 Claims. (Cl. 42—49.)



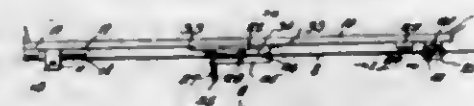
1. A magazine for firearms, comprising an outer rigid end portion, oblong in cross section, adapted to connect with the arm and carrying a follower and a flexible portion, also oblong in cross section, connected with said outer end portion which contains a feed spring supporting the follower whereby the magazine is adapted to contain cartridges arranged crosswise thereof and is adapted to bend easily around the body of the user.

1,308,666. WHEELED SCOOP. THOMAS E. DUCKWORTH, Colfax, La. Filed Apr. 8, 1919. Serial No. 288,539. 3 Claims. (Cl. 37—33.)



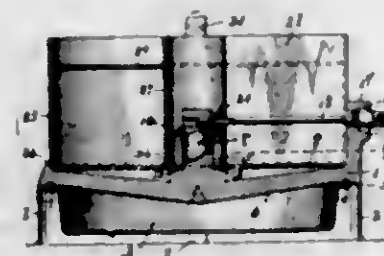
2. In combination, a scoop, handle bars extending rearwardly from the scoop and transversely spaced, a connecting element joining the rear ends of the handle bars, an axle having the scoop mounted thereon and provided with crank arms, wheels mounted upon the crank arms, an operating lever pivotally mounted between the handle bars, a catch carried by the operating lever to engage the element connecting the rear ends of the handle bars and connecting means between the operating lever and axle.

1,308,667. CABLE-GUIDE. HENRY EWOLDT, Grand Island, Nebr. Filed Dec. 16, 1918. Serial No. 266,990. 2 Claims. (Cl. 254—100.)



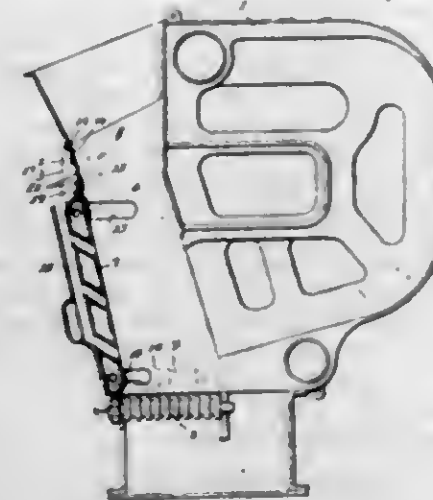
1. The combination with the running board of a motor vehicle; of hauling line guide devices pivotally mounted on the under side thereof, said devices being adjustable to project outward from the running board, and also foldable beneath the same, stops on the running board engageable respectively by the guide devices in the two positions stated, and spring latch tongues projecting from said stops and engageable with the devices for holding the same.

1,308,668. GRATER AND SLICER. THOMAS GORZELANY, Detroit, Mich. Filed Apr. 11, 1919. Serial No. 289,404. 3 Claims. (Cl. 146—9.)



1. The combination of a base having a central post, a cutter plate and a gear connected thereto both rotatable on said post, a shaft and a pinion to turn the gear and plate, and a container above the plate to hold materials to be divided, said container being formed with an inner chamber to receive the shaft and gears to prevent the materials to be divided from getting into the driving mechanism.

1,308,669. HEATER. EARL R. GREENLEY, Syracuse, N. Y., assignor to Pierce, Butler & Pierce Manufacturing Corporation, Syracuse, N. Y., a Corporation of New York. Filed Feb. 7, 1916. Serial No. 76,646. 5 Claims. (Cl. 122—212.)



1. A boiler having a vertical fuel passage, a water wall connected to the boiler and forming one of the walls of the fuel passage and forming a fuel magazine, the water wall being pivoted and adjustable on its pivot, and water pipe connections connected to the water

wall at a point remote from its pivot, said pipe connections being adjustable to conform to the pivotal adjustment of the water wall, substantially as and for the purpose described.

1,308,670. HAT, COAT, AND CANE HOLDING DEVICE. HARRY HANSON, Watertown, Mass., assignor of one-half to Louis E. Cadieux, Boston, Mass. Filed Dec. 22, 1916. Serial No. 138,307. 5 Claims. (Cl. 45—13.)



4. A safety holder for garments and other articles comprising two segment gears, a support in which said segment gears are pivoted in such position that said gears mesh with each other, a backing on which said gear support is mounted, said segment gears each having an arm, one of said arms being provided with a hat holding ring, a garment holder or hook attached to said back support, an umbrella holding clip also attached to said back support, a cross bar secured to the arm connected with the second of said segment gears, said cross bar being provided with a shield which when the said segment gears are turned back brings said shield in front of said garment hanger, said bar also being provided with a guard which when the gears turn back cooperate with the umbrella holding clip to engage the umbrella to prevent it from being moved from the clip, and means for locking said gears in their backward position.

1,308,671. SPEED-INDICATOR FOR SEPARATORS. EMIL HAUTALA, Briar Crossing, Mich. Filed July 26, 1918. Serial No. 246,990. 2 Claims. (Cl. 235—103.5.)



2. In a speed indicator, the combination of an indicating hand, mechanically driven at a pre-determined speed, a dial in conjunction with which said indicating hand operates, a machine driving shaft, a second indicating hand actuated by a movable element of said machine, a second dial for the second named hand, the movement of said second named hand being manually variable, the means for actuating said second named hand comprising a toothed wheel fast on the arbor of the last named hand, and a thrust member cooperating with the teeth of said wheel and actuated by a movable element of said machine.

1,308,672. NUT-LOCK. JOHN J. HENNESSY, New Kensington, Pa. Filed Jan. 12, 1918. Serial No. 211,605. 1 Claim. (Cl. 151-19.)



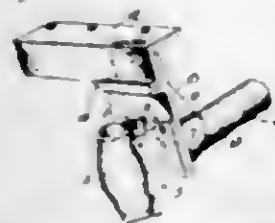
A nut lock comprising the combination with a bolt, of a nut provided upon its inner face with a recess having its outer wall inclined, said recess communicating with the bore of the nut, a flat washer disposed upon the bolt in loose encircling relation thereto and interposed between the nut and the material through which the bolt passes, and a tongue extending outwardly from the outer face of said washer and having its outer wall inclined for cooperation with the inclined wall of said recess whereby upon rotation of said bolt with respect to said nut and washer said inclined wall will cooperate to exert a wedging action for effecting a tilting tendency on said nut whereby to cause binding of said nut with respect to said bolt, said nut and washer being non-rotatable with respect to each other.

1,308,673. PLANING STAND. AARON E. HENRY, Brown Valley, Minn. Filed Jan. 11, 1918. Serial No. 211,430. 1 Claim. (Cl. 144-206.)



In a planing stand, an L-shaped frame having a vertical leg and horizontal leg so that a piece of work to be dressed may lie upon the horizontal leg and abut the vertical leg, U-shaped clamping members, carried by the horizontal and vertical legs respectively for engagement with opposite sides of the work held by the frame, a T-shaped member comprising a vertical leg and a horizontal leg, and means pivotally securing the vertical leg of the T-shaped member to the corresponding leg of the L-shaped frame, whereby the horizontal leg of the T-shaped member may be swung to a position where it lies against the corresponding leg of the L-shaped frame and projects in the same direction as the latter or swung to a position at an angle with the horizontal leg of the L-shaped frame for supporting the said frame in upright position.

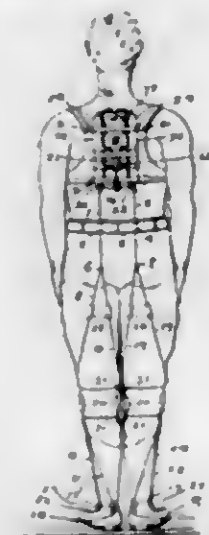
1,308,674. BEDSTEAD. WILLIAM J. S. HENNESSY, Orrville, Ohio. Filed Oct. 23, 1918. Serial No. 259,407. 2 Claims. (Cl. 5-64.)



1. A three-piece bedstead comprising a foot section, having socket members, a head section having socket members, side rails having corner members for interlocking with the sockets, and transverse bars providing for variable adjustment of the corner member at the ends of the frame to compensate for variation as to the distance between the sockets of the respective sections, the

transverse bars having out-turned lips at the ends each corner member in which its lip is slidable having a hook portion adapted to receive the lip on the adjacent end of the transverse bar.

1,308,675. PEDOMOTOR. LESLIE C. KELLEY, South San Francisco, Calif. Filed Apr. 24, 1917. Serial No. 164,285. Renewed May 6, 1919. Serial No. 295,107. 7 Claims. (Cl. 46-69.)



1. A pedomotor comprising two sets of artificial ligaments, each set corresponding with and arranged substantially parallel with the principal motor muscles of each leg and foot of the anatomy; and means for alternately operating each set of ligaments to produce alternately a running movement for each leg and foot.

1,308,676. COLTER. JOHN T. KIRK, Memphis, Tenn. Filed Jan. 4, 1919. Serial No. 269,652. 1 Claim. (Cl. 97-6.)



The combination with a plow beam having a vertical longitudinally extending opening therethrough, of a colter inserted through said opening and provided on one edge with a series of teeth, a locking bar inserted through said opening and provided on one edge with a series of teeth to engage with the teeth on the colter, the opposite edge of said bar being adapted to bear against the adjacent end of the opening in the plow beam, a longitudinally projecting stop on the lower end of the locking bar to engage against the bottom of the plow beam at the end of the opening therethrough, lateral stops on the sides of the locking bar to engage upon the top of the plow beam at the sides of the opening therethrough, and a wedge inserted through the opening in the plow beam and binding between the end of the same and the adjacent edge of the colter.

1,308,677. FRUIT-PICKER. DEMETER K. KOACH, Milwaukee, Wis. Filed Dec. 7, 1917. Serial No. 206,052. Renewed Apr. 18, 1919. Serial No. 291,169. 1 Claim. (Cl. 56-335.)

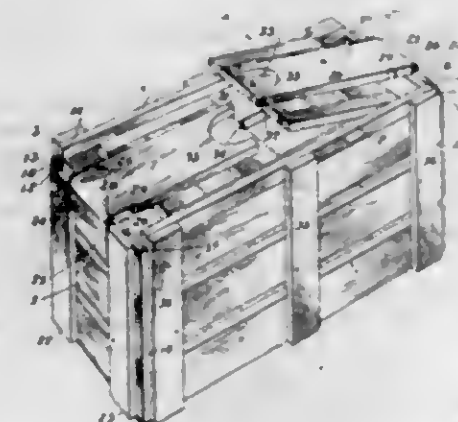
A fruit picker comprising a pole having an inclined opening therein, a stem on said pole, a pair of shears

consisting of two straight members pivotally connected together, one of said members being rigidly connected with the end of said stem, a swiveled pulley carried by



said last mentioned member, a cord connected with the other member and passing over the pulley and down the stem and through the opening, and a receptacle having a socket adjustably engaging the stem.

1,308,678. COLLAPSIBLE BOX, CASE, AND THE LIKE. WILLIAM NEUTZ, Hyde Park, London, England. Filed Mar. 26, 1919. Serial No. 285,355. 3 Claims. (Cl. 217-14.)



1. A collapsible box or the like, comprising side members, end members hinged to the side members at the ends of the side members, said end members having outer vertical bars secured thereto, top sections, hinges connecting the outer ends of the top sections and the outer bars of the end members, said hinges having their pivots disposed outwardly of the end members whereby such end members serve to prevent the downward movement of the top sections beyond a substantially horizontal position, the free ends of the top sections having alternately projecting portions overlapping each other so that the top sections are simultaneously elevated.

1,308,679. SOWING-MACHINE CONSTRUCTION. FRANK POLBINELLI, Benwood, W. Va. Filed Aug. 27, 1918. Serial No. 251,652. 2 Claims. (Cl. 221-130.)

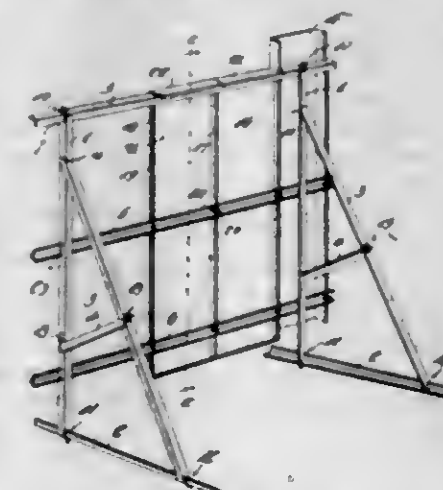
1. In a planter, the combination of a main frame, a transverse series of vertically disposed receptacles, a slotted platform disposed below and spaced from the lower ends of the receptacles, a spout arranged to receive potato pieces from the platform, followers movable forwardly and rearwardly on the platform, levers movable in

the slots of the platform and connected to the followers, yielding means for moving the levers in one direction, a shaft having differently disposed cams for moving the



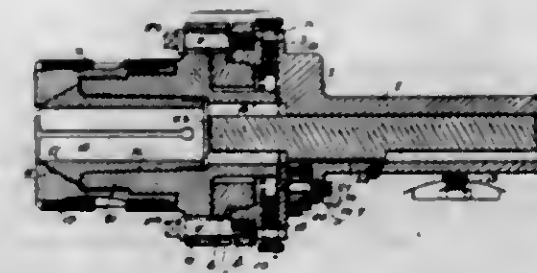
levers in the other direction and means for rotating the cam shaft.

1,308,680. KNOCKDOWN SIGN. AUSTIN ELMER PRICE, Decatur, Ill. Filed Dec. 27, 1918. Serial No. 268,490. 6 Claims. (Cl. 189-34.)



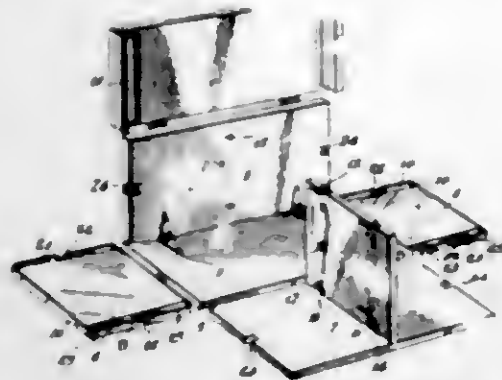
1. In a knockdown wall, a vertical frame formed of metal bars having detachable pin and slot connections, transverse base bars supporting said frame and having detachable pin and slot connections therewith, braces extending from said base bars to said frame and having detachable pin and slot connections with both, and a sheet metal facing for the frame having detachable pin and slot connections therewith.

1,308,681. TOOL-HOLDER. CLARENCE BRADSHAW PRINCEAUX, Forest Hill, London, England. Filed Feb. 17, 1917. Serial No. 149,217. 13 Claims. (Cl. 279-16.)



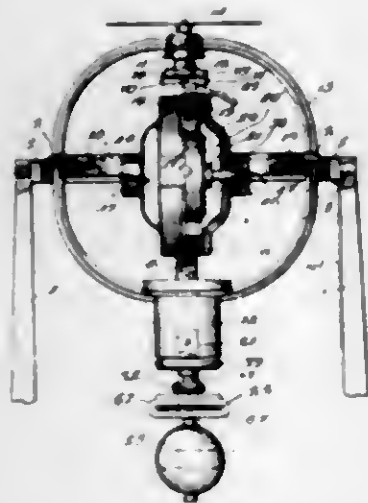
1. A tool holder of the character referred to, comprising a stock, a face plate, a universal joint between said face plate and said stock, means for moving said face plate about said joint, comprising screws on the stock engaging with said face plate, a chuck, means for moving said chuck across the said face plate, and means for clamping said chuck to said face plate in any position in which it may be moved thereon.

1,308,682. FOLDABLE CRATE. GEORGE W. RITCHIE, Oak Hill, Fla. Filed Mar. 10, 1918. Serial No. 83,392. 2 Claims. (Cl. 217-15.)



1. A crate comprising a flat bottom having rectangular sides and ends hingedly secured thereto, a rectangular reinforcing band of a greater width than the ends of the crate secured to the top and bottom edges of the said ends, the side members of each of the bands being centrally formed with a substantially rectangular indent portion that is secured to the side edges of the ends, defining substantially rectangular sockets or spaces between the side edges of the ends and the side members of the bands outward of the said indent portions, the sides of the crate having their ends centrally notched to receive the indent portions of the band, when the crate is set up, and also whereby the ends of the sides, opposite the referred to notches are received in the spaces provided between the bands and the side edges of the ends, and said bands designed to exert a tension toward the side members of the crate.

1,308,683. GYROSCOPIC COMPASS. GEORGE A. ROBERTS, New York, N. Y., assignor to The Carle Gyroscopic Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1915. Serial No. 423. 2 Claims. (Cl. 74-78.)

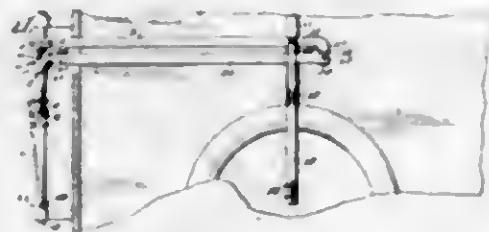


1. In a gyroscopic compass the combination of a rotary gyroscopic member; means for restraining its movements in one direction; means for pivotally mounting said member adapted to swing in azimuth; vertically disposed means for floating the weight of said member on a magnetic field, and means comprising a magnetic pole and a movable metal member to dampen the precessional movements of said member while seeking a true east and west plane.

1,308,684. AUTOMATIC SAFETY-VALVE. ALEXANDER E. RUCHT, Cincinnati, Ohio. Filed Dec. 7, 1918. Serial No. 265,713. 5 Claims. (Cl. 67-116.)

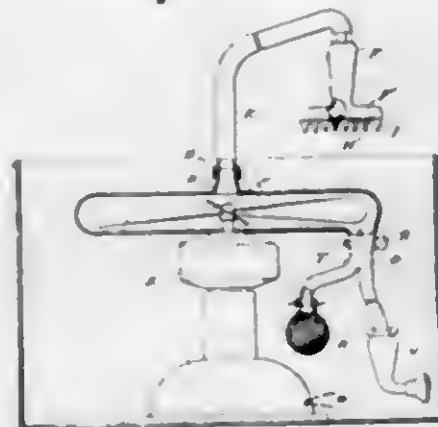
1. In a device of the character described, a support, valve means for controlling the flow of gas, a lever pivotally connected to the support, a combination catch, retaining and guide element mounted on the lever, an arm

projecting from the valve means and engageable with the catch, retaining and guide element, an expander and contractor connected to the support and also operably con-



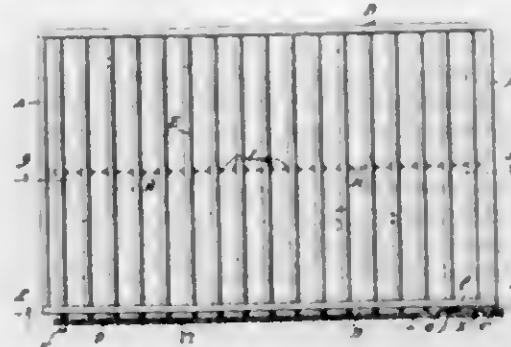
nected with the lever so as to control the position of the lever, and means for automatically returning the valve means to a closed position subsequent to the release of the arm from the catch, retaining and guide element upon the contracting or excessive expanding action of the expander and contractor.

1,308,685. HAIR-CLEANING DEVICE. ANTONIO DI SALVO, Washington, Pa. Filed Feb. 15, 1919. Serial No. 277,159. 1 Claim. (Cl. 15-60.)



A hair cleaning apparatus, comprising a casing, a motor, a vertically disposed shaft with a fan fixed thereto, and a suitable housing for the latter, a pipe leading from the housing, a handle with flexible pipe connections between the fan and the housing, a comb with perforations fastened to said handle, said housing having branching passageways with valves therein, a drier having flexible pipe connection with one of said passageways and a receptacle with the other adapted to receive dandruff.

1,308,686. DEVICE FOR TURNING EGGS. DAVID SPRER, Fort Dodge, Iowa. Filed May 6, 1919. Serial No. 295,037. 1 Claim. (Cl. 119-44.)



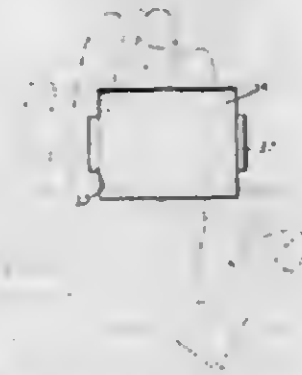
An egg turning device, comprising a frame made up of two complementary sections, the adjacent longitudinal edges of which are provided with oppositely disposed scalloped portions forming, when the frames are together, bearings, the bottom of the frame having a series of holes in alignment, pins seated in said holes and having concaved heads forming bearings for the rollers midway between the opposite sides of the frame, sprocket wheels keyed to the rollers, a sprocket chain passing about said wheels, and means for taking up slack in the chain, one of said rollers adapted to have a crank attached thereto for driving the chain.

1,308,687. SPRING-CLIP TOOL. GARA ROSCOR STARK, El Campo, Tex. Filed Nov. 19, 1918. Serial No. 263,200. 2 Claims. (Cl. 29-84.)



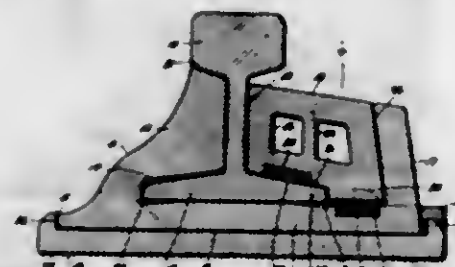
1. A spring clip tool to facilitate forcing a clip through a hole in a plate, consisting of a bar with a finger pivoted thereto and having its free end angled, the end of the bar designed to engage the clip, and the angled end of the finger adapted to engage said hole whereby said clip may be sprung into the hole as the bar and finger are moved together.

1,308,688. BLOTTER. JAMES J. SULLIVAN, St. Thomas, Minn. Filed Aug. 10, 1918. Serial No. 249,283. 3 Claims. (Cl. 120-25.)



1. The herein described hand attached blotter comprising a strip of blotting paper folded into an intermediate panel and two overlapping side panels, a stiffening frame, means located at each end of the stiffening frame for gripping the folded panels and a flexible band positioned across the blotter for engagement around the operator's fingers.

1,308,689. RAIL-JOINT. GEORGE TAYLOR, Roxborough, Pa. Filed Apr. 11, 1919. Serial No. 289,186. 3 Claims. (Cl. 238-207.)



1. In a rail joint, the combination with the rails of a chair having an undercut enlargement at one side and an inwardly inclined opposed wall at the other side, an undercut block adapted to fit between the inwardly inclined wall and the web of the abutting rail ends, means for forcing said block upwardly into locking position, and a supporting element for the chair having spaced enlargements adapted to align with the enlargement on the chair.

1,308,690. WATCH CRYSTAL AND BEZEL. LOUIS E. F. WACHTER, New York, N. Y. Original application filed Oct. 17, 1917. Serial No. 197,006. Divided and this application filed Mar. 11, 1918. Serial No. 221,585. 4 Claims. (Cl. 58-91.)

1. In a watch or like article, a bezel, a crystal having a cupped-face portion, a side wall engaging the inner pe-

riphery of the bezel and extending in a flange edge more flexible than the face portion engaging the under side of



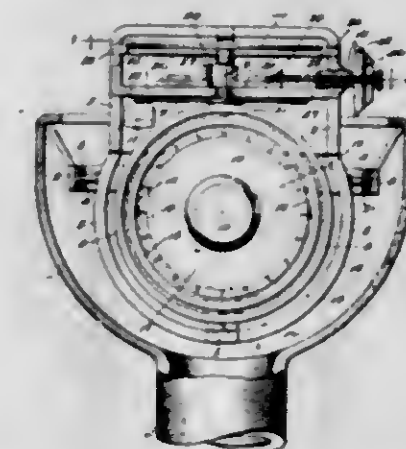
the bezel and the surface of the dial or adjacent watch parts.

1,308,691. COMBINED MOTOR TRACTOR AND CULTIVATOR. ALEXANDER E. WILLIAMS, U. S. Army. Filed Dec. 1, 1916. Serial No. 134,408. 1 Claim. (Cl. 97-30.)



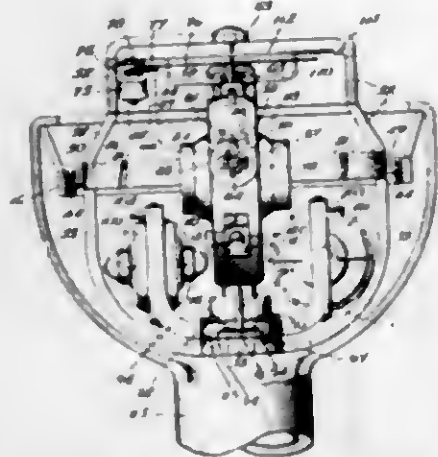
In a farm tractor the combination of a framework; parallel disposed means for attaching a pair of plows to said framework; a motor; means carried by said framework for supporting said motor; means carried by said motor supporting means for transmitting power to the wheels of the tractor; and means for elevating and lowering different distances said motor, said power transmitting means and said motor supporting means relative to said plow attaching means, substantially as described.

1,308,692. COMPASS-CORRECTOR. JOHN E. BEATTIE, New York, N. Y., assignor to The Carle Gyroscopic Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1918. Serial No. 219,832. 6 Claims. (Cl. 33-204.)



1. In a compass corrector the combination of a gyroscopic wheel; a pivot controlled by said wheel; a compass card carried by said pivot and adjustable in azimuth thereabout; lever connections between said card and pivot for controlling such adjustment; and eccentric means for controlling said lever connections, substantially as described.

1,308,693. DAMPENING DEVICE FOR GYROSCOPIC COMPASSES. JOHN E. BRATTIE, New York, N. Y., assignor to The Carle Gyroscopic Corporation, New York, N. Y., a Corporation of New York. Filed May 23, 1918. Serial No. 236,179. 11 Claims. (Cl. 74-78.)



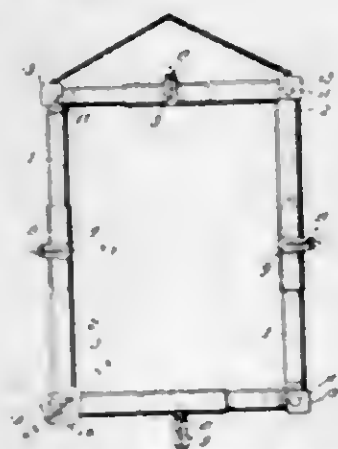
1. In a gyroscopic compass adapted to be carried on an unsteady platform, the combination of a pendulous gyroscopic directive element; pendulous supporting means therefor adapted to rotate around a vertical axis; means adapted to compensate for errors due to friction while said supporting means is moving around said axis; stabilizing means adapted to suppress precessional movements due to motions of said platform; and magnetic dampening means adapted to suppress oscillations of the north end of the axis of said directive element on each side of the north point of the horizon, substantially as described.

1,308,694. COMBINATION TOOL. ROSCOE C. ROSEWELL, Washington, D. C. Filed July 13, 1918. Serial No. 244,744. 2 Claims. (Cl. 81-144.)



1. A wrench embodying a shank, a stationary jaw carried thereby, a jaw slidably mounted upon said shank, guiding flanges carried by the movable jaw and engageable upon each side of the shank, a slidable collar surrounding both the shank and slidably-mounted jaw for holding the latter upon the shank, and means carried by the collar for holding the jaw against movement.

1,308,695. PICTURE FRAME. JOSE BURKOVSKI, American Expeditionary Forces. Filed Sept. 11, 1918. Serial No. 253,598. 2 Claims. (Cl. 40-148.)



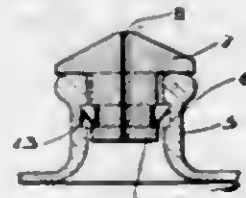
1. A picture frame comprising a plurality of adjustable sections having flattened front faces to receive the picture, outwardly extending brackets on the outer edges of said frame, rotatably mounted spring plates on said brackets and clamping means at the corners of the frame.

1,308,696. COLLAR-BUTTON. FRANK CADOREN, Chicago, Ill. Filed Apr. 15, 1919. Serial No. 290,173. 3 Claims. (Cl. 24-101.)



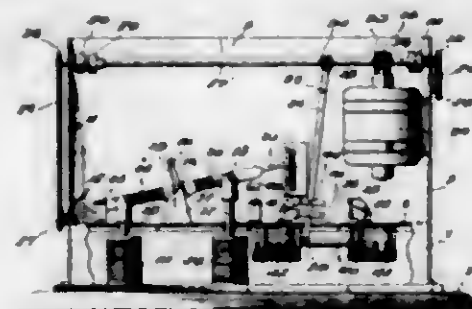
1. A button of the class described including a bottom, a weighted disk arranged against said bottom and having a diameter equal to that of said bottom, said disk being adapted to prevent rolling of the button and a flexible element covering said disk.

1,308,697. LOCKING DEVICE. ALFRED B. CADMUS, New York, N. Y. Filed Jan. 29, 1915. Serial No. 3,975. 1 Claim. (Cl. 215-54.)



In combination, a hollow body, a solid member having a central bore telescopically engaged in said hollow member, said members having annular grooves formed in their adjacent faces, the solid member having an outwardly extending integral flange arranged to engage the outer surface of the hollow member, and a locking device movably seated in the groove in the inner member and including a resilient split ring and a plurality of angularly directed tongues adapted to engage the walls of the groove in the outer member to lock said members against disengagement.

1,308,698. AUTOMATIC ELECTRIC ADVERTISING SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed July 24, 1916. Serial No. 111,014. 10 Claims. (Cl. 40-31.)

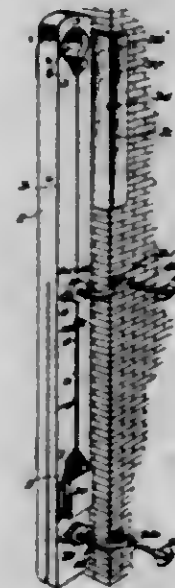


1. In a sign of the class described, an electric motor, a drive shaft driven by the said motor, take-up rolls each having operative gear connection with the said shaft, a display band wound at its ends upon the rolls, timing mechanism arranged to close the circuit through the motor at predetermined intervals of time, means controlled through the travel of the band for breaking the motor circuit, gears carried by the said shaft and arranged to be selectively clutched with the shaft and having operative gear connection with the rolls, and means actuated also through the travel of the band to actuate the clutch devices whereby to provide for automatic reversal of the direction of travel of the band.

1,308,699. COMBINED LEVEL, PLUMB, AND GAGE. WILSON L. CRACK, Follansbee, W. Va. Filed Mar. 22, 1918. Serial No. 224,008. 4 Claims. (Cl. 33-85.)

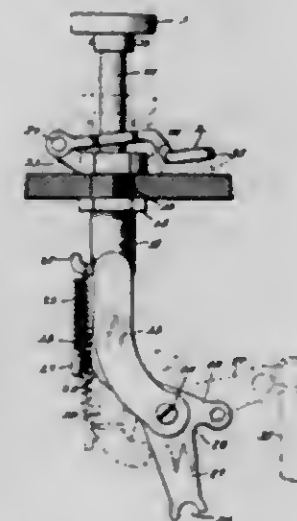
1. The combination with a level, plumb, or similar instrument, including a stock, of means for clamping the

stock to work including a member having a shank swiveled in the stock, a clamping head fitted to the said shank at one face of the stock and having a jaw portion designed



to project beyond either edge of the stock, means for securing the said member against swiveling movement, and a clamping screw carried by the member for coaction with the said jaw portion.

1,308,700. PEDAL. FLOYD C. EWING, Jeromesville, Ohio. Filed Mar. 31, 1919. Serial No. 286,275. 3 Claims. (Cl. 74-81.)



1. In combination with a board having an opening therethrough, of a sleeve in said opening, jam nuts on the sleeve contacting with the opposite faces of the board, a rod slidable through the sleeve, spring means influencing the rod in one direction, and a spring influenced pedal pivoted to one of said jam nuts having an opening therein receiving the rod therethrough and said pedal being normally ranted by its spring to cause the opposite walls of the opening to frictionally engage said rod.

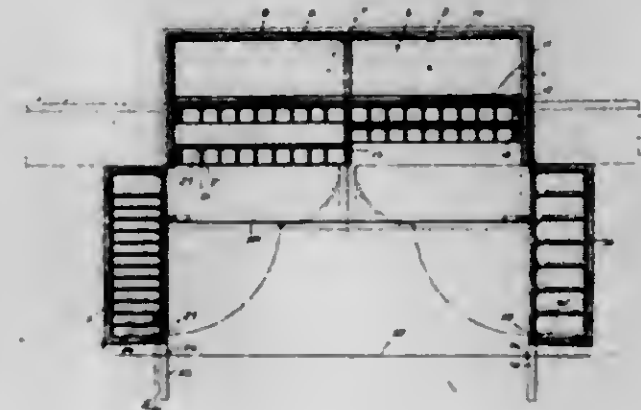
1,308,701. SAFETY-CRANK. HERB T. FARLEY, Paris, Tex. Filed Sept. 25, 1917. Serial No. 193,103. 2 Claims. (Cl. 123-185.)



1. A safety cranking device comprising an arm adapted for rigid attachment to the starting shaft of an auto ve-

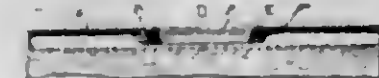
hicle engine, a crank adapted for loose attachment to said shaft, members having means for attachment to the frame of an auto vehicle, a block pivotally mounted on the crank, means connecting the block and the arm, so that the block is permitted pivotal movement in one direction only, and a device which contacts with the aforesaid members, whereby the crank is positively secured to the arm to turn the engine forward but is released therefrom on any retrograde movement of the engine.

1,308,702. TICKET-SELLER'S BOOTH. ALFRED FELL-HEIMER, New York, N. Y. Filed Oct. 12, 1917. Serial No. 196,176. 5 Claims. (Cl. 211-37.)



2. A ticket booth comprising an upper casing, a lower casing, a plurality of drawers in the lower casing, a pair of doors for said lower casing normally covering said drawers, a plurality of racks arranged in the upper casing, a pair of rack members hinged to the upper casing and acting as doors therefor, means for connecting the hinged rack members with said first mentioned doors so that they will open and close together, and means for locking said doors and rack members connected therewith in a position substantially at right angles to their closed position.

1,308,703. TRANSPARENT CLOSURE FOR CANS. CORNELIUS C. FREEBORN, Sr., New Milford, N. J. Filed Apr. 11, 1919. Serial No. 289,311. 1 Claim. (Cl. 220-82.)

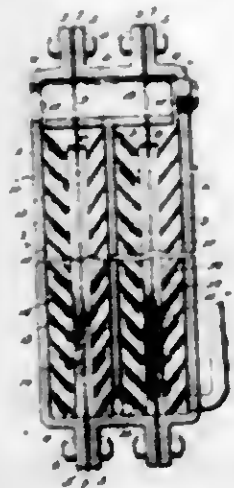


In combination with a can having a flange about the marginal edge which is downwardly and upwardly curved, a gasket resting upon said edge, a window resting upon said edge, a ring having a curved flange interlocked with the curved flange upon the top and bearing against said window and holding the same in a clamped relation against said gasket, the upper face of the ring and the top being flush.

1,308,704. ELECTROLYTIC CELL FOR PRODUCTION OF OXYGEN AND HYDROGEN. EVARISTE GEERARD, Prestwich, England, assignor to George J. Stanfield, Manchester, England. Filed May 17, 1917. Serial No. 169,363. 2 Claims. (Cl. 204-5.)

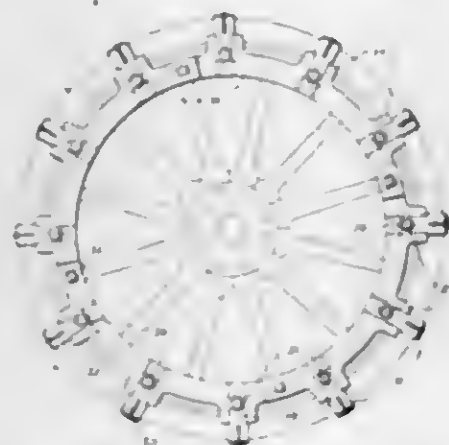
1. An electrolytic cell having side walls forming electrodes, means for insulating said walls from each other, a series of vanes supported in spaced parallel relation transverse each side wall and inclining downwardly and inwardly therefrom, the side walls being formed with vertical channels in rear of and communicating with the

spaces between the vanes, and independent gas conduits at the upper end of the cell in communication, respectively, with the vertical channels of the side walls,



whereby the gas liberated at each electrode is directed into its respective gas conduit.

1,308,705. NON SKID ATTACHMENT FOR WHEELS. JOSEPH GAJAN, New York, N. Y. Filed Sept. 11, 1918. Serial No. 253,579. 4 Claims. (Cl. 152-14.)



1. The herein described non skid attachment for wheels comprising a series of arc shaped plate members adapted to be applied along one side of the wheel, pivot members articulating adjacent plate members together, the inner edges of which describe a circle, each plate member having a plurality of lugs projecting radially outward therefrom, and each lug having a radial socket, a series of non-skid spurs having leg members fitted in said sockets, means to lock the leg members therein, the spurs extending thence across and around the tread portion of the wheel, and means on the opposite side of the wheel to engage and hold the portions of the spurs remote from the sockets aforesaid.

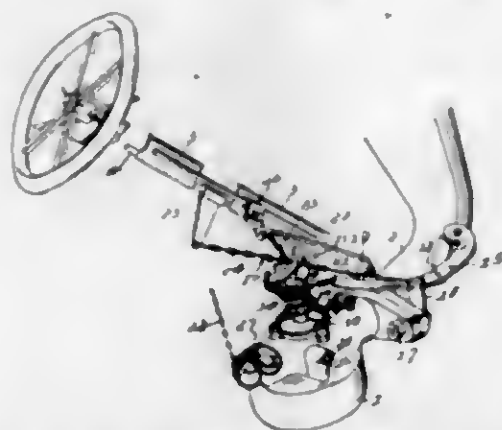
1,308,706. RAKE ATTACHMENT. SALLIE S. GILKEY, Marion, N. C. Filed Nov. 9, 1918. Serial No. 261,942. 3 Claims. (Cl. 55-145.)



1. A device of the class described, the combination, a rake including a head and downwardly extending prongs,

of a cleaning attachment comprising a resilient plate bent back upon itself, said plate having longitudinally extending slots for receiving the prongs, means for securing the upper portion of the plate to the rake head, and means for depressing the lower portion.

1,308,707. CARBURETER-ADJUSTING ATTACHMENT. HERMAN GROSS, La Fayette, Ind. Filed May 31, 1918. Serial No. 237,598. 5 Claims. (Cl. 123-99.)



1. In a device of the class described, the combination with a carbureter having a needle valve, of a disk mounted on the stem of the needle valve, a lever pivotally mounted on the carbureter, a flexible member partially surrounding the disk on its periphery and having one end fixedly connected thereto and the other end connected with the free end of the lever, and means for connecting the lever to both the throttle control and spark control rods of an auto vehicle, whereby the needle valve is operated as a result of the operation of either of the said rods.

1,308,708. COLOR PHOTOGRAPHY. ARON HAMBURGER, Mayfair, London, England. Filed Jan. 20, 1919. Serial No. 272,201. 3 Claims. (Cl. 95-2.)

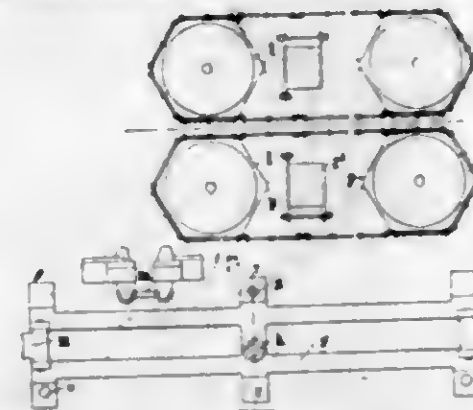


1. A multi-color process comprising accurately registering and photo-chemically printing complementary color-value negatives, one of which is reversed, respectively upon both sides of a positive film sensitized on both sides, and thereafter while maintaining the said positive in a vertical position between two dissimilar liquids in contact therewith, but not in contact with each other, practically simultaneously developing the respective colors on the two sides of the combined positive so produced.

1,308,709. PROCESS OF TREATING CINEMATOGRAPH-FILMS. ARON HAMBURGER, Mayfair, London, England. Filed Feb. 4, 1919. Serial No. 274,966. 4 Claims. (Cl. 8-5.)

4. In coloring cinematographic film, the herein described process which comprises positioning successive portions of the length of the said film between successive pairs of boxes to form containers on both sides of such

cinematographic film, such containers being separated by said film, and subjecting the two sides of any given one of said portions of film, substantially simultane-



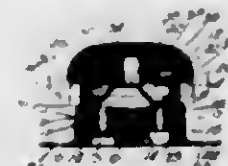
ously to the action of coloring solutions, and repeating such last-mentioned operation with successive portions of the length of said film.

1,308,710. DEVELOPING, COLORING, AND WASHING TANK FOR TWO-SIDED PHOTOGRAPHIC FILMS. ARON HAMBURGER, Mayfair, London, England. Original application filed Jan. 20, 1919, Serial No. 272,201. Divided and this application filed May 20, 1919. Serial No. 298,527. 5 Claims. (Cl. 95-2.)



1. Means for dyeing the two sides of a film practically simultaneously, comprising a tank in which a film may be placed and held to form a complete partition therein dividing the tank into two compartments.

1,308,711. CIRCUIT-CLOSER. CLARENCE B. HARLOW, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 3, 1918. Serial No. 11,766. 4 Claims. (Cl. 200-27.)



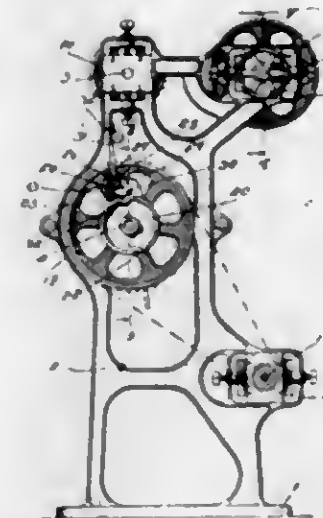
1. A circuit controller comprising a contact, a movable contact coacting therewith, a metallic housing therefor having an annular flange forming a fulcrum, an insulating hand-engaging member, a metallic fulcrum-engaging member having a flange engaging said first flange, means for securing said fulcrum engaging member to said hand-engaging member comprising an insulating washer, and a rivet extending through said washer to hold the washer on the hand-engaging member and to engage the movable contact.

1,308,712. SPRING-MOTOR. JOHN H. HOLZHAUSEN, Milwaukee, Wis. Filed Nov. 10, 1917. Serial No. 201,238. 2 Claims. (Cl. 185-30.)

1. The combination with a spring motor, of means secured to the arbor thereof, for rewinding the motor com-

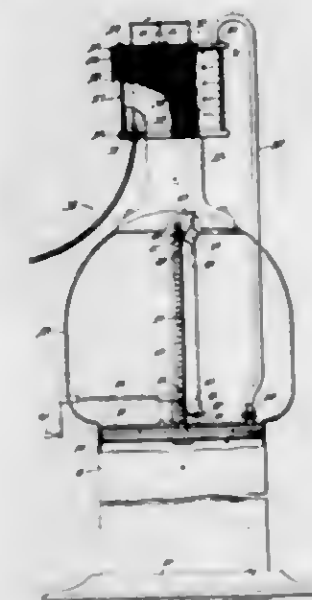
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prising a pair of notched wheels, the notches thereof being aligned, a dog pivoted to a stationary part and adapted for engagement with one of said wheels to pre-



vent retrograde movement thereof, a driven sprocket wheel loosely journaled on said arbor, and juxtaposed the other notched wheel, a pawl pivotally carried by said sprocket wheel and engageable with the last named notched wheel for advancing the same to rewind the spring, and means for tripping said pawl when it has traveled a determined distance.

1,308,713. GASOLINE-VENDING MACHINE. WALTER W. KILPATRICK and EUGENE T. BOOTH, Atlanta, Ga. Filed Mar. 9, 1917. Serial No. 153,684. 4 Claims. (Cl. 221-09.)



1. In a liquid vending machine, the combination with a liquid container, of a piston for delivering liquid therefrom, a rod connected to said piston and extending upwardly above the same and having a lug thereon, means for reciprocating said rod and the piston connected to it, a receiver supported above said container and piston, a pipe leading from said container to the upper end of said receiver, said receiver having a transparent portion marked so that the amount of liquid therein may be observed and determined, said receiver also having an outlet in its lower end, a valve controlling said outlet, and mechanism for operating said valve comprising devices connected to said valve, one of said devices being engageable by the lug on the piston rod to open the valve at the upper end of its stroke and another of said devices being engageable by said lug to close the valve at the lower end of its stroke.

1,305,714. FERTILIZER DISTRIBUTER. ALFRED W. McCREARY, Mount Pleasant, Pa. Filed Nov. 28, 1916. Serial No. 133,911. Renewed Oct. 16, 1918. Serial No. 258,393. 4 Claims. (Cl. 221-119.)



1. A fertilizer distributor comprising a container having an outlet, a receptacle one wall of which being shaped to close said outlet and further being provided with an inlet adapted to register with said outlet when the receptacle is in one position and means for giving movements to the receptacle, said means including a member slidably mounted on the container and having a portion arranged to engage the ground.

1,308,715. SYSTEM FOR CLEANING BOILERS. CHESTER T. MCGILL, Elgin, Ill. Filed Feb. 12, 1918. Serial No. 216,771. 2 Claims. (Cl. 122-399.)

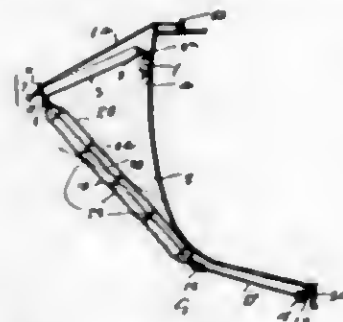


1. A boiler having, in combination, a settling tank; a steam and water uptake pipe leading up from just below the normal water level of the boiler near its front; a sediment uptake pipe at the opposite end of the boiler and leading from the bottom thereof; a stand pipe extending from the top of the tank; an upwardly inclined steam and water pipe connecting the steam uptake pipe to the upper part of the stand pipe; a pipe connecting the sediment uptake to the stand pipe at a point below the connection therewith; an ejector connection at the juncture of the sediment pipe and the stand pipe whereby the water descending in the latter is utilized to draw water and sedimentary matter up the sediment uptake pipe and to the tank, and a return connection between the tank and the boiler.

1,308,716. TORPEDO GUARD. JOHN D. McKEL, Trenton, Nova Scotia, Canada. Filed Nov. 8, 1918. Serial No. 261,637. 3 Claims. (Cl. 114-240.)

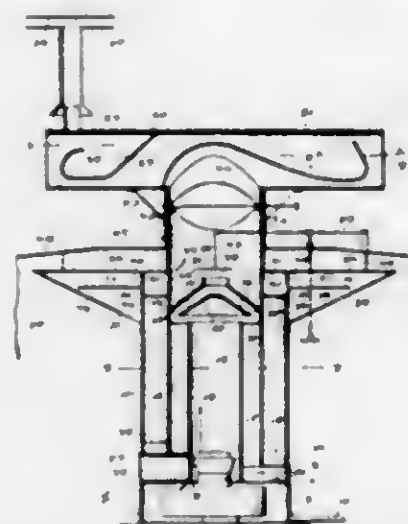
1. The combination with a ship's hull, of a plurality of spreader members mounted on said hull at their inner ends for rocking movement about horizontal axes, means for raising and lowering said members, nets having their upper edges secured to the outer ends of the spreader members so as to be raised and lowered thereby in ac-

cordance with adjustment of said members, and means for attaching the lower edges of the nets to the ship's hull so as to cause said nets to be extended upwardly



and outwardly therefrom when the spreader members are in lowered position.

1,308,717. BROODER. HOMACK MANN, Old Albuquerque, N. Mex. Filed Sept. 14, 1918. Serial No. 254,035. 3 Claims. (Cl. 119-32.)



1. A device of the character described comprising a hollow supporting base provided with an air inlet, a lamp within said base, an upstanding flange on said base, a drum device mounted upon said base and detachably engaged with said flange and including a plurality of staggered sections, an upstanding flange formed at the upper end of said drum member, a hover member including a circular top plate having a central opening surrounded by a flange engaging upon said flange upon said drum member, a depending flange in the outer periphery of said circular plate, a canopy depending from said last named flange and concentric with said drum member, a relatively large drum member telescopically engaged upon the flange on said first named drum, said last named drum being of greater diameter than said first named drum member and of less diameter than said hover member, and an outlet pipe communicating with said last named drum.

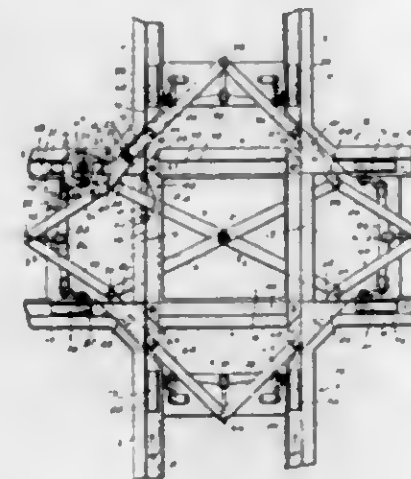
1,308,718. SPARK-PLUG. ALVIN MAYMA, Rhineland, Mo. Filed Jan. 26, 1918. Serial No. 213,944. 1 Claim. (Cl. 123-169.)



A spark plug comprising a body, a conductor passing through the body and provided with a socket member

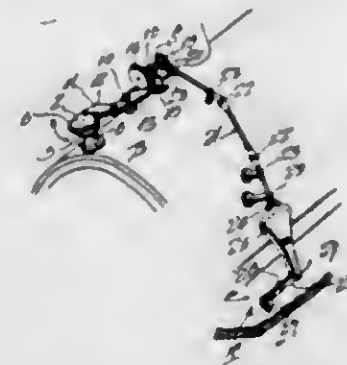
having at its lowest point an opening, a ball freely movable in the socket member and adapted to close over the opening therein, a sleeve surrounding the body and a point carried by the sleeve and disposed transversely with relation to the socket member and below the same and spaced from the ball and socket member.

1,308,719. SILENT RAILROAD-CROSSING. GEORGE C. MELROSE, Redondo Beach, Calif. Filed Sept. 6, 1918. Serial No. 252,960. 2 Claims. (Cl. 246-375.)



1. A silent railroad crossing comprising, track rail sections forming a crossing, there being diagonal slots across the corners formed by the outside rail intersections; right angle triangular shifting rail sections slidably mounted in the diagonal slots; two levers extending through two inside rail sections and crossing at the center of the square; a fixed pivot extending through the crossed levers; second levers pivotally connected to the right angle triangular shifting rail sections and pivotally connected to the ends of the crossed levers; links pivotally connected to the second levers, each pair of links being connected together; actuator heads mounted for vertical reciprocation in the car wheel flange grooves; arms extending downwardly from the actuator heads; and bell-crank levers pivotally mounted and connected to the actuator heads and connected to the links; so that when the car wheel flanges press downwardly on the actuator heads the right angle triangular shifting rail sections will be moved out of the way of approaching car wheel flanges and into positions to cross the car wheel flange grooves of the other track.

1,308,720. LOCOMOTIVE-HEADLIGHT. CALVIN D. MOODY, Corpus Christi, Tex. Filed Feb. 3, 1919. Serial No. 274,691. 3 Claims. (Cl. 240-62.)



1. In a dirigible locomotive headlight, the combination with a locomotive and a headlight mounted thereon for horizontal turning; of a gear rotatable bodily with said headlight, a horizontally swinging segment mounted on top of the locomotive boiler and meshing with said gear, a flexible vertical shaft curving around the side of the boiler and means for operating said segment from said shaft, a pinion on the lower end of said flexible shaft, a

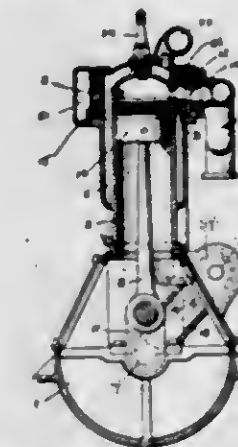
segment mounted on the locomotive independently of the front truck thereof, and meshing with said pinion, and means for operating said last named segment from said truck.

1,308,721. SPINNING-FRAME. ALBERT H. MORTON, Lowell, Mass. Filed Mar. 15, 1915. Serial No. 14,357. 5 Claims. (Cl. 118-12.)



2. A spinning frame having, in combination, drawing rolls, spindles, a doffing rail, thread boards carried by the doffing rail, thread guides carried by the thread boards and fixedly connected therewith, said thread boards being connected to the doffing rail so as to permit of longitudinal and turning adjustment.

1,308,722. ROTARY-VALVE GAS-ENGINE. JOHN F. PAGENDARM, San Francisco, Calif., assignor of seventy per cent. to John W. Shannon, San Rafael, Calif., and ten per cent. to William Von Hacht, ten per cent. to Charles R. Taylor, and ten per cent. to William F. Clewe, Sonoma, Calif. Filed Apr. 12, 1918. Serial No. 228,267. 3 Claims. (Cl. 123-80.)

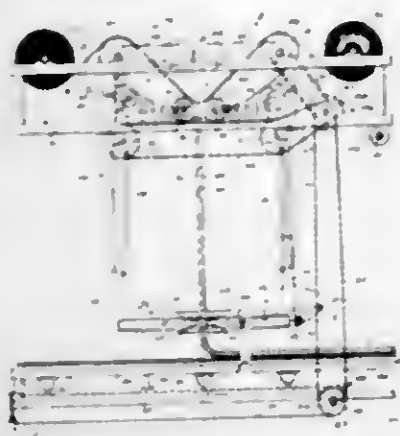


1. A rotary valve explosion engine comprising an engine cylinder having a suitable water jacket, a rotary sleeve valve surrounding the engine cylinder outside the water jacket and having ports adapted to register with ports in the engine cylinder, packing rings surrounding the inlet and exhaust ports of the engine cylinder and bearing upon the inside of the valve ring, a piston packing ring carried by each of the aforesaid packing rings, and movable at right angles to their lines of movement.

1,308,723. MACHINE FOR MAKING PLASTER-BOARD AND THE LIKE. JOHN SCHUMACHER, Los Angeles, Calif. Filed Feb. 20, 1919. Serial No. 278,186. 14 Claims. (Cl. 154-1.)

10. In a plaster board machine, the combination of means forming plaster board and advancing the latter

vertically therefrom, and severing means advancing with said board and comprising a cutting element for passage



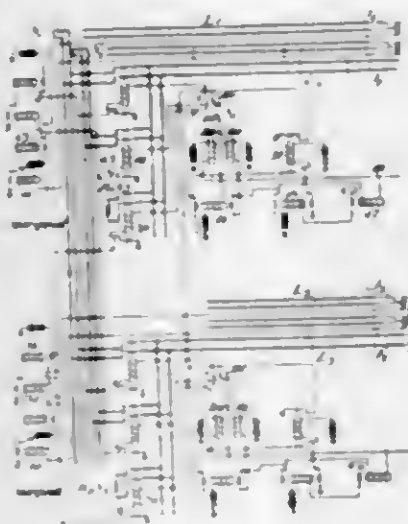
from one side of the board to the other in alternate directions.

1,308,724. PLASTER-BOARD LATH. JOHN SCHUMACHER, Los Angeles, Calif. Filed Mar. 8, 1919. Serial No. 281,433. 10 Claims. (Cl. 154—2.)



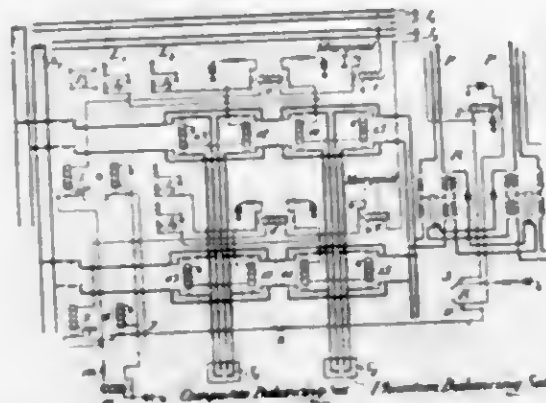
1. The process of making plaster board, which consists in interposing between sheets of pliable material a plastic substance, one of said sheets being corrugated and having a fullness on its surface at the grooves; and extending said surface by removing said fullness, whereby the sides of said grooves are pitched.

1,308,725. SELECTING-CIRCUIT FOR ARTIFICIAL LINES. JOHN F. TOOMEY, New York, and CHARLES S. DEMAREST, Flatbush, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1917. Serial No. 174,899. 15 Claims. (Cl. 179—170.)



1. The combination with a repeater, of a plurality of transmission lines, a plurality of balancing artificial lines, and automatic switching means for associating one of said artificial lines with the repeater and any one of said transmission lines.

1,308,726. MEANS FOR CONTROLLING ARTIFICIAL LINES. JOHN F. TOOMEY, New York, and CHARLES S. DEMAREST, Flatbush, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1917. Serial No. 174,900. 5 Claims. (Cl. 179—170.)



2. A balancing arrangement comprising an artificial line for simulating a transmission line, an auxiliary balancing set for simulating auxiliary apparatus associated with a transmission line, and switching means, controllable at will, for rendering said auxiliary balancing set operative and inoperative.

1,308,727. FOLDABLE TABLE AND CASE THEREFOR CONVERTIBLE INTO BENCHES. GEORGE RHETOKIN, Portland, Oreg. Filed June 30, 1917. Serial No. 178,045. 3 Claims. (Cl. 190—12.)



1. In combination with a foldable table provided with a carrying handle substantially as described, a case consisting of two sections or sides each in the form of a half box and provided with foldable legs and means for rigidly supporting the latter when extended thereby adapting such section to be converted into a bench, means for latching said sections together, and the opposed portions of the abutting edges of said sections having portions cut away so as to permit these edges to be placed in abutment and with the handle of the folded table projecting therethrough.

1,308,728. SURGICAL INSTRUMENT. GEORGE G. ALLARD, St. Paul, Minn. Filed Oct. 29, 1918. Serial No. 260,984. 2 Claims. (Cl. 128—369.)



1. A surgical instrument comprising, in combination, an operating stem having a laterally disposed loop forming a tissue holder, a pair of shearing blades cooperating with said holder and movably mounted upon said stem for transverse movement across the holder, and means operable from the outer end of said stem for closing and opening said blades.

1,308,729. ADJUSTABLE PIANO-BENCH. VALENTINE BELZIAN, Los Angeles, Calif. Filed Mar. 8, 1919. Serial No. 281,443. 4 Claims. (Cl. 155—22.)

1. In a piano bench, the combination of a supporting frame, a seat mounted thereon for elevation and depres-

sion; an elevating structure on which said seat is supported comprising a pair of racks at one end for raising and lowering said seat, juxtaposed elevating gears con-



centrically mounted, one each in mesh with a rack, a shaft having a pinion thereon meshing with one of said gears, a second pinion on said shaft, a second shaft parallel to said first shaft, a pinion on said second shaft meshing with the other of said gears and with said second pinion, and means to drive one of said shafts, said gears being supported by said pinions.

1,308,730. SAFETY-RAZOR. ALONZO NEWTON BENX, Chicago, Ill. Filed July 3, 1916. Serial No. 107,320. 17 Claims. (Cl. 30—12.)



3. The combination with a handle and a holder detachably secured thereto and having a cylindrically curved blade-receiving surface from which project two studs more widely separated near their free ends than at their bases, of a flexible blade perforated to pass over the studs and when curved to fit closely between their bases, a guard member curved like the holder and perforated to pass over the studs, and screw devices carried by the handle and adapted to force the guard member outward to clamp the blade against the holder.

1,308,731. ADJUSTABLE AND INTERCHANGEABLE CRAVAT AND BOW. NATHAN JUDSON BUEAR, St. Boston, Mass. Filed Jan. 13, 1919. Serial No. 270,786. 4 Claims. (Cl. 2—83.)

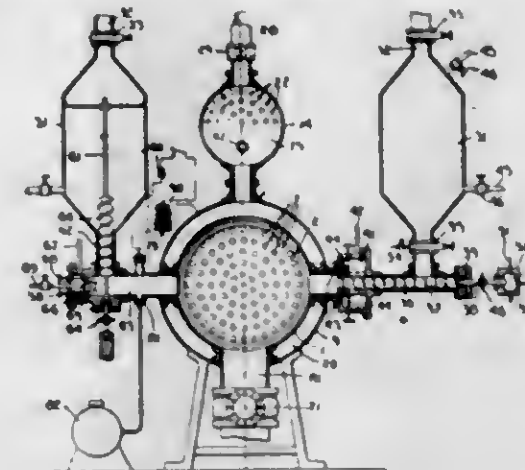


1. An adjustable and interchangeable cravat comprising a length of thin resistant material curved to retain a normally circular form, having a plurality of eyes at one end and an elongated slot at its other end, and a locking clasp held friction tight in said slot to be capable of being forcibly slid to any part thereof, and adapted to be engaged with any one of said eyes, whereby the cravat can be accurately adjusted to snugly fit any one of a wide range of different sized collars.

1,308,732. POWER-GENERATING APPARATUS. GEORGE COEN, Malden, Mass. Filed Sept. 16, 1916. Serial No. 120,538. 3 Claims. (Cl. 60—45.)

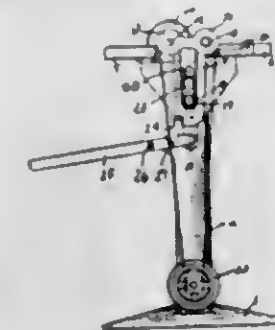
1. In a power generating apparatus, the combination with a boiler having a combustion chamber, a pipe or conduit leading thereinto, a chamber for containing fuel dust communicating with the conduit, a screw conveyer

for forcing fuel dust from the latter chamber through the conduit into the combustion chamber, an air chamber communicating with the conduit, means to deliver air



under pressure to said latter chamber and valves for controlling communication between said air chamber and the conduit.

1,308,733. LINOTYPE-SLUG-SAWING MACHINE. CHARLES W. CUAL, San Francisco, Calif. Filed Dec. 15, 1917. Serial No. 207,243. 9 Claims. (Cl. 29—69.)



1. A linotype slug sawing machine comprising a support, a slidable table thereon, a circular saw revoluble in a plane adjacent said table, a surfacing tool revoluble in the same plane as the saw, a vertically movable slide carrying the surfacing tool and saw, a belt passing over the drive pulleys of the tool and saw, and manual means for raising or lowering the slide while maintaining the belt tight at all positions of the slide.

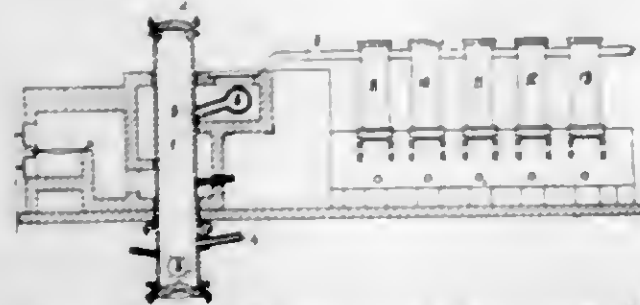
1,308,734. LOCK-GUARD. WILLIS SMITH FARNSWORTH, San Francisco, Calif., assignor to Coin Controlled Lock Company, San Francisco, Calif., a Corporation of California. Filed Apr. 15, 1913. Serial No. 761,105. 13 Claims. (Cl. 70—46.)



1. The combination in a lock having a cylinder and a key therefor, of detent means adapted to engage the cylinder when the latter is turned in one position to lock the cylinder against rotation, said detent means con-

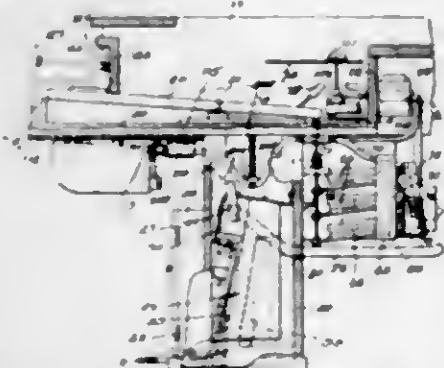
constructed and arranged to be actuated by the insertion of the key into the lock to release the cylinder, and said de-
tent means operable to engage the cylinder when the key is in the lock and prevent the re-operation of the lock until the key has been withdrawn and reinserted into the lock, said last-named means including a lockable spring plate extendible directly into the path of the end of the key.

1,308,735. SEPARATION OF MOLYBDENUM ORES. TORMOD REINERT FÖRLAND, Hangesund, Norway. Filed Apr. 4, 1918. Serial No. 226,747. 2 Claims. (Cl. 75-17.)



1. Process of treating said ores of molybdenum, which consists in passing a current of chlorine gas at a temperature above 268° C. in contact with the ore and condensing the resulting vapors of chlorid of molybdenum.

1,308,736. PLAYER-PIANO. ARYL G. GULBRANSEN and CHRISTIAN GULBRANSEN, Chicago, Ill., assignors to Gulbransen-Dickinson Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1915. Serial No. 45,091. 24 Claims. (Cl. 84-233.)



1. In a player grand piano a case, a box lyre therefor, suction apparatus in said box lyre and an action operative by said suction apparatus lying outside of the piano case and back of the box lyre.

1,308,737. CAR VENTILATOR. CHARLES L. HARRISON, Richmond, Va. Filed May 31, 1918. Serial No. 237,493. 5 Claims. (Cl. 98-22.)



2. In a device of the class described, an exhaust ventilator having parallel spaced panel-like walls, the edge of

the inner wall extending up beyond the plane to which the outer panel descends, the outer wall being detachable, a screen releasably supported between said walls, means for regulating the area of the ventilating passage, and self-adjusting deflector vanes positioned at either end of the ventilator to create an outward draft through the ventilator opening when the car is in rapid motion in either direction, said deflector vanes being swingably mounted on vertical axes and mounted to abut against the ventilator frame and limit the rearward swinging movement only of the forward deflector vane relative to the direction of travel of the car to an angle of approximately 45 degrees to produce the desired exhaust draft when the car is in rapid motion.

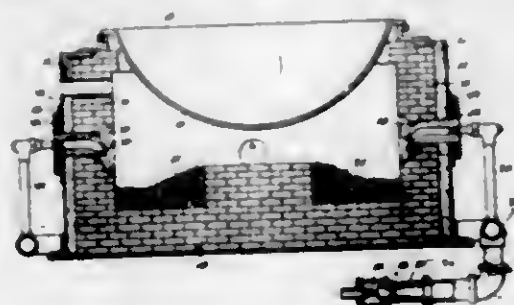
1,308,738. SUBMARINE BOAT. SIMON LAKE, Milford, Conn., assignor to The Lake Torpedo Boat Company of Maine, Bridgeport, Conn., a Corporation of Maine. Filed Mar. 29, 1915. Serial No. 17,797. 20 Claims. (Cl. 114-16.)



1. A submarine boat, having a main superstructure, a superstructure superposed on said main superstructure, and a buoyant chamber arranged wholly within said superposed superstructure.

10. A submarine boat having a superstructure, and an uncovered transparent coaming arranged upon said superstructure, providing a conning station or pit, said conning station or pit communicating with the interior of the boat.

1,308,739. METHOD OF BURNING EXPLOSIVE GASEOUS MIXTURES. CHARLES E. RICHARDSON, New York, WILLIAM BARTON EDDISON, Irvington, and HENRY L. READ, New York, N. Y., assignors to The Surface Combustion Company, New York, N. Y., a Corporation of New York. Original application filed Nov. 23, 1916, Serial No. 133,986. Divided and this application filed Sept. 29, 1917. Serial No. 193,982. 5 Claims. (Cl. 158-117.5.)

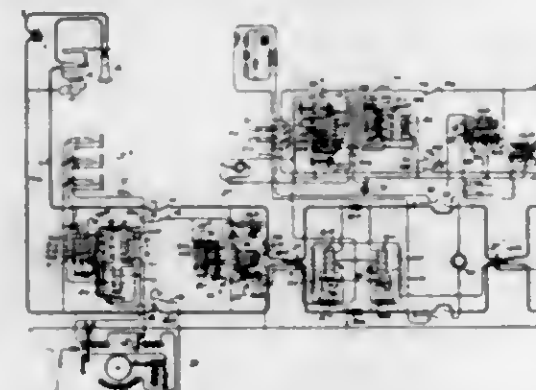


1. The method of burning explosive gaseous mixtures, which comprises discharging a stream of the mixture from a discharge orifice with a velocity greater than the rate of propagation of inflammation of the mixture and causing the stream of mixture to spread out with rapid reduction of its flow velocity, burning the mixture where its flow velocity is reduced to the rate of propagation of inflammation, and maintaining the temperature of the walls of the discharge orifice substantially lower than the ignition temperature of the mixture.

1,308,740. AUTOMATIC OR SEMI-AUTOMATIC TELEPHONE SYSTEM. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1914. Serial No. 819,678. Renewed Oct. 28, 1918. Serial No. 260,003. 32 Claims. (Cl. 170-27.)

1. In a telephone system, a calling and a called subscriber's line, means for extending a connection from the calling line to said called line, a visual signal, means for

intermittently reversing the current over the connection extending to the called line when the called line is busy,

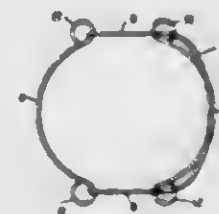


and means operated by said reversal of current for intermittently flashing said signal.

1,308,741. PROCESS OF SOLDERING CHAIN-LINKS. EUGEN SREINEL, Wormheim, Germany, assignor, by mesne assignments, to General Chain Company, Providence, R. I., a Corporation of Massachusetts. Filed Feb. 23, 1912. Serial No. 679,428. 8 Claims. (Cl. 113-112.)

1. Process of preventing intersoldering of solder-cored metal chain links, consisting in applying a deoxidizer to the work piece, removing it again therefrom except at the joints, pre-heating the work piece until oxidation takes place on the surface of the metal, and then heating the work piece to soldering heat, substantially as set forth.

1,308,742. MILK-BOTTLE CARRIER. ALEXANDER K. SUTHERLAND, New Britain, Conn., assignor of one-half to Herbert O. Rockwell, New Britain, Conn. Filed Jan. 18, 1919. Serial No. 271,800. 3 Claims. (Cl. 215-1.)

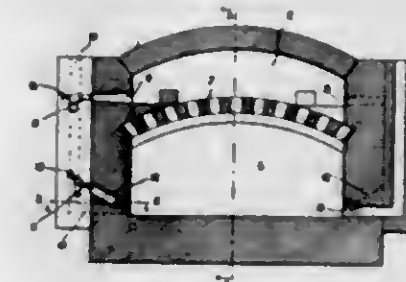


1. A bottle carrier comprising, a ball, a link for engaging one side of a bottle neck pivotally connected at its opposite ends with the opposite ends of said ball and a cooperating link for engaging the opposite side of the bottle neck slidably connected at its opposite ends with the opposite end portions of the ball and having a sliding pivotal movement on the opposite end portions of the ball away from the first link to enable separation of the links for engagement of the same over the bottle neck and said ball adapted when turned on the first link as a pivot, to act as a lever drawing the second link by means of said sliding connections toward the first link and into holding engagement with the bottle neck.

1,308,743. FURNACE. LAMBERT H. RICHARDS, Shields, Pa., and CHARLES P. WATKINS, Louisville, Ky., assignors to Tate-Jones & Co., Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1918. Serial No. 257,141. 4 Claims. (Cl. 263-43.)

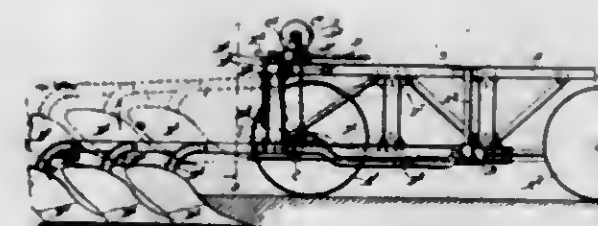
1. In an over-fired furnace, the combination of an upper combustion chamber, a lower heating chamber, a perforated wall separating said chambers, a burner discharging into the combustion chamber and furnishing heat to the upper part of the heating chamber through the perforated wall, and an independently controllable burner discharging into the lower portion of the heating

chamber and above the floor thereof for providing the supplementary heat necessary to bring the lower part of



the heating chamber to approximately the same temperature as the upper part of said chamber.

1,308,744. GANG-PLOW. ALEXANDER CARPENTER, Carey, Ohio, assignor to National Tractor and Plow Company, Carey, Ohio, a Corporation of Ohio. Filed Apr. 5, 1916. Serial No. 80,002. 13 Claims. (Cl. 97-70.)



1. The combination with a plow and beam of a vertical guide member upon which the forward end of the beam is freely slidable and there being horizontal pivotal connection between the beam and the connection sliding on the vertical guide, and plow lifting means connected with the beam intermediate its ends on such transverse line that the beam is free to rock with respect to such lifting means in a vertical plane as the plow is being lifted or lowered.

1,308,745. SCALLOP CAP. CHARLES HAMMER, Queens, N. Y., assignor to American Metal Cap Company, Brooklyn, N. Y., a Corporation of New York. Original application filed Apr. 27, 1917. Serial No. 161,832. Divided and this application filed July 18, 1917. Serial No. 181,191. 4 Claims. (Cl. 215-84.)



1. In combination with a jar having screw threads, a screw closure therefor comprising a top and a cylindrical flange having a plurality of projections on the lower edge, each projection being bent inwardly on a curve coinciding with the circle of the lower edge of the flange intermediate of the projections, each projection extending directly toward the cylindrical axis of the cap with its forward portion being less acute to the flange than its rear portion, whereby to constitute a helical edge for engagement with a screw thread on the jar, the free edge of the projections being so inclined as to engage the jar thread at one end portion on first application and to yield on screw pressure to engage along the entire projection.

1,308,746. SCALLOP CAP. CHARLES HAMMER, Queens, N. Y., assignor, by direct and mesne assignments, to American Metal Cap Co., Brooklyn, N. Y. Continuation of application Serial No. 841,308, filed May 27, 1914. This application filed Apr. 27, 1917. Serial No. 164,832. 13 Claims. (Cl. 215-84.)

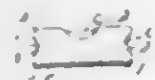
1. A closure for a storage vessel comprising a flanged cap having a plurality of projections each bent over in-

warily to form lugs on the inside of the flange adapted to engage the screw thread on a jar, each lug presenting to the jar thread an initially engaged raw edge of the



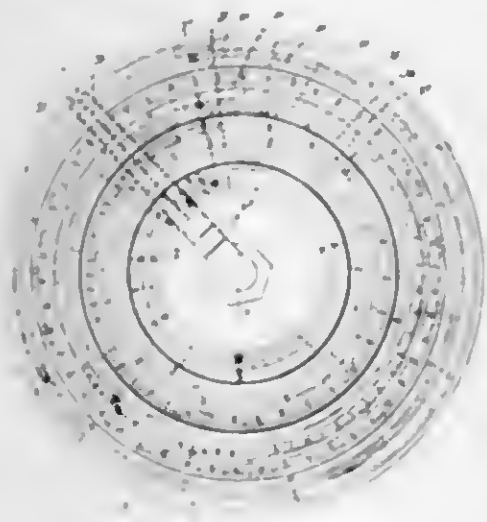
projection and also a bent portion of the projection adapted to be pulled inwardly toward the jar by said raw edge.

1,308,747. SAFETY RAZOR. CHARLES W. LUND, Bridgeport, Conn., assignor to The E. W. Carpenter Mfg Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 4, 1919. Serial No. 274,846. 2 Claims. (Cl. 30-12.)



1. A safety razor comprising a handle and a blade holder connected therewith and having notches at its outer or side edges, a blade in said holder with its cutting edge projecting therefrom, and with its side edges projecting into the notches of said holder, said blade having notches corresponding in position to the notches in said holder, said notches being smaller than the corresponding notches in the holder, thus forming in those portions of the blade which projects into the notches of the holder, points or corners by means of which the blade may be adjusted to any desired position within the holder.

1,308,748. NAVIGATION INSTRUMENT. CHARLES LANE POOK, Dering Harbor, Shelter Island, N. Y. Filed Jan. 10, 1918. Serial No. 211,222. 3 Claims. (Cl. 235-84.)

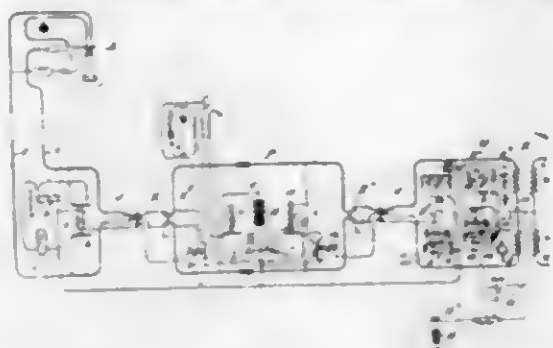


1. A navigation instrument comprising a chart having a series of concentric scales and a radial zero line intersecting the scales, one of the scales being for latitude starting from the said zero line in one direction and another of the scales being for declination and starting from the said zero line in the opposite direction, and indicating means movable relative to the chart and indicating on the said scales.

1,308,749. AUTOMATIC TELEPHONE SYSTEM. ARTHUR BRADY SMITH, Evanston, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1916. Serial No. 96,493. 11 Claims. (Cl. 179-27.)

1. In a telephone system, a line connecting two exchanges, means including said line and an automatic switch at one exchange for connecting subscribers' lines

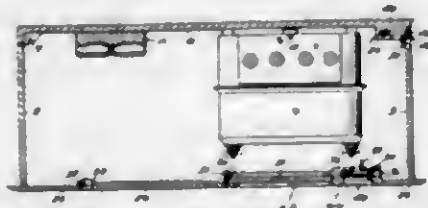
in the two exchanges, a telegraph circuit superimposed on said line, a branch of said circuit at one end containing a condenser and controlling relay for said



switch, and a branch of said circuit at the other end containing a condenser and a source of alternating current for operating said controlling relay.

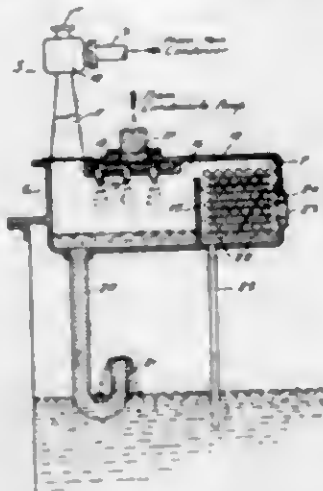
REISSUES.

14,677. BOX FOR ELECTRIC METERS. JOHN V. BECKA, Cleveland, Ohio. Filed May 23, 1919. Serial No. 299,345. Original No. 1,292,682, dated Jan. 28, 1919. Serial No. 198,807, filed Oct. 27, 1917. 12 Claims. (Cl. 247-13.)



2. A housing comprising top and bottom and end walls rigidly connected, a removable front wall and a rear wall hinged to permit relative swinging movement between the rear wall and the remainder of the housing, blind latches for securing the front and rear walls, and a window for reading the meter.

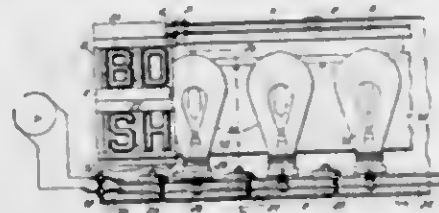
14,678. MEANS FOR WITHDRAWING NON-CONDENSABLE VAPORS FROM CONDENSERS. RAYMOND N. EBERHART, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1919. Serial No. 271,920. Original No. 1,284,271, dated Nov. 12, 1918. Serial No. 123,978, filed Oct. 5, 1916. 5 Claims. (Cl. 257-32.)



4. In combination with a steam actuated air ejector, a receptacle having an inlet port through which said ejector discharges into the receptacle, and an atmospheric vent port, means for delivering condensing water into

said receptacle so as to interpose condensing water between the inlet port and the vent port and to insure an intimate mixture of the fluids discharged from the ejector, and the condensing water delivered to the receptacle, a series of cooling tubes within said receptacle located between said inlet port and said vent port and surrounding the vent port, and means for delivering cooling water to said tubes.

14,679. ILLUMINATED SIGN. ROY ROONEY WILEY, Buffalo, N. Y., assignor, by mesne assignments, to Flexlume Sign Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 6, 1917. Serial No. 147,018. Original No. 828,005, dated Aug. 7, 1906. Serial No. 230,464, filed Oct. 29, 1904. 3 Claims. (Cl. 40-132.)

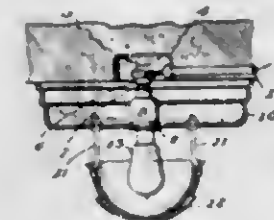


1. In an illuminated sign, the combination with a box-like supporting frame having a front opening and parallel channels extending along the edges of the front opening, of lamps disposed within the frame to the rear of said opening, a letter-frame disposed between said channels, spring means for locking said letter-frame within said channels, and interchangeable letter-plates held in said letter-frame, the edges on said plates having overlapping edges for preventing escape of light between adjacent plates.

14,680. LIGHTING-FIXTURE. EDWIN F. GUTH, St. Louis, Mo., assignor to Luminous Unit Company, St. Louis, Mo., a Corporation of Missouri. Filed June 4, 1919. Serial No. 301,596. Original No. 1,076,418, dated Oct. 21, 1913. Serial No. 731,981, filed Nov. 18, 1912. 3 Claims. (Cl. 240-78.)

3. In a lighting fixture, a unitary structure comprising the combination with a reflecting member, of a translucent light diffusing bowl opening toward the central portion of the reflecting surface and positioned a short distance below said surface to provide free space for the passage of light between the reflecting surface and the upper edge of the bowl, the bowl opening being of smaller

area than the reflecting surface, means for attaching the bowl to the reflecting member in spaced relation thereto, and a source of light within the bowl and near the reflecting surface, the relative position of the bowl, source



of light and reflecting surface being such that substantially all of the rays of light not passing directly from the source to the inner surface of the bowl will strike the reflecting surface and be directed downwardly thereby.

DESIGNS.

53,480. DOLL. ETTA MANSFIELD, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,347. Term of patent 14 years.



The ornamental design for a doll, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 1, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 94,462. (CLASS 39. CLOTHING.) RICHMOND Hosiery Mills, Rossville, Ga. Filed Apr. 15, 1916.



Particular description of goods.—Hosiery.
Claims use since May, 1911.

Ser. No. 94,635. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) AMERICAN CAN CO., New York, N. Y. Filed Apr. 22, 1916.

ECH-KRAFT

Particular description of goods.—Sheet Metal Ornamented with a Decorative Engraving.
Claims use since Apr. 1, 1914.

Ser. No. 98,321. (CLASS 39. CLOTHING.) JOEL BAILY DAVIS COMPANY, Philadelphia, Pa. Filed Sept. 29, 1916.

BADACO

Particular description of goods.—Leather, Knitted, and Woven Gloves, Athletic Underwear, Shirts, Drawers, and Union-Suits of Knitted and Textile Material for Men and Boys, Dress, Negligée, and Work Shirts.
Claims use on gloves since about April, 1914, and on underwear and shirts since about April, 1915.

Ser. No. 100,570. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa. Filed Jan. 13, 1917.



No claim being made to the word "Genuine" apart from the mark shown in the drawing.

Particular description of goods.—Safety-Pins, Toilet-Pins, and Snap Fasteners or Buttons.

Claims use on safety-pins since July, 1913; on toilet-pins since October, 1913, and on snap-buttons since November, 1916.

Ser. No. 102,319. (CLASS 35. BELTING, ROPE, MACHINERY PACKING, AND NON-METALLIC TIRES.) MOTOR CAR SUPPLY CO., Chicago, Ill. Filed Mar. 21, 1917.



Particular description of goods.—Pneumatic Tire and Tube Patches.

Claims use since on or about the 1st day of January, 1912.

Ser. No. 105,243. (CLASS 12. CONSTRUCTION MATERIALS.) THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Filed July 24, 1917.



The star being printed in red and the "T" printed in green.

Particular description of goods.—Asphalt Products—Namely, Solid, Semiliquid, and Liquid Asphalt; Road-Oils; Paving-Filler, (a Pure Asphalt of Proper Consistency for Use without Admixture with other Materials in Filling the Joints of Brick, Stone, or Wood Pavements;) Paving-Cement, (a Pure Solid Asphalt of Proper Consistency for Mixture with Mineral Aggregate to Form an Asphaltic Wearing-Surface;) Tank-Bottom Cement, (a Pure Solid Asphalt Used for Lining and Coating the Bottom of Storage-Tanks;) Impregnating Compound, (a Pure Solid Asphalt of Proper Consistency for Use in Impregnating Felt and Paper in the Manufacture of Asphaltic Roofing-Papers;) Weatherproofing Compound, (a Pure Solid Asphalt of the Proper Melting-Point and Consistency for Use in Protecting the Outer Covering of Conduits and Cables against Heat, Cold, and Water;) Felt Saturated with Asphalt for Roofing Purposes; Rubber Roofing-Stock, (a Pure Solid Asphalt of Proper Consistency and Melting-Point Used in Combination with Pure Reclaimed Rubber Used in the Manufacture of Rubber Roofing;) Asphalt for Building Roads, and Felt Roofing.

Claims use since about January, 1907.

Ser. No. 105,780. (CLASS 39. CLOTHING.) WILLIAM P. SCHRAMM, New York, N. Y. Filed Aug. 21, 1917.

"FACTORY,"

Particular description of goods.—Men's Collars, Cuffs, Dress and Negligée Shirts, Undershirts, and Underpants, Neckties.

Claims use since Oct. 15, 1916.

Ser. No. 107,068. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) PACIFIC MILLS, Lawrence and Boston, Mass. Filed Oct. 31, 1917.



Particular description of goods.—Cotton Piece Goods.

Claims use since December, 1915.

Ser. No. 107,762. (CLASS 39. CLOTHING.) S. J. BROUWER SHOE CO., Milwaukee, Wis. Filed Dec. 5, 1917.

KICK PROOF,

Particular description of goods.—Leather Shoes.

Claims use since 1911.

Ser. No. 108,321. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COMMANDER MILL CO., Minneapolis, Minn. Filed Jan. 5, 1918.

HYRIZER

Particular description of goods.—Wheat-Flour.

Claims use since the 4th day of November, 1916.

Ser. No. 108,487. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) ED. E. DUSMUE, Mineral Wells, Tex. Filed Jan. 16, 1918.



Particular description of goods.—Mineral Water.

Claims use since Jan. 1, 1914.

Ser. No. 108,769. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) AARON PERER & SONS, St. Louis, Mo., and Omaha, Nebr. Filed Feb. 2, 1918.

KLEEN KVALITY KLOTHS

The mark consisting of the misspelled words "Kleen Kvality Kloth" distinctively combined and displayed one above the other, as shown in the drawing, the letter "K" being common to and forming the initial and capital letter of each of said words, the words "Kleen Kvality Kloth" being separately or individually disclaimed.

Particular description of goods.—Oil and Grease Wiping and Cleaning Cloths.

Claims use since October, 1916.

Ser. No. 108,955. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MILAN FRANCIS PRATT, Rochester, N. Y. Filed Feb. 12, 1918.

MAGNESIA NEUTRATE

I disclaim the use of the word "Magnesia" apart from the mark shown.

Particular description of goods.—A Preparation to Correct an Acid Condition of the Stomach.

Claims use since Feb. 8, 1917.

Ser. No. 109,125. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) JOSEPH BUMP, Anna, Ill. Filed Feb. 20, 1918.



No claim is made to the words "Orange Tart" and to the representation of a half-orange and a glass apart from the trade-mark shown in the drawing.

Particular description of goods.—A Non-Alcoholic Non-Cereal Maltless Beverage Flavored with Orange-Juice and Sold as a Soft Drink and a Non-Alcoholic Non-Cereal Maltless Syrup for Making the Same.

Claims use since Dec. 1, 1917.

Ser. No. 110,149. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) RENNES & YATES SMITH, Inc., New York, N. Y. Filed Apr. 12, 1918.



Particular description of goods.—Loganberry-Juice.

Claims use since Mar. 28, 1918.

Ser. No. 110,487. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.



The picture of the man appearing as a part of the trade-mark is fanciful, and the trade-mark is applied by lithograph.

Particular description of goods.—Powdered Tale and Powdered Mica.

Claims use since Jan. 1, 1918.

Ser. No. 110,492. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.



Particular description of goods.—Valve-Grinding Compound, Neat's-Foot Clutch and Brake Compound, Leather-Dressing for Automobile-Tops and Upholstery, and Hand-Soap.

Claims use since February, 1914.

Ser. No. 111,253. (CLASS 39. CLOTHING.) JOHN WANAMAKER, PHILADELPHIA, Philadelphia, Pa. Filed May 29, 1918.

TILLERETTE

Which consists of the word "Tillerette."

Particular description of goods.—Dresses for Women, Misses, and Children.

Claims use since about May 6, 1918.

Ser. No. 111,821. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) NATIONAL COMMODITIES CO., Philadelphia, Pa. Filed June 26, 1918.



Palm Beach Hair Net

Quality Superb

No claim being made to the words "Hair Net" and "Quality Superb" apart from the other features of the mark.

Particular description of goods.—Sanitary Human-Hair Nets.

Claims use since Sept. 1, 1916.

Ser. No. 111,856. (CLASS 17. TOBACCO PRODUCTS.) HENRY T. OYSTERDINGER, Washington, D. C. Filed June 27, 1918.

MEDITATION

Particular description of goods.—Cigars.

Claims use since Sept. 24, 1915.

Ser. No. 111,859. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE RIDGELY TRIMMER COMPANY, Springfield, Ohio. Filed June 27, 1918.



Particular description of goods.—Painters', Decorators', and Paper-Hangers' Tools and Supplies—to wit, Wall-Paper Trimmers, Paste-Tables, Extension-Planks for Paste-Tables, Paste-Boards, Casing-Wheels, Seam-Rollers for Paper-Hangers, Paint-Scrapers for Painters, Magnet-Hammers for Tackling, Graining Check-Roller for Graining Floors, Glass-Cutters, Smoothing-Rollers for Wall-Paper Hangers, Stencil-Rollers for Wall-Paper Hangers, Knives for Paper-Hangers, Stencil-Knives, Border-Cutters for Paper-Hangers, Wall-Scrapers for Paper-Hangers, Wall-Paper Shears, Glaziers' Hammers, Tools for Graining Woodwork, Glass-Pliers, Paint and Color Mixers, Huddle-Horses for Wall-Paper, Molding-Scrapers, Cabinet-Scrapers, Paint-Mills, Putty-Knives, Putty-Scrapers, Sand-Bellows, Bulbs for Relief Decorating, Paint-Sanders, Glazier's Chisel, Graining-Combs, Striping-Wheel, Long-Handle Paint-Brush Holders.

Claims use since Mar. 1, 1907, the name "Ridgely" having been used by said corporation or its predecessors, The Ridgely Trimmer Company, a corporation of West Virginia, and Charles T. Ridgely, since prior to Jan. 1, 1889, for wall-paper trimmers.

Ser. No. 112,280. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) EVERBRIGHT MANUFACTURING COMPANY, San Francisco, Calif. Filed July 23, 1918.



The trade-mark consists of the letters "E M C" inclosed within a diamond-shaped figure, as shown in drawing. The lining is intended to represent purple.

Particular description of goods.—A Polish for Cleansing, Polishing, Preserving, and Finishing Varnished, Enameled, Baked, Plated, and Natural Surfaces of Metal and Metal Bodies—Namely, Aluminum, Brass, and Iron Castings and other Metal Articles to Which a Polish May be Applied.

Claims use since on or about June 19, 1918.

Ser. No. 112,870. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE DUNHAM COMPANY, Berea, Ohio. Filed Aug. 26, 1918. Under ten-year proviso.

DUNHAM

Particular description of goods.—Soil-Tilling Machines—Namely, Soil-Pulverizers, Corrugated Rollers, Soil-Packers, Soil-Levelers, Soil-Stirrers, Soil-Mulchers, and Soil-Cultivators.

Claims use since 1881.

Ser. No. 112,928. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BURLINGTON VINEGAR & PICKLE WORKS, Burlington, Iowa. Filed Aug. 29, 1918.

George Mason's

The trade-mark is the facsimile of the signature of applicant's predecessor in business.

Particular description of goods.—A Sauce for the Following Foods—Namely, Meats, (Hot and Cold;) Fish, Fowl, and Game, Sea Foods, Salads, Soups, and Rarebits.

Claims use since Aug. 13, 1918.

Ser. No. 112,974. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GASPARE DOLCIBELLA, San Francisco, Calif. Filed Sept. 3, 1918.



Particular description of goods.—Hair-Tonic.

Claims use since July 11, 1918.

Ser. No. 113,785. (CLASS 25. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE JOHANNES ROEHRER COMPANY, Cincinnati, Ohio. Filed Oct. 18, 1918.

DoRo

Particular description of goods.—Belting, Hose, and Machinery Packing—viz., Leather, Rubber, Solid-Woven Cotton, and Canvas-Stitched Belting; Rubber and Metallic Hose, and Leather, Rubber, Asbestos, Metallic, Rawhide, Fiber, or Textile and Combination Machinery Packing.

Claims use since Feb. 13, 1911.

Ser. No. 113,958. (CLASS 39. CLOTHING.) BURLINGTON BLANKET COMPANY, Burlington, Wis. Filed Oct. 31, 1918.



Particular description of goods.—Insoles for Footwear.

Claims use since about Apr. 20, 1918.

Ser. No. 114,022. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CLEVELAND CHAIN & MFG. CO., Cleveland, Ohio. Filed Nov. 2, 1918.

TRAX-YUN

Particular description of goods.—Antikid-Chalos.

Claims use since Oct. 4, 1917.

Ser. No. 114,091. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CLEVELAND TRACTOR COMPANY, Euclid, Ohio. Filed Nov. 8, 1918.

Cleveland

Particular description of goods.—Tractors and Parts Thereof.

Claims use since about Dec. 17, 1917.

Ser. No. 114,346. (CLASS 32. FURNITURE AND UPHOLSTERY.) MARSHALL VENTILATED MATTRESS COMPANY, Chicago, Ill. Filed Nov. 25, 1918.

MARSHALL SPRING

No claim being made to the word "Spring" and representation thereof except as shown in the drawing.

Particular description of goods.—Mattresses and Cushions, in the Nature of Upholstery, Attached to or Removable from the Article Upon Which the Cushion is Used.

Claims use since Nov. 1, 1918.

Ser. No. 114,472. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPERRY FLOUR COMPANY, San Francisco, Stockton, Vallejo, Fresno, Salinas, Paso Robles, Los Angeles, Chico, and Marysville, Calif., and Tacoma, Wash. Filed Dec. 3, 1918.



The poppies being printed in gold.

Particular description of goods.—Oatmeal, Rolled Oats, Yellow Corn-Flour, Yellow Cornmeal, White Corn-Flour, White Cornmeal, Large Hominy, Hominy-Grits, Graham Flour, Cracked Wheat, Entire-Wheat Flour, Wheat-Farina, Barley-Flour, Pearl-Barley, Sago, Pearl-Tapioca, Self-Rising Buckwheat-Flour, Dried Split Peas, Ryemeal, Rye-Flour, Rice-Flour, and Pancake-Flour.

Claims use since 1895.

Ser. No. 114,475. (CLASS 39. CLOTHING.) SAMUEL M. WETHEIMER, New York, N. Y. Filed Dec. 3, 1918.

SAMASAM

No claim being made to the words "Mens Wear" apart from the mark as shown on the drawing.

Particular description of goods.—Men's Cotton Hosiery, Men's Mercerized Hosiery, Men's Silk Hosiery.

Claims use since Sept. 1, 1918.

Ser. No. 114,666. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELLIS GROVE MILLING COMPANY, Ellis Grove, Ill. Filed Dec. 16, 1918.

11TH HOUR

Particular description of goods.—Wheat-Flour, More Specifically Self-Rising Flour.

Claims use since about May, 1917.

Ser. No. 114,667. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELLIS GROVE MILLING COMPANY, Ellis Grove, Ill. Filed Dec. 16, 1918.

NU-JOY

Particular description of goods.—Wheat-Flour, More Specifically Self-Rising Flour.

Claims use since about May, 1917.

Ser. No. 115,129. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOB ROSENSTEIN, New York, N. Y. Filed Jan. 11, 1919.



SATURNO

The lines in the background being intended for shading and not for color.

Particular description of goods.—Wheat-Flour.

Claims use since Nov. 21, 1918.

Ser. No. 115,168. (CLASS 39. CLOTHING.) CHARLES W. ZEHNBAUER, Jersey City, N. J. Filed Jan. 18, 1919.

EV-VER-NU-TYE

No claim being made to the word "Tye" apart from the mark as shown.

Particular description of goods.—Men's Ties and Cravats.

Claims use since about Jan. 1, 1918.

Ser. No. 115,526. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y. Filed Jan. 30, 1919.

Loomspun

Particular description of goods.—Silk Piece Goods.

Claims use since the 21st day of January, 1919.

Ser. No. 115,559. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) SAMUEL A. HARTOGENSEN, New York, N. Y. Filed Feb. 1, 1919.

MOGUL

Particular description of goods.—Collar-Buttons and Link Sleeve-Buttons Made Wholly or in Part of Precious Metal.

Claims use since about July 25, 1918.

Ser. No. 115,594. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ALVRY MANUFACTURING COMPANY, St. Louis, Mo. Filed Feb. 3, 1919.

Amco

Particular description of goods.—Gravity Conveyers, Belt Conveyers, Apron Conveyers, Slat Conveyers, Vertical and Incline Elevators, Conveyers, Chutes, Conveyor-Frames, Elevator-Carriers, Sprockets, Chain-Slats, Wood and Steel Rollers, Ball and Roller Bearings, Journal-Bearings, Shafts and Shafing, Take-Up Boxes; Toothed Racks, Gears, Pinions, and Gearing-Guards; Pulleys, Hangers for Shafts and Conveyor-Frames, Supporting-Frames, and Macaroni Cutters.

Claims use since Apr. 10, 1914.

Ser. No. 115,605. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MORRIS SEADEN, Brooklyn, N. Y. Filed Feb. 3, 1919.

LIBERTY



Particular description of goods.—Hair Tonics.
Claims use since Jan. 21, 1919.

Ser. No. 115,658. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE GARDNER-BRYAN COMPANY, Cleveland, Ohio. Filed Feb. 6, 1919.

Gardnerized

Particular description of goods.—Metal-Working Taps and Dies.
Claims use since about Jan. 29, 1919.

Ser. No. 115,749. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) C. M. KIMBALL COMPANY, Winthrop, Mass. Filed Feb. 6, 1919. Under ten year provision.

KIMBALL'S

Particular description of goods.—Silver-Polish, Stove-Polish, and Metal Polish.
Claims use since July 1, 1904.

Ser. No. 115,751. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN BROACH & MACHINE CO., Ann Arbor, Mich. Filed Feb. 11, 1919.



No claim is made to the word "American."

Particular description of goods.—Broaching-Machines, Machines for Grinding Metal Surfaces, Branches, Cutting-Tools, and Parts for Renewal of Broaching-Machines and Machines for Grinding Metal Surfaces.
Claims use since Jan. 1, 1919.

Ser. No. 115,871. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) L. D. BRAGER, Philadelphia, Pa. Filed Feb. 15, 1919.

"Justwell"

Particular description of goods.—Adjustable Elbows for Stovepipes, Heater-Flues, and Smoke-Flues.
Claims use since Nov. 1, 1918.

Ser. No. 116,052. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) L. HELLER & SON, INC., New York, N. Y. Filed Feb. 21, 1919.

Pearl/Jadoline

The lining in the drawing is for shading only. No claim is made for the word "Pearl" except as shown.
Particular description of goods.—Pearls and Pearl Necklaces or Strings, Precious, Semiprecious, and Imitation Stones.
Claims use since Feb. 14, 1919.

Ser. No. 116,073. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE BALDWIN PERFUMERY COMPANY, Chicago, Ill. Filed Feb. 24, 1919.



The picture shown being fanciful.
Particular description of goods.—Complexion-Soap.
Claims use since Feb. 1, 1919.

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Ser. No. 116,373. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DAVIS PHILLIPS, New York, N. Y. Filed Mar. 3, 1919.

LESNALIN

(ג'לסנאלין בורא ")

The Hebrew characters forming a part of the trademark are the Hebrew equivalent of the word "Lesnalin."

Particular description of goods.—Disinfectant.
Claims use since about June, 1916.

Ser. No. 116,275. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LOUIS ROSSAM & CO., New York, N. Y. Filed Mar. 3, 1919.

Florisine

Particular description of goods.—Silk Piece Goods.
Claims use since Oct. 1, 1918.

Ser. No. 116,356. (CLASS 10. PAINTS AND PAINTERS' MATERIALS.) CHARLES T. LEWIS, Dallas, Tex. Filed Mar. 7, 1919.

FAN-OL

Particular description of goods.—A Cleaning and Polishing Preparation for Woodwork, Floors, Furniture, and Similar Articles.
Claims use since about Dec. 6, 1918.

Ser. No. 116,406. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CABLE DRAPER BAKING CO., Detroit, Mich. Filed Mar. 8, 1919.

GOLD CUP

Particular description of goods.—Bread.
Claims use since about March, 1918.

264 O. G.—10

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Ser. No. 116,425. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) SAMUEL W. RAPP, Jr., Morton, Ill. Filed Mar. 8, 1919.



The trade-mark, which is wholly fanciful with respect to the central or principal human figure, the lining of the background being for shading purposes only, the words "Cleaner," "No Grit," "Do-Boy Products Co.," and "Morton, Illinois," being disclaimed apart from the mark shown on the drawing.

Particular description of goods.—A Compound, Either in Liquid or Paste Form, for Cleaning the Hands, Fabrics, Glassware, Porcelain, Metal Ware, Painted and Varnished Surfaces, Woodwork, and the Like.
Claims use since about the 15th day of February, 1919.

Ser. No. 116,531. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE PAUL DE LANEY CO. INC., BROCTON, N. Y. Filed Mar. 18, 1919.



The picture of the girl's bust shown on the drawing is fanciful. The map of the United States of America, apart from the exact form in which it is used in connection with the trade-mark, is disclaimed.

Particular description of goods.—Grape-Juice, Apple-Juice, and Apple Cider.
Claims use since Sept. 10, 1915.

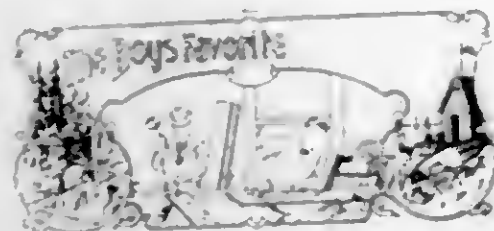
Ser. No. 116,720. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MEYER BROS. COFFEE AND SPICE CO., St. Louis, Mo. Filed Mar. 19, 1919.

OLD JUDGE



Particular description of goods.—Teas, Mustard, Coffee, Ground Black Pepper, and Flavoring Extracts for Foods.
Claims use since Jan. 18, 1919.

Ser. No. 116,724. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) PLATT'S BOX COMPANY, Troy, N. H. Filed Mar. 19, 1919.



No claim being made to the words "The Boys Favorite" apart from the mark shown in the drawing.
Particular description of goods.—Boys' Sets of Carpenters' Tools Contained in Chests.
Claims use since about the year 1906.

Ser. No. 116,804. (CLASS 39. CLOTHING.) BEN WIENER & CO., New York, N. Y. Filed Mar. 21, 1919.

HUCK FINN

Consisting of the words "Huck Finn."
Particular description of goods.—Boys', High-School Boys', Javelines', and Young Men's Suits and Overcoats.
Claims use since Mar. 12, 1919.

Ser. No. 116,870. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) YARNALL-WARING COMPANY, Philadelphia, Pa. Filed Mar. 24, 1919.

YARWAY

Particular description of goods.—Recording Meters for Liquids, Such as Water, Oil, and Acid.
Claims use since about May 1, 1915.

Ser. No. 116,979. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) C-MAGNET SAFETY RAZOR COMPANY, Lowell, Mass. Filed Mar. 27, 1919.

MAGNET

Particular description of goods.—Safety-Razor Blades.
Claims use since Mar. 21, 1919.

Ser. No. 116,984. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AMERICAN ROACH MAGNETO CORPORATION, Springfield, Mass. Filed Mar. 28, 1919.



Particular description of goods.—Ignition and Starting Apparatus for Internal-Combustion Engines and Electric-Lighting Systems for Moving Vehicles, Consisting of Magneto-Electric Generators, Spark-Plugs, Mechanical Interrupters and Distributors for Ignition Systems, Ignition-Timers, Electric Condensers, Ignition-Coils, Electric Motors, Electric Generators, Electric Switches, Head-Lights, Incandescent Lamps, Cable-Conduits, Insulated Cables, Cable-Terminals, and Parts Thereof.
Claims use since Mar. 10, 1919.

Ser. No. 116,988. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) A. J. CHURCHILL CO. INC., Portland, Oreg. Filed Mar. 28, 1919.

SFAG-NA-KINS

Particular description of goods.—Sphagnum-Moss Sanitary Napkins.
Claims use since Mar. 1, 1919.

Ser. No. 116,999. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UTICA STRAW AND MOHAWK VALLEY COTTON MILLS, Utica, N. Y. Filed Mar. 28, 1919. Under ten-year proviso.



Particular description of goods.—Sheets, Sheetings, Pillow-Cases, and Cotton Piece Goods.
Claims use since Jan. 1, 1883.

Ser. No. 117,001. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BUNTS BROTHERS, Chicago, Ill. Filed Mar. 29, 1919.

JUST FOR YOU

Particular description of goods.—Confectionery—Namely, Chocolates.
Claims use since about the 12th day of March, 1919.

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Ser. No. 117,008. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FRANKLIN BARN EQUIPMENT CO., Monticello, Iowa. Filed Mar. 29, 1919.



Particular description of goods.—Overhead Carriers.
Claims use since on or about Apr. 1, 1915.

Ser. No. 117,090. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE RIDGELY TRIMMER COMPANY, Springfield, Ohio. Filed Apr. 1, 1919.



Particular description of goods.—Cleaning and Scouring Material—to wit, Steel-Wool.
Claims use since Mar. 1, 1907.

Ser. No. 117,091. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE RIDGELY TRIMMER COMPANY, Springfield, Ohio. Filed Apr. 1, 1919.



Particular description of goods.—Painters' and Decorators' Tools and Supplies—to wit, Pot-Hooks, Straining-Cloth Holders, Ladder-Rung Replacers, Ladder-Shoes, Suspenders for Paint-Brushes.
Claims use since Mar. 1, 1907.

Ser. No. 117,147. (CLASS 39. CLOTHING.) CHARLES W. WOLFE, East Orange, N. J. Filed Apr. 3, 1919.

HOMOS

Particular description of goods.—Suits of Outer Wearing-Apparel for Men, Women, and Children.
Claims use since 1915.

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Ser. No. 117,163. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HAAE BROTHERS, New York, N. Y. Filed Apr. 4, 1919.



The applicant hereby disclaims any exclusive right to the word "Twill" apart from the mark shown on the drawing hereto.

Particular description of goods.—Wool Goods Composed Entirely of Wool.
Claims use since 1915.

Ser. No. 117,168. (CLASS 17. TOBACCO PRODUCTS.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed Apr. 4, 1919.

CAMEL

Particular description of goods.—Smoking-Tobacco and Cigarettes.
Claims use since about March, 1901.

Ser. No. 117,172. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN JOSEPH BUGOLT, Stevens Point, Wis. Filed Apr. 5, 1919.



Particular description of goods.—A Pedaling-Cart on Three Wheels for Boys.
Claims use since Jan. 14, 1919.

Ser. No. 117,177. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COLUMBIA CHEESE CO., Newark, N. J. Filed Apr. 5, 1919.



DOCTOR BRAND



No registration rights being claimed for the word "Brand" apart from the mark shown in the drawing, and the representations of the man and woman being fanciful.

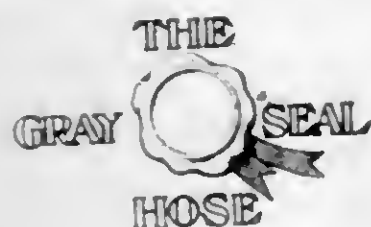
Particular description of goods.—Eggs.
Claims use since 1916.

Ser. No. 117,223. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) EXCELLO TIRE & RUBBER CO., Philadelphia, Pa. Filed Apr. 7, 1919.

XLO

Particular description of goods.—Rubber Tires and Rubber Inner Tubes for Tires.
Claims use since June 15, 1914.

Ser. No. 117,262. (CLASS 39. CLOTHING.) ALEXIS WEIL, New York, N. Y. Filed Apr. 7, 1919.



The word "Hose" being disclaimed.
Particular description of goods.—Men's, Women's, and Children's Hosiery.
Claims use since the year 1913.

Ser. No. 117,288. (CLASS 39. CLOTHING.) JULIUS WILE SONS & CO., New York, N. Y. Filed Apr. 9, 1919.



Particular description of goods.—Leather Boots and Shoes for Men, Women, and Children.
Claims use since Mar. 1, 1919.

Ser. No. 117,297. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) EASTERN PRODUCTION COMPANY, Detroit, Mich. Filed Apr. 9, 1919.

EASTERN

Particular description of goods.—Hydraulic Presses, Hydro-pneumatic Presses, Hydro-pneumatic Accumulators, Hydraulic Pumps, and Parts Thereof.
Claims use since Nov. 15, 1918.

Ser. No. 117,330. (CLASS 38. PRINTS AND PUBLICATIONS.) THE HOLT MANUFACTURING COMPANY, Stockton, Calif. Filed Apr. 19, 1919.

THE TANK

Particular description of goods.—Monthly Periodicals.
Claims use since Mar. 1, 1919.

Ser. No. 117,416. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE STAMPEDE COMPANY, LIMITED, St. Paul, Minn. Filed Apr. 12, 1919.

RABBIT



Particular description of goods.—Candy.
Claims use since Mar. 21, 1919.

Ser. No. 117,464. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM G. VAN HOOK, Earl, Ark. Filed Apr. 14, 1919.

ENGINOL

Particular description of goods.—A Salve Used Externally to Relieve Inflammation and for Ailments of the Respiratory Organs and Internally for Kidney and Bladder Ailments.
Claims use since Feb. 28, 1919.

Ser. No. 117,489. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SIMON W. FARSEA, Brooklyn, N. Y. Filed Apr. 15, 1919.

Adjusto-Lite

Particular description of goods.—Portable Electric Lamps.
Claims use since Apr. 9, 1919.

Ser. No. 117,498. (CLASS 39. CLOTHING.) NATIONAL SHIRT SHOPS, INC., New York, N. Y. Filed Apr. 15, 1919.



Particular description of goods.—Coats, Vests, Trowsers, Palm Beach Suits, Caps, Bath-Robes and House-Gowns, Slippers Made of Rubber and of Fabric, Socks, Negligee Shirts, Dress-Shirts and Work-Shirts for Men, and Bathing-Suits, Stockings, Underwear of Knitted and Woven Material, and Pajamas for Men and Women.
Claims use since January, 1919.

Ser. No. 117,523. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) GLENDEA TEXTILE CO., New York, N. Y. Filed Apr. 16, 1919.

Glen-Tex

Particular description of goods.—Veilings, Nettings, Chiffons, and Georgettes and Laces.
Claims use since Dec. 28, 1918.

Ser. No. 117,614. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE CHICAGO ELECTRIC MANUFACTURING CO., Chicago, Ill. Filed Apr. 19, 1919.



No claim is made to the exclusive use of the word "Handy" apart from the mark shown in the drawing.

Particular description of goods.—Electric Appliances—Namely, Sockets, Connectors, Plugs, Switches, Cowl-Lamps, Gage-Lamps, Portable Lamps, Tonneau-Lamps, Tail-Lamps, Dash-Lamps, Trouble-Lamps, Inspection-Lamps, and Extension-Lines.
Claims use since 1910.

Ser. No. 117,620. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEGGETT & BROTHER, INCORPORATED, New York, N. Y. Filed Apr. 19, 1919.



The trade-mark consists of a red circular band having outlined therein the word "Poison" and having within the circular space inclosed by the band the representation of a skull and cross-bones. At opposite points in the band are the representations of seals, with the initials "L" and "B," separated by a horizontal line. No exclusive claim is made to the word "Poison" or to the representation of the skull and cross-bones.

Particular description of goods.—Insecticides and Fungicides, and in Particular Hellebore, Paris Green, Dry Bordeaux Mixture, Dry Bordeaux and Paris-Green Compound, Bordeaux-Mixture Paste, Arsenate of Lead, Arsenate of Calcium, Bordeaux-Arsenate-of-Lead Mixture, and Arseno.
Claims use since March, 1899.

Ser. No. 117,644. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DUPLICATOR MANUFACTURING COMPANY, Chicago, Ill. Filed Apr. 21, 1919.



Ditto

Particular description of goods.—Duplicating-Rolls for Duplicating-Machines.
Claims use since Dec. 16, 1918.

Ser. No. 117,645. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DUPLICATOR MANUFACTURING COMPANY, Chicago, Ill. Filed Apr. 21, 1919.



Ditto

Particular description of goods.—Duplicating-Machines.
Claims use since Dec. 16, 1918.

Ser. No. 117,685. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NASHVILLE ROLLER MILLS, Nashville, Tenn. Filed Apr. 21, 1919.



Particular description of goods.—Wheat-Flour.
Claims use since Apr. 1, 1919.

Ser. No. 117,686. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) NATIONAL FRUIT JUICE COMPANY, La Fayette, Ind. Filed Apr. 21, 1919.



The portrait being that of General Lafayette, deceased. Applicant hereby disclaims the word "Apple-ade."

Particular description of goods.—Non-Alcoholic Maltless Apple-Juice Beverage Containing No Cereals, Sold as a Soft Drink, Known as Apple-ade.
Claims use since Feb. 6, 1919.

Ser. No. 117,696. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE PORTLAND CHEESE COMPANY, Portland, Oreg. Filed Apr. 21, 1919.



Particular description of goods.—Cheese.
Claims use since Sept. 28, 1910.

Ser. No. 117,712. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH VENUTO, Philadelphia, Pa. Filed Apr. 21, 1919.

VENUTOL

Particular description of goods.—Skin Lotions.
Claims use since March, 1919.

Ser. No. 117,743. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE W. T. RAWLZIGH COMPANY, Freeport, Ill. Filed Apr. 22, 1919.

NUVOSEN

Particular description of goods.—Blood-Tonic in Tablet Form.
Claims use since Dec. 23, 1918.

Ser. No. 117,775. (CLASS 39. CLOTHING.) CRADDOCK TERRY COMPANY, Lynchburg, Va. Filed Apr. 23, 1919.



The name "McElroy's" forming a part of the trademark is a facsimile of the handwriting of the vice-president of the applicant corporation. No claim is made to the exclusive use of the word "Turns" except in connection with the mark as shown in the drawing.

Particular description of goods.—Ladies' Shoes of Leather or of Leather and Fabric.
Claims use since Mar. 15, 1919.

Ser. No. 117,791. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANGLO-AMERICAN PHARMACEUTICAL CORPORATION, New York, N. Y. Filed Apr. 24, 1919.

WINTOGENO

Particular description of goods.—A Menthol and Wintergreen Cream Used for the Treatment of Sciatica, Neuralgia, Rheumatism, Lumbago, Headache, Earache, Pains in the Throat and Chest, and as a General Anesthetic.

Claims use since the year 1916.

Ser. No. 118,001. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) VICTOR LEATHER COMPANY, Allentown, Pa. Filed Apr. 29, 1919.



No claim being made to the words "Kid and Calf—Made in America" apart from the mark shown in the drawing.

Particular description of goods.—Tanned and Finished Calf and Kid Leather.

Claims use since Mar. 5, 1919.

Ser. No. 118,073. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VAN DYK & CO., New York, N. Y. Filed May 1, 1919.

MIUSA

Particular description of goods.—Perfume-Bases, Synthetic Flower-Oils, Natural Flower-Oils, Perfume-Oils, Toilet-Water Oils, Benzaldehyde, Benzyl Chloride, Ethyl Bromide, and Chemicals Suitable for Imparting Odors to Toilet Preparations.

Claims use since Apr. 7, 1919.

Ser. No. 118,180. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MORRIS RUDOMINA, Newark, N. J. Filed May 5, 1919.

BROMOPHEN

Particular description of goods.—A Headache Remedy.
Claims use since Jan. 10, 1919.

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Ser. No. 118,186. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) REED FOOD COMPANY, Indianapolis, Ind. Filed May 5, 1919.

Reed's

Alex

No claim is made to the exclusive use of the word "Reed's" except in connection with the remainder of the mark.

Particular description of goods.—Non-Alcoholic Maltless Cereal Beverage Sold as a Soft Drink.
Claims use since June 27, 1918.

Ser. No. 118,188. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) SONORA PHONOGRAPH CORPORATION, New York, N. Y. Filed May 5, 1919.

NOCTURNE

Particular description of goods.—Talking-Machines, Phonographs, Gramophones, Graphophones, and Music-Boxes.

Claims use since on or about the month of March, 1919.

Ser. No. 118,266. (CLASS 17. TOBACCO PRODUCTS.) VICTOR LEVOR, Attica, Ind. Filed May 8, 1919.

NO PROTEST

Particular description of goods.—Cigars.
Claims use since 1889.

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Ser. No. 118,485. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed May 14, 1919.

DOLPHIN

Particular description of goods.—Rubber Garden-Hose.
Claims use since 1899.

Ser. No. 118,660. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) EMPIRE BOTTLING WORKS, El Paso, Tex. Filed May 19, 1919.

Broncho

Particular description of goods.—Non-Intoxicating Non-Alcoholic Maltless Non-Cereal Beverage Sold as a Soft Drink.

Claims use since Mar. 20, 1917.

Ser. No. 118,660. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) DAVID N. GOLDBERG, Chicago, Ill. Filed May 19, 1919.

Vanity Fair

Particular description of goods.—Non-Alcoholic Non-Intoxicating Non-Cereal Maltless Beverage Sold as a Soft Drink.
Claims use since January, 1919.

TRADE-MARK REGISTRATIONS GRANTED

JULY 1, 1919.

125,887. SUSPENDERS. BERKOWITZ & LOBEL, New York, N. Y., assignors to Herman Berkowitz, New York, N. Y.
Filed December 2, 1918. Serial No. 114,442. PUBLISHED FEBRUARY 25, 1919.

125,888. SUSPENDERS. BERKOWITZ & LOBEL, New York, N. Y., assignors to Herman Berkowitz, New York, N. Y.
Filed December 2, 1918. Serial No. 114,443. PUBLISHED FEBRUARY 25, 1919.

TRADE-MARK REGISTRATIONS CANCELED.

79,195. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y.
Registered August 16, 1910. Canceled April 9, 1919.
80,914. COTTON PIECE GOODS. GRINNELL WILLIS & Co., New York, N. Y.
Registered February 14, 1911. Canceled March 13, 1919.
95,719. WHEAT-FLOUR. UPDIKE MILLING COMPANY, Omaha, Nebr.
Registered March 3, 1914. Canceled April 23, 1919.
99,042. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y.
Registered August 11, 1914. Canceled April 9, 1919.

112,245. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. AMERICAN LA FRANCE FIRE ENGINE COMPANY, Elmira, N. Y.
Registered August 29, 1916. Canceled May 12, 1919.
118,503. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y.
Registered September 15, 1917. Canceled April 9, 1919.
123,400. COFFEE. THE WOOLSON SPICE COMPANY, Toledo, Ohio.
Registered October 20, 1918. Canceled May 12, 1919.

LABELS

REGISTERED JULY 1, 1919.

- 21,280.—Title: "SYLVAN CARNATION TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,281.—Title: "SYLVAN HELIOTROPE TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,282.—Title: "NATURAL ODOR SANDALWOOD." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,283.—Title: "NATURAL ODOR HELIOTROPE." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,284.—Title: "SYLVAN ROSE TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,285.—Title: "NATURAL ODOR ROSE." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,286.—Title: "NATURAL ODOR CARNATION." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,287.—Title: "SYLVAN LILAC TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,288.—Title: "NATURAL ODOR LILAC." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,289.—Title: "SYLVAN SANDALWOOD TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,290.—Title: "NATURAL ODOR VIOLET." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,291.—Title: "SYLVAN VIOLET TOILET SOAP." (For Toilet Soap.) ARMOUR AND COMPANY, Chicago, Ill. Filed April 22, 1919.
- 21,292.—Title: "AUERBACH FINEST LEMON DROPS." (For Candy.) H. AUERBACH & SONS, New York, N. Y. Filed March 4, 1919.
- 21,293.—Title: "BAKER'S FOOT EASE." (For Foot Powder.) J. HARVEY BAKER, Portales, N. Mex. Filed April 17, 1919.
- 21,294.—Title: "HARVARD BRONCHIAL SYRUP." (For Bronchial Syrup.) CLAUDE A. BELL, Lowell, Mass. Filed April 22, 1919.
- 21,295.—Title: "BELL'S SASSAPARILLA." (For Sarsaparilla.) CLAUDE A. BELL, Lowell, Mass. Filed April 22, 1919.
- 21,296.—Title: "BELL'S EXTRACT OF SPICES." (For Extract of Spices.) CLAUDE A. BELL, Lowell, Mass. Filed April 22, 1919.
- 21,297.—Title: "BELL'S LUNG BALSAM." (For Lung Balsam.) CLAUDE A. BELL, Lowell, Mass. Filed April 22, 1919.
- 21,298.—Title: "BETSY ROSS CANDIES." (For Candy.) BETSY ROSS CANDY SHOP, Indianapolis, Ind. Filed April 30, 1919.
- 21,299.—Title: "COMET." (For Canned Sardines.) F. E. BOOTH CO., San Francisco, Calif. Filed April 21, 1919.
- 21,300.—Title: "BARBOUR GROOVED ENDLESS WELTING." (For Welting.) BROCKTON RING COMPANY, Brockton, Mass. Filed April 30, 1919.

- 21,301.—Title: "CHATEAU." (For Soft Drinks.) CHATEAU BOTTLING CO., New York, N. Y. Filed April 3, 1919.
- 21,302.—Title: "MOER-LO." (For a Non-Intoxicating Cereal Beverage.) THE CHRISTIAN MOERLEIN BREWING COMPANY, Cincinnati, Ohio. Filed March 30, 1918.
- 21,303.—Title: "LAQUILA ALPINA BRAND." (For Semolina Macaroni.) CUMBERLAND MACARONI MFG. CO., Cumberland, Md. Filed April 21, 1919.
- 21,304.—Title: "CACTUS BRAND CANTALOUPE." (For Cantaloupe.) CRITCHFIELD & WOOLFOLK, Pittsburgh, Pa. Filed April 5, 1919.
- 21,305.—Title: "LIBERTY BLUING." (For Bluing.) JOSEPH F. CZALGOSZEWSKI, Chicago, Ill. Filed December 2, 1918.
- 21,306.—Title: "STERILE SURGICAL SUTURES." (For Sterile Surgical Sutures and Ligatures.) DAY & GECK, INC., Brooklyn, N. Y. Filed April 21, 1919.
- 21,307.—Title: "DE CROES HAIR STIMULANT AND DANDRUFF REMEDY." (For a Hair-Tonic.) C. E. AND B. M. DE CROES, Indianapolis, Ind. Filed May 5, 1919.
- 21,308.—Title: "CHAMPION." (For a Hair-Tonic.) WILLIAM H. DECHANT, Toledo, Ohio. Filed May 1, 1919.
- 21,309.—Title: "OVER-THE-TOP." (For Coffee.) EL RENO WHOLESALE GROCERY CO., Oklahoma, Okla. Filed April 2, 1918.
- 21,310.—Title: "EGG CREAM." (For Egg Substitute.) THE FOOD PRODUCTS CO., Binghamton, N. Y. Filed April 12, 1919.
- 21,311.—Title: "VICTORY BOYS' WASH SUITS." (For Boys' Wash-Suits.) LOUIS JACOB FREEDMAN, Baltimore, Md. Filed March 22, 1919.
- 21,312.—Title: "PERMANITE." (For Glazing Compounds.) THE GARLAND CO., Cleveland, Ohio. Filed September 19, 1918.
- 21,313.—Title: "PAR." (For Cigarettes.) WILLIAM H. GLENN, New York, N. Y. Filed February 12, 1919.
- 21,314.—Title: "GUESS." (For a Soft Drink.) GUESS COMPANY, Vidalia, Ga. Filed February 20, 1919.
- 21,315.—Title: "POPPY BRAND." (For Fresh Asparagus.) JONES & PETTIGREW, San Francisco, Calif. Filed April 21, 1919.
- 21,316.—Title: "IT WEARS AND WEARS." (For Hosiery.) KACHEL-LENNART COMPANY, Ephrata borough, Pa. Filed March 29, 1919.
- 21,317.—Title: "PASCO." (For Canned Pimentos.) NELLIE T. KEEFE, New York, N. Y. Filed April 21, 1919.
- 21,318.—Title: "KOOP'S LIGHTNING." (For Hair-Renewer.) FRED KOOP, Westmont, N. J. Filed April 10, 1919.
- 21,319.—Title: "TWIN BUTTES." (For Canned Tomatoes.) LA SIERRA HEIGHTS CANNING COMPANY, Los Angeles, Calif. Filed April 21, 1919.
- 21,320.—Title: "LEV-I-TONE." (For Eye-Lotion.) MICHAEL L. LEVITT, Philadelphia, Pa. Filed April 11, 1919.

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- 21,321.—Title: "BUCK-O." (For a Non-Intoxicating Cereal Beverage.) LION BREWING COMPANY, Wilkes-Barre, Pa. Filed April 10, 1919.
- 21,322.—Title: "TRU-BLU." (For Bluing.) LYONS CHEMICAL WORKS, Chicago, Ill. Filed March 10, 1919.
- 21,323.—Title: "THE PRETTY VILLAGE." (For Toy Villages.) MCGOUGH LIN BRO., INCORPORATED, New York and Brooklyn, N. Y. Filed May 1, 1919.
- 21,324.—Title: "DORIANA." (For Cigars.) HARRY MILLS, New York, N. Y. Filed March 21, 1919.
- 21,325.—Title: "LACE DESIGN." (For Boxes Containing Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed March 19, 1919.
- 21,326.—Title: "PEACOCK BORDER." (For Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 5, 1919.
- 21,327.—Title: "COUGH DROP LIFE SAVERS, THE CANDY MINT WITH THE HOLE, A Dainty Confection." (For Medicinal Candies.) MINT PRODUCTS COMPANY, INC., New York, N. Y. Filed February 25, 1918.
- 21,328.—Title: "MOCO MONKEY GRIP." (For Patches for Automobile-Tires.) MOCO LABORATORIES, INC., Oklahoma, Okla. Filed April 2, 1918.
- 21,329.—Title: "SULFERN SOAP." (For Soap.) THE NATIONAL SULFERN SOAP CO., Denver, Colo. Filed April 22, 1918.
- 21,330.—Title: "NUT-BUTTER BRAND NUT MARGARINE." (For Margarine.) NARRAGANSETT DAIRY CO. LTD., Providence, R. I. Filed March 18, 1919.
- 21,331.—Title: "OUERNSEY BRAND OLEOMARGARINE." (For Oleomargarine.) NARRAGANSETT DAIRY CO. LTD., Providence, R. I. Filed March 18, 1919.
- 21,332.—Title: "M N PEANUT FLUFF." (For Candy Confection.) MAANE N. NELIN, Rockford, Ill. Filed April 21, 1919.
- 21,333.—Title: "INDIAN RIVER FRUITS, NEVINS MERRITT'S ISLAND BRAND." (For Fruits.) THOMAS F. NEVINS, New York, N. Y., and Merritt, Fla. Filed April 25, 1919.
- 21,334.—Title: "GLEN ROSA BRAND." (For Orange Marmalade.) NORTH ONTARIO PACKING CO., Los Angeles, Calif. Filed April 21, 1919.
- 21,335.—Title: "CHOCOLAT SUPERIEUR." (For Chocolate.) PENNSYLVANIA CHOCOLATE COMPANY, Pittsburgh, Pa. Filed March 11, 1919.
- 21,336.—Title: "PERFEKTONE." (For Talking-Machines.) THE PERFEKTONE CORPORATION, Philadelphia, Pa. Filed April 10, 1919.
- 21,337.—Title: "BONE DRY BRAND." (For Weather-proof Clothing.) J. M. PICKERILL, St. Louis, Mo. Filed March 27, 1918.
- 21,338.—Title: "RALITE-STONE BLOCKS." (For Toy Building-Blocks.) Ralo Toy Company, Worcester, Mass. Filed April 23, 1919.
- 21,339.—Title: "NEO." (For Nasal Jelly.) MAX ROBINSON, Chicago, Ill. Filed April 21, 1919.
- 21,340.—Title: "SERVICEABLE, ADJUSTO CORSETS, COMFORTABLE." (For Corsets.) ROYAL WORCESTER CORSET CO., Worcester, Mass. Filed April 7, 1919.
- 21,341.—Title: "FASHIONABLE, ROYAL WORCESTER CORSETS, GRACEFUL." (For Corsets.) ROYAL WORCESTER CORSET CO., Worcester, Mass. Filed April 7, 1919.
- 21,342.—Title: "OLD TAILOR BORBON." (For a Non-Alcoholic Distilled Beverage.) MAYER RUBIN, Hammond, Ind. Filed May 8, 1919.
- 21,343.—Title: "TAN-SAV." (For Preparations for Relief of Colds and Catarrh.) JOHN SAADI, Allentown, Pa. Filed March 25, 1919.
- 21,344.—Title: "IT'S QUALITY." (For Bread.) PAUL J. STERN, Milwaukee, Wis. Filed April 15, 1919.
- 21,345.—Title: "PACIFIC." (For Canned Fish Balls.) STUART FISH PRODUCTS CO., INC., Seattle, Wash. Filed April 21, 1919.
- 21,346.—Title: "TERRIS." (For White Dye Bleach for Protrusions and Straw Hats.) JOHN TERRIS, Lebanon, Pa. Filed April 21, 1919.
- 21,347.—Title: "A PIPPIN OF A DRINK." (For Pure Apple-Juice.) VIRGINIA FRUIT JUICE COMPANY, INC., Norfolk, Va. Filed March 1, 1919.
- 21,348.—Title: "PIG-ME." (For Toy Furniture.) WALLIS DORR COMPANY, New York, N. Y. Filed December 23, 1918.
- 21,349.—Title: "BEST EVERYWAY MILK." (For Condensed Milk.) WEIL COLOR AND CHEMICAL COMPANY & WEIL AND COMPANY, New York, N. Y. Filed March 15, 1919.
- 21,350.—Title: "WILSON SUN-BEAM AUTO POLISH." (For a Liquid to Polish Bodies of Automobiles, Musical Instruments, Furniture, and Fixtures.) CHARLES A. WILSON, New York, N. Y. Filed February 7, 1919.

PRINTS

REGISTERED JULY 1, 1919.

- 5,107.—Title: "SENSEN MAKES MY CIGAR TASTE LIKE A 25¢ PERFECTO!" (For Sen-Sen Pellets.) AMERICAN CIGARETTE COMPANY, New York, N. Y. Filed March 27, 1919.
- 5,108.—Title: "A. D. S. COLD AND GRIPPE TABLETS." (For Cold and Grippe Tablets.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,109.—Title: "A. D. S. COLD AND GRIPPE TABLETS." (For Cold and Grippe Tablets.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,110.—Title: "A. D. S. COLD AND GRIPPE TABLETS." (For Cold and Grippe Tablets.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,111.—Title: "A. D. S. BEEF IRON AND WINE." (For Beef, Iron, and Wine.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,112.—Title: "A. D. S. BEEF IRON AND WINE." (For Beef, Iron, and Wine.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,113.—Title: "A. D. S. BEEF IRON AND WINE." (For Beef, Iron, and Wine.) AMERICAN DRUGGISTS SYNDICATE, Long Island City, N. Y. Filed January 31, 1919.
- 5,114.—Title: "PACIFIC COAST STACKS." (For Stack-Paints.) CALIFORNIA PAINT COMPANY, Oakland, Calif. Filed Apr. 30, 1919.
- 5,115.—Title: "THE PICKWICK SERVICE STORES." (For Self-Service Stores.) CHASE G. JOHNSON, Sioux City, Iowa. Filed August 6, 1918.
- 5,116.—Title: "HAVE YOU MAX-WELL KNOWN ROUND STOVE WITH A FLUE?" (For Gaseous, Liquid, and Solid Fuel Burning Stoves and Heaters, Not Electrical.) HENRY MCKINNA, Pittsburgh, Pa. Filed March 24, 1919.
- 5,117.—Title: "PERFEKTONE." (For Talking-Machines.) THE PERFEKTONE CORPORATION, Philadelphia, Pa. Filed April 10, 1919.
- 5,118.—Title: "IT'S QUALITY." (For Bread.) PAUL J. STEAN, Milwaukee, Wis. Filed April 15, 1919.
- 5,119.—Title: "NEW COLORS FOR YOUR WAISTS." (For Dye-Soap.) SENSEAM CHEMICAL COMPANY, Chicago, Ill. Filed January 16, 1919.
- 5,120.—Title: "FASHIONABLE COLORS INSTANTLY." (For Dye-Soap.) SENSEAM CHEMICAL COMPANY, Chicago, Ill. Filed January 16, 1919.
- 5,121.—Title: "DON'T BUY NEW CORSETS." (For Dye-Soap.) SENSEAM CHEMICAL COMPANY, Chicago, Ill. Filed January 16, 1919.
- 5,122.—Title: "CLEANSES AND COLORS INSTANTLY." (For Dye-Soap.) SENSEAM CHEMICAL COMPANY, Chicago, Ill. Filed January 16, 1919.
- 5,123.—Title: "DYE IT THE EASIEST WAY." (For Dye-Soap.) SENSEAM CHEMICAL COMPANY, Chicago, Ill. Filed January 22, 1919.

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DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

U. S. Circuit Court of Appeals—Third Circuit.
CUNNINGHAM PIANO COMPANY v. ÆOLIAN CO.
Decided January 31, 1919; rehearing denied March 26, 1919.
[255 Fed. Rep., 897.]

1. PATENTS — VALIDITY AND INFRINGEMENT — PIANO-PLAYER.

The Young patent, No. 692,968, for controller for mechanical musical instruments, Held valid and infringed.

2. SAME—INVENTION.

Young's thought that a line might be made to record a master's interpretation of a musical composition and that any one who follows that line physically can reproduce the music of the master was not his invention. That was his discovery. It was, however, the soul of his invention. The very simple means of a pointer connected with the controller and extending over the music-sheet to the line, by which his discovery was brought into action, did not, when standing alone, involve invention; but when this means, simple though it was, was employed to bring into being and put to use the substance of the discovery the two together, the great and the little thing, constitute invention.

APPEAL from the District Court of the United States for the Eastern District of Pennsylvania; Oliver B. Dickinson, Judge.

Suit in equity by the Æolian Company against the Cunningham Piano Company. Decree for complainant, and defendant appeals. Affirmed.

Mr. Hector T. Fenton for the appellant.
Mr. Joseph C. Fraley for the appellee.

Before BUTTINGTON and WOOLLEY, Circuit Judges.
WOOLLEY, Cir. J.:

By the decree of the district court, claims 1 and 2 of Letters Patent No. 692,968, dated February 11, 1902, issued to complainant as assignee of the inventor, Francis L. Young, for an improvement in controllers for mechanical musical instruments, were held valid and infringed. We affirm the decree on the court's opinion (D. C., 251 Fed., 307) without doing more than to state very generally the feature of the case which has most impressed us.

The invention of the patent relates to mechanical musical instruments such as the "planola," and more particularly the "piano player," wherein musical notes are automatically sounded by pneumatic mechanism actuated by a travelling sheet of perforated paper. The state of the art—that is, the point which the art had reached and at which

it had stopped just before the patentee entered it—records the advance of a remarkable though imperfect mechanical musical instrument. The organization of this instrument contained, first, means for the mechanical sounding of musical notes, governed in their production and duration by the other mechanical means of a travelling sheet of perforated paper; and second, means for giving artistic effects to the sounds thus mechanically produced, by controlling their speed and volume. The latter means embraced a number of parts termed "controllers." Though connected with the sound-producing mechanism, these were operated, not mechanically, but manually by the performer, and were the particular instruments the performer used to control variation in sound volume and time and thereby to give to a musical composition the artistic interpretation he desired. Without controllers, the instrument produced an unmusical jumble of sounds. With controllers, the production was musical according to the skill with which the performer moved the controllers and governed the artistic effects of time and sound. One unskilled in music could render very little real music from the sounds with which the mechanism supplied him. Skill of a musician in some measure was required for the production of music.

Obviously, instruments with a musical range limited to musicians more or less skilled were limited in their sale. To broaden the commercial field, manufacturers found it necessary to qualify the unmusical as musical performers by affording them a modicum of skill that could be easily acquired. With this in view, they printed instructions on the margin of the perforated music-sheet so as to convey to the mind of the performer, as the music-sheet traveled into view, the musical effects which were appropriate at the moment when later the sheet passed over the point at which its perforations called forth sounds. These instructions consisted of words familiar to ordinary music, such as, "Accel." or "Ritard," when they related to speed or tempo effects; and "Piano" or "Forte," when they related to sound-volume or dynamic effects. (Webber, No. 452,208.)

Numerals also were printed in vertical alignment on the margin of the sheet or on the body of the sheet out of alignment. These numerals corresponded to others on a dial placed conveniently within the range of the performer's vision. They

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indicated the tempo; and as they moved on the sheet toward the sound-actuating board, the performer could obtain the appropriate speed or time by moving a controller-connected pointer to the appropriate numeral on the face of the tempo-indicator. (Chase, No. 571,740; 638,955; Richards, No. 652,529.)

In addition to these instructions there were others, the most useful perhaps being a line printed lengthwise the traveling sheet but shifting across its face, from side to side, technically known as the "expression line." This line—the invention of Webber, Letters Patent No. 452,203—was not truly sinuous in the sense of bending in and out in a wavelike course, but shifted its direction abruptly and at angles. In its position and change of direction, this line denoted generally but not precisely the appropriate sound-volume and its changes, and when followed by the eye, it carried to the mind of the performer some measure of the artistic interpretation as to loud and soft sounds and as to changes from one to the other which the musical composition called for. The Webber line was an interpretative guide. Whatever its merits, it was only a guide. The musical interpretation it conveyed to the performer was capable of reproduction by him only according to his skill in following the line with his eye and mind—in reading what the line imparted—and in manipulating the controllers in a way to produce the effects the line intended.

It thus appears very clearly that the art, when Young entered it, called for some musical knowledge and some musical skill on the part of the performer to render artistically a musical composition mechanically sounded. It is equally clear that the art enabled him to render music only according to his own skill, or, at most, only according to his skill in reproducing the interpretation of another so far as that interpretation was shown by words, numerals and by the Webber expression-line and its angles.

The conception of Young, the patentee, also contains a line, but a line different in character and function. In the line of the invention, nothing is left to the skill or interpretation of the performer in supplying musical effects when the line changes its position and direction. The performer does not have to read it. The purpose of the invention, therefore, is to facilitate, continuously and without breaks, the rendering or "shading" of music whose notes are mechanically sounded, so that a person who has no musical knowledge and who is without artistic skill in any degree can reproduce a musical composition of high order, not with tolerable fidelity, but exactly as the skilled pianist had played it and interpreted it.

What Young did was to extend the tempo-controller mechanism over the traveling sheet and fasten a pencil to it. When he played the piano, the sheet moved against the pencil, which drew a line lengthwise the sheet and throughout the musi-

cal composition. This line varied in direction with each variation of musical effect given by the performer. The changes of direction were not sudden abrupt, or angular, as in Webber, but were bending and sinuous, and it was found that in the sinuosities of the line were exactly recorded every variation of tempo expression. What Young achieved was to impress upon a musical composition, and upon every note of it, his interpretation and his artistic conception of its musical effects and to embody them in the line thus drawn. These recorded effects may be either of time or sound-volume according as the controller mechanism is adapted to one or the other. What Young gave the art was an idea made practical by mechanical means, whereby the interpretation of a master performer, or even of the composer, can be exactly reproduced with its precise artistic effects by an unskilled performer merely following the line impressed upon the sheet, not by his eye or by his mind, but physically by a pointer attached to the controller mechanism and extending over the music-sheet. Young's line became the expression pathway of the master performer, and so long as one follows it without wandering, he will reproduce the master's actual performance. The skill of a great artist can thus be caught on the sheet, there impressed and preserved and be reproduced by any one, anywhere, and for all time.

The defendant says that invention was not involved in this. We think it was. In the first place, it was a true discovery. It involved uncovering a thing, which, while long capable of being done, was never before thought of. It also afforded a medium or means for bringing the discovery into practical action, and put it into the hands of others, there to be turned to pleasurable and profitable uses. Young's thought that a line might be made to record a master's interpretation of a musical composition, and that any one, however unskilled, who follows that line physically can reproduce the music of the master just as the master had rendered it, was not his invention. That was his discovery. It was, however, the soul of his invention. The very simple means of a pointer connected with the controller and extending over the music-sheet to the line, by which his discovery was brought into action, did not, when standing alone, involve invention. But when this means, simple though it was, was employed to bring into being and put to use the substance of the discovery, the two together, the great and the little thing, constitute invention. Young's thought without the pointer is nothing more than an interesting discovery, and is not patentable. (*Morton v. New York Eye Infirmary*, 5 Hatchf., 116; Fed. Cas., No. 9,805; *Miami Copper Co. v. Minerals Separation, Limited*, 244 Fed., 752; 157 C. C. A., 200.) The pointer without the thought is a useless piece of metal. The world may use one without the other at will; but it is the use of both together that Young taught the art, and of which the unskilled

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who are anxious to produce music, as well as the skilled who are ambitious to perpetuate their fame, have availed themselves in amazing numbers.

We realize that the issues of validity and scope of the claims in suit, and consequently the issue of infringement, present aspects which admit of extended technical discussion; but as our reasoning follows that of the learned trial judge as shown in his opinion, and as our judgment on all issues is the same as his, we find it unnecessary to do anything more than direct that the decree below be affirmed.

Supreme Court of the United States.

WERK *et al.*, CO-PARTNERS UNDER THE NAME OF ROBERT F. WERK & COMPANY, v. PARKER *et al.*, CO-PARTNERS UNDER THE NAME OF F. T. PARKER COMPANY.

Decided March 3, 1919.

[249 U. S., 130.]

1. PATENTABILITY—EVIDENCE—JUDICIAL NOTICE OF BOOKS OF REFERENCE.

The use of horsehair mats for extracting oil, as abundantly shown in standard and easily-accessible books of reference, may be noticed judicially.

2. SAME—INVENTION—USE OF ANIMAL HAIR FOR OIL-PRESS MATS.

The application, in the extraction of cotton-seed oil, of mats made of horsehair or other long animal hair, woven in a manner designated, but without improvement in the art of weaving, held not invention, but merely mechanical adaptation of familiar materials and methods.

3. SAME—SAME—SAME.

Patents Nos. 758,574 and 758,575, to Robert F. Werk, relating to oil-press mats for use in extracting cotton-seed oil, held invalid as to certain claims.

CERTIORARI to the Circuit Court of Appeals for the Third Circuit.

The case is stated in the opinion.

Mr. T. Hart Anderson for the petitioners.

Mr. John Weaver for the respondents.

Mr. Justice PITNEY delivered the opinion of the Court.

Petitioners sued respondents in the District Court of the United States for the Eastern District of Pennsylvania for infringement of two divisional patents, Nos. 758,574 and 758,575, granted April 26, 1904, to Robert F. Werk. Defendants answered denying patentable novelty, and also denying infringement. The patents relate to an oil-press mat or cloth for use in the extraction of cotton-seed oil. The claim in issue under the former patent was for—

an oil-press mat or cloth made entirely of long animal hair and consisting of warp and weft threads, said weft-threads being composed exclusively of soft, pliable hair and the warp-threads greatly exceeding the weft-threads in number per square inch.

And in the second patent:

An oil-press mat or cloth consisting of warp-threads and weft-threads, each composed exclusively of long hair derived from animals' tails and manes, which hair is soft and pliable; the warp-threads exceeding the weft-threads in number per square inch, and the weft-threads being thicker than the warp-threads.

The district court dismissed the bill on the ground of non-infringement. (221 Fed. Rep., 644.) The circuit court of appeals, without discussing

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this question, affirmed the decree upon the ground that the patent disclosed no such novel information to the oil-pressing art as warranted a grant of the patent monopoly. (231 Fed. Rep., 121.) At the conclusion of its opinion the court stated (p. 125) that in view of the fact that certain references quoted were not given in evidence, the sending down of the mandate would be deferred for a time to permit of an application for reargument or other form of relief to meet such references. Thereupon a petition for a rehearing was filed in behalf of appellants, which, while not disputing the accuracy of the results disclosed by the court's investigation, insisted that there was error in giving effect to the anticipatory matter thus disclosed, and in—

failing to give controlling consideration to the fact that both of the two claims declared upon are laid not only to a particular woven structure of an oil-press mat, but also to an oil-press mat of such particular woven structure, when its threads are composed of animal hair.

The rehearing was refused; after which the present writ of certiorari was allowed. (242 U. S., 645.)

In the process of obtaining oil from cotton-seed, the seeds, having been cleaned and freed from lint, are hulled and chopped up, the meats being separated from the hulls; the meats are passed through a crusher, next cooked in water, and after this are spread upon an oil-press mat or cloth, the ends of which are folded over to cover the upper surface of the cooked meats. The mat with its inclosed mass of meats is then placed in a press and subjected to a pressure of about four thousand pounds, which has the effect of expressing the oil through the mat as through a strainer.

One of the patents declares, and the evidence at the hearing indicated, that the highest grade of mat previously in general use was made of camel's hair, and that this was objectionable because of its tendency to puck and felt together when in use to such an extent as to hinder the free flow of the oil, and also because of its want of durability. The use of long animal hair, specifically horsehair, obviated this difficulty to such an extent as materially to reduce the percentage of oil wasted, as well as the cost of the mat in proportion to the product. Defendants accomplished like results with mats woven from human hair.

The circuit court of appeals, while finding that the change from camel's-hair to horsehair mats was sufficient to constitute invention in the art, if this use of horsehair mats was first disclosed by Werk, nevertheless found, from an examination of standard works, that the patentee's use was but a revival of an old and well-recognized use of such mats in the art of oil extraction. Reference was made to the *British Encyclopedia*, ninth edition, 1884, the *Standard Dictionary* of 1894, and a multitude of other publications long antedating the application for the patent.

It is not questioned that these references abundantly showed that the use of haircloth, and especially horsehair cloth, in the making of oil-press mats or cloths, was well known in the art long before the patents in suit.

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Nor is it questioned—indeed, we deem it clear, beyond question—that the court was justified in taking judicial notice of facts that appeared so abundantly from standard works accessible in every considerable library. (*Brown v. Piper*, 91 U. S., 37, 42; *Terhune v. Phillips*, 99 U. S., 392.)

The burden of petitioner's argument in this Court, as in the application for a rehearing in the circuit court of appeals, is that there was nothing in these publications to show that the horsehair cloth so familiar in the art embodied the "structural characteristics" of the oil-press mats of the patents in suit, referring to the peculiar mode of weaving described in the claims. But at the hearing it was clearly proved, and was conceded to be beyond controversy, that the patents involved no claim of an improvement in the art of weaving, but only the application of that art and a combination of threads of a certain type and character in order to produce a particular result. And this, in our opinion, goes no further than a mere mechanical adaptation of familiar materials and methods, not rising to the dignity of invention. (*Atlantic Works v. Brady*, 107 U. S., 192, 200; *Pennsylvania R. R. Co. v. Locomotive Truck Co.*, 110 U. S., 490, 494; *Hollister v. Benedict Mfg. Co.*, 113 U. S., 59, 71, 73; *Aron v. Manhattan Ry. Co.*, 132 U. S., 84, 90; *McClain v. Ortmyer*, 141 U. S., 419, 423, 429; *Duer v. Corbin Cabinet Lock Co.*, 149 U. S., 216, 222; *Wright v. Yuengling*, 155 U. S., 47, 54; *Olin v. Tinken*, 155 U. S., 141, 153; *Market Street Cable Ry. Co. v. Rowley*, 155 U. S., 621, 629.) Decree affirmed.

Supreme Court of the United States.

MOORE v. THE UNITED STATES.

Decided April 14, 1919.

1. PATENTS—ACT OF JUNE 25, 1910—JURISDICTION OF THE COURT OF CLAIMS.

Where the bill of complaint filed in the Court of Claims alleged that the patentee completed his invention while in the employ of the Government, *Held* that under the third proviso of the act of June 25, 1910, the Court of Claims was without jurisdiction.

2. SAME—SAME—SAME.

Where it appears from the bill filed in the Court of Claims under the act of June 25, 1910, that the patentee at the time he completed his invention was an employee of the Government, the allegation that he confined his work on the invention to the hours when he was not actually on duty is immaterial. To give effect to this allegation would be to amend the statute, not to construe it.

APPEAL from the Court of Claims.

Mr. Samuel Herrick for the appellant.

Mr. Assistant Attorney-General Frierson for the United States.

Mr. Justice CLARKE delivered the opinion of the Court.

The appellant sued the United States in the Court of Claims to recover compensation for the use, without license or lawful right, of a tool, which was covered by the United States Letters Patent, of which he was the owner. In his amended

petition he alleged that during the years 1903 to 1914, inclusive, he invented the tool in question, which was adapted to be used—
as a reefing-iron on the decks, sides and bottoms of vessels where wood-calking is done;

that he entered the employment of the Government as a wood-calker in a navy-yard on March 26, 1913, and continued therein until July 16, 1914;

that during the month of May, 1914, your petitioner, after expending a great deal of time, labor, and study, completed his invention—

of the tool afterward patented; and that during the hours of his employment by the Government he did not do any work upon his invention, but that such work as was performed upon it subsequent to March 26, 1913, when he entered the Government employ, was performed at his home during his absence from duty in the navy-yard. For the extensive use which the Government had made of the tool he prayed for compensation, which had been demanded and refused.

The appellant can maintain such a suit, if at all, only by warrant of the act of Congress, approved June 25, 1910, (36 Stat., 851.) This act provides that whenever any invention described in and covered by a patent from the United States shall hereafter be used by the United States without the license of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the Court of Claims.

Of the three provisos in the act the third one is applicable to this case and reads:

And provided further, (3) that the benefits of this act shall not inure to any patentee, who, when he makes such claim in the employment or service of the Government of the United States; or the assignee of any such patentee; nor shall this act apply to any device discovered or invented by such employee during the time of his employment or service.

The appellant was not actually in the employ of the Government when he made his claim by bringing suit, but the Court of Claims dismissed his petition for want of jurisdiction on the ground that it showed on its face that the device was discovered during the time he was in the employment or service of the Government, and that therefore the case fell within the third proviso of the act.

This decision is so obviously right that discussion of it would be superfluous. The act of Congress must be read—

according to the natural and obvious import of the language, without resorting to subtle and forced construction for the purpose of either limiting or extending its operation. (*United States v. Temple*, 105 U. S., 97, 99.)

No matter what the appellant may have done prior to May, 1914, it was in that month, he avers, that he completed his invention, and during the whole of that month he was in the employment or service of the Government. To give the effect contended for to the allegation that the appellant confined his work on his invention to the hours when he was not actually on duty, but while he was in the Government employ, would be to amend the statute, not to construe or interpret it.

The judgment of the Court of Claims is affirmed.

[Vol. 264. No. 1.]

Court of Appeals of the District of Columbia.

WADSWORTH, HOWLAND & CO., INC., v. TRUSSED CONCRETE STEEL CO.

Decided March 31, 1919.

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—TEST.

In determining whether the goods of two parties are of the same descriptive properties the fact that the goods of the first to adopt the word have been used for the same purpose as the goods of the second is not important if it appears that the goods can be put to the same use, since "the likelihood of confusion depends as much upon the probabilities of the future as upon the experience of the past."

2. SAME—SAME—LIQUID CONCRETE-HARDENING MATERIAL AND VARNISH.

Held that a liquid concrete-hardening material constitutes goods of the same descriptive properties as varnish, since it appears that the latter is capable of being used for the same purpose as the former.

Mr. E. E. Kent for the appellant.

Mr. W. Merle Smith for the appellee.

PER CURIAM:

Appellant corporation appeals from a decision of the Commissioner of Patents dismissing its opposition to the registration by appellee of the word "Agatex" as a trade-mark for a liquid concrete-hardening material.

[The decision of the Assistant Commissioner reads as follows:

The opposer of registration of a trade-mark appeals from an order of dismissal of its opposition, rendered upon proofs taken.

The applicant's mark is the word "Agatex" for a concrete hardening material which appears to be a liquid chemical reagent. The opposer had previously used the words "Agate" and "Agatene" for varnishes. It asserts that inasmuch as varnish has the effect of "hardening" a concrete floor or pavement when applied thereto, and has been sold and used for that purpose by the opposer, therefore the proposed registration would injure the opposer by preventing it from selling its varnish as a "concrete hardener" under its trade-mark "Agate," which is similar to "Agatex." It is asserted moreover that the applicant would profit by the opposer's reputation, customers supposing that "Agatex" concrete hardener was made by the trader who made varnish called "Agate" or "Agatene." The opposer asserts that both parties have been known as varnish makers and also makers of specialized products for treating concrete surfaces, and that the applicant is "merely using the opposer's varnish mark for a varnish substitute."

The evidence does not sustain any of these contentions, as I think is clear from examination of the actions of the parties in sequence of time.

The Trussed Concrete Steel Co. applied on December 23, 1914, for registration of its trade-mark "Agatex," filing labels which showed the words "Trus-Con" in still larger letters placed over the word "Agatex." It alleged use of this mark since 1913. It appears that at the time of its application it used as a general trade-mark the term "Trus-Con," and used this mark "Agatex" on a special material which permeates and chemically unites with the concrete, and which remains solid and soluble until it has reacted and formed a new and harder material in and on the surface of the concrete. It appears that in the use of the material it is applied several times and after each reaction the surplus is washed away; and that finally no coating is left on the concrete surface. "Concrete hardener" is a proper term for such a substance.

At the time of the applicant's application for registration, the opposer was making various coating materials, the most important of which were varnishes under a general trade-mark "Bar State," and among others it had a varnish called "Agate" and another called "Agatene." These were for wood and iron, as usual; and it did not market any material which could properly be called a concrete hardener under either of these names, or in any way claim to have any "hardener" for concrete. Conceiving that the Trussed Concrete Steel Company was invading its rights, the opposer thereafter deliberately undertook to combat the applicant by starting in to making a special form of varnish which it now asserts had some chemical action on concrete, and could properly be called a concrete hardener. And it deliberately changed its trade-mark from "Agate" to "Agatex." This occurred in 1916, long after the applicant had applied for registration.

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Very much of the opposer's testimony, and of its argument in its brief, is quite irrelevant because of its use of the present tense of the verbs. It asserts that it has used "Agatex;" that it has called "Agatex" a concrete hardener; that as a matter of fact it is a concrete hardener; and it shows that there may be confusion between its "Agatex" and the applicant's "Agatex." All these things may be true, and yet have nothing to do with the case. The question is not the condition now, but the condition in 1914. Certainly it is not material to show a confusion which the opposer has deliberately brought about for the specific purpose of being able to assert that there is confusion. In these matters it is the business that is to be protected; not the trade-mark itself. (*Carroll v. Mellencamp*, 171 Fed. Rep., 125.) The real question is whether in 1914 the opposer had any business which was interfered with by this applicant's registering "Agatex" for a particular material properly called a concrete hardener.

In this connection I think there should be some distinction between a purely arbitrary and invented mark, and those marks which are generally adopted because of obvious and desirable suggestiveness. The word "Agatex" suggests a texture like agate. It is far more appropriate to a concrete hardener than it is to a varnish. The opposer is not entitled to monopolize what it calls the whole "Agate family" of names, for the public has so interest in many uses of the word "Agate" for purposes of description and purposes of suggestion. The word "Agate" as a trade-mark for concrete itself, for example, might be purely descriptive. When the opposer adopted the word "Agatex" it did not adopt it in place of its known mark "Agate," but applied it to a new product, which was itself gotten up rather in imitation of the applicant's business. In 1914 one familiar with "Agatex" concrete hardener could not have supposed it was varnish; nor had there ever been anything other than varnish called "Agate" or "Agatene."

As a matter of fact no varnish is a concrete hardener in any proper sense. To call it so is to make the word harden mean nothing. It is as if one said that he hardened a carborundum grid-stone by painting it with tar. He may indeed have filled the pores and interstices with a binder, and might thereby prevent what is called "dusting," by keeping the small particles from separating from the main body of the stone; but there is no hardening of the material, which is already the hardest known material. No varnish is as hard as concrete. No varnish is hard at all, being invariably a gummy flowing substance with a quality which is the very antipode of hardness. But even if it became hard itself it could not be called a hardener of concrete, upon which it effects no change toward hardness.

As for the prevention of dusting in a concrete floor, this is accomplished, not by hardening it, but by coagulating the dust, or at best filling the pores. It has been done from time immemorial by sprinkling the floor with oil or water, which certainly could not be called hardeners. The illogic of the argument that varnish is a hardener is illustrated by the opposer's irrelevant testimony that varnish increases the tensile strength of concrete. Hardness has nothing to do with tensile strength. Surface hardening might just as well decrease the tensile strength as increase it. Moreover, any increase in tensile strength is due to the varnish, and not the concrete.

The opposer makes an apparently plausible argument on the basis of a certain previous opposition proceeding herein. It appears that for some reason, when the applicant first applied for registration it called its material a "floor coating" under the class of painters' materials, notwithstanding it is clear that the material is not a coating at all. The opposer showed a prior right to use the words "Agate" and "Agatene" for floor coatings, that is, varnishes. The registration therefore was refused for "Agate." But the previous opposition decided nothing more than this. It decided nothing with respect to the applicant's right to register the word "Agatex" as a trade-mark for something else, not a floor coating.

As to confusion of goods I think it clear that no one seeking a varnish by the name of "Agate" would be misled into buying a liquid acid reagent for chemically treating concrete under the name "Agatex," any more than one seeking white lead would buy a package of calcimine. (*The Mural Co. v. National Lead Co.*, 165 O. G., 475; 36 App. D. C., 541.) Indeed not as much so; for white lead and calcimine are both coatings, and both wall coatings, whereas I can see no similarity whatever between a varnish and a concrete hardener. As to confusion of reputations I think that as conditions stood in 1914 no one would have supposed that "Agatex" concrete hardener was made by the manufacturer of "Agate" varnish. It was the opposer who brought about whatever confusion there now is. He cannot deliberately alter his business to bring about the confusion, and then object to it. So far as this record shows, the applicant's hardening material was in 1914 a new thing entirely unknown to the opposer's trade. It is more likely that in the trade in that material the opposer will profit by the applicant's reputation than that the applicant will profit by the opposer's reputation as a varnish maker.

The opposer dwells much upon its "right to grow," but the doctrine of the right to grow more properly relates to general trade-marks. The fact is that "Agatex" used by the opposer would mislead the public as applied to

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anything but a varnish or a paint or some other coating material. The applicant in the present proceedings has nothing to do with varnishes, paints, or any coating material whatever.

The decision of the Examiner is affirmed and the opposition is dismissed.]

The opposition is based upon the prior registration and use by appellant of the words "Agate" and "Agatene" as trade-marks for varnishes. It clearly appears that the goods bearing the marks of the opposer are capable of being used for the same purposes as the goods of appellee. There is evidence that such use has been made. The mat-

ter of actual use is not important, for it appears that the goods can be put to the same use, and the likelihood of confusion depends as much upon the probabilities of the future as upon the experience of the past. The same or similar use of the goods of the respective parties demonstrates like qualities, and the similarity of the marks furnishes convincing proof of the likelihood of confusion.

The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.

[Vol. 264. No. 1.]

Patents Nos. 1,308,750 to 1,309,603.

THE OFFICIAL GAZETTE

OF THE

United States Patent Office.

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TUESDAY, JULY 8, 1919.

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Total.....	996

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Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 20, 1919.

Romm & Company, their assigns or legal representatives,
take notice:

An interference having been declared by this Office between the applications of John Wannamaker, New York, of Broadway and Tenth streets, New York, N. Y., and Diana Waist Co., Inc., of 22 West Fifteenth street, New York, N. Y., for registration of trade-marks and trade-mark registered July 2, 1907, No. 63,733, to Romm & Company, of 23 East Eighth street, New York, N. Y., and a notice of such declaration sent by registered mail to said Romm & Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Romm & Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Briefs in Appealed Cases.

All briefs filed in this Office should have conspicuously printed thereon a statement designating the particular tribunal of the Patent Office to which the brief is addressed.

Drawings.

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE.

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorization from the applicant is filed in connection with the application. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

Disbarred Attorneys.

It is hereby directed that any person who has been disbarred from practice before the Patent Office by order of the Commissioner will be denied access to the files of the Office, either in his own capacity or as the representative of any other person or firm.

Delivery of Patent.

RULE 169. The patent will be delivered or mailed on the day of its date to the attorney of record, if there be one; or, if the attorney so request, to the patentee or assignee of an interest therein; or, if there be no attorney, to the patentee or to the assignee of the entire interest, if he so request.

Communications to the Patent Office.

RULE 8. A separate letter should in every case be written in relation to each distinct subject of inquiry or application. Assignments for record, final fees, and orders for copies or abstracts must be sent to the Office in separate letters.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business July 4, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No of applications awaiting action.
		New.	Amended.	
314	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 17	May 17	319
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Jan. 31	Apr. 3	622
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 5	Dec. 17	173
214	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Mar. 7	May 31	489
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter; Tying Cords or Strands.	Mar. 31	Jan. 27	187
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Mar. 15	Mar. 18	372
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	Apr. 28	May 6	296
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 28	May 5	311
721	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Feb. 13	Apr. 4	321
235	10. Carriages and Wagons; Motor Vehicles.	Feb. 31	Apr. 28	719
184	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 12	May 31	277
22	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements.	Dec. 19	Dec. 3	1110
29	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Beaded, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 26	Mar. 26	658
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 20	Apr. 10	194
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 5	May 7	580
112	16. Radiant Energy; Telegraphy; Telephony.	Feb. 4	Feb. 17	711
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 26	Apr. 24	259
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 19	Apr. 3	457
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 24	Apr. 1	280
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Saws; Undertaking.	May 20	May 24	270
317	21. Brakes and Guns; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Dec. 10	Mar. 13	378
349	22. Aeronautics; Firearms; Ordnance.	May 1	May 17	266
317	23. Acoustics; Count-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 23	May 3	366
141	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 2	Mar. 19	473
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 10	May 10	128
108	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Nov. 19	Feb. 6	658
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 7	Apr. 22	466
223	28. Internal-Combustion Engines.	Feb. 6	Apr. 29	633
167	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 24	Apr. 1	666
132	30. Illuminating; Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Apr. 25	June 6	344
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 21	Mar. 20	351
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Jan. 3	Apr. 16	457
70	33. Bridges, Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metals Building Structures; Roads and Pavements; Paving; Road.	Feb. 4	Feb. 26	317
304	34. Railways; Railway Rails and Fasteners; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 3	May 14	284
87	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	May 25	June 7	318
201	36. Drains; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	May 13	Mar. 21	991
167	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Mar. 1	Apr. 2	789
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stallions; Stone-Working; Wells.	May 23	June 3	208
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Dec. 26	Dec. 7	589
273	40. Baggage, Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles, Special Receptacles and Packages; Wooden Receptacles.	Mar. 31	Mar. 24	411
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 1	Mar. 8	399
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electricity, Conducts; Electric Signaling.	Mar. 4	Mar. 1	456
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewage; Surgery; Water Purification.	May 34	June 5	122
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	May 8	May 9	132
379	45. Clutches; Lubrication; Motors; Railway Brakes.	Mar. 14	Mar. 20	359

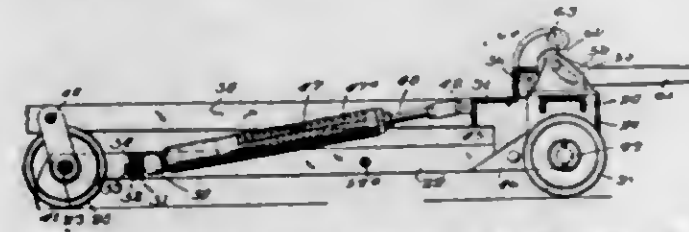
Oldest new case, Nov. 19; oldest amended, Dec. 3.
Total number of applications awaiting action..... 18,774

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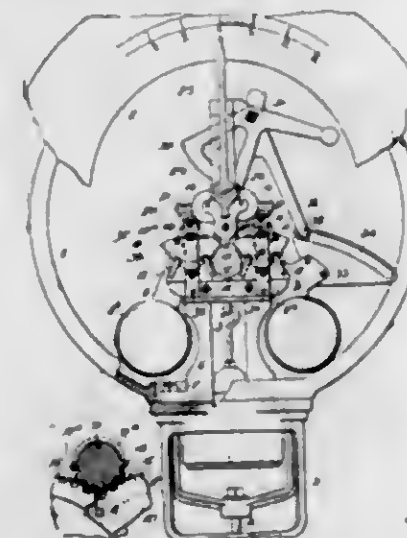
GRANTED JULY 8, 1919.

1,308,750. TRUCK. ARTHUR M. BASSETT, Winnetka, Ill. Filed Jan. 21, 1916. Serial No. 78,339. 19 Claims. (Cl. 254-8.)



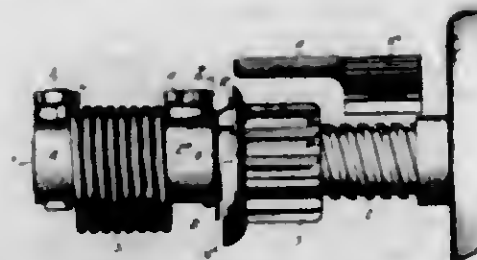
1. In a truck, the combination of a main frame, a supporting wheel journaled upon a horizontal axle and adapted to turn about a vertical axis relatively to said frame, a handle operatively connected with said supporting wheel for guiding the truck, an upwardly-movable elevating frame mounted on said main frame, and means rigidly carried by said handle and movable therewith into and out of position to directly engage said elevating frame for lifting the same.

1,308,751. MEASURING INSTRUMENT. JOSEPH C. BARRETT, Brooklyn, N. Y. Filed Dec. 29, 1916. Serial No. 139,480. 11 Claims. (Cl. 74-104.)



1. A measuring instrument comprising a lever having pivots, movable members adapted to support said pivots, means movably supporting said members, and means to cause said members to return to their normal position after an operation thereof.

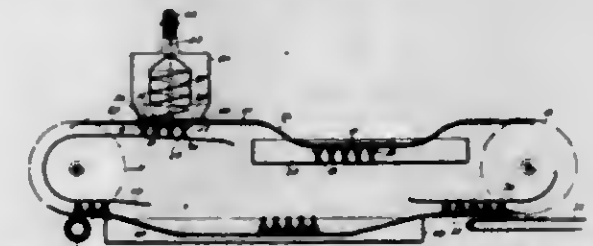
1,308,752. ENGINE-STARTER. VINCENT HENDIX, Chicago, Ill. Filed Oct. 12, 1916. Serial No. 125,291. 11 Claims. (Cl. 74-7.)



1. In a drive of the character described, the combination of a rotatable member, a driving member mounted there-

on for rotary movement therewith and longitudinal movement thereof, and a yielding connection fastened to said two members respectively.

1,308,753. SOAP-MOLDING MACHINE. MARION L. CROUCH, Milwaukee, Wis. Filed Aug. 31, 1917. Serial No. 180,009. 12 Claims. (Cl. 25-99.)

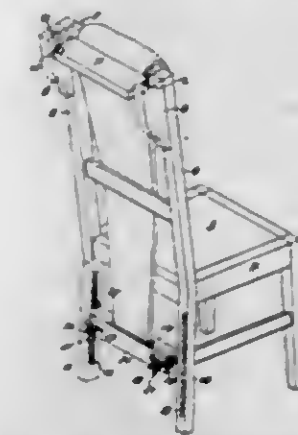


10. A frame, a carrier supported for travelling movement thereon, a mold plate having molds secured to said carrier, a receptacle to supply material to said molds, followers located within the molds, a tank for changing the temperature of the molds, means for guiding the molds into said tank, means for subsequently changing the position of the followers to eject cakes from the molds, a second tank for changing the temperature of the molds, means for guiding the molds into said tank, and means for withdrawing the followers from their ejecting position for passage through the second tank.

1,308,754. METHOD OF REGULATING THE QUALITY OF COKE. WALTER L. GRAUL, Detroit, Mich., assignor to Semet-Solvay Company, Solvay, N. Y., a Corporation of New York. Filed Jan. 7, 1919. Serial No. 270,065. 2 Claims. (Cl. 44-1.)

1. The process of regulating the quality of coke which consists in adding to the coal to be coked such proportion of dry pitch or coke breeze as will correct the excess or deficiency of the coking substance in the coal and such additional proportions of pitch and breeze as will give to the coke to be produced the desired degree of toughness and hardness and coking the mixture.

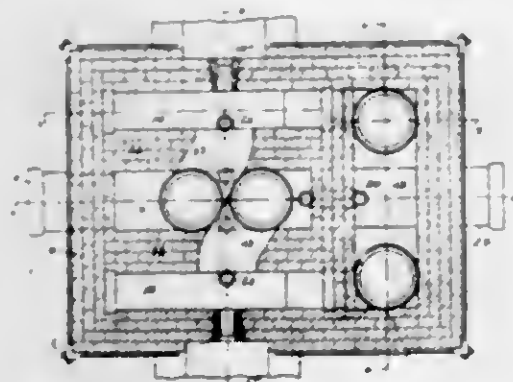
1,308,755. TROUSERS-STRETCHING ATTACHMENT TO CHAIRS. OSCAR BERNHARD HELLSTROM, Neutral Bay, near Sydney, New South Wales, Australia. Filed Jan. 31, 1910. Serial No. 274,259. 9 Claims. (Cl. 223-19.)



1. In a chair attachment for stretching trousers, a vertically sliding and pivoted bar adjacent to and parallel with the top rail of the back, and a bar adjacent to and parallel with the top rail of the back.

parallel with the bottom rail and adapted to be clamped thereto, the trousers being stretched and held between said rails and their respective bars substantially as described.

1,308,750. EXHAUSTER. INGEGNER HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation of North Carolina. Filed Nov. 2, 1918. Serial No. 260,901. 6 Claims. (Cl. 230—11.)



3. A fan casing having a fan chamber and a supply chamber located beside each other and separated by a wall, an elbow pipe connecting said chambers, the end of the pipe in the supply chamber being provided with a valve seat, and supported at opposite sides by the opposite side walls of said chamber, and a valve cooperating with said seat.

1,308,757. MANUFACTURE OF PHENOL. ALEXIS C. HOTCHINSON, Fayetteville, N. Y., assignor to Semet-Solvay Company, Solvay, N. Y., a Corporation of New York. Filed July 9, 1918. Serial No. 244,082. 5 Claims. (Cl. 23—24.)

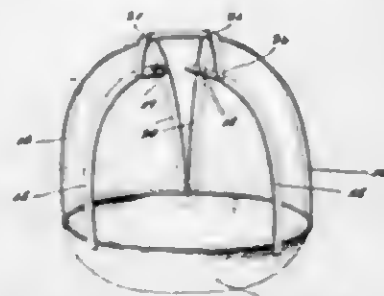
1. The improvement in the manufacture of phenol from benzenemonosulfonic acid which consists in adding the benzene sulfonation reaction mixture directly to molten caustic soda without previous neutralization.

1,308,758. MOLDING AND SWAGING DEVICE. MICHEL G. KHOUAT, Rio de Janeiro, Brazil. Filed Aug. 10, 1916. Serial No. 114,217. 6 Claims. (Cl. 113—39.)



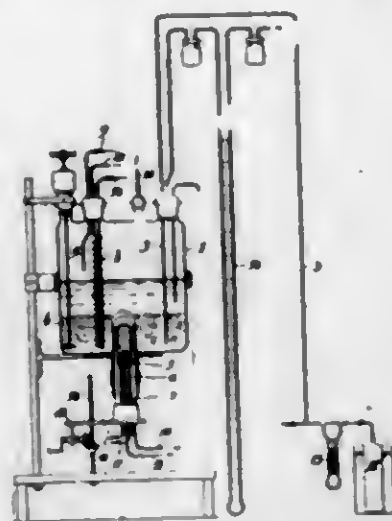
1. A device of the class described comprising a two-part casing, each part having a cavity, in which the dies may be cast and which are adapted to contain the dies when the device is used as a swage, and an opening in the bottom wall of said cavity, a ring adapted to engage the said casing parts and cover the joint therebetween, and a plunger adapted to engage one of said casing parts to transmit motion thereto and cover the opening therein.

1,308,759. CARRIER. JAMES KRAUTZ, Franklin, N. H. Filed Nov. 12, 1918. Serial No. 262,136. 1 Claim. (Cl. 224—6.)



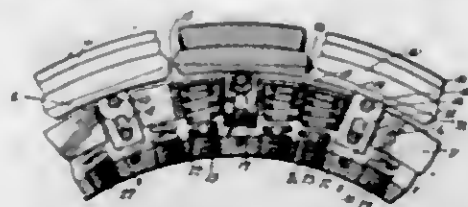
A carrier for use by ambulance attendants for carrying wounded soldiers, comprising a bowl-shaped seat of textile material, a pair of front straps attached with their lower ends in spaced relation to the front part of said seat, a buckle connection for the upper ends of said straps in front of the attendant's chest, a strap attached to said seat at oppositely disposed points behind said front straps, adapted to be placed upon the neck of the attendant, and a pair of shoulder straps engaged in close proximity at the rear part of the seat and connected with their other ends to the front straps in proximity to the ends thereof.

1,308,760. PROCESS OF PHOTOCHEMICAL CHLORINATION. HENRIETT S. LACY, Seward, N. J., assignor to The Roessler & Hasselacher Chemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1917. Serial No. 163,228. 5 Claims. (Cl. 23—24.)



1. The process of preparing chlorinated hydrocarbons which comprises simultaneously dissolving chlorine in an organic liquid containing replaceable hydrogen and adjacent to a layer of water, acting on the solution thus obtained with chemically active light, and absorbing the generated hydrochloric acid in the said layer of water.

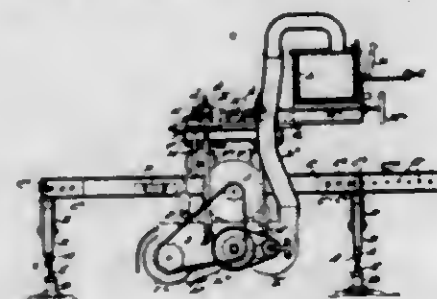
1,308,761. RESILIENT WHEEL FOR VEHICLES. GUAYARO LUCIANO, Habana, Cuba. Filed Aug. 15, 1918. Serial No. 250,005. 6 Claims. (Cl. 152—8.)



5. In combination with a wheel rim having an outwardly opening annular channel, a plurality of spaced resilient shoes arranged adjacent to said wheel rim and constituting the tread, carriers for said shoes, bearing members detachably secured to said carriers, retaining

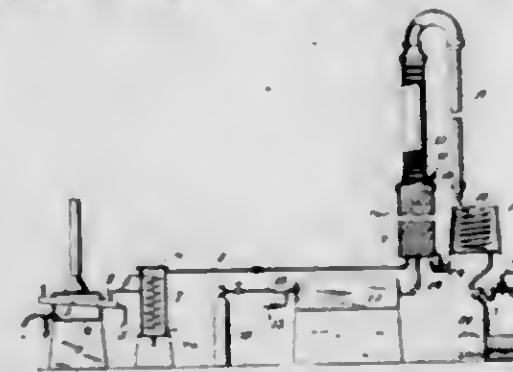
members arranged in said channel adapted to execute a radial reciprocating movement, said members being connected with the central portion of said bearing members, casings at both sides of said retaining members adapted to engage adjacent portions of the inner side of said bearing members, springs forcing said casings into engagement with said bearing members, screws arranged in said rim and projecting into the channel to serve as adjustable abutments for said springs and means for securing said screws in adjusted position.

1,308,762. BOWLING-ALLEY SURFACER. JOSEPH MARVIN, Detroit, Mich., assignor of one-half to Herman F. Zink, Detroit, Mich. Filed July 19, 1918. Serial No. 245,656. 6 Claims. (Cl. 51—13.)



1. In an apparatus of the class described, the combination with a track, of a horizontal fifth wheel, means for mounting the fifth wheel to permit the same to move longitudinally and transversely of the track, a floor surfer carried by the fifth wheel, and means connected with the floor surfer for turning the same on the fifth wheel and also for moving the floor surfer longitudinally and transversely.

1,308,763. METHOD OF MAKING CHLORINATED PRODUCTS. JACOB M. MONESSE, Long Island City, N. Y., assignor to Chemical Development Company, a Corporation of Maine. Filed Feb. 8, 1917. Serial No. 147,466. 7 Claims. (Cl. 23—24.)



7. In the manufacture of chlorhydrins, the process which comprises mixing chlorine and steam and bringing the mixture into reaction with oil gas in a chamber containing material of an oxidizing nature.

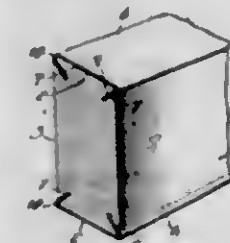
1,308,764. SEMITRAILER ELEVATING-HORSE. JAMES BRYANT OLDS, Maspeth, N. Y. Filed Oct. 17, 1918. Serial No. 258,507. 7 Claims. (Cl. 254—45.)



1. The herein described means for elevating or raising semitrailers in the operation of coupling said trailers

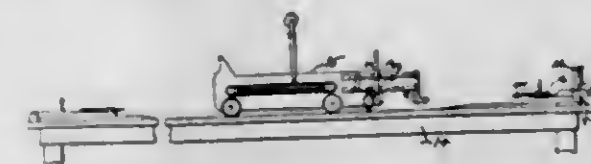
with an uncoupling the same from a tractor, comprising an inclined runway having side track members, and a horse jack adapted to be placed beneath the trailer and to be operated as described, said horse jack being provided with wheels which operate in connection with the side track members of the runway device.

1,308,765. LEVEL. GEORGE C. POWELL, Chicago, Ill. Filed Dec. 12, 1917. Serial No. 206,757. 5 Claims. (Cl. 33—75.)



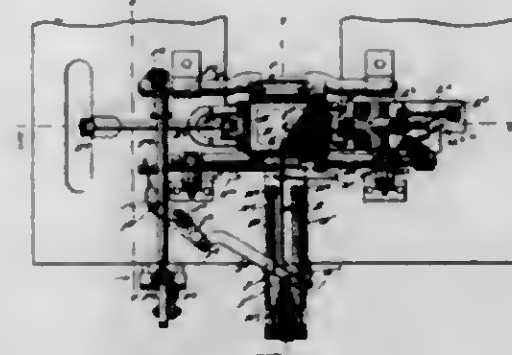
1. A mason's level or the like, having a wooden body provided with a straight edge, a metallic guard of substantially uniform thickness for said edge completely covering said edge and provided with inwardly inclined narrow longitudinal flanges entering like inclined corner slots provided in the level body.

1,308,766. CATCHING DEVICE FOR CLOTH-PILING MACHINES. CHARLES C. SCHNEIDER, St. Louis, Mo., assignor to James H. Cutter, St. Louis, Mo. Filed July 23, 1917. Serial No. 182,366. 3 Claims. (Cl. 270—31.)



1. A catching device for cloth piling machines comprising a supporting bar mounted upon a table, a stationary post and a sliding post connected to the supporting bar, brackets carried by the posts, means for adjusting the brackets in the posts vertically, cloth supporting rods mounted on the brackets, means for operating the same when contacted with by the piling machine and a lever mechanism for locking the rods in their normal position, substantially as specified.

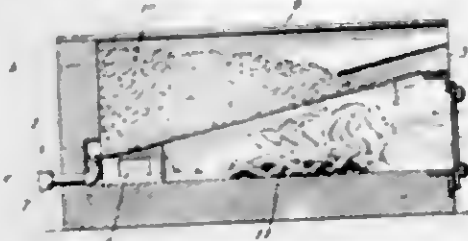
1,308,767. MACHINE FOR MAKING PAPER DRINK-ING-CUPS. WILLIAM H. SHEPPARD, Worcester, Mass., assignor to John A. Sherman, Worcester, Mass. Filed Nov. 13, 1916. Serial No. 130,994. 22 Claims. (Cl. 93—66.)



1. In a machine of the kind described, a folding bed, three folders mounted therein adapted to fold and seal three sides of the blank to form a tube open at both ends, said folders operating successively whereby the first

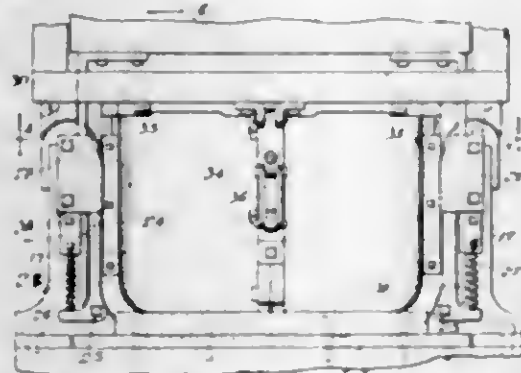
holder to operate will fold and secure an end flap to the body of the blank and the second and third folders to secure the second and third flaps to each other.

1,308,708. RESIN-RECOVERING PROCESS. ROBERT SIMPSON, Cincinnati, Ohio. Filed Mar. 25, 1919. Serial No. 284,900. 1 Claim. (Cl. 203—6.)



The improved resin-recovering process consisting in supporting a mass of resin-bearing chips, etc., in an open fireplace having a sloping floor, applying heat to the under surface of the supporting floor, igniting an exposed surface of the mass of chips, etc., at a distance from the lowest portion of said floor, excluding air from the bottom of the mass of chips, and causing the progressive burning of the chips to melt their resin and cause the resin to percolate downwardly through the mass of chips, and removing the melted resin, substantially as set forth.

1,308,709. METHOD OF MAKING IRREGULARLY-SHAPED STAMPINGS. CLAYTON B. WEAVER, Philadelphia, Pa., assignor to Edward G. Hudd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Feb. 25, 1915. Serial No. 10,455. Divided and this application filed July 19, 1916. Serial No. 110,180. 6 Claims. (Cl. 113—51.)



1. The method of producing large irregularly shaped sheet metal stampings, which consists in rigidly securing the sheet along its edges, and then simultaneously forming and stretching the entire unsecured area thereof into the required irregular shape by pressure applied thereto to one side only thereof.

1,308,770. MILK-COCOON COMPOUND AND PROCESS OF PRODUCING SAME. WALTER A. WEST, Elkhorn, Wis. Filed Mar. 21, 1919. Serial No. 284,062. 3 Claims. (Cl. 99—11.)

1. As a new article of manufacture, a homogenized cooked composition of milk, cocoon and sugar, having a semipasty consistency and capable of ready emulsification with water without further treatment.

1,308,771. TAG FASTENER. MARCUS B. BERHMAN, New York, N. Y., assignor to Lux Seal Corporation, a Corporation of New York. Filed May 26, 1917. Serial No. 171,117. 4 Claims. (Cl. 40—29.)

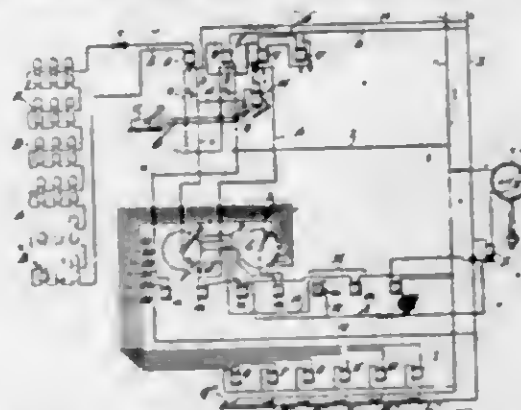
2. In a tag fastener, a casing formed of a piece of metal bent into approximately U form and having a pair of spaced apertures along the line of bend and having the space between the walls of the casing along the sides thereof partly closed, a flexible tie having a tip secured to each end at points between the tip ends, said tips being receivable in one position through the respec-

tive apertures, and a tag received between the walls of the casing and being rigidly secured thereto so as to



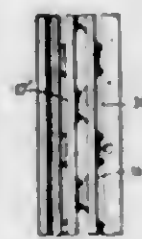
prevent access to the tips or removal of the tie except by disrupting the casing or the tie.

1,308,772. RECORDING SYSTEM AND APPARATUS. RICHARD M. HOPKINS, New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 27, 1917. Serial No. 144,952. 39 Claims. (Cl. 234—37.5.)



1. In a recording system, the combination with a plurality of recording mechanisms each adapted to make one or another of a plurality of distinctive records under control of corresponding signals, of a plurality of signal-transmitting devices and a common circuit therefor, each such signal-transmitting device arranged to transmit a signal different from the signals of all the other said transmitting devices, and selecting means arranged to be operated by said signals transmitted through said circuit and arranged to determine a particular recording mechanism to be finally actuated and as a result of the complete operation of said selecting means and to determine the particular record to be made by the so-selected recording mechanism.

1,308,773. CORNER-BEAD. NORRIS ELMORE CLARK, Plainville, Conn. Filed Mar. 11, 1915. Serial No. 13,555. 6 Claims. (Cl. 72—121.)



1. A sheet metal corner bead comprising, a longitudinally folded strip having a central nose portion with longitudinal shoulders at the edges thereof, indented behind the edges to form channels and having side portions diverging therefrom, each of said side portions having a longitudinally extending imperforate stiffening rib with abrupt sides and continuous marginal portions, the metal adjoining said ribs being provided at intervals with longitudinally elongated bonding openings for receiving and keying plaster behind the ribs.

1,308,774. HOSE-SUPPORTER. WILLIAM E. COWLING, Sioux City, Iowa. Filed Mar. 11, 1918. Serial No. 221,831. 2 Claims. (Cl. 241—6.)



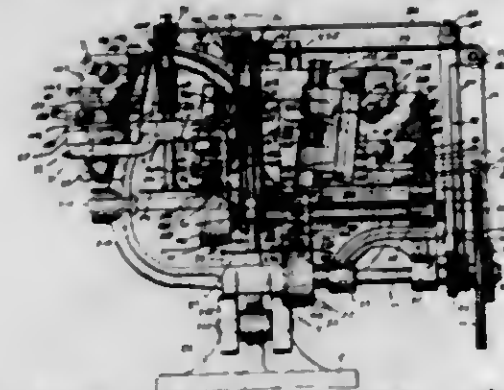
1. A hose supporter of the type described, including a band adapted to encompass the wearer's leg, a second member having depending end-portion adapted to extend diagonally with respect to the leg, means for fastening said end-portion together, means for slidably effecting the connection of said band and second member at their intermediate portion together conjointly, and means coöperative with said intermediate portions comprising an imperforate member adapted to guard the leg from contact with the connecting means between the intermediate portions of said band and second member.

1,308,775. SAFETY DEVICE. GEORGE H. DAV, Southbridge, Mass. Filed Jan. 28, 1915. Serial No. 4,935. 2 Claims. (Cl. 74—46.)



1. In a safety device for a press, the combination with a movable press head, of a tool supported for movement relative to the press head, means for yieldingly holding the tool in operative position, locking jaws for engaging the tool holder to secure the same in fixed position relative to the head, and a wedge member having a thick portion normally between the jaws to retain the same in inoperative position, and a thin portion onto which the jaws may move and thus be shifted into operative position before a tool carried by the holder is brought into engagement with the work.

1,308,776. SKIVING-MACHINE. NEWELL V. DYER, Holbrook, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 18, 1916. Serial No. 132,191. 41 Claims. (Cl. 69—16.)

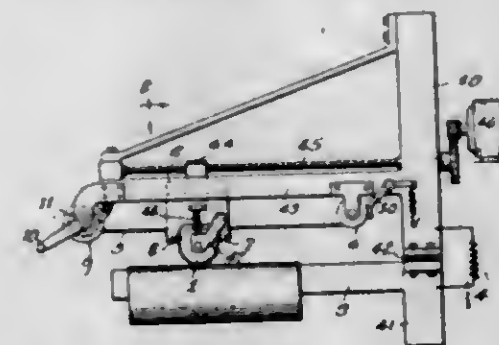


1. In a skiving machine, a main frame, a plurality of independently operated skiving knives upon said frame, a supplementary frame pivoted on said main frame, and a plurality of feed mechanisms upon said supplementary frame adapted respectively to coöperate with said knife mechanisms.

1,308,777. PROCESS OF REGULATING CATALYSIS. BRAXON E. ELKRED and GAIL MERSEREAU, New York, N. Y., assignors to Chemical Development Company, a Corporation of Maine. Filed Aug. 8, 1912. Serial No. 714,022. Renewed Dec. 13, 1918. Serial No. 266,650. 16 Claims. (Cl. 23—24.)

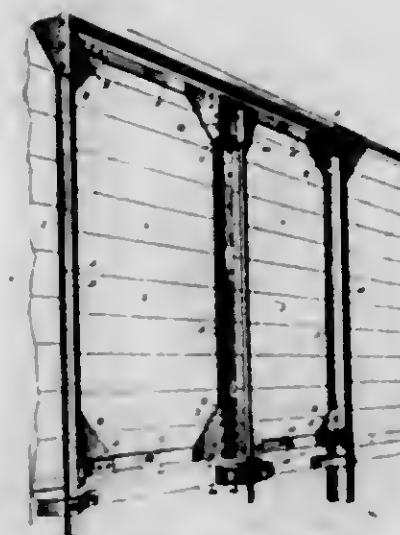
1. The process of forming unsaturated carbon compounds by additive reaction which comprises, forming a dilute gaseous mixture of an unsaturated carbon compound with the gaseous form of a substance with which it will react to form an additive product, and passing the dilute mixture over a catalyst, the diluent being inert in the reaction, and present in such quantity relative to the time of exposure to the catalyst as to inhibit the formation of a saturated carbon compound.

1,308,778. ELECTRIC WELDING APPARATUS. JAMES H. GRAVELL, Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 23, 1918. Serial No. 263,796. 5 Claims. (Cl. 219—4.)



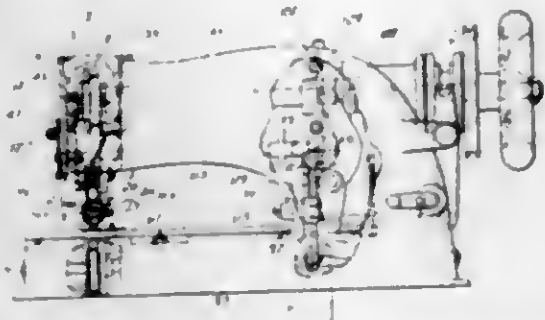
5. In an electric seam welding apparatus, the combination with a roller mounted on a carriage, guide rolls on said carriage, fixed storage and wind-up reels and a strip of conducting material having its opposite ends secured to said reels and passing around said guide rolls and under the electrode roller to form a work-contacting surface therefor.

1,308,779. CAR-DOOR FASTENING. WILLIAM HERN GREGG, Hackensack, N. J., assignor to The Gregg Company, Limited, Hackensack, N. J., a Corporation of New York. Filed Aug. 28, 1917. Serial No. 188,596. 3 Claims. (Cl. 70—49.)



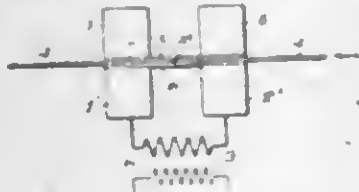
3. In a car door, gussets applied to the door so as to project beyond the edge of the door and overlap the edge of an adjacent member, and a lever pivotally mounted at one end on the door so as to swing outwardly from the door and at that end formed with a latch to interlock with a part of the car structure, said lever being extended across the door, and means provided for fastening the lever at the end opposite that at which the interlocking latch is provided.

1,308,750. PUNCHING-MACHINE. ALFRED B. FOWLER, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 24, 1915. Serial No. 23,690. 12 Claims. (Cl. 164—88.)



1. A machine for forming a row of punch holes in a piece of stock, having, in combination, a support for the stock, a punch, means for reciprocating the punch, means for feeding the stock intermittently past the punch, and means under control of the operator for varying the direction of the intermittent feed movements during the operation of the machine, said feeding means being constructed and arranged to start each feed movement always at the same point close to the axis of the punch, whereby the spacing of the punch holes in curved rows is substantially uniform.

1,308,781. METHOD OF WELDING THIN PLATES. JAMES H. GRAVELL, Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 23, 1918. Serial No. 263,797. 6 Claims. (Cl. 219—10.)



1. The method of butt welding thin plates consisting in assembling the plates with their edges abutted between clamping plates, electrically welding the abutted edges and at the same time upsetting the clamping plates.

1,308,782. TRANSFORMER SECONDARY. JAMES H. GRAVELL, Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 23, 1918. Serial No. 263,798. 4 Claims. (Cl. 219—13.)

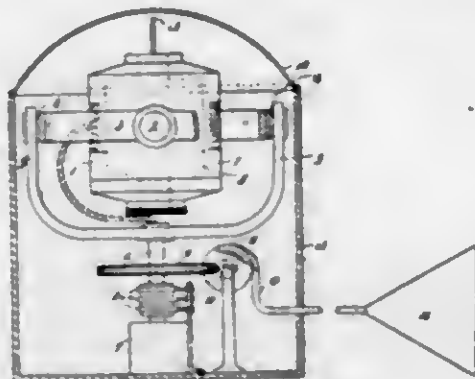


4. An electric metal working machine having two work platens, one of said platens having an integral extension threaded through the core of the transformer, a flexible connection between the end of said extension and the other platen and primary coils embracing said extension as well as the platens as and for the purpose described.

1,308,783. GYROSCOPIC APPARATUS. JOHN GRAY, London, England, and JAMES GORDON GRAY, Glasgow, Scotland. Filed Oct. 14, 1918. Serial No. 258,124. 3 Claims. (Cl. 74—78.)

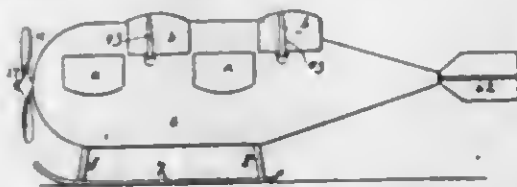
1. The herein described gyroscopic apparatus, comprising, in combination, a gyroscope including a casing and

a spinning element rotatably around a normally substantially vertical axis relatively to said casing, a normally horizontal gimbal frame in which said casing is pivotally



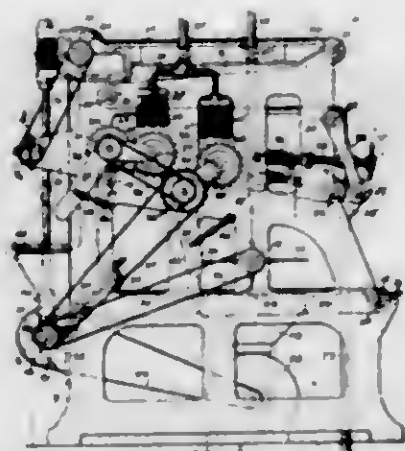
mounted, a frame member to which said gimbal frame is pivoted, and means for effecting rotation of said frame member around a normally vertical axis in the same circular direction as said spinning element but at less speed.

1,308,784. FLYING-MACHINE. ALBERT HOLLAND, Fargo, N. D., assignor of one-tenth to Andrew M. Carlsen, St. Paul, Minn. Filed May 20, 1918. Serial No. 235,638. 4 Claims. (Cl. 244—20.)



1. In a flying machine, a suitable frame, a motor, a series of pivotally mounted wings extending from each side of the frame, operative connection between the motor and the wings, by which alternatively some wings at each side of the frame are swung upward while others are swung downward; said wings being mounted to tilt to different forwardly and rearwardly inclined positions; springs arranged to aid the air in tilting the wings upward with their rear edges into active position, means for automatically limiting said tilting action of the springs, and means to be operated by the aviator whereby the automatic limiting means may be varied to permit all the wings to tilt simultaneously to any desired position.

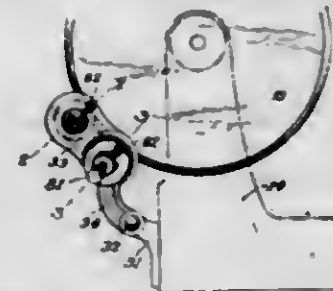
1,308,785. RUG AND CARPET CLEANING MACHINE. LOUIS HOLLMAN, Chicago, Ill. Filed June 2, 1916. Serial No. 101,246. Renewed May 31, 1917. Serial No. 172,078. 5 Claims. (Cl. 15—8.)



1. In a device of the class described, a suitable frame having end uprights, a horizontal platform arranged between the uprights near the bottom, an inclined platform

between the uprights above said horizontal platform, a third platform between the uprights above the inclined platform, said first named platform having a portion formed of wire netting, a hopper below said wire screen, means for causing air suction in said hopper, a rotating scrubbing brush arranged on said second named inclined platform, a plurality of sprocket wheels mounted on said uprights, endless chains arranged to travel over said sprocket wheels, means connected to said endless chains for carrying the article to be cleaned in a flat condition over the first named platform, thence over the second named inclined platform and thence over the third named platform and means for driving said scrubbing brush and said chains in unison.

1,308,786. GRINDER DEVICE FOR MEAT-SLICERS. JOSEPH HOPKINSON, Dayton, Ohio, assignor to The Computing Scale Company, Dayton, Ohio, a Corporation of Ohio. Filed June 28, 1917. Serial No. 177,441. 7 Claims. (Cl. 51—7.)



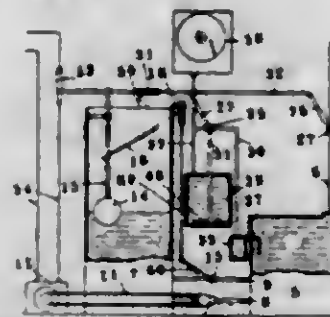
1. In a meat slicing machine having a rotary slicing knife, the combination of a grinder box adjacent to the cutting edge of the knife, an inwardly sphero-concave seat carried by a wall of said box and having an aperture, a sleeve extending through the aperture and having a sphero-convex portion fitting said seat to permit angular adjustment of the sleeve in at least two planes, means for securing the sleeve in adjusted position, and a grinder arbor rotatably mounted in said sleeve.

1,308,787. ADDING-MACHINE. ALLEN A. HORTON, Highland Park, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 1, 1910. Serial No. 112,510. 7 Claims. (Cl. 235—82.)



1. The combination of a vibratory actuator, a series of keys acting thereon, and a set of stops relatively arranged to prevent depression of two keys at once and also serving to block movement of the actuator at the position to which it is brought by a key.

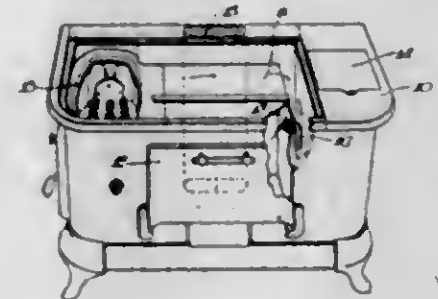
1,308,788. GAS-ANALYZER. WILLIAM KEMP, St. Louis, Mo. Filed Dec. 13, 1918. Serial No. 266,539. 7 Claims. (Cl. 23—3.)



1. In a gas analyzer, the combination with a liquid container communicating with a source of gas to be analyzed,

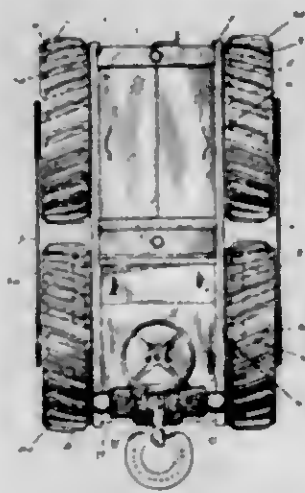
of a second liquid container, a pump for forcing the liquid from said first named to said second named container, and means controlled by the rise and fall of liquid in said second named container for starting and stopping said pump.

1,308,789. OVEN-VENTILATOR. FERDINAND KIRCHHOFF, Sr., Manitowoc, Wis. Filed Oct. 22, 1917. Serial No. 197,939. 1 Claim. (Cl. 126—21.)



In a range having an oven with a flue space passing over the top and down one side thereof and with a fire pot on the other side thereof, the side wall of the oven next to the said flue space being provided with an opening near the top of the oven and near the oven door, said oven being tightly closed by the oven door except for the outlet through such opening, and an angularly shaped metal tube with one end threaded and passed through said opening and with the other end extending downwardly into the flue space at the side of the oven, and nuts threaded on said threaded end of the tube and engaging opposite sides of the oven wall.

1,308,790. TRACTOR. JOHN MINOR KROTER, Stockton, Calif. Filed May 6, 1918. Serial No. 232,703. 4 Claims. (Cl. 180—21.)

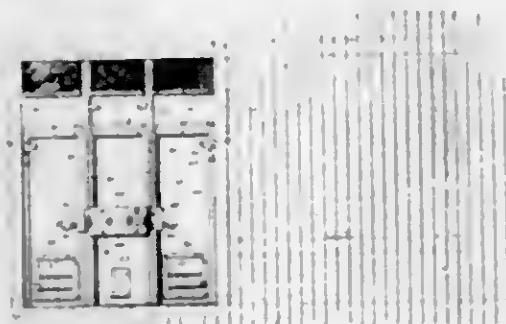


1. A tractor including a frame horizontally rigid for its entire length, ground wheels mounted for rotary movement relative to the frame, and grips on the peripheries of the wheels, those grips on one front wheel being arranged in reverse position to those on the other front wheel, and those on each rear wheel being arranged in reverse relation to those on the adjacent front wheel.

1,308,791. GRAIN-CAR DOOR. ROY CLIFFORD LEITCH, Newton, Kans., assignor of one-eighth to Charles D. Blackman, Dodge City, Kans., and one-eighth to Wm. Peters and one-eighth to Adam E. Purcell, Newton, Kans. Filed Dec. 14, 1917. Serial No. 207,136. 3 Claims. (Cl. 20—31.)

1. The combination with a door frame including an upper door plate, of a door engaging the inner face of

the frame and having its body provided with spaced pairs of guide bars extending vertically along one face thereof, and suspension means for the said door including vertically projecting hanger bars, each of which has its lower end extending between the guide bars of one of the said pair of the guide bars of the door in the lowermost position of the latter, said hanger bars having their upper ends engaging the inner surface of the door plate in operative position, and said hanger bars and said guide bars being spaced from the sides of the door frame so as to co-operate with one another and form vertical braces for the door body in closed position.



2. The combination with a door frame including an upper door plate, of a grain door arranged to engage the inner sides of the frame and having pairs of vertically extending parallel guide bars forming guide channels between them, and extending substantially the full height of the door, and suspension means for the door including vertically disposed hanger bars, the upper ends of which engage the door plate when the door is closed and the lower ends of which extend into the guide channels formed by said guide bars and said hanger bars being equidistantly spaced from one another and from the sides of the frame.

3. A grain car door having vertically extending guide channels, vertical hanger bars the lower portions of which extend into the said guide channels and have opposing rack faces, a gear casing carried by the door and extending between the said hanger bars, and gears within the casing in engagement with one another and with both of the said guide bar racks, certain of said gears having tool engaging means and being located adjacent relatively opposite sides of the gear casing, for the purpose described.

1,308,792. HATCHCHECK AND HOLDER THEREFOR. ROY CLIFFORD LEITCH, Kansas City, Mo. Filed Aug. 10, 1918. Serial No. 249,292. 2 Claims. (Cl. 40—20.)



1. A device of the character specified comprising a base adapted for connection to a fixed support, said base having a transversely arranged lug or projection having inclined side faces converging toward the free edge of the lug, the lug having a transverse head or enlargement at the said free end approximately diamond shaped in cross section for the purpose specified, and checks for co-operating therewith, each having openings spaced apart longitudinally of the check a distance corresponding approximately to the length of the head of the lug and connected by a straight slot for permitting the passage of the head of the lug.

1,308,793. RECEPTACLE. LAWRENCE W. LUELLEN, Bozotou, N. J., assignor to Individual Drinking Cup Company, New York, N. Y., a Corporation of Maine. Filed Feb. 10, 1912. Serial No. 678,096. 9 Claims. (Cl. 229—5.)



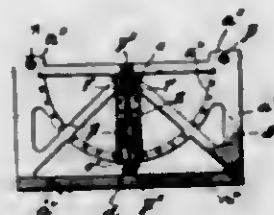
1. As a new article of manufacture, a paper drinking cup made of a single piece of paper having its side walls formed by folding the paper upon itself, coated and impregnated with paraffin, the paper being cemented in folded position by the paraffin.

1,308,794. CLOSURE FOR TANKS. MICHAEL A. LYNCH and JOHN P. F. WHITE, Washington, D. C. Filed Mar. 23, 1918. Serial No. 224,104. 12 Claims. (Cl. 70—3.)



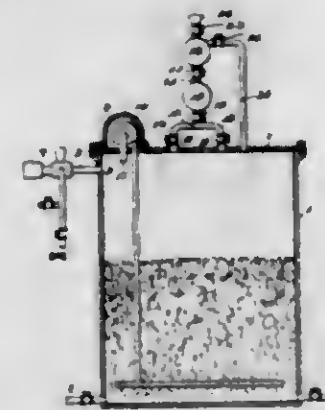
7. In combination with a tank having its upper portion formed with a valve seat, and a cover for said tank adapted to engage said valve seat, an upwardly extending ring-like member surrounding said seat and spaced therefrom, said ring-like member having portions forming part of a locking element, a member having a plurality of legs for co-operating with said ring-like member to lock said cover to said tank, and a leverage mechanism intermediate said locking member and said cover for effecting a relative movement therebetween to firmly seat the latter upon said tank.

1,308,795. INCLINOMETER FOR USE ON AIRCRAFT. WILLIAM D. MCCORMACK, Nashville, Tenn. Filed Oct. 1, 1918. Serial No. 250,394. 4 Claims. (Cl. 33—215.)



1. In an inclinometer, the combination with a main frame having parallel sides with graduated arcs carried by said sides, and pivot pins at the centers of said arcs, of a heavy plate suspended from said pivot pins and provided with a segment-shaped recess therein, with radial graduations below said recess, and a pendulum suspended from a pivot above and having its point adapted to swing over said radial graduations, substantially as described.

1,308,796. PROCESS OF OXIDIZING HYDROCARBONS. KARL P. McELROY, Washington, D. C., assignor to Chemical Development Company, Augusta, Me., a Corporation of Maine. Original application filed Aug. 2, 1912, Serial No. 712,975. Renewed Mar. 18, 1916, Serial No. 85,200. (Patent No. 1,253,617, dated Jan. 15, 1918.) Divided and this application filed Jan. 10, 1918, Serial No. 211,166. Renewed Nov. 2, 1918. Serial No. 260,916. 7 Claims. (Cl. 23—24.)



1. The process of making chlorhydrins from the gaseous olefins which consists in reacting upon such olefins with hypochlorous acid while maintaining the supply of said acid in the zone of reactions during said reaction.

1,308,797. PROCESS OF OXIDIZING HYDROCARBONS. KARL P. McELROY, Washington, D. C., assignor to Chemical Development Company, a Corporation of Maine. Filed June 26, 1917. Serial No. 177,028. 17 Claims. (Cl. 204—1.)



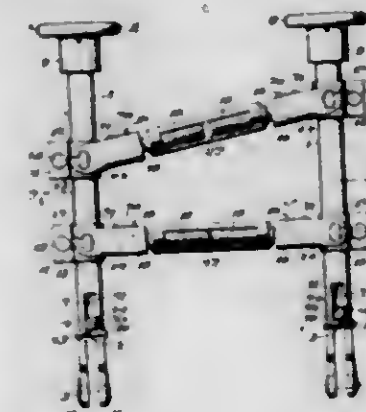
1. The process of making glycols which comprises electrolyzing a chlorid solution in a diaphragmless cell in such manner as to oxidize said chlorid, and maintaining the electrolyte saturated with a gaseous olefin in the presence of an oxygen carrying catalyst.

1,308,798. SURGICAL INSTRUMENT. HARVEY C. MASLAND, Philadelphia, Pa. Filed June 24, 1918. Serial No. 241,473. 7 Claims. (Cl. 128—305.)



1. In a bone surgical instrument, a handle, a rotatable mandrel-like member mounted thereon, means on said member adapted to connect it with and disconnect it from power driving mechanism, a tool carrier on said member, and means on said handle adapted to lock said carrier with the handle.

1,308,799. SURGICAL INSTRUMENT FOR RESETTING BROKEN BONES. HARVEY C. MASLAND, Philadelphia, Pa. Filed Feb. 24, 1919. Serial No. 278,572. 17 Claims. (Cl. 128—92.)



1. An adjustable bone clamp formed of adjustable jaws, a tubular shaft with which one of said jaws is connected, a slidable shaft within said tubular shaft with which the other jaw is connected, a sleeve to said tubular shaft adapted to engage said slidable shaft, a handle mounted on said tubular shaft, and a swivel connection for said handle and sleeve, said slidable shaft, sleeve and swiveled connection being contained in said tubular shaft and wholly guarded by the same.

1,308,800. MEANS FOR TYING BOWS. MAX MENDELSON and NATHAN J. GOLDFARB, Brooklyn, N. Y., assignors to Brooklyn Braid Company, a Corporation of New York. Filed Apr. 1, 1915. Serial No. 18,623. 6 Claims. (Cl. 223—52.)



1. In a device for tying bows, a former, means for folding a length of ribbon over said former, one strand being above and the other strand below said former, non-rotatable means adapted to be interposed beneath said former and said ribbon, said folding means adapted to loop said lower strand about said former and said interposed means, and gripping means carried by said non-rotatable means adapted to grip the free end of said ribbon, and adapted to draw the same through said loop to form a bow.

1,308,801. SAFETY RAZOR. EUGENE G. MERGENTHAUER, Baltimore, Md. Filed Nov. 10, 1914. Serial No. 871,331. 18 Claims. (Cl. 30—12.)



2. In a safety razor, the combination of a frame, a blade support thereon, a blade magazine on the frame, and means

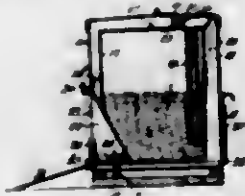
17. As a new article of manufacture a blade for safety razors comprising a strip of this flexible material adapted to be wound into a coil and having a cutting edge, substantially coextensive with its length, said blade being provided with spaced perforations whereby it may be engaged by a pin to withdraw successive sections from the coil in which it is wound, said perforations also acting to weaken the connection between such sections for the purpose specified.

1. A composition of matter comprising the herein described mixture of compounds of chlorine, carbon and hydrogen which forms a heavy oil of which a large part is inseparable into its component compounds by methods now known, a certain group of the more volatile of said compounds being the equivalent in volatility of the standard volatile solvents of nitro cellulose, said composition also comprising an alcohol and cellulose ester.

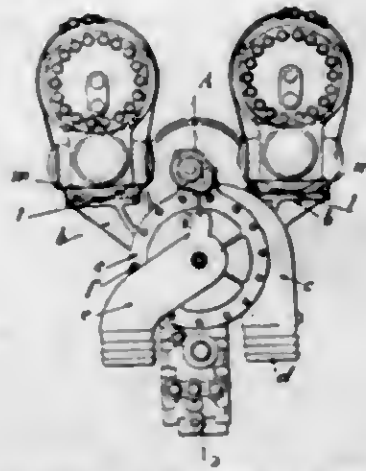
1. A composite welt strip for boots and shoes, comprising a layer of rubber having its upper surface in its normal condition and provided with a beveled portion of material width near its inner edge to render the rubber layer of increased flexibility at its inner side, and a layer of fabric adhesively affixed to the under surface of the rubber layer and extended from near the inner edge thereof toward but not to the outer edge thereof to leave a portion of said under surface uncovered at the outer edge of the composite strip.

A schematic diagram of a mechanical device, likely a pump or engine component. It features a vertical shaft with a piston and a horizontal cylinder. The diagram is labeled with various parts and includes a small inset showing a cross-section of the cylinder.

1,308,806. HOG-WATERER. FRANK HOWARD PAGE,
Waverly, Iowa. Filed July 5, 1918. Serial No.
243,410. 5 Claims. (Cl. 119-73.)



1,308,507. BRACKET FOR ACCESSORIES OF EXPLOSION-ENGINES. PIERRE JEAN RENT POSTEL-VINAT, Paris, France, assignor to Societe Des Moteurs Salomon (Systeme Canton-Unne), Billancourt, France. Filed Dec. 20, 1918. Serial No. 267,726. 4 Claims. (Cl. 123-195.)



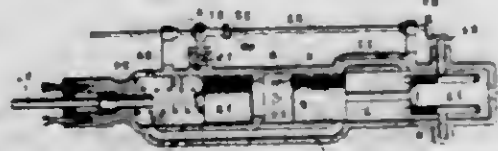
1. The combination in an explosion engine of a bracket formed of a molded casting and comprising a body which

A detailed technical drawing of a mechanical device, likely a pump or engine component. It features a circular housing with a central shaft and four internal arms or pistons arranged in a cross-like pattern. The drawing is a cross-section, showing the internal components and the housing. The style is a technical sketch with hatching for shading.

1,308,813. ENGINE. CHARLES J. SHUTTLEWORTH, In-
ventor. N. Y., assignor of one-half to Clarence J. Warlick,
Washington, D. C. Filed Mar. 16, 1918. Serial No.
222,924. 1 Claim. (Cl. 128—13.)

1,308,512 REFRIGERATING APPARATUS. THOMAS
J. SHANNAN, St. Louis, Mo. Filed Jan. 12, 1918. Serial
No. 211,473. 1 Claim. (Cl. 62-142.)

strike said drill bit, and means for locking said second piston during alternate strokes of said first piston.



pendently of said first piston and actuated by the same charge, said second piston being adapted to

1,308,811. PERCUSSION DRILL. LEWIS L. SCOTT, St. Louis, Mo. Filed June 13, 1918. Serial No. 239,718. 8 Claims. (Cl. 123-7.)

1. In a percussion drill, a cylinder, a piston in said cylinder, a drill bit, a second piston movable inde-

In an aeroplane comprising a plurality of decks having front and rear beams all of which are substantially parallel to each other, the combination of crossed posts extending from each front beam to a front beam of the next deck above or below and secured to each other at their crossing points, and similar crossed posts extending from each rear beam to a rear beam of the next deck above or below and secured to each other at their crossing points.



1,308,810. AEROLYNE BODY OR CELL. JULES SAKMOM, Billancourt, France, assignor to Societe Des Moteurs Sakmoum (Systeme Caneton-Une). Billancourt, France. Filed Mar. 14, 1916. Serial No. 84,113. 1 Claim. (Cl. 244-31.)

7. In combination, a portable lamp, a portable battery, a flexible elongated conductor connecting said lamp to said battery, a malleable adhesive attaching element, and means secured to said lamp and connecting a holder for said attaching element.



1,308,509. LAMM, THEODORE J. RUSS, New York, N. Y. Filed Feb. 11, 1918. Serial No. 216,411. 7 Claims. (Cl. 240-1.)

1. An economizer system for locomotives, comprising a condenser, a collector, means for forcing the water of the condensation to the collector, means for distributing the water of the condensation over the collector, a venturiator means for creating a draft through the locomotive tank, and means for selectively causing the flow of the exhaust steam through the stack or to the condenser.



1,308,808. ECONOMIZER ARRANGEMENT FOR LO-
COMOTIVES. ROBERTUS RAY, Geneva, Switzerland.
Filed Jan. 6, 1919. Serial No. 269,822. 4 Claims.
(Cl. 105-37.)

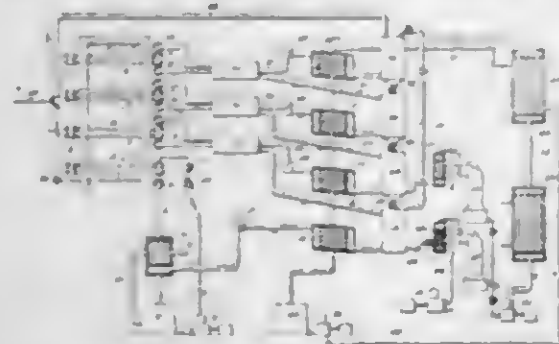
for the casing of a water pump and a central elevator bearing, a shaft rotatably mounted in said bearing, a water pump rotor carried by said shaft, a cover removably secured to the said water pump casing, side legs integral with the bracket for attachment of the same to the engine, two lateral horizontal walls formed on the bracket and adapted to receive two ignition pipes and a horizontal seal, formed on the bracket and adapted to receive an oil pump.

for retaining a blade in cutting position on said support comprising a blade engaging member and a handle member capable of releasably locking said blade engaging member in place, said blade magazine being disposed between the blade support and said releasable handle member.

15. A capsule for razor tape having an outlet slot in its side wall and flanges at opposite ends for the purpose set forth.

17. As a new article of manufacture a blade for safety razors comprising a strip of thin flexible material adapted to be wound into a coil and having a cutting edge, substantially coextensive with its length, said blade being provided with spaced perforations whereby it may be engaged by a pin to withdraw successive sections from the coil in which it is wound, said perforations also acting to weaken the connection between such sections for the purpose specified.

1,308,802. APPARATUS FOR PRODUCING DIOLEFINS. GAIL MESSEREAU, New York, N. Y., assignor to Chemical Development Company, a Corporation of Maine. Filed Sept. 14, 1912, Serial No. 720,363. Renewed Dec. 13, 1918. Serial No. 266,651. 5 Claims. (Cl. 23-24.)



1. The combination with a retort, of heating means therefor adapted to maintain it at a uniform low heat to convert petroleum into gas, means for recovering unchanged oil vapors from such gas, means for recovering diolefins from the treated gas, means for reheating the gas to produce a further quantity of diolefins and means for recovering such further quantity.

1,308,803. CELLULOSE SOLVENT. GAIL MESSEREAU, New York, N. Y., assignor to Chemical Development Company, New York, N. Y., a Corporation of Maine. Filed Sept. 10, 1913, Serial No. 789,221. Renewed Jan. 2, 1918. Serial No. 210,074. 5 Claims. (Cl. 134-70.)

1. A composition of matter comprising the herein described mixture of compounds of chlorin, carbon and hydrogen which forms a heavy oil of which a large part is inseparable into its component compounds by methods now known, a certain group of the more volatile of said compounds being the equivalent in volatility of the standard volatile solvents of nitro cellulose, said composition also comprising an alcohol and cellulose ester.

1,308,804. WELT STRIP. JAMES N. MOULTON, Haverhill, Mass. Filed Oct. 8, 1918. Serial No. 257,397. 2 Claims. (Cl. 36-78.)



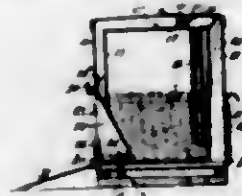
1. A composite welt strip for boots and shoes, comprising a layer of rubber having its upper surface in its normal condition not provided with a beveled portion of material width near its inner edge to render the rubber layer of increased flexibility at its inner side, and a layer of fabric adhesively affixed to the under surface of the rubber layer and extended from near the inner edge thereof toward but not to the outer edge thereof to leave a portion of said under surface uncovered at the outer edge of the composite strip.

1,308,805. MASSAGE APPARATUS. CHARLES NICHES, Brooklyn, N. Y., assignor to Fritz P. Mansbendel, Brooklyn, N. Y. Filed Nov. 3, 1916, Serial No. 129,274. Renewed Dec. 4, 1918. Serial No. 265,347. 2 Claims. (Cl. 174-177.)



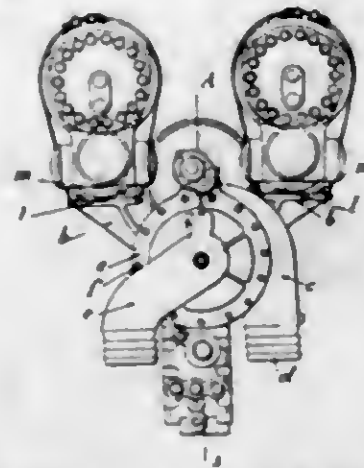
1. In an apparatus of the character set forth, a cylinder, and a piston operating therein to produce a vacuum; a plug closing one end of said cylinder and terminating in a vacuum cup communicating with the interior of said cylinder; an electric lamp mounted in said plug; and resilient means included between said plug and said piston.

1,308,806. HOG-WATERER. FRANK HOWARD PAGE, Waverly, Iowa. Filed July 5, 1918. Serial No. 243,410. 5 Claims. (Cl. 119-73.)



1. A waterer of the class described, including an outer casing, a water tank removably supported within the casing and spaced therefrom, and a trough on the tank at the outside thereof, said trough communicating with the interior of the tank to be fed by the latter and being rigid with the tank to be removable therewith from the casing, said casing having an opening at the trough, the front wall of the trough having a lip extending through said opening over the adjacent edge of the casing and detachably engaging the same, said lip presenting a depression for the escape of overflow from the trough through the opening to the exterior of the casing; together with means at the interior of the casing to, laterally deflect the tank and engage the end of said lip with the casing by the insertion of the tank in the casing.

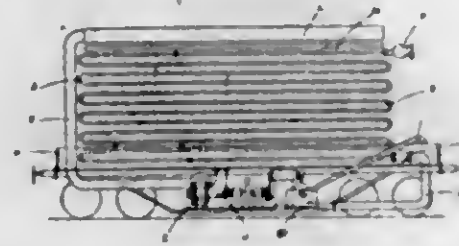
1,308,807. BRACKET FOR ACCESSORIES OF EXPLOSION-ENGINES. PIERRE JEAN RENÉ POSTEL-VINAT, Paris, France, assignor to Societe Des Moteurs Salmson (Système Canton-Unne), Billancourt, France. Filed Dec. 20, 1918. Serial No. 267,726. 4 Claims. (Cl. 123-195.)



1. The combination in an explosion engine of a bracket formed of a molded casting and comprising a body which

forms the casing of a water pump and a central elongated bearing, a shaft rotatably mounted in said bearing, a water pump rotor carried by said shaft, a cover removably secured to the said water pump casing, side legs integral with the bracket for attachment of the same to the engine, two lateral horizontal seats formed on the bracket and adapted to receive two ignition magnets and a horizontal seat formed on the bracket and adapted to receive an oil pump.

1,308,808. ECONOMIZER ARRANGEMENT FOR LOCOMOTIVES. RODOLPHE HAU, Geneva, Switzerland. Filed Jan. 6, 1919. Serial No. 269,822. 4 Claims. (Cl. 105-37.)



1. An economizer system for locomotives, comprising a condenser, a collector, means for forcing the water of condensation to the collector, means for distributing the water of condensation over the condenser, a ventilator for creating a draft through the locomotive stack, and means for selectively causing the flow of the exhaust steam through the stack or to the condenser.

1,308,809. LAMP. RUTHOLD J. REESE, New York, N. Y. Filed Feb. 11, 1918. Serial No. 216,471. 7 Claims. (Cl. 240-1.)



7. In combination, a portable lamp, a portable battery, a flexible elongated conductor connecting said lamp to said battery, a moldable adhesive attaching element, and means secured to said lamp and constituting a holder for said attaching element.

1,308,810. AEROPLANE BODY OR CELL. EMIL JEAN JULES SALMON, Billancourt, France, assignor to Societe Des Moteurs Salmson (Système Canton-Unne), Billancourt, France. Filed Mar. 14, 1916. Serial No. 84,113. 1 Claim. (Cl. 244-31.)

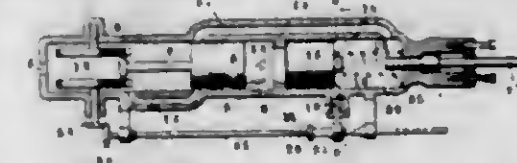


In an aeroplane comprising a plurality of decks having front and rear beams all of which are substantially parallel to each other, the combination of crossed posts extending from each front beam to a front beam of the next deck above or below and secured to each other at their crossing points, and similar crossed posts extending from each rear beam to a rear beam of the next deck above or below and secured to each other at their crossing points.

1,308,811. PERCUSSION-DRILL. LAWIE L. SCOTT, St. Louis, Mo. Filed June 13, 1918. Serial No. 239,718. 8 Claims. (Cl. 123-7.)

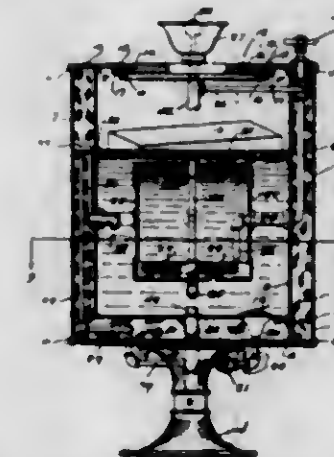
1. In a percussion drill, a cylinder, a piston in said cylinder, a drill bit, a second piston, movable inde-

pendently of said first named piston and actuated by the same charge, said second piston being adapted to



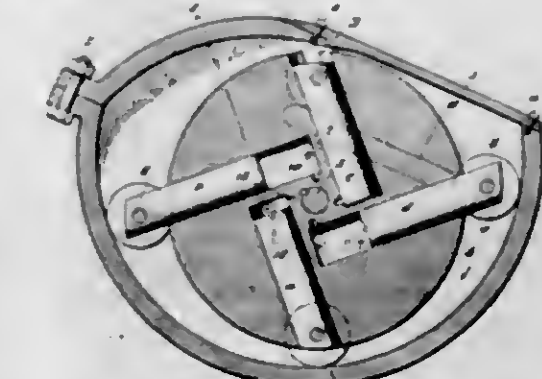
strike said drill bit, and means for locking said second piston during alternate strokes of said first piston.

1,308,812. REFRIGERATING APPARATUS. THOMAS J. SHERRAN, St. Louis, Mo. Filed Jan. 12, 1918. Serial No. 211,473. 1 Claim. (Cl. 62-142.)



In a water cooling apparatus, the combination of a casing comprising inner and outer walls with interposed insulating material therebetween, the casing having an opening in the top, a cover fitted in the opening, a water receptacle in the casing, said receptacle being spaced from the walls of the casing, a service pipe extending through the casing and into the receptacle, and coiled in the bottom of the latter, the end of the service pipe extending vertically from the center of the coil and terminating in the top of the receptacle, a series of short outlet pipes extending from the upper end of the vertical pipe to introduce the water to the receptacle in fine streams, a draw off pipe terminating at the bottom of the receptacle and extending into the casing and toward the top of the latter, a controlling valve in the draw off pipe, a waste pipe extending from the receptacle to the casing, and short connections between the receptacle and the casing to brace the latter, the pipes, and the connections extending from the casing to the receptacle serving to form a support for ice placed in the casing to insure the body of water in the top part of the receptacle being cooled.

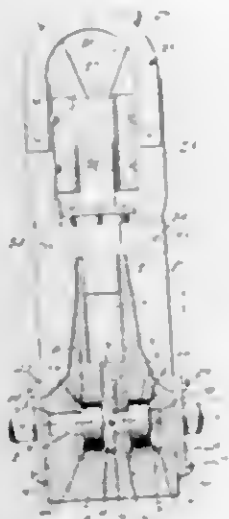
1,308,813. ENGINE. CHARLES J. SHUTTLEWORTH, Buffalo, N. Y., assignor of one-half to Clarence J. Warnick, Washington, D. C. Filed Mar. 16, 1918. Serial No. 222,924. 1 Claim. (Cl. 123-43.)



In a four cycle internal combustion engine, the combination of a rotor having combustion chambers extending from the periphery thereof inwardly in a direction substantially tangential to the center of the rotor, a

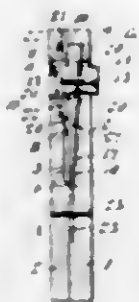
rotor shaft, pistons mounted for reciprocatory movement in said combustion chambers, rollers at the outer ends of said pistons, and a casing in which said rotor is mounted and against the inner wall of which said rollers travel, said casing embodying a piston controlling wall which is approximately elliptical for substantially three quarters of its extent and approximately rectilinear for the remainder of its extent, whereby a quick suction stroke, a full scavenging stroke and a long working stroke are obtained.

1,308,814. WOODEN PUMP. GUY SIDENSTRICKER and JOHN WALTER MILLER, Mount Clare, W. Va. Filed June 20, 1917. Serial No. 175,840. 2 Claims. (Cl. 103-77.)



1. A pump, comprising the combination of a single integral wooden block having a longitudinal cylinder bore, a passage to form an extension of said bore, a transverse passage through the block with which the first mentioned passage communicates, said transverse passage having enlargements forming valve chambers, one side of each of said enlargements forming a valve seat, a substantially cylindrical block loosely movable in said enlargement and forming a valve, a guide for each block and a removable plate secured to the side of the wooden block adapted to be removed to allow access to said valve chambers, a wooden piston in said cylinder bore, and means for actuating the piston.

1,308,815. COMBINATION SQUARE. HENRY SIMON, Laguna Beach, Calif. Filed Apr. 17, 1918. Serial No. 229,126. 27 Claims. (Cl. 33-120.)

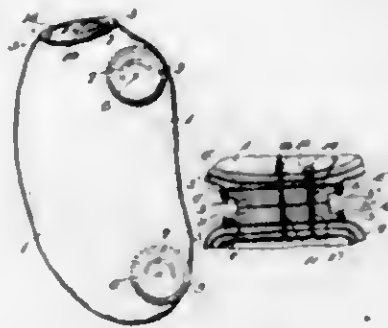


6. A combination square comprising a handle, a sleeve traversing the handle near one end thereof, a blade rockably mounted on the sleeve, and latch means for holding the blade in adjusted positions, including manipulating means slidable lengthwise of the sleeve in the axis of rocking of the blade.

1,308,816. DOLL. ELLA LOUISE SMITH, Roanoke, Ala. Filed Oct. 1, 1918. Serial No. 256,404. 5 Claims. (Cl. 46-40.)

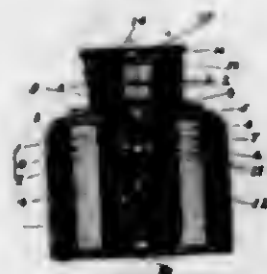
1. In a doll construction, a body portion having an arc shaped slot, a metal joint member secured to the

body portion and having an arc shaped slot arranged to register with the first named arc shaped slot, a limb portion, a metal joint member secured to said limb por-



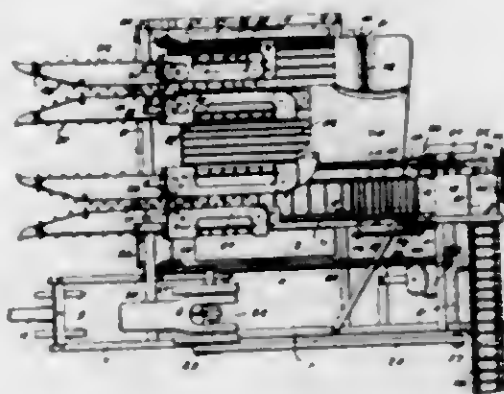
tion and arranged to bear on the first named joint member, a common pivot pin for said joint members, and a stop member carried by said limb and arranged to extend through said registering arc shaped slots.

1,308,817. INK-WELL. HENRY SMITH, College Point, N. Y. Filed May 15, 1918. Serial No. 234,817. 6 Claims. (Cl. 120-69.)



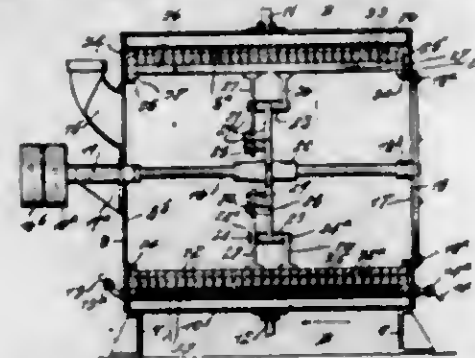
1. In a bottle a stopper, a cup in the neck of said bottle and a tube under the cup forming a support therefor, an opening in said cup and a ball valve normally closing said opening, said cup having passages along its outer wall surface extending into said bottle.

1,308,818. ENSILAGE HARVESTER. LARK ATHEN SPRUELL, Edmond, Kans. Filed Sept. 23, 1918. Serial No. 255,302. 4 Claims. (Cl. 50-16.)



1. A machine for harvesting ensilage including a longitudinal conveyor, a tripping pan open at the front end and overhanging the front portion of the conveyor, stalk cutting mechanism in front of the pan, means for engaging the cut stalks and dragging them over the pan, means for directing the head ends of the stalks downwardly and rearwardly onto the conveyor.

1,308,819. EVAPORATING APPARATUS. BURT E. TAYLOR, Mount Vernon, N. Y., assignor to Borden's Condensed Milk Company, New York, N. Y., a Corporation of New Jersey. Filed May 10, 1918. Serial No. 233,746. 14 Claims. (Cl. 250-109.)



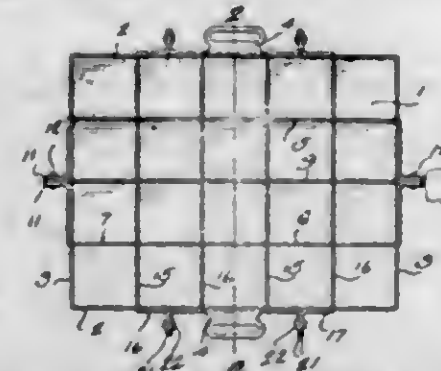
1. In an evaporating apparatus, a cylindrical container, or drum, having its central axis substantially horizontally disposed and a therewith concentric, longitudinally coextensive, continuous, impervious, circular interior body surface; a rotatory shaft concentric with said axis; supported movably in an orbit concentric with and intermediate said axis and surface a therewith parallel member, or bar, approximately coextensive longitudinally with said surface; carried by said bar a therewith approximately coextensive rank of numerous therefrom toward-said-surface-projecting spaced-apart spring-tensioned fingers each vibratable independently of the others and each comprising a thereby detachably carried tip of organic material disposed to normally contact with said surface; and means operatively connecting said bar with said shaft.

1,308,820. PROCESS OF MOLDING LENSES. EDGAR D. TILLYER and HARRY H. STYLL, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 6, 1916. Serial No. 118,773. 2 Claims. (Cl. 49-84.)



1. The process of forming an ophthalmic lens, consisting in heating the glass stock, preparing molding surfaces therefor by moistening the surfaces, placing the glass stock between the surfaces while in heated condition, bringing the moistened surfaces toward the glass whereby a cushioning film is provided preserving the fire polish of the glass while shaping the stock to correspond with the shape of the mold, withdrawing the shaping pressure and projecting an air blast on the molded lens.

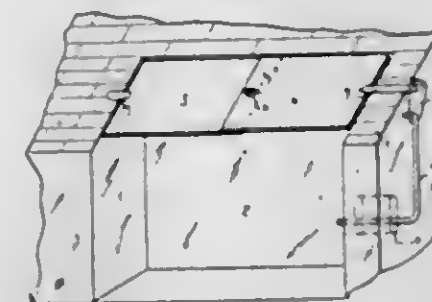
1,308,821. BAKING-PAN. HAL EARL TRIPP, Chattanooga, Tenn. Filed Aug. 2, 1918. Serial No. 248,007. 6 Claims. (Cl. 53-6.)



1. In a baking pan, the combination, of a pan body having upstanding sides, a frame comprising side ribs

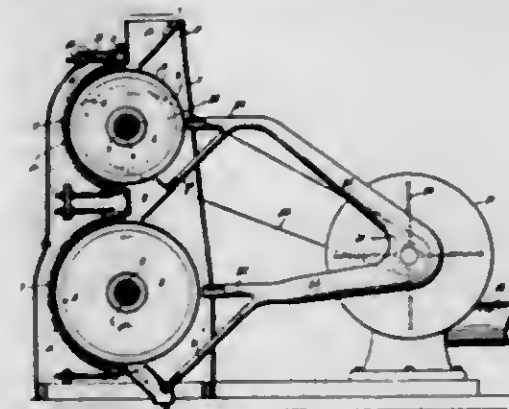
and an intermediate rib, said side ribs having their end portions bent to lie flush against the outer surface of a pair of opposed sides of the pan body and outwardly to form connecting ears, said side ribs and upstanding sides provided with inter-engaging recessed portions whereby the top of the frame will lie flush with the top of the pan body.

1,308,822. FIREPLACE-DAMPER. CHRISTIAN URSTROM, Seattle, Wash. Filed Aug. 12, 1918. Serial No. 249,396. 1 Claim. (Cl. 126-288.)



In combination, a fireplace provided in one side wall with a vertical slot, and in both side walls with aligned bearings, a sectional damper extending across the fireplace and having the adjacent ends of the sections overlapping, means for adjustably fastening the overlapping ends of the damper sections together, a trunnion on each damper section, said trunnions being mounted in the aligned bearings, an arm on the end of one of the trunnions, and a right angular hand rod having its upper end pivoted to one end of the arm and its lower end extended through the slot in the side wall to be accessible from the inside of the fireplace, whereby when the lower end of the hand rod is vertically moved in its slot, the damper will be opened or closed.

1,308,823. COTTON-SEED LINTER. FELIX E. VOORHISE, Dallas, Tex. Filed Dec. 6, 1917. Serial No. 205,848. 4 Claims. (Cl. 13-10.)

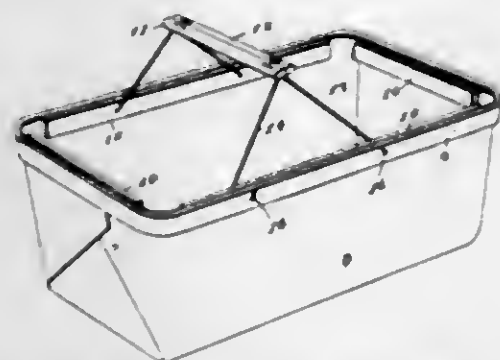


1. In a seed linting machine of the character described, the combination with a casing provided with a feed opening and discharge spout, a plurality of revolving linters comprising wheels fitted with carder points, said wheels being journaled within the casing, a plurality of semi-circular carder plates fitted with points corresponding to the first mentioned points, said carder plates arranged in an engaging relation to the revolving linters, adjustable screws fitted to the carder plates for varying the proximity of engagement of said plates with said revolving linters, suction tubes arranged to take off the lint, and driving means employed for operating the machine.

1,308,824. BASKET. GAINES M. WALKER, St. Louis, Mo. Filed Apr. 22, 1918. Serial No. 230,111. 3 Claims. (Cl. 217-125.)

1. A basket comprising a body portion, a reinforcing strip secured to the top edge thereof, a pair of stiff

handles each of which is pivotally secured on the inside of said basket and passing through the reinforcing strip at a point between the center and the end of the basket, the said wire handles adapted to be folded downwardly away from and toward each other in the bottom of the



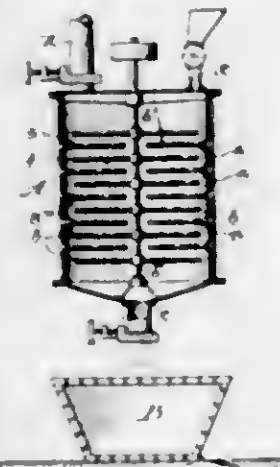
basket, when the handles are out of use, and to be folded upward, toward and in contact with each other when said handles are in use, said handles when folded down and out of use lie wholly on the inside of the basket and in contact with the bottom thereof.

1,308,825. BLOWPIPE ATTACHMENT FOR GRAIN-SEPARATORS. JOHN F. WEGENER, Marion, Kans. Filed Jan. 25, 1919. Serial No. 273,086. 4 Claims. (Cl. 130—17.)



1. An improved blower pipe for grain separating or harvesting machines, comprising a pipe proper having a raised housing portion, said pipe having a wall portion forming an intermediate partition, said partition having openings adjacent either end of the housing and providing upper and lower chambers, a screen in the opening at the end remote from the discharge end of the blower pipe, and baffle plates in the upper chamber having a discharge spout.

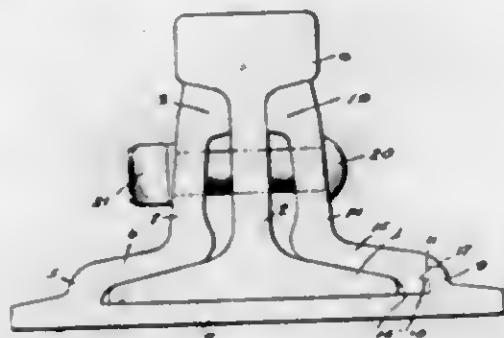
1,308,826. METHOD OF MANUFACTURING CARBONACEOUS FILTERING MEDIUMS. MORITZ WEINSTEIN, Yonkers, N. Y. Filed June 21, 1918. Serial No. 241,192. 3 Claims. (Cl. 127—4.)



1. The manufacture of carbonaceous filtering media consisting in mixing solutions containing sucrose or glucose or both with lime in such proportions and at such temperatures that a chemical combination of the lime and sucrose or glucose will take place obtaining a hard

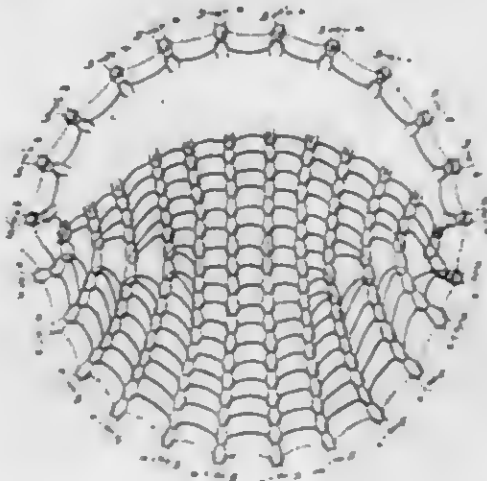
mass; comminuting this mass; then calcining the mass; then cooling the burnt material and then preparing the same for filtering media, substantially as set forth.

1,308,827. RAIL-JOINT. ERNEST C. WILLIAMS, Ruleville, Miss. Filed Oct. 25, 1917. Serial No. 198,372. Renewed May 29, 1919. Serial No. 300,782. 2 Claims. (Cl. 238—198.)



1. A rail joint comprising a base having a plate formed integral along one longitudinal edge, a plurality of ribs formed on the top of the base adjacent the opposite longitudinal edge, said ribs being longitudinally spaced, and a removable plate, said removable plate provided on the bottom with a plurality of longitudinally spaced projections adapted to engage the spaced ribs on the plate.

1,308,828. FACILITATING MECHANICAL TRANSFER OF STITCHES FROM THE NEEDLES OF KNITTING-MACHINES. LOUIS N. D. WILLIAMS, Ogontz, Pa. Filed Feb. 15, 1917. Serial No. 148,755. 1 Claim. (Cl. 66—4.)

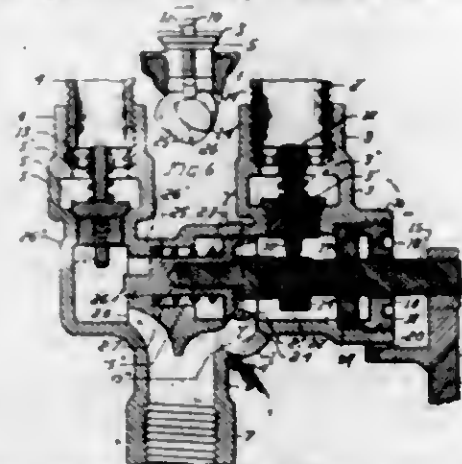


The mode herein described of preparing for transfer the edge of a knitted web produced by partly circular knitting and partly by reciprocating knitting, said mode consisting of adding thereto a complete course of stitches produced by circular knitting, which stitches are adapted for the reception of transfer points.

1,308,829. AUTOMATIC MIXING AND ANTISCALDING VALVE. HARRY L. YOUNG and MATTHEW S. FINCH, St. Joseph, Mo. Filed Feb. 25, 1916. Serial No. 80,371. 1 Claim. (Cl. 277—20.)

In a mixing and anti-scalding valve; a valve body; a mixing chamber formed with said body; an outlet directly connected with said mixing chamber; a piston chamber in said valve body; a water passage connecting said piston chamber with said mixing chamber; a piston valve slidably and rotatably mounted in said piston chamber a spring for moving said piston valve to normally close said passage, said valve being adapted to be slidably moved by pressure of water thereagainst and overcome said spring for opening said passage; a cam shaft rotatably mounted in

said piston chamber; a slidable drive coupling whereby the inner end of said shaft and said piston valve are coupled together; the outer end portion of said cam shaft being extended outside of said valve body; a water inlet valve for admitting water into said piston chamber, said valve being provided with a stem therefor; a steam cam chamber connected with said mixing chamber; a steam inlet valve for admitting a heating agent into said steam cam chamber said valve having a stem therefor; a steam



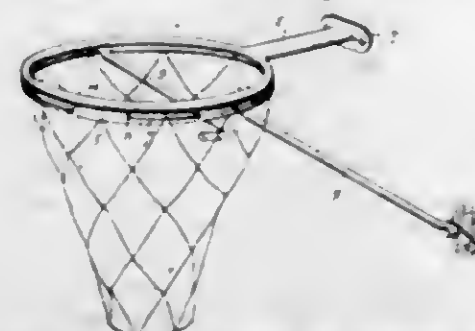
cam in said chamber said cam being formed with said piston valve and being thereby normally held out of active position with relation to the last mentioned valve stem; a handle on the extended end of said cam shaft whereby the same is rotated; and a cam on said shaft beneath the stem of said water inlet valve, said cam being so timed in relation to said steam cam that said water inlet valve is fully opened before said steam cam becomes operative.

1,308,830. JUNCTION-BOX. ALFRED A. ZIEGLER, Boston, Mass. Filed Nov. 6, 1915. Serial No. 60,107. 11 Claims. (Cl. 247—13.)



6. A junction-box including a casing, a removable bottom-plate therefor, a cable-housing rising from the bottom-plate, panel boards separately and detachably mounted on said bottom plate, means removably securing the cable-housing to the bottom-plate, and a cover-plate for the casing.

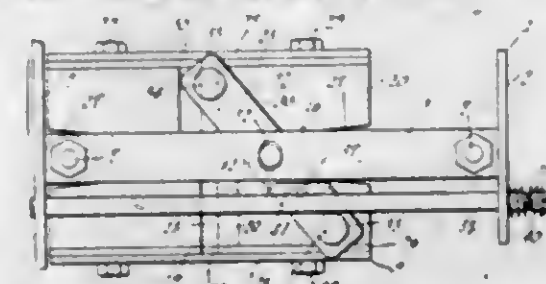
1,308,831. BASKET-BALL GOAL. FRANK ALSBACH, St. Louis, Mo., assignor to Fred Medart Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 28, 1919. Serial No. 279,770. 7 Claims. (Cl. 46—59.)



1. A goal basket comprising an annular rim having a tubular upper portion and a depending annular skirt 264 O. G.—13

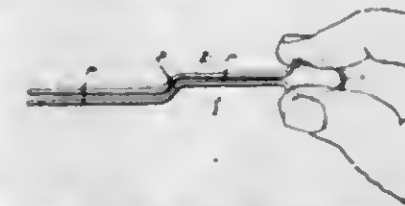
formed with a series of orifices for the passage of the cords forming the depending flexible body of the basket, a horizontal arm carrying said rim, and inclined braces attached at their upper end to said skirt portion, substantially as set forth.

1,308,832. MECHANICAL MOVEMENT. JAMES SHELL-LENBARGER ALSPAUGH, Portsmouth, Ohio. Filed Sept. 23, 1918. Serial No. 253,863. 2 Claims. (Cl. 74—14.)



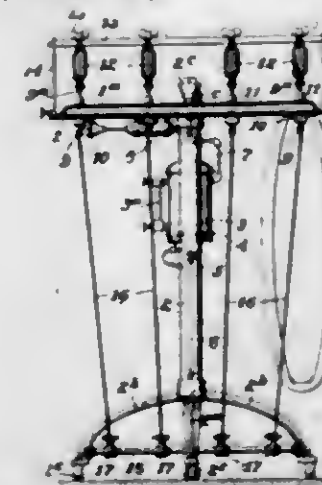
1. In a device of the class described, a frame; a slide mounted for right-line reciprocation on the frame and provided with a groove having oppositely slanting walls adjacent its ends and supplied with abutments disposed opposite to the slanting walls; a swinging member; latches carried by the swinging member and cooperating with the walls, with the abutments, and with the ends of the groove; and means for mounting said member on the frame pivotally for swinging movement, and for endwise movement when either latch cooperates with the corresponding end of the groove.

1,308,833. HAIR-PIN. ERNEST K. ARMSTRONG, Millersburg, Ohio. Filed Oct. 10, 1918. Serial No. 258,477. 2 Claims. (Cl. 132—22.)



2. A hair pin, comprising shank members terminating at one end in an enlarged-prong operating loop head and at the other in anchor shoulders the latter being spaced a substantial distance from said loop head and terminating in off-set prongs having their common axial plane disposed wholly at one side of and substantially parallel with the common axial plane of said shank members, said shank and prong members normally extending in diverging relation and being brought into overlapping parallel relation to each other when closed by said operating loop head for inserting into and removing from the hair.

1,308,834. VULCANIZING APPARATUS. JAMES W. ARTHUR, Akron, Ohio, assignor to The Williams Foundry & Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 7, 1919. Serial No. 270,028. 6 Claims. (Cl. 18—18.)



1. A vulcanizing apparatus comprising a vulcanizing plate having a downwardly facing horizontal surface, a

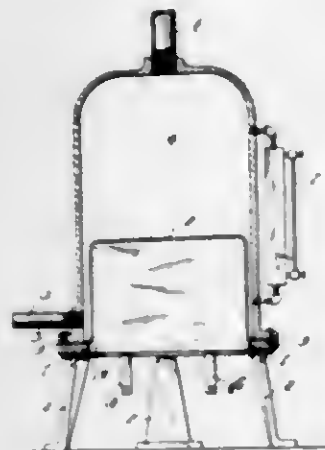
pivoted arm extending substantially horizontally beneath the same, means normally pressing said arm toward the plate, means for swinging the arm away from the plate and a pressure pad having a forked part straddling said arm, and held thereto by frictional contact only, said pressure pad being slidable horizontally on said arm.

1,308,835. LOCOMOTIVE-FEED-WATER HEATER. EARL A. AYRELL, Mount Vernon, N. Y., assignor to Locomotive Feed Water Heater Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 5, 1918. Serial No. 220,826. 4 Claims. (Cl. 60—95.)



1. In a locomotive feed water heating system, the combination of a feed water heater; a feed water supply receptacle; means for effecting the supply, in separated currents, of feed water and of exhaust steam to the heating elements of the heater; means for separating lubricating material from the condensate of the exhaust steam; a drainage conduit connecting the heater with said separating means; a delivery mechanism, interposed in said conduit, for directly applying fluid pressure to the condensate therein, and thereby forcing it from the conduit to the separating means; and means for delivering the condensate from the separating means to the supply receptacle.

1,308,836. HEATER. PIERRE J. H. BERNARD, Montreal, Quebec, Canada. Filed Oct. 22, 1918. Serial No. 259,174. 4 Claims. (Cl. 219—39.)

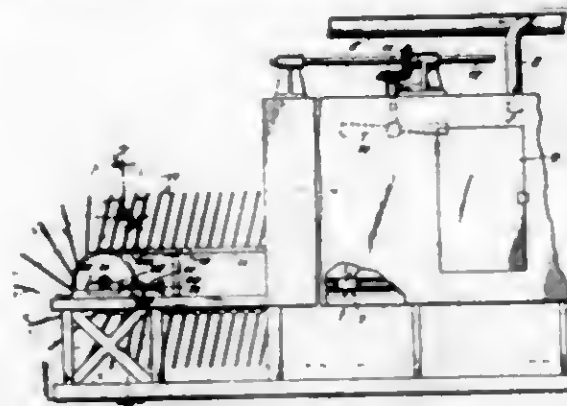


2. An apparatus of the character described comprising a base, a dome-shaped casing secured to said base, a horizontally extending partition secured between said base and dome-shaped casing, said partition having a plurality of vertically extending compartments projecting within said dome-shaped casing, heaters arranged within said compartments, a water inlet and outlet leading to said dome-shaped casing, and means for supporting said heaters within said compartments.

1,308,837. DRYING-OVEN. ALBERT N. BLAKENET, Brooklyn, N. Y., assignor to Metal Package Corporation of New York, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 2, 1918. Serial No. 247,022. 15 Claims. (Cl. 34—12.)

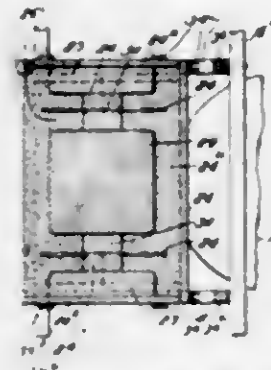
1. In a drying oven, a closure having an opening in either end thereof, a U-shaped track extending through said closure and openings, a carrier adapted to travel on and be supported by said track and to carry thereon the objects to be dried, means for heating said closure, means

for circulating the air therein and an inlet port and outlet pipe independent of the aforesaid openings and connecting



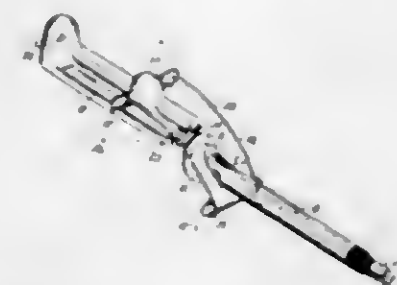
with said closure for allowing air to flow in and escape respectively from the same.

1,308,838. MOLD-MACHINE FOR CONCRETE BUILDING-BLOCKS. LOUIS BRACCO, New York, N. Y. Filed July 1, 1916. Serial No. 107,121. 1 Claim. (Cl. 25—41.)



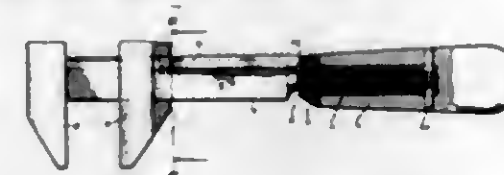
A mold box for forming concrete building blocks provided with a removable center core, removable cores of reduced width at opposite sides of said center core, a pair of hinged side walls for said box, an inwardly extending core secured upon each of said walls, an additional inwardly extending removable core of reduced width carried by each of said last named cores, said cores being adapted to form a block in two separate sections having projections extending toward each other, and a metallic tie supported between said pairs of cores of reduced width to engage said projections and connect said separate sections.

1,308,839. PIERCING AND DECANTING DEVICE FOR SHEET-METAL LIQUID-CONTAINERS. ALEXANDRA CHRISTIA, Newcastle, New South Wales, Australia. Filed Dec. 23, 1918. Serial No. 268,096. 4 Claims. (Cl. 221—23.)



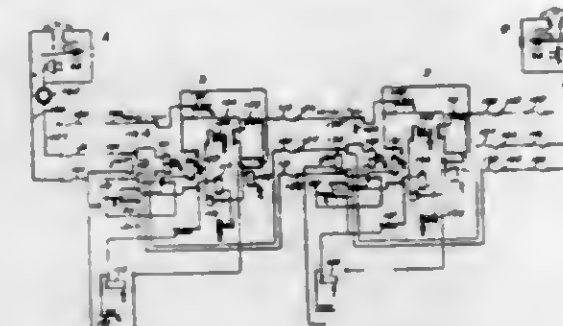
1. An improved piercing and decanting device for sheet metal containers comprising a tube provided with a forward cutter point, an abutment flange rearwardly of the cutter point, a base block adapted to abut a ridge on a wall of the container and position on said wall at right angles to another wall of said container being pierced by said cutter point and resiliently connected to said tube substantially as herein described and explained.

1,308,840. MONKEY-WRENCH. LESTER P. CLARK, Fawcett, N. J., assignor of one-half to Anthony L. Stebor, Jr., Plainfield, N. J. Filed Feb. 8, 1919. Serial No. 275,741. 3 Claims. (Cl. 81—148.)



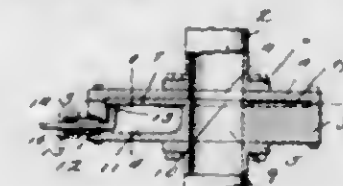
1. A wrench of the character described having a shank, a jaw fixed at one of the shank ends and a movable jaw slidably disposed on the shank, a jamming member extending over the length of the shank and being embedded therein, and means at the handle end of the wrench for lifting the rear end of the jamming member to lock the movable jaw on the shank at the desired place.

1,308,841. AUTOMATIC TELEPHONE SYSTEM. HENRY P. CLAUSEN, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 24, 1918. Serial No. 236,373. 10 Claims. (Cl. 179—18.)



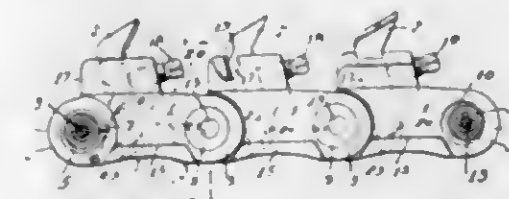
1. In a telephone system, a calling and a called line, senders associated with said lines, automatic switches for interconnecting said lines, means controlled by the operation of the calling subscriber's sender for setting the automatic switches, means for releasing all of the set switches, and means responsive to a definite operation only of the calling subscriber's sender for releasing only a portion of the set switches.

1,308,842. THROTTLE-VALVE. RAY H. CLIFTON, East Peru, Iowa. Filed Sept. 14, 1916. Serial No. 120,106. 1 Claim. (Cl. 251—51.)



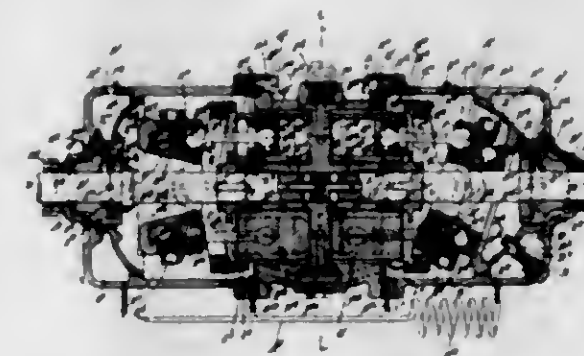
A throttle valve for the fuel feed conduit of an automobile engine, including a relatively thick plate provided with a port transversely therethrough, a relatively thin plate secured to one side of the first named plate and provided with a port registering with the port of the first plate, said plates being formed to provide a slide plate channel therebetween, a slide plate mounted in said channel and provided with a port adapted to register with the ports of the plates, the thick plate being provided with a recess at one side of its port extending longitudinally in the direction of movement of the slide plate and opening into the slide plate passage, an actuating stem slidably passed through one end portion of the thick plate into the recess and having its end therein laterally directed and secured to the slide plate and a packing member surrounding the stem and threaded in the thick plate.

1,308,843. DRIVING-CHAIN FOR MINING-MACHINES. CHARLES E. DAVIS, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1915. Serial No. 26,991. 6 Claims. (Cl. 74—32.)



2. A block for cutter chains for mining machines, comprising a body portion having openings therethrough at opposite ends thereof, a removable bushing in the opening at one end of the body portion and provided with a projecting part which fits into a groove in the body portion, a pin passing through the opening at the other end of said body portion, said pin provided with an eccentric head, the opening at the said other end being enlarged to receive said eccentric head, and means for fastening said pin in position.

1,308,844. HYDRAULIC TRANSMISSION DEVICE. WALTER FERRIS, Milwaukee, Wis., and WILLIAM E. MAGIX, Evansville, Ind. Filed Feb. 26, 1916. Serial No. 80,550. 60 Claims. (Cl. 60—53.)



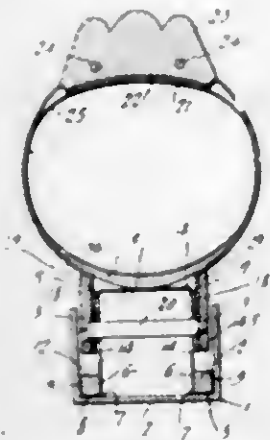
1. A hydraulic transmission comprising a motor and a pump, a pressure chamber contained within and connecting them, a closed housing surrounding them, and means for keeping said closed housing completely full of oil under pressure.

1,308,845. DEODORIZER. HERT W. FLANDERS, New London, Conn., assignor to The New London Chemical Company, New London, Conn., a Corporation of Connecticut. Filed Oct. 6, 1917. Serial No. 195,143. 4 Claims. (Cl. 167—3.)



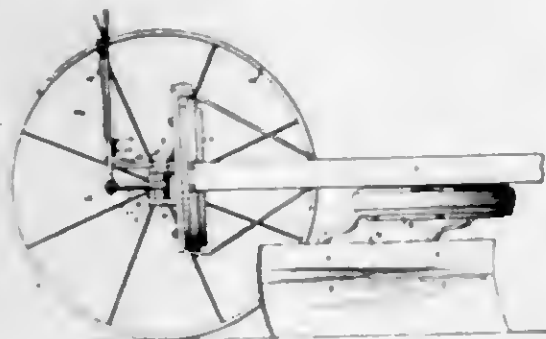
2. A deodorizing apparatus for insertion in a blast of air, the same comprising a tank having slots in its top and bearings in its ends, a skeleton member having a semi-cylindrical body of reticulated material, semi-circular ends, and a main shaft connecting the latter and having trunnions engaging said bearings; a wicking carried by said body, and a blade rising from said shaft and adapted to be struck by the blast of air for turning the skeleton member and raising one end of said wicking through the slot in the top of the tank, into the blast of air.

1,308,846. TIRE. FURNEY F. GREEN, Colgate, Okla. Filed Apr. 13, 1918. Serial No. 228,404. 3 Claims. (Cl. 152-35.)



3. In a device of the class described, a rim comprising a base and side flanges; a tire including a body, and wings received slidably between the side flanges of the rim, the wings having transverse corrugations extended upon the side portions of the body of the tire and terminated in spaced relation to the tread of the tire; and means for supporting the tire yieldingly with respect to the rim.

1,308,847. STEERING MECHANISM FOR ROAD GRADERS. ROYAL A. HAWLEY, Graham, Tex., assignor of one third to J. Driver and one third to John Ruben-koenig, Graham, Tex. Filed Apr. 19, 1915. Serial No. 22,331. Renewed Apr. 29, 1919. Serial No. 293,581. 1 Claim. (Cl. 21-191.)

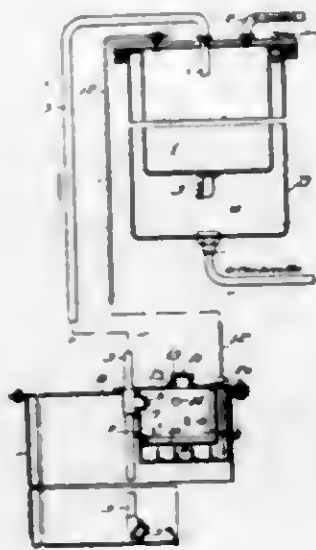


In a steering mechanism for road graders, a box-like hollow axle, a bracket formed at each end by projecting the top and bottom faces of said axle, a vertically arranged plate pivotally supported in each bracket, a stub axle projecting radially from each plate, an arm carried by each plate and a rod connecting the arms, combined with a platform supported by the top of the hollow axle, a hand lever, locking pawl and a sector gear mounted upon said platform, said hand lever pivoted intermediate of its ends to said sector gear and having its lower end connected with said rod, said lever swinging about its pivotal support in a vertical plane.

1,308,848. VACUUM FUEL-FEED DEVICE. WERN JAY, Chicago, Ill. Continuation in part of application Serial No. 206,500, filed Dec. 10, 1917. This application filed Oct. 7, 1918. Serial No. 257,248. 9 Claims. (Cl. 158-36.)

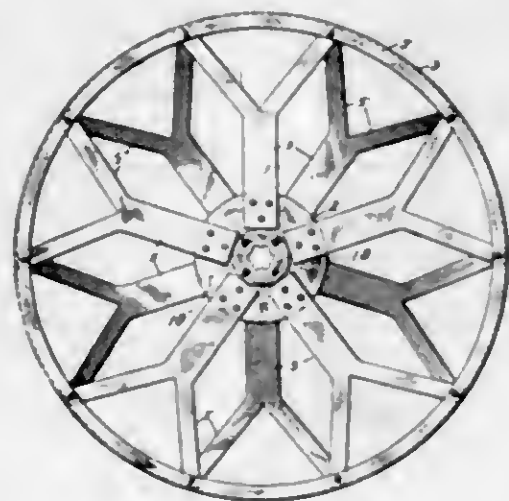
1. A vacuum fuel feed system of the kind in which the fuel is supplied from a main low level supply tank through a liquid fuel conduit, extending from the lower part of said tank, to an elevated supplemental feed tank provided with a vacuum chamber having a suction con-

nection, characterized by a timing chamber open to the atmosphere disassociated from the supplemental tank except as hereinafter specified, provided with means for supplying liquid by gravity to said timing chamber and preventing back-flow therefrom through said means and



having an air conduit from the lowest part of the timing chamber to the upper part of the vacuum chamber adapted to admit air from the timing chamber into the vacuum chamber when the liquid level in said timing chamber is below the intake of said air conduit.

1,308,849. METAL WHEEL. MAURICE LACHMAN, New York, N. Y., assignor to Structural Pressed Steel Wheel Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 17, 1918. Serial No. 250,306. 2 Claims. (Cl. 21-69.)

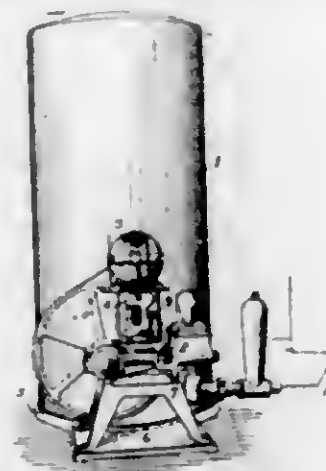


1. A metal wheel having spoke members consisting of Y-shaped metal strips the bodies of which occupy different positions circumferentially on opposite sides of the wheel respectively but having the outer ends of the arms of the Y connected to the rim at substantially the same circumferential point as and for the purpose described.

1,308,850. MOUNTING FOR FLUID-PRESSURE SYSTEM. EVERETT P. LARSH, Dayton, Ohio, assignor to The Burnett-Larsh Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed May 1, 1916. Serial No. 94,806. 11 Claims. (Cl. 103-65.)

1. A mounting of the character described comprising a base adapted to support a tank or reservoir, a lateral ex-

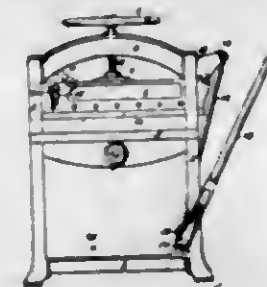
tension on said base, a pedestal located upon said extension and a plurality of superposed spaced shelves upon



said pedestal adapted to support a pump, a cutout and a motor, substantially as specified.

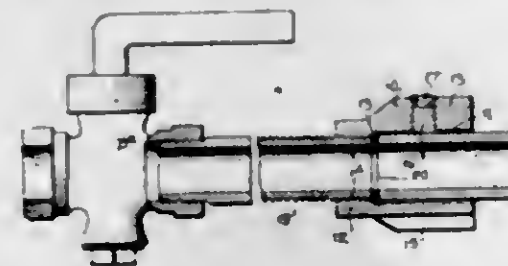
1,308,851. [WITHDRAWN.]

1,308,852. PAPER-CUTTING MACHINE. CHARLES W. LOVELL, Brooklyn, N. Y. Filed Mar. 19, 1919. Serial No. 283,565. 3 Claims. (Cl. 164-53.)



1. In a paper-cutting machine, the combination of a knife-stock mounted for movement in the fixed frame of the machine and arranged for manual operation, a cutting-knife for said knife-stock, a cutting-block of relatively soft material arranged for penetration by said knife, a base fixed to said knife-stock adjacent the fixed frame on the machine, a stop-plate movably mounted on said base and adapted to engage the fixed frame of the machine, and means carried by said base for adjusting the movement of said stop-plate, whereby the cutting movement of the knife is variably limited with respect to the cutting-block.

1,308,853. QUICK-ATTACHABLE PIPE-UNION. GEORGE MCVOY, Scotch Plains, N. J. Filed Dec. 17, 1917. Serial No. 207,568. 4 Claims. (Cl. 285-13.)



1. As an article of manufacture, a pipe fitting comprising a union having a bore, one portion of the bore being relatively large and having a smooth interior face of uniform interior diameter to receive a pipe section and the other portion being relatively small and screw-threaded, set screws passing into the relatively

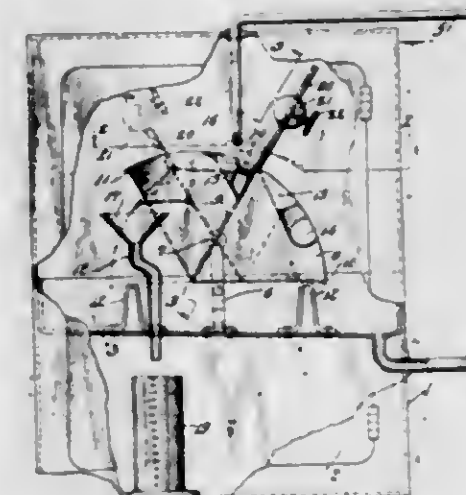
large portion of the bore, there being a shoulder formed at the juncture of the relatively large and small portions of the bore, a gasket disposed in the relatively large portion of the bore and bearing against the shoulder, and a manually operable valve operatively connected to that portion of the union having the relatively small bore.

1,308,854. ADVERTISING TOY. GEORGE H. MERWIN, Milford, Conn. Filed Jan. 13, 1919. Serial No. 270,511. 1 Claim. (Cl. 40-38.)



In a toy of the class described the combination of a handle having a forked lower end portion forming bearings, a spindle mounted in said bearings, a wheel mounted upon the spindle and between the forks, and including disks secured to the opposite sides of the body of the wheel and having illustrations thereon and two hub members mounted in the holes of the disks and having their inner ends spaced apart to form an annular grease pocket between the caps and around the spindle.

1,308,855. LIQUID-MEASURING APPARATUS. GEORGE MOORE, Joplin, Mo. Filed May 17, 1917. Serial No. 169,368. 6 Claims. (Cl. 73-178.)

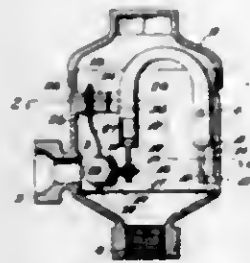


1. In liquid measuring apparatus, the combination of an oscillating container adapted to be moved to and from discharging and filling positions by the weight of liquid supplied to the container, a tallying container communicating with the measuring container and having a capacity bearing a definite ratio with respect to the capacity of the measuring container, and means for delivering liquid from the tallying container at a separate point from the discharge from the measuring container.

1,308,856. THERMOSTATIC VALVE. WILLIAM WINT MOSCAN, Philadelphia, Pa. Filed Apr. 29, 1916. Serial No. 94,295. 4 Claims. (Cl. 236-9.)

1. In a thermostatic valve, a valve body provided with an inlet about which is formed a valve seat, a ball, a depending resilient support for the ball, normally holding

it away from the seat and upon which the ball is capable of turning, a thermal member and a terminal for the



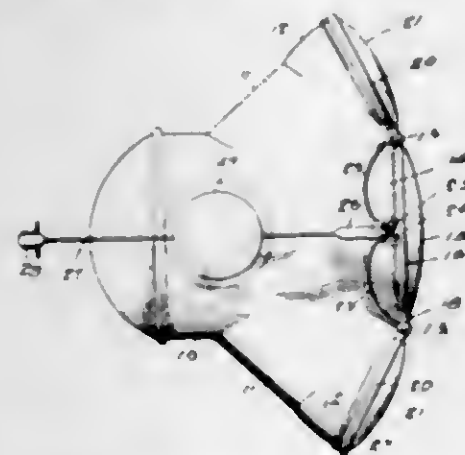
thermal member adapted to engage the ball and force it against the seat.

1,308,857. COMB. LOUIS MYERS, Detroit, Mich., assignor to Crystal Alloys Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 15, 1918. Serial No. 228,920. 1 Claim. (Cl. 132-3.)



A hair comb, comprising a back or shank having a rounded surface, and a series of teeth of uniform rounded cross section throughout their lengths having their inner ends embedded in said back or shank and alternately arranged upon opposite sides of the longitudinal center of said rounded surface and having their outer ends rounded and in substantial alignment.

1,308,858. HEADLIGHT. WILLARD J. NORRIS, Charleston, W. Va. Filed July 23, 1918. Serial No. 240,341. 5 Claims. (Cl. 240-41.)



3. A lamp of the character described, comprising a casing, a main lens connected with the forward end of the casing, angularly adjustable lenses connected with the forward end of the casing and disposed upon opposite sides of the main lens, a carriage longitudinally movably mounted within the casing, a source of light connected with the carriage, a reflector secured to the carriage rearwardly of the source of light and coacting with all of the lenses, and connecting the carriage and angularly adjustable lenses to move them in unison.

1,308,859. RAIL-CLAMP FOR CONVEYING STRUCTURES. ALMON E. NORRIS, Cambridge, Mass. Filed Nov. 13, 1914. Serial No. 872,029. Renewed Nov. 29, 1918. Serial No. 264,721. 42 Claims. (Cl. 188-48.)

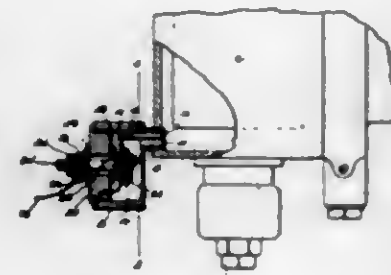
1. A device for securing a structure to a rail comprising jaws for engagement with said rail, a carrier for said jaws, and means for pressing said jaws toward said rail, one of said jaws being movable independently of said means and having provision for automatically increasing

the grip of said jaws on the rail as the structure tends to travel along the same.



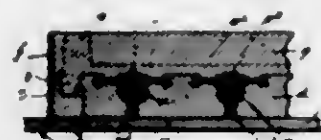
22. A traveling bridge adapted for travel upon a suitable trackway and having a plurality of supporting trucks and provided with a plurality of weight-applied rail clamping devices located at separated points on said bridge structure, a flexible rope or cable connected to each clamping device on the bridge structure, and a common motor for moving the cables to release the clamping devices.

1,308,860. HEATING APPLIANCE FOR CARBURETERS. EDMUND H. O'BRIEN, Kansas City, Mo. Filed Jan. 4, 1919. Serial No. 260,554. 1 Claim. (Cl. 219-35.)



A heating attachment for carbureters comprising a device forming a heating chamber separate from the carburetor and having a stem portion at the top of said chamber for attachment to the carburetor, said stem portion having separate inlet and outlet passages there-through arranged one above the other and providing communication between said carburetor and the top of said heating chamber, the inlet opening into said chamber being at one side thereof and the outlet opening at the opposite side thereof, and an electric heating element disposed in said heating chamber.

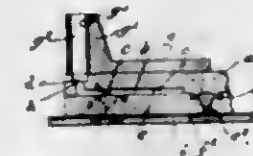
1,308,861. METHOD OR ART OF MAKING MOLDS. CHARLES PACK and LEO FRANK NOCK, Brooklyn, N. Y., assignors to Doehler Die Casting Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 5, 1917. Serial No. 140,708. 7 Claims. (Cl. 22-193.)



1. The method or art of making molds consisting in placing a pattern within a frame upon a slab, flowing plastic composition into the frame, agitating said plastic composition about the pattern, allowing the composition to set, reversing the frame with the plastic mass therein,

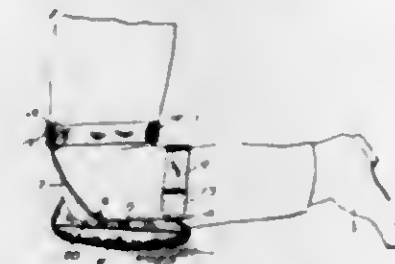
positioning a gate pattern thereon with the lead thereof in engagement with the pattern embedded in the plastic composition, placing a second frame upon said first frame, flowing plastic composition into the said last named frame, allowing said composition to set, separating the frames and drawing the patterns from the plastic mass in each of said frames.

1,308,862. CASTING APPARATUS. CHARLES PACK and LEO FRANK NOCK, Brooklyn, N. Y., assignors to Doehler Die Casting Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 5, 1917. Serial No. 140,710. 3 Claims. (Cl. 22-134.)



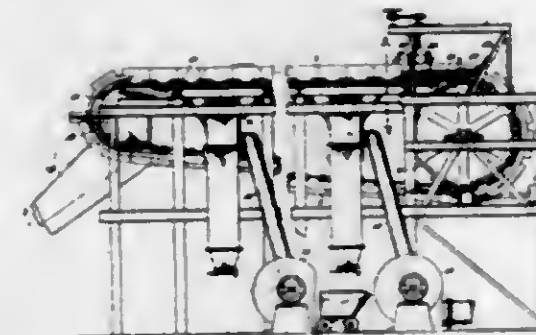
2. A casting apparatus embodying therein a heat conductive base, and a mold formed of plastic composition having a mold cavity, an upwardly opening ingate and a chill opening extending from said mold cavity through the bottom of said mold to said base, said base being adapted to support said mold and conduct heat from the chill opening therein.

1,308,863. KNEE-PAD. LEONARD F. RAYMOND, Bremerton, Wash., assignor of one-half to Chauncey B. King, Bremerton, Wash. Filed Sept. 14, 1918. Serial No. 254,122. 2 Claims. (Cl. 2-130.)



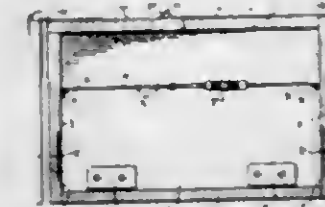
1. A knee pad having a stiff frame in its circumferential edge; two stiff braces pivoted at each side edge of the frame; a strap to engage the free ends of two braces with the leg above the knee, and another strap to engage the other two braces with the leg below the knee.

1,308,864. SINTERING APPARATUS. WILLIAM F. RECKARD, Youngstown, Ohio, assignor to American Sintering Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1918. Serial No. 226,362. 13 Claims. (Cl. 260-21.)



1. In a sintering machine of the type described, the combination with a conveyor comprising a series of pallets, a wind box over which said pallets travel, said pallets and wind box having bearing surfaces adapted to coact to form a wind seal, and mechanism operating to press said bearing surfaces into close contact with each other.

1,308,865. COLLAPSIBLE BOX. VERN E. REICHARD, Perry, N. Y. Filed Apr. 8, 1918. Serial No. 227,345. 2 Claims. (Cl. 217-15.)



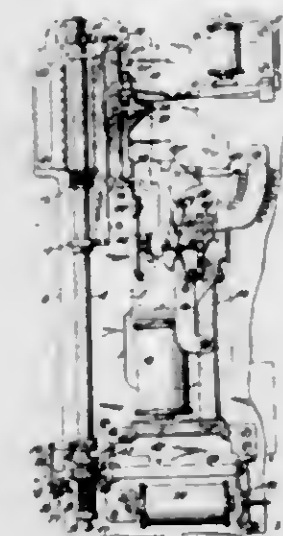
1. In combination with a box body having a face open, the outer faces of opposed walls of the body having their free marginal portions defined by outstanding flanges, a cover panel coacting with the open face of the body, said panel being provided with openings adjacent opposite ends thereof, outstanding shanks carried by the body and disposed through the flanges thereof, the inner ends of said shanks being secured to the outer faces of the walls provided with the flanges, the outer end portions of said shanks being insertible through the openings in the cover panel, and clamp members threaded upon the shank and coacting with the cover panel for holding the same in closed position.

1,308,866. ROTARY TOOTH-BRUSH. WILLIAM T. REMINGTON, Tiffin, Ohio. Filed Mar. 29, 1918. Serial No. 225,559. 2 Claims. (Cl. 15-37.)



1. In a device of the class described, a brush head having a shank extending from one end, a coupling secured to said shank and having an annular groove in its outer face, a casing surrounding said coupling and having an aperture opposite said groove, a brush shield encompassing said head and having a split clamping band at its rear end to clamp around the casing, said band having a rearwardly extending finger with an in-turned lip to pass through said aperture in said casing into said annular coupling groove.

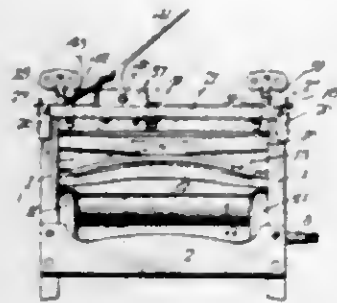
1,308,867. TELEPHONE-EXCHANGE SYSTEM. JOHN NEWBERRY REYNOLDS, Greenwich, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 2, 1917. Serial No. 199,862. 12 Claims. (Cl. 170-27.5.)



1. In an automatic switch, a contact bank comprising terminal sets arranged in sections and groups, a

brush-carrying shaft, an auxiliary shaft, means to operate said auxiliary shaft to control the selection of the desired section, means to operate said brush-carrying shaft and said auxiliary shaft simultaneously to control the selection of the desired group, and means to again operate said auxiliary shaft to control the selection of a desired terminal set.

1,308,868. WRINGER. HERMAN ROEMER, Chicago, Ill. Filed Mar. 3, 1917. Serial No. 152,414. 1 Claim. (Cl. 68-32.)



In a wringer: a frame, a plurality of rolls journaled therein, an abutment piece above the said rolls, a spring device interposed between the abutment piece and the rolls to hold the latter normally in cooperative relation, striker plates on the said frame, a slotted bolt slidable on the abutment piece to engage one of said striker plates, a second bolt having an arched portion overlying the slotted portion of the first named bolt and provided with a slot, said second bolt being slidable on the abutment piece to engage the other of said striker plates, a plurality of plates on the sides of the abutment piece, and a lever pivoted between said plates to engage within the slots of said bolts.

1,308,869. CABLE AND WIRE CLAMP. GABRIEL E. ROEMER, Elmhurst, N. Y., assignor, by mesne assignments, to Clinch Expansion Bolt & Engineering Company, a Corporation of New York. Filed June 16, 1915. Serial No. 31,399. 2 Claims. (Cl. 248-36.)

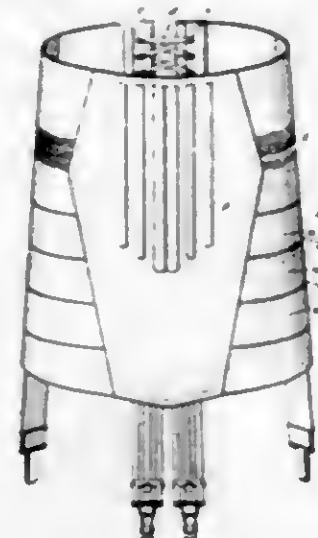


2. The combination with a supporting surface of a cable and wire-supporting clamps, and comprising a wall engaging portion, a hook-shaped portion formed in integral therewith adapted to support therein a cable or the like of relatively large proportions, and provided with a resilient tension member provided with a guiding surface adapted to guide said cable into said hook-shaped portion and adapted to resiliently engage said cable, and a ring-shaped portion adapted to support wires or the like of relatively small proportions independently of said cable supporting portion.

1,308,870. GIRTH. MEYER W. SCHLOSS, New York, N. Y., assignor to Treco Company, Inc., a Corporation of New York. Filed Apr. 10, 1917. Serial No. 160,915. 1 Claim. (Cl. 2-189.)

A girth comprising a flat band of elastic webbing provided with a zone at the region of the waist line which is elastic but less yielding than the body of the band, the

extremities of the band having cooperating fastening devices and the band midway of its extremities being



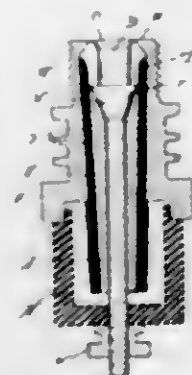
provided with a flat stiffening pad extending across the said zone.

1,308,871. SPARK-PLUG. ALBERT SCHMIDT, Flint, Mich., assignor to Champion Ignition Company, Flint, Mich., a Corporation of Michigan. Filed Jan. 8, 1916. Serial No. 70,904. 2 Claims. (Cl. 123-169.)



1. A spark plug, comprising an outer casing and insulated electrode passing therethrough, an insulator for the inner end of said electrode formed of a mica wrapping about the electrode shank, a series of mica disks sleeved upon said wrapping and shank, a head on said electrode bearing against the inner end of the series of disks, an insulator of a gas-proof material bearing against the inner end of said series of disks and extending outward through said casing, means for forming a gas seal between said casing and the latter insulator, and a clamping collar on the outer end of said electrode forming a sealing engagement with said outer insulator and constituting a means of clamping said series of disks.

1,308,872. SPARK-PLUG AND METHOD OF FORMING THE SAME. ALBERT SCHMIDT, Flint, Mich., assignor to Champion Ignition Company, Flint, Mich., a Corporation of Michigan. Filed Nov. 22, 1917. Serial No. 203,297. 3 Claims. (Cl. 123-169.)



1. In a spark plug the combination with an outer casing, of an inner casing spaced therefrom, an insula-

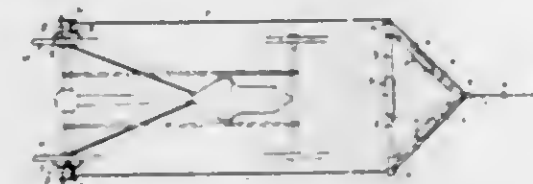
tor compressed between the outer and the inner casings, and an electrode extending through and removably seated in the inner casing and forming therewith a gas-tight seal.

1,308,873. REAR SIGNAL FOR AUTOMOBILES. ROCCO LA SELVA, New York, N. Y. Filed May 6, 1918. Serial No. 232,690. 1 Claim. (Cl. 240-11.)



In a rear signal for automobiles, a casing comprising a lamp container section provided with a central compartment and outer surrounding compartments, the peripheral walls of the central compartment respectively supporting electric signal lamps contained in the outer compartments, the circuit wires for the lamps entering the central compartment from the rear and going to the bases of the lamps through the several walls; and a hood or cover section open in front and hinged along an edge to the container section, the back of the cover section being closed and including transparent legend plates, the closed back as a whole constituting a closure for the container section and the peripheral walls of the cover section being sufficiently deep to give the cover section the qualities of a dark box.

1,308,874. ATTACHMENT FOR MOTOR-DRIVEN VEHICLES. JOSEPH E. STAUFFER, Mount Dora, N. Mex. Filed Apr. 26, 1919. Serial No. 292,798. 2 Claims. (Cl. 234-166.)

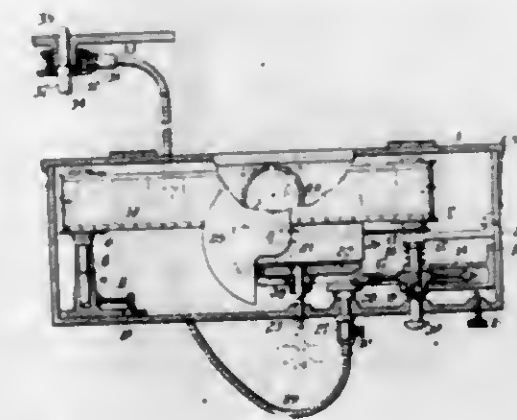


1. An attachment of the character described comprising, in combination, drums adapted to be secured to the driving wheels of a motor driven vehicle, a cable having its extremities engaged with said drums to wind therearound, a spreader coacting with the intermediate portion of the cable, said spreader being substantially triangular in form, pulleys carried by the ends of the base of the spreader and the apex portion thereof, and anchoring means carried by the apex portion of the spreader, the apex portion of the spreader being provided with a forwardly directed arm with which the anchoring means is engaged and which carries the pulley coacting with the apex portion of the spreader.

1,308,875. CINEMATOGRAPH. LUNFORD S. STILES, Brooklyn, N. Y., assignor of one-fourth to John J. Kuhn, New York, N. Y. Filed Mar. 4, 1915. Serial No. 12,014. 5 Claims. (Cl. 88-102.)

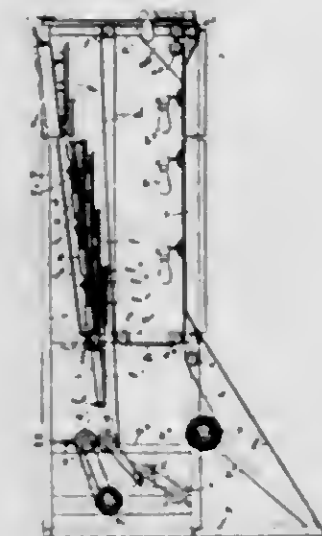
1. In an apparatus of the character stated, a case, a pair of rolls arranged in the case, a film of pictures arranged about the rolls, means to put the film under tension, means on the case for viewing the pictures of the film as they travel under it, a power motor arranged within the case, power transmitting connections between the power motor and one of the rolls, spring actuated

means for normally keeping the power transmitting devices out of operation, and hand controlled means for



opposing the action of the spring and putting said power transmitting devices into operation whereby the power motor may rotate the roll which drives the film.

1,308,876. CINEMATOGRAPHIC TARGET. HENRY B. THOMPSON, New York, N. Y., assignor to Lydia B. Koch, New York, N. Y. Filed Oct. 17, 1917. Serial No. 196,994. 11 Claims. (Cl. 124-15.)

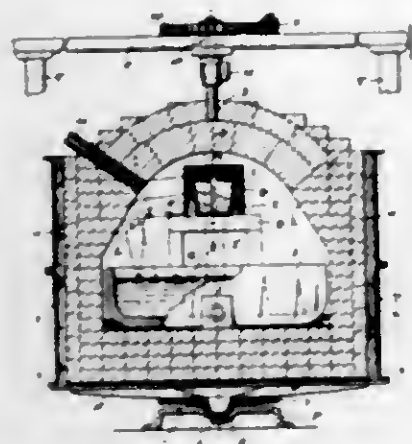


11. A cinematographic target embodying therein an elevated frame having a slight opening therein, means adapted to support a reel of paper strip or web below said frame, guide rollers adapted to conduct said paper strip or web in closely adjacent parallel reaches across the slight opening in said frame, a pair of presser rollers below said guiding means for said paper strip or web between the parallel reaches thereof, and said presser rollers, a rewinding reel below said means simultaneously actuating said presser rollers and said rewinding reel, below said frame, a removable shield forwardly of and below said frame, whereby the various strip feeding mechanisms are protected from stray bullets, and a back plate structure rearwardly of said parallel reaches.

1,308,877. ELECTRIC FURNACE FOR FUSING METALS. JOHN THOMSON, New York, N. Y. Filed Oct. 7, 1918. Serial No. 257,212. 9 Claims. (Cl. 204-64.)

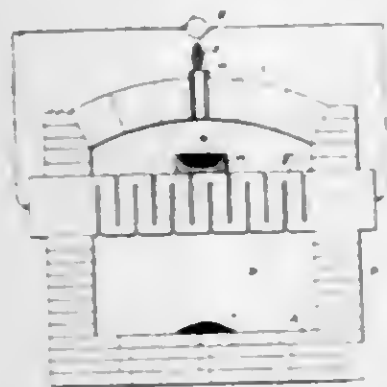
1. In electric furnaces, a suspended carbon resistor disposed along a central longitudinal axis of the furnace-chamber, above an open melting tank, and longitudinally

extending chamber side-walls, sloping inwardly and upwardly, whereby the heat which flows from the correlated



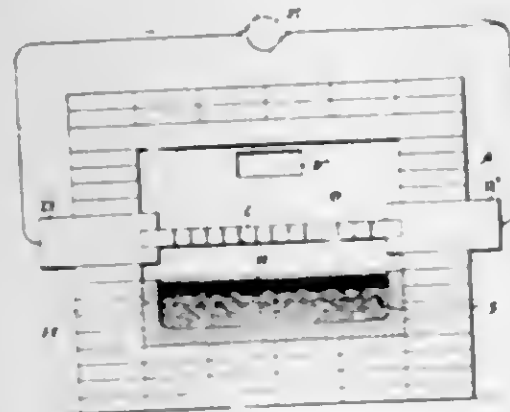
sides of the resistor is directly refracted upon the charge.

1,308,878. METHOD FOR PREVENTING ELECTRIC CARBON RESISTERS FROM OXIDIZING. JOHN THOMSON, New York, N. Y. Filed Oct. 7, 1918. Serial No. 257,213. 4 Claims. (Cl. 204-64.)



1. In electric furnaces, the method of preventing a carbon resistor from oxidizing which consists in locating a charge of oxide of zinc and carbon (ZnO and C) within the resistor chamber and heating the said charge until it reacts and produces zinc fumes and carbon monoxide (Zn and CO).

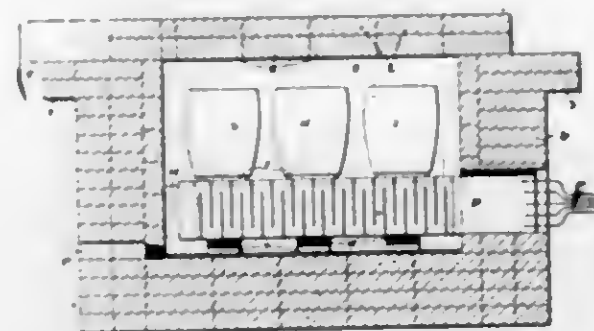
1,308,879. METHOD OF ELIMINATING CARBON DIOXIDE AND OXYGEN IN ELECTRIC SMELTING-FURNACES. JOHN THOMSON, New York, N. Y. Filed Oct. 24, 1918. Serial No. 259,560. 6 Claims. (Cl. 204-63.)



1. In an electric smelting furnace provided with a thermal element formed of carbon whose energy is radi-

ated to an underlying charge, the method of protecting the said thermal element from the erosive attack of CO₂ and O₂ or either of them, which consists in covering the said charge with a layer of filter-carbon and maintaining it at a temperature of about or above eleven hundred degrees centigrade.

1,308,880. ELECTRIC FURNACE FOR FUSING METALS CONTAINED IN CRUCIBLES. JOHN THOMSON, New York, N. Y. Filed Nov. 30, 1918. Serial No. 264,771. 4 Claims. (Cl. 204-64.)



1. An electric furnace for fusing metals contained in a crucible, comprising a chamber, a zigzag carbon resistor disposed along the bottom of said chamber to sustain the crucible, whereby heat may be transferred to the crucible by direct conduction.

1,308,881. SECTIONAL SILO-LADDER. WILLIAM B. TROST and FRANK KLEIN, Waterloo, Iowa, assignors to Waterloo-Playford Silo Company, Waterloo, Iowa, a Corporation of Iowa. Filed Apr. 20, 1918. Serial No. 229,738. 4 Claims. (Cl. 228-47.)

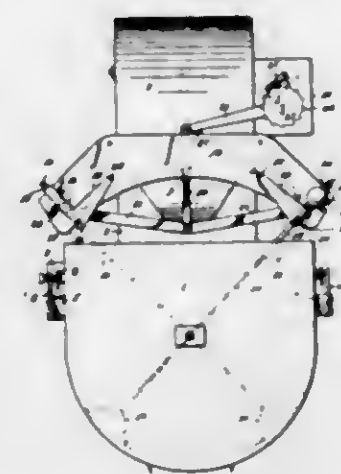


1. The combination with silo hoops or the like, of ladder sections positioned one above another, said sections being pivotally suspended at their upper ends on the adjacent silo hoops, each section being adapted to swing upwardly and then be retained in its upward position by the overlying ladder section thereabove.

1,308,882. GRAIN-WEIGHER. JOHN H. VAN PELT, Peoria, Ill., assignor of one-fourth to Frank W. Volker and one-fourth to Alfred E. Volker, Macomb, Ill. Filed Jan. 22, 1918. Serial No. 213,126. 4 Claims. (Cl. 73-168.)

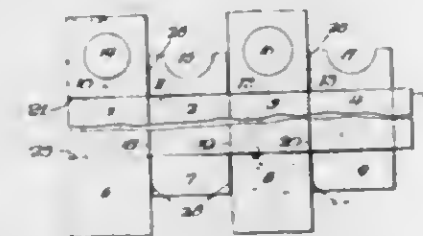
3. The combination of a vertically movable hopper including a poise, a valve pivoted in said hopper adapted to swing to two extreme positions, a support above said

hopper, a latch pivoted to the support at each extreme of travel of the valve, each lying in the path of a part



thereof adapted to be lifted thereby in its travel, and a member for each latch for adjusting it relatively to the path of travel of the said part.

1,308,883. FIBER CONTAINER. WILLIAM CHRISTIAN WEAVER, Monroe, Mich., assignor to The Wels Fibre Container Corporation, Monroe, Mich., a Corporation of Michigan. Filed Jan. 29, 1917. Serial No. 145,080. 5 Claims. (Cl. 220-17.)



1. In combination with a closure, a container formed from a blank having flaps provided with round openings to register when the blank is folded, so that the container has a top formed by the superimposed flaps and provided with a mouth through which the container is filled and to receive said closure by inward insertion of the closure through the mouth, thereby to seal the container after the filling thereof through said mouth, having said openings of different diameters to obviate the necessity of exact registration of the openings in the folding and securing together of said flaps to provide the mouth with a suitable circular edge for receiving said closure to seal the container.

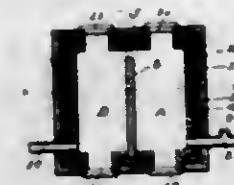
1,308,884. PAINT. WALTER E. WAGNER, Cleveland, Ohio. Filed Aug. 3, 1917. Serial No. 184,207. 5 Claims. (Cl. 134-39.)

1. A paint comprising a metallic pigment, tung oil, an oil adapted to retard the drying of the tung oil, a drying oil other than tung oil, substantially in the proportion, by weight, of from four to fourteen parts of the tung oil, from seven to thirty-five parts of the oil adapted to retard drying of the tung oil, and from nine to twelve parts of the second-mentioned drying oil, to one hundred parts of the pigment.

1,308,885. PROCESS OF AND APPARATUS FOR MAKING HALIDS. LYLE STOCKTON ABBOTT, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed May 11, 1917. Serial No. 167,962. 17 Claims. (Cl. 23-13.)

4. In the manufacture of aluminum chlorid from a reaction mass of alumina and carbon with the aid of

chlorin, the process which comprises keeping up the temperature of such mass by the introduction of the chlorin



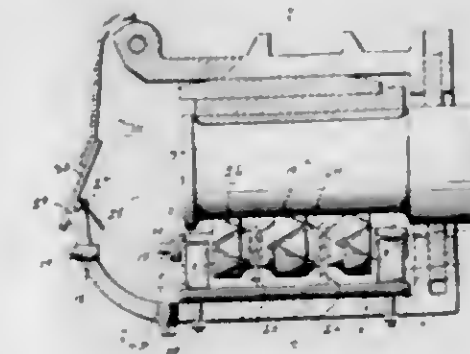
in a preheated state, all or substantially all of the heat so required being so communicated to the reaction mass.

1,308,886. COATING DEVICE. WILLIAM M. HOTLE, Kansas City, Mo., assignor to W. M. Hoyle Manufacturing Company. Filed Nov. 6, 1917. Serial No. 200,556. 1 Claim. (Cl. 91-32.)



A coating device comprising a sectional container, one of said sections being shorter than the other, a branch connection uniting the adjacent ends of the sections, the lower end of the container being closed, a scraping element engaged over the open upper end of the container, a rigid conduit engaged with the branch connection, and a reservoir connected to said conduit having its upper end arranged substantially level with the upper end of the container.

1,308,887. SELF-LUBRICATING DEVICE FOR JOURNAL-BOXES. FREDERICK C. BUELL, St. Augustine, Fla. Filed Feb. 12, 1919. Serial No. 276,498. 14 Claims. (Cl. 64-33.)



1. The combination with a journal box, of an axle having its spindle end journaled in the box, means in frictional contact with the spindle end and given a revoluble movement by its relation with the spindle end, and means loosely carried and suspended on the first means and adapted to swing outwardly by the centrifugal action, agitating and splashing the lubricant in the bottom of the journal box.

1,308,888. GRAIN DRILL. EDWARD W. BEAGAW, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Nov. 22, 1916. Serial No. 132,813. 15 Claims. (Cl. 97-89.)



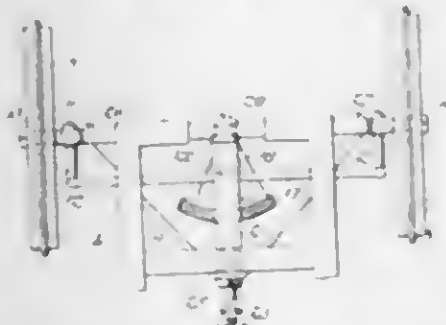
1. A grain drill including, in combination, a wheel frame, traction wheels, a rotatable axle, rising and falling furrow openers, lever mechanism for raising and lowering said furrow openers, a rotatable friction element driven by power transmitted from said traction wheels, and means carried by said lever mechanism and adapted to be operatively connected with said friction element by the movement of said lever mechanism in one direction to assist said mechanism in raising and lowering said furrow openers.

1,308,889. CORNER BEAD CONSTRUCTION. NORMAN ELMORE CLARK, Plainville, Conn., assignor to Robert S. Allyn, trustee, New York, N. Y. Filed Mar. 3, 1919. Serial No. 280,412. 5 Claims. (Cl. 72-121.)



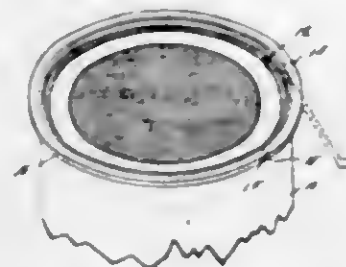
1. A corner bead comprising a self-supporting body member having a nose and side portions and a protecting strip of a uniformly thin non-corrosive metal secured in close intimate contact throughout with the nose portion of the body member to protect the nose of the bead from corrosion when the remainder of the bead is embedded in plaster.

1,308,890. STEERING MECHANISM. ARTHUR COLEMAN, Kansas City, Mo. Filed July 24, 1917. Serial No. 182,530. Renewed Apr. 22, 1919. Serial No. 291,951. 3 Claims. (Cl. 21-198.)



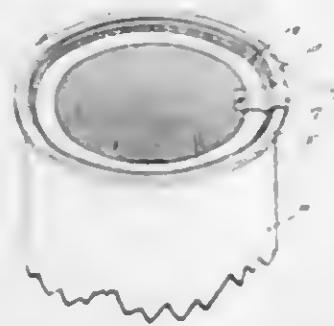
1. In a device of the character described, an axle, a spindle pivoted to each end of the axle on a vertical axis, an arm extending from each spindle, a rod connecting said arms, said axle having a slot intermediate the ends thereof, an arm having connection with the axle and extending rearwardly thereof, a bracket secured to said arm of the axle, a shaft journaled in said bracket, a pinion on said shaft, a segmental shaped member pivoted in the aforesaid slot on the axle, and extending rearwardly under the last mentioned arm and also under and beyond the aforesaid rod, an arcuate shaped rack on said segmental member, in the rear of said rod and meshing with the aforesaid pinion, a connection between the aforesaid connecting rod and the segmental member, and means for rotating said shaft.

1,308,891. CAN. RALPH W. CRAW, Waukesha, Wis. Filed May 23, 1917. Serial No. 170,342. 1 Claim. (Cl. 220-53.)



The combination with a can and cover having mating circumferential flanges, of a sealing ring applied to said circumferential flanges, said sealing ring comprising a strip of material having substantially parallel flanges embracing the circumferential flanges of the can and cover and having abutting ends in the form of short fingers which are stepped and disposed in abutting relation, one contacting the flange of the cap and the other contacting the flange of the can.

1,308,892. CAN. RALPH W. CRAW, Waukesha, Wis. Filed May 23, 1917. Serial No. 170,343. 1 Claim. (Cl. 220-53.)



The combination with a can and cover having mating circumferential flanges, of a U-shaped sealing strip applied to said flanges so as to embrace the same, and a fastening piece externally applied by pressure to the sealing strip so as to embrace the same at the junction of its ends, said fastening strip having a portion overlying the cover free from the sealing strip and capable of being readily lifted to permit withdrawal of the fastening member and consequent exposure of the adjacent ends of the sealing strip.

1,308,893. CHEESE BOX. DELL S. CROSBY, Chicago, Ill. Filed Mar. 23, 1918. Serial No. 221,403. 1 Claim. (Cl. 217-22.)



A cheese box having a bottom and four side walls, the upper surface of the bottom being provided with parallelly

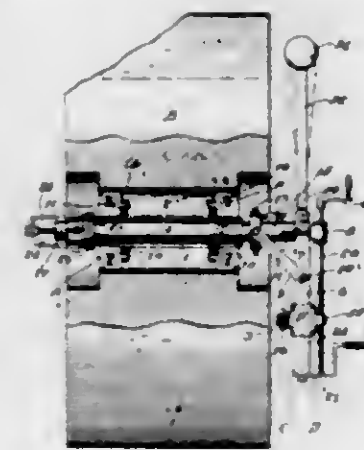
disposed cleats arranged in pairs and extending from end to end of the box, the tops of the cleats being provided with smooth beveled surfaces, with the top surfaces of the cleats of a pair being disposed toward each other and providing cheese-contacting surfaces of comparative width, the height of the cleats, the degree of bevel of the upper surfaces and the distance between the cleats of each pair being correlated so as to permit the marginal edge of the cheese "print" or cake to contact with the upper surfaces of the cleats and the bottom at a point intermediate of the cleats and permit circulation of air intermediate of the cleats and said point of contact of the cheese "print" with the bottom, a plurality of interlocking partition members, of less depth than the depth of the box arranged on said cleats in spaced relation with the bottom of the box, whereby the box is provided with a plurality of compartments permitting circulation of air throughout the tops and bottoms of said compartments, air-admitting openings in opposite side walls of the box adjacent the top and bottom thereof, and a cover member for said box.

1,308,894. FINGER-RING. JULIA DINHORA, New York, N. Y. Filed May 25, 1918. Serial No. 236,980. 1 Claim. (Cl. 93-15.)



A wedding ring or like article comprising a perforated strip of material adapted to hold gems, said strip being concavo-convex in cross section with its concave face on the inside of the ring, and a relatively short engraving receiving plate covering a portion of the concave face of the ring and secured thereto leaving the major portion of said concave face and the rear faces of the gems held in the ring uncovered.

1,308,895. APPARATUS FOR FACING GRINDSTONES. FREDERIC DUGAS, Jay, Me., assignor to International Paper Company, a Corporation of New York. Filed July 14, 1917. Serial No. 180,639. 6 Claims. (Cl. 125-8.)



1. A machine for facing grindstones, comprising in combination, a sustaining frame having means for securing it to the stone, a shaft mounted in said frame and rotatable on an axis extending axially of the stone, an arm movably connected with the shaft and extending radially thereof, a facing tool carried by the arm, a collar adjustable longitudinally on the shaft and connections between the collar and arm.

1,308,896. INTERNAL-COMBUSTION ROTARY ENGINE. CARL O. FARNHAM, Paris, Ill. Filed Nov. 23, 1918. Serial No. 263,800. 18 Claims. (Cl. 123-11.)

1. In an explosion engine, an annular piston chamber, a motor shaft, a piston in said piston chamber rigidly connected with said shaft, a piston in said piston chamber mounted to rotate coaxially of said motor shaft, a jointed

connection between said pistons, an eccentric pin, and a link pivoted to said eccentric pin and pivotally connected to said jointed connection.

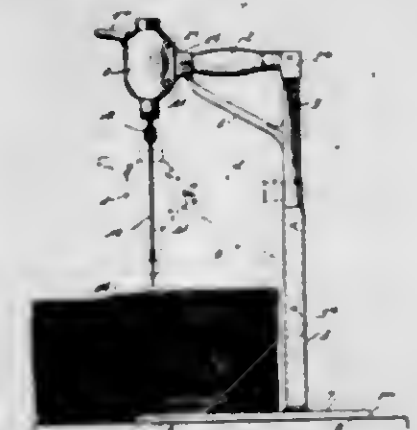


1,308,897. TILTING TRAP. FREDERICK C. FARNSWORTH, Coateshocken, Pa. Filed Sept. 30, 1918. Serial No. 256,167. 4 Claims. (Cl. 137-103.)



4. In a tilting trap, a journal support for the tilting body comprising a unitary casting having a central journal and enlarged end portions each having angular passages therethrough from top to the outer ends in axial alignment with the journal, said enlarged end portions providing shoulders for the respective ends of the journal and having lateral tubular extensions for connection with the body.

1,308,898. CLOTH-DRILLING MACHINE. LAWRENCE J. FOX, New York, N. Y. Filed Nov. 3, 1917. Serial No. 200,188. 3 Claims. (Cl. 77-6.)

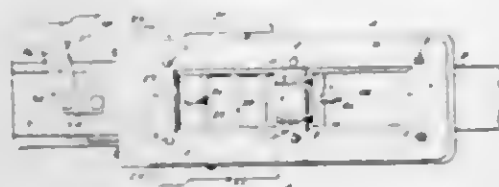


1. A cloth drilling machine comprising a movable base plate freely traversable over a work table, and having a thin edge adapted to slide under a stack of cloth to be bored, a post fixed to said base plate, a vertically movable support mounted on said post, a motor carried by said support, and a vertically disposed drilling needle operated by said motor.

1,308,899. PROCESS FOR TREATING NATURAL SODA. JOSE DE LAS FUENTES, Mexico, Mexico. Filed Jan. 9, 1919. Serial No. 270,415. 1 Claim. (Cl. 23-22.)

The process for separating the carbonates and sesquicarbonates found in natural soda from the other salts that accompany them, which essentially consists in lixiviating natural soda with mother waters from a previous operation instead of fresh water and submitting the resulting solution to the action of dioxide of carbon changing the carbonates and sesquicarbonates into bicarbonate which is precipitated all substantially as described.

1,308,900. DOUBLE-ACTING FUEL CRUSHING AND FEEDING DEVICE. NORMAN E. GEE, Altoona, Pa. Filed Dec. 9, 1918. Serial No. 805,575. 19 Claims. (Cl. 83-52.)



2. In combination, a fuel magazine having a discharge opening in its floor, a crushing and feeding device suspended directly in such opening, and power means operatively applied to such device below the magazine floor.

1,308,901. AUTOMATIC HOG-FEEDER. EUGEN C. GRIFRITH, Springfield, Iowa. Filed Feb. 24, 1919. Serial No. 278,685. 11 Claims. (Cl. 119-54.)

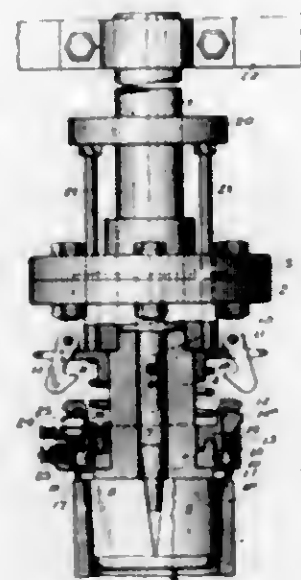


1. In a hog feeder, the combination with feed receiving housing provided with openings in its side wall allowing access to the feed, the bottom of the housing having feed urging means to urge the feed toward the openings, of an animal actuated one-piece oscillatory feed agitator swingingly rising upwardly from the feed urging means and having its upper part extending into the feed above said urging means, said upper part of the agitator being adapted to swing in a direction longitudinally with the urging means for agitating the feed, whereby it may be urged by the feed urging means.

1,308,902. AUTOMATIC TAP. CHARLES E. GROSS, JR., Pittsburgh, Pa. Filed Nov. 20, 1917. Serial No. 203,884. 19 Claims. (Cl. 10-145.)

1. A tap arranged to be applied to the spindle of a tapping machine, comprising a stem, a cutting head having expansible cutters on said stem, a member arranged to enter said cutting head and expand said cutters, resilient means arranged to exert a force tending to withhold said expanding member from operative position, a movably mounted keeper rigidly connected to said expanding member and arranged to engage a portion of said tap and hold said expanding member against the resistance of said resilient means in position to expand said cutters, and a

knock-off ring in said tap arranged to contact the engaging means of said keeper and having a ring adjustable



thereon and arranged to contact the blank being tapped to cause said knock-off ring to release said keeper.

1,308,903. TUNING ATTACHMENT FOR WIND MUSICAL INSTRUMENTS. EDWARD J. GELICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Feb. 20, 1918. Serial No. 218,343. 4 Claims. (Cl. 84-7.)

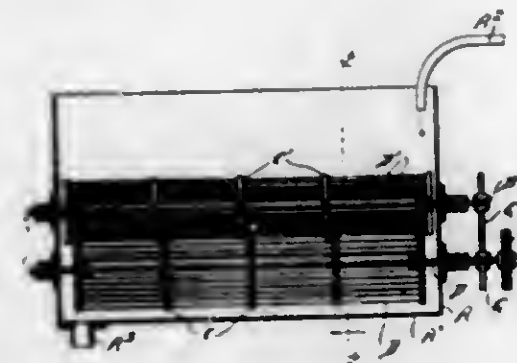


1. A tuning attachment for wind musical instruments comprising a tubular instrument end, a liner tube having an axially sliding bearing within said instrument end, and a sleeve surrounding said liner tube but separated therefrom and providing therewith an annular space extending substantially the length of tuning adjustment and fitting the instrument end, said liner tube and sleeve being united beyond said annular space by a bearing that permits turning but resists axial movement of the sleeve upon the liner tube, means being introduced between the sleeve and instrument end that translates a rotary movement of the one, into an axial movement in the other, and connection being provided between the liner tube and the instrument end which permits axial movement but resists rotation between them.

1,308,904. METHOD OF AERATING LIQUESCENT MATERIAL AND MACHINE FOR THE PURPOSE. MARK HOPKINS and CHARLES BACHENHURST, Middletown, N. Y., assignors to Borden's Condensed Milk Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1918. Serial No. 252,031. 14 Claims. (Cl. 259-104.)

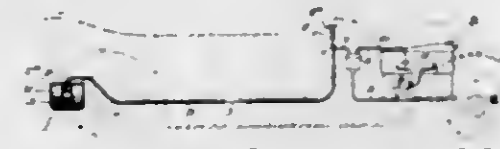
1. In an apparatus for aerating semi-liquid material, a tank, and within said tank a rotatory shaft carrying a plurality of therefrom transversely projecting arms each carrying a group of therefrom transversely extending relatively attenuated rods, in combination with another similar shaft similarly carrying similar arms and rods, the one shaft being superdisposed relatively to the other shaft, and the said shafts being so spaced apart as to per-

mit clearance thereof by said rods and the paths of rods carried by the one shaft to be intersected by paths of



rods carried by the other shaft, and means to synchronously rotate said shafts in opposite directions.

1,308,905. INDICATOR FOR FUEL-TANKS. WERN JAY, Chicago, Ill. Filed May 8, 1918. Serial No. 233,279. 17 Claims. (Cl. 73-82.)



1. A remote indicator for fuel tanks comprising a fuel feed conduit through which liquid fuel flows toward a point of consumption, a device adapted to be located in the fuel tank and to develop mechanical movements from changes of level of liquid therein, a mechanical connector leading from said float and extending through and exposed to contact with the liquid in the fuel conduit and an indicating device controlled by said connector.

1,308,906. SECURING MEANS FOR SEPARABLE MEMBERS. CHARLES M. KOLDENSTETTER, Detroit, Mich. Filed Aug. 24, 1916. Serial No. 116,717. 6 Claims. (Cl. 21-31.)

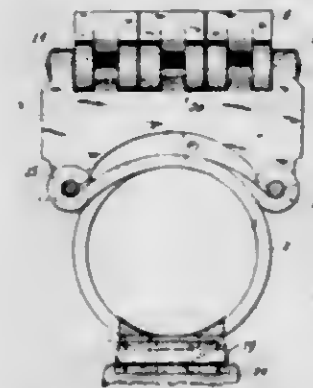


1. The combination with inner and outer members, of a securing member for interlocking with said inner member by relative longitudinal and rotative movements, locking means for said securing members, comprising pivoted locking members carried by said securing member to engage the outer member and prevent rotation of said securing member relative to said outer member, pins carried by said locking members and extending through said securing member, and a spanner wrench adapted to engage said pins and successively turn said locking members upon their pivots to unlock the securing member and then partially rotate said securing member.

1,308,907. MANUFACTURE OF MOLYBDENUM-TUNGSTEN ALLOY. FREDERICK G. KEYES, Hoboken, N. J., assignor to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 16, 1915. Serial No. 56,214. 3 Claims. (Cl. 75-1.)

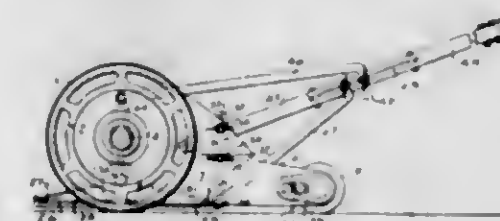
2. A metallic alloy of tungsten and molybdenum in which alloy the molybdenum constitutes approximately twenty per cent. of the entire content.

1,308,908. SPRING-TIRE. ZACHARY KUTCHUK, Southwest, Pa. Filed Oct. 21, 1918. Serial No. 259,088. 1 Claim. (Cl. 152-8.)



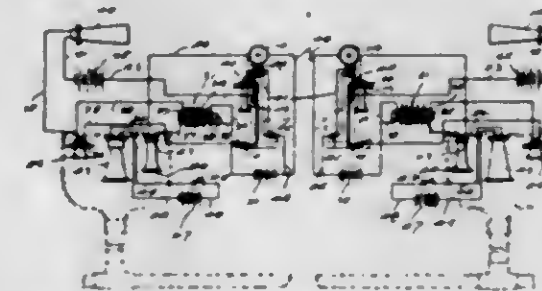
A spring tire comprising a plurality of supporting links flexibly riveted together, spring coils mounted on each of said supporting links, a clamping plate for securing said coils to each of said supporting links, supporting bars carried by the said coils, and a tread chain pivotally mounted in the said supporting bars and consisting of three parallel rows of tread links flexibly riveted together, substantially as described and for the purpose set forth.

1,308,909. MOWER. FREDERICK M. LONDON, Tacoma, Wash. Filed May 28, 1917. Serial No. 171,569. 8 Claims. (Cl. 56-255.)



1. In a lawn mower, the combination with a frame carrying a transverse cutter bar having a forwardly and a rearwardly extending finger; a star wheel cutter mounted on said cutter bar and rotating on a substantially vertical axis; and means for driving said star wheel cutter.

1,308,910. TRAIN-TELEPHONE SYSTEM. JOHN M. McILHANN and HERBERT K. KITTS, Bluefield, W. Va. Filed Jan. 30, 1918. Serial No. 214,511. 1 Claim. (Cl. 179-1.)



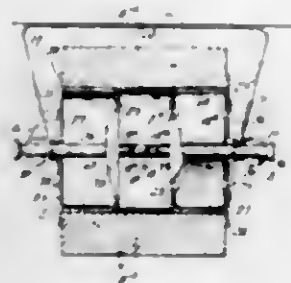
A railway train telephone system including the air of the main line pipe of the air brake system as a conductor,

housings connected to the main line pipe of the air brake system, telephone receivers and transmitters, auxiliary transmitters and receivers located in the housings, electrical means connecting the telephone receivers and transmitters to the auxiliary transmitters and receivers, electrical signaling means in said housings, and signal receivers electrically connected with the auxiliary transmitters.

1,308,911. PROCESS OF MAKING COMPOUNDS OF RARE METALS. ROBERT MCKNIGHT, Pittsburgh, Pa. Filed Oct. 4, 1912. Serial No. 723,992. Renewed Nov. 7, 1918. Serial No. 291,551. 3 Claims. (Cl. 23-13.)

1. The process of making compounds of the rare metals, such as tungsten, vanadium, uranium, molybdenum and tellurium, which consists in melting together a salt of the rare metal and a chloride of one of the alkali metals without any substantial volatilization of the rare metal.

1,308,912. PAPER ROLL AND HOLDER THEREFOR. ROCKWELL MEARS MACCORMAC, Kansas City, Mo. Filed May 2, 1918. Serial No. 232,300. 13 Claims. (Cl. 241-31.)



1. A roll holder adapted for rolls having depressions in their ends, said holder including a support, a divided axle mounted to turn in said support and adapted to receive a roll, and a clamping head on each axle section and adapted to engage the ends of the paper roll, said clamping heads having projections on their inner faces adapted to engage in the roll depressions, to prevent a turning of said clamp heads and their respective axle sections relatively to the paper roll and relatively to each other.

1,308,913. PRIMING CUP. CHARLES P. MINGST, Evansville, Ind. Filed July 18, 1918. Serial No. 245,467. 1 Claim. (Cl. 123-187.5.)

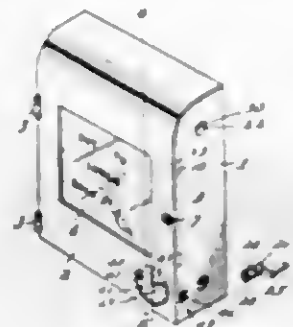


A priming cup which is open at its top and is provided with a valve seat, the upper edge of the open topped cup having a horizontally arranged cam, in combination with a freely vertically slidable and rotatable pin having a valve adapted to engage said seat, said pin being provided with a laterally arranged operating handle resting on the cam and adapted to close the valve when the handle is turned and rides upwardly on the cam.

1,308,914. INDICATOR. IRAN S. PERKINS, Guymon, Okla. Filed Jan. 28, 1918. Serial No. 214,049. 1 Claim. (Cl. 40-86.)

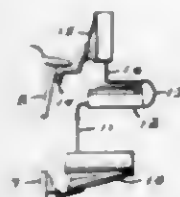
In a device of the character described, a cabinet having a window therein, spools in the upper and lower portions of said cabinet, a ribbon connected to said spools and

bearing information for exposure at the window, a time-piece mounted in the cabinet adjacent to the window for



use in conjunction with information on the window, and winding shafts to the spools and said timepiece adapted to receive an operating key common to all of said shafts.

1,308,915. PLAYER-PIANO. WILLARD L. POLLARD, Chicago, Ill., assignor to The Cable Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1914. Serial No. 851,032. 23 Claims. (Cl. 84-108.)



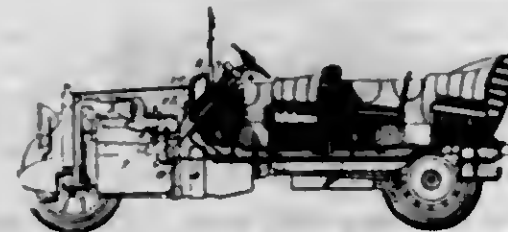
1. A player-piano having piano-action units and a single actuating device for each piano-action unit, and having expression-means whereby one part of a musical composition may be played with a different degree of force relative to another part, and having means whereby said first part may be prevented from being played while the other part is permitted to be played.

1,308,916. OILING MECHANISM FOR ROTARY SHAFTS. FINLEY R. PORTER, Port Jefferson, N. Y., assignor to Knight American Patents Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1918. Serial No. 120,561. 15 Claims. (Cl. 184-27.)



1. A shaft oiler including a rotary hollow shaft, its bearing, an eccentric formed in the shaft between the ends of the bearing, providing a crescent shaped oil space communicating with the interior of the shaft, a pump operated by said eccentric including a fixed guide and a hollow pump rod reciprocable therein, communicating with said space, and means for holding the end of the rod engaged with said eccentric.

1,308,917. DUAL FUEL-FEED SYSTEM FOR INTERNAL-COMBUSTION ENGINES. JAMES R. RICKETTS, Long Beach, Calif. Filed Mar. 2, 1917. Serial No. 153,460. 8 Claims. (Cl. 158-36.)



1. A dual fuel feed system for internal combustion engines comprising separate gravity and pressure fuel tanks, a carburetor, and automatic valve means intermediate of said tanks and said carburetor, whereby either of said fuels may be selectively supplied to said carburetor.

1,308,918. APPARATUS FOR SEPARATING LIQUID FROM SOLID MATTER. FREDERICK J. SCHWABE, Piqua, Ohio, assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Filed July 16, 1917. Serial No. 180,718. 19 Claims. (Cl. 210-12.)



1. In an apparatus for separating solid matter from liquids, the combination of a plurality of upright separating containers having movable walls and open lower ends and having provision for filling the containers, means for supporting said containers in upright position, means for closing the lower ends of said containers, expandable compression devices arranged between adjacent containers, means for confining said containers and compression devices, and means for expanding said compression devices to compress the contents of said containers, said closing means being operable to close and open the lower ends of said separating containers without disturbing the supporting means for the containers.

2. In an apparatus for separating solid matter from liquids, the combination of a plurality of upright compressible separating containers having pervious walls and open lower ends and having provision for filling the containers, means for supporting said containers in upright position, means for closing the lower ends of said containers, expandable compression devices arranged between adjacent containers, means for confining said containers and compression devices, and means for expanding said compression devices to compress said containers and express liquid from the contents thereof, said closing means being operable to close and open the lower ends of said separating containers without disturbing the supporting means for the containers.

3. In an apparatus for separating solid matter from liquids, the combination of a plurality of separating bags of pervious material suspended with their open ends downward and having provision for filling the bags,

means for closing the lower ends of the bags, expandable compression devices arranged between adjacent bags, means for confining said bags and compression devices, and means for expanding said compression devices to compress said bags and express liquid from the contents thereof.

4. In an apparatus for separating solid matter from liquids, the combination of a plurality of separating bags of pervious material suspended with their open ends downward and having provision for filling the bags, means for closing the lower ends of the bags, bags of impervious material arranged between adjacent separating bags, means for confining said bags, and means for expanding said impervious bags for expressing liquid from the contents of said separating bags.

5. In an apparatus for separating solid matter from liquids, the combination of a plurality of separating containers having movable walls and having provision for filling the containers, expandable compression devices arranged between adjacent containers, means for confining said containers and compression devices, and means for expanding said compression devices to compress the contents of said containers, said separating containers having parts adapted to be opened while said containers remain in said confining means to discharge the solid matter from said containers.

1,308,919. PRESSURE-SYRINGE AND SUBCUTANEOUS NEEDLE. JOHN A. E. SELLAR, Everett, Mass., assignor to The Randall-Falchney Company, Inc., a Corporation of Massachusetts. Filed July 23, 1918. Serial No. 246,369. 4 Claims. (Cl. 128-215.)

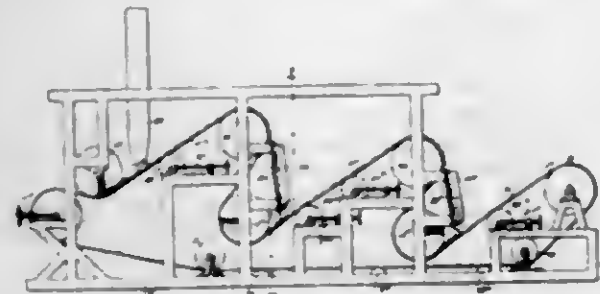


1. A hypodermic syringe comprising a barrel, a neck at one end of said barrel having a passage extending therethrough, a stopper held in said passage by frictional contact with said neck and a piston fitting into said barrel, in combination with a hypodermic needle, a hub for said hypodermic needle having a duct extending longitudinally thereof and a passage extending laterally of said hub into said longitudinal duct, an extension on said hub projecting longitudinally thereof beyond said lateral passage and toward said neck, the diameter of said projection being smaller than the smallest diameter of the passage in said neck, whereby said stopper may be ejected from said neck into said barrel, and a flexible tubular member connecting said neck and said hub.

1,308,920. SEPARATOR. HORACE HOLLY SMITH, Tacoma, Wash. Filed June 28, 1918. Serial No. 242,455. 14 Claims. (Cl. 83-54.)

2. A separator of the class described including an endless belt presenting an incline and having in the working

face thereof alternate grooves and ribs running with the direction of travel of the bolt, and a transverse sep-



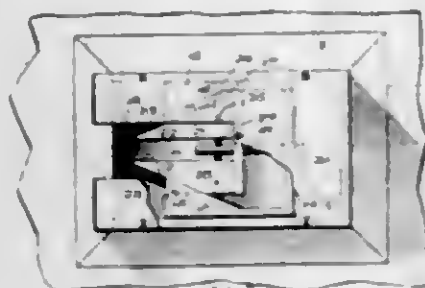
arator screw, the convolutions of which lie in the same cylindrical surface.

1,308,921. BEET-TOPPING DEVICE. MARION A. SMITH, Salt Lake City, Utah. Filed Nov. 4, 1918. Serial No. 261,166. 4 Claims. (Cl. 55-197.)



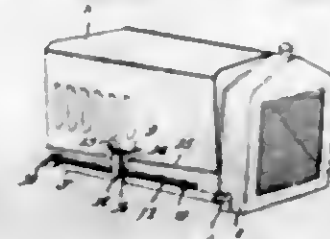
1. A beet topping device consisting on an inverted U-shaped frame; a sleeve vertically suspended in said frame; a bar carried in said sleeve having its lower end bifurcated; a disk journaled in the bifurcated portions of said bar; horizontally disposed braces fastened to said bar; a topping knife fastened at the end of said braces; rocking shafts journaled in portions of said braces; rearwardly projecting arms normally parallel; beet engaging arms on the lower ends of said rocking shafts to direct said disk and topping knife to the individual beet; and springs adapted to bear against said rearwardly projecting arms and yield to the pressure of the beet engaging arms to return said shafts to normal position.

1,308,922. AUTOMATIC VISE AND STOP FOR WORK BENCHES. WALTER SOPHER and IRA A. HAMMOND, Alhambra, Nehr. Filed Feb. 14, 1918. Serial No. 217,162. Renewed Nov. 26, 1918. Serial No. 264,248. 4 Claims. (Cl. 144-307.)



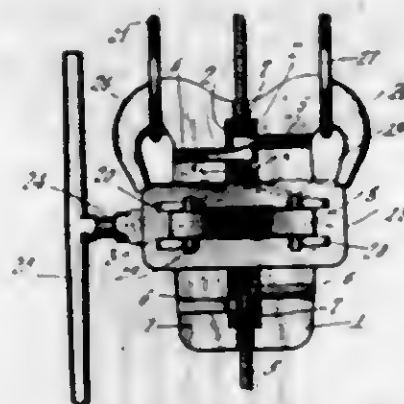
1. In an automatic vise and stop for work benches, the combination with slidable jaws, of a slidable closing device therefor, said jaws and closing device having engaging inclined faces, whereby the jaws may be closed when the closing device is moved in one direction, and operating means for the closing device arranged so as to be engaged by the article which is to be held by the jaws.

1,308,923. HOOD-LIFT MOTOR-VENTILATOR. ARTHUR E. ASHLEY, Boise, Idaho. Filed July 1, 1918. Serial No. 242,818. 2 Claims. (Cl. 74-56.)



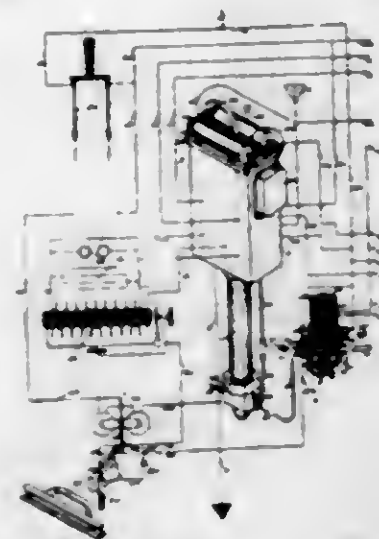
1. In a hood supporting device, a rod, a block rotatably supported by the rod, means for holding the rod in fixed relation to a frame of the automobile, said block having a notch to receive a portion of the hood.

1,308,924. WIRE-LINE CLAMP. THOMAS W. BELL and THOMAS C. ROGERS, Sistersville, W. Va. Filed Oct. 21, 1918. Serial No. 269,010. 4 Claims. (Cl. 24-135.)



3. In a device of the class described, cooperating jaws having recesses in their inner edges, the jaws having rearwardly extended lugs and being provided with forwardly extended arms, the jaws having rearwardly extended ribs projecting beyond the bases of the recesses; removable retainers on the arms; grips in the recesses and held therein by the projecting portions of the ribs and by the retainers; means for pivotally connecting the ribs of the respective jaws; a link receiving the lugs; and a tightening means connecting the arms.

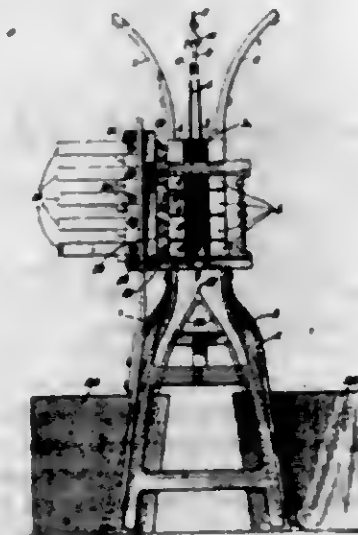
1,308,925. WIRELESS AND AUTOMATIC RAILWAY SAFETY SYSTEM. HARRY D. BETZ, Kansas City, Mo. Filed Mar. 1, 1915. Serial No. 11,416. 12 Claims. (Cl. 250-2.)



1. A wireless apparatus comprising sending and receiving instruments, circuits for the sending and receiv-

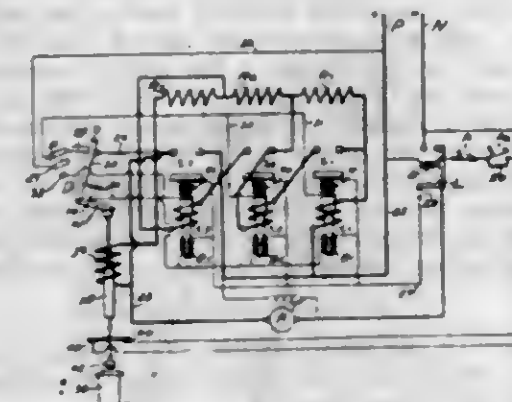
ing instruments having common antennae and ground members, separate contacts in the circuits, a switch for alternately connecting the circuit contacts with the antennae and ground members, a primary circuit for the sending instrument having contact points adapted for connection by said switch when the parts are in sending position, a coherer device in the receiving instrument comprising movable contacts, and connection between the switch and movable contacts for automatically withdrawing said contact members from the coherer to render the receiving instruments inoperative when the parts are in sending position.

1,308,926. CASTING-MACHINE. JOHN BURKHARDT, New York, N. Y. Filed Nov. 7, 1916. Serial No. 129,957. 8 Claims. (Cl. 22-60.)



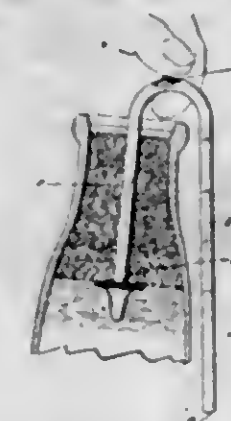
1. In a casting machine, the combination of two series of mold blocks adapted, when brought together, to cooperate with each other to form complete molds, the blocks of each series loosely arranged upon one another, means connected with the lowermost block of each series for supporting, raising or lowering the said series, means for forcing the corresponding mold blocks of the two series together for the casting operation, and means for separating them after the operation to discharge the cast articles.

1,308,927. MOTOR-CONTROL SYSTEM. HARRY R. CASFIELD, Cleveland, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 6, 1916. Serial No. 89,264. 19 Claims. (Cl. 172-288.)



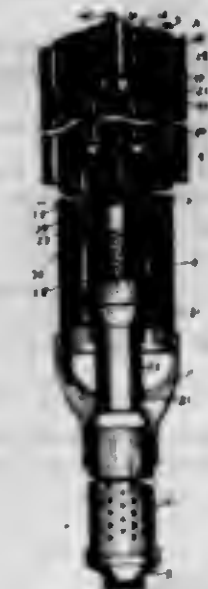
9. In a motor control system, a motor, a motor circuit, starting resistance in the circuit, switches for cutting out the resistance to start the motor, and maintaining the current within predetermined limits, and means controlled by the motor for increasing the predetermined limits at which the switch functions.

1,308,928. CREAM-EXTRACTOR. JOHN E. CARLSON, Hartford, Conn. Filed Feb. 6, 1919. Serial No. 275,351. 4 Claims. (Cl. 137-20.)



3. A device for siphoning liquid from a container comprising a U-shaped tube having a short and a long leg, the end of the short leg being turned upward and a cap closing said upturned end, and said tube having a vent opening at the bend whereby the siphon may be primed by the successive insertion of the long leg and the short leg in the liquid in the container and the proper regulation of the vent and of the ends of the siphon.

1,308,929. METHOD OF AND APPARATUS FOR SULFUR-MINING. ROBERT E. CARMICHAEL, Damon, Tex., assignor of one-half to George Hamman, Houston, Tex. Filed Apr. 20, 1918. Serial No. 229,859. 26 Claims. (Cl. 262-3.)

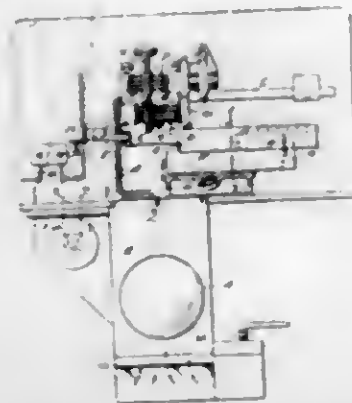


1. A device for sulfur mining comprising a casing, a pipe projecting below said casing and perforated toward its lower end, a slidable pipe within the first pipe, means to close the passage between the two said pipes; a third pipe within said slidable pipe, perforated toward its lower end, a fourth pipe within the third pipe, a closure toward the lower end thereof and closing the passage between the third and fourth pipes, an inner air pipe in the system and fluid connections at the upper ends of each of the pipes except the slidable pipe, whereby heated fluid may be directed around the lower end of said slidable pipe.

1,308,930. HUMIDITY AND TEMPERATURE REGULATOR AND THE LIKE. WILLIAM H. CANEYER, Buffalo, N. Y., assignor to Buffalo Forge Company, Buffalo, N. Y. Filed Apr. 14, 1915. Serial No. 21,264. 6 Claims. (Cl. 236-27.)

1. In an instrument of the character stated, a thermoresponsive element comprising a closed outer container of substantially fixed volume partially filled with a volatile

liquid adapted to produce vapor pressure in said container which varies with normal changes in the temperature of the atmosphere affecting said container, and an inner container inclosed within said outer container and having a flexible wall exposed to the pressure of the vapor generated in said outer container, and a pressure-



operated motor having a pressure chamber communicating with the interior of said inner container, said inner container, motor chamber and their connection being filled with a non-compressible pressure transmitting medium, and said flexible wall being adapted to transmit the pressure of said vapor to said pressure transmitting medium.

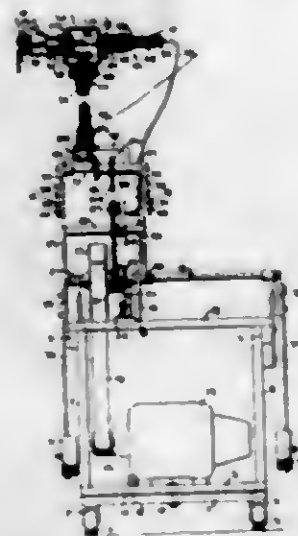
1,308,931. PROCESS OF TREATING LIME. CHARLES CATLETT, Staunton, Va. Original application filed May 9, 1918, Serial No. 233,564. Divided and this application filed Sept. 23, 1918. Serial No. 255,389. 13 Claims. (Cl. 106-29.)

1. The process of producing lime compositions which comprises mixing lime and a pulverulent oxy salt with water.

1,308,932. CEMENTITIOUS COMPOSITION AND METHOD OF PREPARING SAME. CHARLES CATLETT, Staunton, Va. Filed Sept. 23, 1918. Serial No. 255,390. 18 Claims. (Cl. 106-25.)

1. The method of preparing hydraulic cement compositions which comprises intimately commingling with a hydraulic cement, substantially dry material comprising an oxy salt.

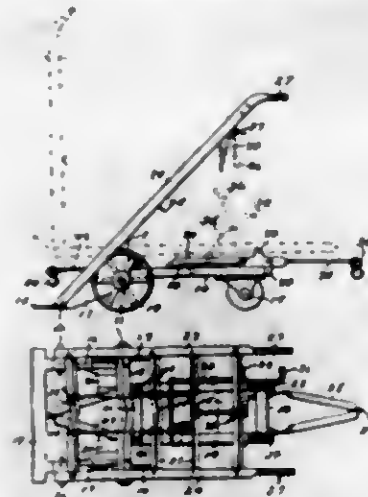
1,308,933. GRINDING OR POLISHING MACHINE. ENCOLE CAVICCHI, Quincy, Mass. Filed Aug. 2, 1916. Serial No. 112,649. 25 Claims. (Cl. 51-11.)



1. A wall polishing machine comprising a stand, an arm pivotally mounted thereon formed of pivotally connected sections movable in vertical planes, and polishing

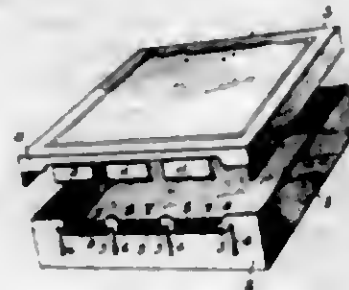
means carried by the free end of said arm presenting a flat polishing face lying in a vertical plane, whereby said polishing means is adapted to be moved in any direction upon a vertical wall and thereby to polish the surface thereof.

1,308,934. COMBINED TILTING AND PLATFORM TRUCK. JOHN LOCCEN CHERNUTT, Kansas City, Mo., assignor to The Chernutt Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Dec. 29, 1917. Serial No. 209,469. 17 Claims. (Cl. 21-65.)



1. The combination of a wheeled truck frame, a load-engaging member substantially triangular in side elevation pivoted at its lower rear corner on said wheeled frame, and manually controlled means pivoted on the forward corner and adapted to engage the rear corner for oscillating said load-engaging member.

1,308,935. HINGE FOR METAL BOXES OR CANS. JAMES J. COOK, Baltimore, Md. Filed July 8, 1918. Serial No. 243,851. 9 Claims. (Cl. 220-32.)



4. A hinge comprising the body member having a wall provided with a horizontal slit spaced from the upper edge of said wall to define a bar which constitutes the pintle, said bar being given an increased transverse spread and a rounded form by means substantially as described, and the lid having a tongue extending therefrom and adapted to be passed through said slit and bent into tubular form to enclose said bar and turn thereon, and vertical strengthening ribs formed in said wall and extending across the ends of the slit but spaced therefrom.

1,308,936. CLINKER-BURNER. JAY COOK, Coldwater, Mich. Filed Feb. 26, 1919. Serial No. 279,462. 1 Claim. (Cl. 158-91.)

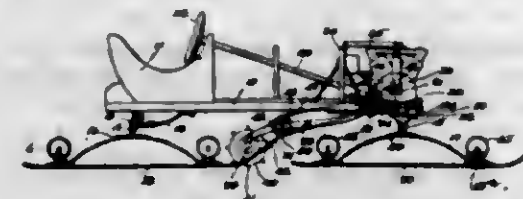
In a device of the class described, a hollow base having an imperforate bottom and a top concaved downwardly from its periphery to its center, the top being provided with a perforation; means for admitting liquid fuel to the base; a spreader adjustable on the supports toward and away from the base and having its lower surface con-

vexed downwardly from its periphery to its center into approximate parallelism with the top of the base; and adjusting devices on the supports, the adjusting devices



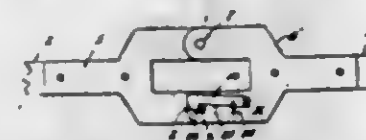
cooperating with the upper and lower surfaces of the spreader and being movable longitudinally of the supports to adjust the position of the spreader with respect to the top of the base.

1,308,937. MOTOR-SLEIGH. NEWTON CRANE, Boston, Mass. Filed July 13, 1917. Serial No. 180,312. 9 Claims. (Cl. 180-6.)



1. In a motor sleigh the combination with a sleigh body, motor, and propelling means, of runners which are resilient and light in weight, comprising each a base member and an upwardly bowed relatively thin and wide spring member connected at its ends to said base member and at an intermediate point to said body.

1,308,938. DRAFT-BAR. PATRICK L. DONOVAN, Toulon, Ill. Filed Apr. 18, 1918. Serial No. 229,388. 4 Claims. (Cl. 55-150.)



2. A draft bar consisting of two sections pivotally connected at one of their ends, a pin extending from one of them spaced from the pivot of the sections in a direction substantially perpendicular to the longest measurement of the said section, and a latch normally elastically held in the path of the pin and engaged by said pin when the sections are brought into alignment.

1,308,939. STAKE. ROBERT N. ECCLESTON, Muskogee, Okla., assignor to Pull-U-Out Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed May 29, 1914. Serial No. 841,899. 7 Claims. (Cl. 189-90.)



7. A ground anchor consisting of a relatively thin, flat web provided at its upper end with a bifurcated portion that projects laterally from the rear side of the stake

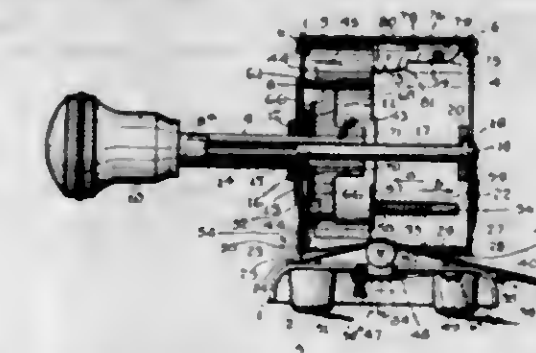
and having a reinforced flange that extends longitudinally of the web at approximately right angles to the face of the web and whose upper end is integrally connected to said bifurcated portion.

1,308,940. GROUND-STAKE. ROBERT N. ECCLESTON, St. Louis, Mo., assignor to Multipoll Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 27, 1916. Serial No. 183,712. 5 Claims. (Cl. 189-90.)



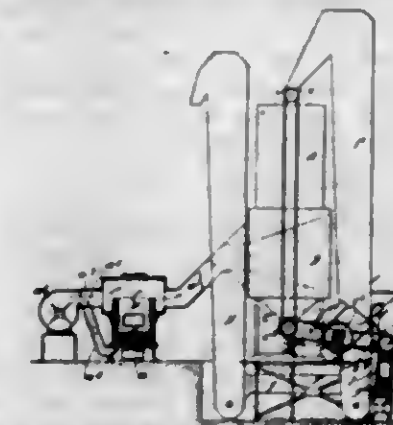
5. A ground stake provided at its upper end with a notch for receiving the link of a chain, lugs on the rear side of said stake that form an abutment for the adjacent link of the chain, and a ball on the rear side of the stake under which the chain is adapted to be passed, said ball being arranged below the notch in the upper end of the stake.

1,308,941. CHECKWHITER. BENJAMIN O. FANLOW, Rye, N. Y. Filed Sept. 13, 1916. Serial No. 119,854. 27 Claims. (Cl. 197-64.)



18. In a check protecting machine, a support for the check over which it may be fed; a rotary platen and means for mounting the same in the support so that it shall at all times project through the latter; a printing wheel, provided with type-blocks of varying length, journaled to rotate above said support and to move over and in engagement with said platen; and means whereby the wheel may be moved from one side to the other of the platen in engagement with the latter to print and variably feed the check according to the character printed.

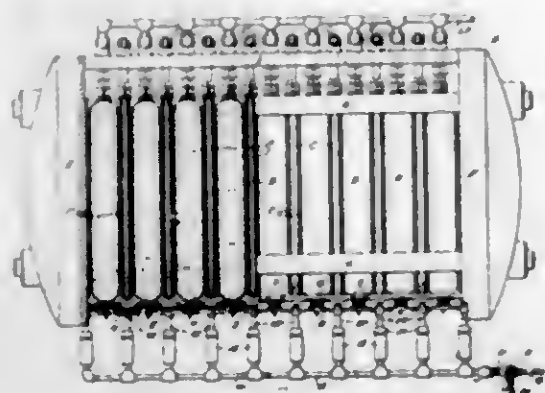
1,308,942. METHOD OF AND APPARATUS FOR DRYING STONE OR OTHER MATERIAL. ALFRED W. FRENCH, Piqua, Ohio. Filed June 21, 1915. Serial No. 35,232. 10 Claims. (Cl. 34-37.)



1. The herein described method of removing moisture from fine stone consisting in heating a quantity of stone,

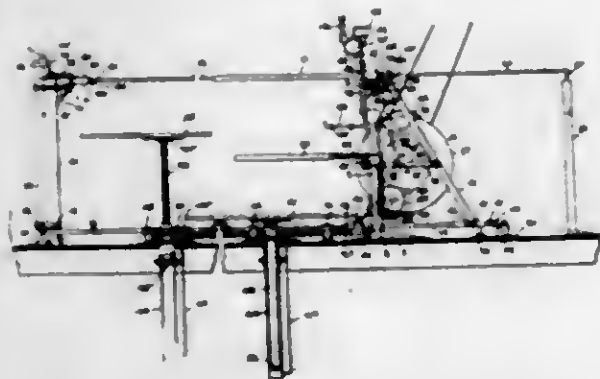
utilizing the heat of coarse stone for removing moisture from the fine stone by mixing heated coarse stone with moist fine stone, separating the coarse stone from the fine stone, and using the coarse stone repeatedly.

1,308,943. APPARATUS FOR SEPARATING SOLID MATTER FROM LIQUIDS. ALFRED W. FRENCH, Maqua, Ohio. Filed Nov. 28, 1917. Serial No. 204,445. 10 Claims. (Cl. 210-13.)



2. In an apparatus for separating solid matter from liquids, the combination with a plurality of separating containers having pervious walls and open lower ends, of members adjacent said lower ends of said containers, and movable bodily laterally toward and from each other for closing the lower ends of said containers and permitting the opening of the same to allow the solid matter to discharge therefrom.

1,308,944. BAG-TURNING MACHINE. PETER J. GAGNON, Jr., South Lowell, Mass., assignor of one-half to Ralph A. Wilson, Lowell, Mass. Filed Apr. 19, 1918. Serial No. 229,540. 16 Claims. (Cl. 139-47.)

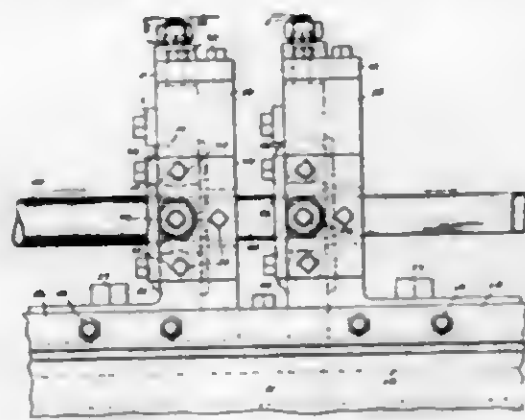


1. In a bag turning machine comprising a plurality of bag turning members, means for reciprocating said members to cause them to enter and while advancing reverse a positioned bag and means for rotating said members during their advancing movement, whereby their introduction into the bag is facilitated and the proper turning of the bag insured.

1,308,945. TUBE-SQUARING APPARATUS. JOHN F. GILL, Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a Corporation of Delaware. Filed May 11, 1917. Serial No. 168,023. 1 Claim. (Cl. 153-32.)

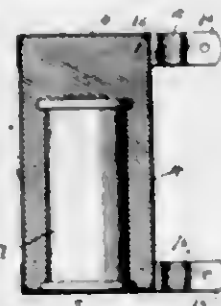
Apparatus for cold squaring thin-wall round metallic tubing, comprising a set of four concave roughing idler rolls, all arranged substantially in the same transverse plane and arranged so that the propulsion of the tube between said rolls will result in the formation of two pairs of opposed longitudinal zones of a flatter curvature

than that of the original tube, and a set of four substantially flat polishing idler rolls having their axes



located substantially in the same transverse plane and substantially parallel with the axes of the first set of idler rolls.

1,308,946. HOLDER FOR RESISTANCE-COILS. BENJAMIN E. GAINHAM, Memphis, Tenn. Filed Oct. 14, 1916. Serial No. 125,761. 1 Claim. (Cl. 219-04.)



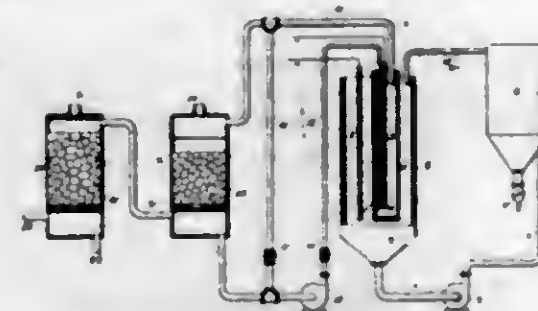
A container comprising a cylindrical sheet metal casing closed at one end and open at the other end, a coil within the casing seating against the closed end thereof, a sealing compound filling the space surrounding the coil and closing the open end of the casing, and a reinforcing band secured to the periphery of said casing adjacent each end thereof, said bands being bent close to their respective extremities to form adjustable clamping members, substantially as set forth.

1,308,947. CLOCK-CASE. CHARLES BALLARD HALL, Park Ridge, Ill., assignor to Time-Systems Company, Portland, Me., a Corporation of Maine. Filed May 20, 1916. Serial No. 98,700. 11 Claims. (Cl. 58-54.)



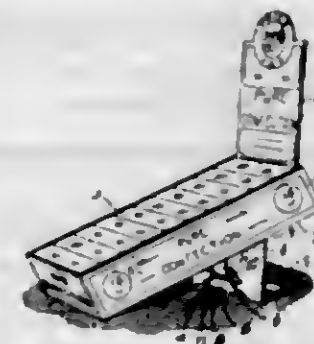
1. A casing comprising a dial plate, a shell encircling said plate, and a plurality of shoulders between said plate and shell, in combination with a glass on one of said shoulders, and a flexible strip resting on the other of said shoulders and overlapping the glass aforesaid.

1,308,948. METHOD OF PRODUCING LEAD SALTS. RALPH M. HARRINGTON, Brooklyn, N. Y., assignor to Elmer A. Sperry, Brooklyn, N. Y. Filed Sept. 27, 1917. Serial No. 193,415. 18 Claims. (Cl. 204-61.)



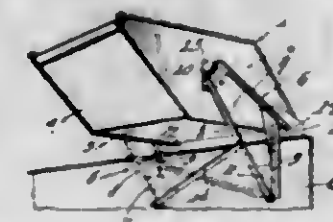
1. The method of producing a lead compound electrolytically which comprises passing an electric current from a lead anode to a cathode through an electrolyte capable of yielding a lead solvent, substantially excluding lead compounds from said cathode by a diaphragm and introducing into the catholyte an acid capable of yielding an insoluble precipitate with lead when it reaches the anolyte within the cell.

1,308,949. DISPLAY DEVICE. JAMES HARRIS, Wyoming, and ROBERT D. BOGUE, Cincinnati, Ohio, assignors to The Aromint Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 25, 1916. Serial No. 80,409. 11 Claims. (Cl. 211-24.)



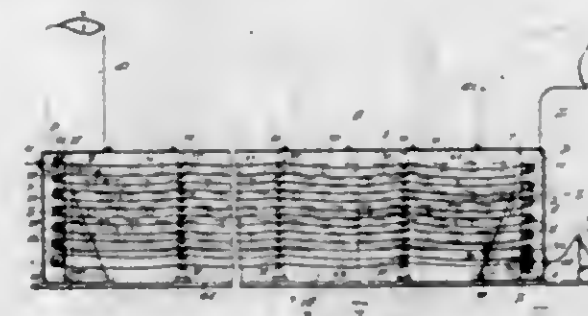
1. In a display device, in combination with means to hold matter to be displayed, a prop and a brace hinged to said means to swing downward against each other, whereby the brace holds the prop in operative position to support said means in position for display of said matter, said prop and brace being adapted to lie against the side of said means, out of operative position, removable means for holding said prop and brace against said side, and self-acting means connected to said prop and to said brace, respectively, to automatically swing said prop and brace down from said side and hold the end of the brace against the lower end part of the prop.

1,308,950. CAR-UNLOADING CHUTE. JOHN N. HETZEL, Warren, Ohio, assignor to The Heltzel Steel Form & Iron Co., Warren, Ohio. Filed Dec. 20, 1915. Serial No. 69,234. 2 Claims. (Cl. 193-34.)



2. In a device of the class described, a pair of brackets; plates having angular parts cooperating with the brackets, the plates having slots provided at their upper ends with enlargements located in the angular parts of the plates; a rocking member located between the brackets; and trunnions on the sides of the rocking member, the trunnions being journaled in the slots and being movable downwardly into the slots, the trunnions having enlarged heads movable downwardly through the enlargements to occupy a position behind the plates.

1,308,951. DRYING AND SHRINKING DEVICE. ALEXANDER L. JACOBS, St. Louis, Mo., assignor of one-fourth to Albert J. Franke and one-fourth to Louis N. Franke, St. Louis, Mo. Filed Apr. 8, 1918. Serial No. 227,255. 7 Claims. (Cl. 34-48.)



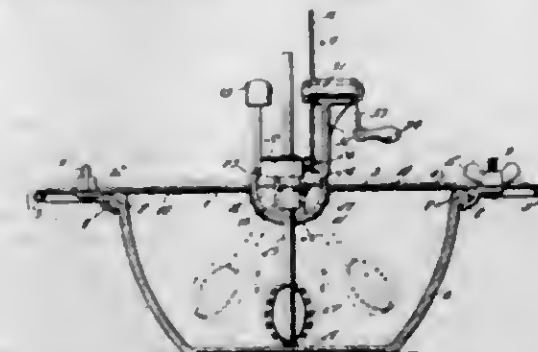
1. A drying and shrinking device comprising a housing, a set of horizontal power rollers arranged in vertical alignment adjacent each end of said housing, said rollers adapted to carry a fabric in zig-zag order through said housing, said roller sets having their uppermost rollers of a smaller diameter than the lowermost rollers.

1,308,952. INSECT CATCHING AND KILLING DEVICE. JOHN CLAY JEWETT and WILLARD ANHLEY JEWETT, San Francisco, Calif., assignors, by mesne assignments, of one-half to Augustus J. Bowle, Jr., and one-half to John F. Barnett. Filed Sept. 3, 1913. Serial No. 787,879. 9 Claims. (Cl. 43-1.)



1. An insect injuring or killing device consisting of a casing adapted to encircle an insect, an opening into said casing, and means for completely collapsing said casing, thereby injuring or killing said insect.

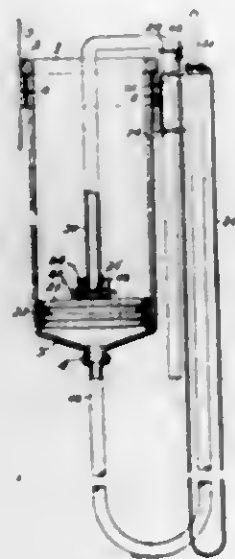
1,308,953. WHIPPER FOR EGGS, CREAM, OR THE LIKE. ERICH JOHNSON, Cleveland, Ohio. Filed May 5, 1919. Serial No. 294,742. 6 Claims. (Cl. 250-106.)



1. A device of the kind described, comprising a cover adapted to be fixed upon a bowl or the like, said cover hav-

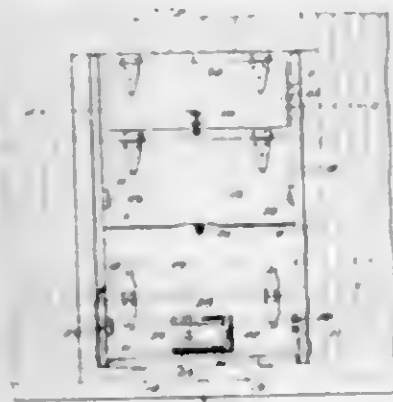
ing a socket, a support having universal movement in said socket, a rotary beater having a shaft mounted in a bearing of said support, and means carried by such support to drive the shaft.

1,305,954. FORCE-DELIVERY SYRINGE. GEORGE COLVIN KENNEDY, Waterloo, Iowa. Filed Jan. 16, 1918. Serial No. 212,037. 4 Claims. (Cl. 128—227.)



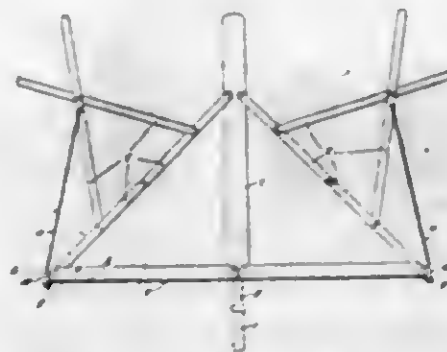
2. In a device of the character described, a vessel having a delivery-orifice, a piston in said vessel, a piston-rod on said piston having its upper part projected from the vessel and bent to one side, supporting means in which said vessel is removably mounted, a guideway on said supporting means in which the bent part of said piston-rod is slidably mounted, and traction-means connected to said piston rod for moving it downwardly operable from a distance.

1,308,955. FREIGHT CAR DOOR. KURTAA R. KOSKINEN, Duluth, Minn. Filed Oct. 24, 1916. Serial No. 127,430. 1 Claim. (Cl. 20—27.)



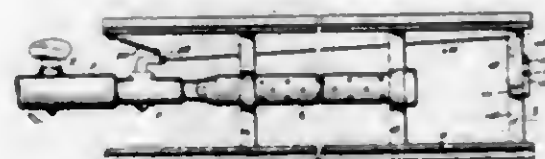
A freight car door including a door frame, a door comprising a number of panels hingedly connected together, a shaft secured to the framework above the door, bearing members attached to the upper panel of the door and engaging such shaft, a spring mounted upon said shaft and engaging the bearing members to swing the uppermost panel upwardly, and guides secured to the edges of the door frame terminating at a point below the joint between the upper and lower panels whereby the spring will not perform its function until after the lower panels have been folded against the upper panel so that the guides will be cleared during such swinging motion.

1,308,956. FOLDING MUSIC-STAND. ALBERT KRAUTH, Hamilton, Ohio; Fritz G. Diesbach administrator of said Albert Krauth, deceased. Filed Aug. 23, 1917. Serial No. 187,536. 1 Claim. (Cl. 45—121.)



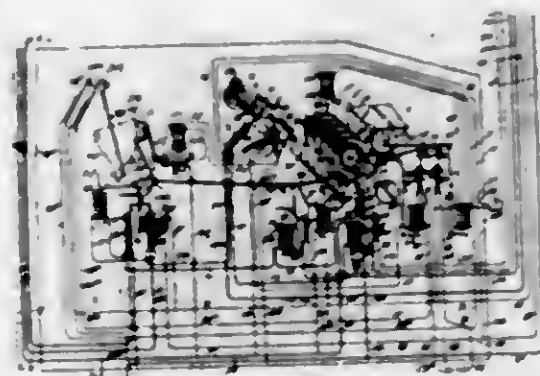
In a music-stand, a rack comprising a base edge, the opposite ends of which are bent into transversely extending bearing eyes, collapsible arms projecting from the rear margin of the rack, an elbow tube swiveled in each eye with its upper end angularly adjustable in a plane parallel with the arms, and a finger secured in each of said adjustable ends of the elbow tube.

1,308,957. SOLDERING-FURNACE. JULIUS J. LANGER, New York, N. Y. Filed Feb. 20, 1917. Serial No. 151,065. 1 Claim. (Cl. 126—238.)



A soldering furnace including a semi-cylindrical hood, a gas burner mounted in said hood, a valve associated with said burner, a spring for normally retaining the valve in a partly closed position, a cross bar extending across one end of the hood, an upstanding projection on said cross bar, a rocker bar pivoted adjacent said upstanding member and movable toward and away therefrom and designed to receive therebetween the shank of a soldering arm, a bell crank mounted on said cross bar, a link connecting one arm of the bell crank with the rocker arm, and a link connecting the other arm of the bell crank with the valve.

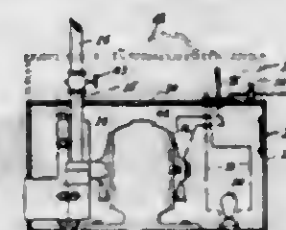
1,308,958. ELECTRIC SIGNAL-TRANSMITTING MEANS. JUDSON McFELL, Chicago, Ill. Filed Sept. 13, 1915. Serial No. 50,382. 33 Claims. (Cl. 177—338.)



1. The combination of a plurality of telegraphic signal-transmitters each having an electro-responsive lock-out mechanism and signal-impulse transmitting means, a central station signal-responsive device, a signaling circuit

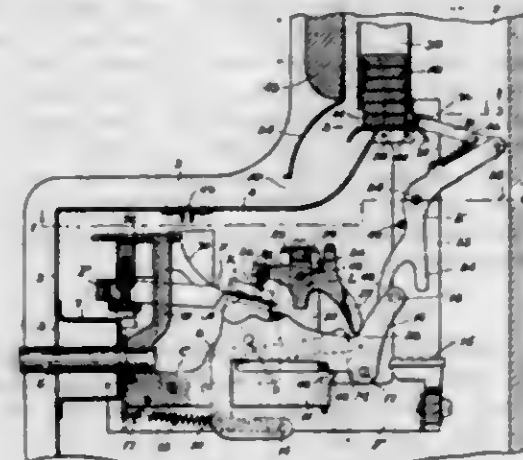
for said impulse-transmitting means and signal-responsive device, a lock out circuit for the lock out mechanism, and means operable prior to the signal responsive device for potentiating the lock out circuit for all other transmitters during the operation of any transmitter.

1,308,959. PORTABLE ELECTRICAL GENERATING APPARATUS. WILLIAM H. MASON, Easton, Pa. Filed Dec. 15, 1914. Serial No. 877,317. 3 Claims. (Cl. 290—7.)



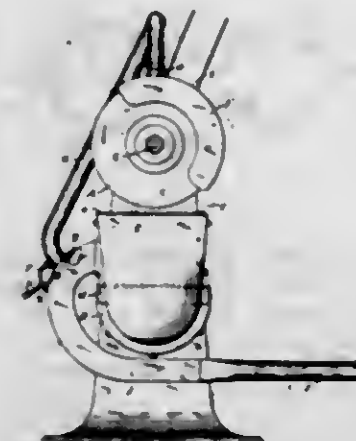
1. A portable apparatus for detonating blasts comprising in a single unit a rotary electrical generator, a fluid pressure motor for imparting continuous rotary movement to said generator, means for detachably connecting the motor with a source of fluid under pressure to drive same, an indicator circuit, a current passage indicator in said circuit, means for attaching an external circuit containing fuses for detonation of blasting charges, and a two position switch adapted in one position to connect the generator with the indicating circuit, and in the other position to connect the generator with the external blasting circuit, substantially as shown and described.

1,308,960. VENDING-MACHINE. AUGUST C. PANN, Ridgewood, N. Y., assignor, by mesne assignments, to Autosales Corporation, a Corporation of New York. Filed June 16, 1915. Serial No. 34,358. 4 Claims. (Cl. 211—8.)



1. In a vending machine, a magazine for containing the vendible articles, a pivoted lever having means at its upper end to eject the articles from said magazine, a hand-operated actuating member for said lever, said member having a normal or inoperative path of travel and an operative path, an extension provided at the lower end of said lever and arranged out of the normal or inoperative path of said member but adapted to be engaged by said member when the latter travels in its operative path, whereby said member actuates said lever to eject the articles, said lever remaining in actuated position, means whereby said member during its return movement actuates said lever back to normal position, and mechanism for adjusting the path of travel of said member.

1,308,961. DUST-COLLECTOR. JEFFREY J. POWEN, Madison, Wis., assignor to Powen, Stevens Fan Devices Company, Madison, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1916. Serial No. 135,537. 6 Claims. (Cl. 51—7.)



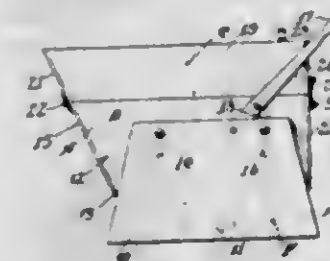
2. The combination with an abrading wheel, of a suction nozzle adjacent to the periphery of the wheel on the lower side thereof, and means for delivering a downwardly moving blast of air along the upwardly moving sides and rim portions of the wheel.

1,308,962. COVER-FASTENER. IDA M. SHACKLE, Watertown, S. D. Filed July 27, 1917. Serial No. 183,125. 1 Claim. (Cl. 24—81.)



A cover fastener comprising a pair of companion members having one of their ends bent to form gripping teeth and their ends bent angularly to form finger grips, inwardly directed apertured ears formed on said members and arranged in overlapping pairs, a T-shaped member having its head portion extending through the apertures in said ears, and a spring wound about said head and leg portion of the T-shaped member and having its ends disposed against the finger grips for forcing the gripping ends of said members in engagement with each other.

1,308,963. ASH-SIFTER. HERMAN C. STERN, Waukegan, Wis. Filed Jan. 20, 1919. Serial No. 272,069. 7 Claims. (Cl. 83—60.)



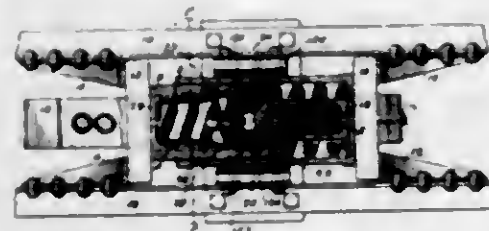
1. An ash sifter comprising a container, a supporting frame for said container, hangers supporting the container within said frame for oscillatory reciprocating movement, a lever carried by the frame and connected to the container for imparting movement thereto as aforesaid, an ash tray hinged upon the container and provided with a cover and a sifter bottom, a pan in the container beneath the tray and fastening means between the tray and pan to serve the two-fold purpose of securing the tray toward the container and the pan in position.

1,308,964. OPHTHALMIC MOUNTING. FREDERICK A. STEVENA, Providence, R. I., assignor to Stevens and Company, Incorporated, a Corporation of Rhode Island. Filed Dec. 3, 1918. Serial No. 285,138. 5 Claims. (Cl. 58-47.)



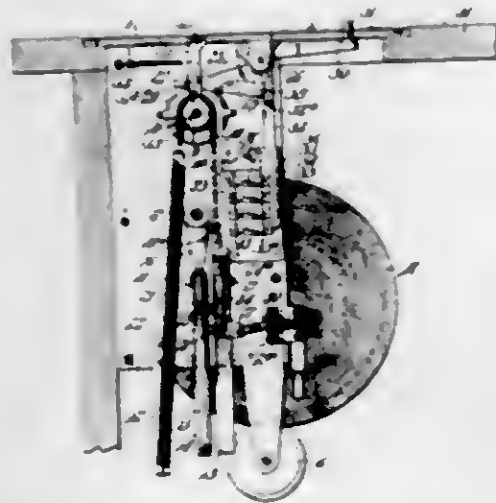
1. In an ophthalmic mounting, the combination of an auxiliary rim provided on its rear side with an annular slot to form a sheath for the main rim, and provided with an annular groove below the slot, a main rim in the slot, and a lens seated in the groove.

1,308,965. HIGH-CAPACITY SHOCK-ABSORBING MECHANISM. SVEN J. STRIO, Chicago Heights, Ill., assignor to William H. Miner, Chazy, N. Y. Filed July 25, 1918. Serial No. 246,971. 10 Claims. (Cl. 213-64.)



1. In a friction shock absorbing mechanism, the combination with a friction shell, of a plurality of friction shoes slidable longitudinally of said shell, tandem arranged springs, one of said springs having its outer end directly engaged by said shoes at their rear ends and the other of said springs having its outer end directly engaged by the front ends of said shoes, lateral pressure-creating means coacting with said shoes and including an element stationary with respect to the shell and elements disposed within and engaging the interior faces of said shoes, said spring that is engaged by the front ends of said shoes having its inner end engaging also one of said elements within the shoes.

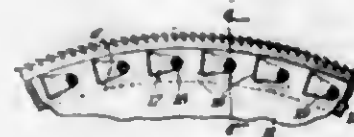
1,308,966. TICKET-ISSUING MACHINE. WILLIAM L. SULLIVAN, Ferguson, Mo. Filed July 29, 1912. Serial No. 712,113. 44 Claims. (Cl. 211-32.)



1. A ticket-issuing machine provided with a ticket strip feeding mechanism that comprises an actuating member, a spring for moving said member in one direc-

tion, a motor-actuated element for moving said member in the opposite direction so as to store up energy in said spring, means for locking said actuating member after said spring has been placed under tension, devices which control or limit the degree of movement of said actuating member, and means under control of the operator for releasing said actuating member and for setting up or arranging in operative position one or the other of said devices.

1,308,967. GIN OR LINTER SAW. PARKER H. SWEET, Boonton, N. J. Filed June 10, 1918. Serial No. 230,124. 7 Claims. (Cl. 13-14.)



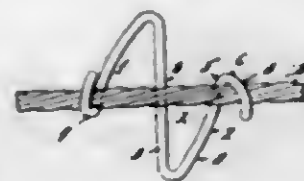
4. In gin or linter saws, the combination of a disk arranged to be mounted upon a shift; annular toothed segments; clips stamped from and bent laterally of the toothed segments, and between which clips and the body of the segments the peripheral portion of the disk is adapted to engage; and said clips provided with ribs to coöperate with the disk to releasably secure the toothed segments to the disk.

1,308,968. HAND-WHEEL FOR SAUSAGE-GRINDERS. ROBERT L. SWEETNAM, Armington, Ill. Filed Jan. 25, 1919. Serial No. 272,994. 2 Claims. (Cl. 64-26.)



1. In combination, interchangeably with shafts of different sizes, and of defined form, including a tapered end, of a hand wheel provided with an opening in its hub member conformatory to the taper of said shaft ends respectively, and a resilient spacing or filler member for interposition therebetween, formed on lines in agreement with the contour of the opening in said hub member, and also with that of the shaft members respectively, having its free ends spaced apart to permit compression or expansion thereof.

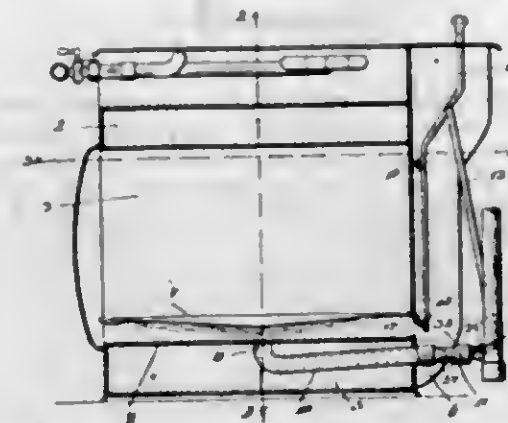
1,308,969. CABLE-HANGER. DIETRICH F. TRACHTE, St. Louis, Mo., assignor to Jasper Blackburn, Webster Groves, Mo. Filed Feb. 12, 1917. Serial No. 148,064. 1 Claim. (Cl. 248-33.)



A cable hanger formed from a single piece of spring wire comprising a cable supporting seat disposed vertically beneath the messenger wire and transversely thereof to which the hanger is applied, a pair of supporting arms formed integral with the vertically disposed seat and projecting from the seat at an angle less than a right angle and extending from the messenger wire to which it is applied in parallel relations, one of said arms acting as a gripping arm adapted to engage the messenger on its

underneath surface, said gripping arm being provided with a hook overlying the messenger wire and projecting downwardly so that it will not become disengaged in the application of the hanger to the messenger, a hook formed on the other arm adapted to engage the messenger on its side and top surface, the prong of the last mentioned hook projecting over the messenger and extending in a direction parallel to the arm by which it is carried, the hooks on the suspension arms being reversely formed and widely separated and the overlying prongs thereof being arranged at an oblique angle.

1,308,970. COMBINATION GAS AND COAL RANGE. NORMAN VAN VOORHIS, Rochester, N. Y. Filed June 8, 1917. Serial No. 173,642. 3 Claims. (Cl. 126-36.)



1. The combination of a flue of a gas range, a removable baffle plate situated in said flue, said baffle plate having a fuel pipe cast integral therewith.

1,308,971. ALTIMETER. ELMER N. WIDEN, St. Louis, Mo., assignor to Everstiek Anchor Company, St. Louis, Mo., a Corporation of Missouri. Filed June 27, 1917. Serial No. 177,378. Renewed Apr. 28, 1919. Serial No. 293,342. 3 Claims. (Cl. 33-70.)



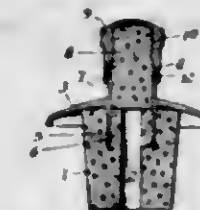
1. An instrument of the class described comprising a weighted body portion, a handle pivotally carried by the upper end thereof, and a detachable sight tube carried by said body portion.

2. An instrument of the class described comprising a weighted body portion, a block carried by the upper end of said body portion, said block being provided with a tapering bore, a handle pivotally secured to said block, and a sight tube provided with a tapering enlargement seated in the tapering bore of said block.

3. An instrument of the class described comprising a weighted tubular body portion, a cover for closing an end of said tubular body portion, a block carried by the upper end of said tubular body portion, said block being provided with a tapering bore whose longitudinal axis is at an angle of forty-five degrees to the longitudinal axis of the tubular body portion, a handle pivoted to said

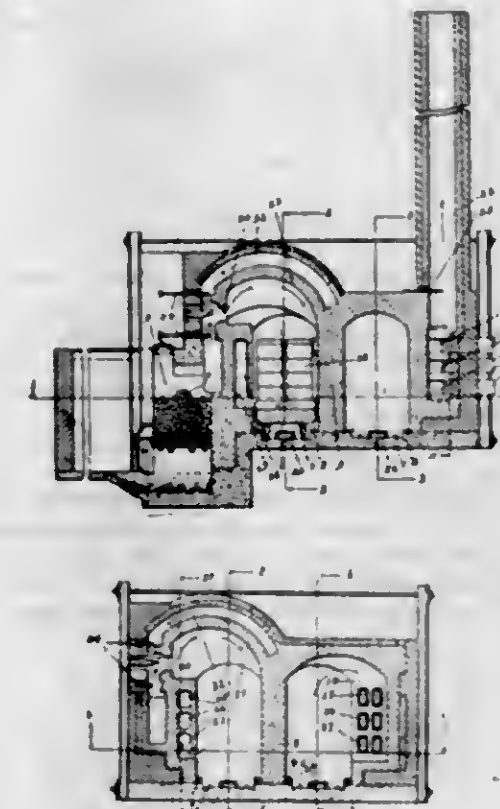
block, and a tubular sight member provided with a tapering enlargement detachably mounted in the tapering bore of said block, and adapted to be stored in the tubular body portion.

1,308,972. BOTTLE-STOPPER. AUGUST HERMAN WIRS, Moylan, Pa. Filed Feb. 17, 1915. Serial No. 8,724. 5 Claims. (Cl. 215-54.)



1. In a device of the character stated, a main cork having a longitudinal opening, a cap secured upon the cork, a pouring spout upon the cap and an auxiliary cork engaging the interior of the pouring spout and the upper annular face of the main cork.

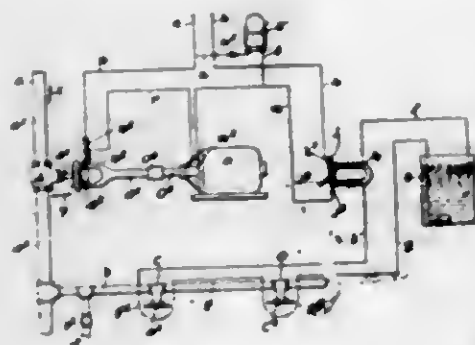
1,308,973. KILN. CARL H. ZWERNANN, Newark, Ohio. Filed Mar. 27, 1919. Serial No. 285,475. 24 Claims. (Cl. 25-142.)



1. The combination with a pair of tunnel kilns having a common inner wall and each comprising a water-smoking zone, a preheating zone, a firing zone, and a cooling zone, said kilns being disposed in reverse relation with the cooling zone of one opposite the water-smoking zone of the other and the firing zone of one opposite the preheating zone of the other, circulating flues opening at the top and bottom of the water smoking zone of each tunnel and arranged to receive heat from the cooling zone of the other tunnel, a plurality of heating burners for each firing zone disposed in the outer walls of the tunnels to deliver at the top thereof, a plurality of firing zone flues disposed below said burners one above the other and having inlets disposed in alignment adjacent the bottoms of the tunnels, horizontally disposed preheating flues to which said firing zone flues deliver, stacks at the outer ends of said preheating zones to which said preheating flues are connected, dampers for said stacks, dampers for said flues disposed at the stack ends thereof, air heating flues in the tops of said tunnels leading inwardly over the

preheating and firing zones to the burners, air ducts in the bottoms of said tunnels leading outwardly from a central point and connected by riser ducts to the outer ends of said air heating ducts in the tops of said tunnels, and valves for controlling the delivery of the air from said air heating ducts and the delivery of the fuel to the burners.

1,308,974. SPRINKLER SYSTEM. ABRAHAM A. AVINER, Brooklyn, N. Y., assignor to Samuel Levin, Brooklyn, N. Y. Filed Mar. 1, 1918. Serial No. 219,784. 6 Claims. (Cl. 169-22.)



1. In a sprinkling apparatus of the class described, a main water supply pipe, a water distributing pipe connected therewith, sprinkling devices connected with said distributing pipe, a valve device mounted in the supply pipe and adapted to control the flow of water to the distributing pipe and the sprinkling devices thereof, an electric motor placed in an open electric circuit, means for placing the motor shaft in operative connection with said valve device, and another electric circuit normally closed by fusible connections, and means whereby the melting or breaking of one of said fusible connections will open said last named circuit and close the motor circuit to put said motor into operation to open the valve device to admit water to the distributing pipe and the sprinkling devices thereof.

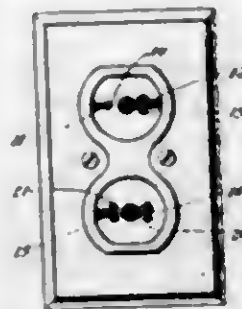
1,308,975. METHOD OF CONSTRUCTING ELECTRIC TERMINALS. WALTER M. ACHIN, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1914. Serial No. 574,094. 7 Claims. (Cl. 113-116.)



6. The method of constructing two similar terminals which consists in transversely severing a single metal tube along a curved line so that the line on opposite sides of the tube will register and pressing corresponding opposite portions of the severed end of each of the respective members thus obtained toward each other into registration.

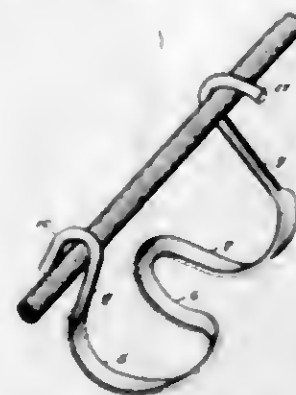
1,308,976. [WITHDRAWN.]

1,308,977. ELECTRICAL RECEPTACLE. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1917. Serial No. 165,461. Renewed May 15, 1919. Serial No. 297,411. 1 Claim. (Cl. 173-330.)



A duplex receptacle comprising two receptacle portions, one of said receptacle portions comprising insulating means recessed to receive spring contacts, spring contact means constructed to engage either aligned blade caps or right-angle blade caps alternatively, said insulating means being provided with restricted I-T slots leading to said contact means, the I being perpendicular to the cross-arm of the T, the other of said receptacle portions comprising insulating means recessed to receive spring contacts, spring contact means constructed to engage either parallel blade caps or right angle blade caps alternatively, said insulating means being provided with restricted I-T slots leading to said contact means, the I being parallel to the cross-arm of the T, the distance between the cross-arm of the T slot and the distant end of the I slot in said first-described receptacle portion being the same as the distance between the I slot and the distant end of the T slot in the second-described receptacle portion, whereby said receptacle portions will receive the same right-angle blade cap.

1,308,978. CABLE-HANGER. JASPER BLACKBURN, Webster Groves, Mo. Filed Feb. 21, 1917. Serial No. 150,209. 1 Claim. (Cl. 248-33.)



A cable hanger formed from a single piece of spring wire and provided with an elongated cradle-like and flattened cable supporting seat, so that the weight of the cable may be distributed to different points and the denting of the same prevented, suspending straight arms widely separated and disposed on opposite ends and each side of the cable supporting seat, one of said arms acting as a gripping arm for gripping the lower portion of the messenger wire to which it is applied, said gripping arm projecting outwardly from the messenger at an angle slightly less than a right angle to the axis of the messenger, a suspension hook carried by said gripping arm adapted to grip the messenger on its top surface, the prong of said hook extending over the messenger at an oblique angle and engaging the messenger at points entirely beyond and removed from the engaging points of the gripping arm, a supporting hook carried by the other

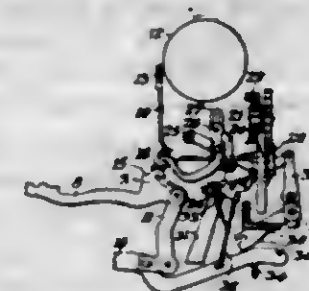
straight suspending arm and bent in opposite direction to the first mentioned hook and being so arranged that its overlying prong grips the messenger on its top surface, the overlying prong of the last mentioned hook being substantially parallel to the overlying prong of the first mentioned hook and the said straight arms and hooks being widely separated so that the hanger may be applied to a cable already strung.

1,308,979. CABLE-HANGER. JASPER BLACKBURN, Webster Groves, Mo. Filed Mar. 11, 1918. Serial No. 221,681. 2 Claims. (Cl. 248-33.)



2. A cable hanger formed from a flat strip of spring material provided with a cable supporting seat having arms spread apart laterally and bowed in opposite directions so as to give stability to the hanger and permit the same to be applied to a cable already hung, one of said arms being provided with a semicylindrical messenger wire seat, the longitudinal axis of the cylinder of which said seat is a part being inclined when the hanger is not in use downwardly and outwardly, and with an extension beyond said messenger receiving seat, the inner edge of which forms with the opposing side of the seat a tapered opening or throat, and the other of said arms being provided with a hook bent in the same direction as said extension adapted to engage the messenger wire on its top surface.

1,308,980. TYPE-WRITING MACHINE. MARTIN BLODGETT, Brooklyn, N. Y. Filed May 3, 1917. Serial No. 166,266. 7 Claims. (Cl. 197-83.)

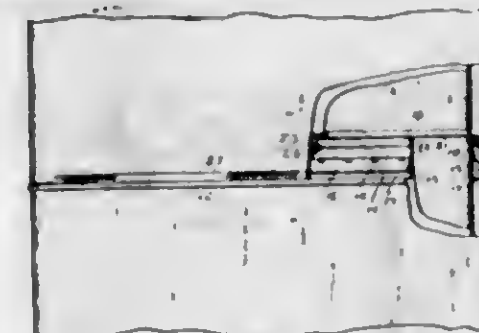


1. In a typewriting machine, the combination with typebars, typebar actuating levers and carriage feeding mechanism, of a universal bar engaged and moved by the typebars upon the actuation thereof, and said movement of the bar actuating the carriage feeding devices; a rock-shaft connected to certain of said typebar levers; and an abutment pivotally carried by the rock shaft normally interposed between the universal bar and the carriage feeding mechanism to transmit the movement of the former to actuate the latter, and movable from between the universal bar and the carriage feeding devices upon the rocking of the rock shaft by the actuation of a typebar lever connected thereto, substantially as and for the purpose specified.

1,308,981. DOUBLE-WALL PIPE. CHARLES M. HOLLER, Milwaukee, Wis., assignor to L. J. Mueller Furnace Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 7, 1917. Serial No. 166,886. 3 Claims. (Cl. 285-186.)

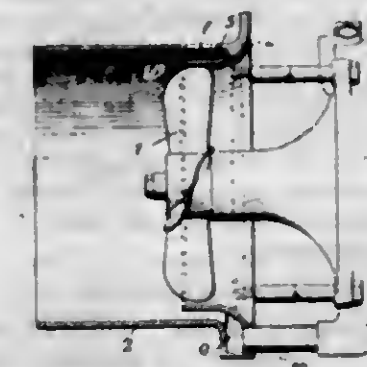
1. A double wall hot air pipe section comprising an inner wall and an outer wall spaced apart and secured to-

gether in spaced relations at their ends, each wall consisting of side plates having interlocked lapped joint con-



sections angularly bent to form flat corners, said walls being spaced from each other at the corners.

1,308,982. FAN-BLOWER. FRANK H. C. COPPUS, Worcester, Mass., assignor to Coppus Engineering and Equipment Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 15, 1914. Serial No. 861,907. 6 Claims. (Cl. 230-11.)



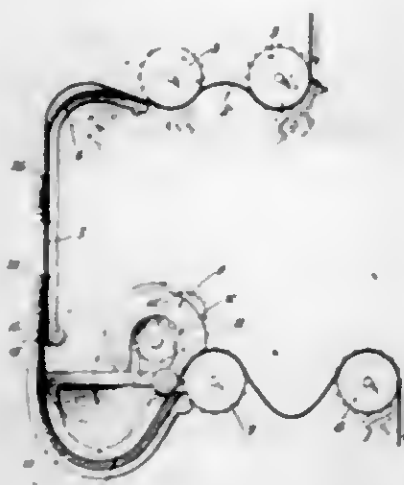
5. In apparatus of the class described, a blower casing of generally cylindrical contour having a mouth of reduced internal diameter, with the interior of said casing expanding to a larger diameter beyond said mouth, and a rotatable blower disposed in said casing, with its vanes closely fitting the mouth thereof, and projecting longitudinally thereof past the point of expansion.

1,308,983. ELECTRIC REGULATION. JOHN L. CREVELINO, New York, N. Y., assignor to Safety Car Heating and Lighting Company, a Corporation of New Jersey. Filed Apr. 19, 1911. Serial No. 621,998. 8 Claims. (Cl. 171-318.)



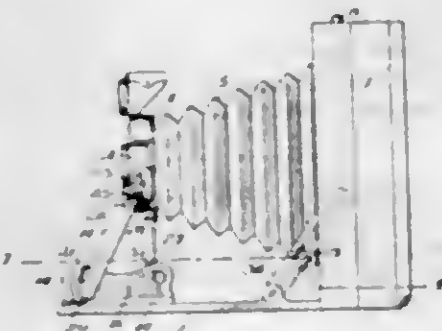
2. The combination with a generator; of a storage battery charged thereby; automatic means for controlling the generator; and means whereby said automatic means is affected by the quantitative charge delivered to the battery independently of fluctuations in the charging voltage, including means whereby the operation of the same is also affected by the discharging voltage.

1,308,984. MOTION-PICTURE APPARATUS. HENRY R. EVANS, New York, N. Y.; Adele Kean Evans executrix of said Henry R. Evans, deceased. Filed July 14, 1918. Serial No. 100,291. 6 Claims. (Cl. 88-18.6.)



1. In motion picture apparatus, the combination of a gate past which a film is fed, means for feeding the film to form a loop therein in advance of the gate, and means for feeding the film intermittently from the loop past the gate, said means including an operated film-engaging part and means operating said part so that it is yieldably impelled during the latter part of its film-feeding movements, and a film movement-limiting device having a surface against which the film is brought by the yielding force of said film-engaging member to arrest the film so as to assist in registering it at the gate at the end of each stepping movement.

1,308,985. FOLDING CAMERA. AGUSTIN CARL FISHER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 12, 1917. Serial No. 154,179. 3 Claims. (Cl. 95-45.)



1. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a catch on the body, a front movable on the bed and a device movable relatively to the front to move it into focusing position and adapted to cooperate with the catch to hold the bed closed.

1,308,986. BILLET HANDLING DEVICE FOR ROLLING-MILLS. CHARLES W. HAWTHORNE, Buffalo, N. Y., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Continuation in part of application Serial No. 28,317, filed May 15, 1915. This application filed June 27, 1917. Serial No. 177,300. 10 Claims. (Cl. 214-23.)

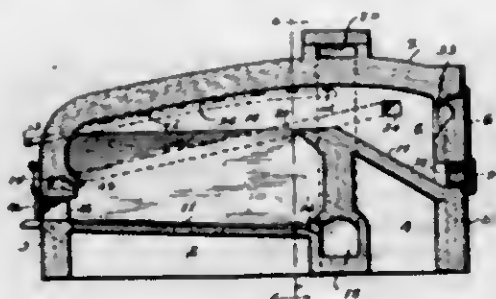
1. In a billet handling device for rolling mills, a push bar having parallel surfaces on opposite sides, a pair of rotatable pinch rolls in frictional contact with the parallel surfaces of said push bar and means for rotating said

rolls to impart a longitudinal movement to said push bar, said push bar having a quarter twist, whereby said push



bar is rotated a quarter turn as it passes between said pinch rolls.

1,308,987. FURNACE. WILLIAM W. LEACH, Mansfield, Ohio, assignor of one-half to William H. Dixon, Mansfield, Ohio. Filed Feb. 13, 1919. Serial No. 276,785. 42 Claims. (Cl. 203-15.)



20. In a furnace, comprising walls forming a chamber, the rear walls of which are arranged to converge from the side walls of the furnace leaving an opening between them to form a fire box, a bottom fitted to the fire box to incline toward the bottom of the furnace, flues provided in the walls of the furnace and in communication with the fire box, atmosphere, and chamber of the furnace, means to close the opening between the side walls forming the fire box, means independent of the closing means of the fire box to permit access to the fire box to remove the slag deposited therein from the products of combustion and means to clean the roof of the furnace.

1,308,988. RATCHET EXTENSION FOR MICROMETERS. LOUIS LOWENSTEIN, Detroit, Mich. Filed May 16, 1918. Serial No. 234,864. 2 Claims. (Cl. 35-164.)

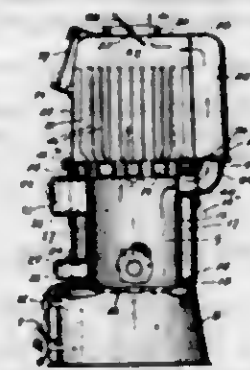


1. An extension for the finger piece of a micrometer gage comprising a sleeve having one end thereof closed, and an inwardly projecting slitted thimble carried by the closed end of said sleeve and adapted to be fitted over the finger piece of the micrometer gage.

1,308,989. COMBINED GARBAGE-BURNER AND HEATER. LOUIS J. MUELLER, JR., Milwaukee, Wis. Filed Aug. 26, 1918. Serial No. 251,455. 3 Claims. (Cl. 122-2.)

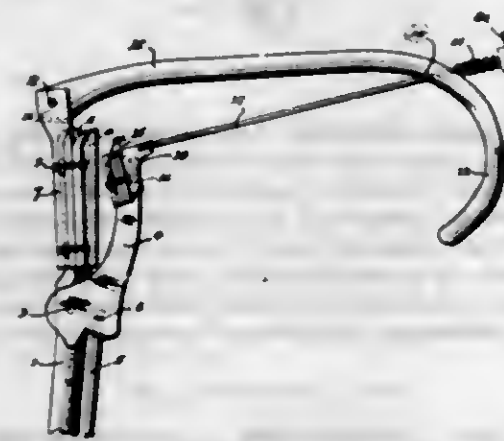
1. In a combined garbage burner and water heater, the combination of a water heater comprising a combustion chamber provided with an outlet, an annular water chamber surrounding the combustion chamber, a top water chamber cast integral with the annular water chamber and consisting of spaced channels, said top water chamber forming a garbage supporting grate, a garbage section disposed above the grate and provided with an inlet and

an outlet, a flue connecting the outlet of said combustion chamber and the inlet of said garbage section, and means



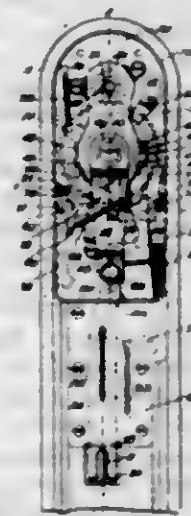
in said flue and the outlet of said garbage section for controlling the passage of waste products of combustion from said garbage section and combustion chamber.

1,308,990. LEVER EXTENSION. ANDREW MUGENAST, St. Louis, Mo. Filed Jan. 30, 1919. Serial No. 274,044. 1 Claim. (Cl. 74-39.)



An extension attachment for automobile hand-levers, comprising a clamping-device adapted to fit the end of a hand-lever, a rearwardly-extending member pivoted at its front end to the said clamping-device, and having a handle at its free rear end, and a pawl-operating member, having a clamp adapted to fit the pawl-latch lever of said hand-lever.

1,308,991. FILM-WINDING DEVICE. WILLIAM J. PARKINSON, WILLIAM A. M. WELLS, and PHILIP W. TIERNEY, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 5, 1917. Serial No. 106,640. 9 Claims. (Cl. 242-71.)



1. In a film feeding device for photographic roll holders, the combination with a winding reel, a rotary

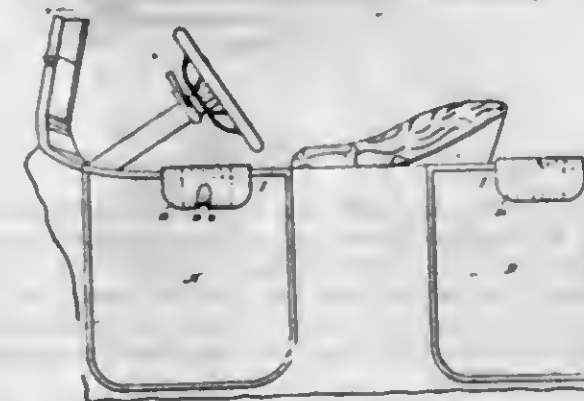
driving member therefor and a rotary element carrying a stop for the driving member and movable concentrically therewith, of means actuated by the driving member when moved in one direction for advancing the stop to limit its movement in the other direction.

1,308,992. CONNECTING-ROD. ALEXIS R. PAIRILL, Wilkesburg, Pa. Filed July 12, 1917. Serial No. 180,053. 4 Claims. (Cl. 74-17.)



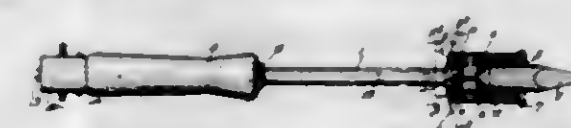
1. A connecting rod having a crank shaft bearing provided with a detachable cap, and a U-bolt having its head permanently fixed in the longitudinal axis of said rod and connecting said cap thereto.

1,308,993. HAND-PAD FOR VEHICLE-DOORS. ALFRED BLAIR RIDINGTON, St. Louis, Mo. Filed Sept. 16, 1917. Serial No. 190,039. 6 Claims. (Cl. 21-125.)



6. A hand pad for vehicle doors comprising a resilient plate adapted to resiliently engage the outer face of a door and formed to provide a head terminating in a longitudinal door engaging lip having openings for the reception of fasteners adapted to be carried by the vehicle door.

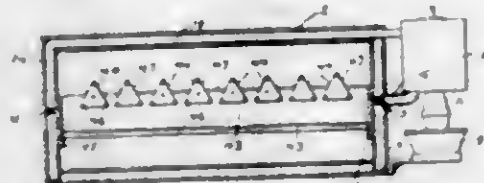
1,308,994. ELECTRIC SOLDERING-IRON. EVAN J. ROHSE, Minneapolis, Minn. Filed Apr. 29, 1916. Serial No. 94,285. 2 Claims. (Cl. 219-26.)



1. In an electric soldering iron, the combination with a tubular stem having at one end a "point," of a handle removably mounted on the other end of the stem, a switch secured to the handle, lead wires secured to the switch,

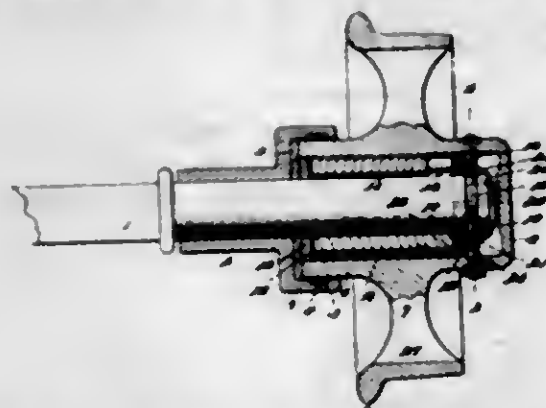
a heating element for the "point" wires extending through said stem and connecting the switch to the heating element, said stem having a lateral opening normally covered by said handle, an insulating block mounted in the lateral opening in said stem, and binding screws securing said wires thereto.

1,305,995. INCUBATOR. ORRIS RUSSELL, Cape Fair, Mo. Filed Aug. 31, 1917. Serial No. 139,192. 2 Claims. (Cl. 119-44.)



1. An egg tray for incubators comprising a frame, containers rotatably mounted in said frame and comprising each a plurality of spaced parallel rods disposed in substantially polygonal arrangement, one of said rods being hingedly secured at one end and detachably secured at the other end so as to permit opening of said container for insertion of eggs into the same, and means for causing simultaneous rotation of said containers.

1,308,996. MINE-CAR-WHEEL-ATTACHING DEVICE. JOHN H. RUTHERFORD, Knoxville, Tenn. Filed Feb. 15, 1919. Serial No. 277,333. 8 Claims. (Cl. 295-48.)



1. In a mine car wheel, the combination with an axle having an annular groove, of a wheel mounted on the axle having a roller bearing cage, a cup-shaped member embracing the end of the axle having means for connecting the same to the bearing cage, and bolts passing through the hub of the wheel and cup-shaped member and groove of the axle.

1,308,997. AEROPLANE. CHARLES A. SIMMONS, Fairfield, Ill. Filed May 1, 1918. Serial No. 231,886. 2 Claims. (Cl. 244-29.)



2. A controlling mechanism for flying machines, embodying a laterally tilting member, vertically disposed and having its upper and lower end flared and made hollow,

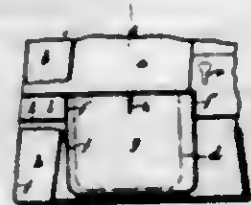
a member mounted in the laterally tilting member and projecting above and below the same and adapted to receive a fore-and-aft swinging movement, and a weight on the lower end of the last mentioned member.

1,308,998. SCREEN. AVON L. STONE and JOHN M. STONE, Lodi, Calif. Filed Apr. 19, 1918. Serial No. 229,015. 3 Claims. (Cl. 130-19.)



1. In a grain separating screen, a frame having bearing surfaces at each end, hook bolts at the ends of said frame capable of moving angularly toward or away from said surfaces, cylindrical bars loosely inclosed by said hook bolts and disposed parallel with and below the plane of said bearing surfaces, nuts on said bolts for adjusting the latter, and strands covering said frame and resting at their ends upon said surfaces and passed around said bars.

1,308,999. POCKET FOR COATS OR OTHER GARMENTS. FRED STURDY, Leeds, England, assignor of one-half to William Mitchell, Hornsforth, England. Filed July 5, 1916. Serial No. 107,560. 3 Claims. (Cl. 2-15.)

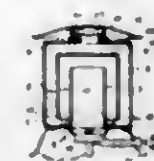


1. In an unlined garment, the combination of the front of the garment and the vertical facing of the same, of a horizontal strengthening stay which extends from the facing of the front to the side seam of the garment, said strengthening piece being folded along its upper and lower edges and first sewed by its lower edge to the inside of the garment, and a pocket made of two blanks of fabric stitched together and secured in position by turning one of its upper edges over the upper folded edge of the strengthening piece and sewing both of the two folded upper edges to the garment at the same time.

1,309,000. HOT-AIR HEATER. HERBERT TOWNSEND, Gloucester, N. J., and WILLIAM B. DIXON, Nicetown, Pa. Filed Sept. 4, 1917. Serial No. 189,482. 1 Claim. (Cl. 126-85.)

A hot air heater having a circuitous passageway and provided with an outlet opening, a flange surrounding said outlet opening, a hood having a central flat portion and a downwardly and outwardly projecting flange and a depending collar carried by the hood and projecting from the central flat portion thereof and adapted

to be placed over the flange, said collar being of greater height than said flange and having openings therein



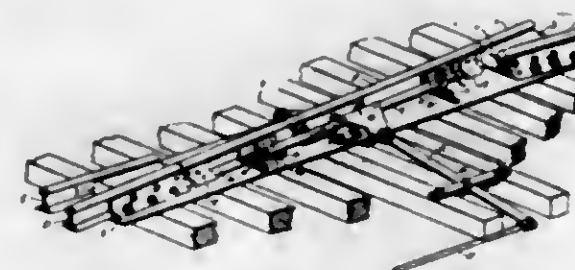
located above the upper edge of the flange when the collar is placed thereon.

1,309,001. ROTARY CONVERTER. CARL TRETTIN, Berlin, Germany, assignor to Siemens-Schuckert Werke G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed June 7, 1915. Serial No. 32,593. Renewed Nov. 7, 1918. Serial No. 261,554. 6 Claims. (Cl. 171-228.)



1. A rotary converter for converting continuous current of one voltage into continuous current of another voltage, comprising an armature having two windings, a commutator connected to each of said windings, a set of brushes on each of said commutators, said sets of brushes being displaced relatively to each other, main poles, and commutating poles intermediate between said main poles for generating distinct commutating zones for each of said windings.

1,309,002. SWING-RAIL SWITCH-FROG. GEORGE LESLIE WALKER, Kansas City, Mo., assignor to The Wallis Frogless Switch & Manufacturing Company, Kansas City, Mo., a Corporation of Colorado. Filed Apr. 18, 1918. Serial No. 229,421. Renewed May 6, 1919. Serial No. 295,112. 19 Claims. (Cl. 246-385.)



1. In a swing-rail switch frog, a base plate, a rail section pivoted on said base plate, oppositely inclined wedges having their bases bearing against said rail section on opposite sides thereof and adjacent one end thereof, an abutment mounted on said base plate in position to cooperate with the inclined face of each wedge, and means for simultaneously moving said wedges in opposite radial directions.

4. In a swing-rail switch frog, a base plate, a rail section pivoted on said base plate, a reciprocating plate on each side of said rail section, oppositely inclined wedges mounted at each end of said reciprocating plates, said wedges having their bases bearing against said rail section, an abutment mounted on said base plate in position to cooperate with the inclined face of each wedge, a locking bar extending radially from each wedge, a track structure at each end of said pivoted rail section having a pair of rails with each of which said pivoted sec-

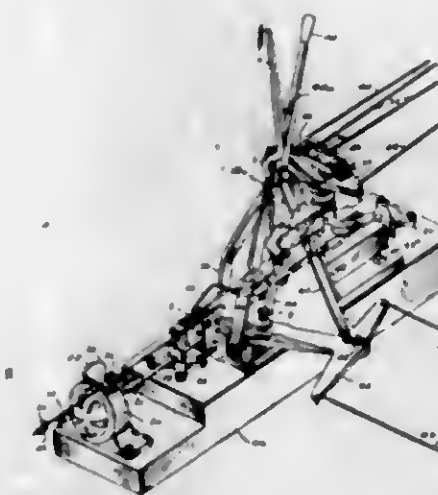
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tion is adapted to be brought into line and having a socket adjacent each rail end adapted to receive a locking bar, and means for simultaneously moving said reciprocating plates in opposite directions.

6. In a swing-rail switch frog, a base plate, a rail section pivoted on said base plate, a wedge member on each side of said rail section adjacent one end thereof, said wedge members having their bases bearing against said rail section and having their outer surfaces each formed into a surface parallel to said rail section, a surface inclined thereto, and a second surface parallel thereto, said inclined surfaces being oppositely directed, a locking bar projecting from each wedge member toward the end of the rail section, abutments mounted on said base plate in position to cooperate with the outer faces of said wedges, and means for simultaneously moving said wedges in opposite radial directions.

14. In a swing-rail switch frog, the combination with a pivoted rail section, of wedges bearing against said rail section on opposite sides of its pivot, abutments cooperating with said wedges, and means for moving said wedges simultaneously longitudinally of the rail section and relatively to said abutments.

1,309,003. ACTUATING DEVICE FOR SWING-RAIL SWITCHES. GEORGE LESLIE WALKER, Kansas City, Mo., assignor to The Wallis Progress Switch & Manufacturing Company, Kansas City, Mo., a Corporation of Colorado. Filed Oct. 6, 1917. Serial No. 195,119. Renewed May 7, 1919. Serial No. 295,452. 31 Claims. (Cl. 246-388.)

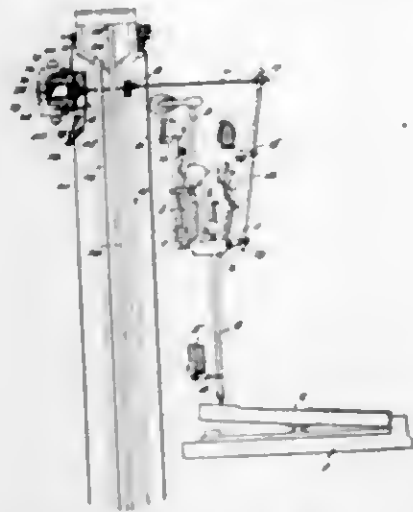


1. In a device of the character described, a stationary member, a pair of rocking levers mounted thereon, a reciprocatory member adapted to travel in said stationary member and to engage said rocking levers to actuate the one of said levers first, to permit said first mentioned lever to remain stationary while actuating the second of said levers, and then to return said first mentioned lever to its original position while said second mentioned lever is held stationary, power means for imparting movement to said reciprocatory member, and hand operable means for said reciprocatory member normally traveling free therewith but adapted to be employed to operate the parts independently of said power means.

1,309,004. VIOLIN-PIANO. JAMES L. WARNER, Girard, Kans. Filed Oct. 7, 1918. Serial No. 257,176. 3 Claims. (Cl. 84-48.)

1. In a violin-piano having a string and a piano action; a U-shaped member supported adjacent the string, a vibrator mounted for rotation in the U-shaped member, means actuated by the operation of the piano action

for forcing the U-shaped member rearwardly, means for guiding the U-shaped member laterally, as it is forced



rearwardly, to bring the vibrator against the string, and means for rotating the vibrator.

1,309,005. ADJUSTABLE RADIATOR-FAN. WILLIAM G. WIRTHSALT, Los Angeles, Calif., assignor of forty-five per cent. to Walter P. Jones, Spokane, Wash. Filed Mar. 4, 1918. Serial No. 220,234. 2 Claims. (Cl. 170-163.)

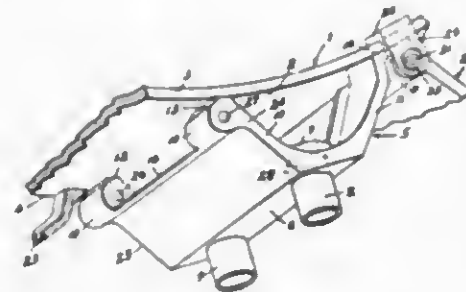


1. In a radiator fan, a post adapted to be secured to the base of an engine and extend upwardly therefrom; a bearing at the upper end of the post; a spindle clamped in the bearing, said spindle having a central bore extending from end to end; a fan hub rotatably mounted upon the spindle; a fan pulley integral with the fan hub; a retaining flange upon the forward end of the spindle; a second flange upon the forward end of the hub; a cup-shaped housing mounted with its bottom against the front face of the second flange; radial arms having their inner ends fitting against the rear face of the second flange; the housing, second flange and radial arms being secured together by rivets; there being radial slots through the rim of the housing; an annular channelled rim having bearings evenly spaced apart, the outer ends of the radial arms being fixed to the rim and the outer ends of the arms being slightly bent forwardly; fan blades having pintles mounted in the bearings in the rim and having cranks extending from their inner ends through the slots in the housing; a shifting head within the housing and having an annular groove into which the cranks extend; a shifting rod extending from the head through the bore in the spindle; and means for shifting the rod to feather the fan blades.

1,309,006. SELF-CLEANING GROUTER FOR TRACTOR-WHEELS AND THE LIKE. SHAMAM T. ALLEN, Los Angeles, Calif., assignor of one-half to Joseph H. Hunt, Chicago, Ill. Filed Nov. 14, 1918. Serial No. 262,514. 3 Claims. (Cl. 21-214.)

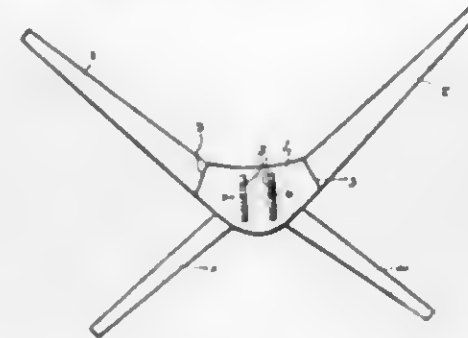
1. A grouter for traction wheels consisting of a central portion having pipe sockets, inclined supporting walls

extending outwardly from opposite sides of the central portion, feet extending outwardly from the outer sides of the inclined walls, bearings formed integral with the feet



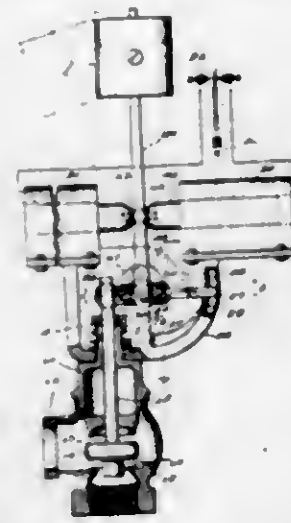
at the outer side of one wall, toes extending from the opposite feet so that the toes of one grouter will fit under the bearings of the next grouter, and means for securing the grouter to the rim of a wheel.

1,309,007. ABDOMINAL SUPPORT. ISENE ALLISON, Wyomeshurg, Pa. Filed Apr. 5, 1918. Serial No. 89,119. 1 Claim. (Cl. 2-188.)



In a device of the character described, a substantially triangularly shaped body conforming substantially to the lower portion of the abdomen so as to fit snugly beneath and about the same, upwardly diverging relatively narrow attaching straps secured to said body adjacent the ends thereof, the vertex of the body being directed downwardly, and downwardly diverging thigh straps secured to the body at the lower edge thereof and at each side of the vertex of said body.

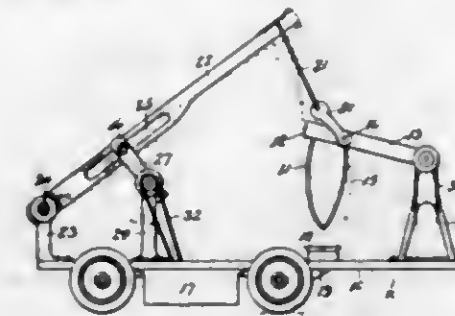
1,309,008. THERMOSTATICALLY-CONTROLLED RADIATOR-VALVE. LOUIS K. ASCHER, Indianapolis, Ind. Filed Apr. 11, 1918. Serial No. 227,887. 8 Claims. (Cl. 236-4.)



1. In combination, a radiator valve having a sliding valve stem, a valve disk mounted on said valve stem, and two seats which said valve disk engages when the valve is

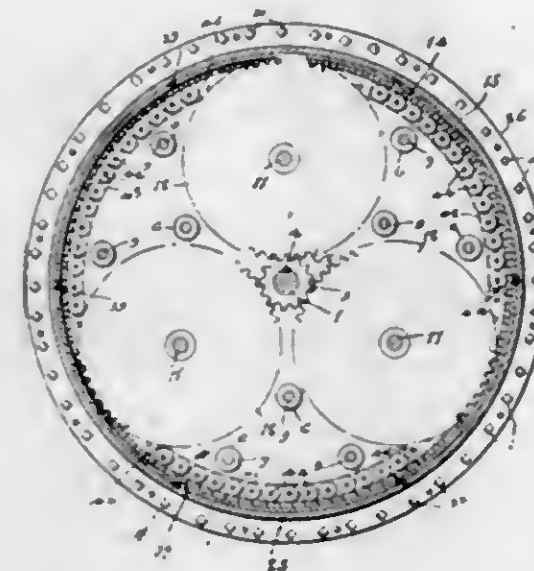
respectively closed and open, thereby keeping the steam pressure away from around the valve stem; in combination with electro-magnetically operated mechanism for sliding said valve stem to move said valve disk between said seats, and a tilting weight connected to said electro-magnetically operated mechanism so as to be moved thereby when the valve stem is moved, said tilting weight being arranged so that it tends to hold the valve disk in engagement with each seat when it engages that seat.

1,309,009. CRANBERRY-PICKER. EDGAR F. HASSETT, Harwich, Mass. Filed July 13, 1916, Serial No. 109,162. Renewed Feb. 21, 1919. Serial No. 278,510. 2 Claims. (Cl. 56-89.1.)



1. A device of the type described, including opposed rakes, an oscillatory member 22, means for actuating said oscillatory member, comprising pivotally supported arms and links, said arms having pivotal connection with said links and said links having pivotal ball-like connection with said oscillatory member, a driven rotating arm having a sliding connection with said oscillatory member, one of said rakes having its head supported in the aforesaid arms and connected to said links, the head of the other rake being yieldably carried by arms supported in the device, the rake-head by said arms being resiliently held in position.

1,309,010. TRACTOR-WHEEL. LOUIS K. BENEDICT, Hastings, Fla. Filed Nov. 30, 1917. Serial No. 204,685. 4 Claims. (Cl. 74-7.)

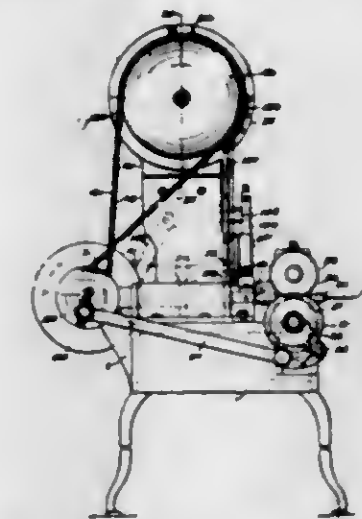


1. In a tractor wheel, a rigid internal structure, a plurality of gears rotatably carried by said rigid internal structure, a pinion meshing with said gears for rotating the gears, a rim structure rotatably mounted about said rigid structure, a ring attached to the inner surface of said rim, said ring having its inner surface provided with gear teeth and tracks spaced upon each side of said gear teeth,



carried by said rigid internal structure and engaging said tracks.

1,309,011. MACHINE FOR PRODUCING SPRING-CARRYING PINS. DAVID BODRUX, Amesbury, Mass., assignor to G. W. J. Murphy Company, Merrimac, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1916. Serial No. 121,803. 24 Claims. (Cl. 29-33.)



15. A machine of the class described comprising means to feed forward wire in a helical coil, a periodically operated cutter to cut off definite lengths of the coil, coil handling mechanism comprising a jaw having a recess to receive the severed length, said jaw being movable to and from said coil feeding means to take and carry the severed length from said means, a cooperating member to hold said length in position on the jaw, a pin holder member constructed to present a pin in axial alignment with the length of coil carried by said jaw, means to feed pins thereto one by one and means to bring together the aligned pin and length of coil.

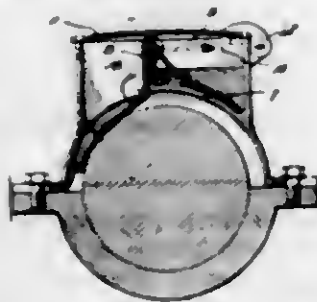
1,309,012. ADJUSTABLE CHAIR-RECLINER. DAVID BRANDON, Los Angeles, Calif. Filed Dec. 5, 1918. Serial No. 265,455. 1 Claim. (Cl. 155-26.)



An adjustable chair recliner comprising side bars, cross-bars rigidly connecting the side bars, C-clamps hinged to

the upper ends of the side bars, compression screws screw seated through the upper ends of the C clamps, upper clamping plates swiveled upon the lower ends of the compression screws, stems sliding through the lower ends of the C clamps and held against rotation, rams mounted upon the lower ends of the C clamps around the stems, handles for operating the clamps, and second cams fixed upon the upper ends of the stems in engagement with the first cams and in opposition to the clamping plates so that by manipulation the handles the clamps may grip a seat board.

1,309,013. JOURNAL-LUBRICATOR. IYING A. BAOWN, Sandusky, Ohio. Filed Dec. 26, 1917. Serial No. 208,766. 3 Claims. (Cl. 64-24.)

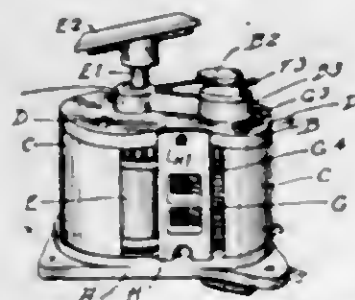


1. A device of the class described, including a journal to be lubricated and an oil well, means adapted to convey oil from the oil well to the journal by capillary attraction, said means comprising a pad having a journal contacting portion and a plurality of separate fingers integral with said pad and adapted to contact with the oil in said well and means whereby one or more of said fingers can be held out of oil contact to regulate the amount of oil fed to said journal bearing portion.

1,309,014. PLASTIC CHLORATE EXPLOSIVE. JAMES MADISON BAOWN, Unaka Springs, Tenn., assignor, by mesne assignments, to National Explosive Corporation. Filed Sept. 6, 1917. Serial No. 189,078. 3 Claims. (Cl. 52-1.)

1. The herein described new explosive consisting of a chlorate of the alkali metal type; a drying oil; vegetable flour; magnesium carbonate; vaselene; and nitroglycerin, substantially as described.

1,309,015. CANE-MILL. JUDSON BUCHANAN, Chattanooga, Tenn. Filed Oct. 31, 1916. Serial No. 128,702. 6 Claims. (Cl. 100-47.)



1. In a cane mill, the combination of three rolls, one being a primary roll and the other two being secondary rolls, the primary roll having a longitudinally continuous face and being set in opposition to the secondary rolls to form two passes, and the secondary roll at the intake side of the mill having transverse grooves separated from each other by relatively narrow spaces and having a depth less than their width and their width being approximately equal to the diameter of the cane stalks which are to be crushed, substantially as described.

2. In a cane mill, the combination of three rolls, one being a primary roll and the other two being secondary rolls, the primary roll having a longitudinally continuous face and being set in opposition to the secondary rolls to

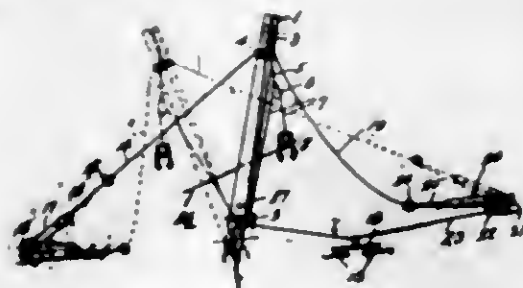
form two passes, and the secondary roll at the intake side of the mill having transverse grooves and relatively narrow uncut faces between said grooves, said grooves having a depth less than their width and their width being approximately equal to the diameter of the cane stalks which are to be cut, substantially as described.

3. In a cane mill, the combination of three rolls, one being a primary roll and the other two being secondary rolls, the primary roll having a longitudinally continuous face and being set in opposition to the secondary rolls to form two passes, and the secondary roll at the intake side of the mill having transverse grooves separated from each other by relatively narrow faces and having a depth less than their width and their width being approximately equal to the diameter of the cane stalks which are to be crushed, and the surfaces in said grooves being roughened, substantially as described.

4. In a cane mill, the combination of three rolls, one being a primary roll and the other two being secondary rolls, the primary roll having a longitudinally continuous face and being set in opposition to the secondary rolls to form two passes, and the secondary roll at the intake side of the mill having transverse grooves and relatively narrow uncut faces between said grooves, and said grooves having a depth less than their width and their width being approximately equal to the diameter of the cane stalks which are to be crushed, and the surfaces in said grooves being roughened, substantially as described.

5. In a cane mill, the combination of three rolls, one being a primary roll and the other two being secondary rolls, the primary roll having a longitudinally continuous face and being set in opposition to the secondary rolls to form two passes, and the secondary roll at the intake side of the mill having transverse grooves separated from each other by relatively narrow faces and having a depth less than their width and their width being approximately equal to the diameter of the cane stalks which are to be crushed, and the surfaces in the grooves being transversely ribbed, substantially as described.

1,309,016. HAY-STACKER. OSCAR E. BRANELL, Caribou, Minn. Filed July 10, 1918. Serial No. 244,280. 1 Claim. (Cl. 212-8.)

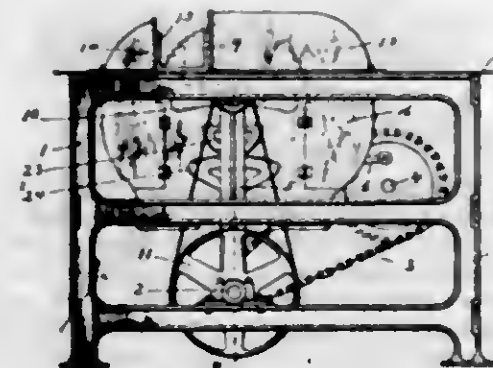


In a hay stacker, the combination of a pair of standards, secured together adjacent their upper ends, the lower ends of said standards having V-shaped recesses, pins passing through said recesses and into the ground for holding the lower ends of the standards from slipping, bars extending transversely through said standards to points above the recesses thereof, thus permitting implements to be inserted under the bars to allow the standards to be lifted and shifted at their lower ends to disengage said pins, whereby the standards may be shifted along as the stack is being built, lifting means connected to said standards and means adjustably connected to said standards for limiting the rocking movement of said standards although permitting of movement of the standards along as the stack is being built.

1,309,017. AUTOMATIC SHIN-BONE CUTTER. ARNOLD C. CHAKRAVARTY and FREDERICK H. GENT, Chicago, Ill. Filed Sept. 13, 1918. Serial No. 253,916. 1 Claim. (Cl. 143-46.)

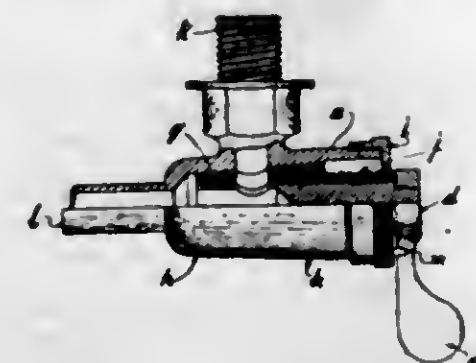
In a sawing appliance, a support equipped for guiding the stock, a refuse-catching casing carried by the sup-

port and having an upper transverse opening through which the stock is fed, the said casing also having arcuate slots in its opposite sides; a shaft journaled on the support below the said casing and concentric with the said slots, a U-shaped rocker arm journaled concentric



with the said shaft and presenting arms at opposite sides of the casing, a saw arbor carried jointly by the said arms and extending through the arcuate slots in the casing, a saw fast on the arbor and disposed within the casing, and cooperating means for rotating the arbor and for reciprocating the rocker arm about its said journaling.

1,309,018. COCK AND THE LIKE. ROBERT FRANCIS CONLON, Manchester, England. Filed Nov. 6, 1918. Serial No. 261,406. 6 Claims. (Cl. 251-113.)



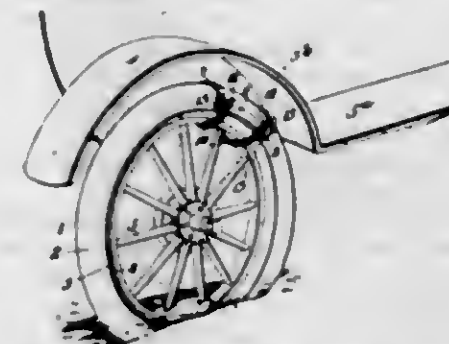
1. In valves, cocks and the like for the control of petrol and analogous liquids comprising a casing and a valve proper, anti-friction white metal lining between the contacting parts which while of a durable nature and not subject to any undue wear is sufficiently ductile as to allow hard impurities in the fluid to bed into the lining or covering rather than score the harder face, substantially as described.

1,309,019. SHIP. ALBERT M. CORTEZ, San Francisco, Calif. Filed Dec. 10, 1918. Serial No. 267,498. 5 Claims. (Cl. 114-68.)



3. A ship comprising a hull; a central bulkhead dividing the hull longitudinally; and arcuate vertically disposed bulkheads extending at an angle from both sides of the central bulkhead and rearwardly to the sides of the ship; the upper portions of said vertically disposed bulkheads being curved toward the bow of the ship.

1,309,020. GRIPPING ATTACHMENT FOR AUTOMOBILE-WHEELS. WALTER CREEK, Las Animas, Colo. Continuation in part of application Serial No. 875,012, filed Dec. 1, 1914. This application filed Oct. 29, 1915. Serial No. 58,657. 5 Claims. (Cl. 152-14.)



1. A device for the purpose described, comprising a skeleton frame formed of a pair of elongated and longitudinally curved side bars, a curved yoke at each end of and connecting the side bars, the curvature of the yokes being substantially coincident with the transverse curvature of a tire to which the device is adapted to be applied, a rigid flange disposed transversely of the device and projecting from one of the yokes substantially radial thereto, and a flexible element secured to and carried by one of the side bars and adapted to be passed around the felly of a wheel and detachably connected to the opposite side bar for removably securing the device in place on a tire, the connections of said flexible element being located between the end and center portions of the side bars but nearer to the end thereof, whereby the device may be applied to an automobile by a person standing on the running-board of the automobile.

2. A mud shoe adapted to be secured upon a tire, and comprising a skeleton frame formed of a pair of elongated, longitudinally curved side bars, curved yokes connecting said side bars at their opposite ends and adapted to span the tread of a tire, one of the yokes being provided with a rigid flange projecting radially therefrom and having a curved engaging edge, and a pair of flexible elements secured at one of their ends to the side bars and carried thereby and adapted to be passed around the felly of a wheel and detachably connected at their other ends to the opposite side bar for securing the device detachably in place on the tire, said flexible elements being spaced apart and disposed nearer to the ends than to the center portions of the side bars, whereby the device may be applied to an automobile by a person standing on the running-board of the automobile.

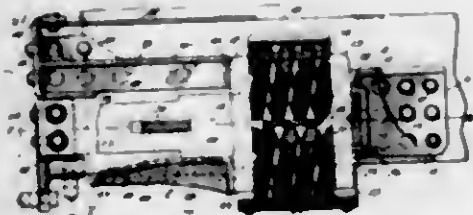
3. A device for the purpose described, comprising a skeleton frame formed of a pair of elongated and longitudinally curved side bars, a curved yoke at each end of and connecting the side bars, the curvature of the yokes being substantially coincident with the transverse curvature of the tire to which the device is adapted to be applied, said side bars being curved transversely to fit the tire and the yokes being of a length to locate the side bars substantially midway between the tread and bead portions of the tire, a rigid gripping element disposed transversely of the device and projecting from one of the yokes substantially radial thereto, and a chain secured to and carried by one of the side bars and adapted to be passed around the felly of a wheel and detachably connected to the opposite side bar for removably securing the device in place on a tire, the connections of said chain being located between the end and center portions of the said side bars but nearer to the end thereof, whereby the device may be applied to an automobile by a person standing on the running-board of the automobile.

4. A shoe adapted to be secured upon a relatively small portion of a tire and comprising elongated, longitudinally curved side bars, curved yokes connecting the side bars at their ends and adapted to span the tread of the tire, the yokes being of a length to locate the side bars substantially midway between the tread and bead portions of the

tire, one of the yokes being provided with a rigid flange projecting radially therefrom and having a convex engaging edge, and flexible elements rigidly connected at one of their ends to the side bars and carried thereby and adapted to be passed around the felly of the wheel and detachably connected at their other ends to the opposite side bars for removably securing the device in place on the tire, said flexible elements being disposed on the side bars between the yokes and the center portion of the shoe but closer to the yokes than to the center portion of the shoe and in spaced relation to said yokes, whereby the device may be applied to an automobile by a person standing on the running board of the automobile.

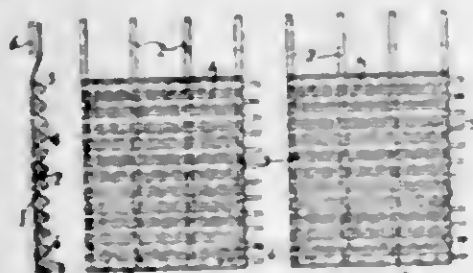
5. A device for the purpose described, comprising a skeleton frame composed of a pair of elongated longitudinally curved side bars and transversely curved yokes constituting end portions of the frame and connecting the bars together, one of the yokes having a rigid flange thereon and extending radially therefrom and provided with a curved ground engaging edge, and chains permanently connected to one of the side bars between the ends and center of the side bar but nearer to the ends than to the center and of a length to pass around the felly of the wheel to the other side bar, said chains having detachable connecting means for securing them to the last mentioned side bar, the connections between the ends of the chains and the side bars being offset from the latter, whereby the device may be applied to an automobile wheel by a person standing on the running-board of the automobile and having but one hand available for securing the device to the wheel, and whereby the chains are so spaced from the ground-engaging flange that the frame can neither turn nor slip in action.

1,309,021. DRAFT-RIGGING FOR RAILWAY CARS. WILLIAM M. DWYER, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Dec. 31, 1915. Serial No. 69,607. 3 Claims. (Cl. 213-42.)



1. In a railway draft rigging, the combination with draft sills hinged at their lower edges, of upper and lower horizontally arranged front stop members for a draft gear, the lower of said stop members having a forwardly and downwardly inclined portion adapted to facilitate the insertion and removal of a drawbar and integral lateral extensions by which it is secured to said sills.

1,309,022. COLLISION-MAT FOR USE ON SHIPS. CHARLES V. A. ELEY, Edgbaston, Birmingham, England. Filed Oct. 31, 1918. Serial No. 260,565. 8 Claims. (Cl. 114-229.)



1. In a collision mat for use on ships the combination of a sheet of resilient material; a plurality of flat springs secured thereto tending to keep the mat flat but permitting it to be rolled up; and a plurality of rigid members secured transversely to said springs, substantially as set forth.

1,309,023. SWING-RAIL SWITCH-FROG. CHARLES EDWARD ENNIS, Kansas City, Mo., assignor to Walls Frogless Switch & Manufacturing Company, Kansas City, Mo., a Corporation of Colorado. Filed May 7, 1918. Serial No. 233,001. 9 Claims. (Cl. 246-388.)



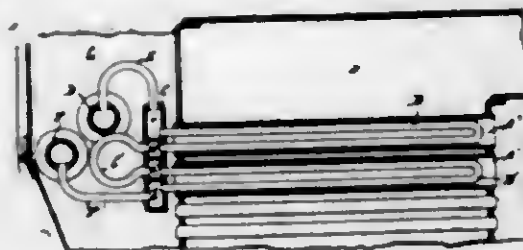
4. In a swing-rail switch frog, a base plate, a rail section pivoted on said base plate, a reciprocating yoke on each side of said rail section, a cam lever connected adjacent each end of each yoke by a pin and slot connection, said cam levers being pivoted on said base plate with their free ends in operative relation to said rail section, and means for simultaneously reciprocating said yokes in opposite directions.

1,309,024. FIREPLACE-FURNACE. CHARLES WESLEY FOX, Pasadena, Calif. Filed Dec. 4, 1917. Serial No. 205,438. 1 Claim. (Cl. 126-131.)



In a fireplace furnace, a lower back wall, rear side walls extending forwardly from the back wall, forward side walls extending forwardly from the rear side walls, a lower front wall connecting the lower portions of the forward side walls, an upper front wall connecting the upper portions of the forward side walls, a top wall connecting the upper edges of the forward side walls, an upper back wall extending from the rear side of the top wall, a top plate connecting the upper edges of the forward lower portions of the forward side walls, there being a damper opening between the lower and upper back walls, a damper for the damper opening, a fire box constructed between the side walls, there being a chamber at each side and a chamber below the fire box, and smoke flues leading laterally from the fire box and downwardly in each side chamber to a smoke header and a flue leading upwardly in each side chamber from the smoke header and through the upper back wall.

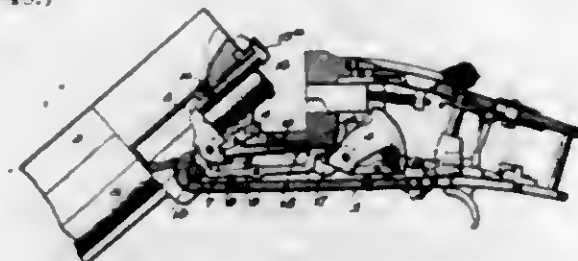
1,309,025. SUPERHEATER. EDWARD A. GROGHIOAN, San Francisco, Calif. Filed Apr. 4, 1918. Serial No. 226,640. 1 Claim. (Cl. 257-255.)



In an apparatus of the class described, a series of vertical headers, the interiors of which are divided into separate chambers, a return-bend superheater tube connecting the first chamber with the second chamber, a looped tube connecting the second and third chambers, a return-bend superheater tube connecting the third and fourth chambers, a horizontal inlet header, a tube connecting said inlet header with the first chamber in said vertical header, a

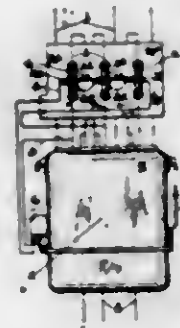
horizontal outlet header, and a tube connecting the fourth chamber in said vertical header with said outlet header, substantially as set forth.

1,309,026. EJECTING DEVICE FOR DOUBLE-BARREL GUNS. GEORGE HENRY GIDDINGS, Ilion, N. Y. Filed Oct. 16, 1918. Serial No. 258,338. 4 Claims. (Cl. 42-48.)



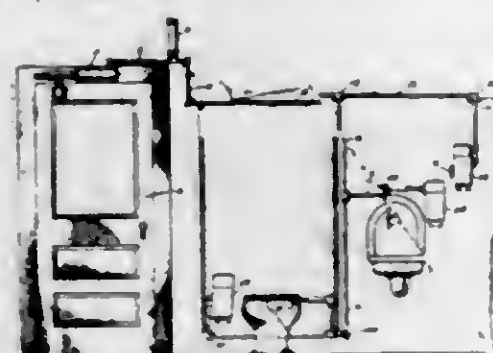
1. In devices of the kind described in double-barrel guns, ejector hammers, slidable ejectors adapted to be struck by said hammers, stops for said ejectors, spring pressed ejector hammer seats, cocking levers engaging the said hammers, V-springs engaging the cocking levers and the hammers, and main hammers adapted to engage the ejector hammer seats, and to disengage them from the ejector hammers as the main hammers are drawn to full cocked position.

1,309,027. FUSE CONTROL FOR MULTIPHASE-CIRCUITS. CHARLES GILLIETT, Toronto, Ontario, Canada. Filed Apr. 5, 1918. Serial No. 226,878. 5 Claims. (Cl. 175-204.)



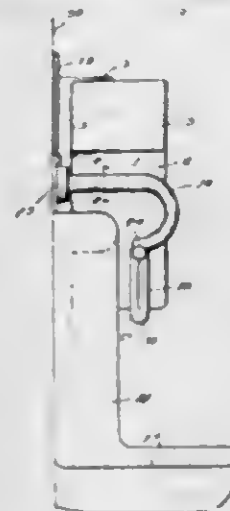
2. The combination with a multiphase electric circuit provided with an inclosed principal fuse in each wire of the circuit of an auxiliary open link fuse in parallel with each principal fuse and removably supported thereon, and a mechanical circuit-controlling device in connection with each auxiliary fuse comprising a spring actuated rocking arm adapted to make or break an electric circuit, said arm being normally restrained from action by the fuse wire of its corresponding fuse.

1,309,028. DISINFECTING SYSTEM. JULIAN G. GOODHUE, Chicago, Ill., assignor to The Universal Utilities Company of Illinois, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1912. Serial No. 701,970. 5 Claims. (Cl. 4-30.)



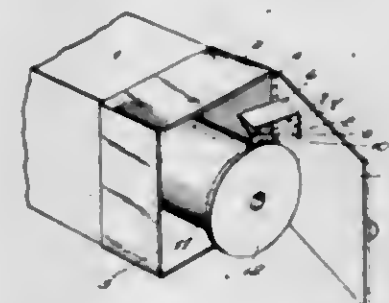
1. The combination with a plurality of atomizers of large pipes leading to the same, and thence to controlling apparatus, and small pipes connected to said controlling apparatus and confined within said large pipes, and branching from the same to several atomizers.

1,309,029. DISINFECTING APPARATUS. JULIAN G. GOODHUE, Chicago, Ill., assignor to The Universal Utilities Company of Illinois, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1912. Serial No. 701,971. Renewed Nov. 11, 1918. Serial No. 262,069. 7 Claims. (Cl. 4-30.)



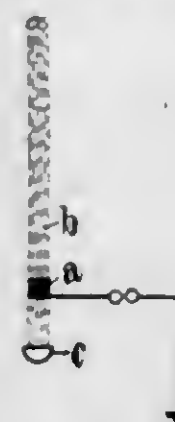
1. In a disinfecting system in combination, a bracket attached to a wall, a goose-necked conduit carried by said bracket having its bend in a vertical plane, and a spraying apparatus suspended from said conduit.

1,309,030. BOX FOR PLAYER-PIANO MUSIC-ROLLS. MASON ALBERT HAWKINS, Baltimore, Md. Filed May 24, 1917. Serial No. 170,732. 2 Claims. (Cl. 220-7.)



1. In a device of the character described comprising an elongated music roll receptacle having an open end, a closure hingedly secured to said receptacle at the open end thereof, and a catch secured to the inner side of said closure, said catch being adapted to move into engagement with the music roll to move the same forward upon the opening of said closure.

1,309,031. AERIAL CONDUCTOR FOR WIRELESS SIGNALING AND OTHER PURPOSES. JOHN HERTING, Streatham, London, England. Filed June 4, 1917. Serial No. 172,702. 19 Claims. (Cl. 250-1.)



1. Substitute means for long conductors of electricity forming part of an electric circuit comprising means for

ionizing the atmosphere along a long beam, and means for electrically connecting said ionized beam to the electric circuit, as set forth.

1,309,032. COATING WITH METAL OF LACE AND OTHER SIMILAR GOODS AND WOVEN OR OTHER FABRICS. EDWARD ALBERT HOLLAND, Southend-on-Sea, England. Filed Apr. 18, 1914. Serial No. 832,992. Renewed Mar. 25, 1919. Serial No. 285,100. 3 Claims. (Cl. 41—37.)

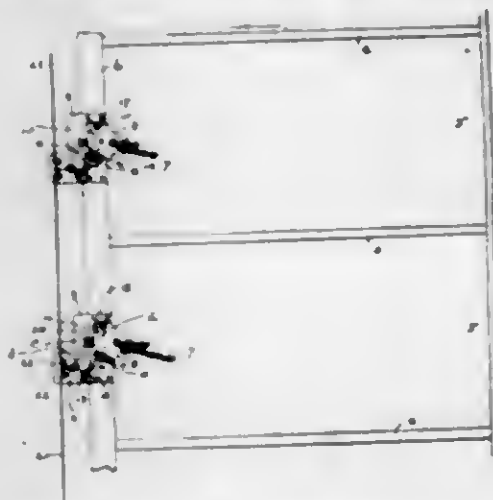
1. A method of treating lace and other goods, consisting in a preliminary treatment of the goods with a solution of rubber and then of alze, then the application of shellac or other varnish on the goods and the drying of the goods, then the application of Oxford ocher and boiled or drying oil and the drying of the goods, and finally the application of the metal substantially as described.

1,309,033. METHOD OF REPAIRING ALUMINUM CASTINGS. SAMUEL D. LAWIN, Floydada, Tex. Filed Nov. 29, 1918. Serial No. 264,250. 1 Claim. (Cl. 113—112.)



The herein described method of welding aluminum castings which consists in applying a welding plate to a side of the article to be welded, said plate comprising a base and an alloying bed, the plate being applied with the alloying bed in contact with the surface of the article to be welded and made to conform thereto, then applying a backing to the welding plate so as to overlap the welding plate and a portion of the article, then applying an intense flame to the joint to fuse the alloying bed and parts of the aluminum bordering upon the joint, then allowing the article to cool and finally removing the backing and stripping off the base.

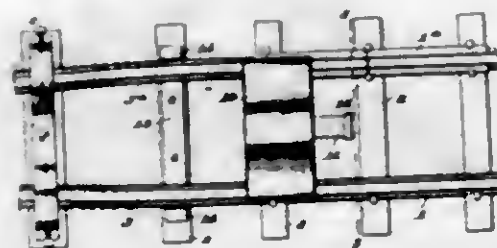
1,309,034. HALTER-RELEASING DEVICE. HENRY JANKEN, Omaha, Nebr. Filed Apr. 24, 1919. Serial No. 292,269. 1 Claim. (Cl. 119—115.)



A releasing device for halters, comprising a support provided with a recess and having a second recess opening upon the first named recess, a block for securing a halter thereto and adapted to be disposed in said recesses, a spring normally engaging the block, a resiliently mounted locking-bolt normally engaging the block, a rock-lever having an arm engaging the locking-bolt and having an arm engaging the spring, a pair of rollers, a strand between the rollers and connected with the rock-lever, and

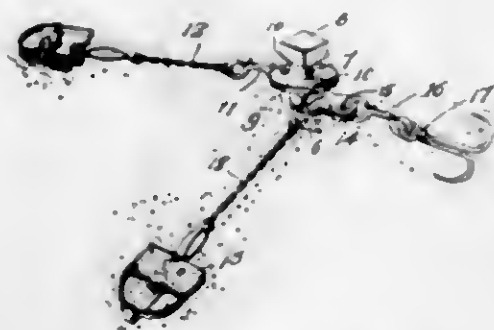
an operating-member connected with the strand, said operating-member being movable on the rollers for actuating the rock-lever to disengage the locking-bolt from the block and to press said block outwardly of said recesses.

1,309,035. CAR-STOP. CARROLL LYMAN JONES, Cheriton, Va. Filed Apr. 12, 1919. Serial No. 289,542. 10 Claims. (Cl. 104—259.)



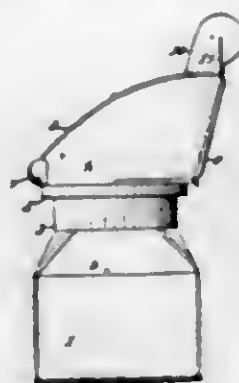
1. The combination with a railway track, of a member engaging both terminal rails of the track and adapted to be moved longitudinally thereof by impact of a car, said rails being so related that movement of said member by a car will be resisted by pressure exerted laterally thereon by said rails.

1,309,036. TRAP-STAKE. JOHN S. KNIGHT, La Jara, Colo. Filed Apr. 11, 1917. Serial No. 101,206. 4 Claims. (Cl. 43—23.)



1. In a trap stake, the combination with a shaft pointed at one end and trap-securing means movably held in said shaft, and a collar at the other end of the shaft to retain the trap-securing means thereon, of laterally swaged oppositely arranged flat extensions on said shaft supporting said collar.

1,309,037. VENTILATOR. NORMAN A. LICHTY, CLAUD S. LICHTY, and HENRY F. CAMPBELL, Waterloo, Iowa, assignors to Lichty Metal Products Company, Waterloo, Iowa, a Corporation of Iowa. Filed July 15, 1918. Serial No. 244,855. 2 Claims. (Cl. 98—3.)

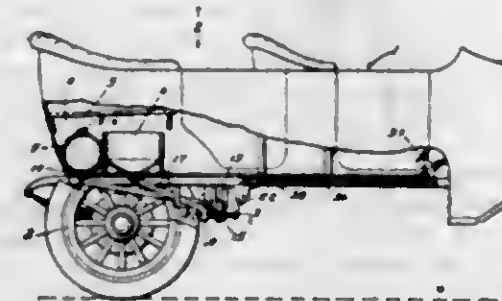


1. A ventilator, comprising a ventilating-fine, and an elbow-shaped cowl rotatably mounted thereon, the top of the cowl being planar and sloped curvilinearly upwardly toward the upper edge of the funnel of the cowl.

1,309,038. SANDLESS CONCRETE. CLAUD H. LIGHT, Des Moines, Iowa, assignor of one-fourth to Jacob Zeiner and one-fourth to Bessie Hindle, Des Moines, Iowa. Filed Nov. 29, 1918. Serial No. 264,667. 2 Claims. (Cl. 106—34.)

1. A sandless plastic product consisting of sawdust, cement, plaster of Paris and lime.

1,309,039. NON-SKID ATTACHMENT FOR AUTOMOBILES. JOHN MCNEIL, Los Angeles, Calif. Filed Dec. 30, 1918. Serial No. 268,079. 2 Claims. (Cl. 291—1.)



1. A non-skid attachment for automobiles comprising a liquid tank mounted to discharge in front of an automobile, a hopper for granular material mounted upon the automobile and adapted to discharge in front of the drive wheels of the automobile and in front of the liquid discharge, a pedal, valves for controlling the discharge, and connections between the pedal and the valves whereby the operation of the pedal will control the discharge of the material.

1,309,040. LITERATURE-DISTRIBUTING DEVICE. FREDERICK JOHN MANSFIELD, Pasadena, Calif. Filed Feb. 14, 1918. Serial No. 217,292. 4 Claims. (Cl. 102—20.)

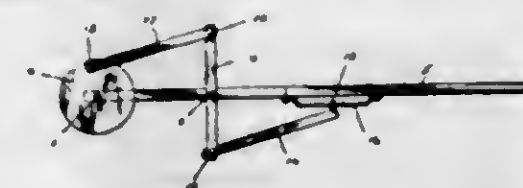


1. A distributing device for balloons consisting of a fuse attached to the balloon and blocks of literature through which the fuse extends.

1,309,041. TOY. JOHN C. MERRITT, Marengo, Iowa. Filed Aug. 16, 1918. Serial No. 249,316. 1 Claim. (Cl. 46—48.)

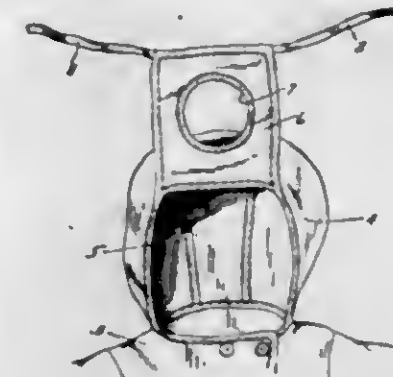
A toy comprising a supporting handle, a ground engaging wheel journaled upon one end thereof, a walking beam disposed transversely of said handle and pivotally connected therewith intermediate its ends, a pitman pivotally connected with one end of said beam and eccentrically connected with said wheel, a link pivotally con-

nected with the other end of said beam, an eye on the free end of said link, and a bracket secured upon the



underside of said handle and offset to lie in spaced relation thereto, said eye being engaged upon said bracket whereby said link will be guided in its movement.

1,309,042. HOOD FOR CHILDREN'S GARMENTS. LEAH G. MILKES, Minneapolis, Minn., assignor to Venus Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Original application filed Mar. 19, 1917. Serial No. 155,869. Divided and this application filed May 27, 1918. Serial No. 236,681. 2 Claims. (Cl. 2—118.)



1. A hood provided with a face flap attached to the top front edge portion, said flap having a central breathing passage, and having at its free end tie strings adapted to be brought around the neck and secured at the back thereof.

2. A hood provided with a face opening, a face flap attached at the upper edge of the face opening and having a breathing passage, and means at the lower edge of the flap to attach the same without adjustment of the hood.

1,309,043. REVERSIBLE CUFF. LEAH G. MILKES, Minneapolis, Minn., assignor to Venus Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 27, 1918. Serial No. 247,059. 1 Claim. (Cl. 2—79.)

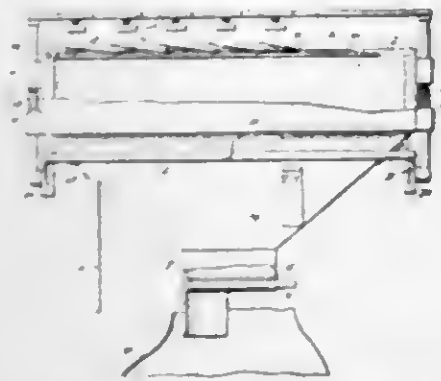


A sleeve having reversible cuff made up of two flaps, the said flaps being connected at their outer edges and ends and one of the flaps being connected to the sleeve at its inner edge, the inner edge of the other flap being loose to permit reversing of the cuff, the said two flaps, near one end of the cuff, having registering buttonholes, one of said flaps, near the other end of the cuff having an attached button, and the other flap having a buttonhole registering with said button.

1,309,044. TICKET-ASSEMBLING APPARATUS. JULIUS MINTZ, New York, N. Y. Filed Apr. 20, 1917. Serial No. 163,469. 20 Claims. (Cl. 232—8.)

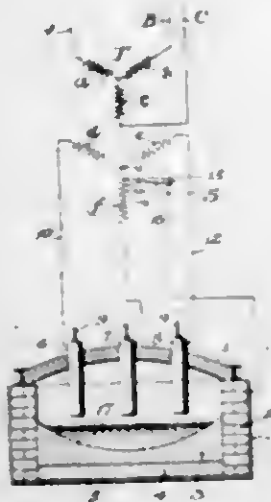
3. An apparatus of the class described comprising a container, a slideway at the open end of said container

adapted to receive a ticket holding card, fingers extending across the top of said container and adapted to pass between the tickets and the card a plate disposed normally



about said fingers, penetrating members carried by said plate and cooperating with said fingers for mutilating a ticket disposed therebetween and means for depressing said plate.

1,309,045. ELECTRIC FURNACE AND PROCESS OF OPERATING SAME. WILLIAM E. MOORE, Pittsburgh, Pa. Filed Aug. 9, 1915. Serial No. 249,073. 13 Claims. (Cl. 204—64.)



4. A polyphase electric furnace, comprising a plurality of arcing electrodes, a polyphase circuit connected with said electrodes, and means for unbalancing the voltage supplied to one of said electrodes.

1,309,046. LATHE. WILLIAM EDMOND, Porthill, Stoke-upon-Trent, England, assignor of one-half to Henry Lewis Boulton, London, England. Filed Nov. 8, 1915. Serial No. 60,405. Renewed Apr. 14, 1919. Serial No. 290,109. 2 Claims. (Cl. 142—42.)



1. In apparatus for externally shaping clay in the manufacture of telegraph insulators and the like, the combination with a rotary shaft adapted to hold and rotate the work during the shaping operations, of a sliding and revoluble rod and a series of tools, adjustably mounted upon the said rod, two of said tools operating upon the clay successively by being moved endwise, and the other tool or tools operating upon the clay after the other tools

have completed their work by being fed against the work in the arc of a circle, a fixed rail alongside and parallel with the sliding rod, said rail having a gap in its upper edge, arms on the sliding rod adapted to bear against the said rail and thereby limit the angular movements of the rod and tools, as well as guide the rod and tools when moved endwise, and one of said arms also being adapted to pass through the gap in the rail when brought opposite thereto, as set forth.

2. In apparatus for externally shaping clay in the manufacture of telegraph insulators and the like, the combination with a rotary shaft adapted to hold and rotate the work during the shaping operations, of a sliding and revoluble rod, a profiling tool secured to said rod for imparting a preliminary profiling to the work, a further tool also secured to the said rod and lying in advance of the said profiling tool for removing the excess clay preparatory to the said profiling tool operating upon the work, the two tools operating upon the work under the endwise movement of the rod, two further tools upon the said rod, one for imparting a finished profiling to the work from end to end, and the other for trimming the wider end of the work, the tools operating upon the work by the said rod being rotated through the arc of a circle, a fixed rail alongside and parallel with the sliding rod and having a gap in its upper edge, arms on the sliding rod, adapted to bear against the said rail and thereby limit the angular movements of the rod and tools, as well as guide the rod and tools when moved endwise, and one of said arms also being adapted to pass through the gap in the rail when brought opposite thereto, as set forth.

1,309,047. RUBBER FOOTWEAR. RAYMOND B. PRICE, New York, N. Y., assignor, by means assignments, to The Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed Dec. 30, 1911. Serial No. 668,791. Divided and this application filed Oct. 22, 1914. Serial No. 867,950. 6 Claims. (Cl. 36—4.)

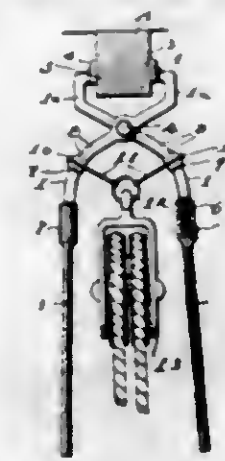


2. A vulcanized rubber boot or shoe composed of layers of vulcanized rubber and fibrous materials in which a layer of rubber is vulcanized in intimate and continuous contact with its adjacent layer throughout its superficial area.

1,309,048. ADJUSTABLE OVERHEAD SUPPORT FOR HOISTS. ADAM A. E. SKIFFS, Bangor, Pa. Filed Nov. 21, 1918. Serial No. 263,541. 2 Claims. (Cl. 57—9.)

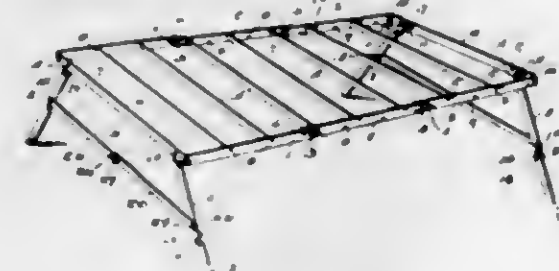
1. An overhead support for hoists including a pair of crossed and pivotally connected levers of which the lower ends diverge while the upper ends terminate in opposed jaws adapted to grip an overhead beam, slides mounted upon the diverging lower ends of the levers, suspending links carried by the slides and mounted to

have a limited movement relative thereto, locking means controlled by the said relative movement between the



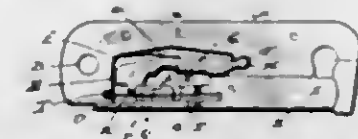
links and slides for holding the slides in an adjusted position on the levers, and a hoist supported by the suspending links.

1,309,049. FOLDING GRILL AND APPURTENANCES. HERBERT STREET, Brooklyn, N. Y. Filed Dec. 6, 1918. Serial No. 265,531. 1 Claim. (Cl. 126—30.)



A foldable grill comprising U-shaped end members, straight intermediate side members each of which is pivoted at one end inside of and at the other end outside of the parts of the end members, means for limiting the unfolding movement of the pivoted parts, grill bars connecting the side members, folding legs at the corners of the grill, and foldable leg braces, each brace comprising two hinged members, a stop to hold the members in line when extended, and notches near the free ends of the members to engage pins on members of two of the legs at the same end of the top.

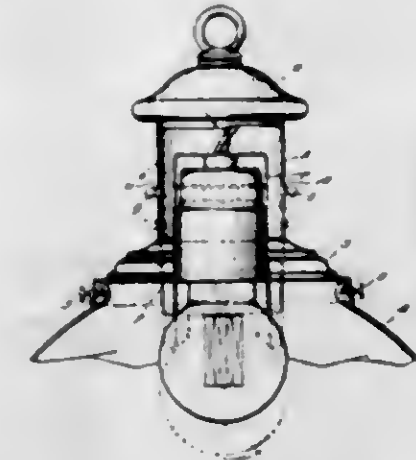
1,309,050. LOCK. ARMAND A. TIRRETS, Omaha, Nebr. Filed May 24, 1918. Serial No. 236,327. 1 Claim. (Cl. 70—5.)



A lock comprising a body portion having a hook at one end for engaging a keeper and means at its other end for pivotally securing the other end to the edge of a door or the like, said body portion having a chamber for the reception of a slidable bolt, one end of said bolt being adapted to move into and out of engagement with the hook, the other end of the slidable bolt being provided with a reduced portion, spring actuated tumblers pivoted in the chamber, their free end being adapted to engage the end of the reduced portion of the slidable bolt for maintaining the same in locked position, a spring detent having one of its ends secured in the body portion and its other end disposed in a longitudinal slot in the reduced end of the slidable bolt, said longitudinal slot having a right angle slot spaced from the inner end thereof and adapted to receive a right angle integral

arm formed at the end of the spring detent, said tumblers, spring detent and slidable bolt being adapted to be engaged by a key for raising the tumblers, depressing the spring detent and forcing the angled end thereof downwardly into registration with the inner end of the longitudinal slot so that the angled end of said spring detent will be received by the same when the key moves the slidable bolt rearwardly to unlocked position.

1,309,051. SOCKET-CARRIER FOR ELECTRIC FIXTURES. HERMAN V. WILLMAN, Chicago, Ill. Filed May 13, 1918. Serial No. 233,884. 8 Claims. (Cl. 240—70.)



1. A lighting fixture for affording a substantially predetermined light distribution from lamps of varying effective lengths, comprising a casing equipped on one side with a slot having a plurality of seat formations spaced longitudinally of the casing by distances corresponding to the successive differences in length of the several sizes of lamps; a reflector fast with respect to the casing and shaped for affording the desired light distribution; and a socket-carrier housed by the casing and movable longitudinally of the latter; the said carrier including locking means projecting through the said slot and normally engaging one of the said seat formations, and a resilient element carrying the locking means and normally holding the latter in its said engaging position; the projecting of the locking means permitting the latter to be manipulated from the exterior of the casing to disengage the locking means from a seat formation and to move the said carrier from one to another of the seat formations so as to adjust the position of the carrier to any one of the predetermined positions visibly defined by the location of the said seat formations as corresponding respectively to the several sizes of lamps.

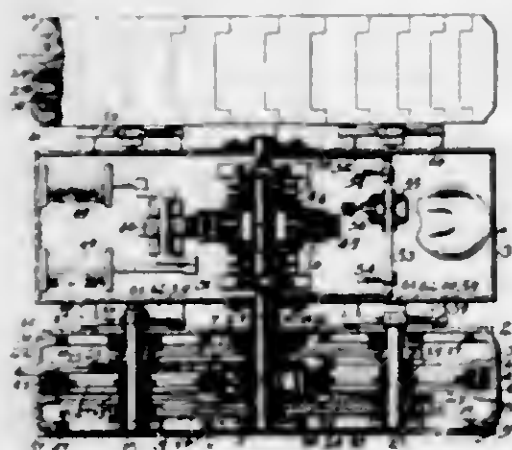
1,309,052. ELECTRIC-FIXTURE SUPPORT. DWIGHT E. WENDELL, Chicago, Ill., assignor to Harter Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1917. Serial No. 175,069. 3 Claims. (Cl. 240—85.)



3. In an electric fixture, the combination with a depending stem, of a fixed support, a plurality of concentric spherical shells one of which is attached to the upper end of the stem and extends upwardly therefrom

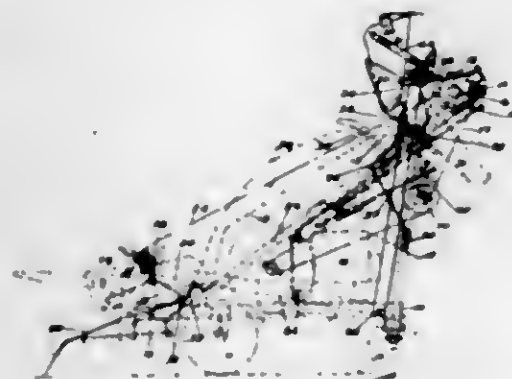
with an integral inwardly extending projection, the other shell portions being secured to the fixed support and depending therefrom engaging the opposite sides of the other shell member and terminating at a distance from the stem, the innermost shell having a perforation in which the projection fits loosely, but is normally in the center thereof, the said perforation and the edges of the shells which are spaced from the end of the stem permitting a limited universal movement of the stem with respect to the fixed support about the common center of the said shells.

1,309,053. TRACTOR ATTACHMENT FOR MOTOR-VEHICLES. MORTON LEA ADAMS, Seattle, Wash., assignor to Adams Tractor Company, Seattle, Wash., a Corporation of Washington. Filed July 26, 1918. Serial No. 246,931. 12 Claims. (Cl. 180—9.)



1. A tractor attachment comprising an axle at each end, tread driving sprockets fixed on the axles, a drive axle, and means carried by the drive axle having connection with said axles and normally applying power uniformly to the tread driving sprockets to reduce the strain on the tread elements, said means including differential gearing on the drive axle.

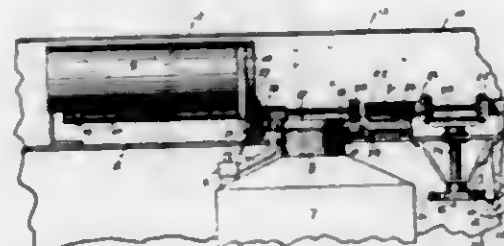
1,309,054. EXCAVATOR. JOHN H. ALBRECHT, Madison, Wis., assignor to The T. L. Smith Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 6, 1916. Serial No. 135,288. 1 Claim. (Cl. 214—92.)



In a loading machine, the combination, with a relatively fixed frame, of a swinging frame pivotally mounted thereon, a skip, means for directly connecting said skip to said swinging frame to be moved with the latter, a scraper adapted to be carried by said skip, means for swinging said frame from a position to receive the scraper to a position to discharge the scraper, a fixed stop on the fixed frame, a stop carried by the skip engaging said fixed stop when the scraper is in discharging position to impart a direct jarring action to the scraper to discharge the material therefrom, levers mounted on said fixed frame and projecting into the

path of the stop carried by the skip, and springs acting on said levers to return said swinging frame a short distance so that the scraper may be jarred again by contact between the above named stops.

1,309,055. HINGED FUNNEL. JOHN W. ANDERSON, New London, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Jan. 3, 1917. Serial No. 149,378. 10 Claims. (Cl. 114—16.)



1. In a submarine boat equipped with a steam power plant, in combination, a hull provided with an opening, a boiler-uptake leading to said opening, a pivotally mounted funnel, means for moving the funnel to extend substantially horizontally and away from said opening and to extend substantially vertically and above said opening, a movable door for opening and closing said opening, and means operable from within the boat for turning the funnel about its pivot and also for moving the door.

1,309,056. DOOR-CHECK. FRED P. ANGELL, Battle Creek, Mich. Filed Mar. 23, 1917. Serial No. 156,860. 2 Claims. (Cl. 16—87.)



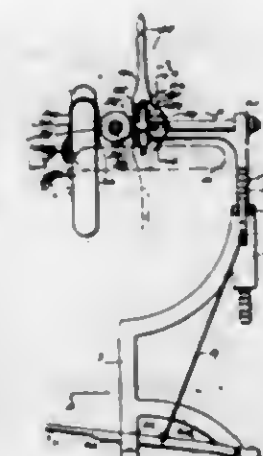
1. A door check, the combination of the cylinder, its head, a piston closing said cylinder and the piston rod attached to said piston, of the guide for said piston, a tension collar on said piston, the spring fitting between said guide and collar, and a screw passing through an offset of said piston rod into said collar for regulating the tension of said spring, substantially as specified.

1,309,057. AUTOMATIC COUPLING FOR RAILWAY AND OTHER VEHICLES. JOSEPH GIBSON ARCHBOLD, Monkseaton, England. Filed Mar. 29, 1919. Serial No. 285,329. 4 Claims. (Cl. 213—40.)



1. In an automatic coupling for vehicles, the combination of two cooperative coupling members, each comprising a triangular shaped block and an adjacent relatively inverted correspondingly shaped cavity, said triangular blocks being arranged to point in the direction of the draw bars and adapted to engage in the cavity of the other member so that their similarly inclined faces meet, a transverse snap operating bolt in each triangular block adapted to engage in a socket on the cooperating member, said meeting faces being adapted to be wedged together by cooperation of the opposite faces, with the corresponding face of the cavity of the opposite member.

1,309,058. TIRE-CASING HOLDER AND SHIFTER. JAMES WHITE ARTHUR, Warren, Ohio. Filed Aug. 12, 1918. Serial No. 249,341. 4 Claims. (Cl. 154—9.)



1. A tire-casing holder and shifter comprising a rotatable device, means for securing a tire thereto, a bearing in which said rotatable device is seated, and a lever pivotally secured on said rotatable device to rotate therewith and being operable to rotate the latter and engageable with said bearing for holding said rotatable device in different angles about its axis.

1,309,059. ROTARY VALVE. GEORGE M. BACON, Salt Lake City, Utah. Filed Mar. 16, 1917. Serial No. 155,389. 7 Claims. (Cl. 221—107.)



1. In a rotary valve, the combination of a hub provided with recesses in its opposite sides, and packing strips fitted in said recesses and having their lateral edges in contact to furnish sealing and pocket defining elements.

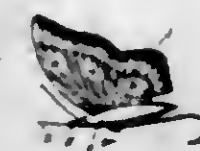
1,309,060. CURTAIN-ROD. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1917. Serial No. 167,626. 5 Claims. (Cl. 156—19.)



1. A hollow curtain rod made from a strip of sheet metal and having a flat front side, said strip having its longitudinal marginal portions folded over with their free edges contiguous throughout the length of the rod, and said folded marginal portions together forming a flat rear side lying substantially parallel with said flat front side.

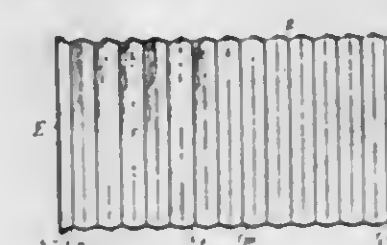
3. In an extensible curtain rod, the combination with a pair of substantially flat hollow rod sections, one of a size to telescope within the other, of a wire loop member having legs rigidly secured in one end of the inner telescoping section and a transversely elastic head portion projecting beyond said end, said head portion having outwardly bowed sides that project beyond the edges of said inner telescoping section and engage under compression within the adjacent end of the outer telescoping section.

1,309,061. FISHERMAN'S FLY. HIRAM CASSEDT, Sr., Brookhaven, Miss. Filed Mar. 12, 1918. Serial No. 221,987. 3 Claims. (Cl. 43—30.)



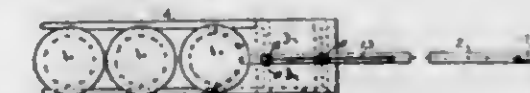
1. A fish lure comprising a body having a notch therein, a wing structure formed with a section adapted to fit into said notch, a clamping block arranged in said notch so as to clamp said wings to said body, and means for locking said wings between said body and block.

1,309,062. BAKE-PAN. SAMUEL ROY CASTLE, Aberdeen, Wash. Filed Oct. 16, 1918. Serial No. 258,368. 3 Claims. (Cl. 53—6.)



1. A bake pan comprising a flexible plate adapted to be rolled into substantially a cylindrical form, said plate possessing inherent resiliency, and end plates engaging the opposite end portions of the rolled plate, said end plates being maintained in applied position by the inherent resiliency of the plate.

1,309,063. PIE-HANDLER. SAMUEL S. CLARK, Sidrac, N. J., assignor to Kenneth S. Clark, Little Falls, N. J. Filed Sept. 29, 1918. Serial No. 255,820. 1 Claim. (Cl. 107—67.)

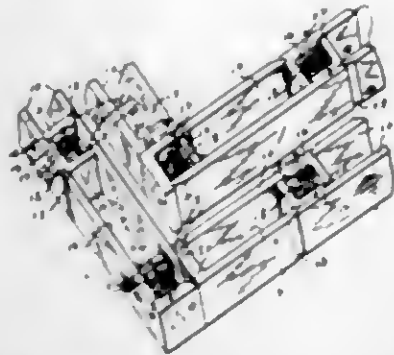


In a pie handler, a hollow handle, a rod or shaft passing through the center of said handle, a spring and hand wheel on the end of the rod for operating it, bevel wheels on the other end of the rod and engaging bevel wheels on studs, pinions on said studs for operating racks, slides integral with said racks, said racks and slides so arranged as to be moved laterally by the rotating of the rod by means of the hand wheel, and sides or bodies connected to the said slides and supporting the strips on which the pie pans are supported for the purpose of handling or conveying pies of any size in and from the oven as set forth and described.

1,309,064. TILE CONSTRUCTION. JOHN A. FLAHERTY, Los Angeles, Calif. Filed Jan. 17, 1916. Serial No. 72,396. 11 Claims. (Cl. 72—30.)

1. A wall construction composed of L-shaped tile or slabs each having a long and a short leg; a groove formed in the inner face of the long leg near its connection with the short leg; a tongue formed on the inner face of the short leg at the end thereof; said tile being laid in pairs and the tile of each pair being laid reversely to each

other, the end of the short leg of each tile abutting against the inner surface of the long leg of its com-



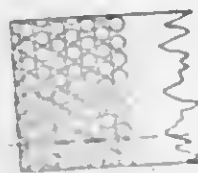
panion tile with the tongue of the short leg engaging the groove of the long leg, whereby channels are formed for the reception of cementitious material.

1,309,965. ARMOR FOR SHINGLES. EVERET L. GENTZ, Idabel, Okla. Filed June 29, 1918. Serial No. 242,678. Renewed May 28, 1919. Serial No. 300,475. 2 Claims. (Cl. 108-13.)



1. As an article of manufacture, a metallic armor for wooden shingles comprising a rectangular sheet of metal having a downwardly extending flange at its lower end formed with an interrupted margin, this flange having a depth equal to the thickness of the lower end of a shingle, the sides of the shingle armor having flanges adapted to interlock with the flanges on adjacent sheets.

1,309,966. BELT. FELICE GIARDINI, Turin, Italy. Filed Apr. 6, 1918. Serial No. 227,051. 5 Claims. (Cl. 74-62.)



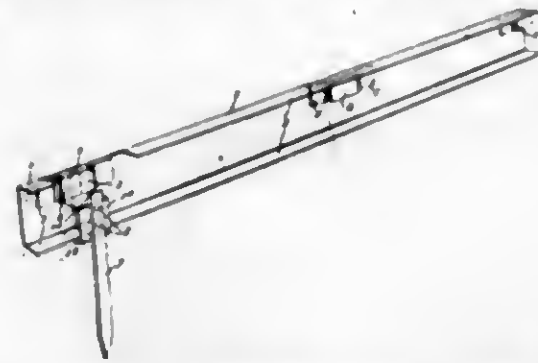
1. A one ply belt having tanned portions separated by untanned portions

1,309,967. WELDING-CLAMP. JOSEPH W. HELTZEL, Warren, Ohio. Filed Apr. 7, 1919. Serial No. 288,025. 5 Claims. (Cl. 113-99.)



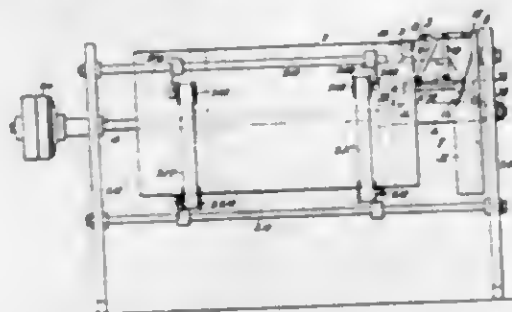
1. A device of the class described, comprising a cruciform base member having a portion extending longitudinally therefrom and provided with a slot, a slotted plate adapted to straddle said portion, and a welding member adapted for insertion into the slot of said portion.

1,309,968. CONCRETE-FORM. JOSEPH W. HELTZEL, Warren, Ohio. Filed Apr. 15, 1919. Serial No. 291,121. 5 Claims. (Cl. 25-118.)



1. A structure of the class described, comprising a side rail and a stake, said side rail and stake having one a female member secured thereto and the other a male member adapted for insertion into said female member thereby to support the rail in vertical position, said stake having a laterally extending member adapted to project beneath the side rail.

1,309,969. MACHINE FOR AFFIXING MEASUREMENT-TICKETS OR OTHER TICKETS TO FABRICS AND THE LIKE. WILLIAM SAMMONS HURBRAD, Leicester, England. Filed May 8, 1916. Serial No. 96,266. 14 Claims. (Cl. 216-28.)



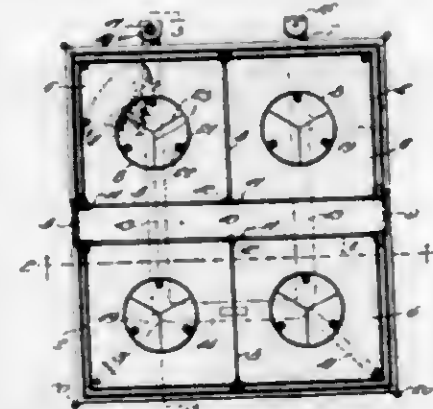
1. A machine for applying measurement or other labels or tickets at regular intervals along the whole length of fabric or the like comprising a measurement drum, means for rotating said drum, a series of cams, a plunger operated by said cams and adapted to attach a label to the fabric through an aperture in the drum surface on each revolution of said drum, means for heating said plunger, a backing block operated by said cams to move into register with said plunger at the moment of attaching the label to the fabric, feeding mechanism operated by said cams to feed forward under the fabric and over the plunger a label from a roll for each revolution of the drum, cutting mechanism operated by said cams to cut off a label from the ticket roll at each revolution of the drum and means for putting said label affixing mechanism out of action during the rotation of the drum.

1,309,970. MANUFACTURE OF LAMPBLACK. THOMAS WILLIAM STAINES HUTCHINS, Middlewich, England. Filed Oct. 16, 1918. Serial No. 258,452. 4 Claims. (Cl. 204-31.)



1. In the manufacture of lampblack from tar or oil, the combination with a vessel containing the said liquid, of means for picking up the liquid from the said vessel in a film form, and an electric arc projected on to said film carrying means and subjecting said film to the heat of the arc, as set forth.

1,309,971. PIG-FARROWING HOUSE. FELIX G. JOHNSON, Clarinda, Iowa. Filed Mar. 1, 1918. Serial No. 219,932. 3 Claims. (Cl. 119-16.)



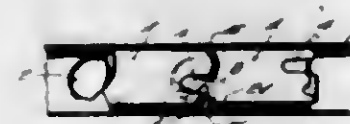
1. A pig farrowing pen having heating means for a portion of its floor, a hoop above said portion of the floor for reserving the same for the litter, and legs depending from said hoop and secured to the floor, the space between said hoop and the sides of the pen being restricted in width to permit the sow to lie down only in a position in which the litter may nurse.

1,309,972. EYEGLASS-MOUNTING. OSMOND YONGUE LADD, Danbury, Conn. Filed Feb. 12, 1919. Serial No. 276,514. 5 Claims. (Cl. 88-50.)



1. A lens mounting comprising a bridge having a tubular upstanding pivot post opening at its lower end through the lower surface of the bridge, a finger piece lever having a depending tubular pivot bar extending downwardly into the pivot post, and fastening means engaging the lower portion of said bar and having bearing against the lower surface of the bridge around the lower opening of the post.

1,309,973. FLEXIBLE SHAFT. EDWARD LEBERG, Roselle, N. J. Filed July 9, 1918. Serial No. 244,108. 5 Claims. (Cl. 64-30.)

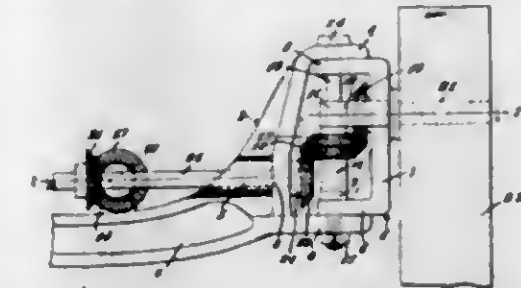


1. In a flexible shaft, an elongated link having a socket opening through one of its ends, one side of said socket being concave and the opposite side relatively flat, and a second elongated link having on one end a substantially quarter-spherical head received non-rotatably in said socket with its convex surface engaging the concave side of said socket, said head having turning movement in said socket allowing angling of the two links in all directions.

1,309,974. VEHICLE-DRIVE. HECTOR McKINNON, Eureka, Calif. Filed Jan. 18, 1919. Serial No. 271,821. 2 Claims. (Cl. 74-101.)

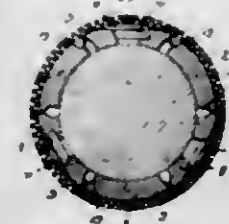
1. In a device of the class described, a vehicle axle comprising a head having arms; a yoke including an upright, and arms coacting with the arms of the axle head, the upright being provided with an inwardly projecting

loop-shaped bracket having a bearing; a shaft connecting the arms of the yoke and of the axle head for relative pivotal movement and passing through the bearing; a gear mounted on the shaft between one arm and the bearing and comprising integrally formed beveled pinions; a stub-axle journaled in the upright of the yoke; a ground



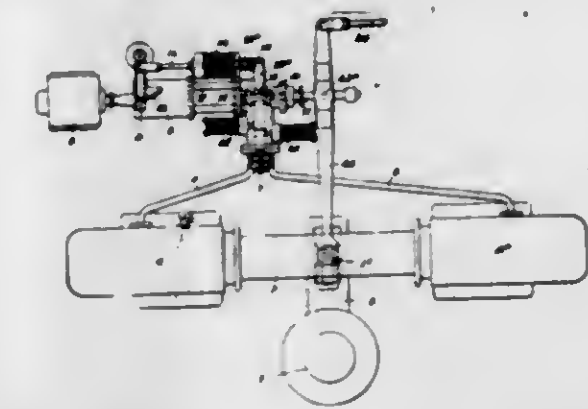
wheel on the outer end of the stub axle; a beveled pinion on the inner end of the stub axle within the bracket and meshing into one of the integrally formed pinions; a shaft journaled in the head; a pinion on the last specified shaft and meshing into the other of the integrally formed pinions; and means for driving the last specified shaft.

1,309,975. METALLIC PACKING FOR PISTON AND OTHER RODS. ALFRED D. MORRIS, Philadelphia, Pa., assignor to Morris Metallic Packing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1916. Serial No. 94,128. 1 Claim. (Cl. 280-24.)



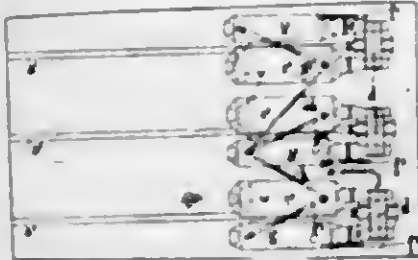
A rod packing ring composed of segments with intervening gaps, means for pressing said segments toward the rod, and spacing pins disposed in said gaps and serving to retain the segments to proper circumferential relation to one another, said spacing pins projecting across the gaps from the end of one segment toward the opposed end of the adjoining segment and being free from connection with one of said segments.

1,309,976. SHIP'S STEERING-GEAR. CECIL E. PAINTE, Bath, Me. Filed Feb. 25, 1919. Serial No. 279,107. 6 Claims. (Cl. 138-2.)



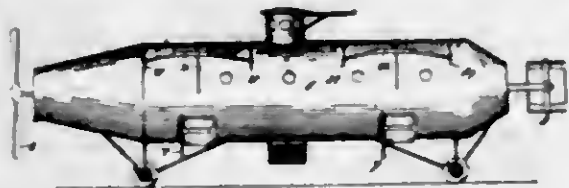
1. In a steering gear, a steering motor, a continuously operable variable stroke irreversible pump for supplying motive fluid to actuate said motor, a reversing valve for reversing the flow of fluid between the pump and motor adapted in one position to cut off said flow, and means whereby the building up of said flow varies the stroke of the pump.

1,309,077. TURBINE INSTALLATION FOR SHIP PROPULSION. CHARLES ALGERNON PARSONS, Newcastle-upon-Tyne, and ROBERT JOHN WALKER, STANLEY SMITH COOK, and LOUIS MORTIMER DOUGLAS, Wallasey, England; said Walker, said Cook, and said Douglas assignors to said Parsons. Filed May 15, 1916. Serial No. 97,717. 4 Claims. (Cl. 60—70.)



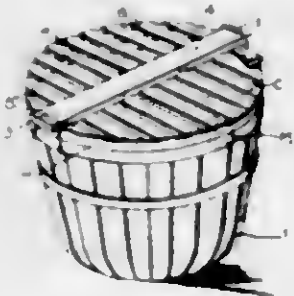
1. A turbine installation for ship propulsion, comprising in combination a plurality of propeller shafts, a set of turbine units for each shaft, each set including a high pressure turbine and a lower pressure turbine in independent casings, gearing between the turbines of each set and the shaft to be driven thereby, pressure fluid conducting means for connecting each high pressure turbine with its lower pressure turbine and pressure fluid conducting means for cross connecting a high pressure turbine with the lower pressure turbine of another set, at least one turbine unit of each set being inoperative when the cross connection is working, and clutches for rendering said units idle or active.

1,309,078. AIRSHIP. JOHN PAULASKI, Cirers, Ill. Original application filed Oct. 31, 1918, Serial No. 260,490. Divided and this application filed May 13, 1919. Serial No. 296,823. 2 Claims. (Cl. 244—29.)



1. In an aerial vessel, an elevating plane, a medial rock shaft carrying said plane, means for rocking said shaft, rods projecting laterally from the plane on opposite sides of the shaft, guides in which the rods work, and means for locking the rods in said guides.

1,309,079. BASKET-CLOSURE. ARTHUR JAMES THOMPSON and HERMAN R. BEMKE, Maunsee, Mich. Filed Jan. 31, 1918. Serial No. 214,727. 1 Claim. (Cl. 217—124.)



In combination with a basket comprising staves, a rim connecting the free end portions of said staves, and a closure member, a holding device formed of a single strand of lendable material and having one end portion returned to form an inwardly facing hook to straddle the lower marginal portion of the rim of the basket, the opposite end portion of the strand being extended, before applied and bent in a direction away from the returned portion and arranged in the same plane as the returned portion longitudinally of the strand, said last named end portion being

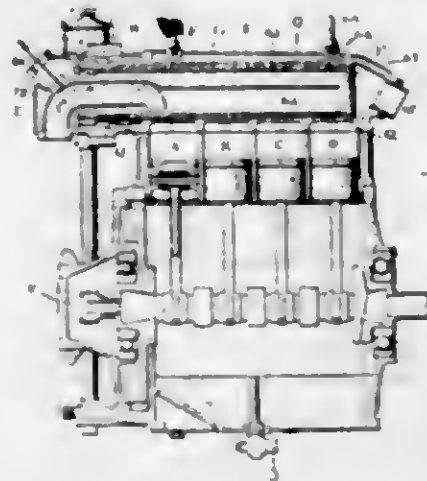
arranged on a predetermined curvature to afford a finger engaging hook in applying the holding device and to protect the contents of the basket when said last named portion is bent inwardly of the rim of the closure.

1,309,080. TRAIN-ORDER HOLDER. EMERSON HOWA SMITH, Parsons, Kans. Filed May 5, 1919. Serial No. 294,717. 1 Claim. (Cl. 258—3.)



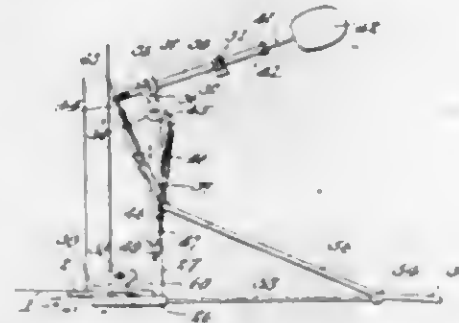
A train-order holder comprising a strip formed into a loop and a handle and having portions converging from the loop to the handle, said handle comprising the united end portions of the strip, a wedge-shaped member between and secured to the converging portions of the strip, and a spring having its inner end portion embedded in said wedge-shaped member, the outer end of said spring being disposed in said loop and forming a clamping element to hold a train-order to be delivered, said wedge-shaped member being provided with a groove extending longitudinally thereof and containing the portion of said spring between said inner and outer end portions.

1,309,081. VALVE AND VALVE MECHANISM. HENRY O. WILKINSON, Pettebridge, England. Filed Oct. 11, 1916. Serial No. 124,993. 3 Claims. (Cl. 123—59.)



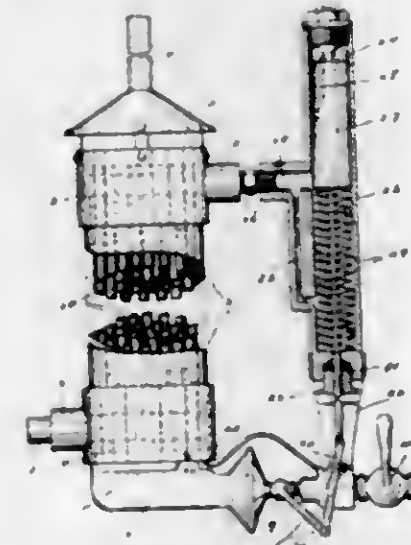
1. Valve mechanism for internal combustion engines comprising the combination of a stationary inlet and exhaust manifold having a cooling chamber divided for the greater part of its length by a rib for circulating purposes, an opening at one end of the manifold connected with the cooling chamber for the passage of a cooling medium to the chamber, a pair of concentric sleeves each having a plurality of inlet and exhaust ports for each corresponding port of each cylinder, and means for rotating the sleeves in opposite directions.

1,309,082. BASS-DRUM AND CYMBAL BEATER. FRED D. WILLIAMS, Ogden, Utah. Filed Jan. 27, 1917. Serial No. 144,921. 2 Claims. (Cl. 84—10.)



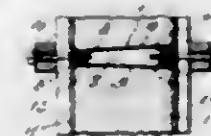
1. An apparatus of the class described including a base plate, a standard thereon, a spring restrained beater mounted upon and adapted to swing relative to the standard, means cooperating with the base plate for gripping the counter hoop of a drum, a rod extending from one end of the base plate and having its outer end bent laterally to form a pintle, a heel plate pivotally mounted on the pintle, a pedal pivotally mounted on said pintle and overhanging the rod, and a connection between the pedal and the beater.

1,309,083. WATER-HEATER. SAMUEL M. WRIGHT, Schenectady, N. Y. Filed Oct. 22, 1917. Serial No. 197,780. 4 Claims. (Cl. 126—351.)



1. In a device of the class described and in combination, a water-valve-casing having an elongated chamber provided with an inlet leading to one end of the chamber, and with a lateral outlet; a plunger reciprocatory within said chamber past said outlet, and having its peripheral portion adjacent to said outlet increasingly chamfered toward the inlet-end of said chamber, said plunger being automatically yieldingly movable toward the inlet-end of said chamber; a gas-valve; and an operating connection between said plunger and said gas-valve.

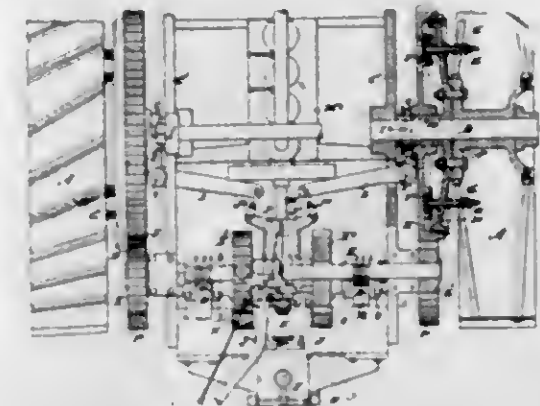
1,309,084. SPACING BAR OR CORE FOR PLASTIC WORK. EDGAR A. ZIMMERMAN, Shamokin, Pa. Filed Apr. 19, 1919. Serial No. 291,238. 6 Claims. (Cl. 25—131.)



1. A core for concrete work, comprising a substantially rectangular shaped body and sockets on each end for holding nuts, for the purpose specified.

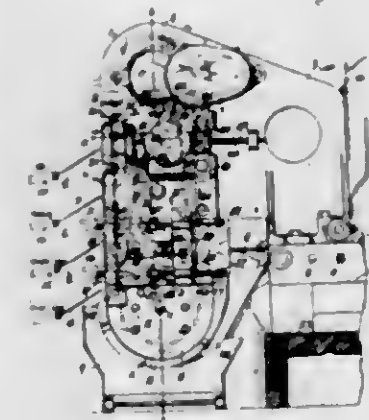
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1,309,085. TRACTOR. JOHN B. CORYELL, Adrian, Mich. Filed July 18, 1918. Serial No. 245,320. 3 Claims. (Cl. 180—17.)



2. In a tractor, the combination of a pair of tractor wheels loosely mounted upon their axle and a source of power carried by the tractor, of a clutch member secured to each tractor wheel, a pair of respectively co-operable and longitudinally slidable clutch and gear members adapted to connect either or both of said tractor wheels with the source of power, independent trains of gears permanently in mesh with the combined clutch and gear member of each tractor wheel, and suitable manually operated clutch means for connecting said respective trains of gears with the source of power.

1,309,086. ASSORTING-MACHINE. EDWARD DANNER, Toledo, Ohio, assignor to The Libbey Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 19, 1918. Serial No. 254,810. 122 Claims. (Cl. 83—92.)

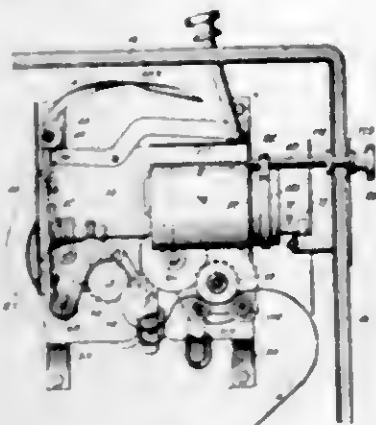


1. In an assorting machine of the class described, an article carrier, means for moving said carrier, and means automatically movable to gage the size of an article carried by said carrier when the carrier is at a predetermined point in its movement, and, if the article is above a predetermined size, to eject it from the carrier.

1,309,087. MOTION-PICTURE MACHINE. HERMAN A. DE VRY, Chicago, Ill., assignor to The De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 16, 1915, Serial No. 45,633. Divided and this application filed Sept. 20, 1916. Serial No. 121,113. 4 Claims. (Cl. 95—45.)

1. In a motion picture machine, the combination of a case, film feeding mechanism in the case, a tubular lens-carrier, a tubular mount in which the lens-carrier is

slidably held, a screw for adjusting the lens-carrier extended through the front of the case and substantially



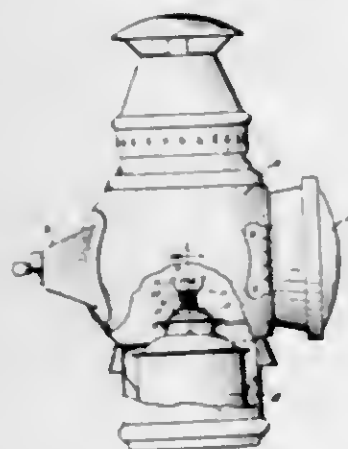
parallel with the axis of the lens-carrier, and means on the outside of the case for operating the screw.

1,309,088. DEVICE FOR FORMING, ASSEMBLING, AND HOLDING SHEET-METAL FORMS. WILLIAM S. HAMM, Hubbard Woods, and WILBER F. STEWART, Chicago, Ill., assignors to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1916. Serial No. 93,169. 4 Claims. (Cl. 113-111.)



1. A device for soldering lap joints comprising a seat for the article to be soldered, a ring for tightly encircling the upper margin of the overlapping member of the joint adapted to extend to its upper edge, the upper face of the ring flaring outwardly from the line of contact with the article whereby when the article is in place a channel will be provided having as its bottom the upper edge of the overlapping member of the joint.

1,309,089. LAMP-BURNER. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Company, a Corporation of Illinois. Filed Jan. 14, 1919. Serial No. 271,077. 7 Claims. (Cl. 67-72.)

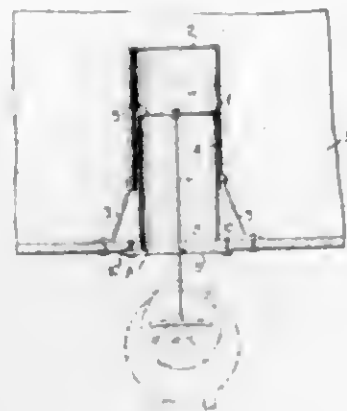


1. The combination with a burner having a wick tube, of a flame spreading cup slidably mounted on the tube, and means for resiliently supporting the cup.

1,309,090. FEEDING DEVICE. GEORGE S. HENSON, Rushville, Mo. Filed Jan. 13, 1917. Serial No. 142,261. 1 Claim. (Cl. 119-54.)

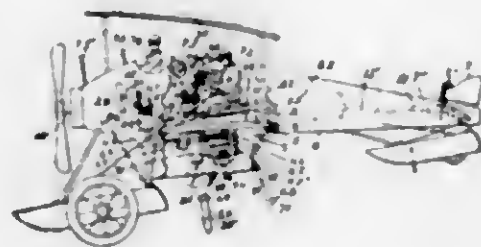
In combination with a hopper provided with a discharge opening in its bottom, a tubular member posi-

tioned above said opening and having its lower end open and its upper end closed, said member being in vertical alignment with the discharge opening, a hollow cylindrical member telescopically engaged within the tubular member and having its lower end open, said cylindrical member being of a diameter to close the discharge opening of the hopper when the cylindrical member is in its lowermost position, a rod connected with the inner end of the cylindrical member and extending exteriorly of the hopper through the discharge opening thereof, a cross mem-



ber carried by the outer end portion of the rod, a guide member intersecting the discharge opening of the hopper and through which the rod is loosely directed, and supporting legs for the tubular member secured to the lower portion of said member and to the bottom of the hopper, said legs being arranged in downward and outward inclines and maintaining the lower open end of the tubular member in predetermined spaced relation relative to the bottom of the hopper.

1,309,091. GUN-POINTING AND AUTOMATIC GUN-DISCHARGING MECHANISM, COMBINED. GEORGE W. HINTON, St. Joseph, Mo., assignor of one-third to Edwin C. Renaud and one-third to Robert R. Potest, St. Joseph, Mo. Filed May 24, 1917. Serial No. 170,612. 9 Claims. (Cl. 244-1.)

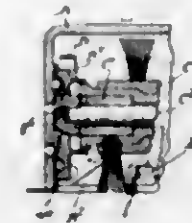


2. The combination with an aeroplane frame of a gyroscopically stabilized gun platform supported by said frame; a gun mounted on said platform for projecting a missile against a target; sighting means mounted on said platform for laterally sighting said gun; and guiding means controlled from said platform whereby said aeroplane is laterally guided for bringing and holding said sighting means in alignment with said target.

1,309,092. BRUSH-SUPPORTING DEVICE FOR SUCTION-CLEANERS. HERBERT W. HOOVER, New Berlin, Ohio, assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio, a Corporation of Ohio. Filed June 8, 1917. Serial No. 173,447. 17 Claims. (Cl. 15-60.)

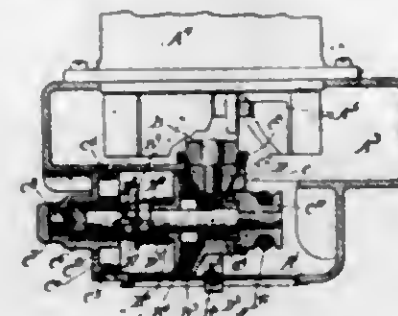
1. In a suction cleaner a hood having an open suction mouth, a removable brush carrying frame supported

within the hood and a rotary brush adjustably mounted on the frame within the hood adjacent the mouth, means



for locking the brush from adjustment on the frame when the frame and brush are in the hood.

1,309,093. BRUSH-DRIVING DEVICE FOR SUCTION-CLEANERS. HERBERT W. HOOVER, New Berlin, Ohio, assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio, a Corporation of Ohio. Filed June 8, 1917. Serial No. 173,448. 4 Claims. (Cl. 15-60.)



1. A suction cleaner comprising a casing having an inlet and outlet and intermediate connected brush and fan chambers comprising a suction system for the passage of dust laden air, in combination with a brush, a fan, a motor, and power transmission devices connecting the motor and brush and a casing which incloses the bearings of such power transmission devices and is provided with one opening to the open air and another to the suction system.

1,309,094. WHEEL. EDWIN H. JAMES, Cleveland Heights, Ohio. Filed Mar. 11, 1916. Serial No. 83,468. 5 Claims. (Cl. 21-69.)



1. A cast metal wheel comprising a hub and a felly connected thereto, said felly comprising an inner cylindrical wall, side walls extending from such inner wall, a cylindrical outer wall connecting the side walls, the outer wall having a segmental central portion and a rib connecting the inner wall and the central segmental portion of the outer wall.

1,309,095. WHEEL. EDWIN H. JAMES, Cleveland Heights, Ohio. Filed Jan. 10, 1917. Serial No. 141,697. 19 Claims. (Cl. 21-69.)

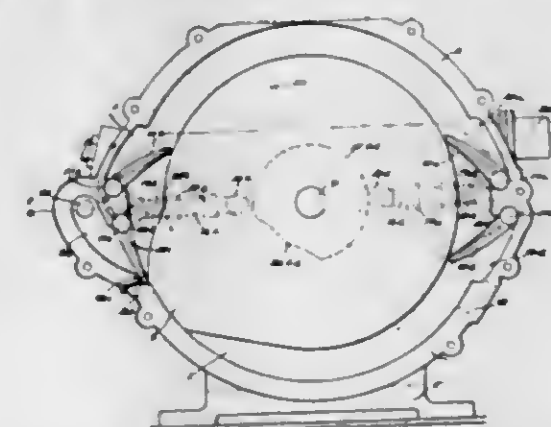
1. A wheel comprising a hub, spokes, and a cast double-walled felly the inner wall whereof is connected to said spokes, the inner and outer walls of the felly being connected and said outer wall comprising a centrally arranged tire supporting portion, and tire supporting por-

tions on each side of the first mentioned portion, there being braces or pillars extending between the central portion and the side portions of such outer wall, the outer



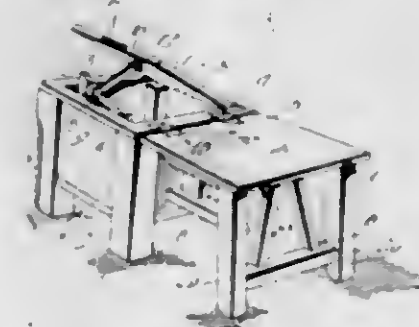
surfaces of said pillars or braces being depressed with reference to the central and side portions of such outer wall whereby the tire base will be seated upon such portions but will not be seated upon such braces or pillars.

1,309,096. ROTARY EXPLOSIVE ENGINE. WILLIAM E. LEBING, Oakland, Calif., assignor of one-third to Anton Weber and one-third to John D. Garretson, Oakland, Calif. Filed Dec. 14, 1917. Serial No. 207,032. 3 Claims. (Cl. 123-15.)



1. A rotary engine comprising a cylinder, a shaft rotatably and axially mounted with respect to said cylinder, a rotor carried by said shaft within said cylinder, a radial piston carried by said rotor, means for admitting gas to said cylinder and discharging the same therefrom, a pair of valves adapted to coact with said rotor and said piston to form a suction and compression chamber in the upper portion of said cylinder, another pair of valves adapted to coact with said rotor to form an expansion and exhaust chamber in the lower portion of said cylinder, means for controlling the transference of the compressed gas from the upper to the lower portion of said cylinder, and mechanism actuated by said rotor for operating said valves.

1,309,097. CHILD'S FURNITURE. JOHN MARKWICK, Detroit, Mich. Filed Sept. 23, 1918. Serial No. 255,360. 3 Claims. (Cl. 45-31.)



1. An article of furniture comprising a body member, a blackboard hinged to the upper part of said body member for downward folding thereon and for upward swinging to an inclined position for use, means for holding said blackboard in inclined position, an extension board hinged to said body member on an axis at right angles

to the hinge axis of said blackboard and adapted first to fold downwardly on said blackboard when not in use, second to be swung outwardly into a horizontal position for coaction with said blackboard in forming a table when said blackboard is folded downwardly, and third to support drawing material when said blackboard is inclined for use, and leg means for said extension board to support it in a horizontal position when extended.

1,309,098. PERCUSSION FUSE FOR EXPLOSIVE PROJECTILES. ALBERT HENRY MIDDLEY, Acton Vale, England, assignor of one-half to Charles Anthony Vanderveit, Acton Vale, England. Filed July 8, 1918. Serial No. 243,900. 7 Claims. (Cl. 102-39.)



1. A percussion fuse for explosive projectiles comprising a fuse holder, a block carrying a striker, a block carrying a percussion cap, a positive safety member for keeping the two blocks apart from each other, a cover for keeping the positive safety member in its safety position, and means for automatically removing the cover after the discharge of the projectile from the gun, as set forth.

1,309,099. RANGE. CHARLES W. NYE, Minneapolis, Minn., assignor to The Minnesota Store Company, a Corporation of Minnesota. Filed Apr. 19, 1918. Serial No. 229,513. 3 Claims. (Cl. 220-1.)



1. A range comprising vertical end and side plates having their ends bent to form overlapping right angled portions at the corners of the range, a right angled strip adapted to fit against the outer surface of said corners, bolts passing through registering holes in the corners of the plates and the strip, and bisecting the right angled corners, said bolts having their heads fitting upon the outer surface of said strip, and nuts on the other ends of said bolts fitting between the sides of the right angled corner.

1,309,100. CONVERTIBLE OVEN FOR RANGES. CHARLES W. NYE, Minneapolis, Minn., assignor to The Minnesota Store Company, a Corporation of Minnesota. Filed Apr. 19, 1918. Serial No. 229,514. 5 Claims. (Cl. 120-36.)



1. A convertible oven comprising a gas admission door, a spent gas outlet door, both of said doors being hinged

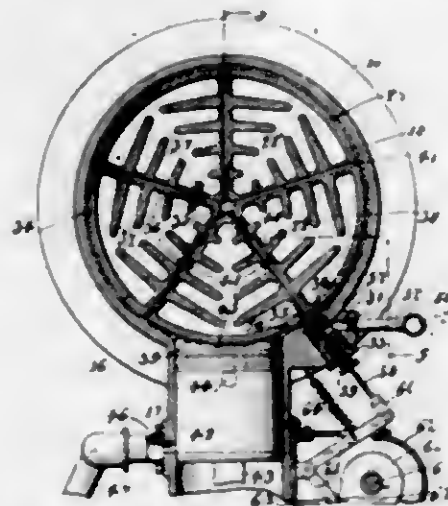
to the rear wall of the oven, a gas burner adapted to be slid into the bottom of the oven when the main door at the front thereof is open, and means whereby both of said rear doors are opened by sliding movement of said burner.

1,309,101. TANK-HEATER. AUGUST OTTO, JR., Sandwich, Ill. Filed Apr. 11, 1918. Serial No. 227,970. 3 Claims. (Cl. 126-367.)



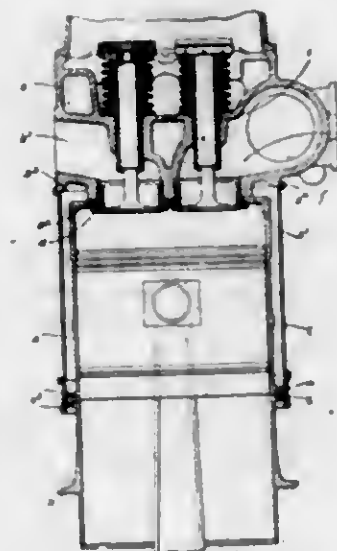
1. A tank heater comprising, in combination, an upright outer casing having an open top and imperforate sides, a removable lid covering the entire top of the casing, said lid having air inlet and smoke due openings, a relatively deep fire-pot having imperforate sides and a foraminous bottom and being spaced apart from the side and bottom walls of the casing so as to provide a dead air space between the firepot and the side walls of the casing, the smoke due opening of the lid registering with the chamber of the fire-pot and the air inlet opening of the lid being located without the fire-pot, and a smoke stack carried by the lid.

1,309,102. STEAM-MOTOR GENERATOR. ENOCH REORON, New York, N. Y. Filed Apr. 19, 1916. Serial No. 92,114. 1 Claim. (Cl. 121-1.)



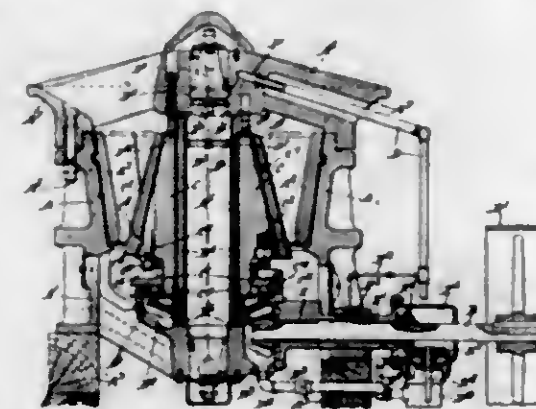
In a device of the class described, a flash boiler including a grid, wheel shaped in form, having a wide peripheral band, a hub portion and a plurality of radially disposed plates connecting the hub portions with the band, said plates and rim coacting to form a plurality of heat conducting passageways therethrough and said grid provided with a steam generating chamber designed to be supplied with heat from said passageways, a cylinder opening directly from the band of said grid and supplied from said chamber, a piston mounted for reciprocatory movement in said cylinder, the end of said piston adjacent the grid being shaped to conform to the configuration of the adjacent face of the grid thereby tending to reduce the clearance between the piston and grid when the piston is at the beginning of its working stroke.

1,309,103. CYLINDER FOR INTERNAL-COMBUSTION ENGINES. ARTHUR JOHN ROWLER, London, England, assignor to D. Napier & Son Limited, London, England. Filed Sept. 24, 1917. Serial No. 192,060. 7 Claims. (Cl. 123-173.)



1. In a cylinder for an internal combustion engine the combination of a steel cylinder having a smooth flat head, inlet and exhaust openings in the head of this cylinder, a casting of aluminum or aluminum alloy in which are formed inlet and exhaust passages and in which are arranged guides for the valve spindles this casting having a smooth face adapted to fit accurately on to the head of the cylinder with the openings of the inlet and exhaust passages in the casting coincident with the openings in the cylinder head the casting being so formed that it rests on the cylinder head and does not extend along the cylinder or around the head, a plurality of members passing through the cylinder head and screwed into the casting and serving as the only rigid connection between the cylinder and the casting, a plurality of valves controlling the inlet and exhaust openings in the cylinder head with their spindles passing through the guides in the casting, a separate ring member surrounding the body of the cylinder, means by which a water tight joint is formed between this ring member and the cylinder body at some place in the length of the latter, and a sheet metal casing formed of aluminum or aluminum alloy and constituting the cylinder water jacket one end of this casing being connected to the casting on the head of the cylinder while the other end is connected to the ring member as set forth.

1,309,104. CRUSHING-MACHINE. EUGENE L. SANBORN, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 14, 1917. Serial No. 202,037. 21 Claims. (Cl. 83-10.)

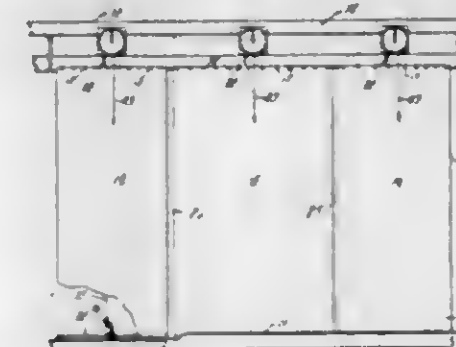


1. A crushing machine comprising a hopper, a central shaft, an eccentric sleeve mounted for rotation thereon a crushing head floating on and in rotatable relation with the eccentric, means for moving the head bodily on the

eccentric to adjust the relation between the head and the hopper said means comprising a supporting ring removed from the sleeve on which the crushing head rides, a thrust bearing upon which it slidably rests and adjusting screws between it and the head.

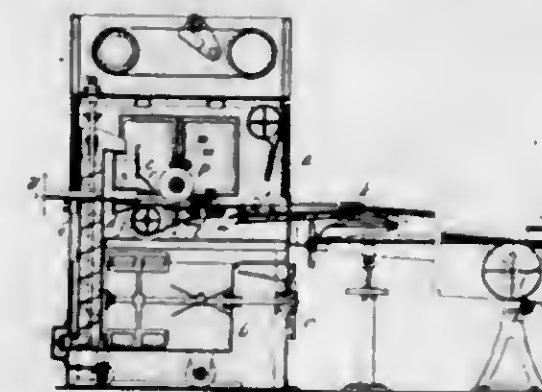
13. In a crushing machine comprising a hopper a central shaft and means for supporting it, an eccentric sleeve mounted for rotation thereon, a crushing head rotatably and adjustably mounted on the eccentric, an oil chamber about the lower end of the shaft, inclosing the lower end of the eccentric sleeve driving means for said eccentric inclosed within the oil chamber, a ring adapted to support the crushing head, in part closing the top of the chamber, a thrust bearing between such ring and the chamber wall, the crushing head having a depending flange of uniform diameter, said flange adapted to penetrate the top of the oil chamber, an oil chamber about the upper end of the shaft, adapted to contain the upper end of the eccentric sleeve, an oil closure about said oil chamber engaging the top of the crushing head and adjustable therewith.

1,309,105. GOLF APPARATUS. SYDNEY J. SANFORD, Los Angeles, Calif. Filed Aug. 29, 1917. Serial No. 188,744. 9 Claims. (Cl. 40-4.)



1. A game apparatus, embodying an upright flexible sheet, yielding means to hold the sheet taut, and registry means connected with the sheet and adapted to register in accordance with the displacement of the sheet by a missile striking it.

1,309,106. COATING-MACHINE. EMILE L. A. SAVY, Paris, France. Filed Nov. 1, 1911. Serial No. 657,950. 18 Claims. (Cl. 91-3.)

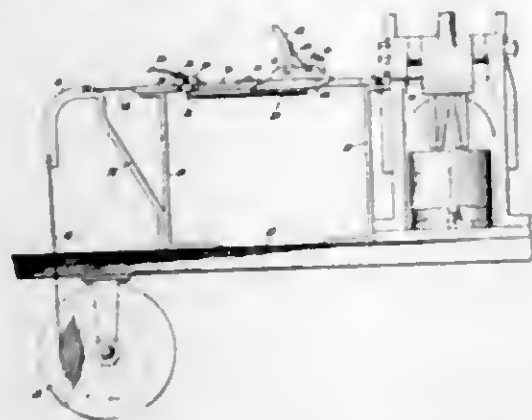


1. In combination, a confection-conveying device, means to coat confections while they are on the conveying device together with a rotatable throwing device arranged to receive the confections from the conveying device and throw them free thereof.

1,309,107. SOLDER-FEEDING MACHINE. BAUNO W. SWAN and GEORGE E. WATTMAN, Chicago, Ill., assignors to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1916. Serial No. 93,214. 2 Claims. (Cl. 113-94.)

1. In a machine for feeding wire solder, in combination, a bed having a solder guiding groove and a slot, a block

sliding in said slot and having a groove in alignment with said guide groove, a carriage traveling with said block and having a normally retracted wire gripping member piv-



oted thereon for gripping the solder against said block, and a finger lever adapted to simultaneously depress said grip and advance said carriage and block.

1,309,108. MOUNTING FOR CONTACT FINGERS AND METHOD OF ADJUSTING THE SAME. CLARENCE S. SNAVELY, Wilkesburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1918. Serial No. 137,263. 6 Claims. (Cl. 175-281.)



1. A method of adjusting a movable contact finger with relation to a stationary contact consisting in floating the finger in a plastic material, adjusting the finger to engage properly with the stationary contact, and then hardening the plastic material whereby a permanent adjustment of the finger is obtained.

1,309,109. SILO DOOR CONSTRUCTION. JOSEPH B. STRUNK, Mill Hall, Pa. Filed Mar. 18, 1918. Serial No. 223,123. Renewed May 29, 1919. Serial No. 300,790. 2 Claims. (Cl. 20-14.)



1. The combination of the parallel stiles of a silo, said stiles having their inner edges disposed on radial lines at right angles to their inner and outer sides, a silo door on the interior of the silo and having its outer side beveled at its ends, said beveled ends overlapping and contacting snugly with the inner sides of said stiles, an external vertical cleat on one end of said door having a beveled outer edge at right angles to the level of this end of the door and contacting with the radially located edge of one of said stiles to prevent said end of the door from moving inwardly, an additional external vertical cleat on the other end of said door adjacent the other stile, an abutment on the outer side of this stile, and a vertically swinging latch lever fulcrumed between its ends to said additional cleat, said lever having on one end a cam overlapping said last named stile to hold the door against inward movement, said cam engaging said abutment to thrust said door endwise for forcing the beveled cleat against the adjacent stile.

1,309,110. REEL FOR EYEGLASSES. CHARLES S. SWIFT, Somerville, Mass., assignor to Carl G. Aldrich, Somerville, Mass. Filed Aug. 23, 1918. Serial No. 116,529. 6 Claims. (Cl. 242-98.)



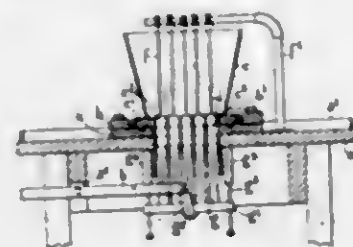
6. In an eyeglass reel, the combination of a housing provided upon its interior with a post; a pulley mounted upon said post having the web thereof made with a ball holding pocket whereof the walls are integral parts of said web, and a ball mounted in said pocket.

1,309,111. MEANS FOR RAISING SUNKEN SHIPS. EDWARD T. BARTLETT, Llanarch, Pa. Filed Mar. 22, 1919. Serial No. 284,358. 2 Claims. (Cl. 114-53.)



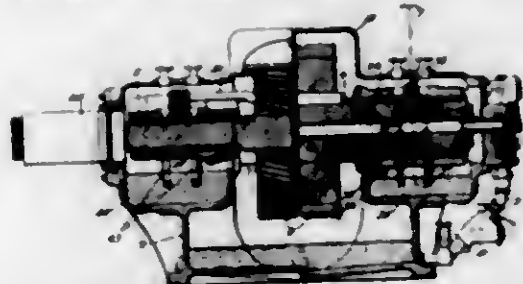
1. In means for raising sunken ships the combination of a series of pontoons, means for connecting the pontoons in loop form, devices for shortening the connecting means to draw and hold the pontoons up to the sides of the ship, and drills carried by the pontoons and adapted to enter the sides of the ship to secure the pontoons thereto, substantially as described.

1,309,112. MEANS FOR MOLDING POWDERED SUBSTANCES. NIELS BENDIXEN, High Holborn, London, England. Filed Mar. 5, 1919. Serial No. 280,629. 6 Claims. (Cl. 107-17.)



6. In means for molding powdered substances the combination of a table, a hopper sliding on said table and having apertures in its lower part, molds carried by said table, plungers acting in said molds, a bracket carried by said table and a plurality of spring arms of narrow cross section fixed at their upper ends to said bracket and vibrating almost horizontally at their lower ends adjacent to the molds substantially as set forth.

1,309,113. GEARING. OLIVER D. H. BENTLEY, West Roxbury, and JOHN H. GIANNA, Readville, Mass., assignors to H. F. Stortevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1917. Serial No. 151,693. 3 Claims. (Cl. 64-24.)



1. The combination with a housing having bearing seats, of a horizontally-split bearing of which the lower member is

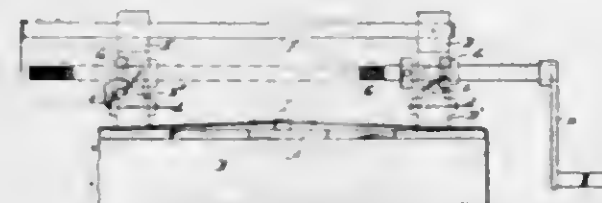
supported by said seats; bolts passing loosely through both bearing-members and into said seats and serving both to secure the bearing-members together and to secure the bearing, as a whole, to the seats so as to permit adjustment of the bearing parallel with and transverse to the plane of the contacting faces of the bearing seats.

1,309,114. FUEL-SAVING DEVICE. JOHN L. BLACK, Valdosta, Ga., assignor to Oliver P. Tucker, Valdosta, Ga. Filed July 3, 1918. Serial No. 243,120. 6 Claims. (Cl. 123-25.)



1. A device of the class described including in combination a combustion engine having a fuel intake and exhaust outlet, a container having a compartment adapted to receive a supply of water, another compartment in said container, an absorbent material in said second compartment, means for conveying water to said absorbent material from the first mentioned compartment, a mixing chamber in said second compartment, means for admitting exhaust gases from the exhaust outlet to said mixing chamber, means for admitting cool and moistened air to said mixing chamber, and a conduit for delivering the combined mixture to the fuel intake.

1,309,115. METHOD OF AND MEANS FOR SEALING PACKAGES. SPENCER C. CART, Brooklyn, N. Y., assignor to Cary Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 4, 1918. Serial No. 210,340. 14 Claims. (Cl. 100-15.)



1. In the art of binding shipping packages, the improvement which consists in stretching a band for the major part of its length so tightly around the package as to embed said band into the material of the package, the end portions of the band being slack, attaching a sealing member to the slack end portions of said band, and applying the tension of the stretched portion of the band to the sealing member by relaxing the drawing strain or pull applied to said band.

14. In the art of binding shipping packages, the improvement which consists in stretching a band for the major part of its length around said package so as to leave the end portions of said band free and slack, and twisting the slack free ends of the band into locking engagement with an anchor while said band is under tension so as to anchor said ends and retain the band around the package.

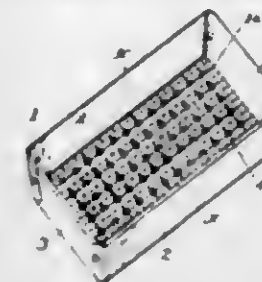
1,309,116. MUSICAL BLOCKS. EVANGELINE L. CLOSE, Brooklyn, N. Y. Filed July 14, 1916. Serial No. 109,217. 2 Claims. (Cl. 84-89.)



1. A set of blocks having staff lines on different faces thereof adapted to register when the blocks are placed edge-to-edge, and musical characters of similar value but

different significance associated with the staff on the different faces of each block, whereby a variety of musical effects may be produced by bringing the different faces of the several blocks into registering relation.

1,309,117. RACK FOR STERILIZERS AND THE LIKE. JOHN C. DARNALL, Cincinnati, Ohio. Filed May 20, 1918. Serial No. 235,581. 2 Claims. (Cl. 167-3.)



2. A sterilizer-rack comprising a main or bottom tray having a perforated or a wire-mesh bottom, a grille or grating within said bottom and elevated slightly above same, an auxiliary-rack surmounting the rim of said main-tray and having one or more series of spaced partitions therein for the vertical extension of the objects to be sterilized, supported in said main-tray on said grille and adapted to support a second tier of objects to be sterilized that telescope without touching the lower tier of objects in the main-tray, and a second auxiliary-rack made up of light-wire rings that are connected within a light rectangular frame and adapted to but slightly engage the upper part of each of said second tier of objects to be sterilized for support thereon and such last named light rack being adapted to support a third tier of objects to be sterilized and with or without the said second tier of objects to be sterilized telescoping within the said third tier of objects to be sterilized.

1,309,118. METHOD OF PRODUCING LEGGINGS. JOSEPH J. DETTLING and EDGAR A. TINSMAN, Akron, Ohio. Filed Apr. 15, 1918. Serial No. 228,640. 6 Claims. (Cl. 154-2.)

1. A method of producing a legging, consisting in stripping the built-up piles of fabric of a tire excesses from each other and reshaping segmental portions thereof with the addition of rubber into a legging of fixed shape and outline.

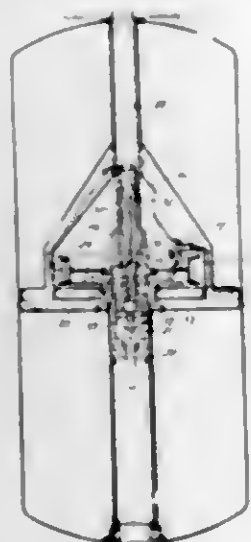
1,309,119. FRUIT-CONVEYER. FRIEND E. DILLON, Deep Run, Ohio. Filed Feb. 7, 1919. Serial No. 275,545. 2 Claims. (Cl. 193-43.)



1. A fruit conveyer of the character described comprising a plurality of similar tube sections, each consisting of a length of canvas tubing and rings carried by said tubing for maintaining its tubular condition, one

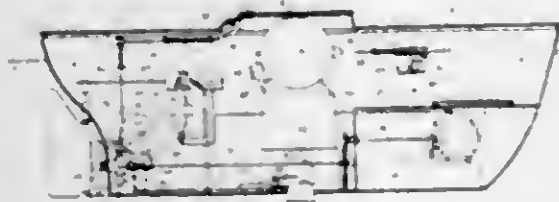
such ring being located adjacent to each end of each section, baffle-like cushions alternately disposed and arranged in stepped relation within each section, each of said sections having gromets therein in spaced relation adjacent to said rings, and each of said cushions having gromets therein in like spaced relation, and snap links received in the gromets of adjacent ends of said sections for connecting the latter, and also received in the gromets of an adjacent cushion for supporting the latter.

1,309,120. APPARATUS FOR DESTROYING SUBMARINE BOATS. GIOVANNI EMANUELE ELIA, New York, N. Y. Filed July 31, 1917. Serial No. 153,665. 5 Claims. (Cl. 102-3.)



1. Apparatus for destroying submarine boats comprising the combination of a barrier of substantial length adapted to be anchored in the sea extending between substantially fixed points in position to be engaged by a submarine boat, an explosive charge connected to the barrier, a firing mechanism for the charge and means for maintaining the firing mechanism normally under tension to operate it to fire the charge, said firing mechanism being normally held against operation by the anchored barrier whereby when the barrier is broken by being engaged by a submarine boat the firing mechanism is released and is operated by said force to fire the charge.

1,309,121. EXPLOSIVE MINE APPARATUS. GIOVANNI EMANUELE ELIA, Turin, Italy. Filed Nov. 19, 1917. Serial No. 202,858. 24 Claims. (Cl. 102-3.)

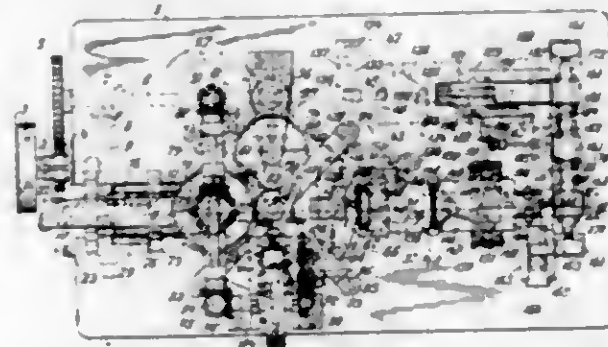


1. The combination of a mine-carrying boat; propelling apparatus therefor; means for automatically terminating the operation of said propelling apparatus when the boat has traveled a definite, predetermined distance; and means operated automatically upon the stoppage of the propelling apparatus for laying the mine carried by the boat, substantially as described.

1,309,122. PACKAGING MACHINE. HILARIO DE ESCOBAR, New York, N. Y. Filed Aug. 20, 1917. Serial No. 157,313. 55 Claims. (Cl. 93-3.)

18. In packaging machines, a reciprocating hollow form adapted to constitute a charge-carrier, folding chan-

nels located successively in the travel path of the form, means for supporting a blank at the entrance to each of



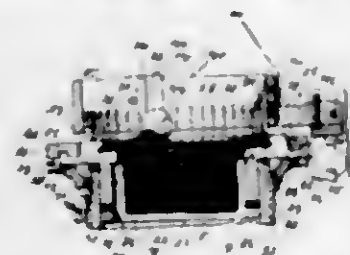
said channels, whereby movement of the form will cause successive foldings of the blanks into nested relation to produce a composite container structure.

1,309,123. STEERING-WHEEL FOR AUTOMOBILES. ORANGE B. FALEN, Salem, Ohio. Filed Apr. 13, 1918. Serial No. 228,460. 5 Claims. (Cl. 74-33.)



1. In a steering wheel for motor vehicles and the like, a steering post, a hub rotatably mounted upon said steering post, a steering wheel pivoted to said hub and lever actuated mechanism for locking said wheel to said post.

1,309,124. KNITTING MACHINE. WILLIAM FISCHER, New Richmond, Ohio, assignor of one-half to Louis Blumenstein, New Richmond, Ohio. Filed Oct. 26, 1914. Serial No. 868,664. 1 Claim. (Cl. 66-20.)



In a circular knitting machine, the combination of knitting instrumentalities annularly arranged in a closed path, a cam-ring and a thread-ring connected together for combined rotation, means for rotating said rings, means including said cam-ring for actuating said knitting instrumentalities for forming a knitting line having a knitting wave therein, an arm secured to said thread-ring and having a depending portion spaced therefrom depending into the space within said thread-ring, the upper ends of the knitting instrumentalities reciprocating up and down in the space between said thread-ring and said depending portion of said arm, a frusto-conical hold-down roll of greater length than average diameter journaled on said arm in a horizontal plane having its larger end adjacent to said knitting line with the periphery of said roll receding from the horizontal plane in which said knitting line is located toward the middle portion of said thread-ring, to cause upward bulging of the knitted fabric adjacent

said knitting wave and downward curving of said bulged portion of knitted fabric toward the middle of said closed path, and means for swinging said thread-ring and hold-down roll upwardly away from said knitting instrumentalities and knitting-line.

1,309,125. ARTICLE-HOLDER. JOHN FLETCHER FORD, Los Angeles, Calif. Filed May 31, 1917. Serial No. 171,903. 1 Claim. (Cl. 24-244.)



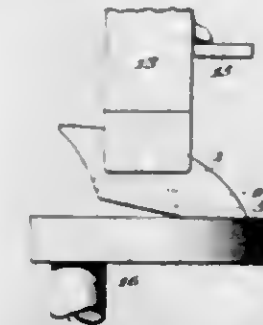
A device of the character referred to formed of sheet metal having one side thereof bent forwardly to form a side wall and having its other side bent forwardly and laterally parallel with its main portion, whereby to form back, side and front walls, said front wall being of less width than said device, whereby to form an article-receiving opening between its edge and the side wall, and a holding disk loosely mounted in said article between said back and front walls, said back wall having struck-in holding prongs adapted to movably confine said holding disk within said article and to one side thereof, substantially as described.

1,309,126. MOLDING-MACHINE. JEANNE N. FRANTI, Newark, N. J., assignor to The Foundry Appliance Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 5, 1918. Serial No. 252,693. 9 Claims. (Cl. 22-25.)



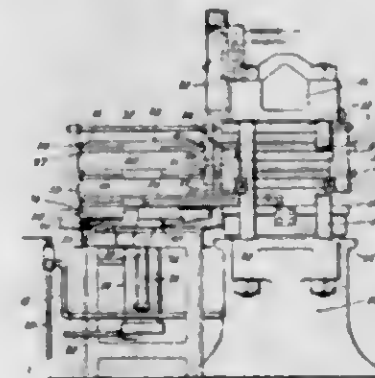
1. In a molding machine having a vertically movable support for a flask, the combination of a stationary frame above said support and having a vertical guideway, a bar extending horizontally through said guideway and mounted to slide vertically therein and to oscillate about a horizontal transverse axis, means for raising and lowering said bar, members pivotally mounted, intermediate their ends, on said bar, adjacent the ends thereof, to extend transversely thereto, and vertical members hung from the end portions of said first-named members, free to hang vertically therefrom in different positions thereof, said vertical members having offset portions adapted to extend under lugs on a flask on said support.

1,309,127. METHOD OF PRODUCING ARTIFICIAL TEETH. THOMAS F. GLENN, Ardmore, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 8, 1916. Serial No. 130,121. 4 Claims. (Cl. 32-9.)



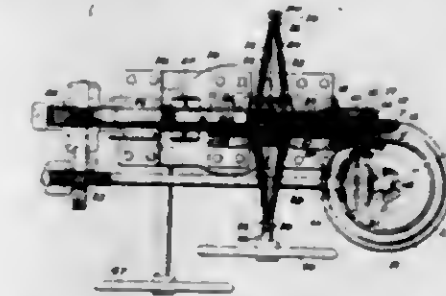
4. The method of truing the lingual surface of an artificial tooth having a recess therein, which consists in placing a tooth on a gage by means of said recess serving as a guide, gripping the tooth by means actuated in a definite relation with respect to said gage to determine the relation of said recess and lingual surface of the tooth, and utilizing said gripping means for effecting the truing of said lingual surface to the required relation.

1,309,128. MOLD-OPENER. JOHN R. GAMMETER, Akron, Ohio, assignor to The H. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 22, 1918. Serial No. 220,942. 16 Claims. (Cl. 18-2.)



1. In combination, a mold-opener having relatively movable members for engaging a mold body and cover respectively, to separate the two, and a flat, portable mold composed of separable parts and adapted to be moved as an individual unit into and out of operative relation to said members by sliding the mold in its own plane.

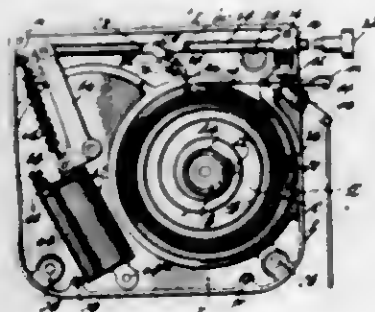
1,309,129. CENTRIFUGAL GUN. THOMAS A. GANNON, Warren, Pa., assignor to Gannon Manufacturing Company, a Corporation of West Virginia. Filed Nov. 7, 1917. Serial No. 200,638. 11 Claims. (Cl. 89-10.)



1. In a centrifugal gun, a rotary bullet projecting member having its axis substantially horizontal, a hopper for the bullets and a rotary feeder between the hopper and the rotary bullet projector, said feeder rotating

on a substantially vertical axis at right-angles to the axis of the rotary bullet projector and feeding the bullets into the channel leading to the axis of said projector, said axial channel being tangential to the periphery of the rotary feeder, said projector having a radial channel for the bullets, a circumferential channel to receive the bullets from the radial channel and a tangential barrel communicating with the circumferential channel, substantially as described.

1,309,130. ELEVATOR-DOOR CLOSER. JAMES M. GRAHAM, Maplewood, N. J., assignor to Elevator Supplies Company, Inc., a Corporation of New Jersey. Filed Dec. 5, 1917. Serial No. 205,490. 11 Claims. (Cl. 16-100.)



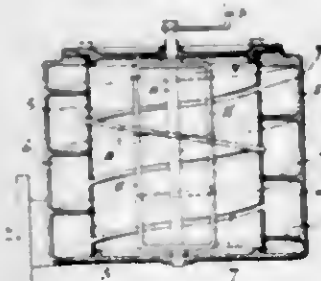
1. Door closing means comprising, in combination, a relatively shallow casing adapted to be carried by the door substantially in the plane of the door movement, a strap and a strap windup drum located in said casing and arranged to wind the strap upon said drum to thereby close the door, said strap being guided through one end of said casing and adapted to be connected to the door frame, a door stop yieldingly projected from said end of said casing adapted to cushion the door when closed by said spring, said stop located at one side of said drum and in the plane thereof, a dash-pot located at another side of said drum and also in the plane thereof, and a bell-crank lever connecting said stop and said dash-pot.

1,309,131. MATHEMATICAL INSTRUMENT AND THE LIKE. JOHN A. HAGERSTROM, Scranton, Pa., assignor to Technical Supply Company, Scranton, Pa., a Corporation of New Jersey. Filed May 31, 1918. Serial No. 237,519. 12 Claims. (Cl. 33-153.)



1. An instrument of the nature set forth, comprising hinge members bent circularly upon themselves to form loops, bearing elements seated therein, and a support including means for pivotally sustaining said members from opposite sides of the same.

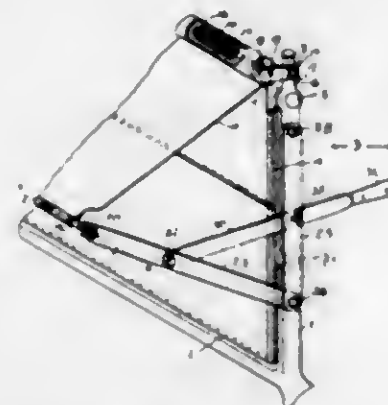
1,309,132. MUFFLER. CARL THURE HALLER, Smögen, Sweden, assignor to Laurencius Laurin, Managing Director, Lysekil, Sweden. Filed Feb. 16, 1918. Serial No. 217,731. 7 Claims. (Cl. 121-116.)



5. In an apparatus for effecting a uniform and noiseless discharging of an intermittently flowing gas, a

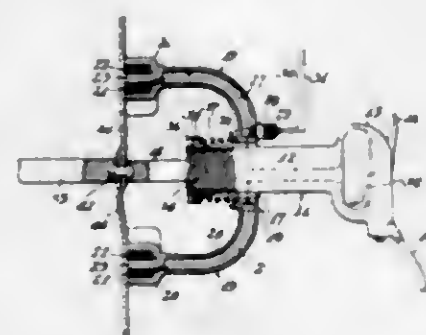
continuous helical conduit for the gas, means closing the space within the helix, and means of communication between the conduit and the said space.

1,309,133. ADJUSTABLE CURTAIN FOR WINDSHIELDS. GEORGE HASSOLD, Los Angeles, Calif. Filed Mar. 14, 1918. Serial No. 222,463. 1 Claim. (Cl. 21-148.)



An adjustable curtain construction for windshields comprising the combination with windshield posts, of curtain brackets secured to the upper ends of the posts, a spring roller mounted in the curtain brackets, a curtain upon the spring roller, a rod connected to the forward edge of the curtain, curtain swinging arms connected to the ends of the rod and pivoted to the windshield posts, an operating lever pivotally connected to one of said arms intermediate its length and means for locking the lever in place to hold the curtain in desired position.

1,309,134. RIVETING DEVICE. NELS H. HASSELL, Los Angeles, Calif. Filed June 20, 1918. Serial No. 241,066. 4 Claims. (Cl. 78-50.)



1. A riveting device consisting of a supporting member, a riveting tool extending freely through and elastically supported in the supporting member, and means whereby said supporting member is electro-magnetically held against the work during the riveting operation.

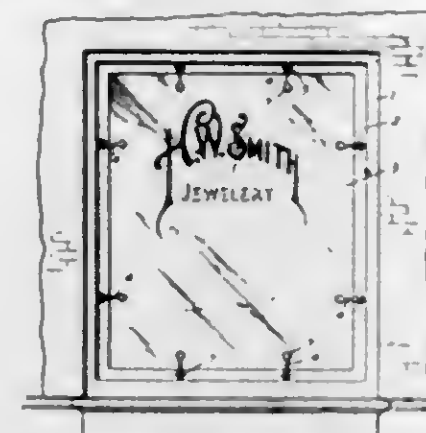
1,309,135. IGNITION AND STARTER CONTROL FOR AUTOMOBILES. NEWELL A. HONETWELL and CHARLES O. MCKAIG, Inglewood, Calif. Filed Feb. 13, 1918. Serial No. 216,985. 2 Claims. (Cl. 175-282.)



1. An ignition and starter control for automobiles comprising a primary or ignition switch, a secondary or

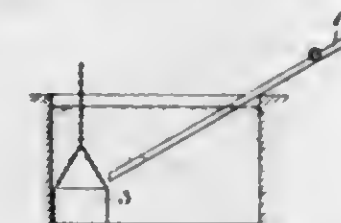
starter switch, a lock, an operating member rotatably and slidably mounted in the lock, and means for preventing longitudinal movement of said member during its rotatable movement, said rotatable movement of the member closing the primary switch and the longitudinal movement closing the secondary switch.

1,309,136. WINDOW-GLASS PROTECTOR. HARRY HOAN, Brooklyn, N. Y. Filed Nov. 20, 1918. Serial No. 263,282. 1 Claim. (Cl. 20-56.)



A window glass protector embodying an arm or bracket secured to the window sash and overlying the window pane, and a suction cup, carried by the bracket and engaging the face of the glass, said suction cup being caused to tightly grip the glass by the partial vacuum in said cup.

1,309,137. METHOD OF HARDENING SOLIDS OF REVOLUTION. AXEL GUSTAF EMANUEL HULTGAEN, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed June 26, 1917. Serial No. 177,071. 3 Claims. (Cl. 148-21.)



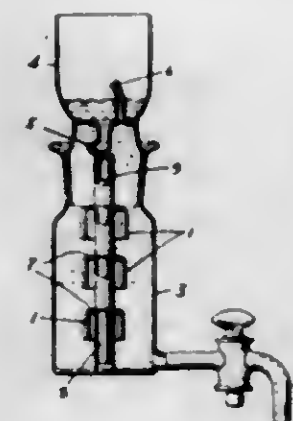
3. A method of hardening bodies having the form of solids of revolution, consisting in imparting a spinning movement to the body by causing it to roll along an incline, and introducing it, while spinning, into a body of hardening liquid toward which said incline extends, whereby the body will rotate within the hardening liquid and also advance bodily in a direction forming an angle with the axis of revolution of the body.

1,309,138. CHILD'S AND MISS'S WAIST. GEORGE P. JAMESON, Bridgeport, Conn., assignor to The Thomas P. Taylor Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 14, 1919. Serial No. 276,908. 1 Claim. (Cl. 2-98.)



In a child's waist, button carrying tapes having their ends placed flat and in substantial parallelism on the body of the waist and secured thereto by rows of stitching, the stitches themselves extending parallel with the tapes while the rows of stitches are side by side and extend athwart the tapes.

1,309,139. IMPREGNATION OF WATER WITH RADIUM EMANATIONS. DICRAN H. KABAKJIAN, Lansdowne, Pa. Filed May 16, 1918. Serial No. 234,854. 3 Claims. (Cl. 167-7.)

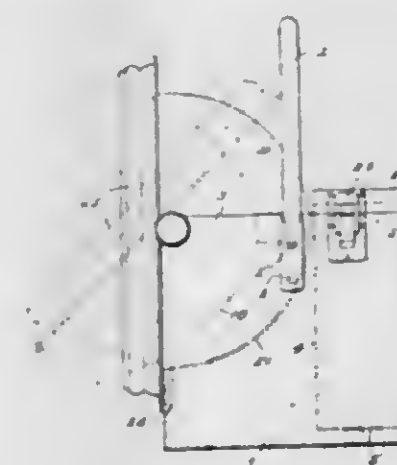


1. Apparatus for impregnating water with radium emanations comprising, in combination, a vessel adapted to be filled with water, a carrier impervious to liquids and gases immersed in the water, and an air seal separating the radium and the water, said seal enabling the emanations to diffuse into the water.

2. Apparatus for impregnating a liquid with radium emanations comprising a receptacle for the liquid to be charged, a cup-shaped carrier having a layer of radium substance deposited on its inner walls adjacent to the bottom of the cup, and a support arranged to maintain the cup in a position with a layer of protective air trapped between the radium and the liquid.

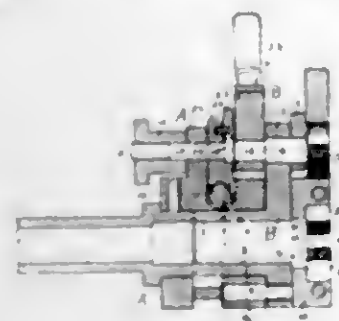
3. The process of impregnating water with radium emanations which consists in arranging the radium to present a maximum emanating surface and causing the emanations therefrom to diffuse through a layer of protective gas maintained between said radium surface and the liquid to be impregnated.

1,309,140. PORTABLE SEARCHLIGHT. JAMES W. KNOBLOCK, Elmira, N. Y., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y., a Corporation of New York. Filed Feb. 9, 1917. Serial No. 147,603. 4 Claims. (Cl. 240-8.5.)



1. A portable searchlight comprising a case, a projector journaled in said case, said projector being provided with a surface of revolution with respect to its journaling axis, a battery in said case, said case being provided with portions forming a surface of revolution with respect to said axis and closely conforming to the surface of revolution of said projector, and means for connecting said battery to said projector.

1,309,141. AUTOMATICALLY-OPENING SCREWING-DIE. HERBERT PRICE LAYDEN, Walsall, England. Filed June 29, 1918. Serial No. 242,522. 3 Claims. (Cl. 10-26.)



1. In a combined die head and automatically opening screwing dies of the type described, the combination of a body member, a die carrier slidably mounted on the body member and having a cross guide on its front face, a pair of half screw dies mounted in said cross guide, a cross block, a cam mounted on the die carrier and adapted to act between one of the half dies and said cross block, two side plates connected to the other half die, a spring for keeping the half die and the cross block in contact with the cam, a die setting lever carried on said cam, a lateral projection on said lever, a worm wheel carried by the body member, a catch plate on said worm wheel and adapted to be engaged by said projection, and a worm gearing coacting with said worm wheel for adjusting the same, the arrangement being such that the turning of the die-setting lever in one direction turns the cam to a predetermined position so that the dies are closed together and the die setting lever is retained in such position by engaging with said catch plate from which it is adapted to be released by the body stopping at the termination of the threading process and moving the dies and die carrier forward on the body member.

1,309,142. DRIVE-CHAIN. JAMES C. LAW, Carbondale, Pa. Filed Aug. 3, 1918. Serial No. 248,192. 3 Claims. (Cl. 32.)



3. A chain composed of alternate middle links and pairs of outer links, each middle link being formed at each end with an opening having semi-circular end walls, each of the outer links having elongated slots in its ends, each slot terminating at its inner end in a circular enlargement, and pintles circular in cross section throughout substantially their entire length, and having a diameter equal to the diameter of the circular enlarged portion of each slot, the pintles at diametrically opposite points adjacent each end being formed with a pair of parallel grooves, the grooves extending tangential to a circle concentric to the axis of the pintle and said grooves receiving the opposite parallel walls of the elongated slots in the outer links and interlocking therewith against independent rotary movement or lateral movement, said pintles being rotatable in the enlarged portions of the slots, whereby the pintles may be reversed when worn on one side, the pintles being extended beyond the outer links sufficiently to permit force to be applied to the pintles to shift them relative to the outer links and to provide bearings.

1,309,143. RECOVERY OF AMMONIA FROM PRODUCER-GAS. ARTHUR HENRY LYNS and NICKS EDWARD RAMBUSH, London, England. Filed July 23, 1918. Serial No. 246,393. 4 Claims. (Cl. 23-21.)

1. In the recovery of ammonia from producer gas subjecting an ascending current of producer gas prior to the

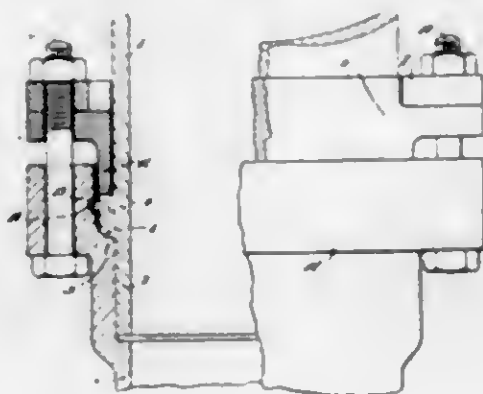
removal of ammonia to temperatures progressively diminishing from not materially below 80° C. to not materially above 40° C. in a manner compelling the condensate to gravitate through the region of highest temperature.

1,309,144. AUTOMOBILE-BODY. HERMAN C. MAISE, Detroit, Mich., assignor, by mesne assignments, to Finance & Trading Corporation of New York, a Corporation of Virginia. Filed Mar. 6, 1917. Serial No. 152,929. 3 Claims. (Cl. 21-7.)



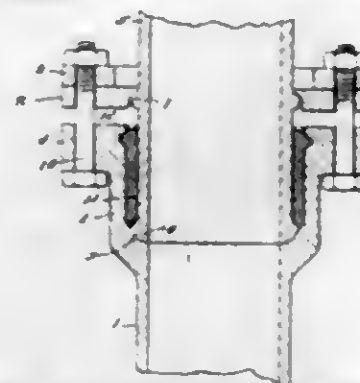
1. A vehicle body of the kind described having removable body members, a seat, a compartment adapted to receive said removable members, a back to said seat upon which said compartment is mounted, said seat back being hingedly connected to a portion of said body and adapted to be rotated forwardly to enable the insertion of said members into said compartment, the said back when in its normal position being arranged to contact with the body and thereby effect the concealment of the compartment.

1,309,145. PIPE CONSTRUCTION. IRA A. MANN, deceased, Pittsburgh, Pa., by Marlon P. Mann, executrix, Pittsburgh, Pa. Filed Dec. 21, 1917. Serial No. 208,309. 1 Claim. (Cl. 285-115.)



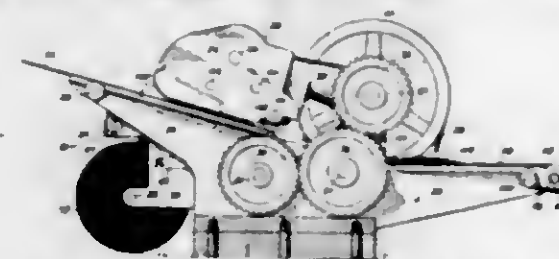
In a pipe connection, the combination of a hub having an upper recess and a lower recess of relatively smaller diameter, a pipe end disposed within said recesses and having a lesser diameter than that of the lower and smaller recess, whereby to provide a slight clearance between the outer face of the extreme end of the pipe and the confronting face of said lower recess, the base of said upper recess being inclined downwardly and laterally toward said clearance and being dimensionally greater than said clearance, a packing in said upper recess having the greater part of its basal portion supported on said inclined base, and follower means carried by said hub having a gland disposed in the upper part of the upper recess to engage the packing and co-operating with said inclined base to force the unsupported and lesser basal portion of the packing into the clearance.

1,309,146. PIPE-JOINT. IRA A. MANN, deceased, Pittsburgh, Pa., by Marlon P. Mann, executrix, Pittsburgh, Pa. Filed Dec. 21, 1917. Serial No. 208,310. 2 Claims. (Cl. 285-115.)



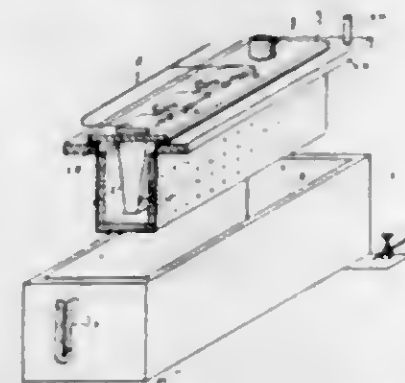
2. In a pipe connection, the combination of a hub and pipe end in telescopic relation and having opposed ground curved engaging surfaces and provided with a packing recess disposed to the rear of and extending laterally in an outward direction from said surfaces, the diameter of the base of said recess being greater than the exterior diameter of the curved surface of the pipe end, and clamping means including a collar contacting constructed and arranged rearwardly of said recess for drawing said surfaces into tight engagement, said collar and pipe having complementary curved engaging portions designed to co-operate with said surfaces whether the connection is in or bent out of alignment.

1,309,147. SEALING-MACHINE. DAVID MARINSEY, New York, N. Y. Filed Apr. 19, 1918. Serial No. 229,523. 22 Claims. (Cl. 216-21.)



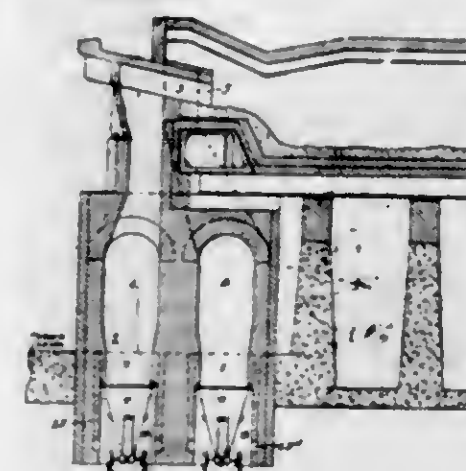
4. In a machine of the class described, a main frame, feed rollers mounted in said frame, means for operating said feed rollers, a supplemental frame mounted to move toward and from the main frame, feed rollers mounted in said supplemental frame and adapted to co-operate with the feed rollers of the main frame, means for operating said last named feed rollers, a sealing strip feeding and cutting mechanism mounted in the main frame, and means operated by the article to be sealed as it is fed into the machine for putting said sealing strip feeding and cutting mechanism into operation.

1,309,148. ELECTROLYTIC CELL. WILLIAM G. MICHEL, Niagara Falls, N. Y. Continuation of application Serial No. 179,111, filed July 7, 1917. This application filed Aug. 19, 1918. Serial No. 250,550. 9 Claims. (Cl. 204-5.)



7. An electrolytic cell made of anthracite coal in its natural state, and a container for said cell, the coal in its natural state being shaped to fit the cell.

1,309,149. OPEN-HEARTH FURNACE. ALBERT MILLER, Buffalo, N. Y. Filed Apr. 29, 1918. Serial No. 231,345. 3 Claims. (Cl. 263-45.)



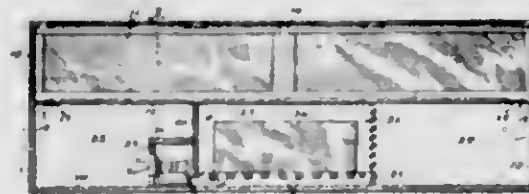
2. The combination with a furnace having a hearth and a down-flue arranged to receive slag therefrom, of a pit located below the floor-level of the furnace, a wheeled slag-receptacle movable into and out of said pit and adapted to receive the slag from said flue, said pit having an opening in its top for the entrance and exit of said receptacle, a lid applied to said opening, and a vertically-sliding door arranged in said pit between said lid and the rear portion of the pit.

1,309,150. ATTACHMENT FOR GLOVES AND CUFF-GLOVES. EDGAR A. MONFORT, New York, N. Y. Filed Dec. 9, 1918. Serial No. 265,929. 3 Claims. (Cl. 24-3.)



1. In a device of the class described, the combination with a glove, of a tongue secured near one end to said glove, the tongue and glove being pierced, an article, a stem on the article extending through the opening in said glove and tongue, and means co-operating with the stem to secure the same in place, and the tongue being adapted to be folded over the article to cover the same.

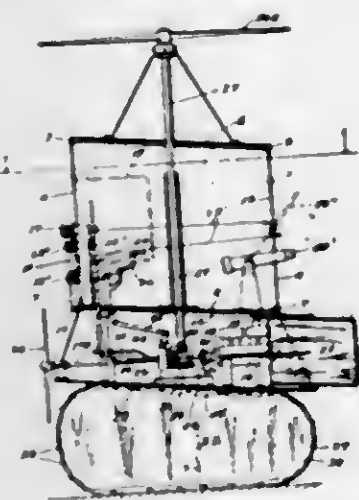
1,309,151. REFRIGERATOR SHOW-CASE. GEORGE F. MOOREHEAD, Des Moines, Iowa, assignor of one-half to Arthur C. Wright, Des Moines, Iowa. Filed Feb. 27, 1917. Serial No. 151,182. 2 Claims. (Cl. 62-37.)



1. A refrigerator show-case, comprising a housing formed with a horizontal partition forming the bottom of a display case, said partition being formed with spaced openings at its ends only, the intermediate portion of said partition being imperforate, vertical partitions below said horizontal partition dividing the lower part of said housing into end compartments and an intermediate refrigerating compartment located entirely beneath said

display case, a skeleton rack mounted in the refrigerating compartment and adapted to carry a refrigerating medium, one of said vertical partitions being formed with an opening at its base below the level of said rack, and a blower device located adjacent the last-named opening, the other vertical partition being formed with openings above the level of the skeleton rack, whereby air is drawn from said refrigerating compartment and is forced upwardly into and from end to end of said display case and is then returned to said refrigerating compartment.

1,309,152. AERIAL MACHINE. WILLIAM PAIN, Little Rock, Wash., assignor of one-fourth to John Nicholas, one fourth to Seltino Lazzari, and one-fourth to Angelo Lazzari, Seattle, Wash. Filed July 28, 1918. Serial No. 111,837. Renewed Nov. 23, 1918. Serial No. 264,129. 2 Claims. (Cl. 244—25.)



1. In a machine of the class described having a series of superposed planes, a lifting propeller, and a substantially vertical shaft for said propeller, of means provided on said shaft and connected with the machine structure, whereby the latter is supported from its proximity to its lower plane by the lower end of the shaft, and means to rotate the propeller.

1,309,153. ELECTRIC SWITCH. CLARENCE D. PLATT, Bridgeport, Conn. Filed May 18, 1918. Serial No. 235,241. 4 Claims. (Cl. 175—287.)

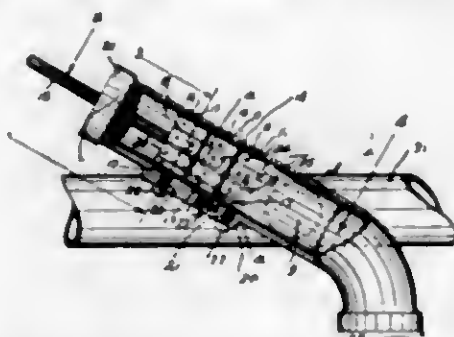


3. In a soap switch, a supporting base, a contact having a base portion secured rigidly to said support and a yielding spring portion projecting out of engagement with the support so as to yield free of said support, a movable contact member arranged to depress the freely yielding portion of the first contact toward the support and a stationary stop shoulder positioned in the path of rebound of the yielding portion of the spring contact and adapted thereby to be engaged by and to immediately check vibrations of said free spring portion of the contact when said contact is released from engagement with the movable contact member.

1,309,154. MEANS FOR LOCKING AUTOMOBILES. JOHN T. POWERS, Tacoma, Wash., assignor to The Jones-Powers Carburetor Company, Denver, Colo., a Corporation of Colorado. Filed Mar. 30, 1918. Serial No. 223,789. 5 Claims. (Cl. 251—6.)

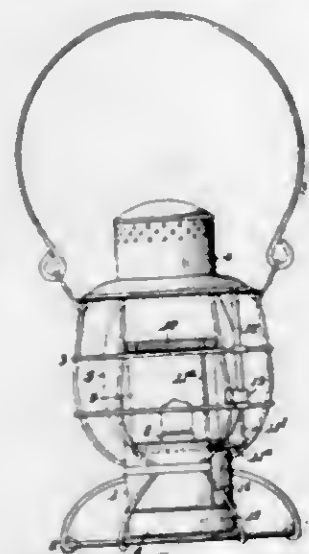
1. A cylindrical casing having an opening therein for passage of fluid therethrough, a member extending into

the casing and movable both rotatably and axially therein, cylindrical locking mechanism on the inner end of said member and fitting said casing, said mechanism comprising



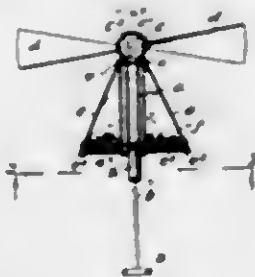
ing locking means and an extension, the extension lying beyond the locking mechanism and adapted to close the openings in the casing.

1,309,155. SIGNAL-LANTERN. THOMAS M. RICHARDS, New Philadelphia, Ohio. Filed Feb. 10, 1919. Serial No. 276,021. 3 Claims. (Cl. 240—39.)



3. A lantern comprising a cylindrical casing having a vertical slot therein, a clear glass globe supported by said casing, a bottom detachably mounted on said casing, a lamp bowl disposed on said bottom and carrying a burner, a colored glass cylinder interposed between said bowl and said casing, said cylinder being vertically movable to and from inclosing relation to said burner, a support for said cylinder comprising an outwardly projecting member lying in said slot and a vertical member located outside said casing, a stationary vertical guide tube in which said vertical member of the support is vertically movable, and means cooperating with said vertical member for holding the latter at either of the limits of adjustment of the cylinder.

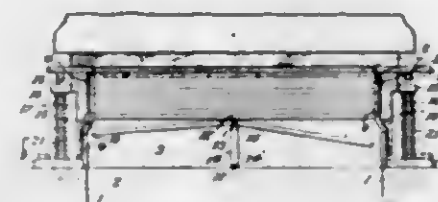
1,309,156. AERIAL WEAPON. MARCUS C. STEARNS, Buffalo, N. Y. Filed May 18, 1918. Serial No. 235,382. 5 Claims. (Cl. 102—2.)



4. An aerial weapon comprising a standard, vanes carried by the standard to set up rotation thereof as the

weapon falls, a plurality of projectile containers hinged on the standard, retaining wires to hold the retainers normally in parallelism with the standard and means to sever the retaining wires.

1,309,157. LEATHER-CUTTING DIE AND METHOD OF MAKING SHAPES. HENRY C. STOCKMAN, New York, N. Y., assignor of one-half to Henry Stockman, Englewood, N. J. Filed Mar. 21, 1918. Serial No. 223,651. 7 Claims. (Cl. 164—29.)



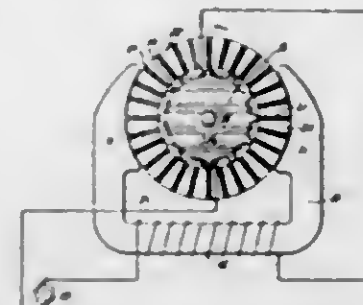
1. The method of making shapes which consists in causing a die to successively sever a plurality of duplicate blanks of predetermined shape from a strip of material, repeatedly confining each blank, immediately after forming the same, in a chamber within said die which snugly conforms to the configuration of said blank while subjecting a superposed strip of material to a successive forming operation of said die until a plurality of blanks are collected within said chamber, and then substantially simultaneously subdividing the lowermost blank into a plurality of parts while forcing a newly formed blank into said chamber and while substantially simultaneously releasing each of said subdivisions so formed into a space of substantially greater cross sectional area than itself.

1,309,158. JOINT FOR ELECTRIC CABLES. ALBERT E. TANNER, Stretford, and ERNEST A. CLAREMONT, High Leigh, England. Filed May 10, 1918. Serial No. 96,090. 4 Claims. (Cl. 173—263.)



1. A coupler for cables comprising an inner sleeve and an outer sleeve, said outer sleeve being spaced apart from said inner sleeve, and being connected to said inner sleeve between its ends.

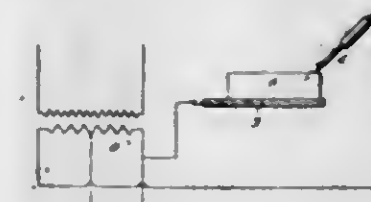
1,309,159. ELECTRIC MOTOR. RUSSELL E. TAYLOR, New York, N. Y. Filed Mar. 2, 1917. Serial No. 151,934. 10 Claims. (Cl. 172—278.)



7. The combination with an alternating current source of an alternating current motor, said motor having an exterior element having magnetic poles, an interior element having magnetic poles, windings on said poles excited from said source, and an intermediate magnetic ele-

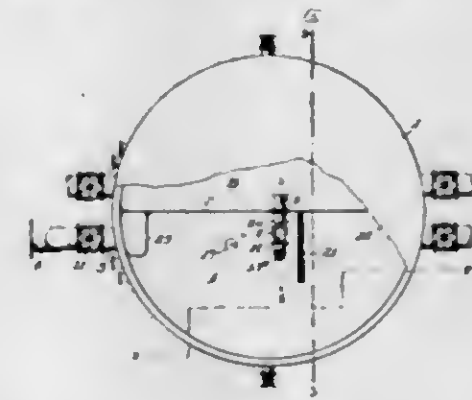
ment having its magnetic material radially disposed and extending in a direction parallel in the axis of the motor and affected by said poles, the magnetic circuit of said material in a circumferential direction being interrupted to minimize passage of magnetic flux in a circumferential direction.

1,309,160. METHOD AND APPARATUS FOR MARKING METAL. GEORGE A. THORNTON, Cleveland, Ohio, assignor to Adams-Hagmail Electric Company, Cleveland, Ohio, a Corporation. Filed Dec. 18, 1917. Serial No. 207,769. 13 Claims. (Cl. 175—265.)



3. The method of electrically marking upon a steel or iron article which consists in providing a conducting medium connected together with the article to be marked to a suitable source of electricity through a means for reducing the voltage and steadying the current and then marking the article by the conducting medium while maintaining a close contact therewith.

1,309,161. FLUSHING SYSTEM FOR BY-PRODUCT COKE PLANTS. LAWRENCE H. UNDERWOOD, Youngstown, and ROBERT B. HITCHCOCK, Struthers, Ohio. Filed Nov. 30, 1918. Serial No. 264,770. 15 Claims. (Cl. 210—5.)

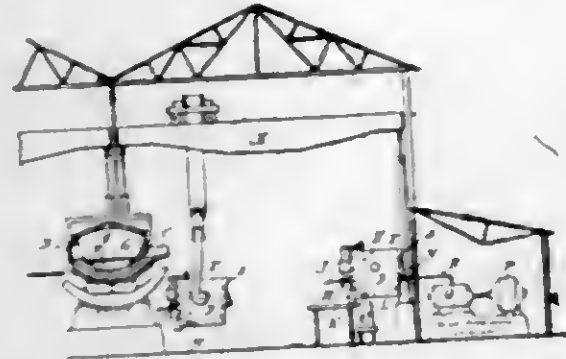


15. In a flushing system of the character described, a tank, a partition dividing said tank into two compartments of which one is a flushing compartment and the other a hot drain compartment, means leading into the top of said flushing compartment for conducting a mixture of tar and liquor to the latter, a tar-withdrawing pipe leading from said flushing compartment at a suitable level above the bottom thereof, a liquor-withdrawing pipe leading from said flushing compartment at a suitable distance above said tar-withdrawing pipe, a siphon for conveying to said hot drain compartment contents of the flushing compartment, said siphon having its receiving end located in the lowermost strata of the contents of said flushing compartment, means for conducting to said hot drain compartment the uppermost contents of said flushing compartment, said conducting means being adjustable to control the level to which the liquid in said flushing compartment is to be reduced, and means for indicating the separation zone between the tar and liquor contents of said flushing compartment.

1,309,162. PRODUCTION OF REFINED BASIC STEEL. WILLIAM R. WALKER, New York, N. Y. Filed Mar. 12, 1918. Serial No. 221,950. 9 Claims. (Cl. 75—46.)

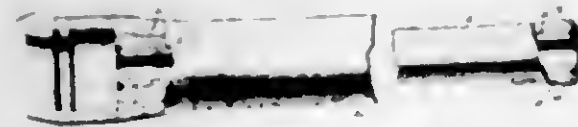
6. The method of producing refined basic steel which consists in treating the metal in a basic furnace or con-

verter under a phosphorus-extracting slag, withdrawing the steel thus formed into a movable vessel with the desired additions, heating the steel in said vessel molten and to allow the additions to take effect and to permit



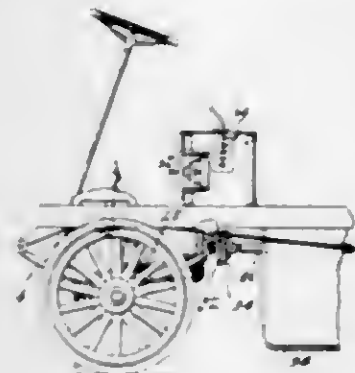
the rise of impurities to the surface and the escape of gases, and using in said vessel a modified slag adapted to retard or prevent the return of phosphorus into the steel.

1,309,163. METHOD OF RELINING CANNON. NATHANIEL C. WALPOLE, U. S. Army, assignor to the Secretary of War of the United States of America, in Trust. Filed Jan. 9, 1919. Serial No. 270,338. 10 Claims. (Cl. 20-1.14.) (Filed under the act of March 3, 1883, 22 Stat. L. 625.)



1. The method of securing semi-finished liners in cannon by welding.

1,309,164. MOTOR VEHICLE. CHARLES A. WARD, Mount Vernon, N. Y. Filed Oct. 23, 1917. Serial No. 198,159. 9 Claims. (Cl. 180-65.)



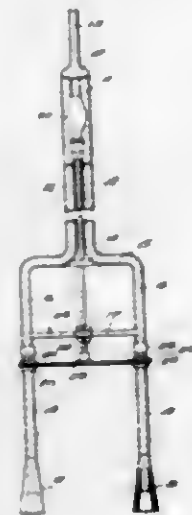
1. In a motor vehicle, a frame, a rear axle on which said frame is supported, drive gearing on the rear axle comprising a high speed driving shaft and reducing connections from said shaft to the vehicle driving wheels, a motor on the front end of the frame provided with a shaft, a long propeller shaft flexibly connected to said front shaft and to said driving shaft and forming with said first mentioned shafts a single continuous driving shaft from said motor to said rear axle, and means carried by said frame for supporting said propeller shaft between said flexible connections.

1,309,165. PROCESS FOR THE RECOVERY OF BRASS FROM FOUNDRY ASH AND THE LIKE. CYRIL HENRY WHITE, Coventry, England. Filed Dec. 4, 1918. Serial No. 265,206. 1 Claim. (Cl. 75-1.1.)

A process for recovering brass from foundry ash and the like which remains in pouring pots and crucibles

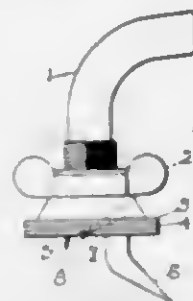
after the brass has been poured therefrom, consisting in heating the said ash to between 1050° and 1250° C. and stirring or kneading the molten mass.

1,309,166. GLASS-BLOWER. EDWARD O. WHITLEY and EDWARD L. KNOWLTON, Williamstown, W. Va. Filed Oct. 26, 1918. Serial No. 259,932. 1 Claim. (Cl. 49-21.)



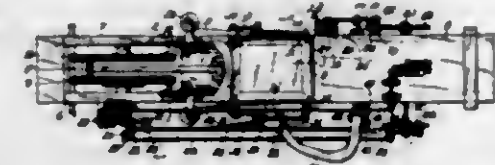
1. In apparatus of the character described, the combination with a plurality of pipes arranged in approximately parallel relation and bent at their forward ends to provide laterally extending portions having a recess upon one side thereof, of a mouth tube connected with the forward ends of the laterally bent portions of the pipes, a plurality of nozzles having tubular extensions rotatably mounted within the forward ends of the pipes, a corresponding number of gears carried by the tubular spindles to turn them, a gear arranged between the plurality of gears to drive them, a driving shaft connected with the said gear and extending longitudinally of and between the pipes and connected therewith, and a handle connected with the rear end of the shaft and arranged for operation within the said recess.

1,309,167. SPOUT-FAUCET BASE. HERBERT JAMES WYATT, Longbranch, Wash. Filed July 12, 1917. Serial No. 180,243. 2 Claims. (Cl. 221-23.)



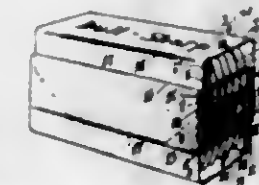
1. A spout faucet of the class described comprising a tubular member having an integrally formed slotted flange upon the lower end thereof, oppositely disposed piercing and cutting members provided on the lower surface of said flange to pierce the wall of a container and to cut a circular portion away therefrom to form an entry for said flange, a packing member disposed to encircle said tubular member and to rest against the outer wall of said container, a washer similarly disposed in abutment with said packing, and a clamping nut adapted to engage said washer and to clamp the opposite sides of the pierced wall of said container between said flange and packing member.

1,309,168. ELECTRICAL BALE-TIE WELDER. LEWIS B. WYANT, Vincennes, Ind. Filed July 10, 1917. Serial No. 179,784. 16 Claims. (Cl. 100-20.)



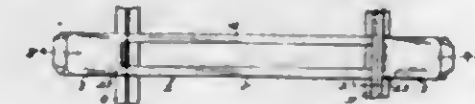
2. An electrical bale-tie welder including a welder head and a cutter blade stationarily supported, a welder head and a cutter blade movably supported, means for guiding two wire portions to the welder heads, and means for guiding the wire portions from the heads to the cutter blades.

1,309,169. RAZOR-BLADE HOLDER. HARRY R. YOUNG, Cincinnati, Ohio. Filed Mar. 4, 1916. Serial No. 82,107. 24 Claims. (Cl. 206-16.)



1. A razor-blade holder having a series of parallel blade-holding pockets having sides gripping the flat sides of the blades to hold the edges of the blades away from the bottoms of the pockets.

1,309,170. RAILWAY-TRACK. JOHN ZUKA, Byesville, Ohio. Filed June 14, 1918. Serial No. 240,034. 6 Claims. (Cl. 238-33.)

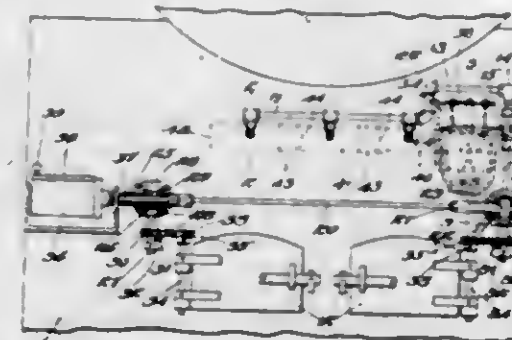


2. In a track construction, in combination with rails having openings therein, a sectional tie designed for receiving the rails, and means on the end sections of the tie for engaging the openings to maintain and clamp the rails in position.

1,309,171. FURNITURE-POLISH. GEORGE H. ALLEN, Clinton, N. Y. Filed May 28, 1917. Serial No. 171,547. 6 Claims. (Cl. 134-24.)

6. A polishing composition comprising a mixture of aqueous extracts of wood, sal soda, mineral oil, beeswax and alcohol.

1,309,172. SMOKE-PREVENTER. BRADFORD L. AMES, Boston, Mass. Filed June 12, 1915. Serial No. 33,820. 7 Claims. (Cl. 110-55.)



1. In a smoke preventer for boiler furnaces, an air conduit consisting of a plurality of sections slip-jointed together and arranged to be adjustable longitudinally

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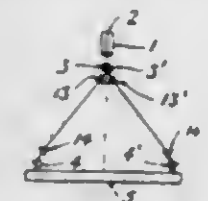
thereof, each of said sections having an exit opening into the interior of the furnace, a nozzle mounted in each of said conduit sections and extending into the said exit opening, and means for supplying fluid to each of said nozzles.

1,309,173. TICKET-CASE. BENJAMIN FRANKLIN BAKER, St. Stephen, New Brunswick, Canada. Filed Feb. 18, 1919. Serial No. 277,841. 1 Claim. (Cl. 206-40.)



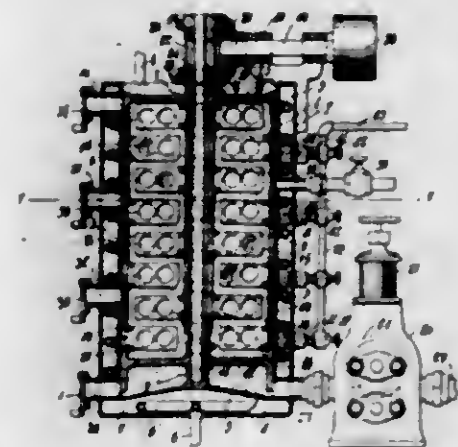
A ticket case including a case body provided in its bottom wall with an opening, a false bottom freely movable within the case body and normally closing said opening, a gripping rib carried by the false bottom and projecting into said opening, a lid for the case body, and an ejector slidable upon the lid, said gripping rib being manually engageable for pressing the false bottom upwardly within the case body and holding a ticket therein against the ejector.

1,309,174. ADJUSTER FOR RANGE-FINDERS. ARCHIBALD BARR and WILLIAM STROUD, Anniesland, Glasgow, Scotland. Filed Aug. 27, 1918. Serial No. 251,670. 12 Claims. (Cl. 89-2.7.)



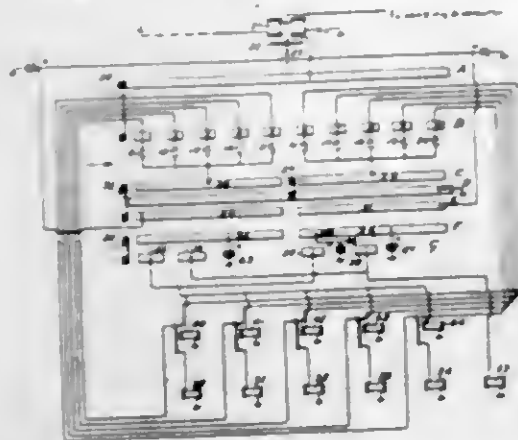
1. An optical adjuster for self-contained base range-finders, consisting of a collimator, refractive means for causing light passing from the collimator to be divided into two beams and diverted at a definite angle associated with refractive means for subsequently rendering the two beams parallel, for the purposes set forth.

1,309,175. BEATING AND AERATING PROCESS AND APPARATUS. EDWARD C. BECHT, Newport, Ky. Filed Nov. 7, 1918. Serial No. 261,512. 13 Claims. (Cl. 269-8.)



1. The method of treating a substance to alter its consistency, substantially without segregating any of its constituents, which consists in beating and aerating said substance by continuously passing said substance into a space in which suitable agitating means is operating, and allowing said substance to continuously escape from said space in its beaten and aerated but undivided condition.

1,309,176. SELECTING SYSTEM. JOHN HUME BELL, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 29, 1917. Serial No. 188,729. 17 Claims. (Cl. 178—33.)



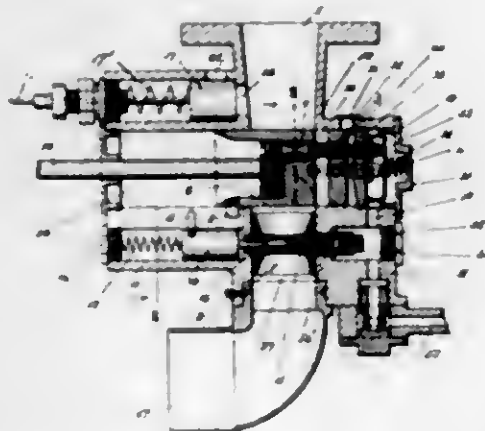
1. In a printing telegraph system, a current distributor, groups of signal storing means in circuit with said distributor, a plurality of selecting magnets, and a plurality of switching relays for alternately connecting said groups of signal storing means in circuit with said selecting magnets.

1,309,177. GARDEN-TOOL. JOSEPH PLACIDE BERTRAND, Port Arthur, Ontario, Canada. Filed Oct. 7, 1918. Serial No. 257,262. 1 Claim. (Cl. 55—08.)



A garden implement comprising an angular blade having one edge formed with projecting corner portions, a groove at the inner side of each corner and a trench forming lip between the grooves, substantially as described.

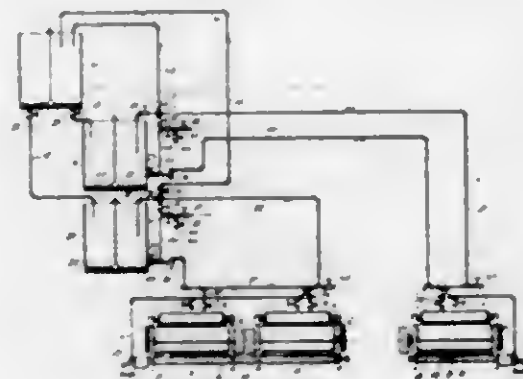
1,309,178. CARBURETOR FOR INTERNAL-COMBUSTION ENGINES. HAD ED BINKS, Eccles, England. Filed Aug. 6, 1917. Serial No. 184,665. 2 Claims. (Cl. 261—41.)



1. In a carburetor, a casing provided with a cylinder and having inlet passages connected with the cylinder, a throttle piston valve working in the cylinder between the said passages, a pilot jet for fuel projecting into the said cylinder and controlled by the said piston valve, a main valve for admitting fuel to one of the said passages,

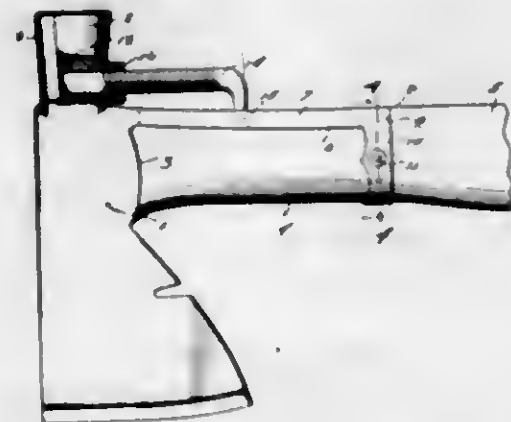
means for closing the said main valve automatically, and projections or tappets operatively connected with the said piston valve and main fuel valve respectively, whereby the piston valve is caused to open the main fuel valve after admitting fuel through the said pilot jet and placing the said inlet passages in communication with each other.

1,309,179. SUPPLY SYSTEM FOR PLASTIC MATERIALS. CHARLES P. BONNETT, Milwaukee, Wis. Filed Apr. 20, 1918. Serial No. 229,728. 13 Claims. (Cl. 91—56.)



1. A system for supplying a fluid or plastic substance to several sets of hide treating machines or the like, comprising a mixing tank, a circulating tank for each set of machines, means for admitting the substance from the mixing tank to any circulating tank, and means for circulating the substance from each circulating tank to one set of machines and then back to the circulating tank.

1,309,180. HAMMER AND WRENCH. ALVA W. CARR, Groveport, Ohio. Filed July 31, 1916. Serial No. 112,356. Renewed Mar. 31, 1919. Serial No. 286,551. 1 Claim. (Cl. 7—8.)



A tool comprising a head including separable members, one of which has a handle socket, a handle in the socket having a flattened longitudinal edge portion, a pair of arms forming a part of the socketed head member and extending in spaced parallel relation therefrom against said flattened portion of the handle and having a yoke connecting the extremities of the arms and embracing the handle, and a carrier for the second head member slidably engaged with the socketed head member, with its extremity slidably held between said arms.

1,309,181. VARIABLE RESISTANCE. THEODORE W. CAST, Scipio, N. Y. Filed Oct. 9, 1917. Serial No. 195,652. 4 Claims. (Cl. 219—76.)

1. A resistance element formed of a compound of thallium and iodine.

1,309,182. PROCESS OF CASTING CYLINDERS OF INTERNAL-COMBUSTION ENGINES. PIERRE CLERGET, Levallois-Perret, France, assignor to Clerget, Blin & Co., Levallois-Perret, France, a French Company. Filed Mar. 18, 1918. Serial No. 223,189. 1 Claim. (Cl. 22—204.)

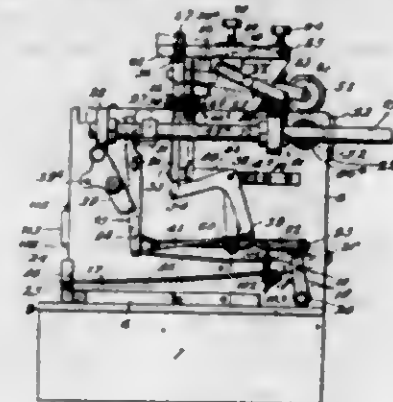
The method of constructing an internal combustion engine cylinder comprising a liner or inner sleeve of wear resisting metal and a casing surrounding the liner of metal having a high conductivity of heat consisting in heating the liner in a temperature below the melting point of the casing metal, and casting the casing around the heated liner as a core.

1,309,183. STEREOPTICON-SLIDE. JULIAN M. COCHANE, Boston, Mass. Filed Dec. 15, 1916. Serial No. 137,233. 7 Claims. (Cl. 40—152.)



2. A lantern slide comprising a frangible picture element of less area than the slide, a surrounding member of less thermal conductivity and of greater thickness than the picture element, and comprising a pair of superimposed elements, a pair of inlay members each having a marginal portion disposed between said pair of superimposed elements and having flanged edges engaging the margins of the picture element.

1,309,184. VENDING-MACHINE. SAMUEL M. COFFMAN, Kansas City, Mo., assignor, by mesne assignments, to The Bushnell Manufacturing Company, a Corporation of Kansas. Filed Aug. 13, 1915. Serial No. 45,299. 21 Claims. (Cl. 194—2.)

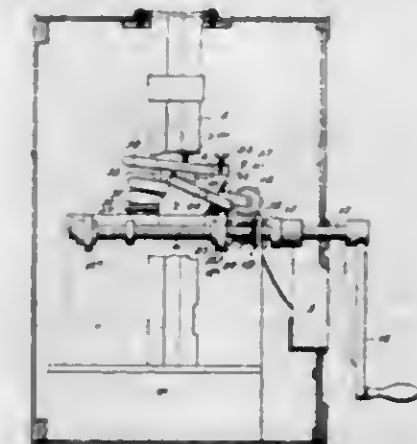


1. In a vending machine, a chute, a stop to arrest the passage of a coin through said chute, a shaft released by said stop, web-selecting mechanism actuated by said shaft, and rotary feeding means for advancing the selected web.

1,309,185. VENDING-MACHINE. SAMUEL M. COFFMAN, Kansas City, Mo., assignor, by mesne assignments, to The Bushnell Manufacturing Company, a Corporation of Kansas. Original application filed Aug. 13, 1915, Serial No. 45,299. Divided and this application filed July 24, 1916. Serial No. 110,914. 14 Claims. (Cl. 211—33.)

7. In a vending machine, a feed roll, means for rotating said feed roll, a plurality of independently-mounted feed rolls to coast with the first feed roll in advancing a

plurality of webs divided into sections by transverse rows of perforations, fingers adapted to enter the perforations



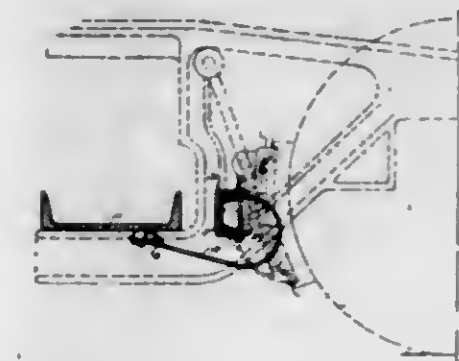
of any of said webs to prevent them from advancing with their companions, and means for raising the fingers from the perforations of one web.

1,309,186. BRAKE-SHOE-KEY LOCK. WILLIAM F. CREMEAN, Wilkes-Barre, Pa., and WILLIAM E. WINE, Toledo, Ohio. Filed Mar. 20, 1919. Serial No. 283,867. 6 Claims. (Cl. 188—28.)



1. In a brake shoe key lock, the combination with a brake head, a brake shoe and a brake shoe key of means for retaining said key comprising a member engaging said brake head and having a portion extending laterally above said key, said member being held in engagement with said brake head by said key.

1,309,187. THIRD-POINT SUPPORT FOR BRAKE BEAMS. WILLIAM F. CREMEAN, Wilkes-Barre, Pa. Filed Mar. 20, 1919. Serial No. 283,865. 7 Claims. (Cl. 188—70.)



1. In a car truck, the combination with a truck member and a brake beam of a balance member secured to said brake beam and having an end disposed beneath said truck member and slidably cooperating therewith.

1,309,188. LOOM-SHUTTLE. JEAN B. DAUDLIN, Fall River, Mass. Filed July 2, 1917. Serial No. 173,108. 13 Claims. (Cl. 130—46.)

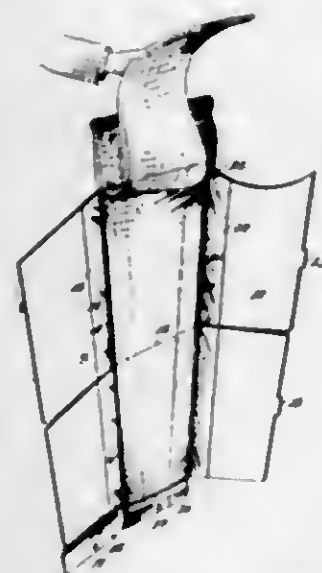
1. In a hand-threading shuttle having a bobbin chamber, a threading eye entering said chamber, and a threading slot extending from said chamber and terminating above

the plane of the eye at the delivery end thereof and there being intersected by a transverse cut which provides a thread passage connecting said slot and eye, whereby the filling is laid in said eye from above, in threading, said



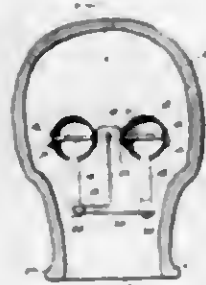
cut leaving a tongue extending transversely of the shuttle under which the filling runs after threading, said tongue affording a barrier to prevent escape of the filling by a direct upward movement.

1,309,189. TROUSERS-PRESS. ROBERT V. DAVIS, Washington, D. C. Filed Oct. 23, 1916, Serial No. 127,205. Renewed Dec. 11, 1918. Serial No. 269,361. 6 Claims. (Cl. 100—57.)



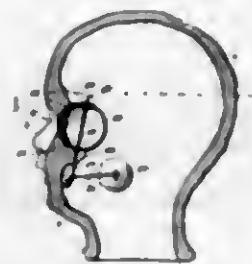
1. A trousers press including a plurality of sections and provided at its upper extremity with a notch with the said sections foldable upon each other to receive a pair of trousers with one of the sections held between the trousers legs by another of the said sections and with the seal of the trousers received by said notch.

1,309,190. DOLL-HEAD. ALEXANDER DANES, Brooklyn, N. Y., assignor to The Wak Novelty Co., Inc., New York, N. Y. Filed Sept. 11, 1918. Serial No. 253,619. 3 Claims. (Cl. 46—40.)



1. A structure for dolls' eyes comprising, in combination, a bracket on the inside of the head between the eye sockets, a shaft supported intermediate its length on said bracket, a pair of eye-shells swingable on said shaft, the latter having its extremities angled to hold the shells one on each side of said bracket, weighted arms attached to the shells for turning the same on the shaft, and rigid means formed to hold the shaft in position and adapted to serve as a stop for said arms to limit the movement thereof in one direction.

1,309,191. DOLL-HEAD. ALEXANDER DANES, Brooklyn, N. Y., assignor to The Wak Novelty Co., Inc., New York, N. Y. Filed Sept. 11, 1918. Serial No. 253,620. 6 Claims. (Cl. 46—40.)



1. A doll head provided with eye-ball retaining sockets, eye-balls freely movable in the sockets, a wire engaged with each eye-ball on a central line therethrough and extending downwardly therefrom where it is bent upon itself to provide a laterally projecting portion, connections between the wires, one of which is a weighted connection located between the extremities of the laterally projecting portions, said connections being pivotally engaged and arranged to permit the weighted connection to produce similar turning movements of the eye-balls either up or down or sideward, depending upon how the head is moved or tilted.

1,309,192. SPARK-PLUG. JOSEPH S. FAUTH, Bloomfield, N. J. Filed Jan. 26, 1918. Serial No. 213,956. 2 Claims. (Cl. 123—169.)



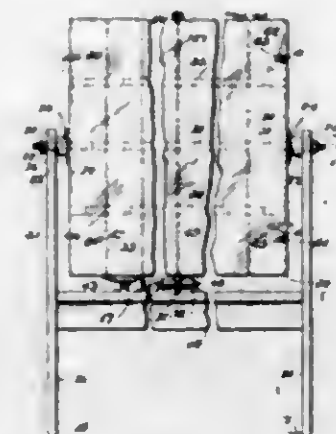
2. A spark plug having a fixed electrode and also having a bar spaced from said fixed electrode and provided with a circular opening opposite said fixed electrode, the wall of said opening being beveled on opposite sides, and a movable electrode loosely mounted for oscillatory movement in said opening, said movable electrode comprising a shank extending through said opening and loose therein and enlarged heads at the ends of said shank.

1,309,193. RODENT-EXTERMINATOR. JACOB T. GARRISON, Oakland, Calif. Filed Nov. 30, 1918. Serial No. 264,796. 1 Claim. (Cl. 43—5.)



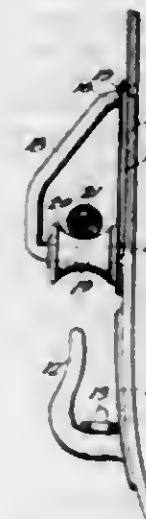
A rodent exterminator comprising a combustion chamber including a metal outer wall, a sheet asbestos inner wall and a filling of insulating material therebetween, a fire pot within the chamber, a reservoir exterior to the chamber and having a valve controlled pipe leading to the fire pot, means for supplying air under pressure to the reservoir, a flexible pipe connected with the combustion chamber and a nozzle at the free end of the flexible pipe.

1,309,194. CARD-RACK. ROBERT PATTERSON GASTON, Baltimore, Md. Filed Oct. 4, 1917. Serial No. 194,823. 6 Claims. (Cl. 211—37.)



2. The combination with a card rack, of a frame for revolvably supporting said rack, a plurality of circular segments secured to said rack, a notch in each segment, a stopping piece supported by said frame and located in the path of said circular segments, guides for said stopping piece supported by said frame and springs for forcing said stopping piece into said notches.

1,309,195. DRIVING-REIN SUPPORT. PERRY G. GIDENS, Columbus, Ga., assignor to Curtis M. Bass, Columbus, Ga. Filed Oct. 26, 1916, Serial No. 127,920. Renewed Jan. 8, 1918. Serial No. 270,212. 1 Claim. (Cl. 54—73.)

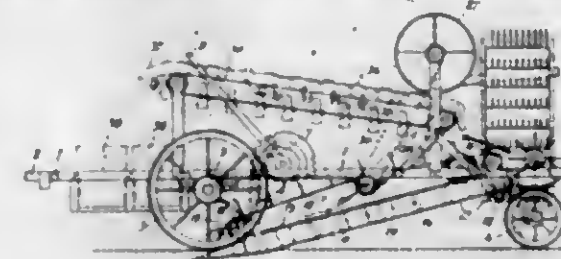


A device of the class described comprising a flexible support, a base member having its rear face flat and resting against the adjacent side of the support and its upper end enlarged and pierced at its corners by fastening devices engaging the support, the lower end of the base member being free, and a bracket device including a rod having its upper end rigidly secured to the base member between the spaced fastening devices and thence extended downwardly in spaced relation to the base to form a guard and thence extended inwardly and rigidly secured to the base at the free end thereof to form a horizontal bearing portion, and a driving rein guiding roller mounted for rotation on the horizontal bearing.

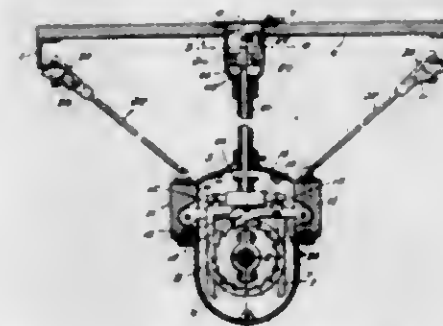
1,309,196. MACHINE FOR TAKING UP POTATOES, &c. NILS OLAF HAVG, Drammen, Norway. Filed Mar. 8, 1919. Serial No. 281,477. 6 Claims. (Cl. 130—32.)

1. In a machine of the character described, in combination, slicing means including a cylinder of wire mesh, the openings formed by the wire mesh successively increasing in size from the feeding to the opposite end of the cylinder,

der, and means operating in the cylinder for advancing the material therethrough and combined sorting and conveying means, one for each size of screen mesh associated with the cylinder and designed to automatically dump parts of the mixture being conveyed when the parts possess an excessive specific weight.

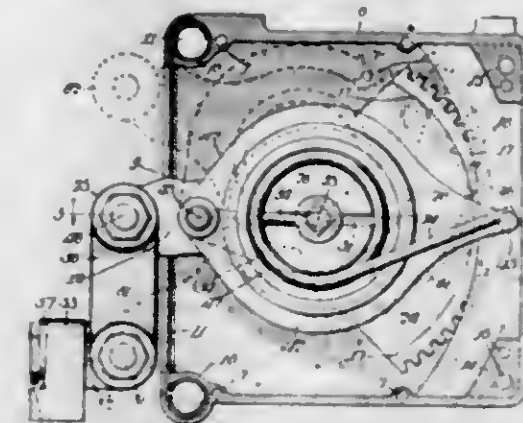


1,309,197. MEANS FOR PREVENTING THE THEFT OF MOTOR-VEHICLES. EUGENE F. HEINS, New York, N. Y. Filed June 26, 1918. Serial No. 242,114. 6 Claims. (Cl. 21—8.)



1. The combination of a motor vehicle, means for holding part of the driving mechanism thereof against movement, means for operating said holding means, and means for preventing access by unauthorized persons to said operating means.

1,309,198. COUNTERPOISING MECHANISM. CHARLES A. HENRY, Chicago, Ill. Filed July 15, 1918. Serial No. 244,831. 8 Claims. (Cl. 267—40.)

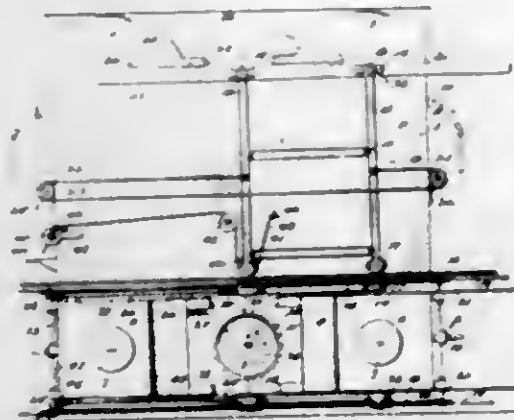


1. A device of the character described, consisting of a rack mounted on and in fixed relation to a movable body, a member having a gear in mesh with said rack and also having its portion opposed to said rack loosely connected to said body, a coiled spring carried by said member and fixed at one of its ends thereto and having its other end extended therefrom in the direction of said rack, and a lever engaging said member and fulcrumed near said loosely connected portion thereof and engaging the extended portion of said spring.

1,309,199. GLASS APPARATUS. ROBERT W. HILTON, Smethport, Pa. Filed Sept. 9, 1918. Serial No. 253,365. 23 Claims. (Cl. 49—53.)

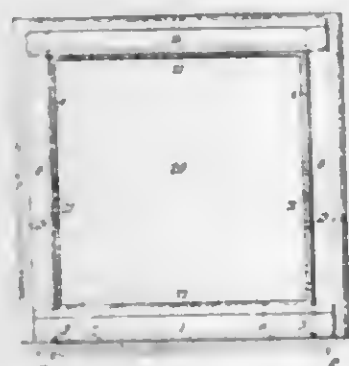
1. In glass apparatus, a furnace having a drawing opening and a draining chamber, drawing pots, and

means supporting the pots and operable to shift the pots along a substantially horizontal straight line alternately



to position within the drawing opening and to position within the draining chamber.

1,309,200. VALVE. WILLIAM H. HOLLAR, Philadelphia, Pa. Filed Aug. 2, 1916. Serial No. 113,028. 5 Claims. (Cl. 180-1.)



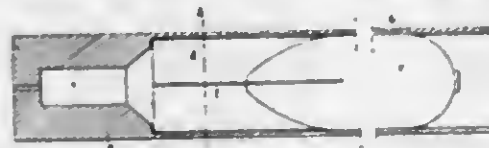
1. In a vault wall reinforcement, formed of rails each having a central longitudinal web with opposite longitudinal base flanges and opposite longitudinal head flanges; the combination with a horizontal bottom series of parallel rails, spaced to receive such a rail web between their base flanges, and each having a pair of notches adjacent each end, extending through its base flanges, the notches of each pair being aligned upon opposite sides of its web, and each notch shaped to fit the base flange of such a rail set normally therein; of two opposite vertical side series of parallel rails, each series spaced to receive such a rail web between their respectively proximal base flanges, and respectively set normally in said base flange notches of said bottom series of rails, each rail of said vertical series having a pair of notches extending through its base flanges in position to receive the opposite head flanges of adjoining rails of said bottom series, said notches being of such extent, longitudinally with respect to said vertical rails, as to permit the latter to be raised and lowered to the extent of the thickness of the base flanges on said horizontal rails; each rail of said vertical series having, adjacent its opposite end, a pair of notches extending through its base flanges, the notches of each pair being aligned upon opposite sides of its web, and each notch shaped to fit the base flange of such a rail set horizontally therein; and a horizontal top series of parallel rails having their opposite ends extending through the last named notches in the base flanges of said side rails, and abutting against the head flanges of the latter rails; whereby said four series of parallel rails are interlocked in rectangular relation.

1,309,201. SURGICAL PACKAGE. BERTRAM K. HOLISTER, Chicago, Ill. Filed Apr. 18, 1918. Serial No. 229,395. 3 Claims. (Cl. 128-269.)



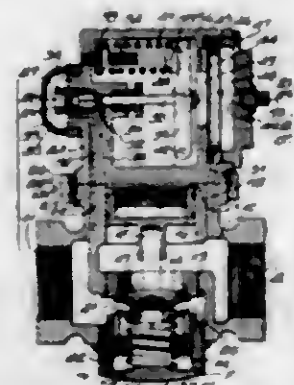
1. A hermetically sealed tube containing a medicament; a swab located exteriorly thereof; and a strip of adhesive tape wound about the upper portion of the swab and the adjacent surface of the tube whereby the swab will be secured to the tube.

1,309,202. SMOOTH-BORE GUN. CHARLES HOLTZHAUER, Paris, France, assignor to La Societe de Construction des Batignolles, Paris, France. Filed July 17, 1918. Serial No. 245,392. 1 Claim. (Cl. 80-1.)



A smooth-bore gun of the muzzle-loading type, comprising a thick-walled rear part constituting the explosion chamber, a thin-walled barrel of larger bore than the bore of the explosion chamber disposed co-axially with the said rear part, and an abutment formed in the gun at the junction of the rear part and the barrel consequent upon the difference between the diameters of said bores; in combination with a projectile adapted to be received in said barrel and having a rearwardly extending tail-piece which bears at its free end against the abutment whereby the movement of the projectile forwardly of the barrel is limited and the base of the projectile is normally spaced a distance forward of the explosion chamber, so as to form in the rear part of the barrel between said projectile base and said explosion chamber when the projectile is in place in the barrel an expansion chamber of predetermined volume and of the same diameter as the bore of the barrel wherein the powder gases freely expand and are confined until the pressure within the barrel is reduced to the point where it is compatible with the thickness of the wall of said barrel; substantially as described.

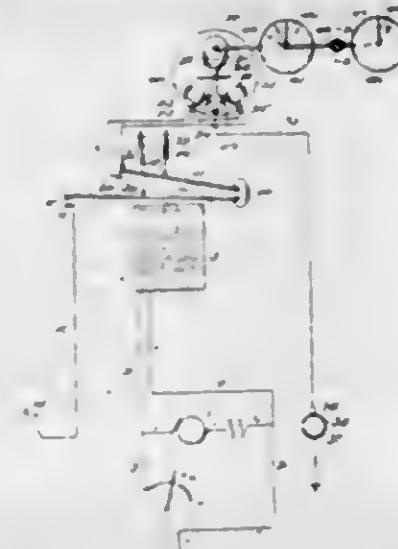
1,309,203. FLUID-REGULATOR. FRANK H. HOPKINS, Somerville, Mass., assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 26, 1918. Serial No. 127,825. 8 Claims. (Cl. 50-11.)



2. A controller of the character indicated comprising a frame having a fluid conducting passage, a control

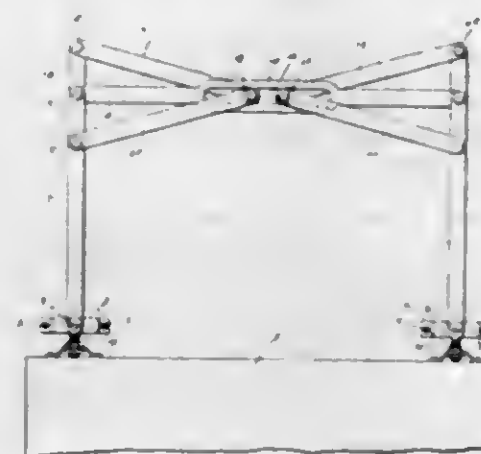
valve interposed in said passage, an operating stem arranged to govern the position of said valve, a member constituting the movable wall of a pressure chamber operatively engaged with said stem to move the same, a lever connected with said stem, and a spring arranged beside said rod to act on said lever in opposition to the pressure applied by said movable wall.

1,309,204. EFFICIENCY-INDICATOR FOR ELECTRIC-CAR OPERATION. CHARLES H. KOEHLER, Springfield, Ill. Filed Aug. 10, 1917. Serial No. 183,007. 6 Claims. (Cl. 161-15.)



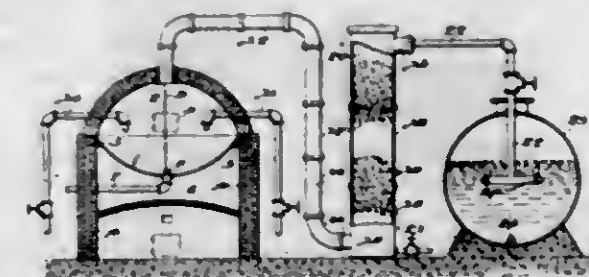
1. In a device of the character described, the combination of a vehicle-propelling electric-motor, electromagnetic mechanism having energizing circuits therefor, said mechanism indicating the algebraic sum of the distance traveled with "power on" and "power off" said motor and for registering the distance traveled while the motor runs under power or as a generator, and switch means controlled by said motor for controlling said circuits.

1,309,205. DOOR-HANGER. ANDREW F. LARSON, Portland, Oreg., assignor to Portland Industrial Company, a Corporation of Oregon. Filed Feb. 20, 1918. Serial No. 218,218. 5 Claims. (Cl. 16-156.)



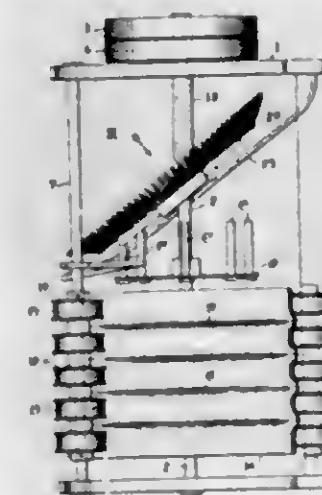
1. Supporting mechanism for a door or the like comprising the combination with two pairs of pivotally united supporting members, and means for operatively applying one of said members of each pair to a wall and the other member of each pair to a door, of coupling means operatively disposed between said pairs, and additional means comprising a shifting center member operatively connected with said pairs and with said coupling means so as to modify the operation of said pairs.

1,309,206. PROCESS OF PRODUCING HYDROCHLORIC ACID FROM SLUDGE. HENRY MICHAEL LASHLEY, Kansas City, Mo., assignor to The Kansas City Refining Company, Kansas City, Kan., a Corporation of Kansas. Filed May 9, 1916. Serial No. 90,430. 3 Claims. (Cl. 23-1.)



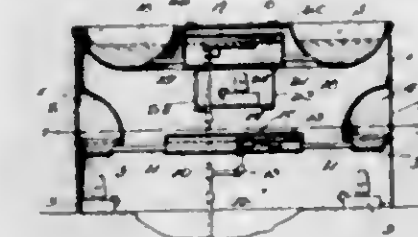
1. The process of utilizing sludge acid which consists in the following steps: (1) Mixing sludge acid with sodium chloride and diluting the mixture with water; (2) heating the mixture continuously to a temperature not exceeding that at which sulfuric acid boils and sufficient to produce a suitable reaction between the sludge acid and the sodium chloride; (3) drawing off the acid vapors until a non-acid residuum is left; (4) drawing off and conserving the residuum; and (5) refining said residuum by treatment to remove undesirable compounds.

1,309,207. MEANS FOR SEPARATING SEED-PODS OR THE LIKE FROM STALKS OF PLANTS. FRANK SWICK JOHNSTON LEITCH, Belfast, Ireland. Filed Nov. 20, 1918. Serial No. 263,202. 0 Claims. (Cl. 130-30.)



2. In a stripping machine, a feeding cylinder provided with means for holding the plants, a toothed stripping wheel arranged substantially concentric with the said cylinder and diagonally of its axis, and means for revolving the said cylinder and stripping device in the same general direction.

1,309,208. STOCK FOUNTAIN. LEBLIE CAHEN MCCARTNEY, Lincoln, Nebr. Filed Jan. 24, 1919. Serial No. 272,877. 2 Claims. (Cl. 119-73.)

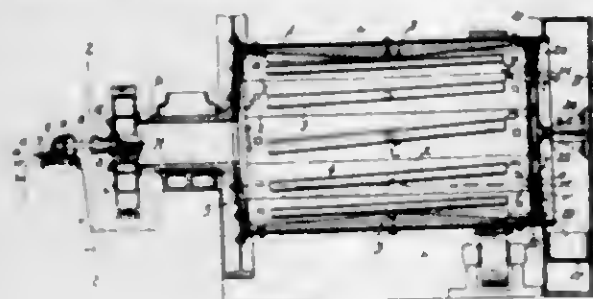


1. An apparatus for the purpose set forth comprising a casing, having an opening in its side, a trough having its outer side resting on the lower wall of said opening,

a hood secured to the casing above the opening and secured to and supporting the ends and the inner side of said trough, an upper annular trough secured upon the upper end of the casing and disposed at the inner side of the same, a cover connecting the inner wall of said annular trough, tanks within the casing, outlet pipes establishing communication between the tanks and the respectively adjacent troughs and supporting the tanks from the troughs, and means within the tanks for automatically controlling the flow of water therethrough.

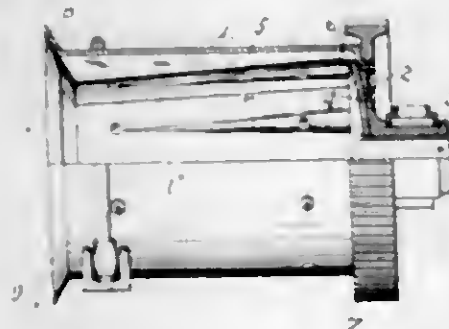
1,309,209. HEAT-PRODUCING COMPOUND. WILLIAM F. McNamee, Pittsburgh, Pa. Filed Jan. 13, 1917. Serial No. 142,134. 4 Claims. (Cl. 44-1.)
1. A heat producing compound containing an alkaline hydrate and an alkaline bisulfate.

1,309,210. ROLLER-MILL. FRANK E. MARCY, Salt Lake City, Utah. Filed Aug. 14, 1918. Serial No. 249,901. 10 Claims. (Cl. 83-9.)



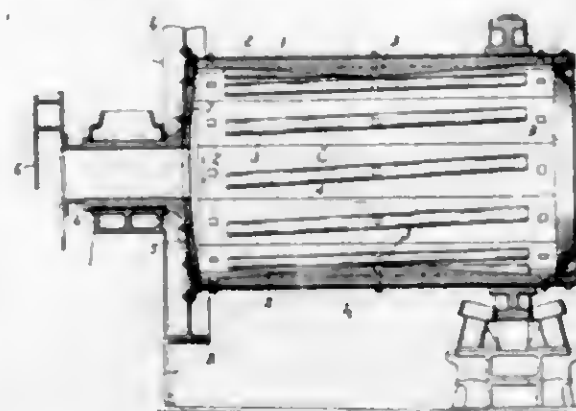
1. In a mill of the character described, a tumbling barrel having a feed end and a normally open discharge end, longitudinally extended loose, and freely moving grinding rods in the barrel, a fixed support, and a member disposed symmetrically about the rotation axis of the barrel and having its periphery spaced from the inner walls of the barrel to form a suitable passage-way for the material, and means for movably mounting said member to said support to permit said member to be brought into proper position for arresting any rod tending to fall out of the barrel.

1,309,211. ROLLER-MILL. FRANK E. MARCY, Salt Lake City, Utah. Filed Jan. 18, 1917. Serial No. 143,078. Renewed Oct. 19, 1918. Serial No. 258,907. 13 Claims. (Cl. 83-9.)



1. A mill of the character described comprising a tumbling barrel and longitudinally extended grinding rods therein, said barrel having one end closed by a head, the opposite end of the barrel being open and unobstructed for the discharge of the material and the direct withdrawal of the rods therethrough, said grinding rods being disposed with one end adjacent the head and with their opposite ends adjacent the open end of the barrel, the inner walls of the barrel being formed to confine the rods against discharge through said open end during the rotation of the barrel.

1,309,212. ROLLER-MILL. FRANK E. MARCY, Salt Lake City, Utah. Filed Sept. 26, 1917. Serial No. 193,292. Renewed Oct. 19, 1918. Serial No. 258,908. 11 Claims. (Cl. 83-9.)



1. In a mill of the character described, a tumbling barrel having a feed end and normally open discharge end, a plurality of freely moving loose grinding rods in the barrel extended longitudinally substantially the length of the barrel and directly removable through said open end, and means in the barrel for imparting to the rods an inward deflection or oscillation at the beginning of their tumbling movement with successive rotations of the barrel.

1,309,213. KILN-FURNACE. RUDOLPH W. MENK, Joliet, Ill., assignor to The Excelsior Steel Furnace Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1918. Serial No. 251,751. 6 Claims. (Cl. 25-150.)



1. A furnace comprising a casing, a wall dividing said casing into opposite compartments and having an aperture therein affording communication between said compartments, a burning grate in one of said compartments, a fuel supporting grate in the opposite compartment, the adjacent ends of said grates meeting in and at a point below the top of said aperture, a lintel in the top of said aperture consisting of a fire brick the surface whereof disposed in said fuel compartment is inclined downwardly and outwardly toward the fuel supporting grate, similar fire brick extending forwardly of said lintel in the walls of said compartment above said fuel supporting grate, and means for admitting draft above said fuel supporting grate.

1,309,214. METHOD OF REMOVING CERTAIN IMPURITIES FROM ELECTROLYTIC CELLS. HEON K. MOOAR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 25, 1919. Serial No. 254,940. 6 Claims. (Cl. 204-28.)

1. The herein described process of freeing electrolytic cells from gelatinous deposits of calcium and magnesium or either, which consists in decomposing the same with an acid which produces a soluble reaction product.

1,309,215. DUST-CAP. FREDERIK NIELSEN, Dorchester, Mass., assignor to A. Schrader's Son Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 17, 1915. Serial No. 51,121. 13 Claims. (Cl. 152-12.)



4. A dust cap having its open end slotted forming yielding fingers, with a corrugation traversing said fingers and an internal screwthread.

1,309,216. HEATER FOR MOTOR-PROPELLED VEHICLES. CLYDE S. PALTON, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Perfection Heater & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 8, 1916. Serial No. 135,299. 2 Claims. (Cl. 257-136.)



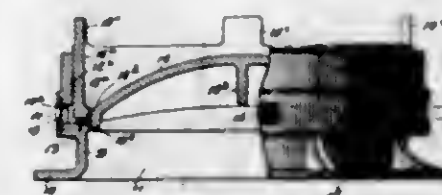
1. In a heater for motor propelled vehicles, a pair of end fittings each comprising a hollow nipple and three sockets whose axes are perpendicular to said nipple, said sockets being arranged at the apices of an equilateral triangle whose base is perpendicular to said nipple and all of said sockets being in free communication with the nipple interior, three heating pipes connecting said fittings and having their ends received in corresponding sockets, and a tie bolt connecting said fittings and drawing the same upon said pipes.

1,309,217. WORK-CENTERING DEVICE. JOSEPH RATHERAM, London, England, assignor to Baxter & Cannter, Limited, London, England. Filed July 30, 1918. Serial No. 247,407. 7 Claims. (Cl. 77-18.)



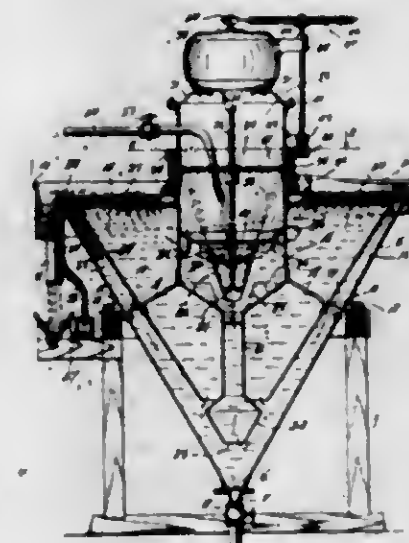
1. A device for work-centering purposes, consisting of a forward member having a guiding device for the rotating work to be centered and having means for carrying a centering drill, a stationary holder member to the rear of said forward member and having means for engaging and retaining the latter, a pivotal joint between said forward and rear members, said forward member having limited rotary movement and limited lateral movement relatively to the rear member about the joint between said two members.

1,309,218. SAFETY-CLOSURE MEANS. WILBUR P. RICHARDSON, Beaver, Pa., assignor to Edwin S. Clarkson, Washington, D. C. Filed Jan. 26, 1916. Serial No. 74,415. 18 Claims. (Cl. 220-88.)



1. In combination, a tank car having a dome-like structure, said structure including a closure member movable usually relative to a seat to open and close a passageway, the movements of the member to open the passageway in the presence of pressure within the tank being limited to rotatable movements of the member, said structure having one or more openings protected against the passage of flame and forming passageways for tank contents when the closure member is moved from its seat.

1,300,219. FLOTATION APPARATUS. JOSEPH P. ROTH, Jr., Independence, Colo. Filed May 18, 1910. Serial No. 97,877. Renewed Jan. 20, 1919. Serial No. 272,194. 20 Claims. (Cl. 259-96.)



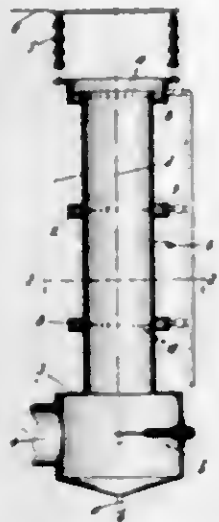
1. In flotation apparatus the combination of a stationary pulp-containing tank, a stationary casing centrally located in the tank and having ports below the level of the pulp in the tank, a hollow open-ended member rotatable in the casing and entirely submerged in the pulp, said member also being provided with ports cooperating with the ports of the casing, and means for imparting rotary movement to the said member.

1,309,220. CONNECTING-BAR. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Oct. 14, 1918. Serial No. 258,128. 4 Claims. (Cl. 74-17.)



1. A connecting bar comprising a one piece hollow body member slotted at its end to form oppositely disposed ears but with the slot terminating short of the extreme end of the bar to leave an integral cross connection between said ears.

1,309,221. APPARATUS FOR ELECTRICAL TREATMENT OF GASES. ARTHUR A. SCHMIDT, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 3, 1917. Serial No. 194,615. 4 Claims. (Cl. 183-7.)



1. In apparatus for precipitating suspended particles from gases by electrical action, a porous electrode, and water supply means for supplying water from the outside of said electrode through said porous electrode to the inner surface thereof.

1,309,222. SIGNAL. HERNARD L. SCHWARTZ, Cincinnati, Ohio. Filed Nov. 24, 1917. Serial No. 203,775. 8 Claims. (Cl. 40-53.)

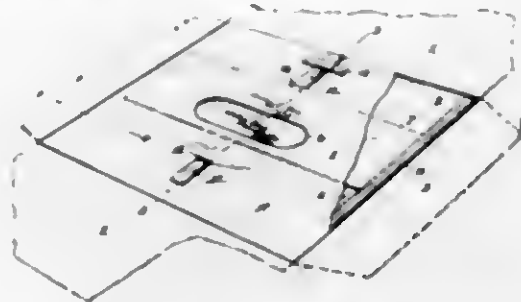


7. In a signal, an indicator box comprising a plurality of sides each bearing an indicating character and ends having substantially central bearings, and each having a segmental slot substantially concentric with its bearing, a driving element extending longitudinally of said box through said slots in both ends and having bearings coaxial with said ends, motive apparatus, and operative connection from said apparatus to said driving element to rotate it, said box being rotatable independently of said driving element to the extent permitted by said segmental slots but rotating with said driving element upon engagement of said element with corresponding ends of the slots, a stop-bar mounted to swing substantially at right angles to the axis of said indicator box, means yieldably holding said stop-bar toward said box, bearing means for said stop-bar on said box whereby said stop-bar is swung out from said box as one side thereof is passing out and a succeeding side is passing into view, but whereby said stop-bar moves inward toward said box and by cooperation with said bearing means stops said box with the particular side in correct indicating position as permitted by the movement which said box has independently of said driving means, and means for controlling the operation of said motive apparatus.

1,309,223. ENVELOP OR FILER. ERNEST L. SMITH, Salt Lake City, Utah. Filed Sept. 5, 1918. Serial No. 252,009. 5 Claims. (Cl. 229-71.)

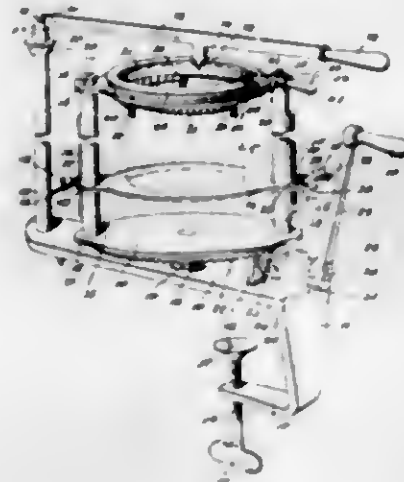
1. An envelop or container provided with a window or opening in its front section; an address card or sheet lo-

ated in rear of said front section and bearing a plurality of addresses; and a tape or band attached to said card or sheet and having its ends brought to the outside of



the container, and serving to adjust the same to present one or another of the addresses opposite the window or opening.

1,309,224. CAN-OPENER. CARL SONNEMANN, New York, N. Y. Filed Mar. 28, 1919. Serial No. 285,724. 6 Claims. (Cl. 30-3.)

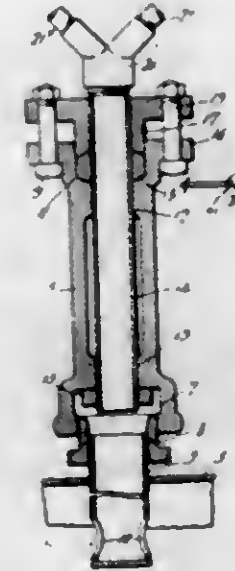


4. A can opener comprising a base and means for clamping said base to a support, a platform rotatable in a vertical axis on said base, means for manually rotating said platform, a pair of oppositely disposed posts set in said platform, a plate adjustable on said posts, means for holding said plate in adjustment, a plate ring secured at the upper extremities of said posts, an inner ring rotatably engaged with said plate ring, a lever for operating said inner ring, means for holding said lever in adjustment, a plurality of clamp chains, each of said chains being secured at one end to said plate ring, connections between opposite ends of said chains and said inner ring, so arranged that the said chains may be moved one past the other and clamped upon an article presented therebetween, a cutter movable over said rings, a lever on which said cutter is mounted, universal joint connections at one end of said lever whereby said cutter may be raised or lowered or moved laterally, and a handle for said lever.

1,309,225. IRRIGATING APPARATUS. STERLING STEPHENS, Bushnell, Fla. Filed Dec. 21, 1916. Serial No. 138,240. Renewed May 27, 1919. Serial No. 300,181. 1 Claim. (Cl. 137-87.)

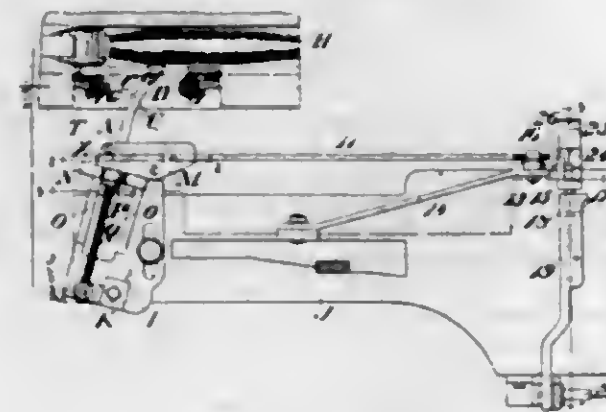
A device of the character described, embodying a supply pipe, an upright tubular body having a counter bore at its lower end, a stuffing box at its upper end, and contracted portions adjacent to said counter bore and stuffing box, a vertical pipe journaled through said contracted portions, a collar engaged upon the lower end of the pipe within the counter bore, a bushing engaged within the counter bore, a gland fitted upon said pipe and entering the stuffing box, and a water discharge nozzle carried by the upper end of

said pipe, and a tubular member having its upper end engaged within the bushing, said tubular member being en-



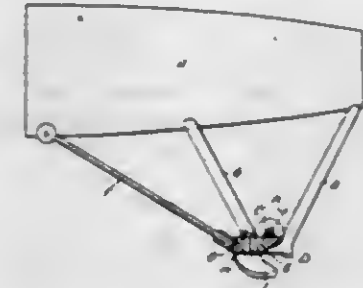
gaged down through the top of the supply pipe and having its lower end closed and an opening at one side near its lower end.

1,309,226. FEELER MECHANISM FOR LOOMS. EDWARD S. STIMPSON, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 13, 1918. Serial No. 228,312. 27 Claims. (Cl. 139-85.)



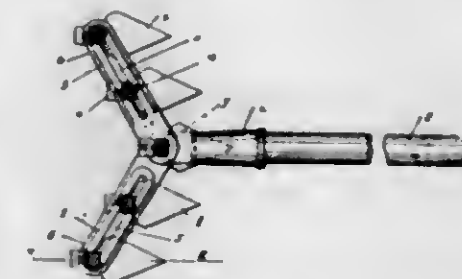
1. A loom having, in combination, a feeler arm with a tip in the path of the weft when in the box at the detecting end of the lay; a swiveled guide slidably supporting the front end of the feeler arm, said guide being offset laterally and outwardly with respect to the feeler tip so that the bobbin encounters the tip along a path nearer the tip of the bobbin than a parallel path intersecting the guide whereby the impact of the weft on the feeler tip tends to swing the feeler arm inwardly; stationary lugs spaced apart to provide an enlarged passageway for the feeler arm; a slide on the feeler arm; a spring which normally holds said slide against said lugs; a stud projecting from said slide; a stationary restoring cam cooperating with said stud; laterally movable controller having a slot through which the feeler arm freely passes during the normal running of the loom, said controller being moved inwardly when the feeler arm moves laterally due to the slipping of the feeler tip along the bared bobbin; and a train of mechanism brought into action by the lateral movement of the controller.

1,309,227. LANDING-SKID FOR AEROPLANES OR SIMILAR AIRCRAFT. WALTER GEORGE TARRANT and WALTER HENRY BARLING, Hyfleet, England. Filed Mar. 27, 1919. Serial No. 285,027. 3 Claims. (Cl. 244-2.)



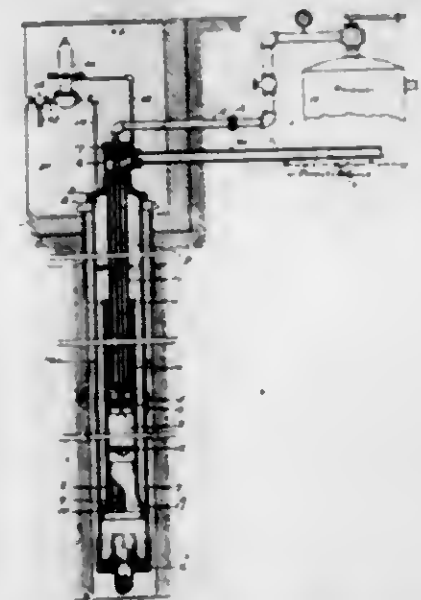
1. In landing skids for aircraft, the combination of a spring mounted axle, a block capable of rotation about the axis thereof, and a shoe carried by the block and capable of movement about a vertical axis.

1,309,228. CULTIVATING IMPLEMENT. FRANK DANIEL TELLIN, Kalona, Iowa. Filed Oct. 24, 1918. Serial No. 259,502. 3 Claims. (Cl. 97-41.)



2. A cultivating implement, having a supporting head, cultivating blades having at the upper end portions of their shanks bearing surfaces arranged at an angle to each other and each provided with a bolt hole, and bolts for engaging with the bolt holes of the shanks and clamping them to the head in different positions.

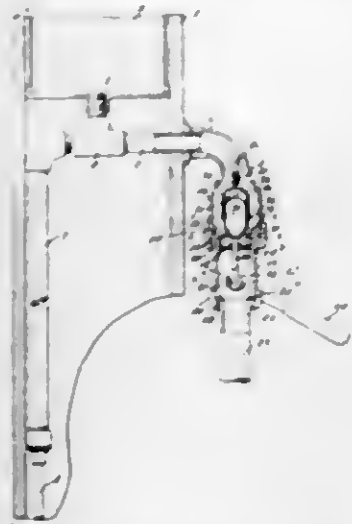
1,309,229. PUMPING SYSTEM. FREDERICK C. WEBER, New York, N. Y. Filed Aug. 1, 1918. Serial No. 247,806. 13 Claims. (Cl. 163-8.)



3. In a pumping system, the combination of a source of fluid pressure supply with a working chamber provided with an intake and a discharge valve normally submerged

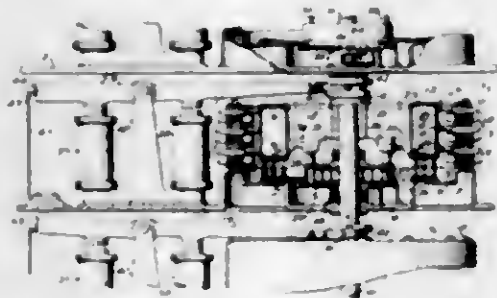
in liquid to be pumped, a pipe connection having a restricted passage therein, leading from said supply to said chamber, a closed discharge chamber communicating with said working chamber by way of said discharge valve, and means for compensating differentials of pressure in said chambers.

1,309,230. FLUSH-VALVE. CLARK H. WELLS, Cedar Rapids, Iowa, assignor of one-half to H. H. Rumble, Norfolk, Va. Filed June 19, 1918. Serial No. 240,516. 2 Claims. (Cl. 4-5.)



1. In a device of the class described, a tank having an outlet; a seat in the outlet; an inverted cup-shaped guide in the outlet and spaced peripherally from the inner surface of the outlet, the guide having an internal longitudinal groove; a buoyant valve slidably supported in the guide and cooperating with the seat; a stem slidably supported in the outlet and adapted to engage the valve; mechanism in the outlet cooperating with the stem to move the valve off the seat; and means for operating said mechanism from a point exterior to the outlet.

1,309,231. SWITCHING APPARATUS. EDGAR W. ADAMS, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 14, 1918. Serial No. 217,173. 13 Claims. (Cl. 170-27.5.)

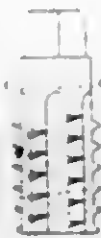


1. In a switch, a movable contact, means for driving said contact, a series of stationary contacts arranged to be engaged by said movable contact, the movement of said movable contact being arrested successively by engagement with each of said stationary contacts, and reciprocating means operated to move said movable contact to disengage the same from said stationary contacts.

1,309,232. TOOL OF CIRCULAR SHAPE WITH CUTTING TEETH, SUCH AS SCREW-TAPS, SCREW-PLATES, BORING TOOLS AND MILLING CUTTERS. FELIX ARON, Paris, France. Filed Mar. 12, 1918. Serial No. 221,995. 1 Claim. (Cl. 10-141.)

A circular tool with cutting teeth, such as screw tap, screw plate, boring tool or milling cutter, comprising, in

combination: teeth backed off laterally, and a core of circular shape, the teeth being formed by the crossing of two

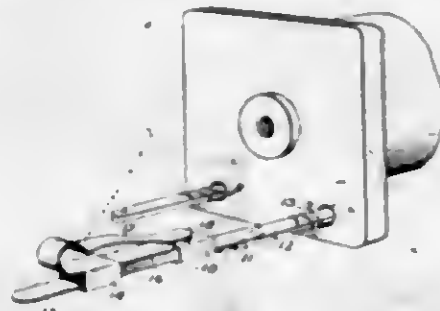


screw threads in opposite directions and having respectively the relations:

$$\text{First thread, } P_1 = p(N+1) \\ \text{Second thread, } P_2 = p(N-1)$$

In which p designates the pitch of the final screw thread and N the number of longitudinal cuts, substantially as described and for the purpose set forth.

1,309,233. PROTECTIVE DEVICE FOR ELECTRICAL APPARATUS. ALLISON AKIN, East Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Oct. 4, 1915. Serial No. 53,953. 1 Claim. (Cl. 175-275.)



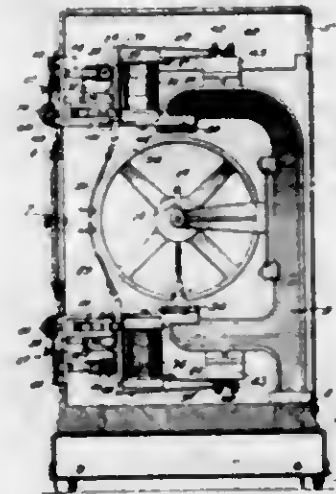
The combination with an electrically operated device including an electrical terminal, of a thermally operated protective device comprising an insulating member provided with a pair of metallic end caps, one of said end caps being provided with a terminal member adapted to be mounted in direct thermal and electrical contact with the terminal of the electrically operated device and the other end cap being provided with a spring member adapted to be secured under tension to said first cap by means of a heat softenable material, and a terminal member for said second cap.

1,309,234. ELECTRIC WATER-HEATER. GUY AATHUS, Riverville, Wash., assignor to Arthur-Fowler Co., Riverville, Wash., a Corporation of Washington. Filed July 6, 1918. Serial No. 243,618. 8 Claims. (Cl. 219-38.)



6. In an electric water heater, an inner heating tube having an intake end and a discharge end, a coil for heating said tube, a pipe surrounding said tube, means forming a rigid and water-tight connection with said pipe and tube at the discharge end of the tube to prevent water from entering between the tube and pipe, and packing means slidably connecting the intake end of the tube with said pipe to allow for unequal expansion and to prevent water from entering between said tube and pipe, substantially as described.

1,309,235. EFFICIENCY-RECORDER. MOIS H. AVRAM, New York, N. Y., assignor to Slocum, Avram and Slocum, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 8, 1915. Serial No. 54,786. 7 Claims. (Cl. 234-1.)



3. In an efficiency recorder including a clock mechanism adapted to operate a chronographic chart, the combination of a supporting frame, an electromagnet adapted to be energized from the machine, the working of which it is desired to control, a stylus adapted to cooperate with said chart when the magnet is energized, an armature effecting said cooperation, an accumulator normally disconnected from but adapted to be connected to said clock mechanism when said magnet is energized, means controlled by said armature for making said connection of the accumulator, and an indicator mounted in said frame adjacent said accumulator adapted to be rendered visible when the magnet is energized.

1,309,236. INTERNAL-COMBUSTION-ENGINE POWER PLANT. CHARLES F. RATT, Brooklyn, N. Y. Filed Jan. 8, 1916. Serial No. 71,101. 10 Claims. (Cl. 180-62.)



1. In a self-propelled vehicle, a complete powered generating and transmission unit comprising a non-revoluble axle housing, an engine embodied in said axle housing with a portion of the housing shell constituting cylinders for the engine, pistons reciprocating axially within said housing and a central axial shaft in said housing and transmission means within said housing to transmit the reciprocating motion of the pistons to the shaft.

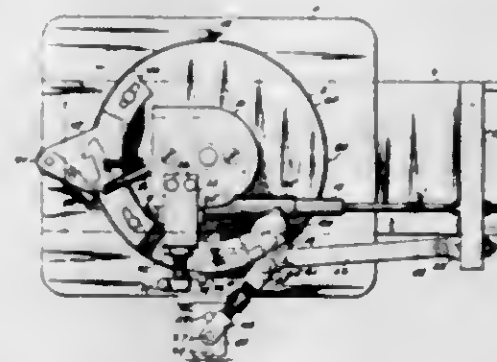
1,309,237. ROTARY PUMP. ALONZO LINTON BAUSMAN, Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 24, 1917. Serial No. 182,420. 1 Claim. (Cl. 103-44.)



A rotary pump, for pumping material of lubricating character, comprising a casing having an inlet and an

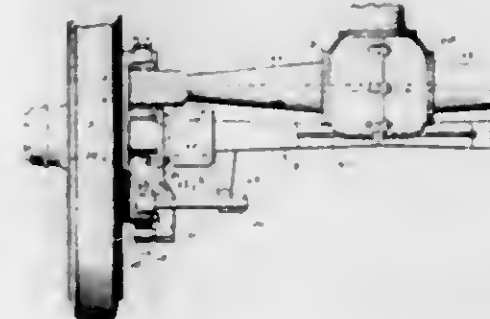
outlet and being otherwise closed, a wall of said casing comprising an inner and an outer partition, spaced each from the other, the inner being provided with a journal bearing extending toward, but clear of, the outer, and open from end to end; said pump also comprising a rotary pumping element constructed to force material from the inlet to the outlet and place the material under pressure at the outlet, such element being provided with a shaft lying in said bearing with sufficient clearance to permit the passage of said material therealong, there being a connection between said clearance and the outlet side of said pump and there being a connection between the space between said partitions and the inlet side of said pump; whereby the material will be forced from the outlet side along said shaft, along the entire length of said bearing, into said space, and to the inlet side of said pump; substantially as described.

1,309,238. TUBE-BENDING MACHINE. LOUIS H. BAISEMAN, Glen Ridge, N. J. Filed Nov. 27, 1918. Serial No. 264,321. 6 Claims. (Cl. 153-40.)



4. In a tube bending machine, the combination of the driven tube bending and positioning mechanism, comprising upper and lower turn tables operatively connected, means for automatically and intermittently locking, unlocking and rotating said mechanism, a reciprocating mandrel, and means for automatically reciprocating and limiting the movement of said mandrel.

1,309,239. MOTOR-TRUCK AXLE. ROBERT J. BURBOWN, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 16, 1917. Serial No. 168,669. 8 Claims. (Cl. 74-7.)



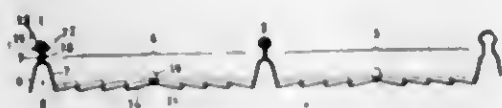
1. A motor vehicle axle of the type described, comprising a dead axle member having wheel splines and circular end portions adjacent thereto, a live axle housing associated therewith, brackets having circular sockets fitted upon the circular end portions of said dead axle member and supporting the outer end portions of said housing, inter-fitting means carried by said brackets and said dead axle member for preventing rotation of said brackets, and means securing said brackets to said dead axle member.

1,309,240. TOY BUILDING ELEMENTS. JOHN A. CHAPPUIS, La Chaux-de-Fonds, Switzerland. Filed Mar. 4, 1919. Serial No. 280,568. 1 Claim. (Cl. 46—35.)



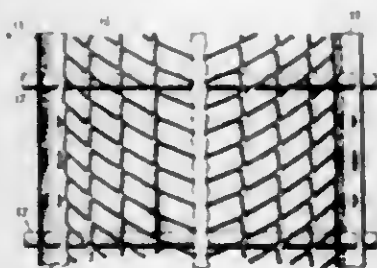
Means for building articles such as machines or parts of machines formed by at least an assortment of three construction elements namely a clamp of U shape including at its base a screw and with an opening in each of its two arms, a wheel perforated at the center and with arms and a hub, and an assembling rod, the dimensions of these elements being chosen so that the assembling rod may be introduced freely into the center of the wheel, into the opening of the clamp and between the two arms of the latter and the clamp may be placed around either the arms or the peripheral part of the wheel.

1,309,241. METAL FABRIC. NORRIS ELMORE CLARK, Plainville, Conn., assignor to Robert S. Allyn, trustee. Filed Apr. 20, 1912. Serial No. 693,329. 10 Claims. (Cl. 72—117.)



1. An expanded metal fabric comprising beam members bent into channel-like form and an expanded section connecting said beam members and consisting of two sets of zigzag strands arranged edgewise to the plane of the fabric and extending diagonally in opposite inclinations relative to the length of the beams and connected midway between the beams by discontinuous connecting portions forming tangs bent from the plane of the fabric.

1,309,242. EXPANDED-METAL REINFORCEMENT. NORRIS ELMORE CLARK, Plainville, Conn., assignor to Robert S. Allyn, trustee. Original application filed Mar. 2, 1909. Serial No. 480,796. Divided and this application filed Feb. 12, 1915. Serial No. 7,759. 9 Claims. (Cl. 72—117.)

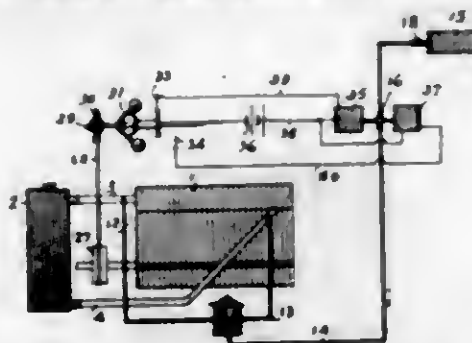


2. An expanded reinforcing structure comprising a plurality of non-expanded double-walled beam members open at one edge and expanded sections integrally connecting the edges of the beam members and means for connecting the opposite walls of each beam member at intervals to limit the spreading of its walls.

1,309,243. ANTIFREEZING CIRCULATOR. FREDERICK E. COMSTOCK, Valparaiso, Ind., assignor of one-half to Roy S. Wheeler, Valparaiso, Ind. Filed Dec. 2, 1914. Serial No. 875,198. Renewed May 28, 1919. Serial No. 309,403. 4 Claims. (Cl. 123—170.)

1. An internal combustion engine, a water cooling jacket therefor, a radiator connected to the jacket so that the heat of the engine causes circulation within the jacket and radiator, an auxiliary device connected to the jacket and isolated from the radiator adapted to maintain independent circulation of the contents of the ra-

dator and jacket, means for heating such device, and a combined automatic mechanical-electrical control for said



heater adapted to start the same when the engine stops and stop the same when the engine is started.

1,309,244. METHOD OF MAKING ENDLESS BELTS. WILLIAM C. CORTELL, Youngstown, Ohio. Filed July 6, 1917. Serial No. 178,924. 6 Claims. (Cl. 29—148.)



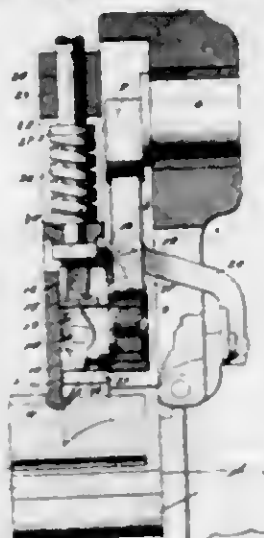
1. The method of making an endless metal belt which consists in gradually expanding a ring of metal of small peripheral length and considerable thickness to a continuous loop of a greatly increased but desired length and greatly reduced thickness, and then dressing the surface and edges of the loop to a desired thickness and breadth, thereby producing an endless belt of desired length, breadth and thickness, the dressing of said edges including trimming to remove defective material.

1,309,245. ENDLESS BELT. WILLIAM C. CORTELL, Washington, D. C. Original application filed July 6, 1917. Serial No. 178,924. Divided and this application filed Oct. 24, 1918. Serial No. 259,548. 3 Claims. (Cl. 74—62.)



1. A thin flat jointless metal power-transmitting belt of the same cross sectional configuration throughout having a high yield point closely approaching its ultimate strength and being truly elastic and practically free at all points in its cross-section from permanent elongation under high-working stresses.

1,309,246. SAFETY OPERATING MECHANISM. HENRY DE SMITH, Rochester, N. Y., assignor to M. D. Knowlton Company, Rochester, N. Y., a Corporation of New York. Filed July 21, 1917. Serial No. 182,081. 11 Claims. (Cl. 74—46.)



1. In a machine of the kind described and in combination, an actuator, a carrying member, a non-yieldable

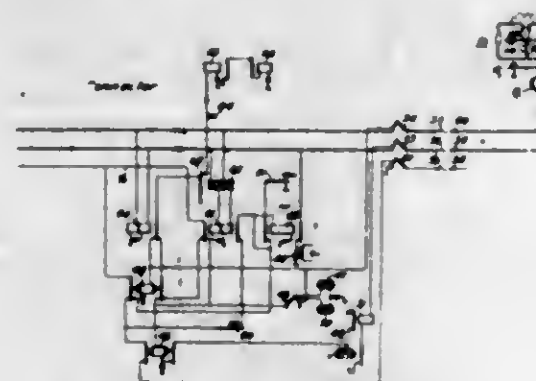
connection between said parts for imparting reciprocating movement to the carrying member, a work-performing element movable with said member and normally yieldable relative thereto, and means automatically operable just prior to the engagement of the work by the work-performing element to connect said element to the carrying member to be actuated thereby.

1,309,247. DIE FOR FORGING PROJECTILES AND THE LIKE. JOEL DICKINSON, Newark, N. J. Filed Jan. 13, 1919. Serial No. 270,896. 5 Claims. (Cl. 78—60.)



1. Forging dies of the character described, having in their cooperating faces, one a groove or recess with a body portion and a differently shaped end portion and the other a substantially plane portion opposite said body portion of the groove and a projecting end portion opposite the end portion of the groove and correspondingly grooved or recessed, whereby the upper die may also be used as a hammer in cutting off the end of the forging.

1,309,248. AUTOMATIC TELEPHONE SYSTEM. CHARLES L. GOODRUM, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 26, 1917. Serial No. 183,295. 20 Claims. (Cl. 179—18.6.)



1. In a telephone system, a calling subscriber's line, a called subscriber's line, automatic switches, means for operating said switches to complete a connection between said subscribers' lines, releasing means for said switches normally under the control of said subscribers, and means under the control of the called subscriber for removing the control of said releasing means from both of said subscribers.

1,309,249. TIRE-LINER. JOHN H. GRUNE, Los Angeles, Calif., assignor to Airsafe Inner Tire Company, Los Angeles, Calif., a Corporation of Nevada. Filed Dec. 28, 1917. Serial No. 269,281. Renewed June 4, 1919. Serial No. 301,510. 5 Claims. (Cl. 152—18.)

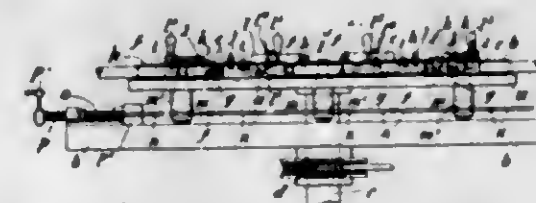
1. An inner liner for auto tires comprising an expandable annulus of tubular formation divided on its inner periphery, one edge of the divided portion formed with

a flap of tapered cross section converging to a water edge and adapted to overlap the adjacent edge of the



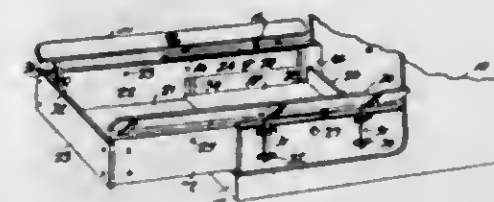
liner, said flap formed of resilient material, and an expansible reinforcing fabric embedded in said flap.

1,309,250. TUBE-BENDING APPARATUS. THOMAS KELLY and SAMUEL KELLY, Glasgow, Scotland. Filed Dec. 7, 1917. Serial No. 206,061. 8 Claims. (Cl. 153—40.)



1. Tube bending apparatus comprising a table, a framework fitted in conjunction with the table, means for revolvably supporting the table, means for revolving the table, adjustable grooved guide blocks fitted on the table, grooved wheels having tube holding devices fitted in the table, and means for revolving the grooved wheels in a direction opposite to the direction of revolution of the table.

1,309,251. EXTENSION-BODY FOR VEHICLES. WINFIELD S. LARIN, Brooklyn, N. Y. Filed Jan. 4, 1918. Serial No. 210,268. 2 Claims. (Cl. 21—7.)



1. In a vehicle body, the combination with the body and seat of a vehicle, of a boot for the rear of the body and adapted to be removed, an extension comprising a drawer fitting in the body, rails in the bottom of the body, cooperating rails on the underside of the extension, offset rails on the body and overlapping the extension, and side rails adapted to keep the drawer in its extended position.

1,309,252. NET-CUTTER OF AUTOMOBILE TORPEDOES. EDGAR LEAS and HERBERT WHEATLEY RIDDALE, Weymouth, England, assignors to The Whitehead Torpedo Works (Weymouth) Limited, Weymouth, England. Filed May 29, 1918. Serial No. 237,341. 4 Claims. (Cl. 114-20.)



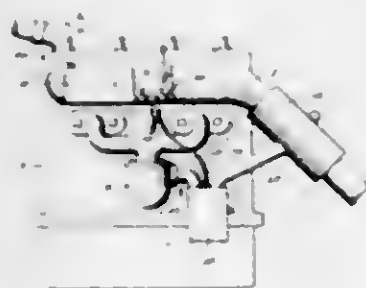
1. In an automobile torpedo, a net cutter of the lance-head type having a plurality of blades which will cut a net having a mesh of any diameter in only one place at a time.

1,309,253. CONNECTOR. CHARLES W. LOWE, Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1917. Serial No. 146,679. 7 Claims. (Cl. 173-338.)



1. A connecting plug, comprising a pair of contact members, a casing inclosing a portion of the contact members, and a single means adapted to hold the casing in position and to permit a free lateral movement of the contact members.

1,309,254. AIR SUPPLY MOISTENER FOR INTERNAL COMBUSTION ENGINES. BERNARD MACFADDEN, New York, N. Y. Filed July 12, 1917. Serial No. 180,055. 12 Claims. (Cl. 261-97.)



1. In an air supply moistener, the combination of absorbent material adapted to contact incoming air; means for supplying water to the material where it is thus contacted to the point of supersaturation; and means for automatically stopping said supply only when the material becomes thus supersaturated.

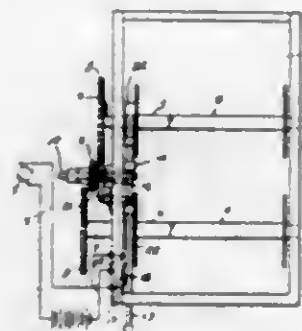
1,309,255. HOLDER FOR TICKETS AND THE LIKE. MURDOCK MACDONALD, Cleveland, Ohio. Filed Oct. 23, 1915. Serial No. 57,569. 4 Claims. (Cl. 211-37.)



2. In a ticket box, the combination of a box-like casing open at one side, a plate hinged to one edge of such open side of said casing, and a second plate hinged to said first named plate, means

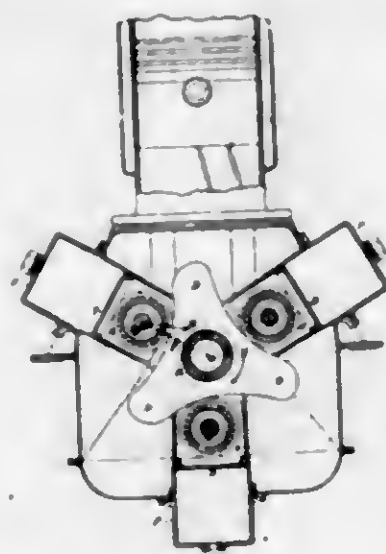
adapted to lock said first named plate in substantially the plane of such open side of said casing, and means pressing said second plate toward the other edge of such open side of said casing and positioned at a slight angle to said first plate, thereby effecting a slight arch in a pad of tickets held on said plates.

1,309,256. WINDING AND REWINDING MECHANISM. LOUIS E. MACKAY and FRANK W. ORMISTON, Detroit, Mich. Filed Aug. 5, 1918. Serial No. 248,276. 2 Claims. (Cl. 40-53.)



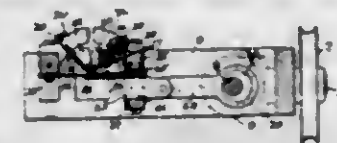
1. A winding and rewinding mechanism comprising a pair of reels, a web extending between the reels and having its end portions respectively wound thereon, an electric motor and circuit therefor, mechanism for alternatively driving the reels from the motor, said mechanism having a neutral position, mechanism for alternatively checking rotation of the reels, and a common means for shifting the drive of the motor from one to the other of said reels, for shifting the application of the checking mechanism from one reel to the other and for closing the motor circuit when the drive to either reel is established and breaking said circuit when the driving mechanism is in neutral position.

1,309,257. TORQUE-EQUALIZING MEANS. LEONARD ALEXANDER MARTEN, Teaneck, N. J., assignor to Kinetic Engineering Company, Inc., New York, N. Y., a Corporation of New York. Filed July 8, 1918. Serial No. 243,985. 3 Claims. (Cl. 74-14.)



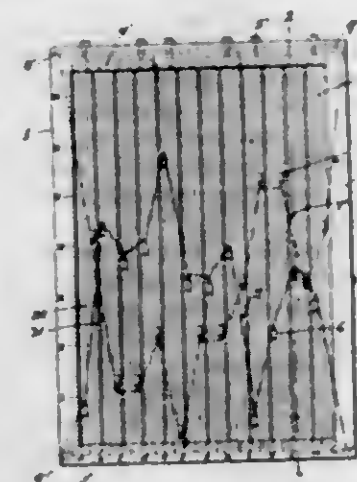
1. Mechanism for effecting equalization of torque and torque recoil of machinery in which the driving or resisting forces, or both, are of a periodically changing nature, comprising reciprocating air compression means actuated by rotatable cams timed with relation to the torque to alternately absorb the surplus energy and deliver the same during relative deficiency of energy, substantially as described, thereby producing constant resultant torque and constant recoil, for the purpose set forth.

1,309,258. SPECK-REMOVER. WILLIAM F. MOON, Milwaukee, Wis. Filed Jan. 3, 1919. Serial No. 269,471. 6 Claims. (Cl. 28-20.)



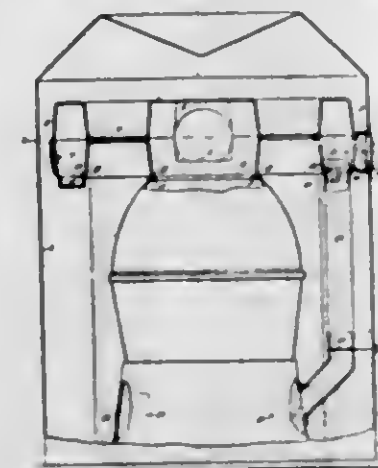
1. In a yarn speck remover, the combination of means for guiding the thread, means for turning the thread to bring the speck below the guide means, and means for cutting the speck from the thread as it advances through the guide means.

1,309,259. INDICATING APPARATUS FOR CHARTS, MAPS, AND PLANS. JEAN HENRI ADRIEN MORICHARD, Amsterdam, Netherlands. Filed Sept. 12, 1918. Serial No. 253,828. 7 Claims. (Cl. 110-31.)



1. An indicating apparatus for charts comprising a frame adapted to be placed over the chart, parallel wires stretched on said frame, a series of indicators movable on said wires, and a transverse thread engaging said indicators and having terminals secured on said frame, one of said terminals being in the form of a spring winding device, whereby said thread may be adjusted to conform to the adjustment of said indicators.

1,309,260. HOUSEHOLD-FURNACE. JOHN N. RICHARDSON, Cincinnati, Ohio, assignor to The Williamson Heater Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 15, 1915. Serial No. 55,921. 4 Claims. (Cl. 126-102.)

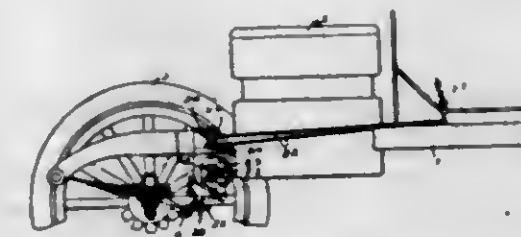


1. In a hot air furnace comprising a furnace body having a combustion chamber and ash pit, an annular radiator on the combustion chamber through which the combustion products pass, a casing surrounding said body

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and radiator, the radiator being formed with an opening in the floor and an adjacent opening in the wall, the ash pit wall being also formed with an opening, a conduit between said body and casing leading from said radiator door opening to the ash pit wall opening, a hollow member supported by the outer casing and extending inwardly into registration with said radiator wall opening and having an outer door forming a compartment between the body and casing adjacent the radiator, a sweeper on the floor of the radiator, and a chain device in the radiator attached to said sweeper and having an operating portion disposed in said inclosed chamber.

1,309,261. POWER STEERING MECHANISM. WALTER L. SHELTON, Detroit, Mich. Filed June 24, 1918. Serial No. 241,514. 3 Claims. (Cl. 180-81.)



1. In a power steering mechanism, the combination with the engine, steering wheels and steering bar, of a rock arm having its axis of rotation parallel to that of the engine shaft, means for actuating the steering bar from said rock-arm, mechanism for actuating said rock-arm in either direction from the engine including clutches controlling the direction of movement, and means for independently controlling said clutches from the driver's seat of the vehicle.

1,309,262. AUXILIARY BREATHING-PIPE ATTACHMENT. BERNARD H. SKELLY, Bridgeport, Conn., assignor to Frederick R. Mount, Botsford, Conn. Filed Nov. 25, 1918. Serial No. 263,996. 3 Claims. (Cl. 123-198.)

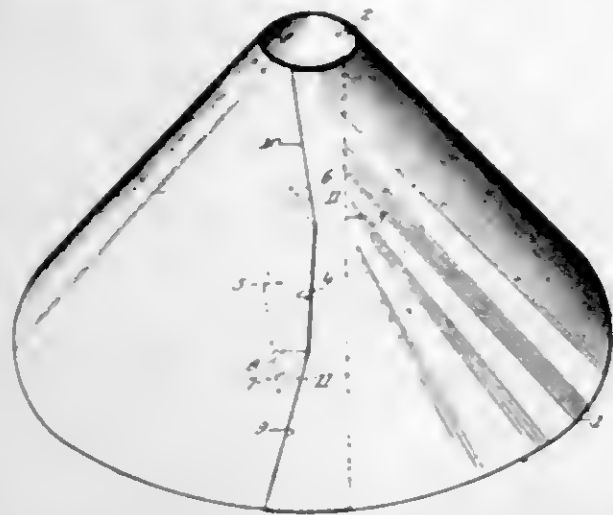


1. In a device of the character described, the combination with the breather pipe of the oil reservoir of an automobile, of a vertically disposed hollow casing closed at the top and secured at the bottom to said pipe, and a tube extending at an angle of approximately 45° from the side of said casing in communication therewith and with its outer end considerably above the top of said casing, said end being normally closed by a detachable vented cap.

1,309,263. LAMP-SHADE. ROY ALLEN SPELLMAN, St. Joseph, Mich. Filed Oct. 19, 1918. Serial No. 258,777. 5 Claims. (Cl. 240-108.)

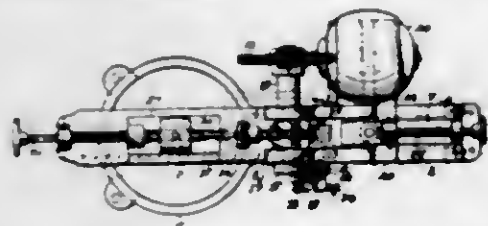
2. A structure as specified in claim 1, said prongs being inside of the shade, and the lower prong being

scored to make it flexible, the blank having a straight edge adjacent to said slot, which edge and slot extend to-



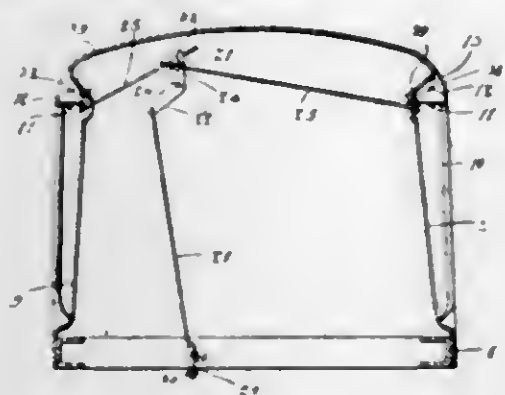
ward said opening, and the blank having end edges which are flared away from said interlocking portion.

1,309,264. MACHINE FOR TRUING GRINDING-DISKS. GEORGE A. SQUIER, Cleveland, Ohio. Filed Mar. 25, 1918. Serial No. 224,608. 11 Claims. (Cl. 82-12.)



10. A machine for truing grinding disks, comprising a table, a slide adjustably mounted on said table, a turn-plate pivoted on said table opposite said slide, a second slide upon said turn-plate, a shaft carried by said first slide, means to rotate said shaft, mechanism operated by said shaft to actuate said turn-plate, and adjustable means on said second slide and also the shaft to hold either a cutting tool or a grinding disk.

1,309,265. DIRECTION INDICATOR. JOSEPH H. TRO-ONING, Greeley, Colo. Filed Sept. 21, 1917. Serial No. 192,505. 7 Claims. (Cl. 116-31.)

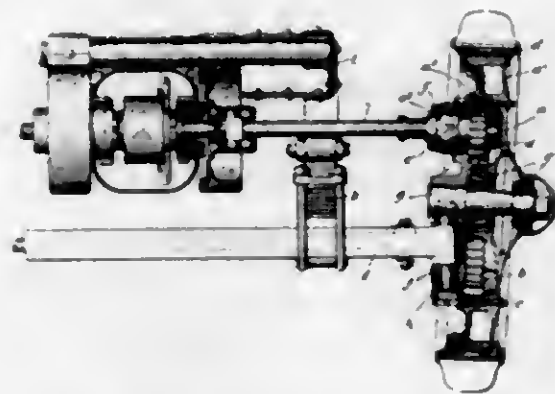


1. In combination, a vehicle including a body, indicating elements pivotally secured to the opposed sides of the body, an actuating shaft, an arm carried by said shaft, rods pivotally secured to the indicating elements, and independently adjustable connections between each of said rods and said shaft for alternately elevating the indicating elements during oscillation of the shaft.

1,309,266. DRIVING WHEEL FOR MOTOR-VEHICLES. MARCEK WALTER, New York, N. Y. Original application filed Sept. 13, 1916, Serial No. 119,842. Divided and this application filed Feb. 20, 1917. Serial No. 149,844. 4 Claims. (Cl. 180-43.)

1. In a motor vehicle, a disk wheel having an annular shoulder in its rear face, an internal driving gear mount-

ed on the shoulder, a Cardan shaft engaged operatively with said driving gear, a spindle for the wheel, a steering pivot on which the wheel is supported and a circular steering knuckle plate fitted within the shoulder to inclose the wheel and carrying the spindle and journal bearings for the Cardan shaft, and the steering pivot.



2. In a motor vehicle, a driving wheel and steering devices associated therewith and including a wheel spindle, a steering knuckle plate, a steering pivot journaled in the knuckle plate and having its axis below the wheel spindle and substantially in the plane of the inner edge of the tread of the wheel, an internal gear carried on the wheel and a driving pinion therefor mounted in the steering knuckle plate.

3. In a motor vehicle, a disk wheel having an annular shoulder, an annular gear supported on the shoulder, a steering knuckle plate fitting within the shoulder, a Cardan shaft journaled in the knuckle plate and provided with a pinion in engagement with the gear, a wheel spindle carried by the knuckle plate, and a steering pivot on the axle journaled in the knuckle plate below the spindle, the driving pinion being engaged with the internal gear at a point above the spindle.

4. In a motor vehicle, in combination with a driving wheel, steering devices associated therewith, an internal gear bolted in the wheel, a steering knuckle plate to one side of the wheel and inclosing certain of the associated elements, a driving pinion rotatably mounted on the steering knuckle plate and engaged with the internal gear, a universal joint in juxtaposition to said pinion, a spherical sleeve to inclose said joint, an axle, and a steering pivot carried on the axle and journaled in the steering knuckle plate below the axis of the wheel and having its axis substantially within the plane of the edge of the tire.

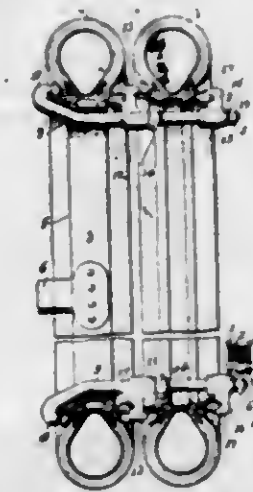
1,309,267. CIRCULATING APPARATUS FOR CELLULOSE DIGESTERS. ABRAHAM GRÖNVOLD WESTAD and ERIK LUDVIG HÄGG, Hønsfor, Norway. Filed Mar. 8, 1919. Serial No. 281,502. 4 Claims. (Cl. 92-7.)



1. In a circulating apparatus for cellulose digesters, a body having a cylindrical lower portion provided with

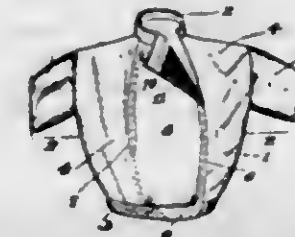
steam inlets a closure for said lower portion, a cylinder in the lower portion of the body providing a steam compartment and having openings at its lower end, a strainer at the upper end of the cylinder and means for directing the course of the steam and lye supplied to the body to insure of a continuous circulation of the lye and steam upwardly along the walls of the body and downwardly through the center thereof and through the cylinder.

1,309,268. TIRE CARRIER. JOHN V. WHITACK, Cleveland, Ohio, assignor to Chandler Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1914. Serial No. 830,621. 1 Claim. (Cl. 224-29.)



A demountable tire carrier for supporting one tire from another tire, comprising a rod substantially circular in cross-section and having a hooked end adapted to engage an edge of the supporting tire and a sleeve receiving end, an inner sleeve slidably mounted on said rod and adapted to be positioned any place along the straight length thereof to accommodate supporting tires of different thicknesses between the sleeve and the hooked end, said sleeve provided with means on opposite sides thereof for engaging the adjacent edges of both the supporting and the supported tires, a nut threaded on the rod for holding said sleeve from movement away from said hooked end, an outer sleeve slidably mounted on said rod between the inner sleeve and the sleeve receiving end of the rod and adapted to coact with the inner sleeve to hold the supported tire therebetween and a nut threaded on the rod for holding said outer sleeve in its tire holding position.

1,309,269. LADY'S GARMENT. MORRIS WINNEBOAD, New York, N. Y. Filed June 8, 1916. Serial No. 102,434. 2 Claims. (Cl. 2-98.)

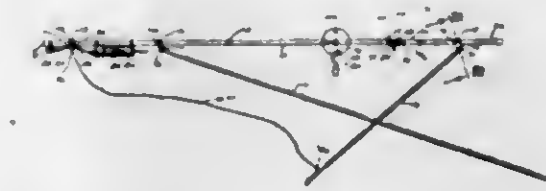


1. A device of the character described comprising a waist body open from the neck-band thereof to the waist-band on one side of the bust portion and from said neck-band to substantially the central body of said bust portion, a series of fastening studs attached thereto on the inside thereof adjoining said openings, a detachable rubber impregnated fabric slip, and a series of fastening eyes mounted on said slip arranged for engagement with said fastening studs on said waist body.

1,309,270. MEASURING APPARATUS. JOSEPH K. WOOD, New York, N. Y. Filed Jan. 9, 1918. Serial No. 210,954. 11 Claims. (Cl. 33-174.)

1. Apparatus of the kind described, comprising a structure including a plurality of relatively movable members,

one of which is a handle-member adapted to be grasped in one hand of the operator, another of which is a handle-member adapted to be grasped in the other hand of the operator, and another of which is a testing-member, the



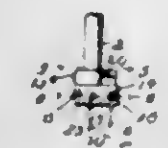
two-handle members each being pivotally connected to the testing-member so that the testing-member has a free end adapted to be swung in an arc about a predetermined point on the testing-member as a center, by relative movements of the handle-members.

1,309,271. LACING DEVICE. VASSILOU P. ZAPIS, New York, N. Y. Filed Mar. 11, 1919. Serial No. 281,804. 2 Claims. (Cl. 24-143.)



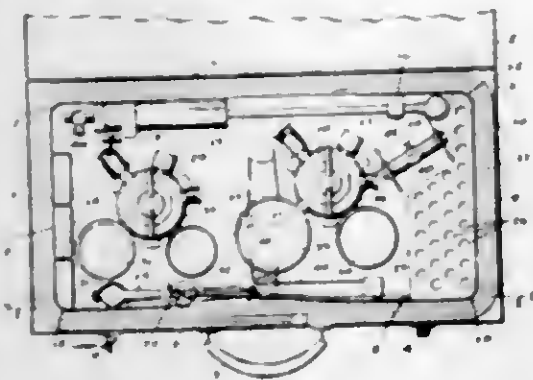
2. A lacing device for shoes comprising plates secured at spaced intervals to the tongue of the shoe and having aligned grooves formed therein, a lace having portions thereof disposed in said grooves, and means for slidably securing the portions of said lace between said plates to the upper of a shoe and laterally of said grooves.

1,309,272. NEEDLE-CLAMP. JOSEPH BERGES, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,804. 7 Claims. (Cl. 112-37.)



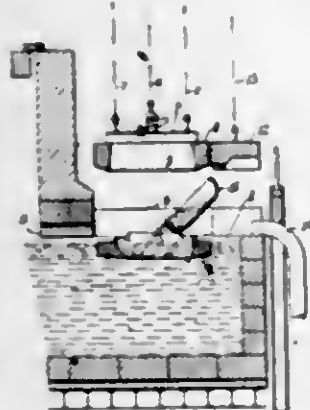
1. The combination of a needle bar, an extension carried at the lower end of the needle bar, said needle bar and extension having sockets formed therein to receive respectively the shanks of a pair of needles, means for securing the needles in said sockets, said extension having sockets to receive respectively the shanks of a second pair of needles, and means for securing said last-named needles in said sockets, said second pair of needles being disposed in a plane at one side of a plane containing said first mentioned pair of needles.

1,309,273. CARRYING-CASE FOR WELDING AND CUTTING EQUIPMENT. HERSEY CAYE, Elizabeth, N. Y., assignor to Davis-Bournonville Company, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1918. Serial No. 231,185. 3 Claims. (Cl. 209—10.)



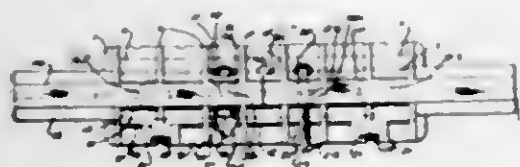
1. A carrying case for oxy-acetylene and like equipment, the same being of suit-case form, and having walls rising from the bottom of the body section and inclosing an oblong interior space containing holders for torches and other articles of equipment, said walls being adjacent the side walls of the case from which they are spaced by an encircling channel adapted to receive hose.

1,309,274. MANUFACTURE OF GLASS. JAMES A. CHAMBERS, Pittsburgh, Pa. Filed Oct. 8, 1918. Serial No. 257,405. 2 Claims. (Cl. 49—83.1.)



1. In the manufacture of glass, drawing an article from a mass of molten glass sufficient to produce a plurality of articles, separating the article from the mass of molten glass, and melting the remnant of the article in the mass of molten glass by the addition of molten glass of a greater temperature than the temperature of the glass to which it is added.

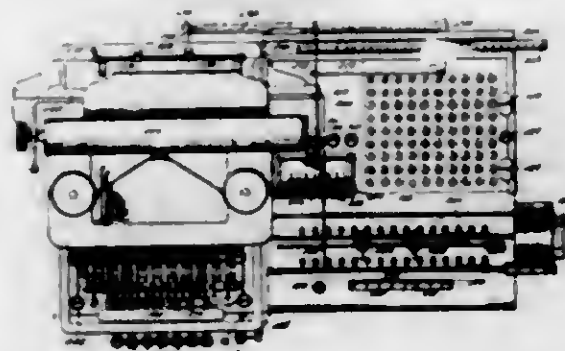
1,309,275. RAIL-JOINT. DANIEL D. CONDON, Prescott, Ariz., assignor to Williams Boltless Rail Joint Manufacturing Company, Prescott, Ariz., a Corporation of Arizona. Filed Feb. 10, 1919. Serial No. 277,972. 5 Claims. (Cl. 238—195.)



1. A rail joint comprising a base-plate, a brace on one side thereof, and a removable clamp on the other side of said base-plate, said brace and said clamp being adapted for supporting the rail-head, said brace and said clamp and said rail bearing sets of perforations, a beveled shoulder formed on the under side of said base-plate adjacent to the edge of the side thereof opposite to said brace, said opposite side of said base-plate being perforated adjacent

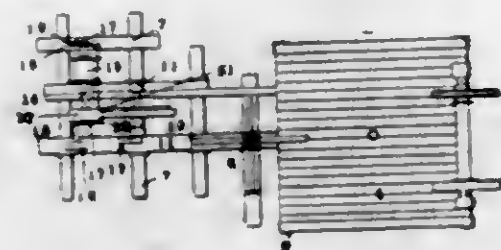
to the edge thereof, and means mounted in said first-named perforations and operatively adapted to exert force between said brace and said opposite side, said means comprising a bent bolt having a head adapted to seat upon said beveled shoulder, said bent bolt being adapted to be mounted in a set of said first-named perforations with its other end extending beyond the outer wall of said brace, and means borne by the said other end of said bent bolt adapted adjustably to bear against the said outer wall of said brace, and a lever having a hook-shaped end mounted in the perforation in said base-plate and fulcrumed upon the under side of said base-plate, a seat and a perforation formed in the other end of said lever, a bolt having a head adapted to engage said seat, said bolt being adapted to be mounted in another set of said first-named perforations and in the perforation borne by an end of said lever and which the other end of said bolt extending beyond the outer wall of said brace, and means borne by the other end of said bolt adapted adjustably to bear against the said outer wall of said brace.

1,309,276. COMBINED TYPE-WRITER AND CALCULATING-MACHINE. ADOLPHUS S. DENNIS, Cleveland, Ohio, assignor to Marchant Calculating Machine Company, a Corporation of California. Filed Nov. 2, 1915. Serial No. 59,238. 56 Claims. (Cl. 235—60.)



1. The combination, with a typewriter, of a calculating machine having indicating devices and a plurality of movable stops for controlling the indicating devices, a member for moving each of the stops into effective position, driving means, and a coupling device for operatively connecting each of the aforesaid members to said driving means, each coupling device being adapted to be actuated by one of the typewriter keys.

1,309,277. DRILLING-MACHINE. EDWARD L. DILLON, St. Louis, Mo., assignor to Lorenzo Norvell, trustee, St. Louis, Mo. Filed May 25, 1917. Serial No. 170,836. 1 Claim. (Cl. 74—26.)



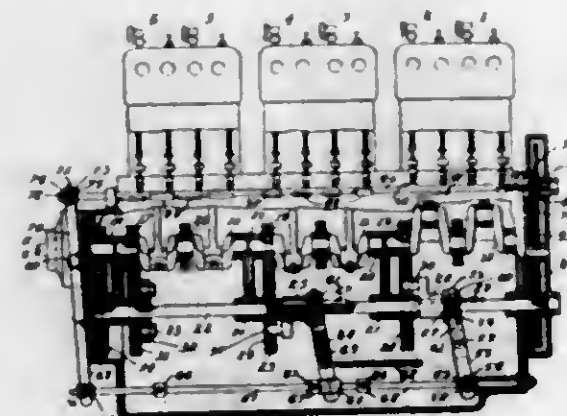
In a well drilling machine, the combination with a band wheel, of a rocking frame, a sand reel carried by said frame and provided with a friction wheel, a second friction wheel carried by said frame and held in constant contact with said first named friction wheel, and means for moving said frame to bring one or the other of said friction wheels into contact with said band wheel to drive said sand reel forward or backward.

1,309,278. GRASS-HOOK. HORATIO S. EARLE, Detroit, Mich., assignor to H. S. Earle Mfg. Co., Detroit, Mich., a Corporation of Michigan. Filed Apr. 17, 1916. Serial No. 91,583. 6 Claims. (Cl. 287—11.)



1. In a grass hook, a blade provided with a tang formed integrally with and extending at an angle thereto, the terminal edge of said tang being arcuate in shape and notched, a handle, releasable means carried by the handle, pivotally supporting the blade and adapted to bind the blade and handle together in wedging relation by relative longitudinal movement of the handle and blade.

1,309,279. EXPLOSIVE-ENGINE. CHARLES E. EGGETT and DANIEL YOUNG, New York, N. Y. Filed Sept. 30, 1913. Serial No. 792,546. Renewed Nov. 6, 1918. Serial No. 261,414. 2 Claims. (Cl. 121—24.)



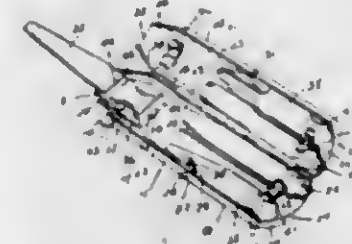
1. The combination of a series of sets of cylinders and pistons operating therein, crank shafts for the pistons that are independent in the sets, a driving shaft, clutch devices arranged to connect the crank shafts with the driving shaft at will, a single cam shaft common to all of the cylinders, valve devices for the cylinders controlled by said cam shaft, and connections between said clutches and the cam shaft whereby the operation of the different clutches will vary the position of the cam shaft in disable the valves in the cylinder set or sets wherein the clutch is disconnected.

1,309,280. COMBINATION-GRENADE. JOSEPH EDWARD FARRELL, Jr., Washington, D. C., assignor to International Munitions Company, Inc., of Delaware. Filed Dec. 19, 1918. Serial No. 267,326. 2 Claims. (Cl. 162—29.)



1. A grenade embodying a fragmenting shell, a hand operating mechanism engineered to remain entirely inactive and without adjustment when the grenade is employed with a suitable gun, means at the opposite end for responding to the explosive gases of such a gun, said means being engineered to remain entirely inactive and without adjustment when used as a hand grenade, a centrally located detonator, two independent fuses arranged to function with the centrally located detonator the said two fuses extending outwardly toward the two ends of the grenade.

1,309,281. TOOL AND TOOL-HOLDER. EWING M. FOUSTS, Chappaqua, N. Y., assignor to William W. Mountain, Flint, Mich. Filed Dec. 20, 1918. Serial No. 267,687. 5 Claims. (Cl. 145—64.)



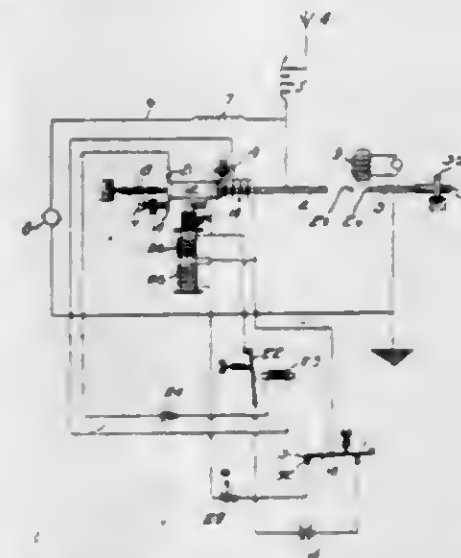
1. In an apparatus of the character described, the combination of a structure comprising main and cover sections; outer and inner bracket arms secured in said main section and provided respectively with long and short slots; a tool formed with a portion adapted to fit said large slot, a pair of shoulders adapted to shut said inner arm, and an end lip adapted to fit in said short slot; and means adapted to hold said tool in said slots.

1,309,282. MULTISTAGE CENTRIFUGAL FAN AND PUMP. WILLIAM JOHNSTON FRAME, London, England. Filed Aug. 24, 1918. Serial No. 251,221. 5 Claims. (Cl. 253—188.)



1. A centrifugal multi-stage fan or pump comprising a casing, at least one rotor compartment in said casing, at least one rotor in said rotor compartment, a plurality of separate sets of rotor fluid impelling blades acting in series in said rotor compartment, return inward flow fluid guide passages in said casing, cross fluid passages disposed transversely of the said inward flow fluid passages, said inward flow fluid passages leading the fluid to one of the separate sets of rotor fluid impelling blades and said cross fluid passages conveying the fluid to another of the separate sets of rotor fluid impelling blades.

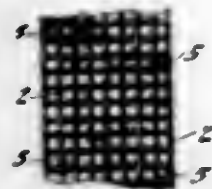
1,309,283. RADIOTELEGRAPHY. LEONARD F. FULLER, San Francisco, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Sept. 4, 1917. Serial No. 189,524. 7 Claims. (Cl. 250—19.)



2. An arc system for radio signaling comprising two electrodes between which an arc is formed, electro-mag-

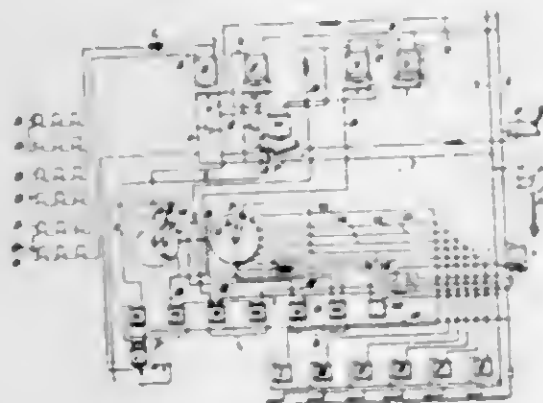
netic means for bringing the electrodes into proximity whereby the arc is formed and means for separating said electrodes to the position of proper oscillating arc length.

1,309,264. COVERED PULLEY. HERMAN F. GEBHARD, University, Mo. Filed Aug. 2, 1918. Serial No. 248,042. 2 Claims. (Cl. 94-45.)



1. A pulley having a cover of open work material thereon affording free openings of considerable area and secured to the pulley by means of a binder having a series of fixed projections extending into the interstices of said material, the relatively rough surface of the cover being exposed to exert its gripping or tractive effect on the inner surface of a belt applied thereto.

1,309,285. RECORDING SYSTEM AND APPARATUS. RICHARD M. HOPKINS, New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 31, 1917. Serial No. 171,940. 16 Claims. (Cl. 177-353.)

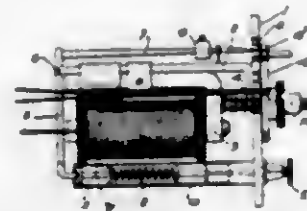


1. In a selective system, the combination with a line relay and signaling means adapted for actuating said relay by signals comprising a plurality of groups of impulses, of a plurality of selectors arranged to be connected successively to said line relay for actuation thereby, a master selector arranged to switch said first mentioned selectors into connection with said line relay successively, and restoring means arranged to restore said selectors and master selector to normal in the event that the master selector is left, for a prolonged period, in an intermediate condition, as may happen when an incomplete signal is received.

1,309,286. DETECTOR DEVICE. RICHARD M. HOPKINS, New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 7, 1917. Serial No. 190,104. 12 Claims. (Cl. 177-329.)

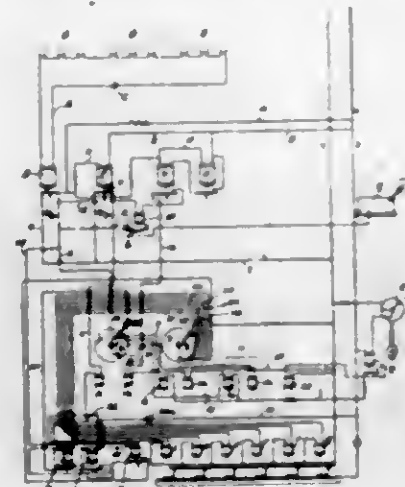
12. A detecting instrument such as described, comprising a single magnet, a single armature therefor, retractile means for said armature, causing the latter to occupy normally an intermediate position, with the armature attracted by the magnet to a normal extent, and

means normally engaging said armature and held thereby but tending to move to another position, and arranged to



so move when the armature moves from its normal position.

1,309,287. RECORDING SYSTEM AND APPARATUS. RICHARD M. HOPKINS, Rutherford, N. J., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 23, 1917. Serial No. 209,237. Renewed Apr. 14, 1919. Serial No. 290,050. 18 Claims. (Cl. 234-37.6.)



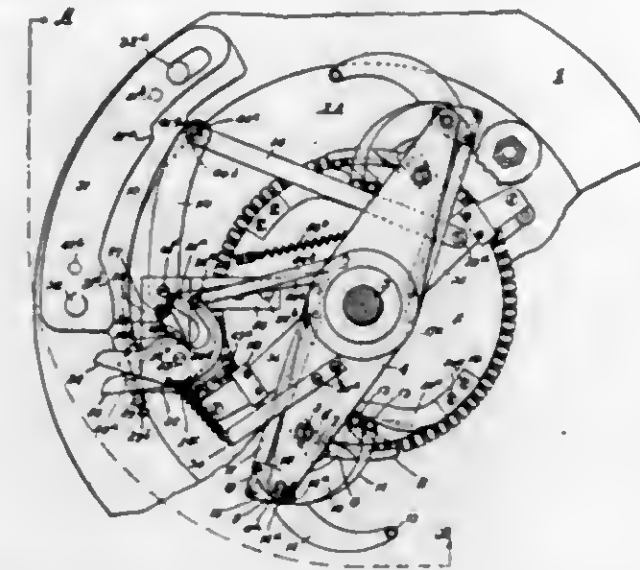
1. In a selective system, the combination with a line relay and signaling means adapted for actuating said relay by signals comprising a plurality of groups of impulses, of a plurality of selectors arranged to be connected successively to said line relay for actuation thereby, a master selector arranged to switch said first mentioned selectors into connection with said line relay successively, restoring means for the selectors, means for recording imperfect signals, and time relay means arranged to cause operation of such recording means and restoring means at the end of such an imperfect signal.

13. In a recorder, the combination of a plurality of recording means each adapted to make a record on one or another of a plurality of points on a record sheet, according as said recording means may be operated, selecting means adapted to be controlled by line signals and to select a particular recording means and a particular point on the record sheet at which a record shall be made by the selected recording means, and means for recording imperfect signals arranged to record such signals as do not cause the selection of a particular one of the main series of recording means or do not cause the selection of a particular point at which one of such main recording means shall make a record on the record sheet.

1,309,288. KNITTING-MACHINE. WILLIS A. INOALLA, Troy, N. Y. Filed Feb. 17, 1917. Serial No. 149,159. 19 Claims. (Cl. 66-12.)

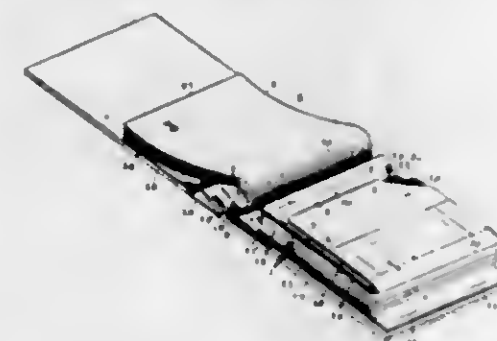
1. In a circular automatic knitting machine for knitting two or more yarns, a yarn holder consisting of a plurality of plates suitably mounted and converging at their rear ends, said plates being adapted to revolve with the cam plate and to permit yarns extending from the leaders to the needles to pass between them, a dog rotating with

the cam plate and adapted to press against the rear end of said plates, and means for forcing said dog against the



plates and for releasing the dog, whereby yarns extending from the leaders and between said plates to the cutter or to the needles may be held or released, as desired.

1,309,289. MANIFOLDING SALES-BOOK. CLARENCE L. JOHNSTON, Oakland, Calif., assignor to Pacific Burt Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed Mar. 29, 1916. Serial No. 87,356. 9 Claims. (Cl. 282-24.)

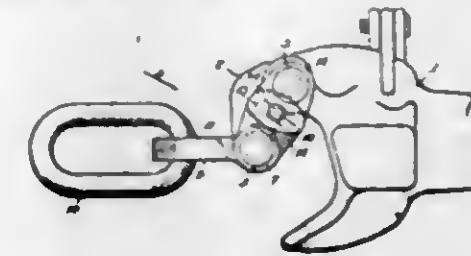


8. In a manifolding device, in combination, a book comprising a plurality of leaves bound together at one edge, each leaf having a folded portion lying thereon, and a second book comprising a plurality of leaves bound together at one edge, each leaf having a folded portion lying thereon, said books being superposed one on the other with the bound edges parallel and at the same end of the device, the bound edges of said books being bound together, and a double faced transfer sheet bound with the leaves of one of said books and having a folded portion adapted to be disposed between the folded portion of a leaf of one book and the folded portion of a leaf of the other book.

1,309,290. TRANSITION CAR-COUPLING. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1918. Serial No. 227,840. 7 Claims. (Cl. 213-65.)

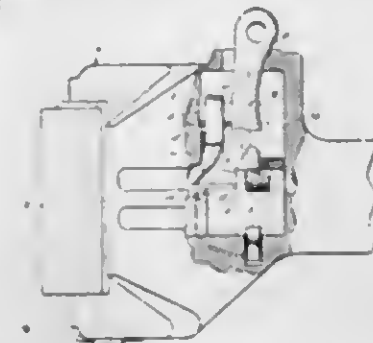
1. In a transition car coupling, the combination with a coupler head, a knuckle pivotally mounted thereon and having a vertically extending pivot pin opening in its outer end, and a lock for said knuckle, of a yoke embracing the outer end of said knuckle, a pivot pin pass-

ing through said yoke and the opening in the outer end of the knuckle, and a link member carried by said yoke



and longitudinally slidable with respect thereto and adapted to be connected to a hook coupling of the European type.

1,309,291. CAR-COUPLING. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 1, 1918. Serial No. 242,723. 4 Claims. (Cl. 213-10.)



1. In a car coupler, the combination with a coupler head provided with bearings in which a knuckle opening lever is journaled, of a knuckle pivotally mounted on said coupler head, locking mechanism for retaining said knuckle in coupled position and for engaging one arm of a knuckle opening lever to actuate said lever, a knuckle opening lever pivotally mounted in said bearings and adapted to be disengaged therefrom by rotation on an axis extending at an angle to its operative pivotal axis, and means on said locking mechanism for forcing said knuckle opening lever to normal position in said bearings.

1,309,292. INK. HERMAN KAUBE, Jersey City, and WILLIAM C. KAUBE, Union, N. J. Filed Jan. 20, 1919. Serial No. 271,957. 3 Claims. (Cl. 134-31.)

3. An improved ink consisting of 96 parts neutral Turkey-red oil, 24 parts of glycerin, 4 1/2 parts of a lake on an alumina hydrate base, and 4 1/2 parts of alumina hydrate.

1,309,293. TRANSITION CAR-COUPLING. WILLIAM MCCONWAY, JR., and WILLIAM KELSO, Pittsburgh, Pa., assignors to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1918. Serial No. 227,838. 4 Claims. (Cl. 213-65.)



1. In a transition coupling, the combination with a car coupler having a coupler head, a knuckle pivotally

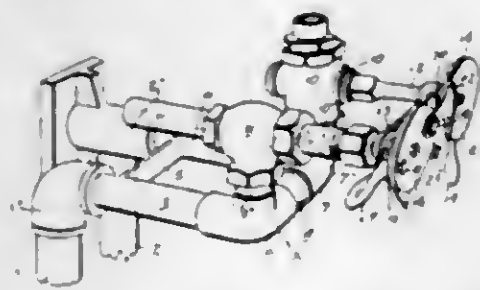
mounted on said head and a lock for said knuckle, of an auxiliary coupling device movably mounted on the guard-arm side of said head and adapted to be retained in coupling position by said knuckle, said auxiliary coupling device being provided with means whereby it may be connected to a hook coupling of the European type, and said coupler head and auxiliary coupling device having a pin and slot connection permitting said auxiliary coupling member to slide as well as rotate with respect to said head when the knuckle closes in locking the auxiliary coupling device in coupling position or opens to release said auxiliary coupling device.

1,309,294. COIN OPERATED TYPE-WRITING MACHINE. JOHN C. McLAUGHLIN, East Orange, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 29, 1916. Serial No. 134,023. 9 Claims. (Cl. 194-84.)



1. In a coin-operated time-controlled mechanism, the combination with a swinging coin-chute, of a spring-detent adapted to retain a coin of proper thickness in the chute, said detent comprising V-arms adapted to engage the coin to determine whether it is of proper thickness, a handle, an operating arm adapted to be swung by said handle against a coin detained by said detent to swing said chute, operating mechanism, a release for said operating mechanism actuated by said coin when so held, and means for releasing said coin upon release of said operating mechanism.

1,309,295. GAS AND WATER CONTROLLING DEVICE FOR WATER-HEATERS. FREDERICK WILLIAM MACK, London, Ontario, Canada, assignor of one-half to Thomas William Baker, London, Ontario, Canada. Filed Mar. 30, 1918. Serial No. 225,795. 5 Claims. (Cl. 277-10.)



1. The combination with gas and water supply pipes, of controlling valves one connected to each pipe provided with stems, and means carried by the stem of the gas supply valve and stem of the water supply valve for independently adjusting each stem to alter the proportion of gas and water and controlling the operation to prevent the operating of the gas supply valve stem while the water supply valve stem is in the closed position.

1,309,296. CONCRETE. ARTHUR MARKS, Knock, Belfast, Ireland, assignor to himself and Harland and Wolff Limited, Belfast, Ireland. Filed Jan. 4, 1919. Serial No. 269,670. 3 Claims. (Cl. 106-30.)

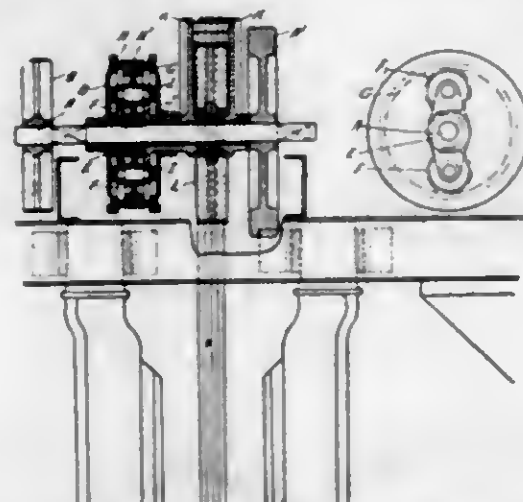
1. Concrete consisting of Portland cement, saw dust, a quantity of a solution of sodium silicate sufficient to render damp the mixture of Portland cement and saw dust and such a quantity of a solution of calcium chloride that the mixture contains a slight excess of sodium silicate.

1,309,297. DRAFT-YOKE. ISAAC H. MILLIKEN, Aspinwall, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 31, 1917. Serial No. 183,752. 3 Claims. (Cl. 213-42.)



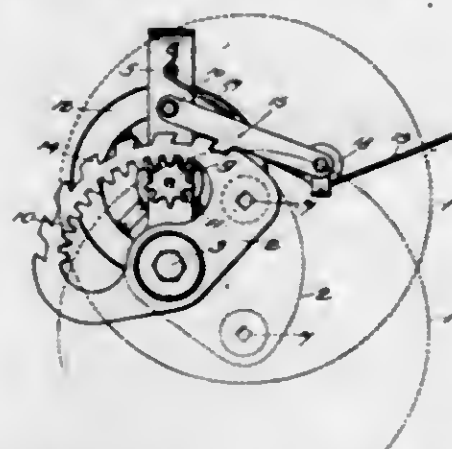
1. A draft yoke for railway draft rigging, comprising a pair of spaced arms, a transversely extending member connecting said arms adjacent the forward portions thereof, and a pair of side walls connected to and extending forwardly from said transversely extending member, said walls also being connected to the adjacent portions of the said yoke arms, and the said transversely extending member being provided on its forward face with a curved segmental bearing surface spaced from the said side walls to reduce the mass of metal at the junctions of said transversely extending member and side walls.

1,309,298. DROP-HAMMER. ARTHUR MORT, Lincoln, England. Filed Sept. 5, 1918. Serial No. 252,794. 3 Claims. (Cl. 78-30.)



1. In a drop hammer in combination with a hammer top and lifting arms for raising the top, means for actuating said lifting arms and an epicyclic gear controlling the actuation of said lifting arms by said means, substantially as and for the purpose set forth.

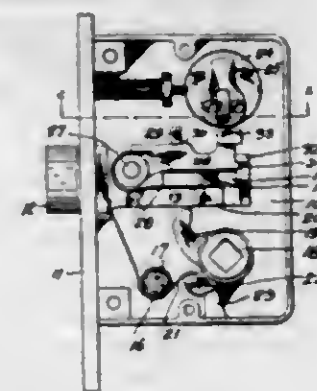
1,309,299. RAISING, LOWERING, AND DEPTH REGULATION OF PLOWS AND OTHER AGRICULTURAL IMPLEMENTS AND VEHICLES. ERNEST MOSS, Dalhoughton, Christchurch, New Zealand. Filed June 18, 1918. Serial No. 240,627. 7 Claims. (Cl. 97-55.)



1. In combination, a frame, a pinion thereon, a quadrant rack pivoted on the frame and meshing with said

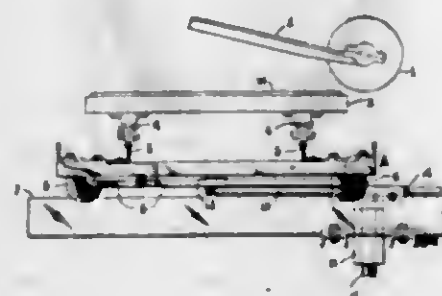
pinion, a supporting wheel rotatably mounted on said rack and eccentrically of the pivot thereof, means for rotating said pinion, and means controllable by the last means for locking said rack in any adjusted position.

1,309,300. LOCK. ALBERT A. PAOR, East Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 25, 1916. Serial No. 127,596. 13 Claims. (Cl. 70-29.)



1. In a lock, a case, a latch bolt therein having a shank, means for guiding the latch bolt shank on the case, a tumbler for said bolt adapted to hold it in latching position or an abnormally protracted position, a fence formed upon said case cooperating with said tumbler, cylinder lock mechanism cooperating with said tumbler for retracting said bolt and for giving it an abnormal protraction, and a knob hub directly engageable with the bolt when the latter is in the latching position to retract the same; substantially as described.

1,309,301. CRANK-DRIVEN DEVICE FOR MACHINING APPARATUS. THEODORE F. PHILIPPI, East St. Louis, Ill. Filed July 29, 1918. Serial No. 247,321. 3 Claims. (Cl. 51-12.)

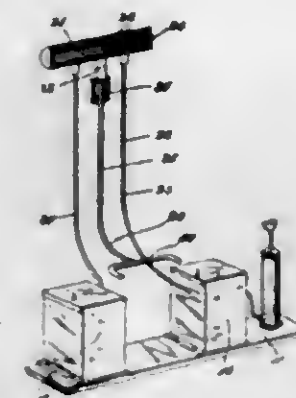


1. A machine provided with a carriage having a crank-receiving slot formed at an oblique angle to the path of the carriage, and a crank for reciprocating said carriage, the wrist of said crank being mounted in the oblique slot to provide for the transmission of movement from said crank to said carriage, the oblique crank-receiving slot being long enough to permit the wrist mounted therein to travel in an endless circular path about the axis of said crank.

1,309,302. WINDOW-CLEANER. GEORGE RACZ, Chicago, Ill. Filed June 8, 1918. Serial No. 238,826. 1 Claim. (Cl. 15-59.)

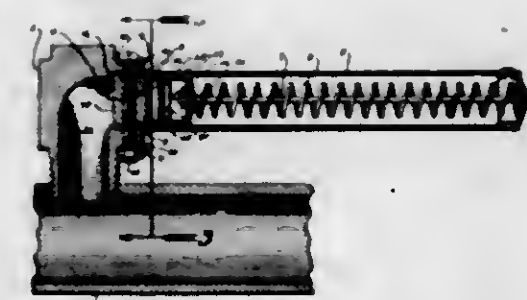
In a window cleaning apparatus of the character described, the combination of an applicator with two flexible hoses adapted to be connected to sockets of the applicator and to a drain and supply tank, and a handle, a

bracket between said sockets and a rod secured to said handle and slidably engaging said bracket, and ten-



sional springs connected to said socket and an arm of said rod for resiliently controlling said sliding movement.

1,309,303. WHISTLE. ERNEST G. RAFF, St. Louis, Mo., assignor to Liberty Accessories Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 13, 1919. Serial No. 270,868. 1 Claim. (Cl. 110-1.)

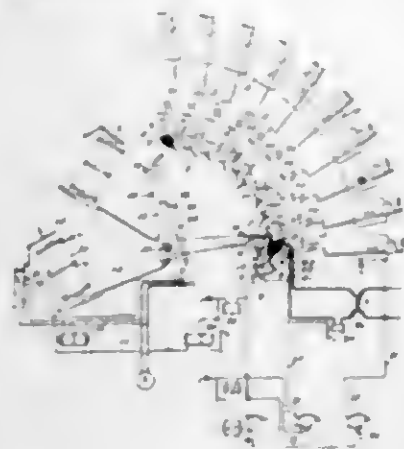


A whistle of the character described comprising a hollow member formed with an enlarged annular open end, the opposite walls of which are formed with aligned openings, an elongated tubular member seated in the enlarged open end of the hollow member and abutting against the shoulder formed by the enlargement, the elongated tubular member having a lateral opening adjacent the enlarged end of the hollow member and also formed with aligned openings, a plug seated in the inner end of the elongated tubular member and formed with a transverse opening, the plug engaging against the shoulder formed at the inner terminal of the enlarged open end of the hollow member, the plug having a notch inclining outwardly to form a restricted outlet adjacent the lateral opening in the tubular member, a bolt extending through the aligned openings in the hollow member, the tubular member and the opening in the plug to hold the parts together, the outer end of the plug having an annular shoulder, a hollow plunger in the elongated tubular member, the plunger having one end to provide a chamber, the end of the plunger normally engaging the annular shoulder on the plug, means for holding the plunger against the shoulder, and means to retract the plunger to uncover the lateral opening for sounding the whistle.

1,309,304. AUTOMATIC SWITCH. JOHN NEWBERRY REYNOLDS, Greenwich, Conn., and JOHN F. HEARN, Passaic, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1918. Serial No. 210,861. 9 Claims. (Cl. 179-27.5.)

1. In an automatic switch, rotatable trunk bars, sets of rigid contacts on said bars, rotatable line bars, a set of contacts on each line bar, means for rotating one of said trunk bars into a position to allow the contacts of

any of said line bars to engage contacts on said rotated trunk bar, and means for rotating a line bar into en-



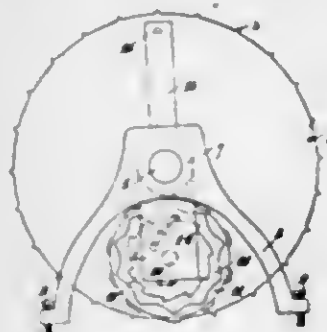
gagement with a rotated trunk bar, said engagement functioning to move the rotated trunk bar into its normal position.

1,309,305. CYCLE FRAME. KARL P. SCHREINER, Brooklyn, N. Y. Filed Apr. 9, 1918. Serial No. 227,554. 5 Claims. (Cl. 180-27.)



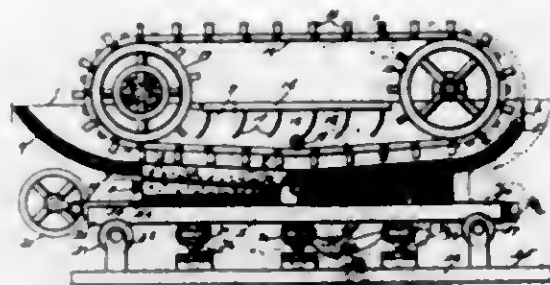
1. A motor cycle frame comprising the front section of a standard frame, a rectangular, horizontally disposed carrier frame, rigid, converging connections between said carrier frame and said standard frame, and take-up means for adjustably stressing said frames in their relative relation.

1,309,306. APPARATUS FOR MEASURING AND SIMULTANEOUSLY MARKING THE MEASUREMENTS ON MACHINE BELTS AND THE LIKE. PETER LUDVIG VILHELM SCHULSTAD, Copenhagen, Denmark. Filed May 16, 1917. Serial No. 169,073. 2 Claims. (Cl. 101-73.)



1. In an apparatus for measuring and marking machine-belts and the like, a rotatable marking disk having equidistant marking members on the periphery thereof adapted to engage the traveling belt, the hub of the disk having an arm extending in a plane parallel to the latter, in combination with a counting mechanism comprising a shaft extending between and mounted in the disk and arm, a plurality of counting disks journaled on the shaft, each counting disk having a series of numbers adapted to be successively brought by rotation into the plane of the zero mark on the marking disk, and means whereby the counting disks receive their rotating movement from the marking disk during the movement of the belt.

1,309,307. ORE-CONCENTRATING MACHINE. FREDERICK E. SMALL, Kansas City, Mo. Filed Apr. 11, 1919. Serial No. 289,391. 1 Claim. (Cl. 83-85.)



A motion reciprocating and motion imparting bed for reciprocating ore concentrators, consisting of a base plate, a plurality of individual flexible supporting members arranged on said base plate to yieldingly support the concentrator, said members comprising a substantially disk-shaped head portion provided on its upper side with an annular ball bearing adapted for constantly bearing on the lower side of the concentrator and a universal joint connected between the head portion and said base, and guides mounted on said base and arranged to receive the concentrator and permit lateral movements thereof on said supporting members within fixed limits while it is reciprocated lengthwise.

1,309,308. VEHICLE-TIRE. JAMES A. SWINEHART, Akron, Ohio. Filed Feb. 23, 1915. Serial No. 9,546. 10 Claims. (Cl. 152-13.)

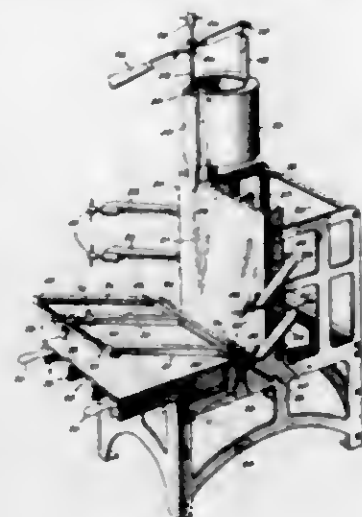


1. A tire for automobile wheels and the like consisting of a cord-basis embedded in the tire structure, annular means borne by the lateral ends of said basis in each tire-base adapted to support said basis, and a pair of annular members in each base adapted to anchor said basis in place in the tire.

1,309,309. MACHINE FOR CASTING STEREOTYPE PRINTING-PLATES. PATRICK A. TOOMEY, Chicago, Ill. Filed June 25, 1917. Serial No. 176,650. 24 Claims. (Cl. 22-2.)

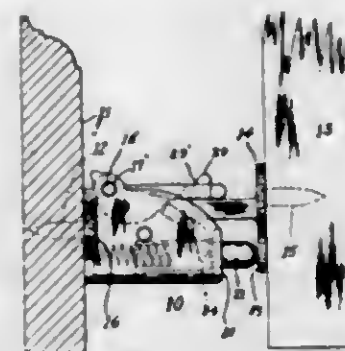
8. A device for casting stereotype printing plates, a supporting stand, a casting box mounted on said stand, said casting box embracing a pair of mold members, one being stationary and arranged upright, and the other having hinged connection with said stand and adapted to be moved toward and from said stationary mold member in the opening and closing of said casting box; there being a mold chamber formed between said mold members when the casting box is closed; the mouth of said mold chamber being formed at the upper edge of said casting box, a

melting pot supported above said casting box and having a discharge spout extending into the mouth of said mold



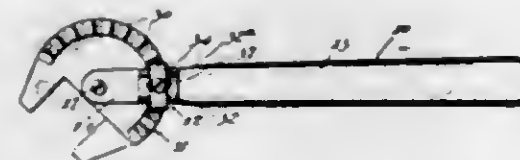
chamber, and a valve member mounted on said melting pot and adapted to control the flow of molten metal from said pot into said mold chamber.

1,309,310. AUTOMATIC DOOR-HOLDER. HENRY G. VOISINT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Dec. 28, 1918. Serial No. 268,629. 7 Claims. (Cl. 16-78.)



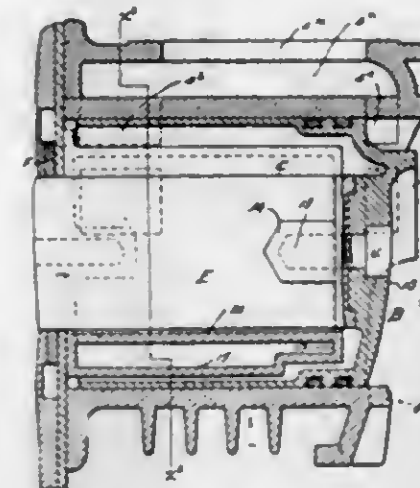
1. In an automatic door holder, a body member, a plunger slidably mounted therein, a holder pivotally mounted upon said body member above said plunger, means movable into and out of positive gripping engagement with said pivoted holder, and an upwardly projecting extension upon said plunger positioned to engage said holder and move the same out of engagement with said first mentioned means.

1,309,311. WRENCH. ANTON T. ANDERSON, Chicago, Ill. Filed Oct. 20, 1916. Serial No. 126,795. 4 Claims. (Cl. 81-62.)



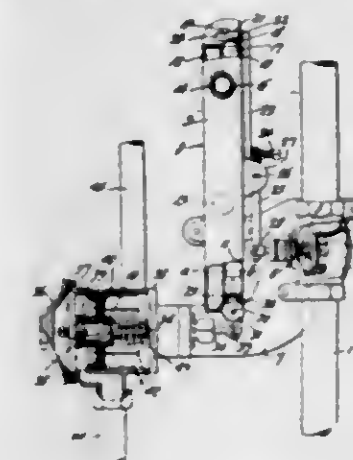
1. A wrench comprising a handle, a flat jaw member pivotally secured thereto, said jaw member being provided with a series of ratchet teeth on one face thereof and two oppositely acting dogs supported by said handle for engaging said teeth, and a wedge member having two oppositely inclined wedge surfaces acting on said dogs respectively for moving them into and out of opposite positions with respect to said teeth.

1,309,312. INTERNAL-COMBUSTION MOTOR. JOHN P. BARKER, Tropico, Calif., assignor, by mesne assignments, to Cal F. Hunter, Los Angeles, Calif. Filed Sept. 9, 1916. Serial No. 119,217. 1 Claim. (Cl. 123-74.)



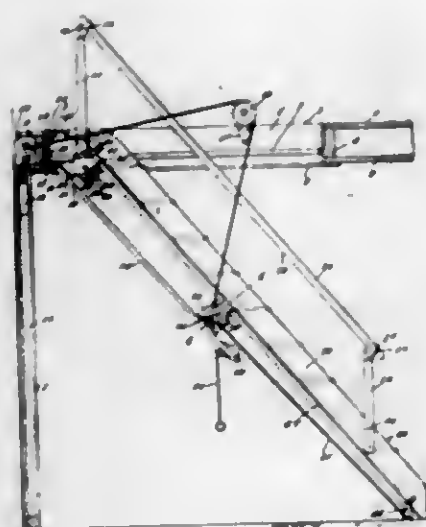
In an internal combustion motor, a cylinder having an initial compression space in one end thereof and a final compression space in the other end thereof, and also having an intake port leading from said initial compression space to said final compression space, a hollow piston mounted in said cylinder and controlling said intake port, a closure for the end of the cylinder provided with the initial compression space, a substantially cylindrical hollow charge displacement element having closed ends and detachably secured at one of its ends to the closure for the cylinder, the sides of the displacement element being spaced from the walls of the cylinder to receive the sides of the piston and the displacement element being formed with a longitudinal slot extending through the same from end to end and opening laterally through one side thereof, and a piston rod extending through the slot and cylinder closure and connected to the piston, said piston rod being adapted to be inserted laterally into position through the slot from one side of the displacement element.

1,309,313. REGULATING-VALVE. ADOLF HEUER, Pittsburgh, Pa. Filed Nov. 12, 1915. Serial No. 61,127. 6 Claims. (Cl. 236-23.)



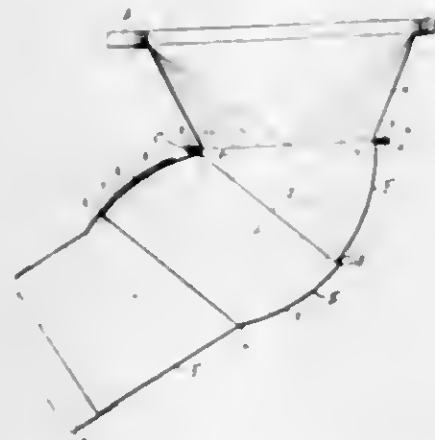
1. In a fluid heater, the combination with a receptacle having an inlet and an outlet, a burner for heating the contents of the receptacle, a normally closed fuel supply conduit leading to the burner, cooperating thermally affected and relatively static elements controlled by the heated fluid and normally inactive, means controlled by the pressure of fluid in motion for shifting one of said cooperating elements to open the fuel supply, the other element being stationary and being affected by heat of the fluid to partially or entirely restore the normal relative positions of the elements.

1,309,314. PANEL-STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Movable Stairway Co., Akron, Ohio. Filed Mar. 28, 1918. Serial No. 225,271. 4 Claims. (Cl. 228—50.)



1. In a device of the class described, a floor and a ceiling having an opening; a lining defining the edge of the opening and cooperating with the floor and the ceiling, the floor including a portion projecting into the opening beyond the lining; a first hinge member secured to the lining and comprising fingers which project in opposite directions, one finger projecting between the floor and the lining, and the other finger extending beneath the projecting portion of the floor; a second hinge member embodying a base plate, an end wall and an underlying flange forming a pocket; a panel having its upper end received in the pocket and secured to the second hinge member; means for pivotally connecting the hinge members; a stairway having a top step cooperating with the projecting portion of the floor; and means for mounting the stairway on the second hinge member and upon the panel for longitudinal sliding movement.

1,309,315. GRAIN DISTRIBUTER. GEORGE W. BLANK, St. Charles, Minn. Filed Dec. 24, 1918. Serial No. 268,178. 1 Claim. (Cl. 193—39.)



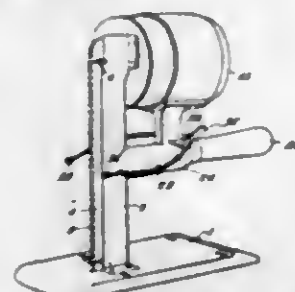
A distributor of the class described comprising a hopper, a chute, and an elbow connecting said hopper and chute, said elbow comprising an intermediate section, and end sections hingedly connected therewith at opposite ends and at opposite sides, said sections telescoping one within the other, the sections of the elbow being provided with interlocking flanges whereby the outward swinging movement of the end sections relative to the intermediate section is limited.

1,309,316. TYPE-WRITING MACHINE. LEE S. BURRIDGE, deceased, New York, N. Y., by Francis O. Burrige, executor, New York, N. Y., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 27, 1915, Serial No. 52,594. Divided and this application filed Oct. 17, 1917. Serial No. 197,004. 8 Claims. (Cl. 197—186.)



1. In a typewriting machine, the combination with a supporting frame, of a platen to be moved step by step in letter-feed direction across said supporting frame, and a carriage for said platen comprising sheet-metal side plates and a pair of sheet-metal angle strips, which are arranged to serve both the purpose of rigidly connecting the side plates and forming the guideways for rolling bearings upon which the carriage is guided when traversing the machine.

1,309,317. CLOTH-CUTTER. CHESTER E. CLARK, New York, N. Y. Filed Aug. 6, 1918. Serial No. 248,592. 4 Claims. (Cl. 164—74.)



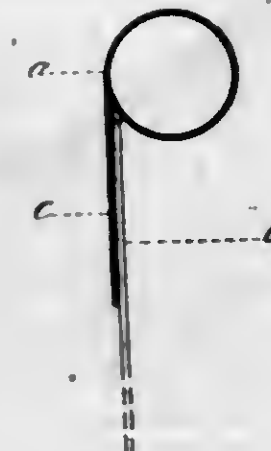
1. A cloth cutter comprising an endless knife formed in a plurality of sections hinged together, each section having a flat transversely extending base, a pair of spaced wheels acting as pulleys over which said endless knife passes, means for rotating one of said wheels so as to drive said knife continually in one direction, a supporting base, and a standard arranged on the base formed with grooves for receiving the base of the respective sections for guiding the knife and holding the sections thereof in alignment.

1,309,318. KNITTING DEVICE. JOHN CUOMO, New York, N. Y. Filed Oct. 31, 1918. Serial No. 260,488. 3 Claims. (Cl. 24—3.)



1. A knitting device including a tubular needle support, open at one end only and having laterally directed rigid wings adjacent its open end.

1,309,319. SUSPENSION-BORDER FOR SHOW-CARDS, MAPS, ALMANACS, AND THE LIKE. JOSEPH VAN DIAS, Amsterdam, Netherlands. Filed Dec. 19, 1917. Serial No. 207,962. 3 Claims. (Cl. 49—27.)



1. A suspension border for maps and other articles consisting of a roll of foldable non-metallic fibrous material, said roll being formed from a sheet covered with adhesive material which hardens thereon but permits the adhesive attachment of the suspended article, said roll being also supplied internally with heavier material and having an unwound flat part of the said sheet for the attachment of said article thereto.

1,309,320. NITRATION METHOD. CARLETON ELLIS, Montclair, and ALFRED A. WALLS, Caldwell, N. J., assignors to Ellis-Foster Company, a Corporation of New Jersey. Filed Mar. 19, 1917. Serial No. 155,741. 11 Claims. (Cl. 23—24.)

1. The process of making picric acid which comprises sulfonating phenol and nitrating it with a nitration mixture comprising sodium nitrate, sulfuric acid and water and the products of reaction of the sulfuric acid on sodium nitrate.

1,309,321. AIR-GUN. FREDERICK HUMBERT FAIRWEATHER, Bridgeport, Conn. Filed Mar. 6, 1919. Serial No. 280,980. 7 Claims. (Cl. 124—8.)

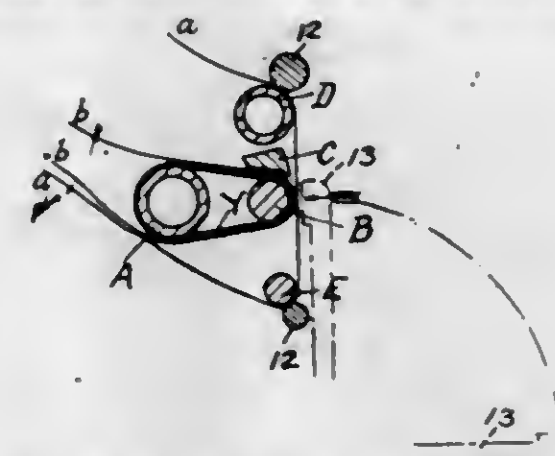


1. An air gun having a barrel, an air chamber, and a collapsible tube connecting the said barrel and chamber, means for collapsing the said tube comprising a member having a movement in the radial direction relatively to the said tube, the said member having two active contacting parts in spaced relation for cooperating with two opposed and appreciably separated portions of the said tube.

1,309,322. TYPE-WRITING MACHINE. WALTER FARRON, Manchester, England, assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 19, 1917. Serial No. 192,681. 15 Claims. (Cl. 197—60.)

1. In a type writing machine, the combination of two

sheet-controlling or guiding rollers, an impression roller, a platen bar, means for rotating the impression roller,



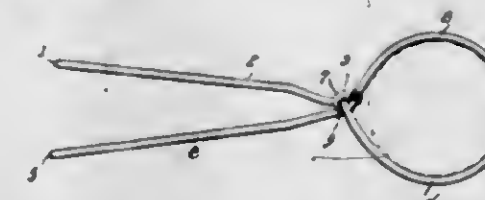
and means for moving the impression roller and the platen bar into and out of the typing position.

1,309,323. CLASP. KERR W. GIBBENS, Salem, Oreg. Filed Jan. 27, 1919. Serial No. 273,356. 3 Claims. (Cl. 206—55.)



1. As a new article of manufacture, a ribbon clasp consisting of two plates in overlying relation, one of said plates being flat and the other arcuate, the flat plate being of a width less than the arcuate plate and positioned substantially central of the arcuate plate, arms extending from corresponding marginal portions of the plates and extending in the same general direction, means for pivotally connecting said arms whereby the plates are capable of relative swinging movement, and means coacting with the arms for constantly urging the plates one toward the other.

1,309,324. LIFTER. WILLIAM D. HANCOCK, Springfield, Tenn. Filed Mar. 23, 1916, Serial No. 86,226. Renewed Jan. 10, 1919. Serial No. 270,583. 1 Claim. (Cl. 65—26.)



A device of the character described comprising oppositely disposed handles provided with jaws, each handle formed from a single strand of wire bent intermediate its ends to provide laterally spaced arms, one of the said handles having the ends of its arms bent outwardly at right angles to provide pintles, the corresponding handle having the ends of the arms coiled around the said pintles, the bent ends of the said arm having the pintles thereon, being engaged with the convolutions of the said coils, the said arm having a resiliency to normally maintain the said pintles extended through the coils to urge the said coils away from each other, a binding wire connecting the coils for maintaining them in laterally spaced relation whereby a turning movement of the pintles in the said coils will cause the arms of the pintles to move toward each other.

1,309,325. STRING-CUTTING RING. HARUN HIRAKAWA, San Diego, Calif. Filed Mar. 19, 1918. Serial No. 228,430. 2 Claims. (Cl. 30—14.)

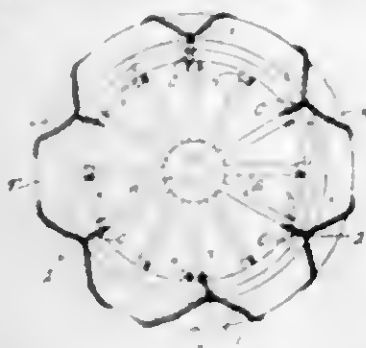
2. In a device of the class described, a band ring provided with an enlarged portion with an inwardly enlarging circumferential slot therein, a knife with oppositely

disposed cutting edges pivotally mounted in one side portion and yieldable inwardly, and a stop on the oppo-



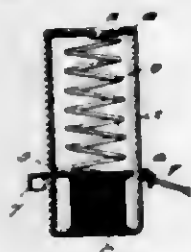
site side portion with which said knife engages in its outward movement.

1,309,326. ANTISKIDDING DEVICE. CHARLES W. JOHNSON, Pasco, Wash. Filed Nov. 6, 1918. Serial No. 261,339. 3 Claims. (Cl. 152-14.)



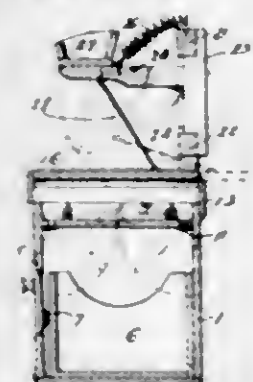
3. As a new article of manufacture, an anti-skidding device comprising an endless flexible member, branch members through which said flexible member is loosely directed, and members adapted to straddle the spokes of a wheel, the branch members being secured to extremities of said last named members.

1,309,327. CHECK-HOLDER. WILLIAM SCHNEIDER LARCOM, Nogales, Ariz. Filed Dec. 26, 1917. Serial No. 208,901. 1 Claim. (Cl. 211-39.)



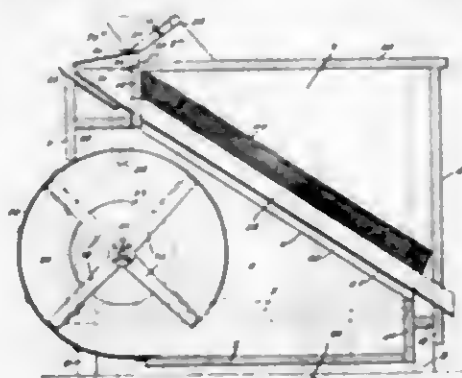
A device of the character described including a substantially rectangular frame composed of a strip of metal bent intermediate its ends to form end and side portions, a closure strip engageable with the free ends of the frame, a follower plate slidable on the opposite sides of the frame, the marginal portions of the follower plate being flanged, tension means engaged with the follower plate, and engaging means secured to one flanged marginal portion of said follower plate.

1,309,328. MAIL BOX. JOHN R. McCLEMONDA, Elwood City, Pa. Filed Dec. 17, 1918. Serial No. 267,174. 13 Claims. (Cl. 232-47.)



1. In a mail box, the combination with a box-like body having a door in the front, a drawer slidably mounted in the body, a trap door hinged within the body, and yielding means for holding it raised; of tracks along the sides of the body, a slide movably mounted thereon, an arm hinged above the body, a link connecting the arm with a slide, and a receptacle carried by the arm.

1,309,329. FANNING-MILL. JOHN W. MABIN, Red Wing, Minn. Filed Mar. 17, 1919. Serial No. 263,032. 11 Claims. (Cl. 130-15.)



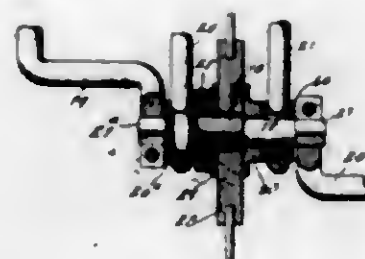
9. A fanning mill for separating grain from straw and other impurities, comprising an inclosing casing having a main compartment and a front compartment, a fan chamber within said main compartment, a fan rotatably mounted in said fan chamber, said main compartment being provided with an inclined channel and an inclined slideway in communication with said fan chamber, means in said front compartment communicating respectively with said channel and slideway for delivering the grain to the channel and the straw and other impurities to the slideway, and means above said last-named means for separating the grain from the straw and other impurities.

1,309,330. FILTER AND METHOD OF MAKING SAME. GEORGE MOORE, Joplin, Mo. Filed July 15, 1915. Serial No. 40,116. 16 Claims. (Cl. 210-9.)



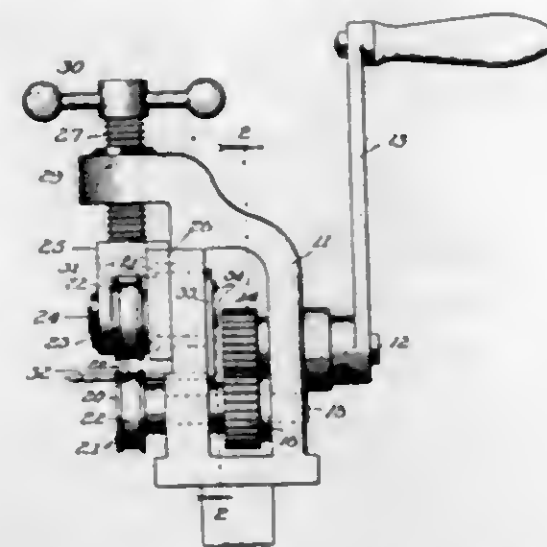
15. The method of forming a filter comprising applying a film of barytes to a support.

1,309,331. CHILD'S VEHICLE. RICHARD NELSON, Chicago, Ill. Filed July 3, 1917. Serial No. 178,400. 4 Claims. (Cl. 208-0.)



1. A device of the class described comprising a seat, a steering wheel axle, a steering wheel normally loosely mounted thereon, pedals rigid with said axle and frictional means mounted on said axle whereby said steering wheel may be locked rigid on said axle when said pedals are operated and permitted to revolve loose when said pedals are held rigidly against revolution.

1,309,332. ART OF CLAMPING HOSE-LINES. CARL J. NIQUIST, Chicago, Ill. Filed Nov. 18, 1918. Serial No. 263,001. 2 Claims. (Cl. 29-88.2.)



1. The method of clamping a hose-line to a tube-section, which consists in surrounding the hose-line at the portion thereof embracing the tube-section, with a clamping element formed of wire wound into a spiral with its ends free, and contracting said element about the hose-line by subjecting the element to a rolling action.

1,309,333. COUPLING-RELEASE FOR MECHANICAL TIME-FUSES. OLUF ORLSON, Newton, Mass., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1918. Serial No. 230,264. 11 Claims. (Cl. 162-36.)



1. The combination in a time fuse with an adjustable timing member, an adjustable setting member, and a coupling between said members under stress constantly tending to cause its disengagement from one of them, of a retainer for holding said coupling in engagement with such member, said retainer being arranged to release the coupling upon firing of the projectile to which the fuse is attached from a gun.

1,309,334. HAIR-PIN. EINAR PEDERSEN, Copenhagen, Denmark. Filed Apr. 12, 1918. Serial No. 228,162. 1 Claim. (Cl. 132-22.)

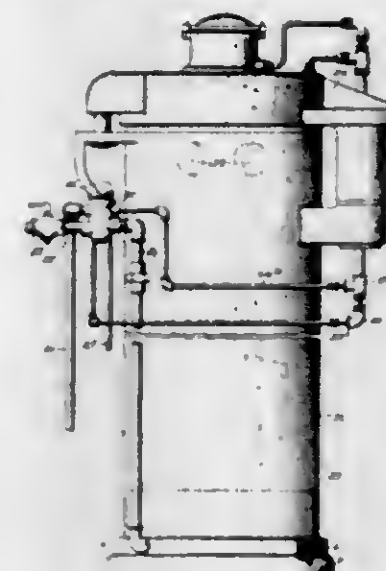


A hairpin comprising a single smooth piece of material, having a light and two legs, said legs lying in a common plane and being of different curvatures.

1,309,335. STUFFER OR FILLER. JOHN M. PETERSON, Chicago, Ill., assignor to George Jacob Sayer, Chicago, Ill. Filed Dec. 22, 1917. Serial No. 208,411. 13 Claims. (Cl. 17-6.)

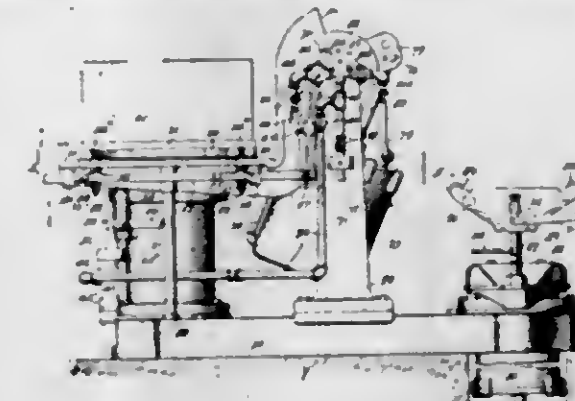
1. A device of the character described comprising a main cylinder, a pneumatically actuable removable cylinder head therefor, a source of pressure supply, and means for

controlling the association of said source of pressure with said main cylinder and controlling the actuation of said



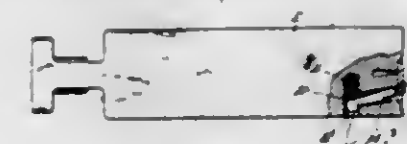
cylinder head both into its cylinder closing and cylinder opening positions.

1,309,336. MOLDING-MACHINE. EDWARD A. PRIDMORE and WILLIAM W. MILLER, La Grange, Ill. Filed Sept. 19, 1914. Serial No. 802,440. 12 Claims. (Cl. 22-33.)



1. In a molding machine, the combination of an invertible pattern-carrier, jarring mechanism located at the ramming side of the machine and operating through an opening in said carrier, depending recessed members operatively connected with the pattern and movable in guide-openings in said carrier for guiding the pattern during the jarring operation, and shiftable bars on said carrier provided with means adapted to enter said recesses upon shifting said bars, to releasably secure the pattern to said carrier.

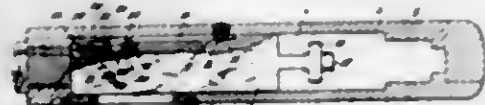
1,309,337. EXTRACTOR FOR FIREARMS. EUGENE G. REISING, East Hartford, Conn., assignor to The Hartford Machine Gun Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 2, 1917. Serial No. 140,175. 3 Claims. (Cl. 42-25.)



1. A breech-bolt having a bore extending inwardly from one end and with a mouth opening laterally from said bore, an extractor located in said bore and having an extracting lip and a retaining lug of a length less than the diameter of said bore, the latter to permit removal of the extractor lengthwise of the bore, said extractor also having a fulcrum intermediate its ends and upon which it

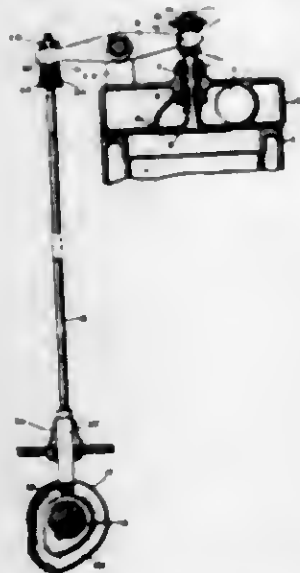
rocks to disengage its lip from a cartridge shell and the retaining lug from said mouth, and means for retaining the lug within said mouth.

1,309,338. **EJECTOR FOR FIREARMS.** EUGENE G. REISING, East Hartford, Conn., assignor to The Hartford Machine Gun Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 2, 1917. Serial No. 140,176. 4 Claims. (Cl. 42-25.)



2. In a firearm including a receiver, a breech bolt movably mounted therein, an ejector actuator located on the receiver, said bolt having an ejector recess, an ejector located in said recess and movable longitudinally therein, a tail on the ejector positioned to strike said actuator to force it forwardly in an ejecting movement, said tail being adapted to pass into said recess and under said actuator, and means for forcing the ejector backwardly on the breech bolt.

1,309,339. **VALVE-OPERATING MECHANISM.** GEORGE A. RAYNOLDS, Indianapolis, Ind. Filed June 20, 1918. Serial No. 240,591. 2 Claims. (Cl. 123-90.)



2. In a valve operating mechanism, the combination with a valve having a stem, of a pivotally mounted lever, having bifurcated ends, a spring structure carried by the valve stem, for directing pressure against one end of the lever, a pitman cooperating with the opposite end of the lever, a spring carried by the pitman for directing pressure against the end of the lever cooperating with the pitman, rollers carried by the pitman, and a cam wheel having cam channels therein in which the rollers travel.

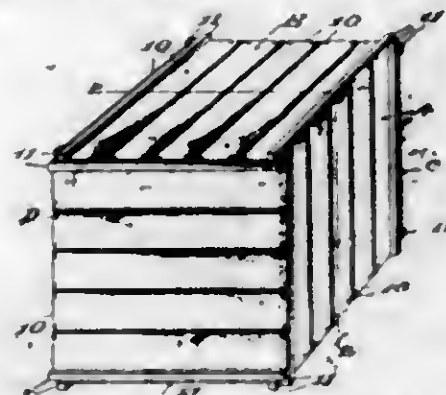
1,309,340. **ADJUSTABLE HAND RAKE.** FRANK W. RHINES, Lamont, Iowa. Filed July 18, 1917. Serial No. 180,363. 2 Claims. (Cl. 55-10.)



1. An adjustable rake including a head and a pair of teeth carrying arms mounted thereon pivotally, a handle connected to the head, a sleeve slidably disposed on the handle and having an upwardly extending threaded stem, a plate engaged on the stem and bearing on the upper face

of the handle, an adjusting nut on the stem and bearing on the plate, and connections between the sleeve and said arms.

1,309,341. **SELF-FASTENING CONTAINER.** JOSEPH H. RITTER, Hastings, Fla. Filed Oct. 23, 1918. Serial No. 259,326. 2 Claims. (Cl. 217-43.)



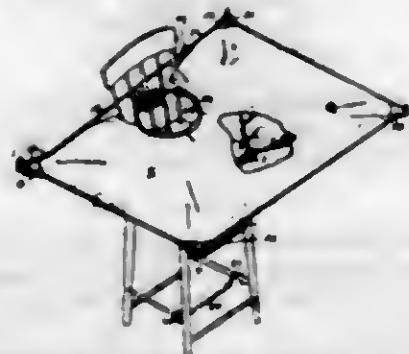
1. A knockdown container comprising a plurality of walls of equal dimensions and form and each consisting of end battens disposed in parallel relation and slats secured to and extending between the battens, the ends of the battens projecting beyond the endmost slats of each wall, the outer edge portions of the endmost slats of each wall engaging inwardly of the battens of two of the adjacent walls and the end slats of the said adjacent walls engaging inwardly of the battens of the first-named walls, one of the endmost slats of one of the walls being removable to permit the rocking movement of said wall and the removal of the same from the container.

1,309,342. **SLAT FOR HARVESTER-REELS.** WESLEY B. STATON, Gray, Saskatchewan, Canada. Filed Nov. 24, 1917. Serial No. 203,817. 2 Claims. (Cl. 56-22.)



1. In a harvester, a reel including pairs of radial arms, and slats each having one side thereof flat and its opposite side curved transversely from one longitudinal edge of the slat to the other to present a continuously smooth surface for contact with the grain, each slat being attached to the rear faces of a pair of corresponding radial arms.

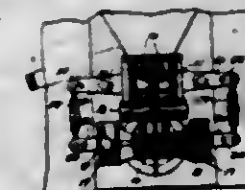
1,309,343. **CHILD'S PLAY-TABLE.** EDWARD G. THOMAS, Toledo, Ohio. Filed Feb. 28, 1918. Serial No. 219,711. 15 Claims. (Cl. 155-26.)



1. In a child's play table the combination of a chair, a bracket attached thereto, supporting arms pivotally con-

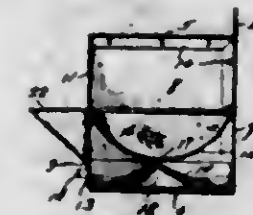
nected to said bracket, means for presteering said arms from being raised above a predetermined angle, and a flexible apron joining the ends of said arms.

1,309,344. **MECHANICAL STOKER.** JOHN VAN BUNT, New York, N. Y., assignor to Combustion Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 21, 1918. Serial No. 235,707. 4 Claims. (Cl. 110-47.)



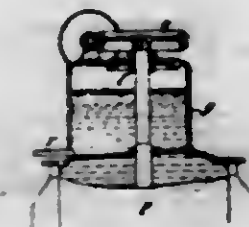
1. In a mechanical stoker, the combination of a retort, movable grate-bars extending from both sides thereof, rocking-bars for moving said grate-bars, a piston and piston rod located in a plane below the plane of said rocking-bars, counter-shafts in the horizontal plane of said piston and on opposite sides thereof, means carried by said piston rod for oscillating said counter-shaft as said piston rod reciprocates, crank-arms upon said counter-shafts and rocking-bars, and means for connecting those crank-arms located on the same side of said piston rod.

1,309,345. **NEST-BOX.** CHRISTINA M. VLARAK, Tabor, S. D. Filed Aug. 8, 1917. Serial No. 185,078. Renewed Dec. 21, 1918. Serial No. 267,883. 1 Claim. (Cl. 110-48.)



A hen's nest comprising a front section having parallel sides, a back section having a top and bottom, edge flanges on the back section top and bottom, means fastening the sides to the edge flanges, ears cut and bent upwardly from the top flange with the back section, the front section being cut away at its top and bottom edges, a removable drawer insertible in the lowermost cut away portion, and a nest bottom removably suspended between and by the front, back and sides.

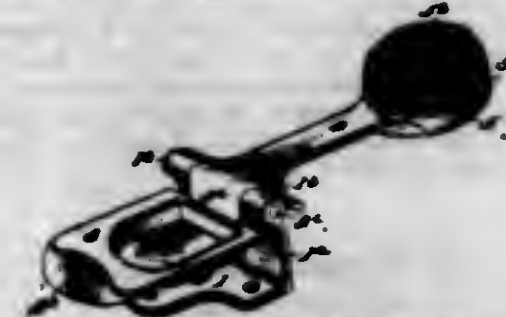
1,309,346. **OIL-COOLED ELECTRIC APPARATUS.** ALBERT WEINER, Berlin-Friedenau, Germany, assignor to Siemens-Schuckertwerke, G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed Mar. 23, 1915. Serial No. 16,476. Renewed Dec. 7, 1918. Serial No. 265,789. 6 Claims. (Cl. 175-361.)



1. An oil-cooled electric apparatus comprising an oil tank, a cover therefor, a member rotatably mounted in said tank and having an axle passing through said cover, an oil chamber arranged above said cover and forming an oil parking between said axle and said cover, and means, adapted to permit expansion of the oil in said tank, for permanently keeping said tank completely filled with oil.

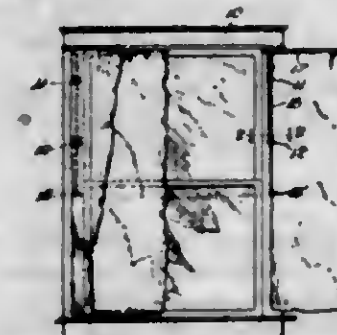
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1,309,347. **ATTACHMENT FOR OPERATING ACCELERATORS OF AUTOMOBILES, &c.** ALLEN A. WILLIAMS, Lovelock, Nehr. Filed Apr. 10, 1919. Serial No. 289,072. 5 Claims. (Cl. 74-81.)



1. An attachment for the purpose specified; comprising a member adapted to be secured to the floor of an automobile adjacent the accelerator and having an upstanding portion providing a brace for the heel of the operator; and a pedal member having a heel portion, a shank portion and a presser head; said pedal being hinged to the standard, the heel portion lying below the hinge pintle, and the presser head over the accelerator.

1,309,348. **CURTAIN-FIXTURE.** JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1918. Serial No. 266,939. 9 Claims. (Cl. 156-22.)

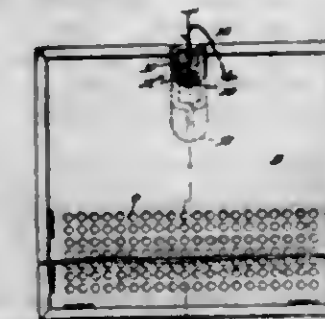


1. In a curtain fixture, the combination of bearing members adapted to be secured in vertically spaced relation to a side member of a window, a curtain-rod supporting member journaled in said bearing members and having at its upper end a horizontal arm, a clip secured to said arm, and a curtain-rod detachably held by said clip.

4. In a curtain fixture, the combination with a curtain rod formed with apertures in its front side, of an extensible side-drape rod formed with end hooks engaged with said apertures.

7. In a curtain fixture, a curtain-rod holder adapted to support the rod between the ends of the latter and consisting of a strip having on its upper and lower margins forwardly projecting lugs between which the curtain-rod is held at its upper and lower edges.

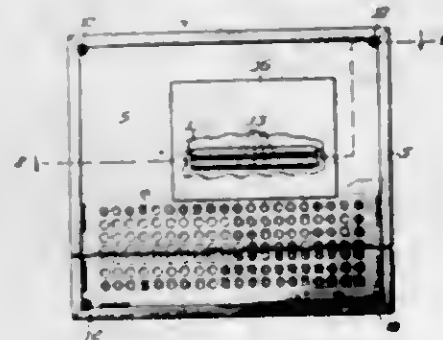
1,309,349. **SALES-BOARD.** CHARLES A. BREWER, Chicago, Ill., assignor to Charles A. Brewer & Sons, Chicago, Ill., a Partnership consisting of Charles A. Brewer, Nelson C. Brewer, Kenneth E. Brewer, and Everett R. Brewer. Filed Mar. 15, 1919. Serial No. 282,835. 5 Claims. (Cl. 46-50.)



1. A sales board of the character described, having formed in one edge thereof an inwardly extending pocket

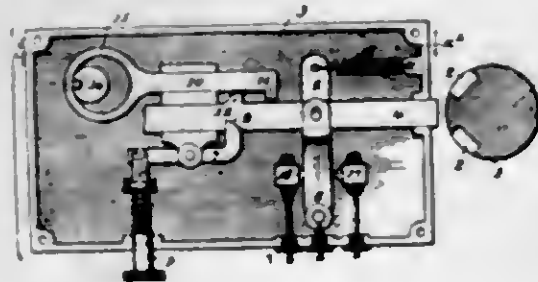
lying wholly within the surface boundaries of said board and shaped to receive and snugly fit a punch inserted therein.

1,309,350. SALES BOARD. CHARLES A. BREWER, Chicago, Ill., assignor to Charles A. Brewer & Sons, Chicago, Ill., a Partnership consisting of Charles A. Brewer, Nelson C. Brewer, Kenneth E. Brewer, and Everett R. Brewer. Filed Mar. 15, 1919. Serial No. 282,836. 4 Claims. (Cl. 46—56.)



1. A sales board of the character described, comprising a flat board having a perforated portion and an imperforate portion, said board further having holes in its rear side in the vicinity of the corners thereof and a pocket in one side of its imperforate portion, and supporting legs for said board adapted in the working position of the latter to be entered in said holes and in the idle position of said board to be stored in said pocket.

1,309,351. LOCKING MECHANISM. UENABE CENTONI, Chicago, Ill. Filed Oct. 28, 1918. Serial No. 260,021. 1 Claim. (Cl. 70—90.)

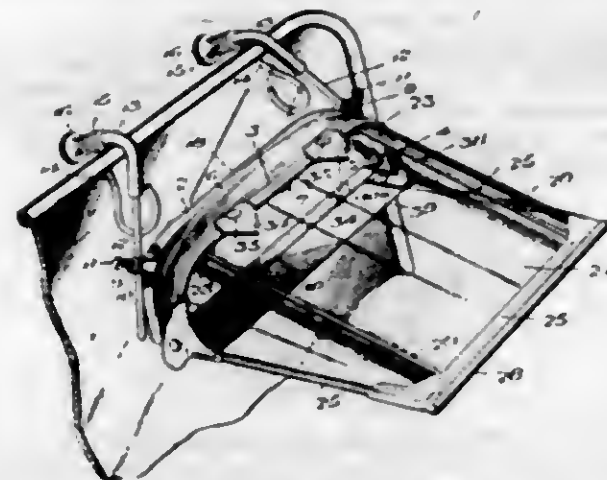


A locking mechanism for automobiles comprising, an including housing, a spring impelled locking bolt arranged in said housing and adapted for engagement in spaced peripheral notches in an automobile steering stem, said bolt having a lateral lug, a manually actuated dog adapted to engage and hold said bolt in a retracted position, a guard lock having an operating eccentric at its inner end, and an intermediate frame moving in parallel relation to said locking bolt and formed with a transversely elongated yoke opening at one end for engagement with the aforesaid operating eccentric, and a lateral lug at its other end for intermittent operative engagement with the lateral lug of the locking bolt, substantially as set forth.

1,309,352. ADJUSTABLE STORM AND LIGHT SHIELD. WILLIAM M. CHRISTOPHER, Amsterdam, N. Y. Filed Dec. 13, 1917. Serial No. 206,915. 12 Claims. (Cl. 21—148.)

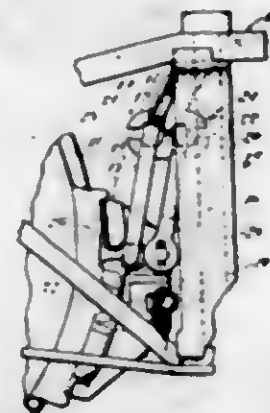
1. A storm and light shield comprising relatively movable inner and outer frames hinged together at their lower portions for relative adjustment, means carried by one of said frames for connecting it to a windshield, pliable or

flexible material connecting the frames constituting the top of the shield, means for securing the outer frame in



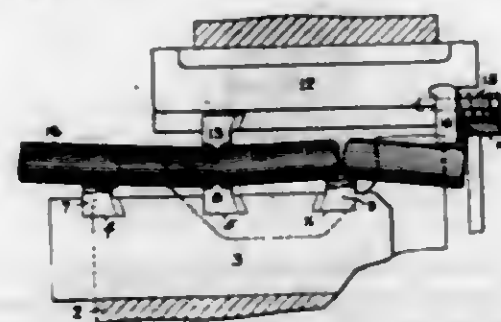
any desired position in relation to the inner frame, and an outstanding pane carried by the outer frame.

1,309,353. HANGER FOR RAILWAY-BRAKES. ALFRED COROXY, Chicago, Ill., assignor of one-half to Charles R. Cooper, Chicago, Ill. Filed July 19, 1916. Serial No. 110,046. 1 Claim. (Cl. 188—70.)



A brake construction, comprising a brake head, and means for supporting said brake head for swinging movement comprising two substantially parallel links, the upper end of each link having a flattened pivot portion, and a supporting bracket for said links having two bearing openings for said pivot portions, and restricted slots leading to said bearing openings, and open on opposite sides of said bracket.

1,309,354. METHOD OF BREAKING RODS OR BARS. THOMAS DONNELLY DALLMEYER, Pittsburgh, and GOVERNOR G. BROWN and JAMES R. SCHULTZ, Oakmont, Pa. Filed Sept. 16, 1918. Serial No. 254,197. 4 Claims. (Cl. 29—66.)



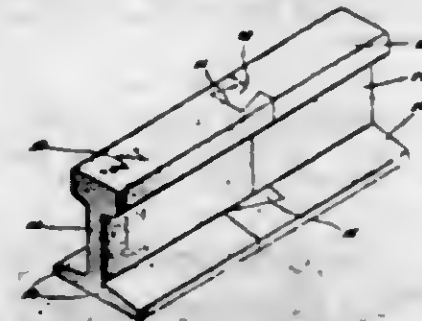
1. The method of breaking metal rods or bars consisting in nicking the rod or bar and by the same nicking stroke breaking off a section previously nicked.

1,309,355. POWER-DRIVEN CHUCK. CHARLES O. DOMINY, Lone Pine, Calif. Filed Oct. 29, 1917. Serial No. 199,110. 1 Claim. (Cl. 278—1.)



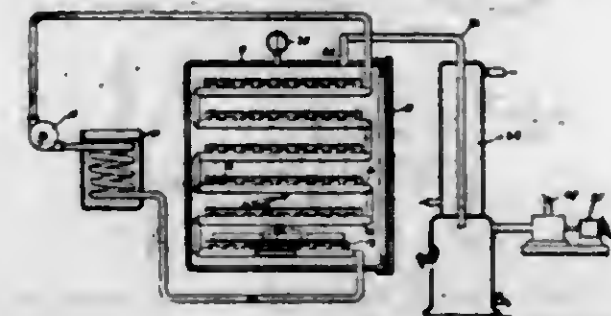
A power driven chuck including a non-rotatable casing forming a hand grip, one end of the casing having an internal shoulder, a driving clutch rotatable within the casing and having a shoulder engaging the first-named shoulder, a central longitudinal stem extending from the inner end of the clutch member, and a chuck member rotatable in the other end of the casing and having a clutch face on the inner end for engagement with the first clutch and a central opening in said end for the said stem.

1,309,356. RAIL-JOINT. FELIX ENGLER, Lemberg, Saskatchewan, Canada. Filed Feb. 4, 1919. Serial No. 274,855. 1 Claim. (Cl. 239—235.)



In a rail joint device, the combination with a pair of running rails comprising heads, stems and flanged bases, of a dovetailed recess formed in the head of one of said rails, a vertical V shaped groove formed in the stem of said rail, and a dove-tailed tenon extending from the base of said rail, the inner end of said tenon and the bottom of said recess being in vertical alignment, a corresponding tenon formed with the head of the mating rail, a beveled edge formed with the stem of said mating rail, and a dove-tailed recess formed in the flange of said mating rail, said dove-tailed recess being receptive of the corresponding tenon in the first named rail whereby the two rails are held against relative lateral movement and against longitudinal separation.

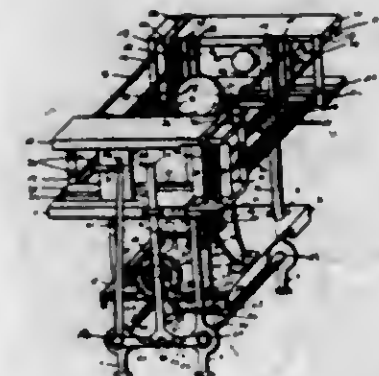
1,309,357. METHOD OF PRESERVING FOOD. KAUFMAN GEORGE FAIR and EDWARD M. FRANKEL, New York, N. Y., assignors to William G. Lyle, trustee, New York, N. Y. Filed Jan. 30, 1918. Serial No. 214,449. 3 Claims. (Cl. 90—5.)



1. The process of preserving meat, which consists in cutting it up and removing bone, excessive fat, etc., and placing it in a vacuum chamber immediately after slaughtering and without cooling, then heating it and maintaining its temperature at or a little below 60° C. by conduction of heat thereto from a contacting member, thereby driving off the moisture in said meat, maintaining the vacuum meanwhile, and in this way drying the meat with-

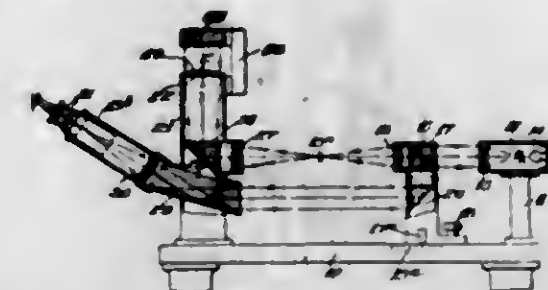
out melting the fatty elements nor making them rancid and without accelerating bacterial growth and without decomposition of the proteins and without producing a cornified exterior layer, and thus preserving the meat by the removal of water therefrom and the resultant increase of salt concentration therein.

1,309,358. AUTOMATIC STEREOPTICON-MACHINE. JOHN S. GAFFES, Kansas City, Mo. Filed July 30, 1917. Serial No. 183,575. 3 Claims. (Cl. 88—28.)



1. A stereopticon machine, consisting of vertically extending standards, oppositely disposed horizontally extending channel plates mounted on said standards and having their end portions cut away to form portals and provided with longitudinally extending inner channels communicating therewith and with outer non-communicating channels, oppositely disposed horizontally extending inverted channel plates mounted on said standards upwardly of said first mentioned plates and having their end portions cut away to form portals and provided with longitudinally extending inner channels communicating therewith and with non-communicating channels, oppositely disposed slideways connected between the end portions of said channel plates, slide members slidably mounted in the non-communicating channels in said plates and provided with yielding fingers normally interposed between the inner channels therein, a plurality of vertically extending revolvably mounted shafts mounted at diagonally opposite end portions of said plates and provided with fingers adapted to move to and fro at the entrance of said slideways, the inner shafts of said shafts being provided at their lower ends with sprocket wheels, a revolving cam, a lever pivotally mounted adjacent said cam and provided with a roller in engagement with the cam, a sprocket chain mounted on the sprocket wheels on said inner shafts of said shafts and having its one end connected with said lever and its opposite end connected with a retractile spring, a bar slidably mounted on the lower one of said plates and having a roller in engagement with said cam and with inwardly projecting pins, bell cranks mounted on said standards and having their vertical arms in engagement with said slide members and their horizontal arms in engagement with the pins on said bar, and means for revolving said cam.

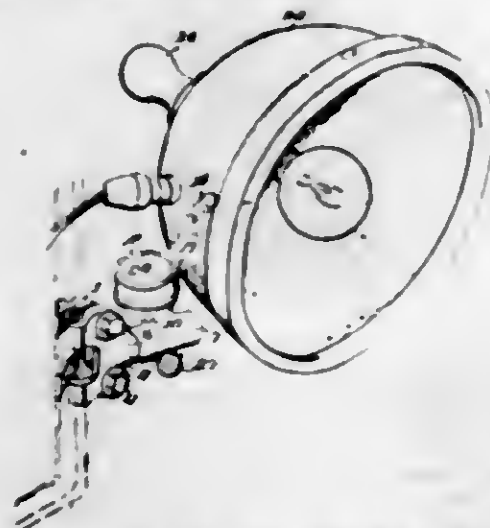
1,309,359. LENS-MEASURING INSTRUMENT. GRAY A. H. KELLNER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 9, 1916. Serial No. 135,942. 7 Claims. (Cl. 88—56.)



1. A lens testing apparatus comprising a target, a positive lens and a reflector arranged in spaced relation

and means forming an image of the target in front of the positive lens, means for supporting a lens to be tested between the latter and the reflector, and a second reflector between the target and its image directing the reflection of the target image laterally of the axis of the lens system and means for viewing the reflected image.

1,309,360. JOINT FOR COMBINED SPOT-LIGHT AND TROUBLE LAMP. CHARLES P. KLOOS, East Conemaugh, Pa., assignor of two-thirds to Joseph E. Zang, Johnstown, Pa. Filed Dec. 6, 1916. Serial No. 135,380. 3 Claims. (Cl. 248-7.)



1. In a device of the class described, an attaching member having a post, a member having a resilient split sleeve fitting the said post and provided at the opposite sides of its split with extensions having aligned apertures offset with respect to the longitudinal plane of the post for the passage of a clamping bolt, one of said extensions having a bearing, a supporting member having a laterally enlarged portion disposed in alignment with the extensions and provided with a socket to receive the bearing, a bolt fitted through the said extensions and through an opening in the enlarged portion of the supporting member, and a nut threaded upon the bolt and arranged when tightened to cause the said split sleeve to bind the said post and simultaneously to bind the bearing in the said socket, the tendency of the said sleeve to open serving to prevent backward turning of the nut.

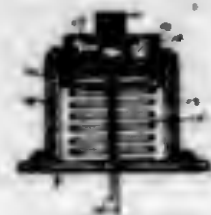
1,309,361. SWITCH-LOCK. KNUD KNUDSEN, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Nov. 11, 1918. Serial No. 262,038. 6 Claims. (Cl. 70-128.)



1. In an electric switch, the combination with the movable switch element and an operating member there-

for, of switch locking means comprising a relatively stationary stop, a stop carried by the operating member in position to pass the stationary stop in the movement of the switch operating member and a padlock engageable with one of said stops to block the movement of one stop past the other.

1,309,362. AUTOMATIC ALARM-VALVE. ADOLPH LEHMANN, Hicksville, N. Y., assignor to Mabel Crist, Hicksville, N. Y. Filed June 29, 1917. Serial No. 177,844. 3 Claims. (Cl. 200-27.)



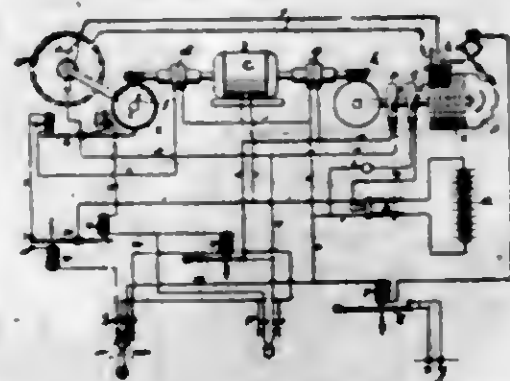
2. In a device of the character described, a push button having a contact means, a device for closing said contact and a resilient member for opening said contact, a casing in which said push button is adapted to move and a resilient member for returning said push button after each movement.

1,309,363. ILLUMINATIVE TOOL. EDWARD JOSEPH MEINKE, Chicago, Ill. Filed Mar. 22, 1919. Serial No. 284,324. 1 Claim. (Cl. 240-8.4.)



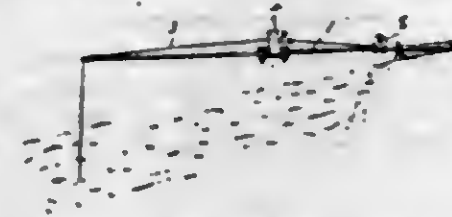
An illuminative tool, consisting of a handle-frame comprising a plurality of spaced apart parallel bars terminating at one of their ends in a transversely disposed connection and provided at their other ends with a longitudinally socketed tool holder, means to secure a tool in said socket, a ring mounted transversely on said bars near the tool holder, a lamp carrying body located between said bars and extended at its lamp carrying end into said ring, and a cap adjustably mounted on the frame to engage the opposite end of said body.

1,309,364. APPARATUS FOR TRANSMITTING SIGNALS. WILLIAM W. MILLER, Ardmore, Pa. Filed May 16, 1916. Serial No. 97,781. 7 Claims. (Cl. 177-364.)



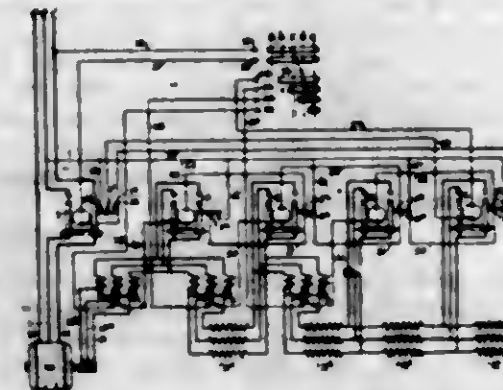
1. In an automatic signal transmitting apparatus, the combination with an electric motor, of a clutch actuable thereby, an indicator operable from the clutch, electrically controlled means to control the operation of the clutch by the motor, a series of circuits, means co-operating with the indicator to energize one of said circuits dependent upon the point of arrest of the indicator, and means operable upon the arrest of the indicator to intermittently open and close, in a predetermined manner, the said circuit so energized.

1,309,365. FISHING-SIGNAL. JOHN EWEY MONIGHAN, Fort Wayne, Ind. Filed Feb. 21, 1917. Serial No. 150,291. 6 Claims. (Cl. 43-31.)



1. In a device of the character described, the combination with a casing adapted to be secured upon a fishing rod, of an electric flash light of common construction provided with a slidable contact member projecting beyond the casing, said light being mounted in the casing, and means actuatable by a fishing line when pull is exerted thereon for moving the contact member of said light into operative position so as to close the circuit thereof and cause illumination of the light.

1,309,366. MOTOR CONTROL. NIELS L. MORTENSEN, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 16, 1917. Serial No. 162,360. 5 Claims. (Cl. 172-179.)



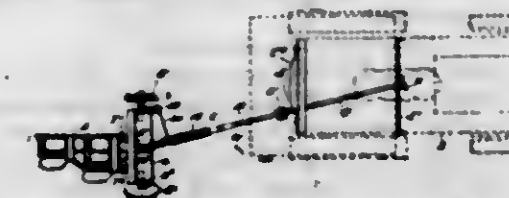
1. In a motor controller, in combination, a resistance and means to include different amounts of said resistance in circuit with the motor upon the occurrence of overloads, including a plurality of overload devices each to effect reclusion of a portion of the resistance, certain of said devices being dependent for response upon prior response of another of said devices.

1,309,367. REELING-MACHINE. LELAND A. PHILLIPS, Rochester, N. Y., assignor to Phillips Ribbon & Carbon Company, Rochester, N. Y., a Corporation of New York. Filed July 29, 1918. Serial No. 247,097. 4 Claims. (Cl. 242-55.)



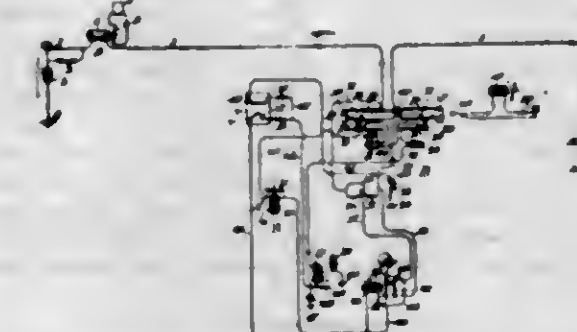
3. In a ribbon reeling machine a rotatable ribbon reel holder comprising a rotatable shaft, having an axial threaded aperture, and a thrust shoulder thereon, in combination with a reel holding member threaded to enter the threaded aperture and having a conical head thereon, to center and hold the reel against the shoulder.

1,309,368. DRAFT MECHANISM FOR EARTHWORKING IMPLEMENTS. WELDEN C. HART, Corpus Christi, Tex. Filed June 18, 1914. Serial No. 845,853. 13 Claims. (Cl. 21-137.)



1. The combination with a wheeled frame implement of draft mechanism connecting said implement with propelling means whereby said implement moves in a path at one side of the path of said propelling means, said draft mechanism comprising means for yieldingly transmitting pulling and pushing strains to said implement, and means actuated by said draft mechanism for maintaining said implement in the desired position with respect to the path of said propelling means.

1,309,369. ANSWER-BACK FOR SIGNALING SYSTEMS. CHARLES STANLEY RHODES, JR., Indianapolis, Ind. Filed Feb. 25, 1918. Serial No. 218,943. 8 Claims. (Cl. 177-353.)



1. A signaling system of the character described comprising a signal sending station and signal receiving station, an electromagnetic signal receiving device at the signal sending station, a line circuit extending between said signal sending and signal receiving stations, a code selector at the signal receiving station, a signal controlled thereby having a vibrating armature and co-operating contact, said code selector having means operable upon the response of said code selector to cause a continuous actuation of said signal during the maintenance of a closed circuit through said code selector, and means including an auxiliary contact under the control of the vibrating armature of said signal to effect changes in the circuit condition of the said line circuit to thereby transmit a signal to operate the signal receiving device at the signal sending station.

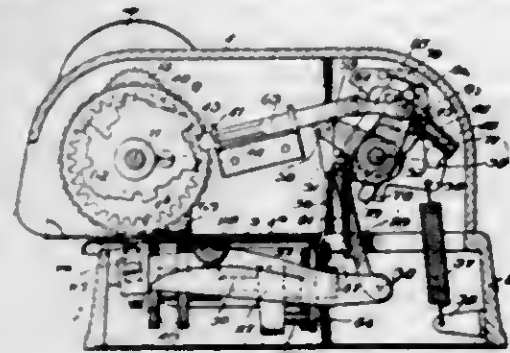
1,309,370. SHOE-POLISHING MACHINERY. PETER J. REMPE, Chicago, Ill. Filed Jan. 22, 1917. Serial No. 143,500. 8 Claims. (Cl. 51-17.)



1. A machine of the class described, comprising a table, a vertically-disposed wax holder normally resting on said table, a rod extending upwardly into said holder through

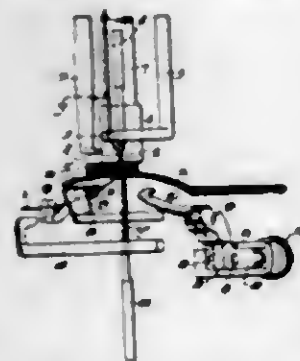
an opening in said table and being provided with a supporting plate at its upper end, means coacting with the lower end of said rod for feeding said plate upwardly, and means whereby said holder may be tilted back out of engagement with said table to thereby render access to said plate unobstructed.

1,309,371. CHECK-WRITING MACHINE. CHARLES H. SAMPHON, Rochester, N. Y., assignor, by mesne assignments, to Todd Protograph Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 8, 1915. Serial No. 40,429. 13 Claims. (Cl. 197-6.4.)



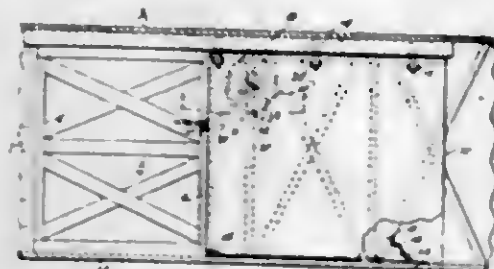
3. In a check writing machine, the combination with a casing having a forwardly opening slot, of a printing member mounted in the casing above the slot, a platen mounted in the casing below the slot, a lever pivoted between its ends and carrying the platen at its forward end, a horizontally arranged shaft supported by the casing above and in rear of the slot, a link eccentrically connected to said shaft and also connected to the rear end of the lever, a locking device for the printing wheel controlled by the shaft, and a spring acting on said shaft to return the platen to its normal position and release the locking device.

1,309,372. SEWING-MACHINE. GEORGE A. SCHICK, Philadelphia, Pa. Filed Oct. 13, 1917. Serial No. 190,425. 15 Claims. (Cl. 112-20.)



1. The combination in a sewing machine of a throat plate; a thread finger operative below said plate; and a wire having one end fixed to the finger and its opposite end formed to provide a thread guide carried by and movable with said finger.

1,309,373. PROTECTIVE DOOR FOR BOX-CARS. ROBERT E. STARS, Cleveland, Ohio. Filed Mar. 21, 1918. Serial No. 223,701. 11 Claims. (Cl. 268-6.)



2. The combination, with a doorway, of an outer door therefor, an inner door for the same doorway, means

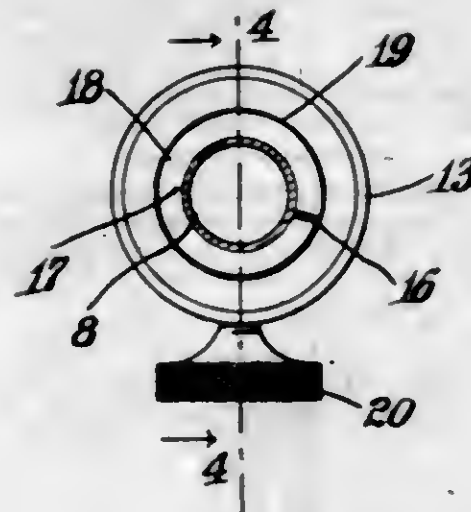
tending normally to close the inner door, a latch for holding the inner door open, and means for automatically releasing said latch upon material opening movement of the outer door.

1,309,374. PERCOLATOR. ALFRED H. S. SWAN, Rochester, N. Y., assignor to Rochester Stamping Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 14, 1918. Serial No. 222,268. 3 Claims. (Cl. 53-3.)



1. A basket for percolators, comprising a perforated container proper, a supporting and draining tube fixed to the bottom of the basket and having a restricted upper open end projecting above the side wall of the basket and adapted to hang upon the open end of the usual fountain tube, said draining tube being provided with a lateral overflow aperture, a retainer supported above the contents of the basket and having a perforated bottom and provided with an outer rim rising above the bottom of the overflow opening and an inner sleeve fitting the draining tube and terminating beneath said opening.

1,309,375. ELECTRIC-LAMP STANDARD. WILTON A. TAYLOR, Meriden, Conn., assignor to Edward Miller & Company, Meriden, Conn., a Corporation of Connecticut. Filed Feb. 24, 1919. Serial No. 278,653. 7 Claims. (Cl. 248-8.)



2. In an adjustable lamp standard, a tubular post, an extension post slidably mounted therein, a collar on the tubular post, a split ring seated in said collar and having a bearing on the extension post, means carried by the collar for exerting pressure on the split ring, and a friction guide between the tubular post and extension post.

1,309,376. CONTAINER. EINAR UFFELMANN, New York, N. Y. Filed Nov. 21, 1917. Serial No. 203,240. 1 Claim. (Cl. 221-60.)

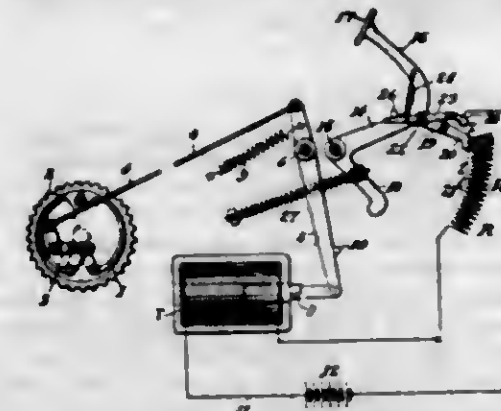
A container having a neck closed at the top and provided with a discharge opening in the side thereof com-

indicating with the interior, a closing tap comprising an impermeate sleeve linearly slidable upon said neck so as to cover said opening in its inner position and uncover



the opening in its outer position, the adjacent peripheral surfaces of neck and cap in the vicinity of the opening being at all times in close contact, and means for limiting the extent of outward movement of the cap.

1,309,377. BRAKE MECHANISM. CHARLES R. UNDERHILL, New Haven, Conn. Filed Mar. 12, 1917. Serial No. 154,297. 4 Claims. (Cl. 74-70.)



3. In a brake mechanism, the combination with a braking member, of an operating lever therefor, an electromagnet for actuating the lever, a pedal having means thereon for closing the magnet circuit and having a projection adapted to engage the lever to actuate the same after its initial actuation by the magnet.

1,309,378. COLLAR. JOHN M. VAN HEUREN, Boston, Mass. Filed July 31, 1917. Serial No. 183,673. 10 Claims. (Cl. 2-67.)



1. A soft folding or turn-down collar made up of a neck band portion and a folding or turn-down portion, one of said portions having a divided edge woven integral therewith between which the edge of the other portion is secured.

1,309,379. COLLAR. JOHN M. VAN HEUREN, Jamaica Plain, Mass. Filed Aug. 15, 1917. Serial No. 180,252. 8 Claims. (Cl. 2-67.)

8. A folding or turn-down collar made up of a neck band portion, a folding or turn-down portion, both of said portions being of multiply fabric and being united

together at the upper edge of the neck band, and said turn-down portion having a curvilinear fold line of in-



creased flexibility woven therein, and arranged at the upper edge of the collar to form the edge fold therefor; substantially as described.

1,309,380. COLLAR. JOHN MANNING VAN HEUREN, Boston, Mass. Filed Sept. 12, 1917. Serial No. 190,935. 2 Claims. (Cl. 2-67.)



2. A soft folding or turned-down collar made of a neckband portion and a folding or turned-down portion, one of said portions being made in part of multiply interwoven fabric and having one or more plies thereof extended to form part of the other portion of the collar, and one or more pieces of fabric secured to the multiply interwoven fabric, the edge portion of the multiply fabric and of the fabric secured thereto being intumed and bound by two rows of stitches, one passing through the intumed edges of both fabrics and one through the fabrics beyond the intumed edge of the multiply fabric; substantially as described.

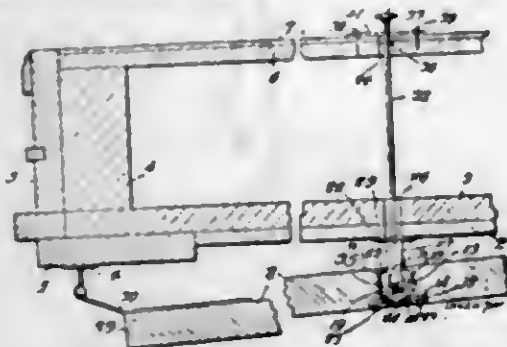
1,309,381. COLLAR. JOHN MANNING VAN HEUREN, Boston, Mass. Filed Sept. 12, 1917. Serial No. 190,936. 3 Claims. (Cl. 2-67.)



3. A soft folding or turned-down collar made up of a neckband portion and folding or turned-down portion, said collar being made up of a single piece of multiply interwoven fabric with one or more single pieces of fabric secured thereto and extending the full width of the neckband and folding portions, the multiply fabric of the neckband and folding portions being united by a curvilinear fold portion of increased flexibility, and the edges of the multiply fabric and added fabric being intumed and stitched by two rows of stitches, one passing through the

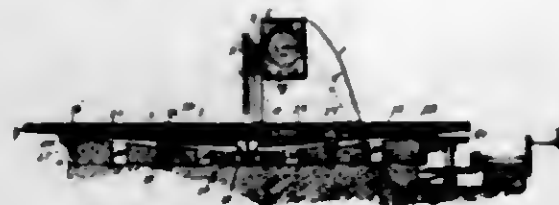
interned edges and one through the fabrics beyond the interned edges, whereby the roller is provided with a curvilinear set and the shape and stiffness of the collar is increased by the edge binding; substantially as described.

1,309,382. SHUTTER-HOLDER. GEORGE D. WILSON, Plainfield, N. J. Filed Feb. 14, 1919. Serial No. 276,961. 9 Claims. (Cl. 16-23.)



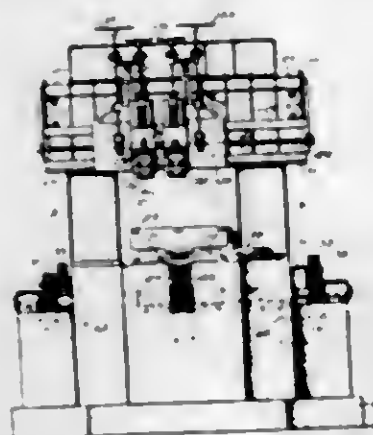
4. The combination in a shutter holder of spring locking means carried in the body of the shutter having spring jaws also lying within the body of the shutter, a co-operating hollow lug mounted on the house and provided with fixed locking surfaces to co-operate with the spring jaws carried by the shutter, and a releasing rod mounted to the hollow lug and adapted to be operated from the interior of the house to release the spring jaws from the fixed locking surfaces on the hollow lug.

1,309,383. MACHINE TOOL. LUCIEN I. YEOMANS, Chicago, Ill., assignor to T. K. Webster, trustee, Chicago, Ill. Filed Aug. 9, 1917. Serial No. 185,257. 7 Claims. (Cl. 77-4.)



1. A machine tool comprising a bed having a plurality of metallic bearing members, a work support constructed of monolithic reinforced concrete and having metallic bearing members engaging with the bearing members of the bed to mount the support for movement upon the bed, and means for supporting a tool above the work support.

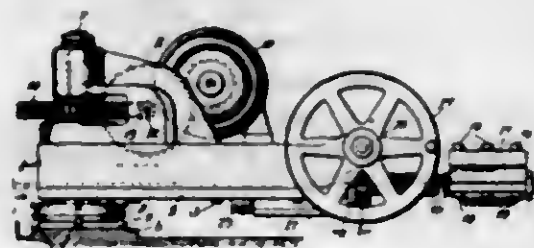
1,309,384. PLANE. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 30, 1918. Serial No. 225,637. 12 Claims. (Cl. 90-35.)



1. A planer having, in combination, a bed, bearings, and a head-beam, all of monolithic reinforced concrete, and a platen reciprocable on the bed.

6. A planer having a bed, a series of way sections secured to the bed in alignment with each other, each way section comprising two rail sections and transverse webs joining said rail sections, openings being provided between said transverse webs, a platen having slides arranged to slide upon said rail sections, a rack secured to the lower side of said platen, a gear wheel carried by the bed and meshing with said rack, and means for driving said gear wheel, a longitudinal passageway being formed in the bed between the rails to afford access to the rack in conjunction with the openings between said transverse webs.

1,309,385. PAD-FACING MACHINE. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 23, 1918. Serial No. 236,121. 7 Claims. (Cl. 90-12.)



1. A machine for facing a pad upon a lathe or the like provided with carriage ways and a pad between said ways, said pad-facing machine having, in combination, a carriage adapted to be mounted upon the ways of the lathe, a bracket adapted to be clamped to said ways, a feed screw and a nut on the feed screw, one of said screw elements being rigidly connected to one of the two above-mentioned parts (namely the carriage and the bracket) and the other of said screw elements being rotatably connected to the other of said above-mentioned two parts, means for rotating the last-mentioned screw element, a pad-facing tool on said carriage, and means on the carriage for actuating said tool.

1,309,386. METHOD OF MANUFACTURING LONG SECTIONAL MACHINE-BEDS. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 23, 1918. Serial No. 236,122. 2 Claims. (Cl. 29-148.)

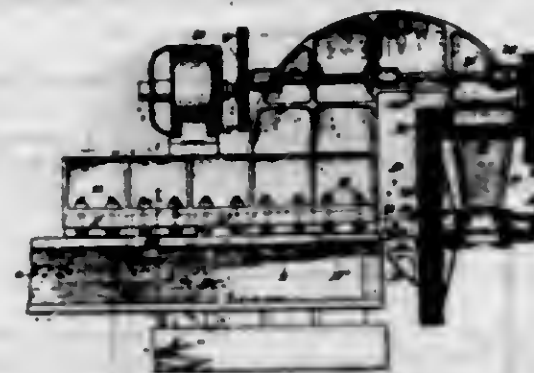


1. The method of manufacturing the long sectional bed of a machine tool provided with a carriage way, which consists in facing the ends of the bed-sections, then securing the sections together with the faced ends abutting each other in the relation which they are finally to occupy, and then planing said sections to form the way thereon.

1,309,387. END-FACING MACHINE. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1918. Serial No. 236,711. 18 Claims. (Cl. 82-4.)

1. A machine for facing an end of a machine bed having carriage ways upon the upper side of said bed, said end-facing machine having, in combination, a sub-base, means for adjustably mounting the sub-base upon the carriage ways, means for securing the sub-base to the carriage ways in adjusted position, a frame arranged to be rigidly secured to and above the sub-base, a member rotatably mounted in said frame opposite one end of the

machine bed, said member being arranged for rotation in a plane approximately perpendicular to the sub-base, cut-



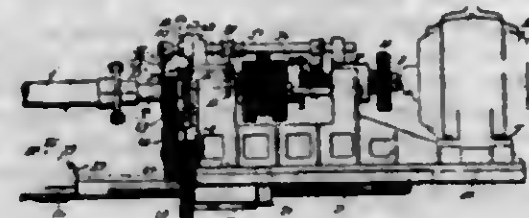
ting means carried by said member to face said end of the bed, and means on said frame for rotating said member and feeding the cutting means across the end of the bed.

1,309,388. PROCESS OF MANUFACTURING THE BEARINGS OF GUN-BORING MACHINES. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 27, 1918. Serial No. 242,190. 6 Claims. (Cl. 29-148.)



1. The process of manufacturing the head-stock spindle bearings of a gun-boring machine or the like, which consists in supporting a boring-bar in a guide located adjacent to one of said bearings, utilizing said boring bar as a mandrel to support a temporary bearing bushing in said adjacent bearing, babbitting said bushing in place in said adjacent bearing, advancing the boring bar into the other bearing and there utilizing the boring bar as a mandrel to support a bearing bushing, babbitting said last mentioned bearing bushing permanently in place, removing the temporary bushing and operating the boring bar to bore out the bearing in which said temporary bushing was located while the boring bar is supported in the other bearing bushing and said guide.

1,309,389. BORING MACHINE. LUCIEN I. YEOMANS, Chicago, Ill., assignor to Amalgamated Machinery Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 12, 1918. Serial No. 266,408. 3 Claims. (Cl. 77-55.)



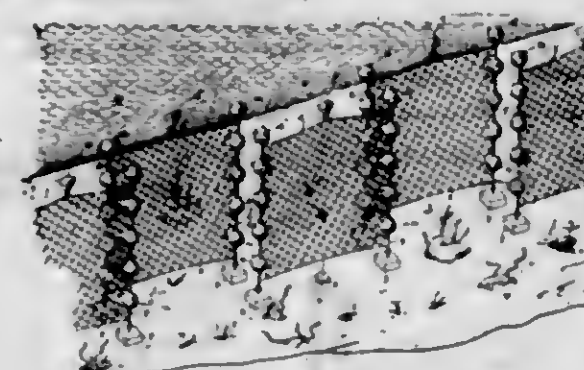
1. A machine for boring a bearing of a machine having carriage ways, said first-mentioned machine having, in combination, a carriage adapted to be slidably supported and guided by said ways, a carriage-feed screw and a co-operating nut, one of said screw elements being rotatably carried by the carriage, means for clamping the other of said screw elements to the carriage ways, a boring-bar spindle on the carriage, and a motor mounted on the carriage and operatively connected to the spindle and the rotatable screw element.

1,309,390. ELECTROMAGNETIC SPEED-INDICATOR FOR CREAM CLARIFIERS AND SEPARATORS. HOMER J. YOUNG, Dayton, Ohio. Filed Dec. 9, 1918. Serial No. 265,877. 5 Claims. (Cl. 264-13.)



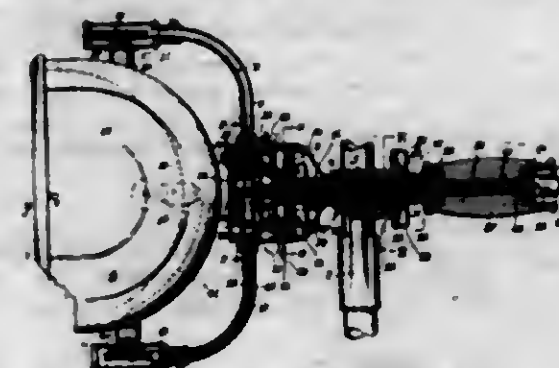
1. In a device of the type specified, the combination with a revoluble bowl, of magnetic means placed at a point in proximity to the outer periphery of said bowl where the latter, during operation, will cut the flux of said magnetic means, to exert a drag upon the said magnetic means, and a device operated by said magnetic means to indicate the speed of rotation of said bowl.

1,309,391. MEANS FOR DESTROYING ENEMY SUBMARINE CRAFT. ARTHUR ADKINS, Leicester, England. Filed Mar. 7, 1918. Serial No. 221,000. 4 Claims. (Cl. 102-3.)



1. An explosive boom adapted for catching and destroying submarine craft, comprising a plurality of vertical strings of mines, said strings being spaced apart from one another and anchored, and connecting means between one string and another adapted to intercept submarine craft traveling submerged and when engaged and dragged upon by said craft, to draw one or more mines of the adjacent connected strings into close proximity to said craft to facilitate the destruction of the latter by explosion of the mine or mines, substantially as described.

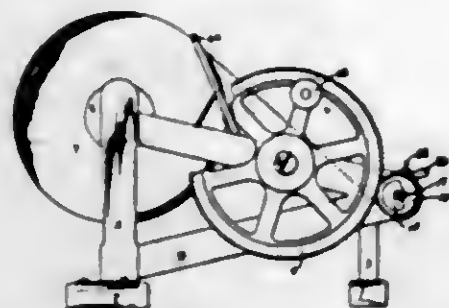
1,309,392. SIGNAL-LAMP. CHARLES E. ARCHER and EDWARD C. HUMPHREYS, Detroit, Mich. Filed June 6, 1918. Serial No. 238,468. 7 Claims. (Cl. 240-61.)



1. A signal lamp comprising an arm, a yoke at the outer end thereof held for rotation about the axis of said arm, a lamp transversed in said yoke, a handle at the inner end of said arm adapted to be reciprocated in one direction and rotated to effect a movement of said

yoke and reciprocated in the opposite direction and rotated to effect a movement of said lamp on its transverse, and a switch at said yoke operatable from said handle and adapted for controlling the illumination of said lamp.

1,309,393. PAPER-ROLLING MACHINE. GEORGE L. CARTER, near Dayton, Ohio. Filed Jan. 17, 1919. Serial No. 271,902. 5 Claims. (Cl. 242-35.)



2. In a paper rolling machine, the combination with a frame, a roll of paper rotatably mounted in the rear end thereof, of a shaft adapted to be inserted in the front end of said frame to receive the free end of said paper, a pinion, a sleeve upon which said pinion is loosely mounted and through which said shaft is projected into the machine, a power gear in mesh with said pinion, and means for detachably connecting said shaft to said pinion, whereby said shaft may be rotated for the purpose of winding upon it a roll of paper of desired size.

1,309,394. NON REFILLABLE BOTTLE. STEVEN CHRISTENSEN, Astoria, Oreg. Filed July 1, 1918. Serial No. 242,000. 2 Claims. (Cl. 215-77.)



1. In combination, a non-refillable bottle comprising a body which tapers at its lower end to form a point and formed at its top with a neck open at its end, the top edge of the neck being inclined, the upper portion of the body having an auxiliary opening, and a one piece sealing element having a cap at opposite ends to fit over and close the opening in the neck and the auxiliary opening in the body.

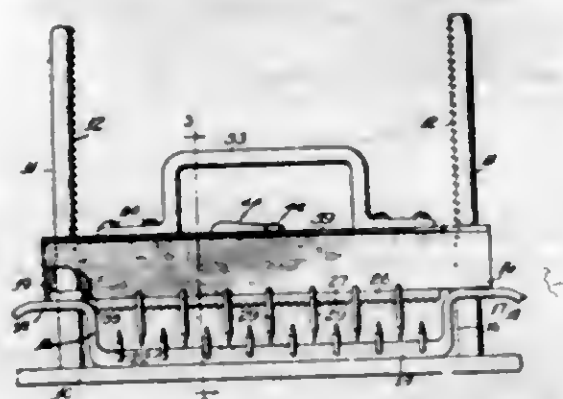
1,309,395. REINFORCING MEANS FOR ANGLE-LOCKS. ROGER H. CLAPP, Philadelphia, Pa. Filed Oct. 31, 1918. Serial No. 260,462. 2 Claims. (Cl. 137-75.)



2. As an article of manufacture a sleeve for reinforcing the junction between a train line pipe and an angle cock

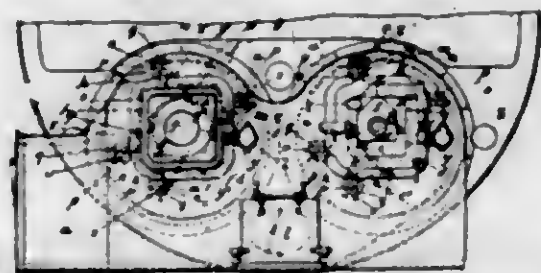
having screw-threaded engagement therewith, the sleeve having an interior bore to receive and fit the train line pipe and having at one end an enlarged hollow head having interior screw-threads to engage with the angle cock.

1,309,396. WORK-HOLDER FOR SLICING-MACHINES. ALFRED M. DEMUTH, Chicago, Ill., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed Nov. 10, 1917. Serial No. 201,193. 15 Claims. (Cl. 17-14.)



1. The combination of a main support, uprights projecting thereabove, an article support movable upon the uprights, a clamping member also movable upon the uprights and cooperating with the article support, means for holding the clamping member in its adjusted position, and co-planar perpendicular pins on the article support and clamping member, the outer face of the teeth being substantially flush with the edges of the article support and clamping member.

1,309,397. FURNACE-FRONT FOR LIQUID-FUEL FURNACES. THORNYCROFT DONALDSON and ROBERT MACKIE, Woolston, England, assignors to John I. Thornycroft & Company Limited, Westminster, England. Filed Jan. 24, 1917. Serial No. 144,249. 8 Claims. (Cl. 158-15.)

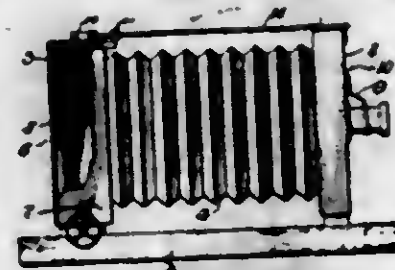


1. In a liquid fuel furnace supplied with forced draft, the combination with the front end of the furnace of an air supply chamber arranged opposite the furnace and provided with air inlet openings, a door closing an opening in the front end of the chamber, means for spraying liquid fuel into said chamber, non-return valves controlling said air openings, fastening means for locking the door in the closed position and means adapted to close the air valves in the act of moving the fastening means into a position to unlock the door.

1,309,398. METHOD OF ASCERTAINING CAMERA-STOPS. FLETCHER BOUTWITT, Detroit, Mich. Filed Aug. 23, 1918. Serial No. 251,060. 7 Claims. (Cl. 95-64.)

1. The method of ascertaining the combination of stops for the production of half tone dot negatives, by a plurality of exposures in a camera, having a lined screen and adapted to have a sensitized plate placed in the rear thereof, a lens movable to and from the screen, a tape between the lens and said screen, an adjustable dia-

phragm for the lens, and a scale adjacent said diaphragm, which method consists in first ascertaining the size of a diaphragm opening, reducing the size of the opening to thousandths of an inch, graduating the diaphragm scale



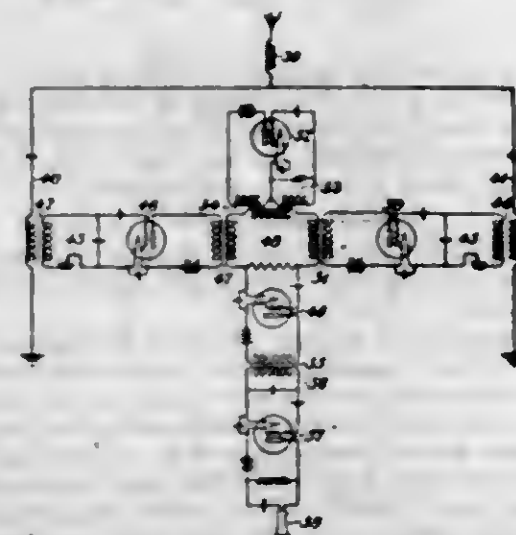
into such thousandths of an inch, ascertaining the screen opening, reducing the size of the screen opening to thousandths of an inch and graduating the tape into such thousandths of an inch so that the diaphragm may be set according to the camera extension.

1,309,399. ATTACHMENT FOR APPLYING AND REMOVING CAPS FROM JARS. JOHN C. DURHAM, Reno, Nev. Filed Dec. 19, 1918. Serial No. 267,487. 1 Claim. (Cl. 65-20.)



A wrench including an elongated body formed at one end with a handle and terminating at its opposite end in an integral curved jaw section formed on its inner curved face with teeth, said body member being provided between said handle and jaw with a relatively flat connecting portion integral with said jaw and handle and provided with an elongated opening, a flexible band, means for securing one end of said band to said connecting member, said band arranged with its free end passing through said opening and forming a loop at one side only of said jaw with the free portion of said band forming loop lying adjacent the inner curved toothed face of said jaw, whereby said curved jaw partially embraces the member operated on and forces the free end of the band forming the loop into tight frictional contact with the member operated on.

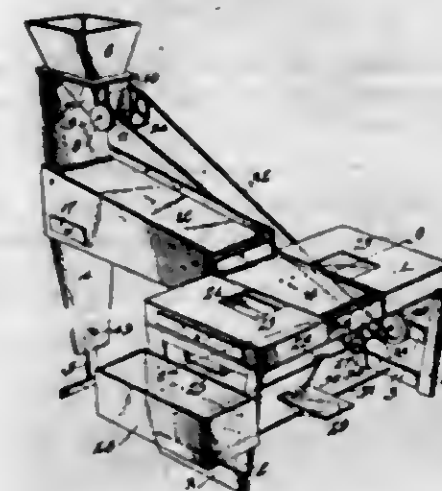
1,309,400. RADIOFREQUENCY INTERFERENCE-RE-ANCE. LLOYD EMERICH, Hollis, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 23, 1916. Serial No. 127,170. 8 Claims. (Cl. 250-20.)



1. In a receiving system, a receiving circuit resonant to reception frequency, an auxiliary circuit resonant to

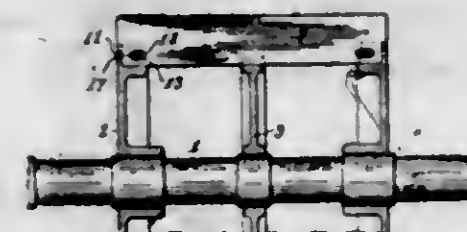
another frequency, means to transform the radio frequency oscillations of one of said circuits to a different frequency, means to change the oscillations of both circuits to the same amplitude and decrement and a receiving apparatus so connected with respect to said circuits that the said oscillations from said circuits will be impressed thereon in opposite phase relation.

1,309,401. BEAN-SORTING MACHINE. HOWARD FOGELSONGER, Clarence, N. Y. Filed Aug. 31, 1918. Serial No. 117,853. 2 Claims. (Cl. 130-18.)



1. In a bean sorting machine, the combination of a feeding device for supplying the beans to be sorted, a separating belt having an upper forwardly inclined operative stretch which has its rear end arranged below said feed device to receive the beans therefrom, a picking belt having an upper horizontal operative stretch the rear part of which receives the beans from the front part of said separating belt and upon which the beans are sorted by the operators, the operative stretch of said separating belt moving rapidly rearwardly for carrying any flat material or broken beans over the upper rear turn thereof, the space above the same being wholly unobstructed to permit free passage of the beans.

1,309,402. FASTENING MEANS FOR BEATER-ROLL BARS. CLARENCE P. FOLSON and LEE E. HALTEMAN, Dayton, Ohio, assignors to Dayton Beater and Roll Co., Dayton, Ohio. Filed Mar. 1, 1919. Serial No. 280,009. 3 Claims. (Cl. 92-22.)



1. A member having pockets therein, bars provided with openings and lying in said pockets, wedges having lugs thereon in said pockets and adapted to hold said bars in position, said lugs lying in said openings, and a filling of soft metal in said pockets adapted to hold said wedges.

1,309,403. TYPE-WRITING MACHINE. TANDY I. FORT, Dallas, Tex., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 1, 1918. Serial No. 250,387. 29 Claims. (Cl. 197-160.)

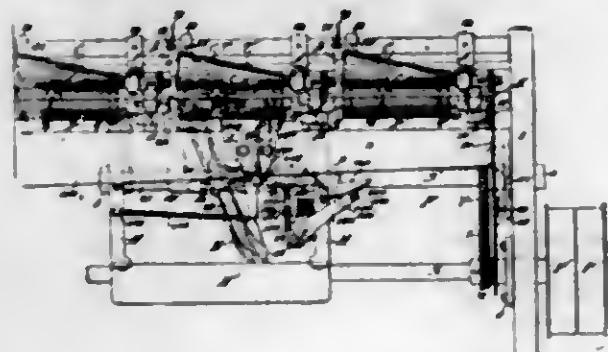
1. In a typewriting machine, the combination with ribbon reversing mechanism including a gravity operated

weight associated with a detachable spool, of means for automatically controlling said weight independently of



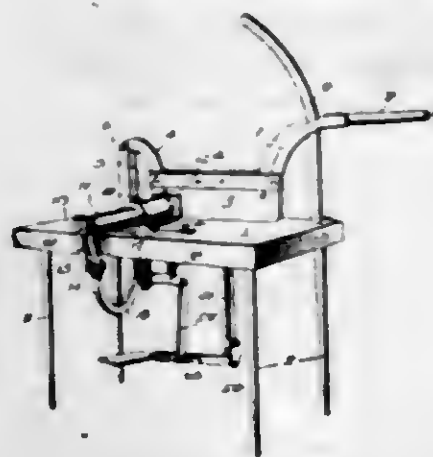
the ribbon reversing operation, said means becoming effective when said spool is detached to hold said weight in inoperative position.

1,309,404. WINDING-MACHINE. GEORGE W. FOSTER, Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 3, 1917. Serial No. 178,393. 16 Claims. (Cl. 242-44.)



5. In a winding machine, the combination with a sliding crosshead, of means to reciprocate said crosshead, a lever pivoted on the crosshead, a thread-guide connected to be traversed from the lever, controlling means for displacing the lever about its pivot on the crosshead during its reciprocation therewith, a cam for operating said controlling means, and a rotating crank-arm adapted to intermittently engage the cam to shift the position of the controlling means whereby to displace the lever on the crosshead to cause a gradual shortening and lengthening of the traverse of the thread-guide during recurring cycles of its operation.

1,309,405. BRICK-CLEANING MACHINE. NELSON T. FULLER, New Bedford, Mass. Filed Dec. 16, 1918. Serial No. 267,090. 3 Claims. (Cl. 125-26.)



1. In a brick cleaning machine, a base, cutting means associated with the base, brick engaging means on the base slidable in a plane transversely of the plane in which

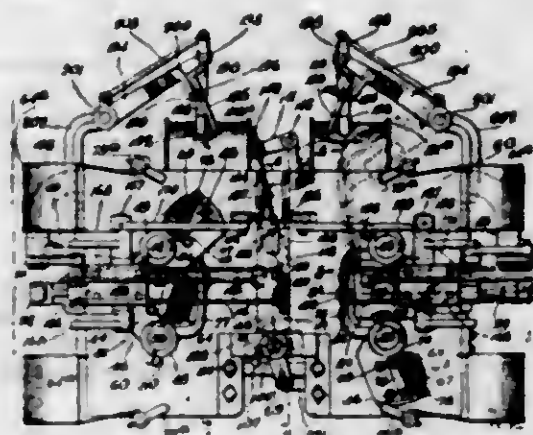
the cutting means operates, a foot operated depressible member, and means to connect said member to the brick engaging means so as to enable the latter to be adjustably and instantaneously actuated by and upon depression of the foot operated member.

1,309,406. DINING-TABLE CONNECTOR. JOHN F. GILCHRIST, Chicago, Ill. Filed Aug. 13, 1917. Serial No. 185,823. Renewed Mar. 27, 1919. Serial No. 285,639. 6 Claims. (Cl. 173-334.)



3. A dining table cluster having a base plate adapted to lie on the table, a cap adapted to overlie the table cloth, a plurality of plug-and-socket connectors, radiating from the cap in a horizontal direction, and a cone and a socket, one fastened to the base plate and the other to the cap and being of considerable diameter, whereby, when the cap is lowered, it will automatically be centered relatively to the base plate, supply conductors, a ring contact, and a finger, one fastened to the base plate and the other to the cap in position to mutually engage when the cap is lowered onto the base plate, the ring and finger and the cone and socket being conductive and connected to the supply conductors, and plug-and-socket connectors for establishing the circuit when the cap is lowered onto the base.

1,309,407. COUNTER-SKIVING MACHINE. REuben P. GRANT, Manchester, N. H., assignor to W. H. McElwain Company, a Corporation of Massachusetts. Filed Oct. 1, 1917. Serial No. 194,150. 65 Claims. (Cl. 12-61.)

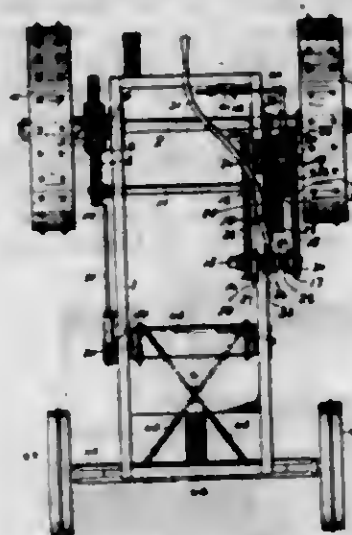


2. A counter skiving machine comprising means to receive counter stock fed forward, a gage for limiting such feeding movement, an oscillating cutter member having a blade extending transversely of said stock, and intermittently acting means to oscillate said member.

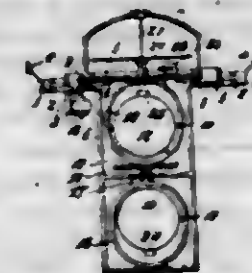
1,309,408. TRACTOR. HILLIS A. HARRAH, Kansas City, Mo. Filed Sept. 12, 1918. Serial No. 253,074. 3 Claims. (Cl. 74-59.)

1. In a tractor, two traction wheels, a driving shaft, no intermediate shaft, means actuated by the intermediate shaft for driving said traction wheels, two sprocket wheels rotatable on the driving shaft, clutch mechanism adapted for alternate driving engagement with the two sprocket wheels and rotatable with the driving shaft, a third rotatable shaft, two sprocket wheels secured respectively to the intermediate shaft and to the third shaft, two sprocket chain belts respectively connecting the sprocket wheels on the driving shaft with the other two sprocket wheels, two

spur gear wheels meshing with each other and mounted one on and secured to the third shaft, the other being rotatable on the intermediate shaft; and manually operated means for releasably locking the intermediate shaft and the said gear wheel which is mounted thereon together.

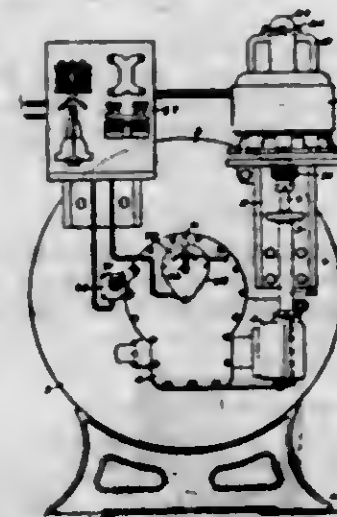


1,309,409. GYRO-COMPASS. JAMES BLACKLOCK HENDERSON, Lee, England. Filed Jan. 22, 1917. Serial No. 143,682. 7 Claims. (Cl. 74-78.)



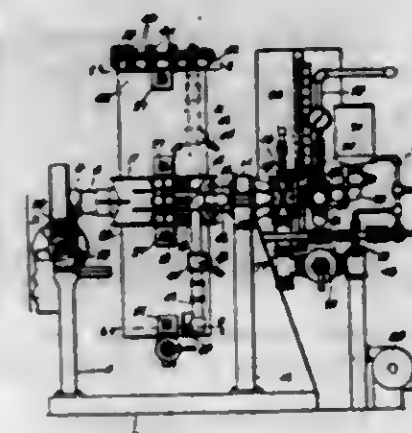
1. A gyro-compass comprising in combination two gyroscopes, one in stable and one in unstable equilibrium, means preventing the inertia stresses of the pendulum being impacted to the gyroscopes and a torsional connection between the gyroscopes whereby their mutual reactions damp the oscillations of the compass and prevent deviation due to lateral movement.

1,309,410. DRIVING AND REVERSING MECHANISM. WILLIAM A. E. HENRICI, Dorchester, Mass., assignor, by mesne assignments, to Louis F. Buff, Jamaica Plain, Mass. Filed July 23, 1914. Serial No. 852,715. 13 Claims. (Cl. 74-50.)



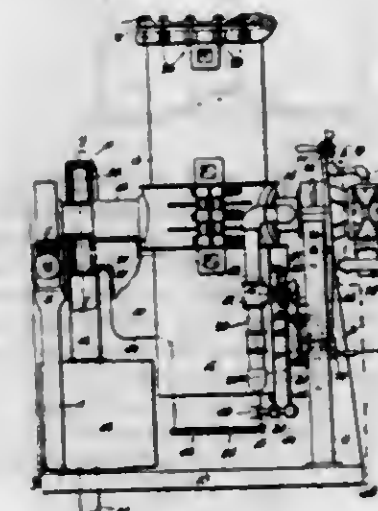
1. In driving and reversing mechanism, a substantially vertically rotatable motor provided with self-aligning bearings, and suspended on one of said bearings.

1,309,411. WASHING, DISINFECTING, AND DYEING MACHINE. WILLIAM A. E. HENRICI, Boston, Mass., assignor to Henrici Washing Machine Company, a Corporation of Massachusetts. Filed June 26, 1916. Serial No. 105,917. 3 Claims. (Cl. 65-18.)



1. A machine for treating fabric with liquid comprising a cylinder of a length considerably greater than its width, mounted to swing on an axis transverse to the length of said cylinder, outlet pipes communicating with the end portions of said cylinder, and means actuable by gravity to control passage through said pipes.

1,309,412. WASHING-MACHINE. WILLIAM A. E. HENRICI, Roxbury, Mass., assignor to Henrici Washing Machine Company, a Corporation of Massachusetts. Filed Dec. 22, 1916. Serial No. 138,480. 15 Claims. (Cl. 68-18.)

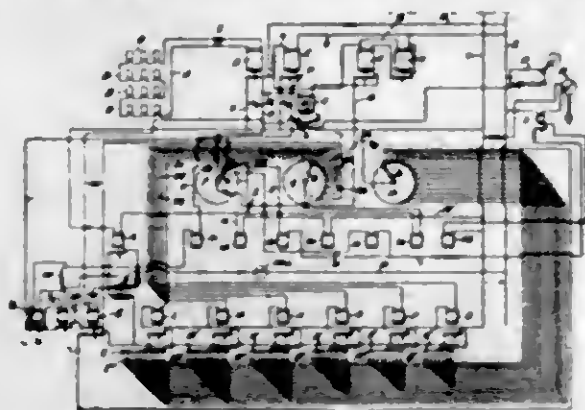


1. In a washing machine the combination of a wash-tank, means for imparting a rotary movement thereto, an exhaust chamber in communication therewith with means for discharging the fluid contents of said wash-tank into said exhaust chamber during the first half of a revolution of said wash-tank and for discharging the said fluid contents from said exhaust chamber during the second half of a revolution of said wash-tank.

1,309,413. RECORDING SYSTEM AND APPARATUS. RICHARD M. HORKINA, Rutherford, N. J., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 28, 1917. Serial No. 209,258. 8 Claims. (Cl. 234-37.6.)

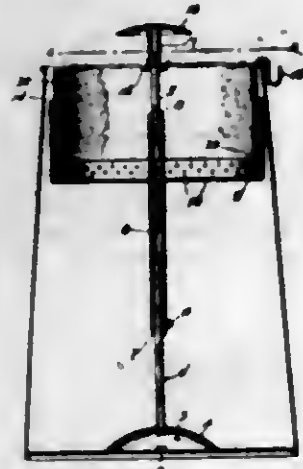
1. In a recording system, the combination with signaling means adapted for producing signals comprising a plurality of groups of impulses, of a plurality of recording means each comprising a plurality of spark points adapted to project electric sparks and thereby to make records on a

recording surface, and selecting means adapted to be actuated by the signals of said signalling means and adapted



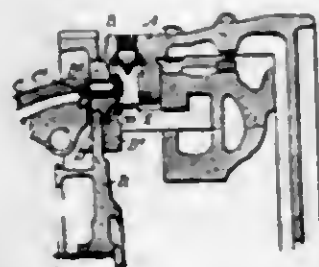
to select a particular recording means and a particular spark point of that recording means, under control of said signals.

1,309,414. ADJUSTABLE COFFEE-PERCOLATOR. Louis B. Huxino, Philadelphia, Pa. Filed June 1, 1918. Serial No. 237,655. 3 Claims. (Cl. 53-3.)



1. An adjustable coffee percolator, embodying, in combination, a hollow supporting and vapor gathering base, a longitudinally extensible tube rising from said base and comprising three telescopic sections the lower one of which is attached to said base, a coffee grounds receptacle consisting of a lower reticulated section fast upon the next higher section of said tube and adjustable up and down therewith, and an upper section fast on the upper section of said tube and adjustable up and down therewith to vary the capacity of the receptacle as a whole, and means for supporting said upper section of the receptacle on the rim of a coffee pot.

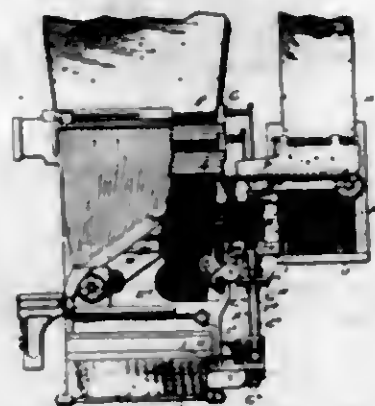
1,309,415. SLUG-CASTING MACHINE. David S. Kennedy, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Apr. 12, 1917. Serial No. 161,413. 8 Claims. (Cl. 199-47.)



1. In a typographical casting machine, the combination of a slotted mold having an aligning surface located at a given distance from its datum line, and a cooperating line of matrices having aligning surfaces to engage that of the mold and formed in their mold engaging edges with routing notches containing at their bottoms formative cav-

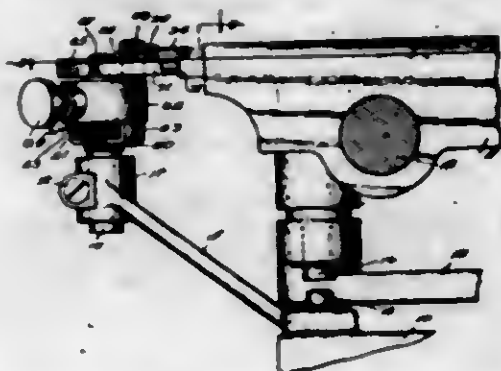
ities or characters situated with reference to a common datum line, the distance between the aligning surfaces of the matrices and their datum line being greater than that between the aligning surface of the mold and its datum line to such an extent as to prevent the outward extension of the routing notches beyond the inner face of the mold wall adjacent the datum line of the matrices.

1,309,416. TYPOGRAPHICAL MACHINE. David S. Kennedy, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 3, 1917. Serial No. 200,031. 35 Claims. (Cl. 199-19.)



1. In a typographical machine, the combination of two matrix magazines arranged in tandem, escapements for each of the magazines and operating devices therefor, two selecting keys, one for each magazine, and connections from each of the keys to the operating devices whereby matrices may be released at will from either magazine upon the actuation of the corresponding key.

1,309,417. RINDING-KNIFE FOR SLICING-MACHINES. August R. Luachka and Joseph Folk, Laporte, Ind., assignors to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed May 31, 1918. Serial No. 237,438. 10 Claims. (Cl. 17-24.)



1. In combination, a rotary member, a rinding knife eccentrically pivoted on said member, a second pivotal support for said rinding knife, and a threaded member for vertically adjusting said rotary member and for holding said member in its various positions of vertical adjustment.

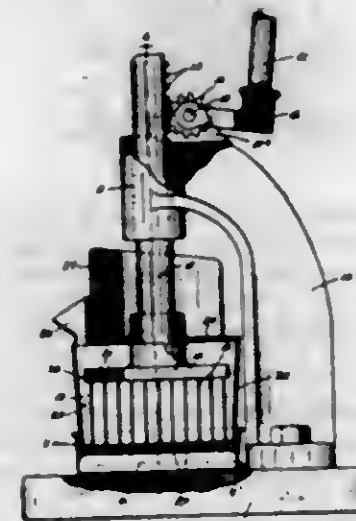
1,309,418. SELF-HEATING CONTAINER. Hirotsune T. Nakamizo, Los Angeles, Calif. Filed Apr. 8, 1918. Serial No. 227,242. 5 Claims. (Cl. 126-43.)



1. The combination with a container having a threaded recess in the bottom thereof, of a cap member having a

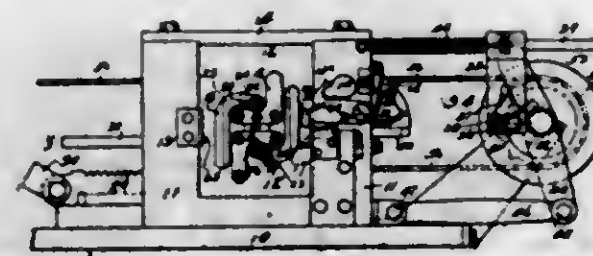
correspondingly threaded portion in engagement with the threaded recess, an annular flange around the threaded portion of the cap, and a combustible material contained in the annular channel formed by the annular flange.

1,309,419. MACHINE FOR MAKING PRESLICED BREAD-LOAVES. JOHN D. RABERT, Minneapolis, Minn. Filed Nov. 2, 1917. Serial No. 169,947. 3 Claims. (Cl. 107-21.)



3. An apparatus for slicing the unbaked dough of a bread loaf, comprising a pan for containing the dough, a vertically movable plunger having a head, a multiplicity of knives carried by said head and depending therefrom, a grease receptacle movable vertically on said plunger and carried on said head, said knives working through slots in the bottom of said grease receptacle, the said knives having grease carrying cavities therein.

1,309,420. S-IRON-BENDING MACHINE. FRANK J. SCHAEFER, Altoona, Pa. Filed Oct. 29, 1917. Serial No. 169,067. 6 Claims. (Cl. 153-39.)



1. In an S-iron bending machine, the combination with a frame, bending means arranged in said frame, and cutting means also carried by the latter, of means for advancing strip material to the cutting means consisting of a check device carried by the frame adjacent the cutting means, a guide member carried by the frame, a horizontally shiftable feeding stirrup slidable on said guide member, a spring coiled about the guide member and having one end attached to the frame and the other end attached to the shiftable feed stirrup, a pair of pivotally connected levers respectively having their ends pivoted to the frame and to the shiftable stirrup, and a rotary disk having a pin projecting laterally therefrom for engaging with the lever connected with the stirrup.

1,309,421. LOCK-NUT. JAMES C. SHELTS, Meadville, Pa. Filed Feb. 19, 1919. Serial No. 278,055. 7 Claims. (Cl. 151-25.)

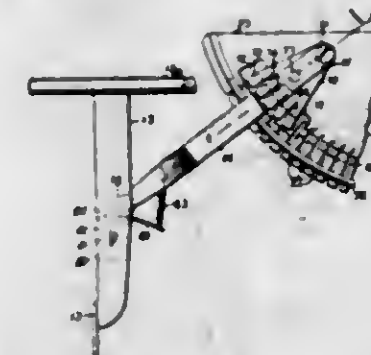
1. A lock nut having an interior chamber tangentially intersecting the thread inside the bottom thereof, and a locking member of hard material normally held on one side of said intersection and preventing backward rota-

tion of the nut but adapted to cut through the top of the bolt thread and pass to the other side of the intersection to unlock when the nut is violently turned backward and



further means for holding said locking member in contact with the bolt threads when said member has passed to said other side of the intersection.

1,309,422. TYPE-WRITING MACHINE. GEORGE A. SEIN, Ithaca, N. Y., assignor to Remington Typewriter Company, Ithaca, N. Y., a Corporation of New York. Filed Jan. 5, 1917. Serial No. 140,701. 27 Claims. (Cl. 197-83.)



1. In a typewriting machine, the combination of type bars, an escapement mechanism, and a shiftable interponent, adapted to be operated directly by some of the type bars; said shiftable interponent in one position preventing the operation of the escapement mechanism but permitting such operation in the other position.

1,309,423. TYPE-WRITING MACHINE. GEORGE A. SEIN, Ithaca, N. Y., assignor to Remington Typewriter Company, Ithaca, N. Y., a Corporation of New York. Filed Oct. 5, 1918. Serial No. 256,985. 11 Claims. (Cl. 197-160.)



1. In a typewriting machine, the combination of a ribbon carrier, a shaft on which said carrier is detachably mounted, reversing mechanism including a device controlled by said carrier, and means for preventing said reversing device from affecting said reversing mechanism when the ribbon carrier is detached, said means comprising a stamped sheet metal piece mounted on said shaft and a spring operative on said piece.

1,309,424. FABRIC-FORMING APPARATUS. FRANK A. SEIBERLING, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 11, 1918. Serial No. 221,758. 23 Claims. (Cl. 154-6.)

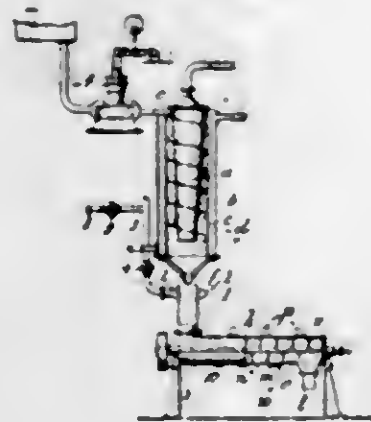
1. An apparatus of the character described, including a mandrel having on its surface a helical groove, a cord cementing apparatus adapted to cement a continuous length of cord as the same is drawn through the appara-

tos, and means for moving the mandrel in a longitudinal path past the cord cementing apparatus, and simultane-



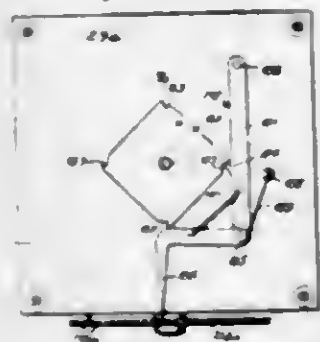
ously rotating the mandrel about its own longitudinal axis to wind the cemented cord in the mandrel groove.

1,309,425. TREATMENT OR PREPARATION OF SUGAR. EDWARD SHAW, London, and GEORGE SAMUEL BAKER, Middlesex, England. Filed Mar. 16, 1915. Serial No. 14,739. 7 Claims. (Cl. 127-17.)



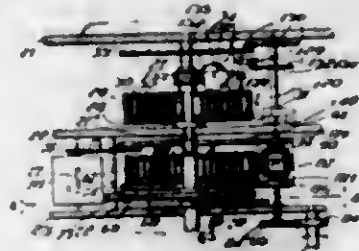
7. The method of manufacturing peife sugar, consisting in heating a syrup to a crystallizing temperature, adding to the heated syrup cold syrup and then crystallizing the mass, whereby the temperature of the hot syrup is utilized to evaporate the water in the cold syrup, and the cold syrup serves to accelerate the crystallization of the mass.

1,309,426. TIME-SWITCH. HAROLD S. SINER, Chicago, Ill., assignor to Mineralac Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 19, 1915. Serial No. 3,021. 4 Claims. (Cl. 161-27.)



1. Escapement mechanism for time switches comprising a spring-operated cam, a lever for locking said cam, an arm arranged to ride on said cam pivoted to said lever, means for holding said lever and arm in operating position, and an actuating device arranged to engage said arm to release the cam, said arm and cam cooperating so that the arm is caused to move out of the path of the actuating device when engaged by it and to return to its normal position in the rear of the actuating device.

1,309,427. PERIODICALLY-OPERATED MECHANISM. HAROLD S. SINER, Chicago, Ill., assignor to Mineralac Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 19, 1915. Serial No. 3,021. Divided and this application filed Feb. 24, 1919. Serial No. 278,788. 12 Claims. (Cl. 161-27.)



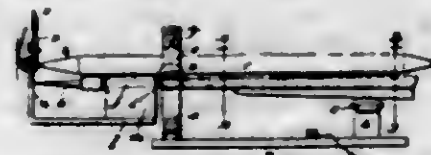
12. The combination with two mechanisms each having a driving spring, of a means for energizing said springs, and driving connections between said energizing means and said springs for selectively energizing said springs in accordance with the deenergized condition of said springs.

1,309,428. GREASE-CUP. CLACON M. SKINNER and LE ROY J. FOWLER, Omaha, Nebr. Filed Mar. 10, 1919. Serial No. 281,039. 2 Claims. (Cl. 184-38.)



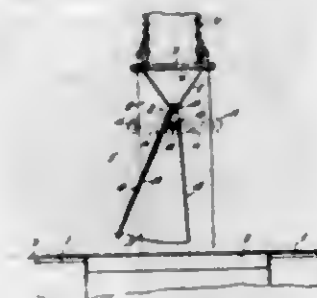
1. In a grease cup, a conducting-tube, a receptacle communicating with the tube, said receptacle having a bottom provided with an outwardly projecting lug and having a threaded aperture in engagement with said tube, a disk having a threaded aperture also in engagement with the tube and having a non-concentric recess for receiving said lug, said disk being revoluble for engagement of the wall of its recess with said lug for pressing the bottom of the receptacle against the tube to maintain said receptacle in stationary relation with the tube at longitudinal intervals thereof.

1,309,429. METHOD OF AND APPARATUS FOR TARGETING GUNS. ELWIN T. STRECHER, Springfield, Mass. Filed Nov. 6, 1916. Serial No. 129,810. 16 Claims. (Cl. 33-180.)



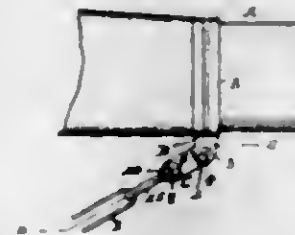
1. The method of targeting a firearm having rear and front sights, which consists in securing the firearm in a fixed position, so fixing a line with reference to the muzzle end of the bore of the firearm that it is in the vertical plane containing the axis of the bore at such end, and making such lateral sight adjustment as may be required to cause the line of sight along the rear and front sights to intersect said vertical line.

1,309,430. DEFLECTOR FOR HOT-AIR REGISTERS. WILLIAM J. WOODALL, Cincinnati, Ohio, assignor to The Williamson Heater Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1919. Serial No. 284,591. 6 Claims. (Cl. 98-50.)



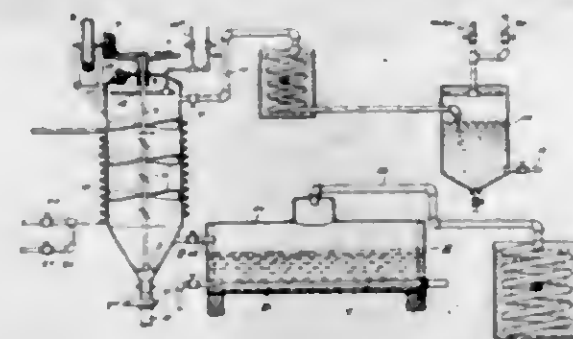
2. A deflector of the class described, comprising a casing having a top wall and two side walls, a rock shaft journaled in the side walls, a deflector plate fixed to and depending from said shaft, side plates pivoted for independent oscillation between the casing side walls and the edges of the deflector plate, each having opposed marginal flanges extended into the path of the deflector plate, and means for operating the rock shaft.

1,309,431. SLING-FITTING FOR GUNS. OLIVER L. BABSON, Plainfield, N. J., assignor to Kerr Adjustable Strap Company, Inc., New York, N. Y., a Corporation of New York. Filed June 6, 1918. Serial No. 238,408. 3 Claims. (Cl. 42-85.)



2. A gun sling attachment comprising a member adapted to be rigidly attached to the gun stock, a connecting link pivotally attached to the rigid member and having a circular extension within an integral head thereon, a second link member having a bore surrounding the circular portion of the first link member and held in swiveling relation thereto by the said head, and a strap retaining loop pivotally attached to the second link member.

1,309,432. PROCESS OF MANUFACTURING LUBRICATING-OILS AND PRODUCTS THEREOF. ROY H. BROWNLEE, Pittsburgh, Pa. Filed May 13, 1918. Serial No. 234,077. 12 Claims. (Cl. 196-26.)

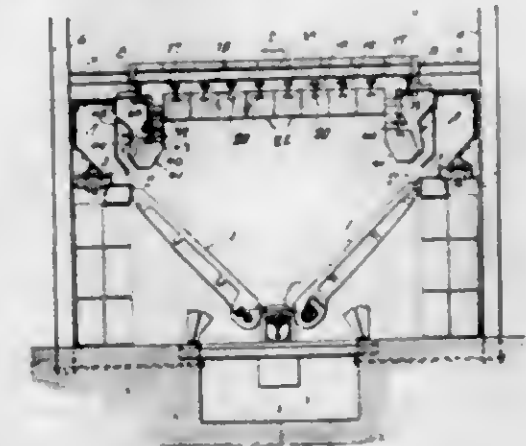


1. The process of manufacturing lubricating oil of low specific gravity, low cold test, and high viscosity from light hydrocarbons of petroleum distillates consisting in

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agitating a suitable petroleum distillate in the presence of a catalyst, separating undesirable matter therefrom, and reducing the product.

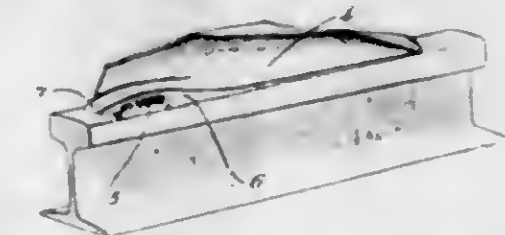
1,309,433. FURNACE-ARCH. MIRON H. DETRICK, Chicago, Ill., assignor to M. H. Detrick Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1916. Serial No. 79,295. 18 Claims. (Cl. 110-29.)



1. A furnace having a fire chamber, a plurality of inclined grates therefor, fuel magazines laterally of and in communication with said chamber, a substantially flat arch supported above the throats of the magazines, side walls extending above the throat portions of the magazines to the said arch, and a supporting structure independent of the magazines, whereby said side walls are supported in proximity to the inner walls of the respective magazines.

15. A furnace having a plurality of arch bars aligned with and spaced from each other, means for supporting said bars, fire bricks mounted on the said bars and projecting partly into the space between the ends of the bars, and a device removably supported on the projecting portions of the fire bricks having means to support fire-brick in the space between said projecting portions.

1,309,434. DERAIL. STANLEY W. HAYES, Richmond, Ind. Filed July 8, 1918. Serial No. 243,797. 3 Claims. (Cl. 246-103.)

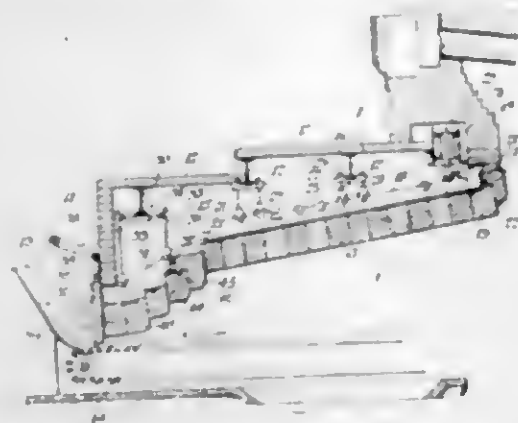


1. In a derail, the combination of a base and a derail block supported thereby and movable thereon downwardly toward and upwardly from the rail-head and formed with a horizontally open cavity in the upright lateral wall of its wheel-tread-receiving portion adapted to form a hand-hold.

1,309,435. FURNACE-ARCH CONSTRUCTION. LOUIS H. MOSKOWITZ, Chicago, Ill., assignor to M. H. Detrick Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1917. Serial No. 159,610. 14 Claims. (Cl. 110-99.)

1. A furnace having a traveling grate and an arch construction overhanging the grate and extending from side to side of the furnace, said construction comprising a main arch and an ignition arch, the main arch including longitudinally flanged members extending lengthwise of the furnace and fire bricks slidably mounted upon the flanges of said members, and the ignition arch including

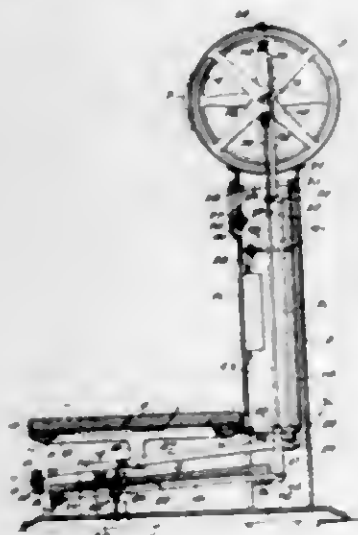
longitudinally flanged suspension members extending lengthwise of the furnace and fire bricks slidably mounted upon the flanges of the latter members and positioned to present heat-radiating surfaces ascending in step-like formation toward but short of the main arch, and re-



movable key-bricks located between the adjacent spaced ends of the main and ignition arches and locking the fire bricks on the flanged members of the respective arches.

11. An arch brick support including a member having laterally projecting flanges arranged in ascending step-like formation.

1,309,436. SCALE. LEONARD T. JOHNSON, Boston, Mass. Filed Nov. 24, 1916. Serial No. 133,243. 8 Claims. (Cl. 265—69.)

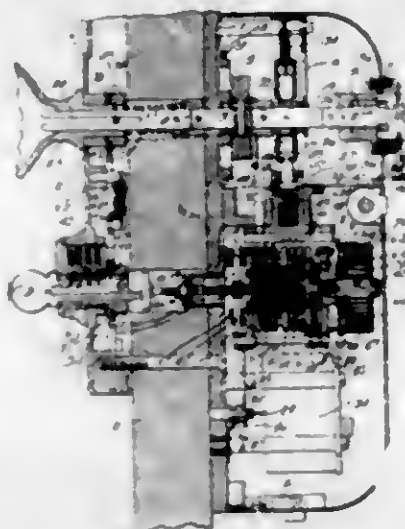


1. In a scale of the class described, a platform to receive articles to be weighed, weighing springs, price indicating mechanism, a lever operated by said platform and connected with the weighing springs, and a separate lever parallel with said first lever and similarly operated by the platform and connected with the price indicating mechanism.

1,309,437. RECORDING LOCK. THOMAS A. KEEFER, Dayton, Ohio, assignor to The Recording Devices Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 17, 1917. Serial No. 191,722. 21 Claims. (Cl. 234—1.)

1. In a lock, a bolt, a recording device comprising a platen, an actuating device comprising a shaft capable of rotation in one direction only, a cam mounted on said shaft for rotation therewith, said bolt having parts arranged on opposite sides of said cam to be engaged thereby, said cam being of such a shape that a half rotation of said shaft will cause said bolt to be projected

and the succeeding half rotation will cause said bolt to be retracted, and an operative connection between said



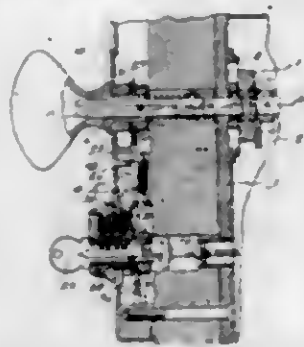
shaft and said platen to cause a complete operation of said platen upon each half rotation of said bolt.

1,309,438. LOCK. THOMAS A. KEEFER, Dayton, Ohio, assignor to The Recording Devices Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 30, 1917. Serial No. 204,486. 9 Claims. (Cl. 70—46.)



1. In a lock, bolt actuating mechanism having operative movement in two directions, a controlling device movable into and out of a position to lock said mechanism against operative movement in either direction, a key actuated device to move said controlling device into an inoperative position, and means controlled by the movement of said actuating mechanism in either direction to automatically return said controlling device to its operative position.

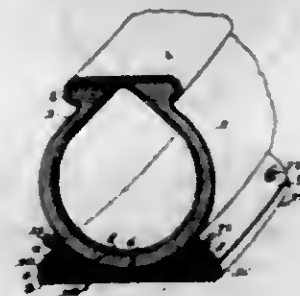
1,309,439. LOCK. THOMAS A. KEEFER, Dayton, Ohio, assignor to The Recording Devices Company, Dayton, Ohio, a Corporation of Ohio. Original application filed Sept. 17, 1917, Serial No. 191,722. Divided and this application filed Nov. 30, 1917. Serial No. 204,487. 28 Claims. (Cl. 70—46.)



1. In a lock, bolt actuating mechanism, a controlling device movable into and out of a position to lock said

mechanism against operative movement, a key actuated device to move said controlling device into an inoperative position, and means to automatically return said controlling device to its operative position.

1,309,440. TIRE-TREAD. HENRY M. LAMBERT, Portland, Oreg., assignor to Lambert Tire and Rubber Company, Portland, Oreg.; a Corporation of Arizona. Filed May 18, 1918. Serial No. 235,308. 3 Claims. (Cl. 152—16.)



2. A tire shoe tread comprising an annular flat body composed of layers of woven fabric and rubber and an annular layer of cord wound spirally in adjacent convolutions and stretched to its approximate limit of elongation while being laid, side filler flanges shaped to form a concave seat for the tire shoe and comprising annular cords embedded in an agglutinant, the aforesaid layers of woven fabric, rubber, cord and side filler flanges being vulcanized together to form an integral structure.

1,309,441. OPTICAL SIGNALING APPARATUS. CLYDE S. McDOWELL, U. S. Navy, and LESTER L. ISRAEL, New York, N. Y., assignors to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 7, 1916. Serial No. 70,741. 8 Claims. (Cl. 177—339.)



1. An optical signaling system comprising an arc light, means for varying the brilliancy thereof including a resistance, means for throwing said resistance into and out of series with the arc, said last named means including a manually controlled switch in parallel with said resistance, and means for quenching the arc across said switch.

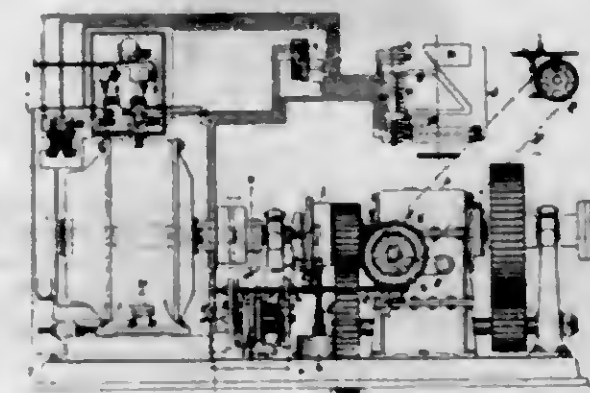
1,309,442. PRESSURE OIL-CUP. GEORGE MARTIN, Andover, Conn. Filed Mar. 6, 1919. Serial No. 260,953. 2 Claims. (Cl. 184—38.)



1. An oil cup comprising a body member having an external screw thread, and a central stem having a longitudinal bore closed at its upper end and having feed openings leading into the bore, and a cap member comprising a cap having threaded engagement with the body member, and a piston on which the cap is swiveled, the

piston having a longitudinal bore which receives the stem loosely leaving an oil passage surrounding the stem, so that when the cap is turned downward oil will be forced through said passage and through the feed openings into the bore of the stem.

1,309,443. DISTRIBUTION OF ELECTROMOTIVE POWER. GEORGE WILLIAM MASCOUD, London, England. Filed Nov. 23, 1912. Serial No. 733,203. 11 Claims. (Cl. 172—239.)



9. An electric motor, a driving shaft rotated thereby, a driven shaft in alignment with the driving shaft, a reducing gear to effect transmission between the said shafts without constant operative connection with the driving shaft and with free wheel driving connection with the driven shaft, electrically operated clutches for engaging the driving shaft with the reducing gear or directly to the driven shaft, a drum controller for the regulation of the operation of the motor and the clutches, and electric switch devices for starting and stopping the motor from one or more points, substantially as described.

1,309,444. COOKER. IONE F. NEWHALL, Crystal Bay, Minn. Filed July 22, 1918. Serial No. 246,183. 2 Claims. (Cl. 53—6.)

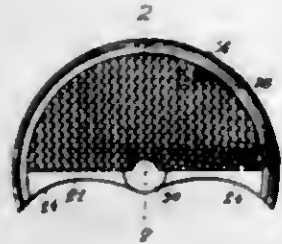


1. In a cooker, the combination with a vessel having an apertured cover, of a U-shaped cutter blade loosely seated in the vessel with freedom for lifting movement therefrom and closely engaging the sides and bottom thereof, the upper ends of the side members of the cutter blade being loosely inserted into the apertures in the cover, whereby said cutter blade may be rotated in the vessel by a turning movement of the cover thereon, and whereby said cover may be separated from the vessel and cutter blade by a lifting movement.

1,309,445. AUTOMOBILE-LAMP. ORHO M. OTTE, Jamestown, N. Y., assignor to Rayder Manufacturing Company, Brackenridge, Pa. Filed Jan. 2, 1918. Serial No. 209,904. 7 Claims. (Cl. 240—48.4.)

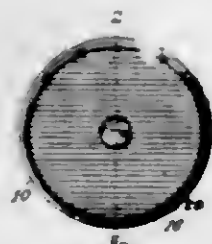
1. In combination with a parabolic reflector and a source of light, a screen of semi-circular form having a

cross-bar at its base and a semi-circular rim connected at its ends to the ends of the cross-bar, a series of parallel vertical spaced strips secured at their lower ends to the cross-bar and at their upper ends to the rim, said cross-bar having a channeled upper face in which



the lower ends of the vertical strips are received, and a series of undulating strips arranged in the spaces between the vertical strips and having their upper ends secured to the rim and their lower ends received in the channel of the cross-bar and secured to the latter.

1,309,416. AUTOMOBILE-LAMP. OTTO M. OTTE, Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Filed Jan. 8, 1918. Serial No. 209,905. 1 Claim. (Cl. 240-48.4.)



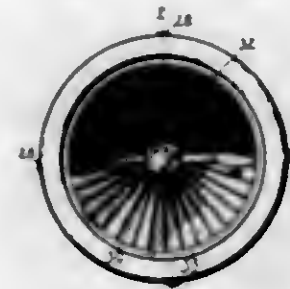
In an automobile lamp, a pair of superposed screens arranged in front of the reflector, and each having similar spaced slats, and means to mount the screens whereby each may be adjusted independent of the other so as to enable the slats to be brought into register or to be disposed so as to relatively intersect at any desired angle so as to obtain various lighting areas.

1,309,417. AUTOMOBILE-LAMP. OTTO M. OTTE, Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Filed Jan. 2, 1918. Serial No. 209,906. 2 Claims. (Cl. 240-48.4.)



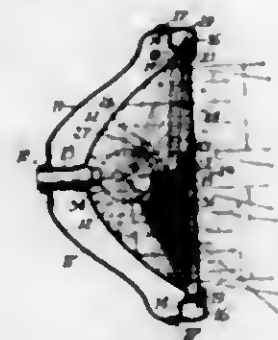
1. In combination with a parabolic reflector, a substantially semi-circular rim, and a series of spaced horizontal strips rigidly secured at their ends to the rim, the lowermost of said strips being bent upwardly at its center to provide an approximate inverted V-formation.

1,309,448. AUTOMOBILE-LAMP. OTTO M. OTTE, Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Filed Jan. 2, 1918. Serial No. 209,909. 6 Claims. (Cl. 240-48.4.)



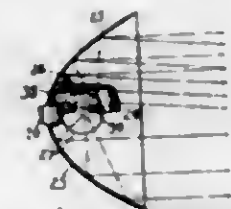
1. In combination with a parabolic reflector, a cross-bar, a screen member, seated at its base on the cross-bar and covering the upper half of the reflector, and a series of blades secured to and radiating from the center of the cross-bar and covering the lower half of the reflector.

1,309,449. AUTOMOBILE-LAMP. OTTO M. OTTE, Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Filed Jan. 2, 1918. Serial No. 209,912. 10 Claims. (Cl. 240-48.4.)



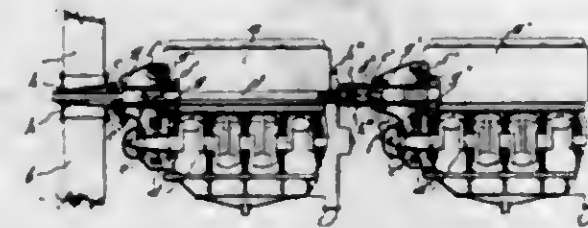
1. In a screen for automobile lamps, a concentric series of spaced semi-circular blades, said blades having a stepped arrangement to form a pronounced concave outer and concave inner face for the screen and extending from the front of the lamp to points adjacent the source of light of the lamp.

1,309,450. AUTOMOBILE-LAMP. OTTO M. OTTE, Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Filed Jan. 4, 1918. Serial No. 210,240. 6 Claims. (Cl. 240-48.6.)



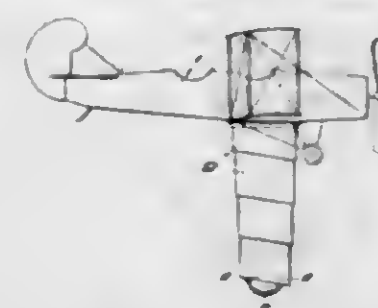
1. In combination with a reflector and an incandescent lamp, a hood-like refractory member arranged to partly extend about the lamp, a bracket having a looped part between its ends extending around the post of the lamp and having an end thereof bent outwardly and secured to said hood-like member, a second bracket having a central arched portion engaged with the post of the lamp and within the loop of the first named bracket, said second bracket having its ends secured to the sides of the hood-like member, and a screw for securing the ends of the first named bracket together and to thereby secure the second named bracket in position.

1,309,451. MULTIPLE-ENGINE DRIVING MECHANISM. LOUIS BÉCHEREAU, Paris, France. Filed Nov. 27, 1917. Serial No. 204,300. 2 Claims. (Cl. 74-7.)



1. Mechanism of the class described comprising multiple stationary engines, each engine having a crank shaft, a driven shaft geared to the crank shaft of each engine, a connecting shaft interposed between the driven shafts, the connecting shaft and driven shafts having engaging terminal coupling joint means, and a driven device on the front extremity of the driven shaft of the foremost engine, the driven shafts and the connecting shaft being in longitudinal alignment.

1,309,452. STABILIZING DEVICE FOR USE ON AEROPLANES. CHARLES J. HERTHEL, Akron, Ohio. Filed Sept. 29, 1917. Serial No. 103,974. 1 Claim. (Cl. 244-31.)



An aeroplane stabilizer, including a body formed from a plurality of telescopically engaged sections connected at one end to the bottom of the aeroplane and adapted to depend therefrom when in extended position, said sections of the body being substantially oval in cross section and having their opposite sides tapered forwardly and the front and rear portions thereof tapered to edges whereby to permit the passing of the same through air with but minimum resistance, a wheel mounted in bearings in the free end of the body, and means for effecting telescoping of the sections of the body.

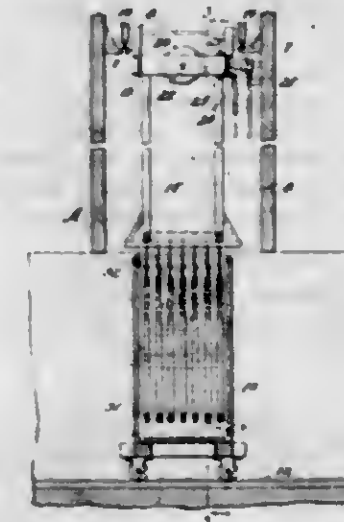
1,309,453. METHOD OF FIREPROOFING AIRCRAFT. PARKER R. BRADLEY, East Orange, N. J., assignor to Aircraft Fireproofing Corporation, Nutley, N. J., a Corporation of New Jersey. Filed Dec. 22, 1917. Serial No. 208,447. 15 Claims. (Cl. 154-41.)

1. In a fireproof covering, a cloth, a covering for the cloth including a slow burning substance and a metal foil disposed over the said covering.

1,309,454. METHOD OF DOPING AIRCRAFT. PARKER RICHARDSON BRADLEY, East Orange, N. J., assignor to Aircraft Fireproofing Corporation, Nutley, N. J., a Corporation of New Jersey. Filed Dec. 22, 1917. Serial No. 208,448. 2 Claims. (Cl. 91-68.)

1. The method of doping a hollow aeroplane wing section having a fabric-covered frame with drain openings in the frame, which consists in dipping the said section in a coating material long enough to permit the coating ma-

terial to penetrate through the pores of the fabric, draining the surplus material from the outer and inner surfaces



of the wing section, drying the coating material, and repeating the dipping, draining and drying steps a plurality of times.

1,309,455. METALLIC RAILWAY-TIE. AUGUSTUS FREEMAN BROWN, Havre de Grace, Md. Filed Jan. 31, 1919. Serial No. 274,271. 8 Claims. (Cl. 238-31.)



3. A metallic railway tie, said tie being divided to form two similar overlapping portions with each of said portions having a longitudinally extending flange or ledge and a recessed face, said faces each having a rib and a recess so disposed that the rib of one section will match and interlock with the recess of the other section.

1,309,456. SAFETY-RAZOR BLADE. AUGUSTUS HAGER, Bayant, Glen Ridge, N. J. Filed Nov. 26, 1918. Serial No. 264,180. 2 Claims. (Cl. 30-12.)



1. A razor blade comprising a blade structure having one sharpened edge, a back substantially U-shaped in cross-section clamped to the opposite edge of said blade structure, said back projecting beyond the ends of the blade structure, said projecting portions being pressed together.

1,309,457. MILKING-MACHINE. JOHN S. BUCKWALTER, Lancaster, Pa. Filed July 24, 1918. Serial No. 240,545. 8 Claims. (Cl. 81-98.)

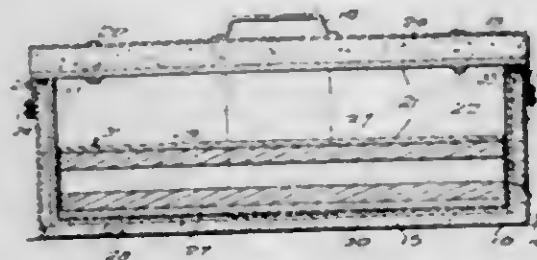


1. In a milking machine, a chamber having a milk outlet in its lower end and provided with a milk inlet and a section port in its upper end, together with a horizontal segmental plate extending across said chamber below said milk outlet with its curved edge spaced from the wall of the chamber, and means joined to the straight edge of the plate.

said plate to prevent the milk discharged thereon from leaving said plate except by passage between said curved edge and the wall of said chamber.

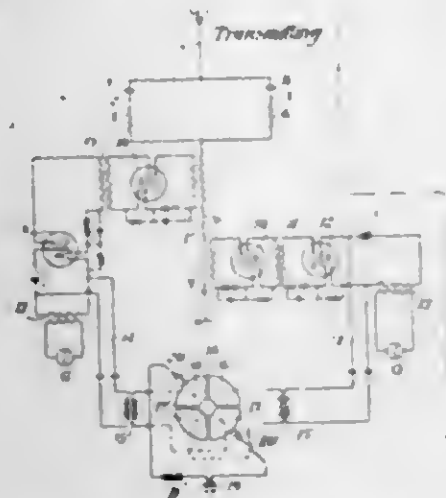
7. In a milking machine, the combination of a valve chamber comprising a bottom having a valve controlled milk outlet, a top having a milk inlet and suction port, a transparent body portion separating said bottom and top and separable therefrom, gaskets between the ends of said body portion and said bottom and top, means for detachably securing said parts together and a milk deflecting device arranged in the valve chamber adjacent the milk inlet.

1,309,458. FIREPROOF BOX. CHARLES W. HUBBARD, Blytheville, Ark. Filed Aug. 28, 1918. Serial No. 251,752. 1 Claim. (Cl. 109-2.)



A fireproof box comprising a metal body having upstanding walls, a lining of asbestos mortar in the body against the bottom and walls thereof, a facing of fireproof boarding positioned in the box against the mortar with the mortar filling the space between the boarding and the bottom and walls of the body, bracing strips extending across the bottom in crossed relation and up the walls and having their free end portions bent to extend over the upper edges of the wall boards, and a cover for the body.

1,309,459. WIRELESS SIGNALING SYSTEM. JOHN R. CANNON, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 10, 1915. Serial No. 60,739. 13 Claims. (Cl. 250-6.)



1. In a signaling system wherein signals are transmitted by the agency of a continuous high frequency wave, means for generating and continuously radiating a plurality of high frequency waves of different frequency, and means for modulating said waves in cyclic order.

1,309,460. CUSHION-TIRE FOR VEHICLES. BURNIS E. CHUTE, Tucson, Ariz. Filed Nov. 22, 1915. Serial No. 62,897. 1 Claim. (Cl. 152-8.)

A cushion tire for vehicles comprising two continuous springs spaced apart, one slightly curved transversely and provided with grooved edges, and a plurality of transverse bow-springs secured to one of said springs, with their free ends in the grooves of the other, a rim, a fabric casing or shoe, tire retaining flanges adapted to embrace the oppo-

site edges of the rim and the edges of the fabric casing or shoe to draw the edges of the casing or shoe inwardly and in close contact with the inner continuous spring, where-



by all-embracing pressure is applied to the bow-springs and their inner ends are held in the grooves of the inner continuous spring.

1,309,461. LEATHER PRODUCT. MILTON H. COOK, San Francisco, Calif., assignor to H. N. Cook Belting Co., San Francisco, Calif., a Corporation of California. Filed Oct. 10, 1918. Serial No. 257,556. 2 Claims. (Cl. 69-21.)



1. A constructed leather comprising continuous flat pieces of leather and a sheet of celluloid therebetween and secured thereto by cement insoluble in water.

1,309,462. AUTOMATIC WRENCH. HENRY FULLER CORREY, Des Moines, Iowa. Filed May 8, 1917. Serial No. 147,250. 1 Claim. (Cl. 81-86.)



A wrench including a shank having an obliquely disposed end portion merging into a fixed jaw, there being a slot extending through said obliquely disposed portion, that end wall of the slot remote from the jaw being formed with teeth, a slide mounted within the slot and having a jaw thereon, one edge of the slide being adapted to engage an article placed between the jaws, teeth upon the opposite edge of the slide and adapted to engage the teeth on the end wall of the slot, a member pivotally mounted on the shank and having a terminal tongue, there being a slot in the slide for the reception of the tongue, said slide being tiltable within the slot to disengage its teeth from the teeth in the slot.

1,309,463. NUT-LOCK. JAMES A. CRANE, Belfast, Me. Filed Jan. 26, 1916. Serial No. 74,446. 1 Claim. (Cl. 151-3.)



The herein described construction of nut locks formed in the process of manufacture to provide a flat body and a rectangular tongue arranged angularly with respect to the body, said tongue and body, at the juncture therebetween being thickened in the said process of manufacture at the outer corner provided by the juncture of the said tongue and body, the body having a bolt opening provided with an internal lug, and said lug being arranged approxi-

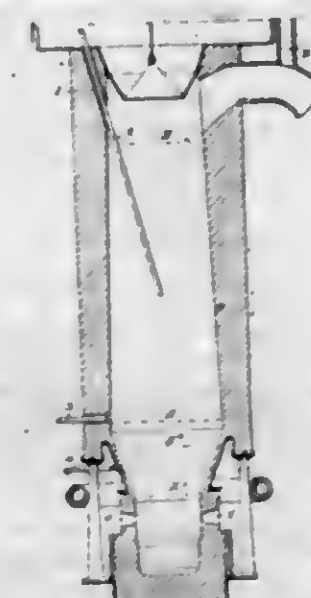
mately central with respect to the tongue, the body and tongue upon the outer face of the device being cut transversely and the walls provided by the cut being angular with respect to each other, whereby when the said tongue is bent toward the body, the said angular walls will contact to retain the tongue at a right angle with respect to the body, and also whereby the thickened corner of the device will effect in preventing the breakage or injury to the tongue when subjected to the impact of force in bending the said tongue toward the body, and the tongue being of a greater length than the thickness of the nut which is adapted to be arranged upon the body.

1,309,464. ADVERTISING ATTACHMENT TO WHEEL-RIMS. CHARLES F. DENCLEAU, Los Angeles, Calif. Filed Aug. 6, 1918. Serial No. 248,510. 4 Claims. (Cl. 40-130.)



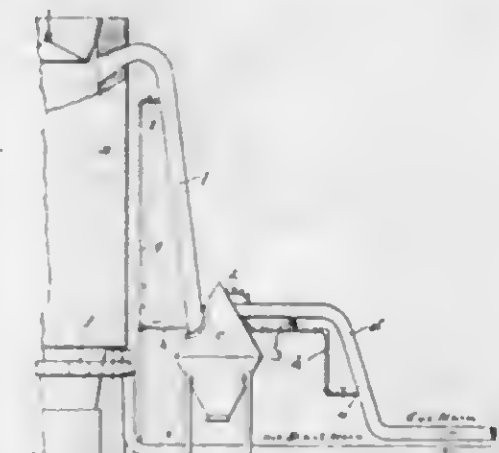
1. The combination of a collapsible and extensible frame, adjustable means carried thereby and adapted to engage a part of a wheel for securing said frame thereto, and a flexible cover for inclosing said frame having display matter thereon, and of suitable size and shape to be stretched tight by said frame when extended.

1,309,465. METHOD OF BLOWING DOWN AND BLOWING OUT BLAST-FURNACES. JOHN W. DOUGHERTY, Beaver, Pa. Filed Mar. 14, 1919. Serial No. 282,683. 8 Claims. (Cl. 266-26.)



1. The method of blowing down and blowing out blast furnaces, comprising forming and maintaining within the furnace a non-explosive gaseous mixture at about when the blast is turned off.

1,309,466. METHOD OF PREVENTING GAS EXPLOSIONS IN BLAST-FURNACES DURING TEMPORARY STOPS. JOHN W. DOUGHERTY, Beaver, Pa. Filed Mar. 20, 1919. Serial No. 283,841. 8 Claims. (Cl. 266-26.)



1. The method of preventing explosions during a temporary stop in the operation of blast furnace systems, which comprises introducing steam into the gas system at a point between the hot blast stores and the shaft of the furnace, thereby maintaining a volume of steam between the points of air admission to the system and the gas, the movement of which steam shall be in the direction of movement of the gas.

1,309,467. JOURNAL FOR CAR-WHEELS. JOSEPH E. DOWNES, Allentown, Pa. Filed Aug. 23, 1918. Serial No. 251,169. 1 Claim. (Cl. 64-10.)



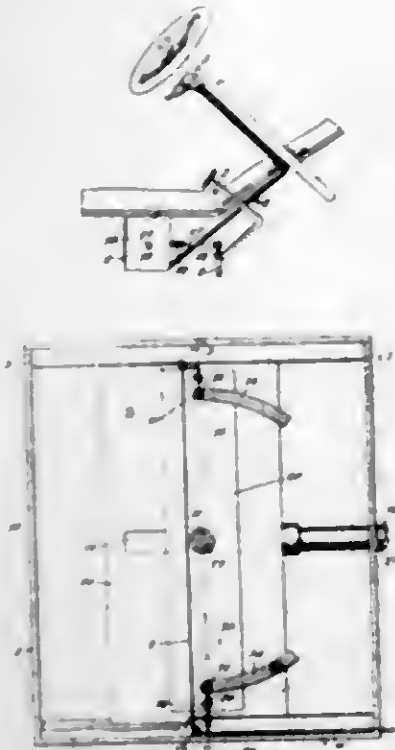
In combination a wheel hub having a tapering bore and an oil recess, a tapering bushing provided with a bearing surface and having a wedging connection with said bore, a log engaging the depression in the hub and openings connecting said recess with the bearing surface.

1,309,468. FLOW. RUFUS CLEVELAND DUNN, Vidalia, Ga. Filed Feb. 5, 1919. Serial No. 275,235. 3 Claims. (Cl. 97-26.)



1. An implement of the class described comprising a beam, a standard depending therefrom, a bracing plate located at the junction of the standard with the beam, means for adjustably connecting the standard with said plate and handles pivotally connected with the beam and adjustably connected with the plate.

1,309,409. CONTROL FOR TRANSMISSION-GEARS. ALEXANDER CARL ECKE, Mankato, Minn. Filed July 30, 1917. Serial No. 183,519. 3 Claims. (Cl. 74-38.)



1. A device of the character described, embodying an actuating member, a lever having opposite arms, latches carried by the arms of said lever for the connection with the actuating member when the parts are in one position, selectively operable means for moving the latches into connection with the actuating member, and means for retaining the latches in connection with the actuating member when moved from said position.

1,309,470. AUTO-CARRIER. EDWARD L. EVANS, Jewett, Tex. Filed Oct. 30, 1918. Serial No. 260,352. 2 Claims. (Cl. 224-29.)

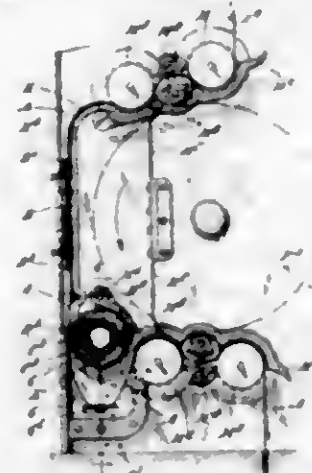


1. An auto carrier comprising a vertical strip having a slot running vertically therein, a slot in the upper end of said strip designed to receive an attaching strap, clamps comprising jaws having threaded shanks movable in said slot, binding means engaged on said shanks, a U-shaped clamp member hinged to the lower end of said strip and a clamping screw engaged through the lower jaw of said clamping member.

1,309,471. METHOD OF AND APPARATUS FOR FEEDING MOTION-PICTURE FILMS. HENRY KIRGEL EVANS, London, England; Adele Kean Evans executrix of said Henry R. Evans, deceased. Filed June 13, 1915. Serial No. 34,311. 24 Claims. (Cl. 88-18.)

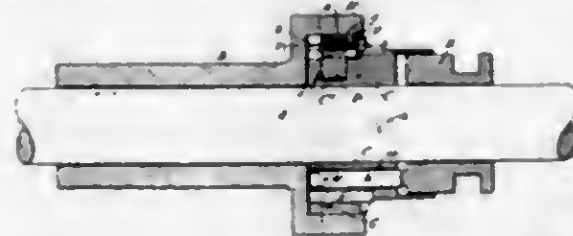
1. In motion picture apparatus, the combination of a gate past which the film is fed, means for forming a loop

in the film in advance of the gate, and means for feeding or stepping the film intermittently from said loop past



the gate, said means having provision whereby the film completes its stepping movements under a yielding force.

1,309,472. FRICTION-CLUTCH. ERNEST S. FAIRBANKS, Greenfield, Mass. Filed Oct. 6, 1910. Serial No. 124,121. 5 Claims. (Cl. 192-13.)



1. In combination, a shaft, a sleeve on the shaft having an enlarged cylindrical portion concentrically spaced from the shaft, a collar fixed on the shaft and within said enlarged cylindrical portion, said collar having an annular groove, arcuate members disposed in said groove and having two of their ends in bearing contact with each other to permit relative movement, a C-shaped ring embracing said arcuate members and inclosed by the enlarged cylindrical sleeve portion, and means shiftable on the shaft to expand said arcuate members to force C-shaped ring into frictional contact with the enlarged cylindrical portion.

1,309,473. VEHICLE-WHEEL. GEORGE R. FARRELL, Detroit, Mich. Filed Sept. 12, 1918. Serial No. 253,794. 1 Claim. (Cl. 21-211.)

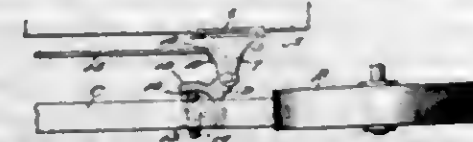


In a device of the character described, a pair of co-acting members adapted to embrace the spokes of a wheel and having projecting lugs with apertures for the passage of connecting bolts, bolts for securing said members together upon the spokes of a wheel, a bifurcated paddle adapted to straddle the rim and tire of a wheel having an apertured shank for the passage of bolts, and bolts for securing the bifurcated paddle to one of said co-acting members provided with a plurality of apertures for the entry of said last named bolts, whereby said paddle may be radially adjusted as required.

1,309,474. BELT GUIDE AND SHIFTER. GEORGE M. FRIEDEL, Lebre, Saskatchewan, Canada. Filed Dec. 20, 1918. Serial No. 267,686. 2 Claims. (Cl. 64-4.)

1. A belt shifter and guide comprising a bracket, an angle lever pivoted on said bracket, an operating rod pie-

otally connected with one arm of said angle lever, a belt engaging bracket pivoted upon the other arm of said angle lever, a guide member secured upon said second



named arm of said angle lever and provided with a segmental slot, and a shoe depending from said belt engaging bracket and disposed within said slot.

1,309,475. RELEASING-PENHOLDER. JOSEPH GAZCO, New York, N. Y., assignor of one-half to Harry E. Augenthaler, New York, N. Y. Filed July 3, 1918. Serial No. 234,420. 1 Claim. (Cl. 120-101.)



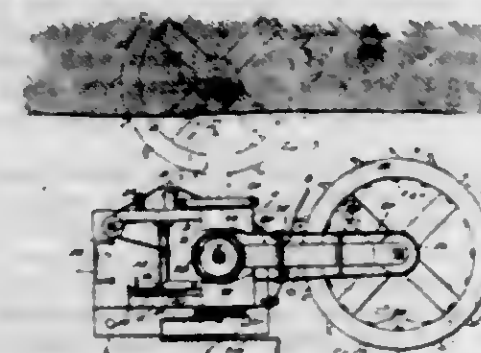
A pen holder and releasing device, comprising an externally threaded plug provided at one end with an apertured bit having two opposing flat sides and a flat end, and at its other end with means for attaching it to a handle, a pair of jaws having conical outer ends and having the inner faces of their inner ends rabbeted to receive and fit upon the bit, said jaws having their opposing faces concave and convex respectively, from the rabbeted inner ends to their outer ends, a resilient pin passing through the aperture of the bit of the plug, and having its ends secured to the reduced ends of the jaws, and a sleeve surrounding the jaws and plug and having its inner end internally threaded to engage the threaded plug, the sleeve having a tapered outer end.

1,309,476. HOSE-CLAMP. THOMAS HILL, New York, N. Y. Filed Apr. 24, 1919. Serial No. 292,313. 3 Claims. (Cl. 24-19.)



2. In a clamp of the character set forth, the combination of an anchorage device including a cradle having a rounded bottom bearing and a rocker having a convex bearing surface cooperating therewith, a tension member including a threaded member extending loosely through the rocker in a direction perpendicular to the axis of the rocker, said tension member also including a member threaded complemental to the screw, and a flexible compression member having one portion engaged with the cradle and another portion engaged with the tension device.

1,309,477. MANUALLY-OPERATED COAL-MINING MACHINE. ED JACKSON, Thorber, Tex. Filed Apr. 4, 1918. Serial No. 88,819. 3 Claims. (Cl. 262-27.)



3. A mining machine of the class described including a pivotally mounted oscillatory arm, a rotary cutting wheel mounted on the arm and carried by the same,

means for rapidly rotating the cutting wheel, feed mechanism connected with the arm and adapted to move the same in one direction to feed the cutting wheel, a power shaft adapted to simultaneously operate said means and said feed mechanism, means adapted to be operated by said shaft for moving the arm in the opposite direction to return the cutting wheel to its initial position, and means for disconnecting said feed mechanism from the power shaft to permit the arm to be moved in said opposite direction by said returning means.

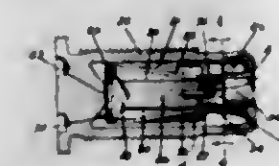
1,309,478. PERISCOPE. HENRY C. JENKINS, New York, N. Y., assignor to Newell & Neal, New York, N. Y., a firm composed of Emerson R. Newell and Chester T. Neal. Filed Dec. 27, 1915. Serial No. 68,039. 2 Claims. (Cl. 88-1.)



1. In an optical instrument, a tube having an eye piece, a plurality of side lenses spaced apart along the tube axis, successively operable shutters for said lenses, a light-deflector movable axially of said tube and arranged to register with said lenses successively, and means arranged selectively to open and close said shutters in accordance with the position of said deflector.

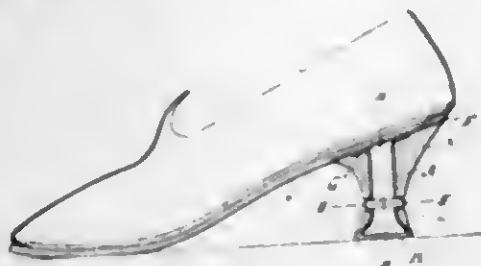
2. In an optical instrument, a tube having an eye piece, a plurality of side lenses spaced apart along the tube axis, successively operable shutters for said lenses, a light-deflector movable axially of said tube and arranged to register with said lenses successively, means arranged selectively to open and close said shutters in accordance with the position of said deflector, a sky lens, and means arranged to move said deflector out of the light-range from said sky lens.

1,309,479. PERCUSSION-SHELL FUSE. CHARLES H. JOCKMUS, Ansonia, Conn. Filed July 16, 1917. Serial No. 180,704. 17 Claims. (Cl. 102-39.)



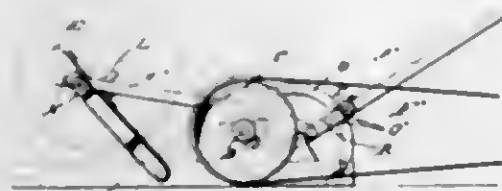
1. A fuse of the character described, comprising a body having a chamber with a projection at its inner end, a cap closing the chamber and having a primer pocket, a circular groove and a rib between the groove and the pocket, a firing plunger having a recess in its base, grooves in its sides and a point, and a resilient safety device consisting of a ring lying in the recess and arms lying in the grooves and having heads lying between the plunger and the rib, the shock of explosion of a firing charge causing the projection to arm the fuse by cupping the ring, the heads being thrown into engagement with the wall of the chamber to prevent creeping or rebounding of the plunger, and impact with an objective causing the plunger to overcome the frictional resistance of the safety device, the heads passing into the circular groove and the point detonating a primer.

1,309,480. HEEL. HERBERT KNIGHT, New York, N. Y. Filed Mar. 29, 1919. Serial No. 285,960. 11 Claims. (Cl. 36—38.)



1. A hollow heel embodying supporting walls of metal having a peripheral spring portion of relatively greater resiliency, providing a cushion.

1,309,481. AUTOMOBILE POWER TRANSMITTING APPARATUS. JOHN JAMES KOGAN, Morristown, Tenn. Filed Dec. 20, 1918. Serial No. 267,672. 3 Claims. (Cl. 74—100.)



1. An automobile power transmitting apparatus, comprising a frame, a shaft journaled therein, friction wheels fixed to the latter, levers pivotally mounted upon the frame, bars pivoted to the latter and having shoes for engagement with the axle of the automobile, pivotal connections between said bars and levers, segments fastened to the frame, and means upon the levers cooperating with the segments to support the shoes at different elevations.

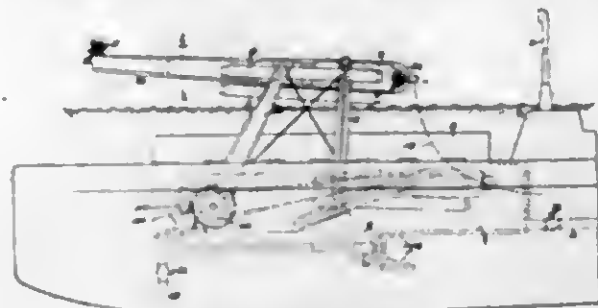
1,309,482. SAFETY GAS-JET. GIULIO LEONARDI, Long Island City, N. Y. Filed Apr. 10, 1918. Serial No. 227,749. 1 Claim. (Cl. 67—115.)



A device of the character described comprising a casing including a lower portion formed of inverted frusto-conical shape and having its lower end provided with an internal flange, a plug extending through a central hole in said flange and provided in its upper end with a valve seat communicating with a bore, a coupling threaded upon the lower end of said plug and cooperating with said plug for clamping engagement with said flange, said casing having its upper portion formed as a dome secured to the lower portion, a flexible diaphragm disposed between the upper and lower portions of said casing, a vertically movable member disposed within said casing and provided with a valve adjacent its lower end for closing said seat and having its lower extremity formed as a reduced stem slidably received within the bore of said plug, the upper portion of said member being enlarged and being provided with a central threaded

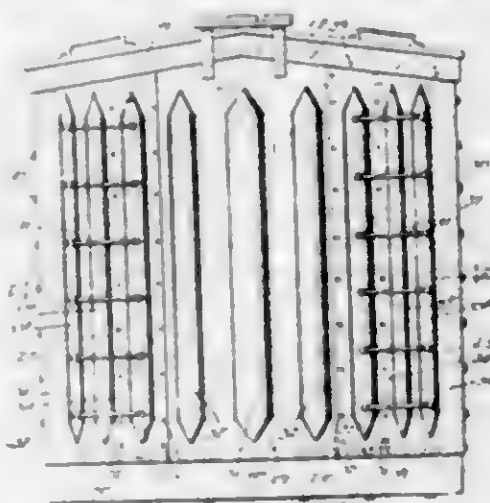
socket, a rod slidable through the top of the dome portion of said casing at its center and threaded at its lower end into said socket, said rod being provided with an enlarged portion engaging against the top of said diaphragm and cooperating with the enlarged upper end of said member for clamping engagement with said diaphragm, and a coil spring surrounding said rod and abutting at one end against the top of said dome and at its lower end against the enlarged portion on said rod, and an outlet pipe extending from one side of and communicating with the interior of the lower portion of said casing.

1,309,483. SUBMERSIBLE GUN-MOUNT. ISRAEL LUDLOW, New York, N. Y. Filed June 28, 1917. Serial No. 177,480. 4 Claims. (Cl. 89—93.)



1. A gun mount having means for elevating the gun for discharge and for depressing the same during the recoil of said gun; a portable submerged support for said gun; and means for pointing said gun, said means embodying a periscope, and mechanical devices for shifting the gun while the base thereof is immersed in water.

1,309,484. CORRUGATED SHEET-METAL CAR END. WALTER P. MURPHY, Chicago, Ill. Filed Mar. 6, 1916. Serial No. 82,423. 7 Claims. (Cl. 105—410.)



1. A sheet metal end structure for a railway car, comprising a plurality of sheets overlapped, and secured together and to the frame of the car, and formed with one single corrugation of maximum depth adjacent the vertical center line of the end and with shallower corrugations on either side of the same, the sheet having the said deep corrugation being thicker than the other sheets.

2. A sheet metal end structure for a railway car comprising a plurality of sheets overlapped on vertical lines and secured together and to the frame of the car, and formed with one single corrugation of maximum depth adjacent the vertical center line of the end and with shallower corrugations on either side of the same, the sheet having the said deep corrugation being thicker than the other sheets.

3. A sheet metal end structure for a railway car comprising metal sheets formed at the center of the end with

a single corrugation of maximum depth and with a plurality of parallel vertically disposed corrugations becoming gradually shallower toward the opposite sides of the panel.

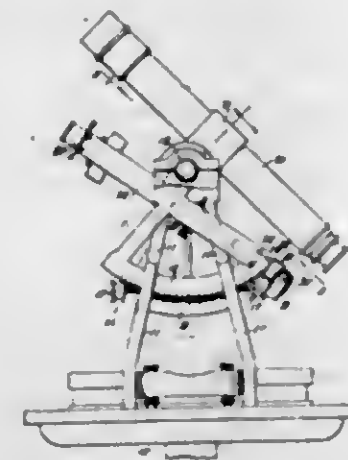
4. A sheet metal end structure for a railway car comprising a plurality of metal sheets joined together along vertical lines and provided with a plurality of vertical corrugations, which are deepest at the central portion of the end and decrease in depth toward the sides, the sheet at the center of the structure being provided with flat marginal portions which overlap one of the corrugations of the adjacent sheets providing a box girder extending substantially from the door of the car to the roof thereof.

5. A sheet metal end structure for a railway car comprising a plurality of metal sheets joined together along vertical lines and provided with vertical corrugations, the sheets at the center of the structure being of thicker material than the adjacent sheets, and provided with marginal portions which overlap one of the corrugations of the said adjacent sheets.

1,309,485. METHOD OF TREATING VULCANIZABLE PLASTICS. RAYMOND B. PAICE, Mishawaka, Ind., assignor, by mesne assignments, to The Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Dec. 30, 1911. Serial No. 668,791. 4 Claims. (Cl. 18—53.)

1. Vulcanizing a rubber article upon a pervious form by first applying an internal vacuum, and then vulcanizing under external heat and pressure, the vacuum being continued during that portion of the application of the vulcanizing temperature during which vapors or gases are given off by the rubber.

1,309,486. SOLAR TRANSIT. HERBERT NEWTON RAYMOND, Olympia, Wash. Original application filed Nov. 6, 1917. Serial No. 200,565. Divided and this application filed July 13, 1918. Serial No. 244,800. 12 Claims. (Cl. 88—38.)

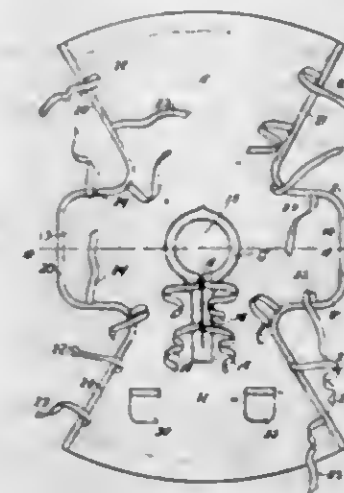


1. In a solar transit, a main axis, a latitude arc are secured to the said main axis, a solar telescope mounted on the said arc, a transit telescope, a hub carrying the said transit telescope and mounted to turn on the said main axis, a reflector mounted to turn on one end of the solar telescope, a declination arm mounted to swing on the axis of the said reflector, and a manually controlled arm connected with the reflector for turning the same independent of the said declination arm.

1,309,487. SEAMLESS DRESS. MARGUERITE REEBER and WILLIAM WALLACE SYRBERG, Newark, N. J. Filed Feb. 24, 1919. Serial No. 278,781. 2 Claims. (Cl. 2—145.)

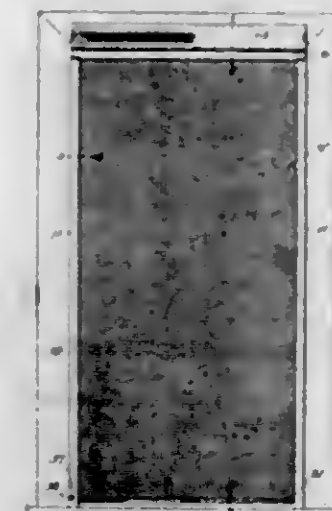
1. A seamless dress made of a single piece of dress material folded into two identical front and back portions along a median horizontal line, the piece having a

neck opening at the middle of the said median line, and a slit leading from the said neck opening downward at the front portion, the piece having oppositely arranged and laterally extending sleeve portions, bindings extending along the sides of the said piece, tying bands arranged in pairs on the binding at the sides of the dress body to tie the front and back portions together at the sides and



with the bindings in overlapping relation, permanently secured tying bands arranged in pairs on the binding at the under side of the sleeve portions, a binding extending along the wall of the neck opening and its slit, and permanently secured tying bands arranged in pairs at the binding of the slit.

1,309,488. SCREEN, CURTAIN, OR LIKE ARTICLE. TELBERT L. RICHARDSON, Brock, Nehr. Filed Oct. 22, 1918. Serial No. 259,273. 3 Claims. (Cl. 156—30.)



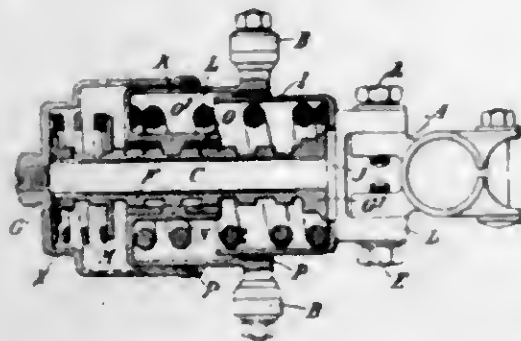
2. A frame presenting stiles, a spring roller mounted at the upper portion in said frame, sheet material secured to said roller to wind thereon or to unwind, said stiles having vertical slots through which the sheet material extends, upper and lower wheels in said stiles, an endless chain extending about said wheels, pins on the chain, strips on the side edges of the sheet material and presenting holes adapted to receive said pins, a ratchet turning with the lower wheel, and a pawl engaging said ratchet and extending to the exterior of the frame, whereby to release the ratchet and permit the spring roller to raise the sheet material.

1,309,489. DOUBLE-GYRO INCLINOMETER. LAWRENCE R. SPERRY, Brooklyn, N. Y., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 18, 1918. Serial No. 229,467. 5 Claims. (Cl. 74-78.)



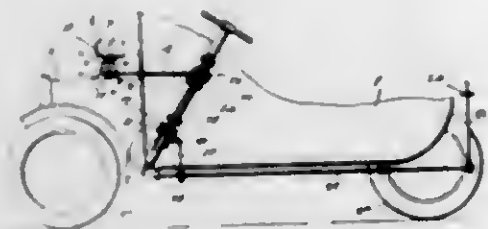
1. An inclinometer for aeroplanes comprising a pair of point-supported gyroscopic rotors having normally vertical spinning axes and air turbine means for driving said rotors in opposite directions.

1,309,490. SHOCK ABSORBING MECHANISM FOR VEHICLES. GEORGE ENOCH STANLEY, Coventry, England. Filed Dec. 21, 1918. Serial No. 267,879. 2 Claims. (Cl. 267-3.)



1. In a shock absorber for the purpose described, the combination with two relatively movable parts and a cushioning spring interposed therebetween, of a quick-threaded screw on one of said movable parts, a nut on the other movable part to engage said screw, and two friction elements brought in contact by the axial movement of the one part and consequent rotation of the other, the one friction element being constituted by a flange formed on the one end of the said screw, and the other by the bearing for one of said movable parts.

1,309,491. AUTOMOBILE ATTACHMENT. GEORGE W. STEINHAUER, Roseburg, Ore. Filed Aug. 7, 1917. Serial No. 184,902. 1 Claim. (Cl. 116-31.)

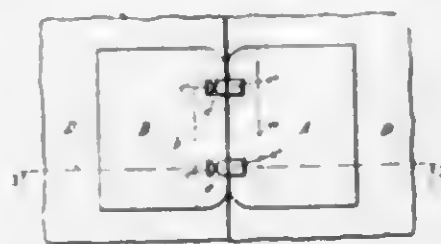


An automobile attachment including a steering post and a rotatably mounted headlight having a pulley secured thereto, a housing surrounding the steering post, a removable section to said housing and being of a larger diameter than said housing and having an opening therein, a roller secured to the steering post and located within the removable section, and a belt mounted on the pulley and passing through the opening of the removable section to turn the headlight on turning of the steering post.

1,309,492. PACKAGE-FASTENER. ARTHUR H. SWETT, Chicago, Ill., assignor to American Tag Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1918. Serial No. 239,113. 4 Claims. (Cl. 24-17.)

4. As a new article of manufacture, a self-contained separable sticker-fastening comprising two gummed pieces

of pliable material with flap-ports meeting edge to edge in the same flat plane, and a flat metal clip lying against the inner sides of said flap-ports and bridging the edges thereof and piercing said flap-ports and hav-



ing a short tongue clamped upon the outer side of one flap-portion, and a long tongue clamped over the other flap-portion and extending beyond the meeting edges of the two flap-ports.

1,309,493. CONVERTIBLE VELOCIPEDE. JAMES E. TYLER, Helen, Ga. Filed Oct. 25, 1918. Serial No. 259,658. 1 Claim. (Cl. 208-113.)



1. A convertible velocipede of the character described comprising a frame having a rear axle, the said frame including frame bars laterally spaced apart and attached to the axle at points on opposite sides of the center of the axle, the latter being provided with an offset having a wheel mounted thereon to be normally maintained midway between the said frame bars, and wheels mounted on the ends of the axle.

1,309,494. X-RAY SYSTEM. RICHARD VARLEY, Englewood, N. J. Filed Mar. 18, 1915. Serial No. 15,270. 2 Claims. (Cl. 175-345.)



1. In an electric system, the combination of a source of alternating current, a transformer supplied thereby, a choke coil associated with the core of the transformer, and an electro-magnetic device actuated by the primary current of the transformer and controlling the circuit of the choke coil.

1,309,495. BRUSH. DONALD H. WALKER, Detroit, Mich. Filed Dec. 18, 1918. Serial No. 267,314. 1 Claim. (Cl. 15-38.)

A shaving brush comprising a hollow handle, open at one end, and provided with a vertical slot, bristles projecting from the open end of said handle, a cup slidably fitted in said handle and carrying a stick of shaving soap, eyes carried by the end of the cup and the closed

end of the handle, a coiled contractile spring arranged within the handle and terminally connected with said eyes, and a beaded element threaded into said cup and

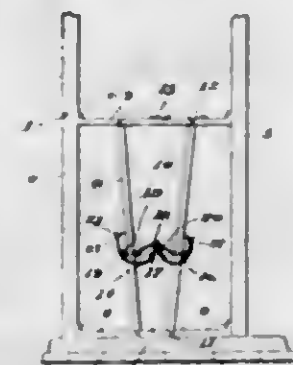


passed through said slot, said bead engaging against the handle to hold said cup in adjusted position against the tension of said spring.

1,309,496. PROCESS OF MAKING ACID-STEEL. WILLIAM R. WALKER, New York, N. Y. Filed Feb. 1, 1918. Serial No. 214,834. 2 Claims. (Cl. 75-27.)

1. The process of producing acid steel, low in sulfur, which consists in bessemerizing iron in an acid converter, transferring the metal to and treating it in a basic open hearth, thereafter transferring it to and treating it in a basic electric furnace with a basic slag containing at least 10% silica and the remainder of the slag being lime, and thereafter transferring it to and treating it in an acid-lined electric furnace with a silicious slag.

1,309,497. COW-STANCHION. GARRETT H. WARD, Tillamook, Ore. Filed Sept. 19, 1916. Serial No. 120,963. 4 Claims. (Cl. 119-147.)



1. In a stanchion structure, the combination, of an upper and lower cross bar, a substantially vertical bar rigidly connected to said top and bottom cross bars, a second bar pivotally connected to said bottom cross bar, and spring catches carried by said top cross bar for an engagement with the upper end of said pivoted bar for holding the pivoted bar in adjusted positions, rings slidably carried by said substantially vertical bar and the pivoted bar, a flexible rope connected to said rings and adapted for extending about an animal's neck, and means carried by the free ends of said rope for securing them together.

1,309,498. PLOW. JOHN CALVIN WATERS, Epworth, Ga. Filed Mar. 6, 1919. Serial No. 280,924. 1 Claim. (Cl. 97-27.)

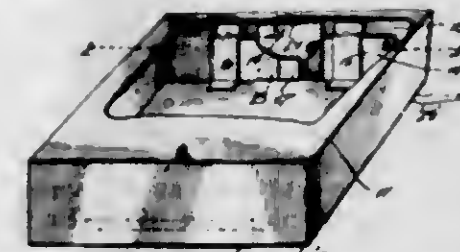
A combination turning plow and subsoiler, comprising a beam with a clevis swiveled thereto, a turning plow and a subsoiler, each having a slotted standard adapted to straddle the beam, pivotal pins passing through registering apertures in the wall of each slotted standard, links pivotally connected to said pins, a forked handle pivotally connected to the pivot upon which said standards are

mounted, and each arm being pivoted to the adjacent ends of links upon either side of the beam, said pins which



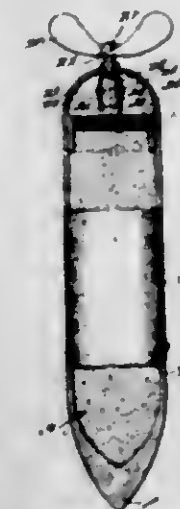
pivotally connect the standards to said links tending to limit the movement of the beam in one direction or the other.

1,309,499. BOX. HANST WELLS, New York, N. Y. Filed Feb. 23, 1918. Serial No. 218,663. 8 Claims. (Cl. 229-47.)



1. The combination with a box comprising two box-sections, of locking means for said sections concealed in said box, and means for operating said locking means from outside said box, said operating means extending between the said sections.

1,309,500. AERIAL TORPEDO OR MINE. MEADE WILDRICK, U. S. Army, assignor of one-half to Oscar I. Strand, Fort Howard, Md. Filed Jan. 27, 1917. Serial No. 144,967. 2 Claims. (Cl. 102-2.)

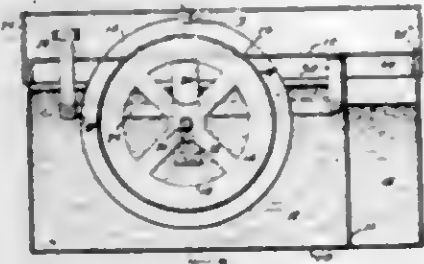


1. In a projectile adapted to be dropped from air craft, the combination with a shell containing high explosive, of a percussion fuse adapted to explode said high explosive, means for holding said percussion fuse in the safety position, a spindle journaled in the base of the projectile, a screw propeller secured to said spindle, and adapted to be rotated by the pressure of the air during the flight of the projectile, and releasing means automatically controlled by the rotation of said spindle and operated by centrifugal force for releasing said holding means, substantially as described.

1,309,501. CONTAINER FOR MUCILAGE OR THE LIKE. RHESA FLAVIUS WILLIAMS, Lake Toxaway, N. C. Filed Dec. 6, 1917. Serial No. 205,751. 1 Claim. (Cl. 91-51.)

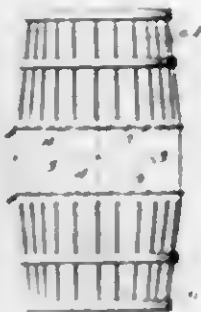
A device of the class described including a container, a removable top thereon presenting an opening, a roller

mounted for turning movement and extending at its upper side through the said opening, a shaft on which the drum is mounted to turn, springs exerting pressure against the ends of the said shaft and tending to press the latter against opposite edges of the opening, and members carried by said top on which the springs are seated so that the roller, its shaft, and springs will be removable with the removal of the said top; together with



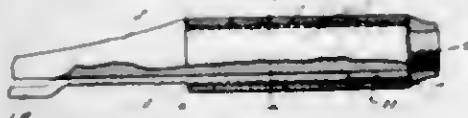
means to depress the roller against the action of the springs and relieve the pressure of the roller against the edges of the opening, said means including a frame presenting side bars adapted to bear against the ends of the shaft, members on the removable top, to which members the said side bars are pivoted at one end, and a key connected with the said arms at the opposite ends thereof, the key extending above the removable top.

1,309,502. FLEXIBLE KNOCKDOWN CONTAINER. J. FRANK WILSON, Jacksonville, Fla. Filed May 15, 1917. Serial No. 168,794. 1 Claim. (Cl. 217-44.)



A knock-down barrel made from a web which is composed of a plurality of wide, thin, flexible staves, a portion at least of the edges being approximately at right angles to their main surfaces, one end at least of each staff having a plurality of slots, and hoops rigidly secured to the solid portion of the several staves at a plurality of points throughout their width, whereby to prevent the hoops from slipping with respect to the staves, the staves and hoops so assembled that when in the mat the right angular adjacent edges of the staves come close together or in contact, so that when the mat is rolled into barrel form and the outer ends are secured together in the completed barrel, the several edges of the staves are drawn into tighter contact with each other due to the tendency of the stave edges to yield and the hoops to be subjected to strain without slipping.

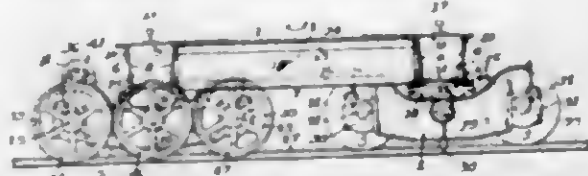
1,309,503. CAN-OPENER. WILLIAM L. WITSON, Zillah, Wash. Filed Aug. 10, 1917. Serial No. 185,503. 1 Claim. (Cl. 30-3.)



A can opener comprising a cylindrical body having one end reduced and screw threaded, a tapering shank formed on the other end of said body and defining an annular shoulder at its point of formation with said body, a re-

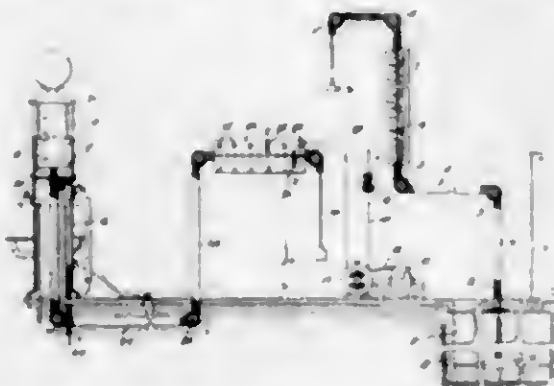
taining means carried by the free end of said shank, said shank and body having aligning grooves, an arm slidable in the grooves of the body and shank and having its forward end spaced from said shank, a cutting element carried by said end of the arm, threads formed on the arm, and an internally screw threaded cylindrical handle mounted on the body and having one end abutting the shoulder and its threads meshing with the threads of said arm, and a retaining collar threaded to the screw threaded extension of said body and abutting the other end of said handle.

1,309,504. TRAVELING CRANE. WILLIAM A. YOUNG, Milwaukee, Wis., assignor of one-half to Henry H. Erkelens, Milwaukee, Wis. Filed Apr. 12, 1918. Serial No. 228,268. 5 Claims. (Cl. 105-27.)



1. In a traveling crane the combination of a bridge having longitudinal box girders rigidly connected at the ends by transverse tie members, brackets secured to the lower edges of the girder webs and having lugs fitting between said webs, equalizing truck frames disposed transversely to the girders centrally pivoted to the brackets and provided at the ends with wheel bearings, and truck wheels journaled in said bearings.

1,309,505. LIQUID-DISPENSING APPARATUS. MRS. BILL A. BEACH, Penn Yan, N. Y. Filed Apr. 28, 1919. Serial No. 293,103. 3 Claims. (Cl. 103-80.)



1. The combination with a liquid supply tank and an auxiliary receptacle having a float arranged therein and a cable connected to the float and provided with an indicator member movable with the cable when the float is actuated, of an electrically operated pump having connection with the said supply tank and adapted to supply liquid to the said auxiliary receptacle, and an indicator board provided with normally open contacts at regular intervals throughout the length of the board, a switch plug adapted for insertion in the board to engage any pair of contact members and adapted for rotation for disengaging the members, the said cable being disposed on the said board and movable across the same to guide the said indicator when the cable is moved for engaging the said rotatable plug to automatically actuate the plug during a predetermined limited movement of the said cable across the board, whereby the said electrically operated pump will be deenergized.

1,309,506. DEVICE FOR TYING PACKAGES. GEORGE A. BLAKE, deceased, by Mary D. Blake, administrator, Watertown, N. Y. Filed Dec. 18, 1918. Serial No. 267,415. 2 Claims. (Cl. 24-16.)

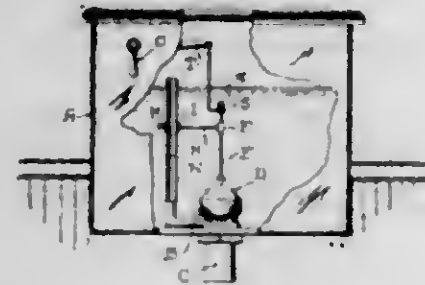
2. In a package tie, a fastening device consisting of a body including a shank having spaced fingers at one end

offset from the shank through the medium of a bight portion between the shank and fingers, said bight having an opening therein, a finger carried by the bight portion between the first mentioned fingers and extending over the opening at the side of the bight portion opposite to the



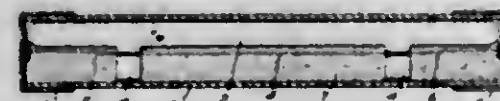
direction of extension of the fingers, and a lip carried by the opposite end of the shank from the fingers and extending over the shank at its side opposite to the direction of the offset of the fingers, said shank having a longitudinal notch in one edge extending from the lip to a point adjacent to the bight.

1,309,507. VALVE FOR FLUSH-TANKS. CLARENCE A. BRAS, Detroit, Mich., assignor of one-half to Peter H. Rich, Detroit, Mich. Filed May 7, 1919. Serial No. 295,311. 3 Claims. (Cl. 4-5.)



1. A valve for flush tanks, etc., made up of a mass of spongy like rubber, having throughout its make-up air cells.

1,309,508. CARTRIDGE-FUSE. ROBERT C. COLE, Hartford, Conn., assignor to The Johns-Pratt Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 21, 1919. Serial No. 272,224. 4 Claims. (Cl. 175-273.)

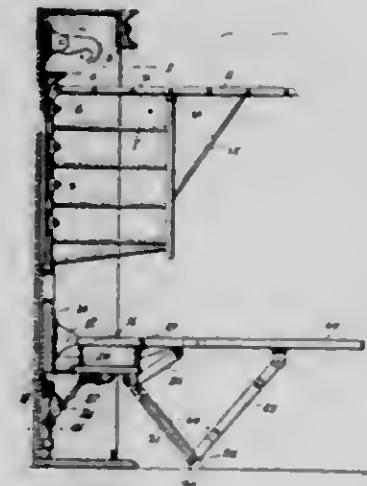


1. A cartridge fuse having an insulating case, metal caps at the ends of the case, a piece of sheet insulation loosely located in the case and extending longitudinally and transversely thereof, a fusible wire extending between and having its ends wrapped about portions of said piece of insulation, and terminal wires with their inner ends wrapped about the inner ends of the fusible wire and their outer ends electrically connected with the end caps.

1,309,509. COMBINED TABLE. FREDERICK S. CONKLIN, Yonkers, N. Y. Filed Feb. 28, 1919. Serial No. 279,854. 1 Claim. (Cl. 126-37.)

In combination, a cabinet, a head board secured to the back wall thereof, spaced brackets mounted upon the head board, a rod extending at right angles between and at the bottom of said brackets and forming a bumper, a stove having lugs hingedly connected upon said bracket at its rear end, a lug carried by said stove at its bottom and rear end adapted to engage said bumper rod whereby

to be held in a horizontal position and against rear movement, a service pipe extending practically through the bottom of the cabinet under said head board, a controlling valve connected to the upper end of said service pipe, a pipe pivotally coupled to the upper end of the said service pipe, a branch pipe pivotally coupled to said last named pipe at its outer end, a feed pipe projecting



through the bottom of said stove to which is pivotally coupled said branch pipe, a longitudinal table board secured to said stove flush with its top surface and forming an extension thereof, a sectional support secured to said stove and board respectively and adapted to hold the latter in horizontal position with said stove, said support being foldable substantially in the same direction as the length of said board.

1,309,510. NAIL-BRUSH. ADAM R. DAVIDSON, Bedford, Ind. Filed Mar. 2, 1917. Serial No. 152,068. 1 Claim. (Cl. 15-37.)

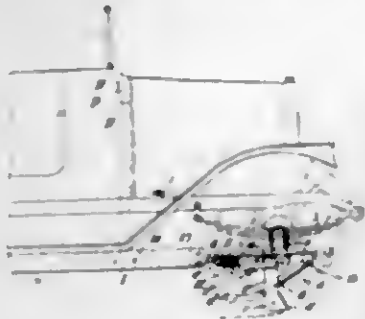


In a device for the purpose set forth, the combination with a casing of a size to be grasped by the hand of an operator, of spaced shafts journaled in the casing, meshing toothed wheels upon each of the shafts, a balance wheel upon one of the shafts, a ratchet wheel loosely journaled upon this shaft, a pinion secured to the ratchet wheel, a spring pressed dog upon the toothed wheel carried by the said shaft engaging with the ratchet wheel, a longitudinally movable rack bar slidably mounted in the casing and projecting therethrough and co-engaging with the teeth of the pinion, spring means engaging with the end of the rack-bar for returning the same to normal position, a head upon the outer end of the rack bar, and a rotary brush upon the second shaft having a portion projecting from the casing.

1,309,511. AUTOMOBILE-JACK. MATTEO DE CESARE and JOSEPH DELLE CHIAIE, Clifton, N. J., assignors of one-third to Pandlo Diodato, New York, N. Y. Filed Jan. 8, 1917. Serial No. 141,292. 2 Claims. (Cl. 21-8.)

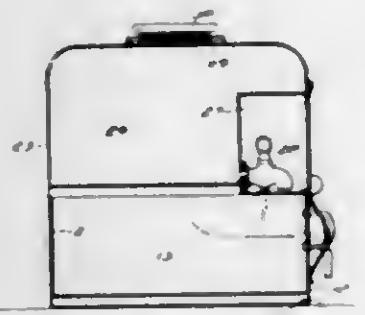
1. The combination of a plate adapted to be secured to an automobile frame, a jack arm pivotally secured at one end to the plate, a telescopic brace pivotally secured

at one end to the jack arm intermediate the ends thereof and pivotally secured at the other end to the plate adjacent one end thereof, said arm being provided with an eye, a spring pressed bolt carried by said plate adjacent



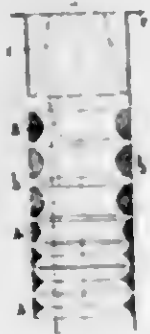
the other end thereof and adapted to engage into said eye when the jack arm is in raised position, and means for moving the said bolt into retracted position so as to permit the jack arm to move downward and forward about its pivotal axis.

1,309,512. AUTOMOBILE-LAVATORY. WILMER ARTHUR DEHUFF, Baltimore, and EUGENE T. GRIFFIN, Annapolis, Md. Filed Aug. 29, 1918. Serial No. 251,558. 9 Claims. (Cl. 45—119.)



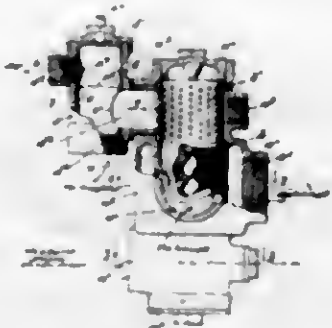
4. A lavatory comprising a casing having an upper water receptacle and a front recess, said receptacle having an upper filling opening and a lower outlet cock, the latter located in said casing recess, and a drawer having a basin and slidable into and out of the casing below the water receptacle and the outlet cock thereof.

1,309,513. METHOD OF CASTING GROOVES OR IMPRESSIONS IN ROLLERS. JOHN ELLBOJ, Stockholm, Sweden. Filed Mar. 7, 1919. Serial No. 281,193. 5 Claims. (Cl. 22—180.)



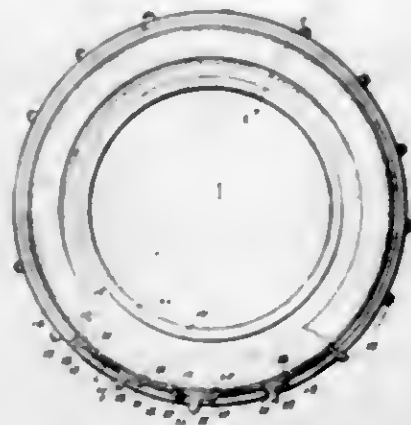
2. The method of casting grooves or impressions in rollers in chill molds, consisting in securing the chills together at a suitable distance from one another by means of thin blades or fastenings of thin flat or hoop iron, so as to form a jointed skeleton, securing said skeleton to a cylinder, and submerging said cylinder in a casting mold.

1,309,514. APPARATUS FOR VAPORIZING HYDROCARBONS. HENRI CHARLES EMPIA, Paris, France. Filed Sept. 14, 1917. Serial No. 191,415. 7 Claims. (Cl. 257—241.)



1. In an apparatus for vaporizing hydrocarbons for internal combustion explosion motors, a chamber having a perforated tube therein provided with means for utilizing hot exhaust gases from the motor for heating the same, an inlet branch through which a mixture of air and hydrocarbon is fed to said chamber and tube, an outlet branch for connecting the chamber and tube to the suction pipe of the motor, and a mass of small bodies of heat conducting material located within said perforated tube and adapted to be kept in motion by the suction of the motor as the hydrocarbon passes through the chamber and tube from the said inlet branch to the said outlet branch.

1,309,515. TIRE-PROTECTOR AND ANTISKID DEVICE. WILLIAM B. ESTES, Sr., Newark, N. J., assignor of one-fourth to A. LYONS, Newark, N. J. Filed Feb. 13, 1917. Serial No. 148,359. 1 Claim. (Cl. 152—33.)

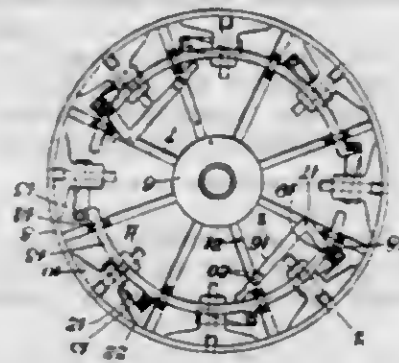


A tire protector including an annular shield, a plurality of circumferentially spaced lugs formed upon the outer face of said shield, a collar to encircle said shield, a plurality of circumferentially spaced enlargements formed on said collar having recesses in their undersides to receive the lug, and an anti-skid lug formed upon each of said enlargements adjacent the ends of said enlargement and spaced circumferentially from said recesses.

1,309,516. LOCOMOTIVE DRAFT-REGULATOR. JOSEPH R. GERARD, Parsons, Kans. Filed Aug. 10, 1917. Serial No. 185,513. 2 Claims. (Cl. 162—8.)

2. In combination with a locomotive having a nozzle in the smoke box thereof below the smoke stack and communicating with the exhaust of the locomotive, of a hollow head on the nozzle communicating therewith, a closure plate for the head, slidable valves seated in the head, said valves having passages from their outer ends communicating with the bottom thereof and with the seat thereof, valves having fluid conducting pipes communicating with the in-

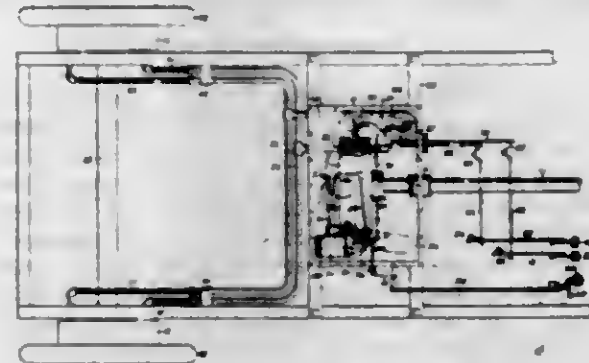
1. In combination with a wheel having a slotted rim, a housing attached to the rim at said slot, said housing



1,309,521. TRACTION-WHEEL. GEORGE L. HENRY, Turo township, Franklin county, Ohio, assignor of one-half to Orla H. Mosler, Columbus, Ohio. Filed Jan. 29, 1919. Serial No. 271,038. 3 Claims. (Cl. 21—209.)

1,309,518. DRIVING MECHANISM. FREDERICK C. GUERARD, Stamford, Conn. Filed Jan. 13, 1917. Serial No. 142,331. 13 Claims. (Cl. 60—53.)

1. A mechanism as characterized comprising a power generator having a rotary supporting frame embodying a plurality of cylinders and piston therefor, means for rotating the said frame, and adjustable member operatively

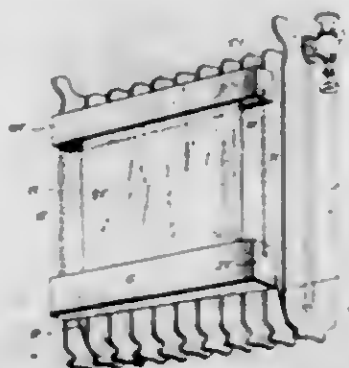


1,309,519. RADIATOR-HUMIDIFIER. LINCOLN T. HANSEN, SAN, SULLIVAN, Ill. Filed May 26, 1917. Serial No. 170,956. 1 Claim. (Cl. 237—78.)



1,309,520. COMBINED SEAT AND BED. GRACE HANSEN, Mosler, Calif. Filed May 24, 1918. Serial No. 230,302. 2 Claims. (Cl. 21—43.)

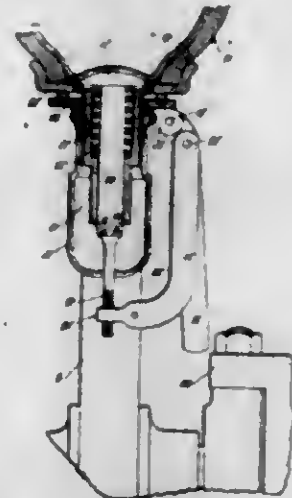
The herein described radiator humidifier comprising a supply tank having supporting rods at its ends, said rods having hooks to engage over sections of a radiator, a trough, chains suspending the trough from the supply tank, rods extending longitudinally through the tank and the trough, an absorbent fabric having its ends attached to the tank, said fabric passing over a wall of the tank, said chains and suspended trough maintaining the fabric in extended position between the tank and trough, and also enabling the trough to be placed on the tank when desired.



1,309,519. RADIATOR-HUMIDIFIER. LINCOLN T. HANSEN, SAN, SULLIVAN, Ill. Filed May 26, 1917. Serial No. 170,956. 1 Claim. (Cl. 237—78.)

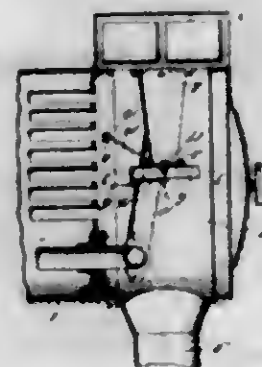
means leading from one of the valves. ber to positions eccentric to the said frame operable by leading to the valves, and means for shifting the said member to positions eccentric to the said frame operable by

1. In combination with a vehicle wheel and an indicator, means to project beyond the wheel and strike a stationary part of the vehicle when the tire is not properly indicated.



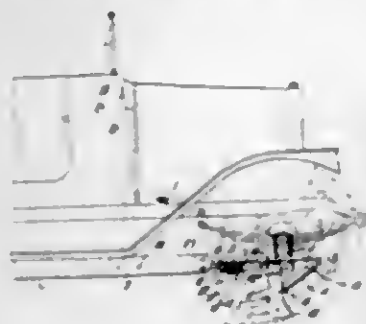
1,309,517. TIRE-PRESSURE INDICATOR. BENJAMIN G. GILBERTON, Los Angeles, Calif. Filed May 23, 1917. Serial No. 170,410. 11 Claims. (Cl. 73—111.)

pivoted on the cover plate and loosely connected with the legs of the valves, and an operating rod connecting the free arms of the toggle levers.



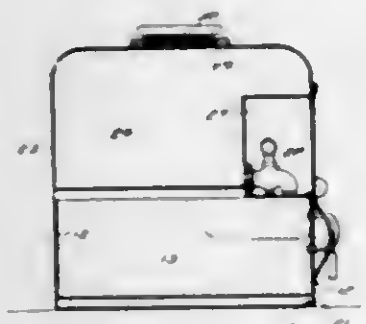
terior of the head to the rear of the valve, an upstanding lug on each of the valves, said cover plate having elongated openings through which the lugs pass, toggle levers

at one end to the jack arm intermediate the ends thereof and pivotally secured at the other end to the plate adjacent one end thereof, said arm being provided with an eye, a spring pressed bolt carried by said plate adjacent



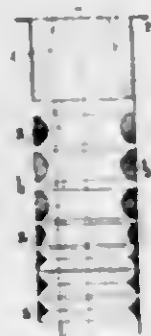
the other end thereof and adapted to engage into said eye when the jack arm is in raised position, and means for moving the said bolt into retracted position so as to permit the jack arm to move downward and forward about its pivotal axis.

1,309,512. AUTOMOBILE LAVATORY. WILMER ARTHUR DEHUFF, Baltimore, and EUGENE T. GRIFFIN, Annapolis, Md. Filed Aug. 29, 1918. Serial No. 251,958. 9 Claims. (Cl. 45-119.)



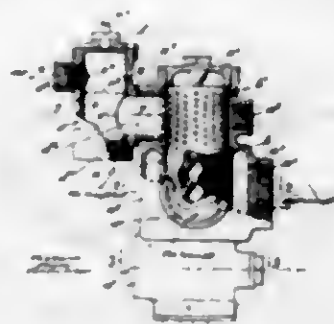
4. A lavatory comprising a casing having an upper water receptacle and a front recess, said receptacle having an upper filling opening and a lower outlet cock, the latter located in said casing recess, and a drawer having a basin and slidable into and out of the casing below the water receptacle and the outlet cock thereof.

1,309,513. METHOD OF CASTING GROOVES OR IMPRESSIONS IN ROLLERS. JOHN ELLBOJ, Stockholm, Sweden. Filed Mar. 7, 1919. Serial No. 281,193. 5 Claims. (Cl. 22-180.)



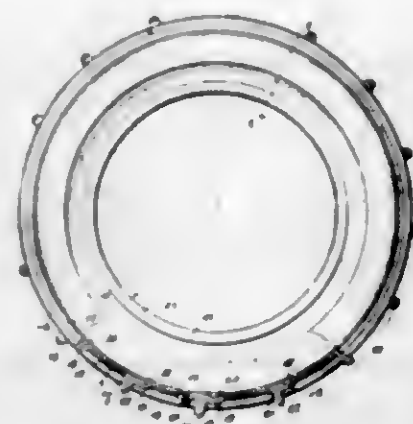
2. The method of casting grooves or impressions in rollers in chill molds, consisting in securing the chills together at a suitable distance from one another by means of thin hinges or fastenings of thin flat or hoop iron, so as to form a jointed skeleton, securing said skeleton to a cylinder, and submerging said cylinder in a casting mold.

1,309,514. APPARATUS FOR VAPORIZING HYDROCARBONS. HANRI CHARLES EMPIA, Paris, France. Filed Sept. 14, 1917. Serial No. 191,415. 7 Claims. (Cl. 257-241.)



1. In an apparatus for vaporizing hydrocarbons for internal combustion explosion motors, a chamber having a perforated tube therein provided with means for utilizing hot exhaust gases from the motor for heating the same, an inlet branch through which a mixture of air and hydrocarbon is fed to said chamber and tube, an outlet branch for connecting the chamber and tube to the suction pipe of the motor, and a mass of small bodies of heat conducting material located within said perforated tube and adapted to be kept in motion by the suction of the motor as the hydrocarbon passes through the chamber and tube from the said inlet branch to the said outlet branch.

1,309,515. TIRE PROTECTOR AND ANTISKID DEVICE. WILLIAM H. EATON, Sr., Newark, N. J., assignor of one-fourth to A. Lyons, Newark, N. J. Filed Feb. 13, 1917. Serial No. 148,359. 1 Claim. (Cl. 152-33.)

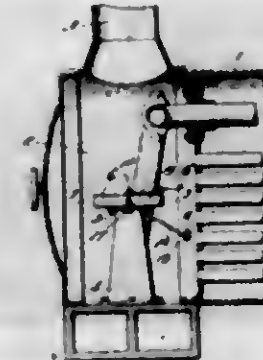


A tire protector including an annular shield, a plurality of circumferentially spaced lugs formed upon the outer face of said shield, a collar to encircle said shield, a plurality of circumferentially spaced enlargements formed on said collar having recesses in their underside to receive the lug, and an anti-skid lug formed upon each of said enlargements adjacent the ends of said enlargement and spaced circumferentially from said recesses.

1,309,516. LOCOMOTIVE DRAFT REGULATOR. JOSEPH R. GARARD, Parsons, Kans. Filed Aug. 10, 1917. Serial No. 185,513. 2 Claims. (Cl. 162-8.)

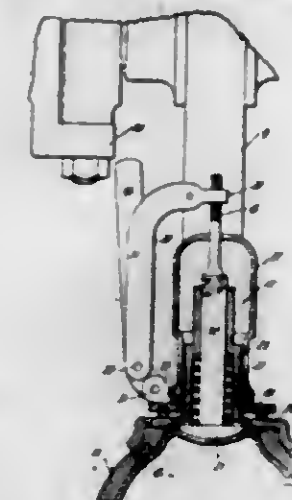
2. In combination with a locomotive having a nozzle in the smoke box thereof below the smoke stack and communicating with the exhaust of the locomotive, of a hollow head on the nozzle communicating therewith, a closure plate for the head, slidable valves seated in the head, said valves having passages from their outer ends communicating with the bottom thereof and with the seat thereof, valved fluid conducting pipes communicating with the in-

terior of the head to the rear of the valves, an upstanding lug on each of the valves, said cover plate having elongated openings through which the lugs pass, toggle levers



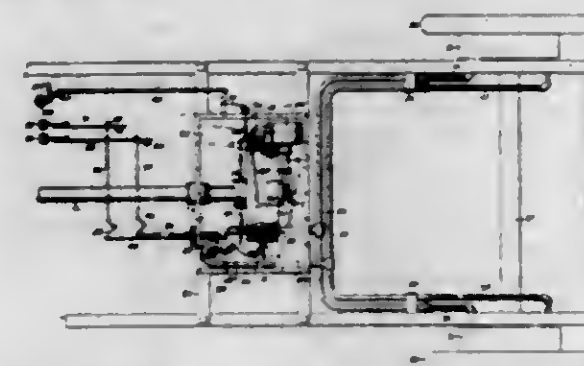
pivoted on the cover plate and loosely connected with the lugs of the valves, and an operating rod connecting the free arms of the toggle levers.

1,309,517. TIRE PRESSURE INDICATOR. BENJAMIN G. GILBERTON, Los Angeles, Calif. Filed May 23, 1917. Serial No. 170,410. 11 Claims. (Cl. 73-111.)



1. In combination with a vehicle wheel and an inflatable tire thereon, a movable pressure operated registering means in operative connection with the tire, and an arm connected to the wheel rim to be moved by movement of said means to project beyond the wheel and strike a stationary part of the vehicle when the tire is not properly inflated.

1,309,518. DRIVING MECHANISM. FREDERICK C. GUERLICH, Stamford, Conn. Filed Jan. 13, 1917. Serial No. 142,331. 15 Claims. (Cl. 60-53.)

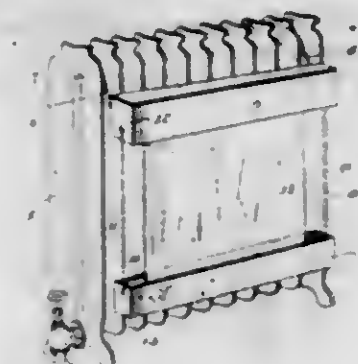


1. A mechanism as characterized comprising a power generator having a rotary supporting frame embodying a plurality of cylinders and piston therefor, means for rotating the said frame, an adjustable member operatively

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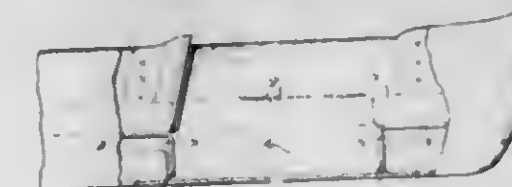
connecting said pistons for moving the same in unison, two valves, and outlets from the cylinders having branches leading to the valves, and means for shifting the said member to positions eccentric to the said frame operable by means leading from one of the valves.

1,309,519. RADIATOR-HUMIDIFIER. LINUS T. HAGEMAN, Sullivan, Ill. Filed May 25, 1917. Serial No. 170,950. 1 Claim. (Cl. 237-78.)



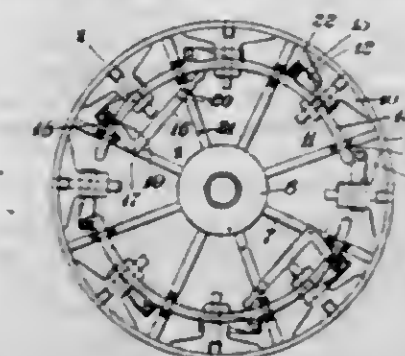
The herein described radiator humidifier comprising a supply tank having supporting rods at its ends, said rods having hooks to engage over sections of a radiator, a trough, chains suspending the trough from the supply tank, rods extending lengthwise through the tank and the trough, an absorbent fabric having its ends attached to said rods, said fabric passing over a wall of the tank, said chains and suspended trough maintaining the fabric in extended position between the tank and trough, and also enabling the trough to be placed on the tank when desired.

1,309,520. COMBINED SEAT AND BED. GRACE HARRIS, Monterey, Calif. Filed May 24, 1918. Serial No. 236,362. 2 Claims. (Cl. 21-43.)



2. In combination with the front and rear seats of an automobile having compartments below the seat cushions thereof, a pair of hinged doors closing the front of the rear compartment, a pair of hinged doors closing the rear of the front compartment and swinging rearwardly into the space between the seats, and a removable cushion in each compartment adapted to be placed on the tops of the doors when the same are in partly open position to form a bed.

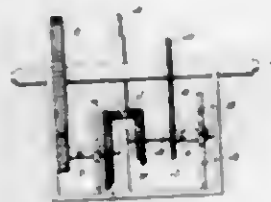
1,309,521. TRACTION WHEEL. GEORGE L. HEMPT, Truro township, Franklin county, Ohio, assignor of one-half to Orla H. Mosler, Columbus, Ohio. Filed Jan. 29, 1919. Serial No. 271,938. 3 Claims. (Cl. 21-209.)



1. In combination with a wheel having a slotted rim, a housing attached to the rim at said slot, said housing

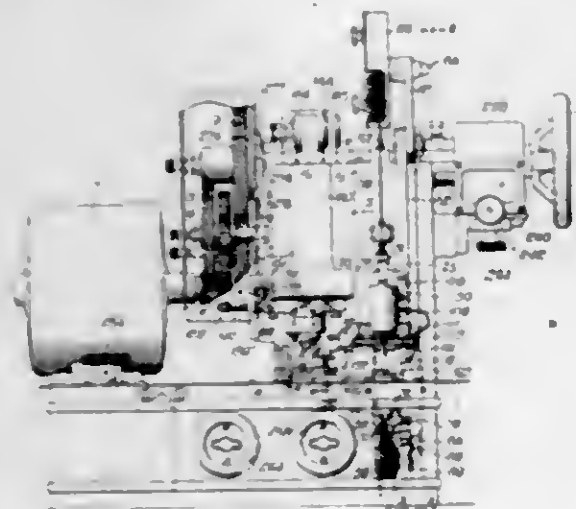
having a passage radial with reference to the wheel for the reception of a traction lug and a cross passage for an actuating member for said lug extending in a plane coinciding with the plane of the wheel, a traction lug in said radial passage, a separate lug actuating member in said cross passage for actuating said traction lug, said lug actuating member being movable in a right line and in a plane coinciding with the plane of the wheel, and means for actuating said lug actuating member.

1,309,522. ATTACHMENT FOR MOWING-MACHINES. LORENZO B. HONTER, Hammond, Ind. Filed Jan. 24, 1919. Serial No. 272,593. 1 Claim. (Cl. 74-59.)



The combination with the axle and driving shaft of a mowing machine, of a pair of stub shafts journaled in the frame of the machine, gears of different diameters connecting said stub shafts with the driving shaft, gears connecting one of said stub shafts with the axle, a chain wheel on the other stub shaft, a like wheel on the axle, a chain connecting said wheels and clutch means on the stub shafts for connecting the same with their driving means.

1,309,523. PROCESS OF FORMING ELECTRICAL CONTACTS. WILLIAM F. HOSFORD, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Sept. 24, 1915, Serial No. 52,514. Divided and this application filed Mar. 23, 1917. Serial No. 156,966. 17 Claims. (Cl. 219-10.)

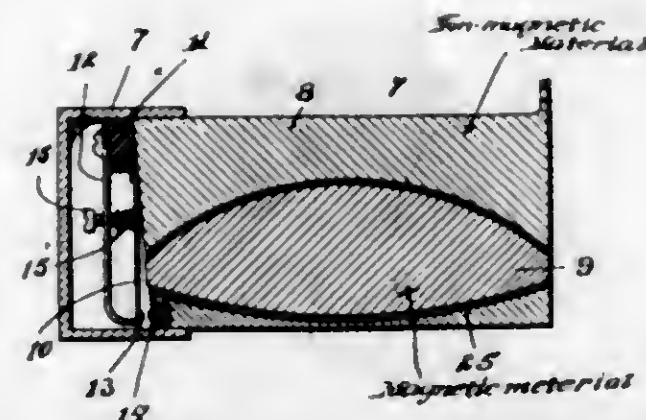


1. The process of making a composite metallic article, which consists in welding the abutting ends of two wires to each other, and then forming one of said parts into a desired shape.

1,309,524. ELECTRICALLY-OPERATED RAILWAY-SWITCH. JAMES A. JOHNSON, Stockville, Nebr., assignor of one-half to E. D. Brown, Stockville, Nebr. Filed Nov. 20, 1915. Serial No. 62,590. 2 Claims. (Cl. 175-32.)

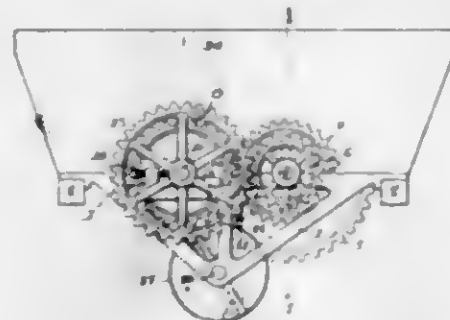
1. A circuit controlling device having a magnetic core, a contact insulated from the core, a disk operated through

the magnetism of the core and having a contact to engage the first mentioned contact, and a conductor in-



cluded in the circuit, encircling the core, and terminating at the insulated contact.

1,309,525. CHEESE-CURD MILL. CHARLES JENSEN, Milwaukee, Wis. Filed Apr. 5, 1919. Serial No. 287,714. 3 Claims. (Cl. 31-22.)



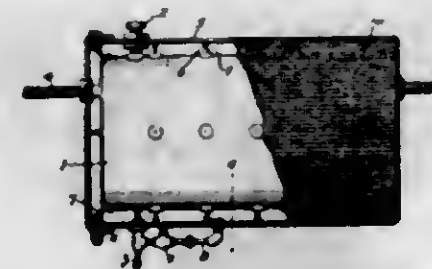
1. In a cheese-curd mill the combination with a series of coaxial circular slitting knives, an opposing parallel roller, and a stationary blade below and parallel with the axes of said knives and roller, of a rotary cutter comprising a spiral blade having its axis parallel with the stationary blade and its cutting edge crossing and adapted to cooperate with the stationary blade at a number of points simultaneously.

3. In a curd mill the combination with a portable frame, a series of coaxial circular slitting knives, an opposing roller having its axis parallel with that of said knives, a stationary doctor blade located close to the periphery of said roller below and parallel with its axis, a rotary cutter comprising a spiral blade having a lateral cutting edge crossing and adapted to cooperate with the lower edge of the doctor blade, and a two way hopper having oppositely and downwardly inclined bottom walls terminating at the lower edges at a distance from each other above and parallel with the axes of the slitting knives and roller respectively and adapted to support and guide sheets of curd fed from either end of the machine to and between said slitting knives and roller.

1,309,526. FUEL-TANK. BERTRAND B. KARN, Cincinnati, Ohio. Filed Dec. 9, 1918. Serial No. 265,846. 3 Claims. (Cl. 220-68.)

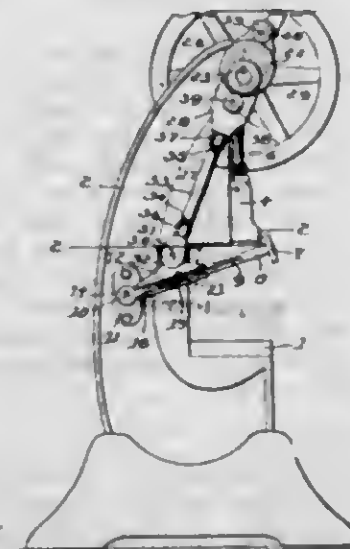
1. A fuel tank comprising, a metallic tank for containing liquid fuel, an enveloping casing formed of rubber,

and means for spacing the casing away from the tank such distance as to prevent the outward ragging of the



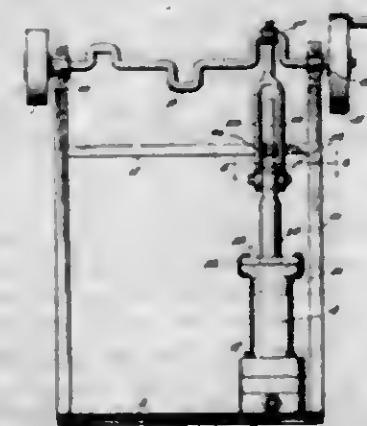
wall of the tank from reaching the casing, combined substantially as set forth.

1,309,527. SAFETY-GUARD FOR POWER-PRESSES. FRANCIS LOUIS KELLENSBERGER, St. Louis, Mo. Filed June 18, 1918. Serial No. 240,596. 3 Claims. (Cl. 74-105.)



1. In combination with a machine of the class described, embodying a crank shaft, a reciprocating element, and a pitman connecting said element to the crank of said shaft; a guard attachment comprising an arm mounted for rocking movement, a guard element carried and rocked by said arm, an eccentric cam on said crank shaft, and a rod connected to said rock arm and having a slot through which the crank shaft extends, said rod being also provided with tappet elements which engage opposite sides of the periphery of said eccentric cam.

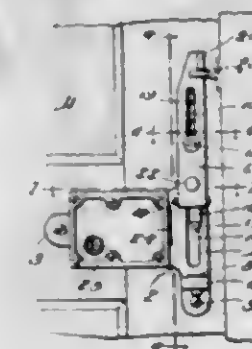
1,309,528. AIR-PUMP. GEORGE KLUNDT, Streeter, N. D. Filed Oct. 16, 1918. Serial No. 258,345. 3 Claims. (Cl. 230-27.)



1. An air pump embodying a plurality of pumps arranged in pairs, plungers for each of said pumps, a crank

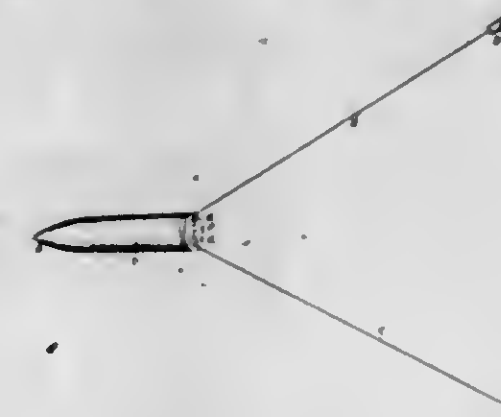
shaft, means for connecting each pair of plungers to the crank shaft, a valve controlled intake port for each of said cylinders, a communicating passage between said ports and an outlet port communicating with said passage, whereby each pair of plungers will act simultaneously upon the crank shaft.

1,309,529. BURGLAR-ALARM. JULIUS KROG and STEFANS SCHERMANN, St. Louis, Mo. Filed Jan. 2, 1919. Serial No. 269,221. 5 Claims. (Cl. 116-42.)



1. In an alarm for doors and windows, an attaching member, means carried by said member for holding a cartridge, a firing pin mounted slidably and non-rotatably on said attaching member for firing the cartridge, a spring for operating said pin, a lateral lug movable bodily with said pin along a straight path, and a stop adapted to be carried by a relatively movable part to engage said lug and prevent operation of said firing pin until the door or window is opened.

1,309,530. AIRCRAFT-PROJECTILE. GEORGE ERVIN LAMBERSON, Brooklyn, N. Y., assignor of fifty-one per cent. to George E. Lamberson, twenty-four per cent. to M. Clifford Pardee, twenty per cent. to Donald M. Oldersleeve, and five per cent. to Harry F. Hully, Brooklyn, N. Y. Filed Oct. 1, 1917. Serial No. 184,272. 2 Claims. (Cl. 102-20.)

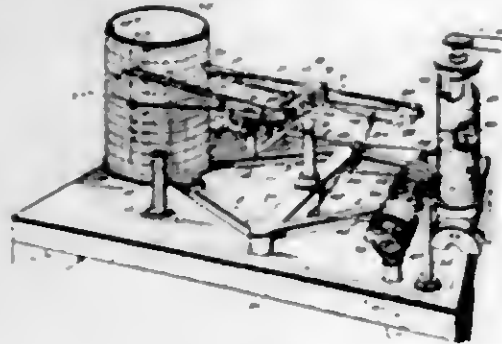


1. An air-craft projectile having a hollow chambered body adapted for the storage of coils of flexible lines; a plurality of coils of lines within said chamber; means for anchoring one end of each of said lines; weighted members attached to the opposite ends of said coils; means for supporting said weighted members; and means for ejecting said weighted members from the rear end of said projectile while said projectile is in flight.

1,309,531. ABSOLUTE HYGROGRAPH. ALEXANDER G. MCADIE, Milton, Mass. Filed Apr. 11, 1918. Serial No. 227,859. 6 Claims. (Cl. 234-11.)

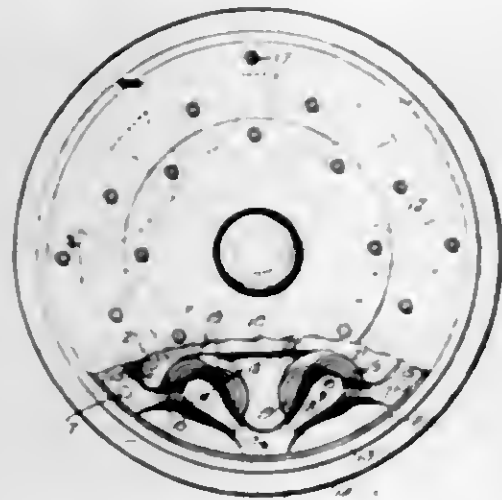
2. A recording hygograph comprising a base, a standard carried by the base, a plurality of pivoted arms mounted in axial alignment on said standard, a dry thermometer for controlling the movement of one of said

ARM, a wet thermometer for controlling the movement of another of said arms, and a hygroscopic device acting con-



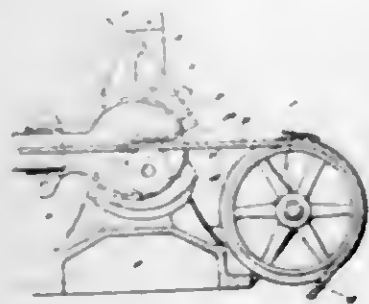
jointly with said dry thermometer for controlling the movement of the third arm.

1,309,532. SPRING-WHEEL. CHARLES J. MCCORD, Alpha, Mich. Filed Nov. 12, 1916. Serial No. 202,155. 5 Claims. (Cl. 152-28.)



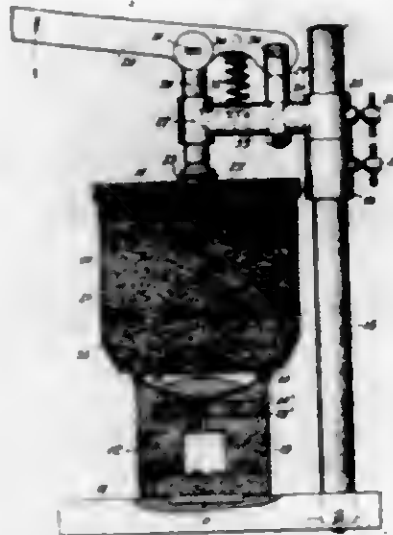
3. A wheel comprising a hub, a felly, tangentially disposed staggered spokes secured to said felly, springs surrounding the inner ends of the spokes and radial lugs projecting from said hub for contact with said springs.

1,309,533. MOORING OF LIGHTER-THAN-AIR AIR-CRAFT. JAMES McKECHNIE, Harrow-in-Furness, and BARNES NEVILLE WALLIS, Grange-over-Sands, England, assignors to Vickers Limited, Westminster, London, England. Filed Mar. 25, 1919. Serial No. 285,107. 4 Claims. (Cl. 244-1.)



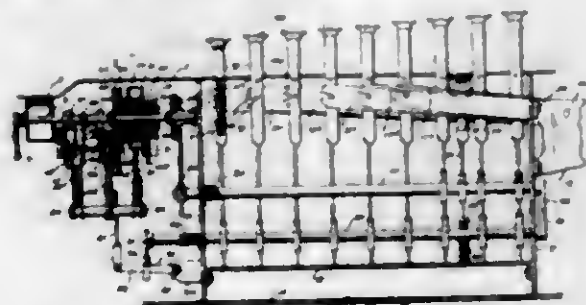
1. An airship mooring comprising the combination of a mast with an expanding socket and ball coupling, said socket mounted on said mast, said ball mounted on the airship, means for holding said socket normally expanded, means for holding said socket closed about the ball when said ball enters the socket and means for disengaging said holding means to permit said socket to expand and release the airship.

1,309,534. METAL-CASTING MACHINE. LEO MAX-DELSTAMM, New York, N. Y. Filed Jan. 21, 1919. Serial No. 272,365. 1 Claim. (Cl. 22-68.)



In a casting press of the character set forth, the combination with a flask or receptacle adapted to contain an investment of a size proportional to the cast to be made and having a concave top to hold the metal to be cast, a plunger movable in a horizontal plane into position close over the flask and molten metal in the top of the flask, said plunger comprising a drum-like shell of larger diameter than any flask used and having an opening in its bottom and being completely filled with compressed fibrous refractory material adapted to come into direct contact with the molten metal, and means to force the plunger downward to drive the molten metal into the cavity in the investment.

1,309,535. CALCULATING-MACHINE. JAMES F. MAYS, Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C., a Corporation of North Carolina. Filed Feb. 14, 1917. Serial No. 148,559. 56 Claims. (Cl. 235-133.)

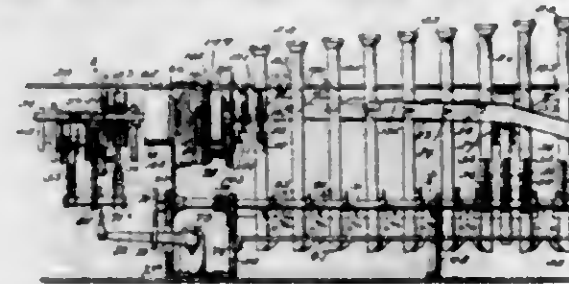


1. In a calculating machine, dials, dial operating mechanism, and a compound carrying mechanism co-operating therewith and comprising a floating holding member movable directly responsive to the operation of the dial carried from and acting to partially effect the carry, an escapement follower for completing the carry, and key controlled means to restrain the operation of said follower until the said holding member has completed its travel.

1,309,536. QUOTIENT MECHANISM FOR COMPUTING-MACHINES. JAMES F. MAYS, Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C., a Corporation of North Carolina. Filed Jan. 11, 1919. Serial No. 270,705. 34 Claims. (Cl. 235-82.)

1. In a calculating machine, the combination of a series of registering devices, a series of columns of keys for actuating the respective registering devices, devices for individually setting the respective registering devices in condition for operation, and division markers oper-

atively connected to the respective setting devices, each division marker being movable into a position to mark



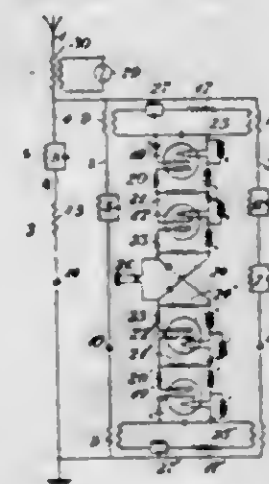
its respective column of keys and operative by such movement to connect for operation the appropriate registering device for the column of keys thus marked.

1,309,537. PAPER DUSTER. HENRY ANDREW MILLER, Meadville, Pa. Filed Mar. 29, 1919. Serial No. 285,945. 2 Claims. (Cl. 2-60.)



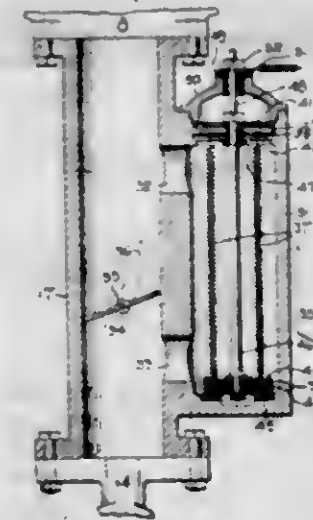
1. A duster or protecting device for clothes comprising a body shaped substantially as a cape, and open at the front, said body being formed of flexible paper and in three parts, there being a back section and two front sections, one edge of each of the front sections being secured to the back section by adhesive, each of the front sections having a slit forming arm openings, and connecting strips arranged on one of the front sections, said strips being coated with adhesive so as to act as connecting means for connecting the two front sections together when the device is in use.

1,309,538. WIRELESS SYSTEM. JOHN MILLS, Wyoming, N. J., and JOHN R. CARSON, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 6, 1915. Serial No. 54,392. 8 Claims. (Cl. 250-9.)



1. In a wireless duplex system, the combination of a transmitting branch circuit, a receiving branch circuit, an auxiliary branch circuit, a receiving device connected to said receiving branch circuit and said auxiliary branch circuit, and means for rendering said receiving device unresponsive to interfering oscillations of said circuits.

1,309,539. HEATER FOR MANIFOLD-INTAKES. WATT L. MORSELAND, Los Angeles, Calif. Original application filed Mar. 20, 1916, Serial No. 85,369. Divided and this application filed Nov. 12, 1917. Serial No. 201,585. 2 Claims. (Cl. 219-38.)



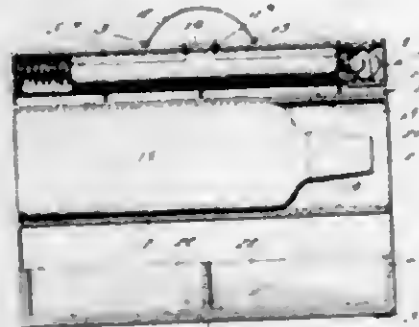
1. An apparatus for heating carbureted air for starting internal combustion motors, comprising a manifold section having lateral ports and having a shutter intermediate its ends to direct flow of air through said lateral ports thereof, a heating chamber extending along one side of the section and communicating through said ports and forming a by-pass for the carbureted air, and electrical resistance coils in the by-pass chamber whereby the flowing air may be heated prior to entry to the motor, the said coils arranged in an organized unit bodily removable from the chamber.

1,309,540. RESILIENT WHEEL. JOHN F. OLDRAM, New York, N. Y. Filed Oct. 16, 1918. Serial No. 258,821. 3 Claims. (Cl. 152-31.)



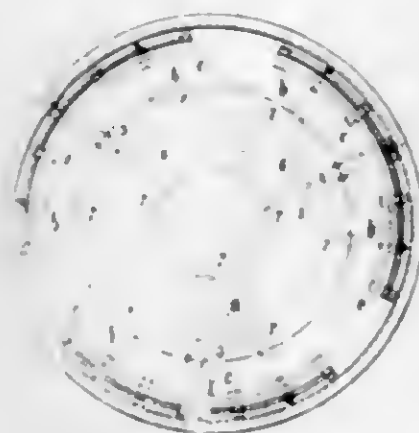
1. A resilient wheel, comprising a hub portion and a rim with openings therein, tubular spoke sections engaging the openings in the rim and having wings at their inner ends for engagement upon opposite sides of the hub, tread shoes, a tubular spoke section fastened to each shoe and telescoping within a tubular spoke section which is fastened to the hub, said tubular spoke sections having shoulders adapted to limit the outer movements of the shoe-carrying tubular sections, a filler at the inner end of each hub engaging spoke section and bearing against the circumference of the hub, coiled springs concentrically mounted within the tubular spoke sections and bearing intermediate the fillers and shoes.

1,303,541. LUNCH-PAIL. CLARENCE M. O'NEAL, Eagle Creek, Oreg. Filed Dec. 7, 1917. Serial No. 206,081. 1 Claim. (Cl. 240-8.4.)



A lunch pail comprising a box like main body and an upwardly contracting portion defined by upwardly converging side walls, a tubular compartment in the upper narrowest portion of the said pail shorter than the main body of the pail, an electric lamp the casing of which fits in and protects beyond said tubular compartment, a removable cap normally covering the projecting end of said lamp, a second compartment underlying the lamp compartment, a tubular casing in said second compartment, a vacuum bottle removably fitted in said second tubular casing and having a tapering neck adapted to receive and form a frictional holder for the cap of the lamp when detached from the lamp and a third compartment in the bottom portion of the pail.

1,309,542. MOUNTING OF REFLECTORS. CHARLES ALGERNON PARSONS, ENRIQUE BENNETT, and HARVEY HOWE, Newcastle-upon-Tyne, England; said Bennett and Howe assignors to said Parsons. Filed Sept. 6, 1918. Serial No. 252,905. 4 Claims. (Cl. 240-41.)

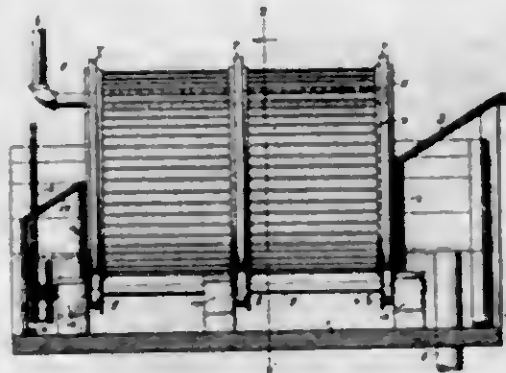


1. A reflector mounted on a number of pivoted supporting members symmetrically placed around the mirror, each supporting member carrying clips embracing the edge of the mirror and bearing on its front and rear surfaces at equal intervals around its circumference, substantially as described.

1,309,543. MACHINE FOR WASHING PULP-WOOD. JAMES LEWIS PHILLIPS, Great Bend, N. Y. Filed Sept. 9, 1918. Serial No. 253,280. 2 Claims. (Cl. 141-12.)

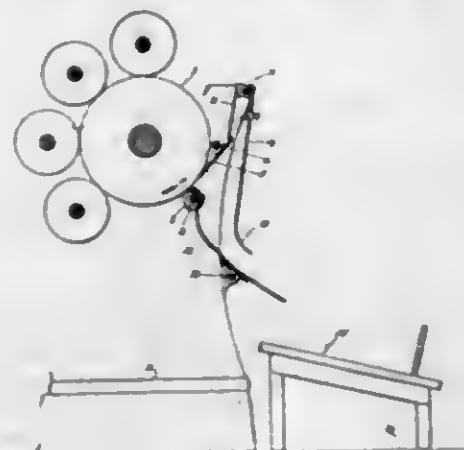
2. An apparatus for washing pulp wood, consisting of a tank, shafts journaled in suitable bearings, wheels fixed to the shafts, a rotatable drum having open ends and comprising a circumferential wall of strips spaced

apart, circular tracks about the drum and resting upon said wheels, a pipe extending through the upper portion



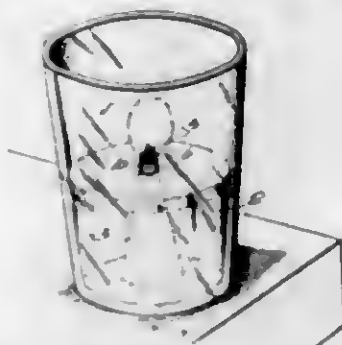
of the drum, the said pipe having perforations within the drum through which water may be sprayed.

1,309,544. DELIVERER FOR PRINTING-PRESSES. CARL O. FRITCHARD, Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio, a Corporation of Ohio. Filed Feb. 16, 1915. Serial No. 8,523. 12 Claims. (Cl. 271-63.)



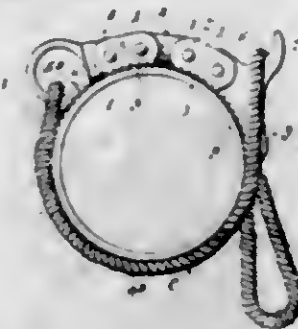
1. In combination with a printing press having a rotary cylinder and means for stripping sheets therefrom, means for controlling the movement of the sheet as it is stripped from the cylinder, and relatively fixed guiding means cooperating therewith for effecting discharge of the sheet in a reverse position.

1,309,545. NIGHT-LIGHT. JACOB REICHEN, Baltimore, Md. Filed May 7, 1919. Serial No. 295,449. 8 Claims. (Cl. 67-21.)



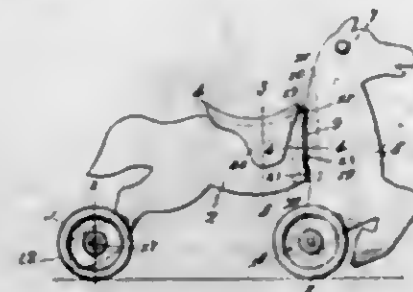
1. In a night light, a receptacle containing fuel, an openwork cage in said fuel extending from the receptacle bottom to a point approximately midway between the ends of the receptacle, a mass of absorbent material confined in said cage, and a wick rising from said absorbent material to a point above the surface of the fuel.

1,309,546. PIPE-GRIPPING DEVICE. JAMES J. RHINELANDER, Pittsburgh, Pa. Filed Nov. 13, 1918. Serial No. 262,318. 2 Claims. (Cl. 81-64.)



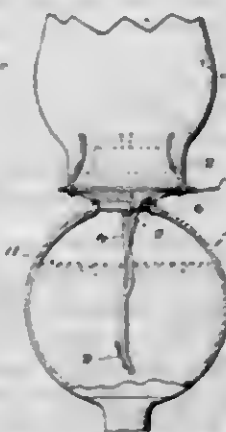
1. A pipe grip comprising a plurality of toothed links pivoted together, a toothed ring pivoted to certain of said links, a substantially bell crank hook member connected to other of said links and a length of rope having one end fixed to said ring and its other end adapted to be adjustably associated with the hook member at a point to force the hook member in a direction toward the pipe.

1,309,547. WHEELED TOY. JAMES A. RICHARDS, Marietta, Ohio, assignor to The Richards Manufacturing Company, Marietta, Ohio, a Corporation of Ohio. Filed Aug. 17, 1918. Serial No. 250,385. 3 Claims. (Cl. 46-22.)



1. A riding wheeled toy, having a main body portion and a front steering portion, these parts being united by a hinge, the hinge being formed of parts carried respectively by the main body portion and the steering portion, and each hinge part being formed of thin metal folded upon itself, the superposed parts being set into a kerf formed in the body part to which that hinge section is secured and formed also with an exposed loop, the loop portions of the hinge parts being adapted to be brought in line with each other, and a pin passing through the said loop parts and constituting the pivot pin of the hinge.

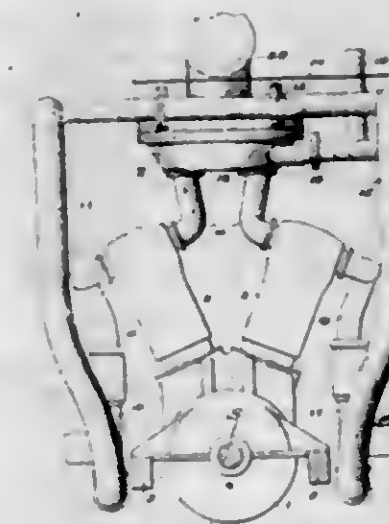
1,309,548. LAMP ATTACHMENT. GAVINO RODRIGUEZ, El Paso, Tex. Filed Nov. 4, 1918. Serial No. 261,036. 1 Claim. (Cl. 67-74.)



In combination with a lamp, including a burner, a wick therefor, and means for raising or lowering said

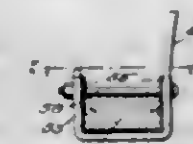
wick, of a flexible wire passing through the bottom of the burner and through the wick at spaced intervals, and a plate secured to the inner end of said flexible element contacting with one of the sides of the wick adjacent to the lower end of said wick, as and for the purpose set forth.

1,309,549. TURBO-COMPRESSOR MOUNTING. EARL H. SHERRBOND, Cleveland, Ohio. Filed Apr. 2, 1918. Serial No. 226,287. 16 Claims. (Cl. 60-13.)



1. The combination with a V-type air-plane engine, provided with a substantially horizontal crankshaft, of a turbo-compressor mounted on said engine and adapted to be operated by the waste gases from the engine to supply air for combustion to said engine and means to support said turbo-compressor so that its axis is substantially vertical.

1,309,550. SHOCK-LOADER. EDWIN O. STANCLIFF, Bakersfield, Calif. Filed Jan. 8, 1917. Serial No. 141,195. 1 Claim. (Cl. 103-8.)



In a machine of the character described, a conveyor having cross bars, grooved plates at opposite sides of said cross bars provided with apertures, conveyor teeth having one end bent to U-form arranged to embrace the sides and lower face of the bars with the side extensions of said U ends disposed in the grooves of said plates, and bolts extending through the apertures of the plates and having portions lapping those portions of the teeth seated in the grooves, substantially as described.

1,309,551. PROCESS OF PRODUCING EXPLOSIVE COMPOUNDS AND PRODUCT THEREOF. CHARLES M. STINE, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed July 20, 1916. Serial No. 110,278. 41 Claims. (Cl. 52-3.)

1. A process of producing an explosive compound which comprises nitrating and halogenating an organic compound to introduce a nitro group and a halogen, hydrolyzing to substitute a hydroxyl group for the halogen, and nitrating to substitute a nitrate group for the hydroxyl group.

29. An explosive containing an organic compound having therein a nitro group and a nitrate group, there being a plurality of one of said groups present.

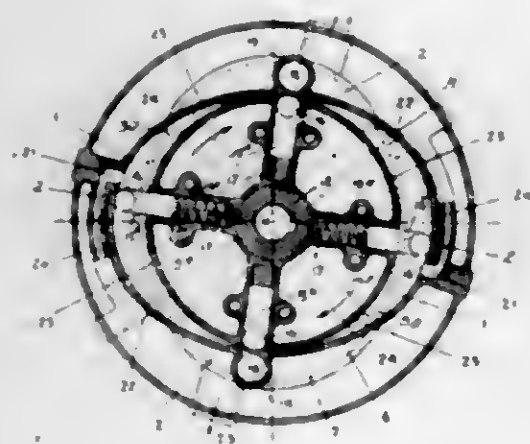
1,309,552. BLASTING-CAP CHARGE. CHARLES M. STINE, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 12, 1916. Serial No. 114,498. 7 Claims. (Cl. 52-2.)

1. An explosive composition containing an organic compound having therein a nitro group and a nitrate group, and a priming material.

1,309,553. EXPLOSIVE. WENDELL R. SWINY, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 31, 1918. Serial No. 214,638. 14 Claims. (Cl. 52-3.)

2. An explosive composition containing high grade gun cotton and a liquid organic nitrated compound.

1,309,554. ROTARY GAS-ENGINE. GIUSEPPE ORRATI TIGHEZZI, Genova, Italy. Filed Apr. 26, 1917. Serial No. 164,708. 2 Claims. (Cl. 123-16.)

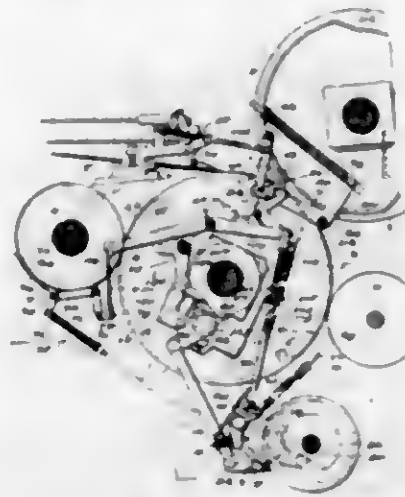


1. A rotary internal combustion engine comprising a casing provided with a plurality of chambers having parallel side walls and elliptical circumferential walls, which are arranged in crossed relation relative to one another, the elliptical wall of one chamber being provided with diametrically opposite openings for the admission of the explosive mixture and with diametrically opposite openings for the discharge of the compressed mixture from said chamber, passages connecting the discharge openings of the first chamber in communication with inlet openings diametrically oppositely arranged in the elliptical wall of the second chamber, rotatable disks mounted in said chambers and each carrying an even number of pistons, and springs for forcing said pistons toward said elliptical walls, the pistons of the two disks being arranged out of alignment.

1,309,555. MULTICOLOR SHEET-PRINTING PRESS. RUST F. UPHAM, Boston, Mass., assignor, by mesne assignments, to United Printing Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 17, 1916. Serial No. 72,474. 42 Claims. (Cl. 101-185.)

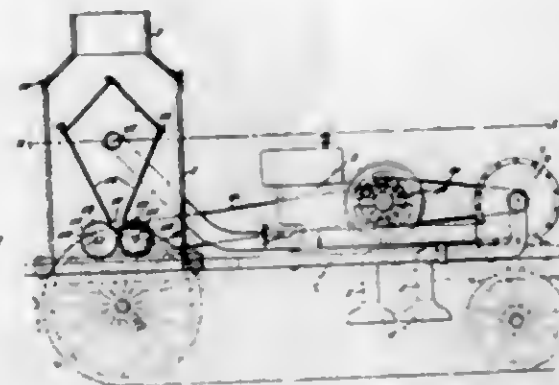
12. In a printing press the combination of a printing couple, means for feeding sheets to the impression member of said couple, a transfer reel adapted to take sheets from said cylinder and to return same thereto, and means for throwing the cylinder off impression; with the spring-pressed rod for tripping said throw-off means, means for re-

taining the rod in ineffective position, detector fingers adjacent the said reel, a latch for holding the rod retaining



means in normal position when the reel is carrying a sheet, and means whereby if a sheet is not on the reel said detector fingers withdraw the latch.

1,309,556. BOLL-WEEVIL CATCHER. OSCAR VAN RIPER, Hope, Ark. Filed Apr. 30, 1918. Serial No. 231,635. 1 Claim. (Cl. 43-1.)

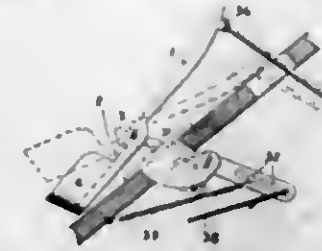


A machine of the class described including a frame for engagement with a portable supporting structure, a housing mounted on the frame at one end and opening downwardly therethrough, a cover hingedly mounted on the housing and having an upwardly extending stack, a screen hopper within the housing and having its walls converging downwardly to an outlet, screens hingedly connected to the upper ends of said walls of the said hopper and secured together under the stack, the said screens and hopper walls extending throughout the width of the housing, crushing rolls below the hopper for receiving material discharged through the hopper outlet, said rolls being adapted to direct such material downwardly onto the ground, a blower on the frame at the other end thereof, means for directing a current of air from the blower and into each side of the housing into the space below the screens and between the walls of the hopper, suction hoods adapted to be supported close to the ground, fluid connections between said hoods and the blower, a motor mounted on the frame, and means for transmitting motion from the motor to the blower and to the rolls simultaneously.

1,309,557. FOOT-PEDAL FOR AUTOMOBILES. HAROLD A. VAN VALKENBURG, Oakland, Calif. Filed Dec. 1, 1917. Serial No. 204,958. 1 Claim. (Cl. 74-81.)

A dual control pedal mechanism comprising a pedal pivoted near its center on a bar slidable in a slot in a floor plate, said bar provided with a lug to limit its movement in said slot, and provided also with a notch for engaging the nether surface of said floor plate, the said

bar adapted, when depressed, to vibrate an elbow lever pivoted at the elbow to a portion of said floor plate and one member of said elbow lever provided with a plurality of holes for engaging one end of a coiled tension spring, the opposite end of which is suitably connected to the



floor carrying the floor plate, the said spring adapted normally to keep the said notched bar in engagement with the floor plate, a lug on one end of said pedal for securing one end of a connecting rod and holes in one member of said elbow lever for connection with one end of a connecting rod or cable.

1,309,558. BURSTING CHARGE FOR CONTAINERS INTENDED TO BE EXPLODED AND PROCESS OF FORMING SAID CHARGES. CLIFFORD A. WOODBURY, Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 4, 1917. Serial No. 184,492. 9 Claims. (Cl. 52-3.)

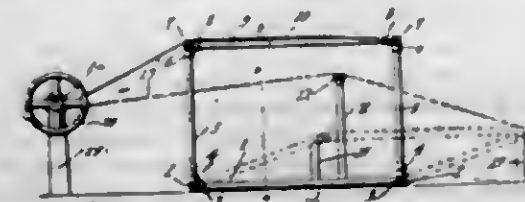


6. A bursting charge comprising trinitrotoluol and ammonium picrate.

1,309,559. PROCESS OF REFINING CRUDE TRINITROTOLUOL AND OTHER CRUDE AROMATIC NITRO COMPOUNDS. CLIFFORD A. WOODBURY, Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 5, 1917. Serial No. 200,368. 4 Claims. (Cl. 23-24.)

1. The process of refining aromatic nitro-compounds, comprising mixing the crude aromatic nitro-compound and sulfuric acid at ordinary temperature, and then removing from the undissolved aromatic nitro-compounds the liquid containing impurities.

1,309,560. GUN-SUPPORT. JOHN H. YOUNG, Bartlesville, Okla. Filed Sept. 21, 1918. Serial No. 255,181. 1 Claim. (Cl. 80-38.)



A knock down gun support formed of detachably connected pipes and joints and including a base frame and

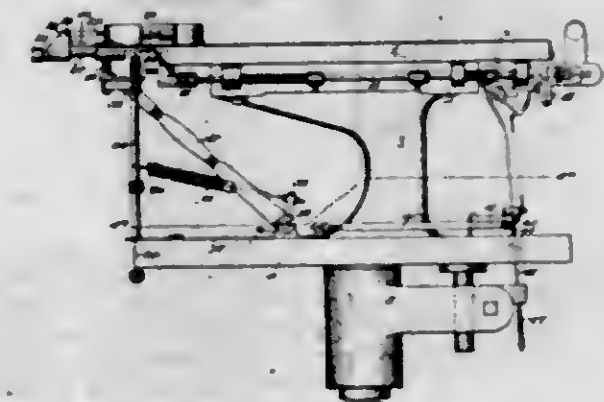
a top frame, standards connecting and pivotally mounted on the ends of the frames, a plate secured to the top frame, standards erected between the ends of the base frame and extending upwardly through the top frame when the support is lowered, elevating cables extending over and connected to the top frame and guided over the standards and downwardly to the front end of the upper frame when said frame is in lowered position, means for taking up or paying out the cables to raise or to lower the top frame and its standards, and stop devices in the paths of the standards for supporting the standards and top frame in lowered positions.

1,309,561. CONNECTION FOR ELECTRIC BATTERIES. FREDERICK JOHN BEAUMONT, London, England. Filed Oct. 2, 1916. Serial No. 123,338. 3 Claims. (Cl. 204-29.)



2. A connection for the electrodes of electric batteries, comprising a strip of bendable material having a T-shaped bendable member attached thereto and providing oppositely extending projecting tongues which are curled for connection around an electrode, the body of the strip being also bendable and the neck of the T-shaped member being curved upwardly and holding the body of said strip and said T-shaped member in positive spaced relation, and means for securing extremities of the device in applied position.

1,309,562. BOSOM-PRESS. CHARLES L. BRADLEY, Chicago, Ill., assignor to The American Laundry Machinery Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 4, 1915. Serial No. 49,020. 18 Claims. (Cl. 68-9.)

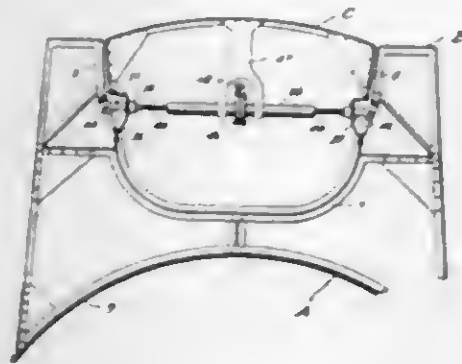


1. In a bosom press, the combination with a heated bed and bosom board, one having movement with relation to the other into and out of ironing relation, of a neck band former on said board, a movable carrier, a yoke supporting member on said carrier, yoke clamping means on said member, and means whereby said clamping means may be adjusted on said member relative to said neck band former.

1,309,563. SUBMARINE LIFE-BOAT. DANIEL J. CARR, Long Beach, Calif. Filed Nov. 18, 1918. Serial No. 262,935. 1 Claim. (Cl. 114-16.4.)

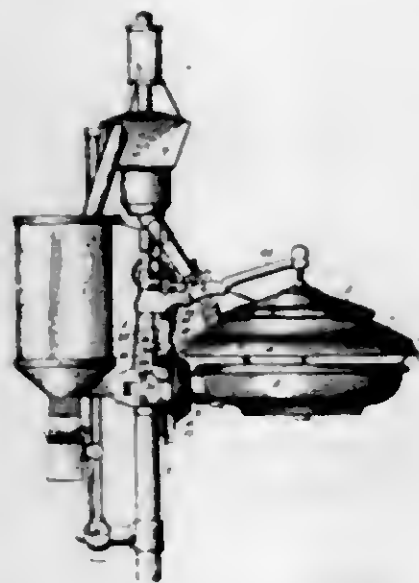
The combination with a submarine of a boat forming a water tight compartment, a man-hole way connecting said boat and said submarine, keeper bars secured to said submarine, latches secured to the sides of said boat and slidable into and out of engagement with said keeper bars, shafts held against rotation and slidably disposed in said shell, a shaft being secured to each latch, said shafts hav-

ing threads thereon, sleeves held against longitudinal movement and engaged with the threads on aligned shafts.



and means to rotate said sleeves in unison for projection and retraction of said shafts, whereby to operate said latches.

1,309,564. TIMING MECHANISM. CHARLES CRETOAS, Chicago, Ill. Filed Sept. 20, 1918. Serial No. 254,947. 5 Claims. (Cl. 74-14.)

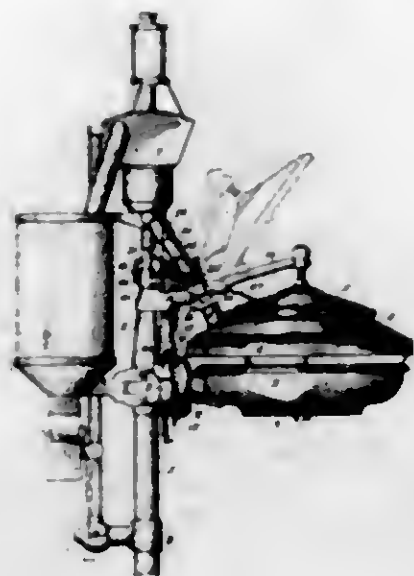


1. A timing mechanism for corn popping apparatus, comprising a driving pinion, a mutilated gear wheel receiving intermittent semi-revolutions from said pinion, means associated with said gear wheel for reengaging the same with the pinion after each semi-revolution, a timing mechanism comprising a ratchet disk carrying a pair of circularly spaced studs adapted for operative engagement with the aforesaid reengaging means and a ratchet lever operatively associated with the ratchet disk, and a cam formation rotating in unison with the aforesaid pinion and having operative engagement with the ratchet lever aforesaid, substantially as set forth.

1,309,565. COVER OPERATING MECHANISM. CHARLES CRETOAS, Chicago, Ill. Filed Sept. 20, 1918. Serial No. 254,948. 8 Claims. (Cl. 53-4.)

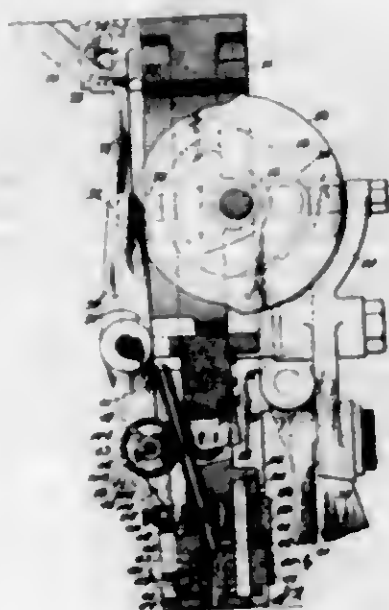
1. A cover operating mechanism for corn popping apparatus, comprising a supporting frame, a swinging cover carrying arm pivoted on said frame, a crank disk journaled on said frame and having operative connection with said carrying arm, said crank disk having a pair of diametrically opposed cam formations near its periphery, a driving countershaft, means for imparting constant rotation to said countershaft, a worm hub journaled loosely on said countershaft and having operative engagement

with said crank disk, a clutch connection between said hub and countershaft, intermittently operated means for moving the movable member of said clutch connection into operative engagement with said worm hub, and means



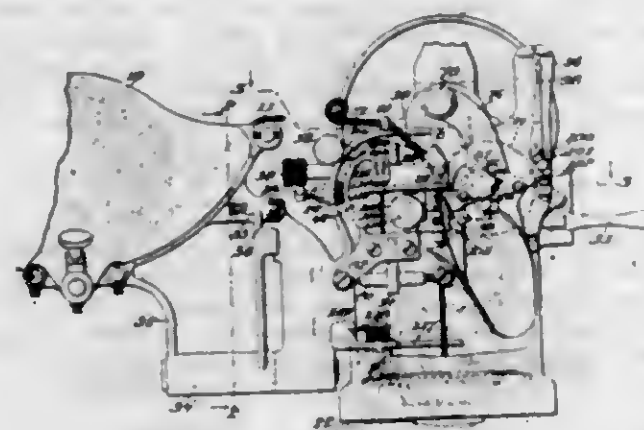
operatively associated with the cam formations of the crank disk for moving said movable clutch member out of engagement with said worm hub, substantially as set forth.

1,309,566. FASTENER-FORMING MECHANISM FOR FASTENER-INSERTING MACHINES. GEORGE A. DOATNA and JOHN H. BAUMINGA, St. Louis, Mo., assignors to Champion Shoe Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 18, 1913. Serial No. 790,415. 51 Claims. (Cl. 10-32.)



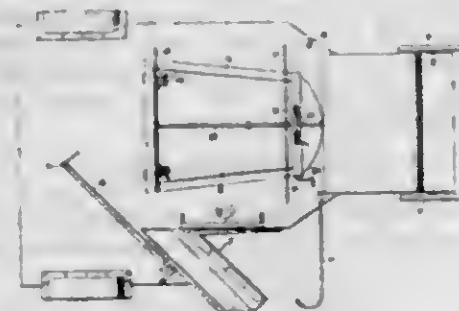
1. In a machine of the class described, the combination with fastener stock feeding mechanism, of a series of differently shaped dies adapted to operate on fastener stock, a single die adapted to cooperate with the dies of said series, and means for selectively positioning a die of said series with respect to said single die, adapted to form different sized fasteners.

1,309,567. WELT GROOVING AND BEVELING MACHINE. ANDREW EPPLER, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 12, 1918. Serial No. 249,386. 14 Claims. (Cl. 12-67.)



1. In a machine for preparing welting, the combination of means for supporting a welt strip of varying thickness, with means for forming a groove in the welt strip of a depth varying directly but to a less degree with the variations in thickness of the welt strip.

1,309,568. CORN-HARVESTER. DAVID J. FARHING, deceased, Butler, Tenn., by W. J. Pierce, administrator, Butler, Tenn., assignor, by direct and mesne assignments, of one-third to J. E. Reece and one-third to Asa C. Reece, Butler, Tenn. Filed June 29, 1918. Serial No. 242,638. 3 Claims. (Cl. 56-79.)

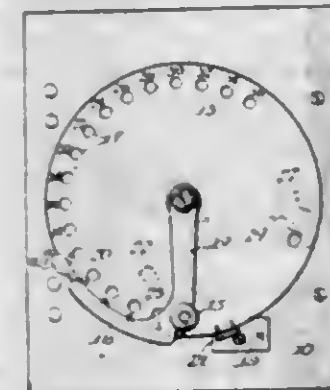


1. In a corn harvester, a wheel mounted platform, a longitudinally arranged forwardly and downwardly inclined blade, at one side edge of the platform, stalk guiding means located above and slightly behind said blade, an obliquely arranged blade disposed beneath the platform and at an angle to the first named blade and obliquely arranged stalkguiding means extending inwardly over the platform and spaced from the rear end of the first named stalk guiding means.

1,309,569. CALL-BOX. PAUL GNIPKE, Milwaukee, Wis., assignor to Railway Electric Manufacturing Co., Milwaukee, Wis. Filed July 16, 1917. Serial No. 180,707. 11 Claims. (Cl. 177-332.)

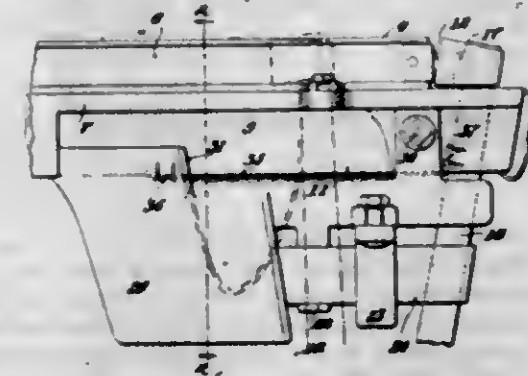
1. In a calling device for selective signaling systems the combination with an impulse transmitting element, means adapted to be selectively set in accordance with the call for any predetermined station and movable to control the actuations of said impulse transmitting element, a stop interposed in the path of movement of said setting means to arrest the movement of said setting

means at a given position in its movement, a second stop adapted to arrest said setting means a second time,



and means to release said setting means from said first aforesaid stop and permit it to travel to the second stop.

1,309,570. AUTOMATIC LOOM. JOSEPH GRANDMAISON, Brunswick, Me., assignor to Hopedale Manufacturing Company, Milford, Mass., a Corporation of Massachusetts. Filed June 14, 1918. Serial No. 239,930. 1 Claim. (Cl. 139-85.)



An automatic loom having, in combination, a lay, a replenishing shuttle box having in its bottom a slot for the passage therethrough of an ejected filling carrier, a picker stick, a picker stick slot below the shuttle box and a strip of flexible material secured at its inner end to the lay and at its outer end to the picker stick so as to cover over the picker stick slot when the picker stick is in its normal position.

1,309,571. TOOL, ADJUSTABLE IN TAPER. WINFIELD HANCOCK GRAY, Portsmouth, N. H., assignor to Ben A. Hurd, Portsmouth, N. H., and Edward J. Gihon, Wakefield, Mass., as trustees. Filed Aug. 2, 1917. Serial No. 184,036. 5 Claims. (Cl. 77-75.5.)



1. A spindle and a series of lengthwise extending blades adjustable longitudinally of the spindle and having such engagement therewith that said longitudinal adjustment will vary the angles of their outer edges to the axis of the spindle, and means for producing such adjustment by pressure on the ends of the blades making a face contact with such ends which is undiminished throughout the range of adjustment.

1,309,572. MECHANICAL TOY. GUSTAV A. GULLICKSON, Seattle, Wash. Filed Feb. 6, 1919. Serial No. 275,297. 7 Claims. (Cl. 214-99.)

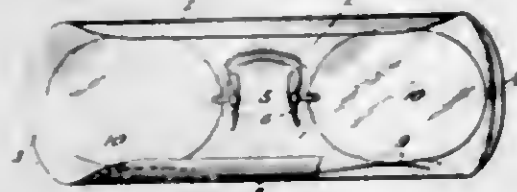
1. A toy of the character described, consisting of a crane arranged for rotary movements, a magnet depending from the crane boom, a plurality of magnetic articles,

a support therefor disposed at one side of the crane, and a device provided at the opposite side of the crane from said support and adapted to be encountered by the articles as they are successively carried by the magnet in the intermittent swinging movements of the crane for effecting the detachment of the articles from said magnet.



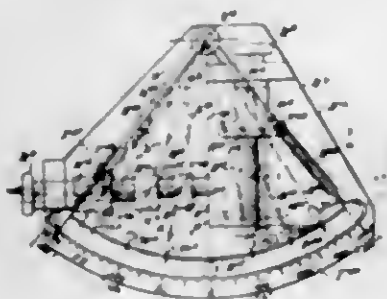
articles as they are successively carried by the magnet in the intermittent swinging movements of the crane for effecting the detachment of the articles from said magnet.

1,309,573. EYEGLASS-HOLDER. VINCENT E. DUNCANSON, Lynchburg, Ohio. Filed Apr. 17, 1916. Serial No. 91,964. 3 Claims. (Cl. 206-5.)



4. A holder for eyeglasses comprising a flat body portion having curved longitudinal edges which are directed toward each other, to form recesses, fingers having adjacent ends pivotally connected to the holder within one of the recesses and at an intermediate portion thereof, right angular extensions on the fingers adjacent their point of pivotal connection and directed toward each other, a pin slidably mounted for movement within an aperture formed in one curved edge, a lug formed with an aperture for guiding the pin, a flange on the pin for engaging both of the extensions to urge the free terminals of the fingers in engagement with the lenses, a coil spring embracing the rod and disposed between the lug and the flange, and a button on the terminal of the pin outside the holder.

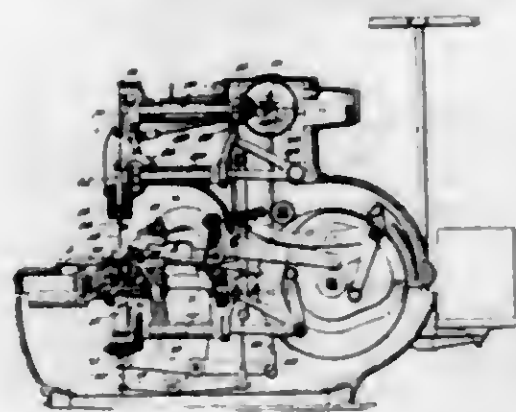
1,309,574. SIDE-FORCE AND DANGER INDICATOR. MATTHIAS J. KLEIN, New York, N. Y., assignor of sixty one-hundredths to Hugo B. Roelker, New York, N. Y. Filed Apr. 24, 1914. Serial No. 834,114. Renewed Mar. 22, 1918. Serial No. 224,051. 7 Claims. (Cl. 73-151.)



1. In a double-acting side-force and danger indicator for vehicles, in combination with a vehicle a base-plate, a curved glass tube with a ball oscillating in it on said base-plate, said glass tube being closed at the ends and nearly filled up with a liquid specifically lighter than

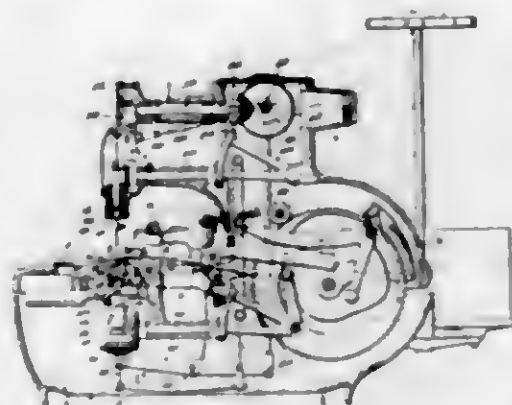
said ball, a dial on said base plate having a zero line, two danger-hands, a zero line (one on each side of the zero-line), the positions of said danger-hands on said dial having a fixed relation to the position of the center of gravity to the loaded vehicle, said curved glass tube with its zero-line being disposed in a perpendicular plane relative to the longitudinal axis of the vehicle, said oscillating ball in said curved glass tube acting as an index-hand on said dial, and showing thereby on the latter, when the vehicle is moving in a curve on a level or banked road, the increased danger of the vehicle being turned over, when said oscillating ball comes more or less close to one of said two danger-hands.

1,309,575. SEWING-MACHINE. GEORGE S. HILL, Stratford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 28, 1916. Serial No. 117,240. 5 Claims. (Cl. 112-4.)



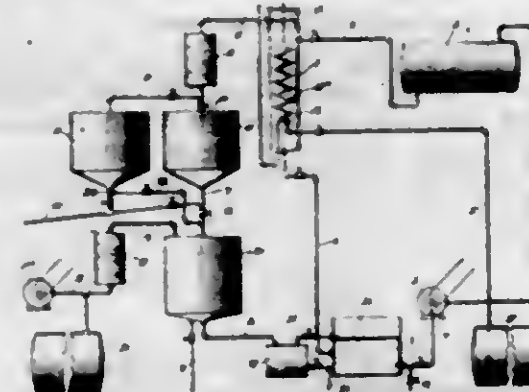
1. A sewing machine having in combination upper needle mechanism, two opposed looper points below the work shaped to enter and carry forward upper needle loops, spreader points mounted to move with the looper points, mechanism for reciprocating the points and for relatively moving the spreader and looper points transversely of their line of reciprocation to carry each needle loop laterally and spread it for the passage of the succeeding needle loop therethrough.

1,309,576. SEWING-MACHINE. GEORGE S. HILL, Stratford, N. H., assignor by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 28, 1916. Serial No. 117,244. 11 Claims. (Cl. 112-4.)



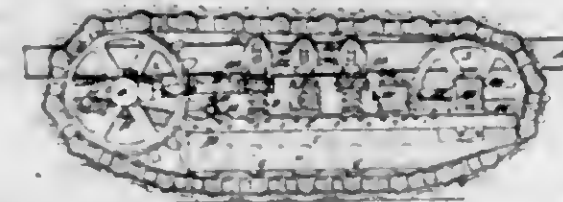
1. A sewing machine, having, in combination, an upper needle mechanism above the work, a reciprocating and transversely moving thread carrying looper below the work, a thread retainer cooperating with the transverse movement to spread the loop of under thread, an opposed and alternately acting looper, and a spreader point moving with and transversely of the second looper.

1,309,577. PROCESS OF OBTAINING NITRO COMPOUNDS. FLETCHER B. HOLMES, Woodbury, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, a Corporation of Delaware. Filed May 11, 1915. Serial No. 27,301. 15 Claims. (Cl. 23-24.)



1. The process which comprises forming a nitro-compound by passing a hydrocarbon liquid containing nitrifiable and a relatively large proportion of non-nitrifiable constituent upwardly through a nitrating acid.

1,309,578. TRACTION-ENGINE. PLENY E. HOLT, Stockton, Calif. Filed Jan. 6, 1914. Serial No. 810,671. 13 Claims. (Cl. 21-150.)



6. In a vehicle, the combination of a main frame, a load supporting means for said frame including a roller truck, an endless, flexible track belt supporting said truck, a rear driving wheel journaled on the main frame and supporting the rear end of the track belt, a front idler journaled on the truck and supporting the other end of the track belt, and pivotal means whereby said roller truck is connected to the main frame at a point beyond all the rollers to permit all of said rollers and the idler to yield simultaneously upwardly in a vertical direction.

1,309,579. HINGE. OTTO KONTZLOW, Cleveland, Ohio, assignor to The Otto Kontzlow Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 7, 1915. Serial No. 40,362. 3 Claims. (Cl. 16-5.)



3. A hinge pin member formed from a single blank of sheet metal and consisting of a main strap portion,

bracket blanks formed integral therewith and extending longitudinally from each end thereof, pin receiving ears extending oppositely from the outer end of each bracket blank, and end strap portions extending toward each other from the bracket blanks and separated by a slot from the main strap portion and lying in the same plane, and comprising a strap including the main strap portion and the end strap portions arranged in the same plane and in longitudinal alignment, and hinge brackets of U-shape in cross section extending at right angles thereto and connecting the main strap portion with the end strap portions.

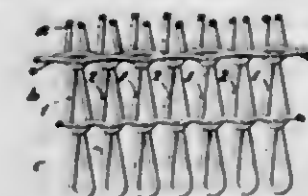
1,309,580. PROCESS OF PREPARING DINITROPHENYLAMINE. JOHN MARSHALL, Swarthmore, Pa., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 18, 1918. Serial No. 258,608. 16 Claims. (Cl. 23-24.)

1. The process which comprises forming dinitrophenylamine by emulsifying aniline and dinitrochlorobenzol in a liquid and raising the temperature to the point at which the reaction begins.

1,309,581. PROCESS OF FIREPROOFING AND PRODUCTS THEREOF. HOWARD W. MATHESON, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 13, 1915. Serial No. 66,463. 11 Claims. (Cl. 91-68.)

1. The process of rendering a surface having a nitro-cellulose coating fire-resistant which comprises applying a coating of a condensation product of phenol and formaldehyde.

1,309,582. KNITTED FABRIC AND METHOD OF MAKING THE SAME. MAX C. MILLER, Cumberland Hill, R. I., assignor to Jencks Knitting Machine Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Aug. 3, 1917. Serial No. 184,341. 6 Claims. (Cl. 66-4.)



1. The method of forming an anti-run-back course in a plain knitted web which consists in drawing stitches of courses of yarn in all the wales to form a plain fabric, then drawing loops of a course of yarn through loops of the preceding course in alternate wales only of the web, and completing this course of stitches by drawing loops of a second course of yarn through loops of said preceding course in the intermediate wales only of the web and then continuing the knitting of the plain fabric by drawing stitches of succeeding courses of yarn in all the wales.

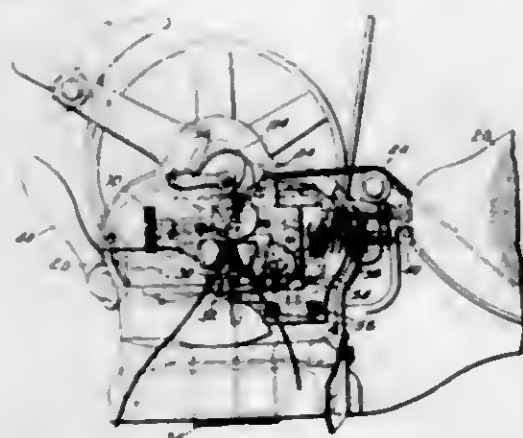
2. The method of forming an anti-run-back course in a plain knitted web which consists in drawing stitches of courses of yarn in all the wales to knit a plain fabric, then drawing loops of a course of yarn in alternate wales only, then completing this course of stitches by drawing loops of a second yarn in the intermediate wales and tacking in the alternate wales, and then continuing the knitting of the plain fabric by drawing loops of succeeding courses of yarn in all the wales.

3. A plain knitted fabric having in its body an anti-run-back course comprising a series of loops engaging the stitches of the preceding course in some of the wales only, and other series of loops engaging the stitches of the preceding course in the other wales only, the loops of all said series being engaged by the stitches of the succeeding course in all the wales.

4. A plain knitted fabric having in its body an anti-run-back course comprising a series of loops engaging the stitches of the preceding course in alternate wales only and another series of loops engaging the stitches of the preceding course in the intermediate wales only, the loops of both series being engaged by the stitches of the succeeding course in all the wales.

5. A plain knitted fabric having in its body an anti-run-back course comprising a series of loops engaging the preceding course of stitches in alternate wales only, and a second series of loops engaging the stitches of said preceding course in the intermediate wales only, the succeeding course of stitches engaging both series of loops in said alternate wales and the second series of loops in said intermediate wales.

1,309,583. MACHINE FOR PREPARING WELTING. ALFRED R. MONSIELL, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 7, 1917. Serial No. 153,014. 10 Claims. (Cl. 12-67.)



1. A machine for preparing welting, having in combination, a feed roll to act on the flesh side of a welting strip mounted in fixed bearings, a cooperating work supporting roll, a carrier for the work supporting roll movable toward and from the feed roll and a grooving knife to act on the flesh side of the welting strip mounted on said carrier.

5. A machine for preparing welting, having in combination, cooperating supporting and feeding rolls, means for guiding a welting strip with one edge projecting beyond the end of the feeding roll, a fixed presser-foot terminating in the line of the bite of the rolls for engaging the projecting edge of the welting, a knife block mounted on a pivot lying in a plane substantially normal to the axis of the rolls, and a knife for operating on the projecting edge of the welting mounted in said block and extending under said presser-foot with its cutting edge in the line of the bite of the rolls.

1,309,584. APPARATUS FOR TRIMMING AND SIMILARLY DISTRIBUTING COAL AND OTHER MATERIALS. ARTHUR MURKIN, London, England. Filed Jan. 25, 1917. Serial No. 144,453. 2 Claims. (Cl. 193-19.)



1. Apparatus for distributing coal in bunkers of ships, comprising a plurality of horizontal reciprocating bars

arranged in superposed relation, feed devices connected with the bars to be moved thereby, a corresponding number of pivoted bell crank levers arranged near corresponding ends of said bars, pitmen connecting the bell crank levers and bars, and a vertically arranged reciprocating bar connected with the bell crank levers to operate them.

1,309,585. DISCHARGE OF COAL AND THE LIKE CARGO IN BULK FROM BARGES OR VESSELS, AND THE ELEVATION AND DELIVERY THEREOF. ARTHUR MURKIN, London, England. Filed Feb. 12, 1918. Serial No. 216,808. 3 Claims. (Cl. 214-13.)



1. In apparatus for transferring material from barges to a ship, a pair of barges arranged near and upon one side of the ship and arranged in spaced end to end relation with each other, a hoisting vessel arranged between the inner ends of the barges, flexible means connecting the inner ends of the barges and the hoisting vessel, conveyers connected with the hoisting vessel and extending longitudinally of the barges to points near their outer ends to conduct material from the barges to the hoisting vessel, and hoisting mechanism carried by the hoisting vessel and extending above the same to discharge the material into the ship.

1,309,586. SNAP-FASTENER. ALBERT S. O. NELSON, Cicero, Ill. Filed Oct. 11, 1917. Serial No. 195,949. 5 Claims. (Cl. 24-216.)



1. A sheet-metal snap-plate for snap-fasteners comprising a curled peripheral rim having a pair of integral flat springs projecting inwardly from an edge of the rim and suitably formed at their inner ends to embrace the button-head when pressed into position between the springs, said springs having contiguous edges transverse to the rim.

1,309,587. ROTARY PRESS. RUDOLF B. RADINSKY, Cleveland, Ohio. Filed Sept. 17, 1918. Serial No. 254,399. 3 Claims. (Cl. 15-37.)

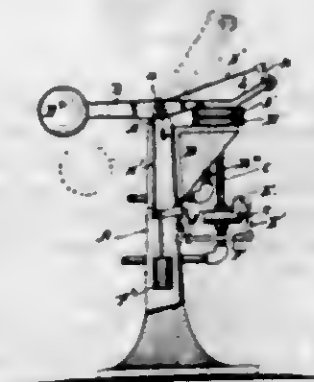


3. A rotary press comprising a disk having loops struck up on opposite sides thereof, and tufts inserted under the loops against opposite sides of the disk, the tufts being pressed down upon the loops to clamp the same to the disk.

1,309,588. HURSTING CHARGE FOR CONTAINERS INTENDED TO BE EXPLODED, AND PROCESS OF FORMING SAID CHARGE. CHARLES L. REESE, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 4, 1917. Serial No. 184,490. 12 Claims. (Cl. 52-3.)

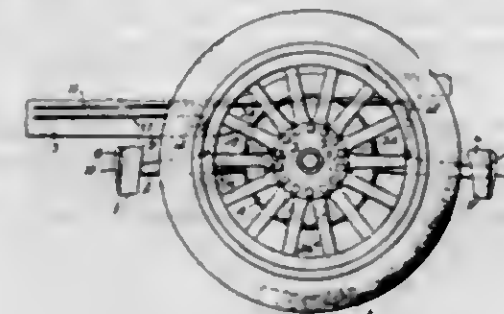
1. A bursting charge comprising the combination of trinitroxyethylene with another organic nitro-compound having a lower melting point.

1,309,589. CLOTHES-PRESSING APPARATUS. ARTHUR E. SNOW, Erie, Pa., assignor to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Jan. 29, 1918. Serial No. 214,304. 2 Claims. (Cl. 68-9.)



1. In a clothes pressing apparatus, an upright column forming the frame, a stationary buck secured to a bracket on said column, a pipe for supplying steam to said buck, a valve for controlling the steam passing therethrough to said buck, a centrally pivoted arm mounted on the top of said column, a presser-plate on said arm adapted to be brought into contact with the top of said buck, a handle on said lever for operating it, a counter-weight on the opposite end of said centrally pivoted arm, a valve operating device on said handle, a pulley on the top of said column, a cord connecting said valve operating device with a bell-crank lever one arm of which connects by a link with the operating lever of the valve controlling the passage of steam to the buck, and the other one with said cord; and a counterweight on said arm for operating said valve operating mechanism in the opposite direction, substantially as set forth.

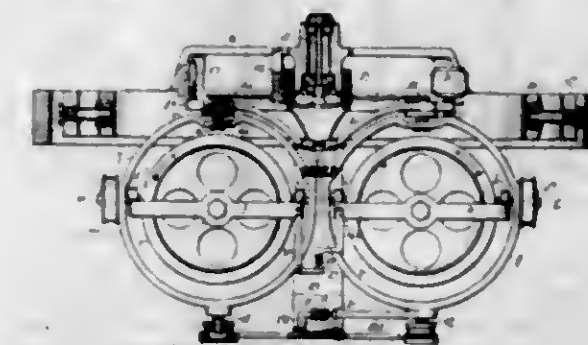
1,309,590. BRAKE. CHARLES P. STANBON, LYDD, Mass. Filed Apr. 11, 1918. Serial No. 227,949. 1 Claim. (Cl. 21-8.)



The combination with the side sills of an automobile, and a cross sill between them, and an axle, of a plurality of brake drum housings on the axle, an arm pivotally mounted on each housing carrying a shoe having an anti-skid rib, a stop to limit the travel of the arm, a shoe controlling shaft with a pulley on each end and mounted upon the side sills, a rope on each pulley connected with one of said arms, a ratchet wheel on the shaft, a shoe raising lever mounted to rotate about the shaft and having a pawl to engage the ratchet wheel to raise the

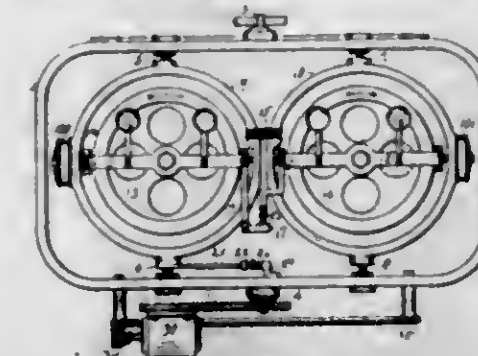
shoe to inoperative position, a trip member on the cross sill to trip the pawl when the lever is drawn backward to disengage the pawl from the ratchet, and a foot pedal carried by the cross sill with a pawl thereon to engage said ratchet wheel to retain it and the shaft, pulley and shoe in inoperative position, and to release them to throw the shoe into operative position.

1,309,591. GYROSCOPIC COMPASS. HARRY LAURENCE TANNER, Brooklyn, N. Y., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed May 15, 1915. Serial No. 28,266. 32 Claims. (Cl. 74-78.)



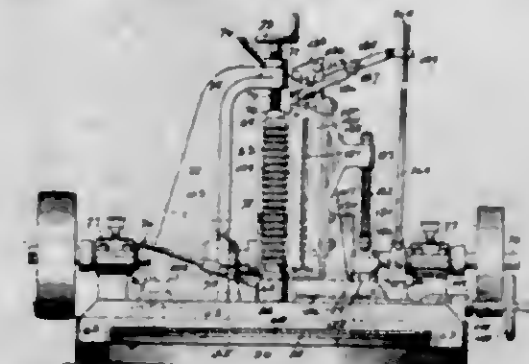
1. A meridional gyroscopic apparatus including a pair of oppositely rotated gyroscopes.

1,309,592. GYROSCOPIC COMPASS. HARRY L. TANNER and HENRY H. THOMPSON, Brooklyn, N. Y., assignors to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed May 27, 1915. Serial No. 30,854. 23 Claims. (Cl. 74-78.)



11. In a gyro-compass, a gyroscope adapted to be rotated in the opposite direction to the rotation of the earth, means for mounting said gyroscope for rotation or oscillation about a vertical and horizontal axis, and means brought into action by oscillation about said horizontal axis for exerting a torque about its vertical axis.

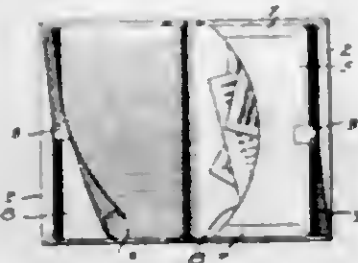
1,309,593. MACHINE FOR GRADUATING TIME-RINGS. GILBERT F. BOLOGIANO, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 8, 1917. Serial No. 186,033. 16 Claims. (Cl. 33-19.)



3. In a machine for cutting graduations in time rings, the combination with means for holding the ring that is to be cut, of reciprocating cutting means; means for lo-

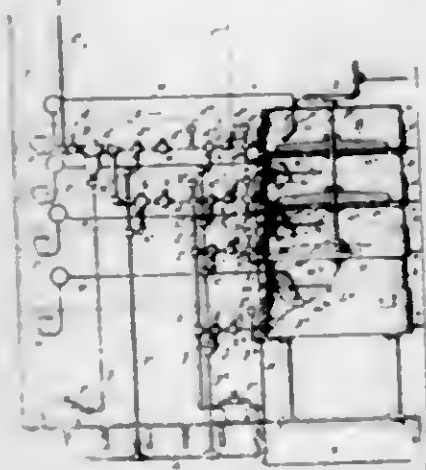
termittently turning the ring step-by-step with respect to the cutting means to vary the degree of rotation between successive cuts whereby to vary the width of spaces between the cuts, and means to prevent movement of the cutting means while the turning means makes a plurality of intermittent turns to leave open spaces on the ring.

1,300,594. COOK BOOK. ANNIE M. CLARK, St. Cloud, Minn. Filed Mar. 2, 1915. Serial No. 11,618. 1 Claim. (Cl. 129-20.)



A cook book comprising a cover, a series of blank leaves bound therein, a series of leaves interspersed with said blank leaves and having side and end flaps thereon, said side flap, when folded inwardly over the leaf, extending partially across it and secured by the folding inwardly of said end flaps to form a pocket with its mouth opening to the bound edges of the leaves and adapted to receive loose slips of paper having untried recipes, there being a pocket opposite each blank leaf in the book, and permanent entry of the recipes, when tested, being made on the page opposite the pocket containing said recipes, and index tabs on said blank and pocket leaves.

1,300,595. COOKER FOR SEED-MEATS. HARRIS T. FRYANT, Memphis, Tenn., and WILLIAM R. CROUT, Hazlehurst, Miss. Filed May 3, 1918. Serial No. 1,322,242. 3 Claims. (Cl. 87-6.)



A cooker for seed meats, comprising a series of kettles arranged one above the other and delivering the one to the other, each of which is provided with means for heating it and each of which is equipped with separately operated thermostatic appliances for automatically shutting off the supply of the heating medium when the temperature of the kettle rises above a predetermined degree, and valve controlled means for separately controlling the supply of moisture to the several kettles.

1,300,596. SPRAY NOZZLE. LEE H. PARKER, Boston, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1917. Serial No. 204,962. 25 Claims. (Cl. 137-86.)

A spray nozzle comprising a shell or casing having an inlet and an outlet and also having one or more spirally arranged vanes between said inlet and outlet for directing the liquid in a spiral jet or jets, said vane or vanes having at least a portion of the inner edge thereof radially spaced from the axial center of the nozzle sufficiently to leave an opening for the passage of a central jet of liquid in contact with such portion of said inner

edge or edges, the inner surface of the shell or casing in proximity to the outlet tapering inward to a markedly greater extent than the preceding part of the said surface, thereby to direct the spiral jet or jets in a marked change in direction into an intensified or increasing mixture with the particles of the central jet at a zone in proximity to the outlet.



edge or edges, the inner surface of the shell or casing in proximity to the outlet tapering inward to a markedly greater extent than the preceding part of the said surface, thereby to direct the spiral jet or jets in a marked change in direction into an intensified or increasing mixture with the particles of the central jet at a zone in proximity to the outlet.

1,300,597. SPRAY NOZZLE. LEE H. PARKER, Boston, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Dec. 1, 1917. Serial No. 204,962. Divided and this application filed Mar. 1, 1919. Serial No. 280,048. 40 Claims. (Cl. 137-86.)



A spray nozzle having a housing with an inlet and an outlet and a vane within the housing for imparting spirally advancing motion to a part of a liquid stream, said vane having a vane-edge shape or formation providing a passage laterally offset from the axis of the nozzle for the forward projection or travel of a portion of the liquid stream, said housing having a mixing chamber in advance of said vane and from which the liquid is discharged through said outlet as a spray of substantially uniform homogeneity throughout.

1,300,598. V-INLET FOR PNEUMATIC-DESPATCH-TUBE APPARATUS. ALBERT W. PEARSON, Lowell, Mass. Filed June 6, 1916. Serial No. 102,078. Reproduced June 3, 1919. Serial No. 301,539. 3 Claims. (Cl. 243-25.)



A pneumatic despatch tube apparatus having therein an inlet casing comprising a through branch and a transverse

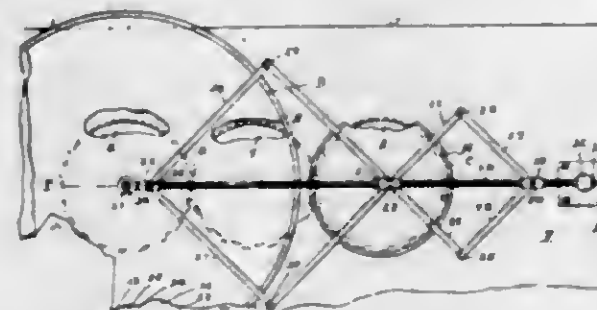
tube in line therewith, an inlet branch, and a valve pivoted to swing about a center substantially at the junction of said branches, said valve having a stop thereon adapted when the valve is open to extend into the path of carriers moving in the through branch and to stop said carriers short of contact with the valve proper, said stop being further adapted to take against a carrier already in the through branch, to prevent opening a valve until such carrier shall have passed.

1,300,599. BRUSH. BERT SEABOLDT, New York, and HENRY E. J. WACKWITZ, Port Washington, N. Y.; said Seaboldt assignor of his right to Hewlett R. Smith, Port Washington, N. Y. Filed Jan. 15, 1919. Serial No. 271,100. 7 Claims. (Cl. 248-49.)



In a brush, a brush handle and a body of bristles carried thereby, a longitudinal bore extending into the handle from the bristle end thereof, a longitudinal slot in the side of the handle, said slot extending into said bore, a rod slidably mounted in said bore, and a rod operating handle operatively connected to said rod and arranged to lie in said slot and to act as a stop when lying in said slot to check the longitudinal movement of the rod.

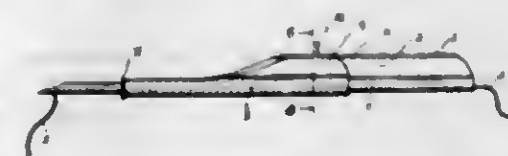
1,300,600. TRANSCRIBING INSTRUMENT. EDWARD H. KEENAN, JENNIE PETER CHRISTIANSEN, and RICHARD RUEMELIN, Stillwater, Minn., assignors of one-half to Twin City Forge & Foundry Company, a Corporation of Minnesota. Filed Oct. 29, 1918. Serial No. 260,140. 5 Claims. (Cl. 33-25.)



An instrument for transcribing graphic charts, comprising, in combination, a primary movable platen for supporting a chart to be transcribed, a secondary movable platen for supporting a chart to receive the transcription, said platens being movably connected whereby the secondary platen is moved positively in one direction at a fixed ratio to the movement of the primary platen depending on the enlargement desired, and means for transcribing radii or ordinates on an enlarged scale from the primary to the secondary chart.

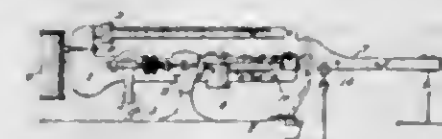
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1,300,601. NEEDLE FOR HAND-EMBROIDERY AND SIMILAR WORK. GEORGE V. PADZ and CONRAD T. NEITZEL, Dallas, Tex. Filed Apr. 29, 1919. Serial No. 293,545. 10 Claims. (Cl. 112-80.)



A needle for hand embroidery and the like, comprising a tubular body pointed at one end and open at the other, said tubular body having a flange projecting laterally therefrom at said opening and provided with a series of notches, and a tubular gage member having an opening extending longitudinally thereof, said gage member being slidable on the tubular body of the needle and provided with a projecting part adapted to engage the notches in the flange of the tubular body.

1,300,602. COUNTING-SCALE. JEREMIAH BROPHY, Schenectady, N. Y. Filed July 6, 1914. Serial No. 849,069. 7 Claims. (Cl. 265-49.)



A counting attachment for beam scales comprising a removable counting bar, fastening means for detachably securing said bar to the scale beam in position to be counterbalanced, and a counting cup mounted on said bar eccentric to the pivot of the scale beam and adjustable to increase or decrease its distance from said pivot but normally fixed in position to hold an article at a distance from said pivot unchanged during counting and such that one article in said cup balances a definite and convenient number of identical articles on the scale platform.

The combination with a weighing scale having a pivoted weighing beam and a scale pan, of a detachable counting bar on said beam, holding means on said bar adjustable toward and away from the pivot of said beam and normally fixed in position to hold an article to be counted at a distance from the pivot of said beam such that one article held by said means balances a convenient number of identical articles on said scale pan, and an equalizer on said beam adjustable independently of said holding means.

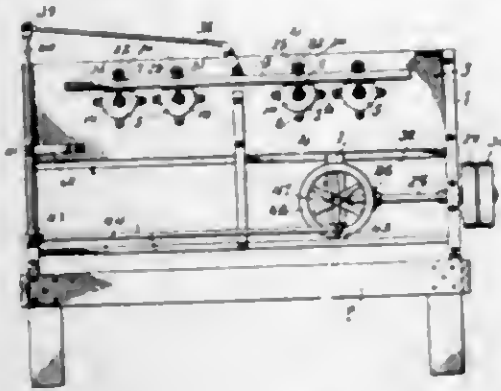
In a weighing and counting scale, the combination with a scale pan and a pivoted weighing beam, of a removable counting bar detachably secured to said beam, a counting cup immovably fixed to said bar during the counting at such a distance from the pivot of said beam that one of the articles to be counted when placed in said cup balances some multiple of five identical articles on the scale pan, and an equalizer attached to said beam to neutralize the weight of said bar and cup.

In a weighing and counting scale the combination with a pivoted weighing beam of a removable counting bar detachably secured to said beam and having at a plurality of points along said bar holding means for an article identical with the articles to be counted, said points being so spaced along the bar that the difference between the number of articles on the scale platform balanced by an identical article held in said means at any one point and the number balanced by said article when held by said means at the next adjacent point is the same for all adjacent points, and an equalizer detachably secured to said beam to neutralize the weight of said bar.

A counting attachment for beam weighing scales comprising a counting bar having holding means fixed along it at a plurality of points in such relation to one

another and to the pivot of the scale beam that the number of articles balanced by an identical article held by said means at one point is a multiple of the number of articles balanced by an identical article held by said means at another point.

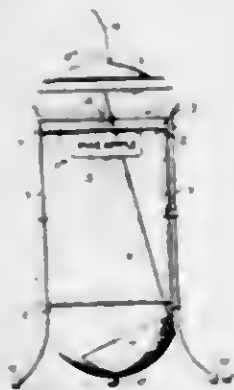
1,309,603. VALVE GRINDING MECHANISM. HOMER S. DOUGLASS, Lathrop, Mo., assignor to Mary B. Douglass, Lathrop, Mo. Filed Dec. 23, 1918. Serial No. 267,901. 16 Claims. (Cl. 51-4.)



4. In a valve grinding mechanism, a supporting frame, a box secured thereto, a gear wheel having a hub oscillatably mounted in said box, a shaft extending through and oscillatable with said hub and bearing against one end of said hub and having one end externally screw-threaded, a screw threaded sleeve fitted on said screw-threaded end and adapted to receive an adapter for supporting a valve to be ground, the other end of said shaft having means for supporting an adapter adapted to support another valve to be ground, a rack meshing with said gear wheel, and means for reciprocating said rack.

REISSUES.

14,681. JAR AND DIPPER FOR SERVING CRUSHED FRUIT OR THE LIKE. ROBERT FAIRER, Decatur, Ill., assignor to Walrus Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed May 31, 1919. Serial No. 301,060. Original No. 779,271, dated Jan. 1, 1905. Serial No. 203,742, filed Apr. 18, 1904. 8 Claims. (Cl. 215-80.)

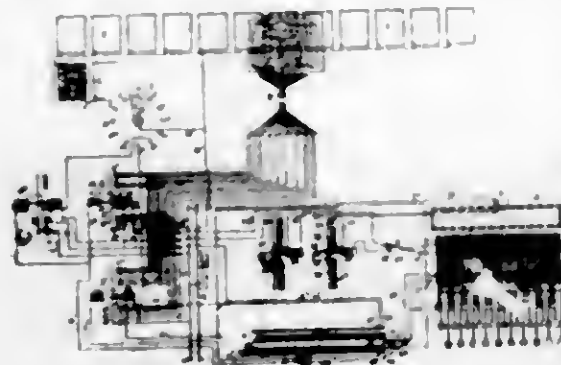


1. The combination of a jar having a rounded bottom, a cover for the jar, a rod extending downward from the under side of the cover and a ladle on the lower end of the rod shaped to conform in a general way to the concavity of the bottom of the jar.

14,682. ILLUMINATED SIGN OR ELECTROGRAPH. ELMER J. KINGBART, Chicago, Ill., assignor to G. Herman Gamper, Columbus, Ohio. Filed Jan. 2, 1917. Serial No. 140,312. Original No. 1,190,176, dated July 4, 1916. Serial No. 879,471, filed Dec. 29, 1914. 20 Claims. (Cl. 177-349.)

1. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized

in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical operating means for each master switch for closing the latter when the corresponding key is pressed, and means for connecting the electrical closing means and contacts of the master switches successively with the source of current as the keys are pressed.



2. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, a carriage movable step by step as the keys are pressed, and means on the carriage for connecting the electrical closing means and contacts of the master switches successively with the source of current.

3. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, a carriage movable step-by-step as the keys are pressed, a cylinder on the carriage and provided with a plurality of sets of contacts connected respectively with the electrical closing means and contacts of the master switches, a fixed contact connected with the source of current and with which contacts on the cylinder successively engage, and means for turning the cylinder to present the sets of contacts thereof successively to the fixed contact.

4. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, means for connecting the electrical

closing means and contacts of the master switches successively with the source of current and automatically as the keys are pressed, and an electrical means at each letter control switch to open the same and blank the monogram.

5. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, means for connecting the electrical closing means and contacts of the master switches successively with the source of current and automatically as the keys are pressed, an electrical means at each letter control switch to open the same and blank the monogram, and normal separated contacts in the circuit of said last electrical means and adapted to engage when the associated letter control switch closes by the first mentioned electrical means thereof.

6. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, means for connecting the electrical closing means and contacts of the master switches successively with the source of current and automatically as the keys are pressed, an electrical opening means for each letter control switch, a manually operated switch whereby either the electrical opening means or the said electrical closing means of a letter control switch will be connected with the said source when a key is pressed.

7. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches for each monogram unit equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, means for connecting the electrical closing means and contacts of the master switches successively with the source of current and automatically as the keys are pressed, an electrical opening means for each letter control switch, a manually operated switch whereby either the electrical opening means or the said electrical closing means of a letter control switch will be connected with the said source when a key is pressed, and means for connecting electrical opening means of all the letter control switches with the source of current independently of the keys for blanking the whole sign.

8. In an electric sign, the combination of a plurality of monogram units having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter controlled switches for each monogram unit equal in number to the number of keys, electrical means to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit,

and each including contacts for connecting all the letter control switches for a monogram unit with the source of current, electrical means for each master switch for closing the latter when the corresponding key is pressed, means for connecting the electrical closing means and contacts of the master switches successively with the source of current and automatically as the keys are pressed, an electrical opening means for each letter control switch, a manually operated switch whereby either the electrical opening means or the said electrical closing means of a letter control switch will be connected with the said source when a key is pressed, means for connecting electrical opening means of all the letter control switches with the source of current independently of the keys for blanking the whole sign, and means for connecting or disconnecting the master switches and keys.

9. The combination of a monogram unit having devices for forming letters, a source of current, a set of keys, a letter control switch for each key, said switch including a movable contact connected with one side of the said source and a plurality of relatively fixed contacts, a wire leading from each fixed contact to a device of the monogram unit, a wire leading from all the devices of the monogram unit to the other side of the source of current whereby current flows through the devices when the movable contact engages the fixed contacts, a magnet for moving the movable contact to closed circuit position, a magnet for moving the movable contact to open circuit position, and a switch whereby either magnet will be connected with the source of current when a key is depressed.

10. The combination of a monogram unit having devices for forming letters, a source of current, a set of keys, a letter control switch for each key, said switch including a movable contact connected with one side of the said source and a plurality of relatively fixed contacts, a wire leading from each fixed contact to a device of the monogram unit, a wire leading from all the devices of the monogram unit to the other side of the source of current, whereby current flows through the devices when the movable contact engages the fixed contacts, a magnet for moving the movable contact to closed circuit position, a magnet for moving the movable contact to open circuit position, a master switch controlling the letter control switches and having a movable contact and a plurality of fixed contacts each connected with a closing magnet for a letter control switch, electrical means controlled by a key for closing the master switch, and a switch for connecting either the opening or the closing magnets of the letter control switches with the keys.

11. The combination of a plurality of monogram units having devices for forming letters, a source of current, a set of keys, a letter control switch for each key, said switch including a movable contact connected with one side of the said source and a plurality of relatively fixed contacts, a wire leading from each fixed contact to a device of the monogram unit, a wire leading from all the devices of the monogram unit to the other side of the source of current, whereby current flows through the devices when the movable contact engages the fixed contacts, a magnet for moving the movable contact to closed circuit position, a magnet for moving the movable contact to open circuit position, a plurality of master switches equal in number to the number of monogram units and each controlling all the letter control switches of a unit, each master switch having a movable contact and a plurality of fixed contacts each connected with a closing magnet for a letter control switch, electrical means controlled by a key for closing each master switch, a manually actuated switch for opening the circuit of the said electrical means for the master switches, a manually actuated double throw switch whereby all the closing magnets or all the opening magnets are connected to the respective keys, and a manually actuated switch for connecting all the opening magnets in circuit directly with the source of current for simultaneously opening all the letter control switches.

12. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, means for operating said elements to cause the appearance of display characters in said units, said means including individual character keys, and means controlled by re-operation of the respective key for obliterating the character set up in any given unit without obliterating the characters set up in the remaining units.

13. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, means including a key board for operating said elements to cause the appearance of display characters in said units, said key board having individual character keys, and means controlled by the re-operation of the respective key for obliterating the character set up in any given unit without obliterating the characters set up in the remaining units.

14. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, means including individual character keys for operating said elements to cause the appearance of display characters in said units, said means including a plurality of character controlling sign element operating relays, and means controlled by the re-operation of the respective key for obliterating the character set up in any given unit without obliterating the characters set up in the remaining units.

15. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, means including individual character keys for operating said elements to cause the appearance of display characters in said units, said means including a plurality of character controlling sign element operating relays, and means for individually operating the restoring relay of a given sign unit by the re-operation of the respective character key.

16. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, means including individual character keys for operating said elements to cause the appearance of display characters in said units, means controlled by the re-operation of the respective key for obliterating the character set up in any given unit without obliterating the characters set up in the remaining units, and means for simultaneously obliterating the characters set up in all of the units.

17. A system of the character described having a plurality of sign units, each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, and means for operating said elements to cause the appearance of predetermined display characters in said units, said means including a stationarily mounted key board, means associated with the keys of said key board for controlling the selection of desired sign elements in accordance with the corresponding key, and a rotatable circuit control mechanism operable with the keys of said key board to control the association of said key board with said sign units in succession.

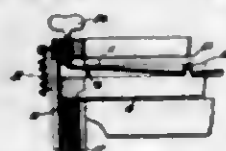
18. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, and means for operating said elements to cause

the appearance of predetermined display characters in said units, said means including a stationarily mounted key board, means associated with the keys of said key board for controlling the selection of desired sign elements in accordance with the corresponding key, and master control mechanism mechanically controlled by said keys to control the association of said key board with one after another of said sign units.

19. A system of the character described having a plurality of sign units each adapted to portray any one of a given number of dissimilar characters, said sign units each having a plurality of selectively operable sign elements, and means for operating said elements to cause the appearance of predetermined display characters in said units, said means including a stationarily mounted key board, means associated with the keys of said key board for controlling the selection of desired sign elements in accordance with the corresponding key, and master control mechanism operable with said keys to control the association of said key board with one after another of said sign units, said master control mechanism including a rotatable cylinder having contacts corresponding to said sign units.

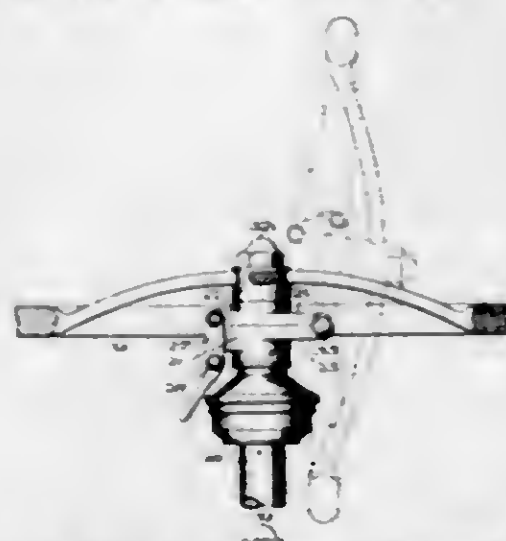
20. In an electric sign the combination of a monogram unit having devices adapted to be energized in predetermined groups to exhibit letters, a source of current, a set of keys, letter control switches equal in number to the number of keys, electrical means for closing each switch and connected with the corresponding key to be energized when the latter is pressed, a series of master switches, one for each monogram unit, and means mechanically controlled by said keys for selecting said master switches in rotation.

14,683. WRINGER. GEORGE W. LEWIS, Grinnell, Iowa, assignor, by means assignments, to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1916. Serial No. 114,288. Original No. 1,107,676, dated Aug. 18, 1914, Serial No. 721,308, filed Sept. 19, 1912. 8 Claims. (Cl. 68-32.)



1. In a clothes wringer, a frame, tension controlled rolls therein separable when the tension is released, a transversely breakable tension applying bar, and an emergency release for breaking the bar.

14,684. TILTING STEERING-WHEEL FOR MOTOR-VEHICLES. FRANKLIN C. PRINDLE, Washington, D. C., assignor to Chester Ricker, Indianapolis, Ind. Filed Sept. 21, 1917. Serial No. 192,612. Original No. 1,098,301, dated May 26, 1914, Serial No. 768,560, filed May 19, 1913. 3 Claims. (Cl. 74-33.)



1. As an article of manufacture, an insert for automobile steering gear, comprising two members hinged to-

gether, one provided with a key-way bore to receive the spline of the steering post, and the other carrying a splined stud to receive the key-way bore of the steering wheel, and also comprising a locking device for locking the two hinged members together and thereby adapted to hold the steering wheel in active position.

DESIGNS.

53,481. LIGHTING-FIXTURE URN. HARRY C. ADAM. St. Louis, Mo. Filed Jan. 20, 1919. Serial No. 272,204. Term of patent 14 years.



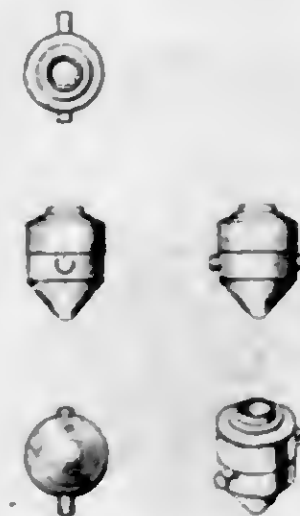
The ornamental design for a lighting-fixture urn, as shown.

53,482. SERVICE-BUTTON. LEONARD BARTHELMER, Wilkesburg, Pa. Filed Mar. 7, 1919. Serial No. 281,318. Term of patent 3 1/2 years.



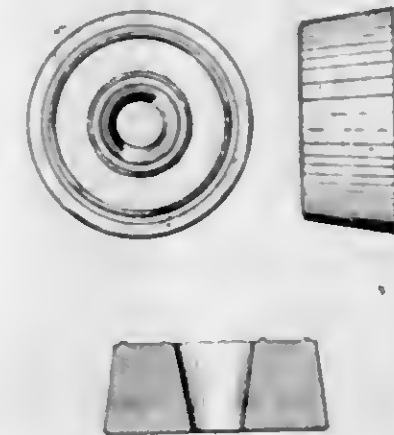
The ornamental design for a service button, as shown in the accompanying drawing.

53,483. CASING FOR A PENDENT SWITCH. RALPH A. BELMONT, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,404. Term of patent 7 years.



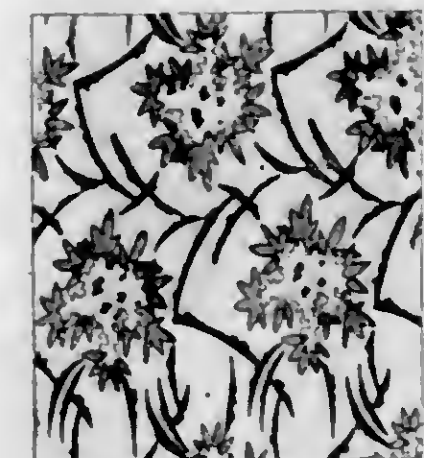
The ornamental design for a casing for a pendent switch, as shown.

53,484. CAKE OF HABBUTT METAL. LAWRENCE M. BARK and LOUIS LAPIERRE, New Haven, Conn., assignors to United Smelting & Aluminum Co., Inc., New Haven, Conn., a Corporation. Filed Oct. 16, 1918. Serial No. 258,387. Term of patent 14 years.



The ornamental design for a cake of Habbutt metal, as shown.

53,485. BROCADE. JAMES H. HUNTING, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed May 3, 1919. Serial No. 294,591. Term of patent 3 1/2 years.



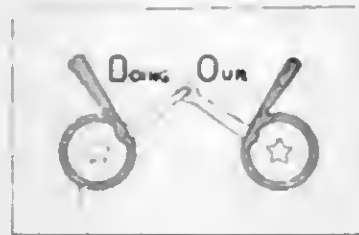
The ornamental design for brocade, as shown.

53,486. SOUVENIR BADGE. SAMUEL A. CLAGGETT and SAMUEL DEYALL, Los Angeles, Calif. Filed Mar. 6, 1918. Serial No. 220,877. Term of patent 7 years.



The ornamental design for a souvenir badge, as shown.

53,487. PENNANT, BOOK-COVER, OR SIMILAR ARTICLE. TIMOTHY R. COURTESAY, New York, N. Y. Filed Jan. 25, 1918. Serial No. 213,815. Term of patent 7 years.



The ornamental design for a pennant, book cover, or similar article, as shown.

53,488. LACE. ELIZABETH A. DAVIS, New York, N. Y., assignor to Blank & Company, Inc., New York, N. Y., a Corporation of New York. Filed May 5, 1919. Serial No. 295,001. Term of patent 3½ years.



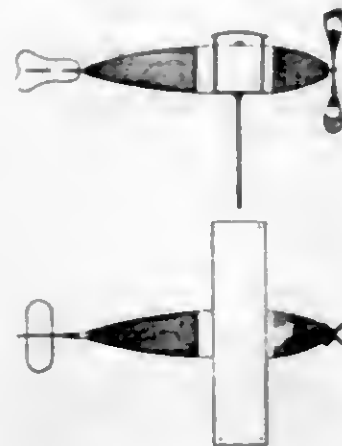
The ornamental design for lace as herein shown and described.

53,489. AUTO-HEADLIGHT LENS. EDWARD S. DE TAMBRE, San Francisco, Calif. Filed Mar. 13, 1919. Serial No. 282,516. Term of patent 14 years.



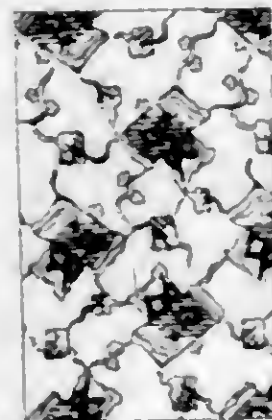
The ornamental design for an auto headlight lens, as shown.

53,490. WIND-WHEEL. HARRY J. DEUTSCH, Columbus, Ohio. Filed May 11, 1918. Serial No. 234,029. Term of patent 3½ years.



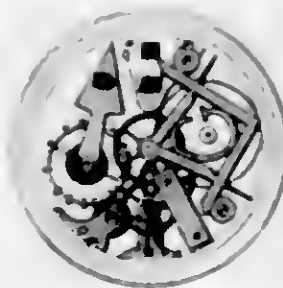
The ornamental design for a wind wheel, as shown.

53,491. PRINTED SILK. HARRY F. DOMMENCE, Jr., New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed May 8, 1919. Serial No. 295,751. Term of patent 3½ years.



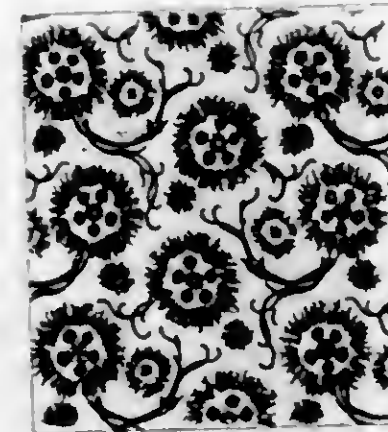
The ornamental design for printed silk, as shown.

53,492. MOVEMENT-FRAME FOR WATCHES. WILLIAM W. DUDLEY, Lancaster, Pa. Filed July 19, 1918. Serial No. 245,767. Term of patent 7 years.



The ornamental design for a movement frame for watches, as shown and described.

53,493. PRINTED SILK. ADOLPHE EISELE, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1919. Serial No. 293,855. Term of patent 3½ years.



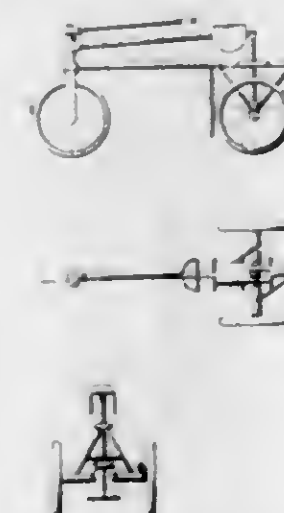
The ornamental design for printed silk, as shown.

53,494. TIRE. ELLER O. FAIRCH, Watertown, Mass., assignor to Hood Rubber Company, Watertown, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1919. Serial No. 287,623. Term of patent 14 years.



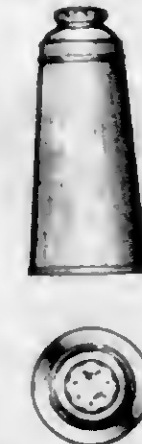
The ornamental design for a tire, as shown.

53,495. TRICYCLE. PETERA GRAUM, Vancouver, Wash. Filed Jan. 20, 1919. Serial No. 272,211. Term of patent 7 years.



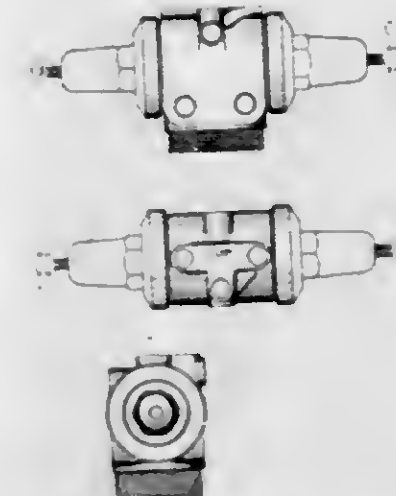
The ornamental design for a tricycle as shown.

53,496. SIFTER-TOP CAN OR SIMILAR RECEPTACLE. LEONARD GERHARDT, Baltimore, Md., assignor to Tin Decorating Company of Baltimore, Baltimore, Md., a Corporation of New York. Filed Feb. 27, 1919. Serial No. 279,603. Term of patent 7 years.



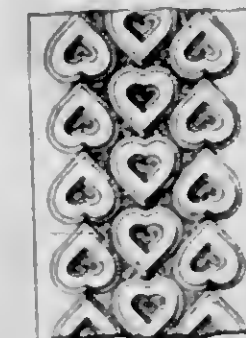
The ornamental design for a sifter top can or similar receptacle, as shown.

53,497. PRESSURE-REGULATOR HEAD FOR FLUID-PRESSURE TANKS. WILLIAM F. GRADOLPH, Toledo, Ohio, assignor to The De Vibris Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 18, 1918. Serial No. 263,091. Term of patent 14 years.



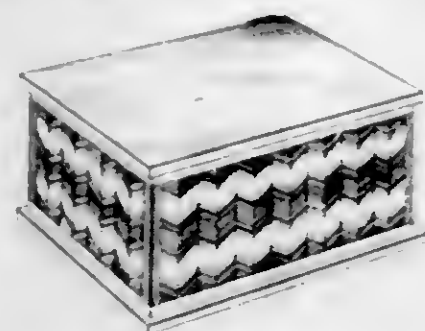
The ornamental design for a pressure regulator head for fluid pressure tanks, substantially as shown.

53,498. AUTOMOBILE-TIRE. MARIUS GREENSPAN, Chicago, Ill. Filed Mar. 28, 1919. Serial No. 285,934. Term of patent 14 years.



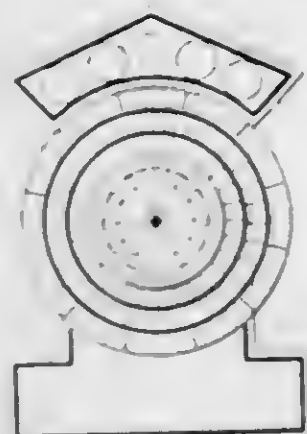
The ornamental design for an automobile tire, as shown.

53,499. NOVELTY-BOX. JOHN F. HANSON, Concord, N. H. Filed Jan. 14, 1919. Serial No. 271,155. Term of patent 7 years.



The ornamental design for a novelty box, as shown.

53,500. PERPETUAL CALENDAR. BENJAMIN MARSHALL HARRISON, Little Rock, Ark. Filed Apr. 1, 1919. Serial No. 286,764. Term of patent 7 years.



The ornamental design for a perpetual calendar as shown.

53,501. SERVICE PIN. WILLIAM A. HARTLINE, Penns Grove, N. J. Filed Mar. 4, 1919. Serial No. 280,680. Term of patent 3 1/2 years.



The ornamental design for a service pin as shown.

53,502. TREAD PLATE FOR SHOE-HEELS. ISABELLE HENNE, Brooklyn, N. Y. Filed Nov. 30, 1917. Serial No. 204,775. Term of patent 3 1/2 years.



The ornamental design for a tread plate for shoe heels as shown.

53,503. FLAG. HARRY MARTIN HOLDEN, Jersey City, N. J. Filed Jan. 4, 1919. Serial No. 269,701. Term of patent 3 1/2 years.



The ornamental design for a flag, as shown.

53,504. STOVEPIPE-REDUCER. MERRIETH JONES, Scranton, Pa. Filed Mar. 8, 1918. Serial No. 221,318. Term of patent 7 years.



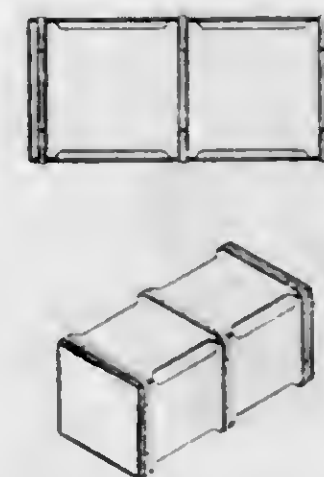
The ornamental design for a stovepipe reducer, as shown.

53,505. LIFTING-JACK. PHILIP SWETT KIMBALL, Milford, Mass. Filed Dec. 16, 1916. Serial No. 137,454. Term of patent 14 years.



The ornamental design for a lifting jack, as shown.

53,506. BOX. WILLIAM C. KITT, Cincinnati, Ohio. Filed Feb. 14, 1919. Serial No. 277,111. Term of patent 14 years.



The ornamental design for a box, as shown.

53,507. BANNER, FLAG, PENNANT, SIGN, EMBLEM, OR ARTICLE OF A SIMILAR NATURE. MAX LEHR, Brooklyn, N. Y. Filed May 25, 1918. Serial No. 236,656. Term of patent 7 years.



The ornamental design for a banner, flag, pennant, sign, emblem or article of a similar nature as shown.

53,508. TRACTOR-BODY. LOUIS MAYER, LORENZ L. MAYER, and EDWIN A. BYE, Mankato, Minn., assignors to Mayer Brothers Company, Mankato, Minn., a Corporation of Minnesota. Filed Feb. 26, 1916. Serial No. 80,744. Term of patent 14 years.



The ornamental design for a tractor body, as shown.

53,509. ICE-CREAM CONE. ALEXANDER MCLAREN, Chicago, Ill. Filed May 31, 1918. Serial No. 237,051. Term of patent 14 years.



The ornamental design for an ice cream cone substantially as shown.

53,510. ICE-CREAM CONE. ALEXANDER MCLAREN, Chicago, Ill. Filed May 31, 1918. Serial No. 237,052. Term of patent 14 years.



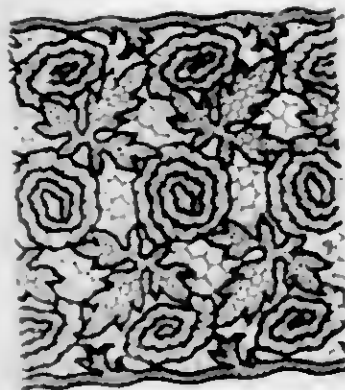
The ornamental design for an ice cream cone substantially as shown.

53,511. TIRE. ANNIE L. MEEKS, Gadsden, Ala. Filed Feb. 19, 1917. Serial No. 149,686. Term of patent 3 1/2 years.



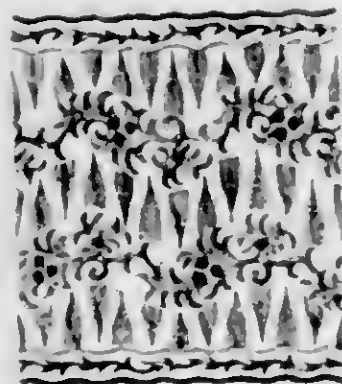
The ornamental design for a tire as shown.

53,512. LACE. FELIX MEYER, New York, N. Y., assignor to Blanck & Company, Inc., New York, N. Y., a Corporation of New York. Filed May 5, 1919. Serial No. 294,996. Term of patent 3½ years.



The ornamental design for lace as herein shown and described.

53,513. LACE. FELIX MEYER, New York, N. Y., assignor to Blanck & Company, Inc., New York, N. Y., a Corporation of New York. Filed May 5, 1919. Serial No. 294,997. Term of patent 3½ years.



The ornamental design for lace as herein shown and described.

53,514. TEXTILE FABRIC. JULIUS A. MIGEL, New York, N. Y. Filed Feb. 25, 1919. Serial No. 279,196. Term of patent 14 years.



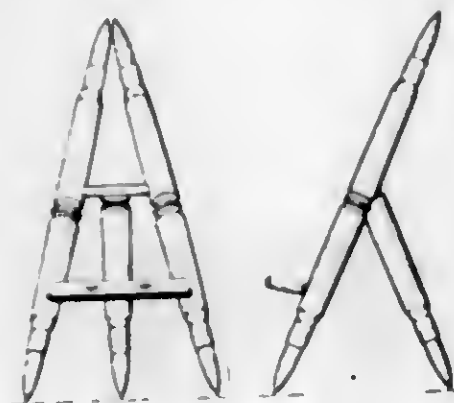
The ornamental design for a textile fabric as shown.

53,515. TEXTILE FABRIC. JULIUS A. MIGEL, New York, N. Y. Filed Feb. 25, 1919. Serial No. 279,197. Term of patent 14 years.



The ornamental design for a textile fabric as shown.

53,516. EASEL. HENRY D. OSERDORFER, Quincy, Ill. Filed Mar. 31, 1919. Serial No. 286,579. Term of patent 3½ years.



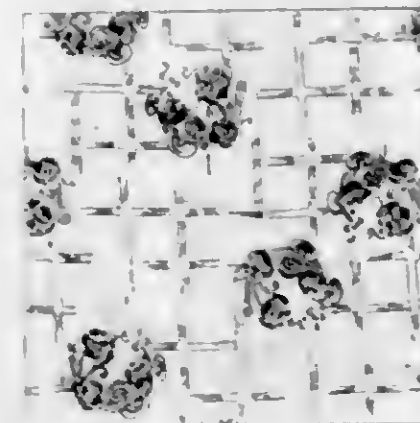
The ornamental design for an easel, substantially as herein shown.

53,517. STEERING-POST SUPPORT FOR AUTOMOBILES. WESLEY N. OSERDORFER, Utica, N. Y. Filed Feb. 14, 1919. Serial No. 277,106. Term of patent 7 years.



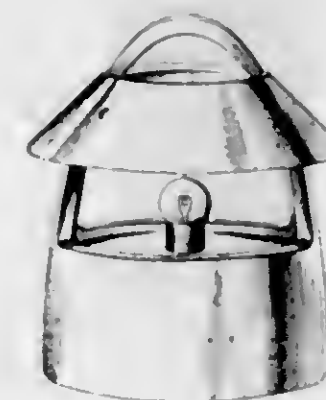
The ornamental design for a steering post support for automobiles, as shown.

53,518. PRINTED SILK. LEON F. OACUTT, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1919. Serial No. 293,849. Term of patent 3½ years.



The ornamental design for printed silk, as shown.

53,519. TABLE-LAMP. RAYMOND V. OWEN, St. Louis, Mo., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 11, 1919. Serial No. 289,481. Term of patent 14 years.



The ornamental design for a table lamp as shown.

53,520. LIGHTING-FIXTURE. RAYMOND V. OWEN, St. Louis, Mo., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 11, 1919. Serial No. 289,482. Term of patent 14 years.



The ornamental design for a lighting fixture as shown.

53,521. MATCH-SCRATCHER. JOHN F. PETITEL, Kuna, Idaho. Filed Mar. 12, 1919. Serial No. 282,221. Term of patent 14 years.



The ornamental design for a match scratcher, as shown.

53,522. INSULATOR. CHARLES L. PEIRCE, Jr., Pittsburgh, Pa., assignor of one-half to Hubbard & Company, a Corporation of Pennsylvania. Filed Mar. 13, 1918. Serial No. 222,243. Term of patent 14 years.



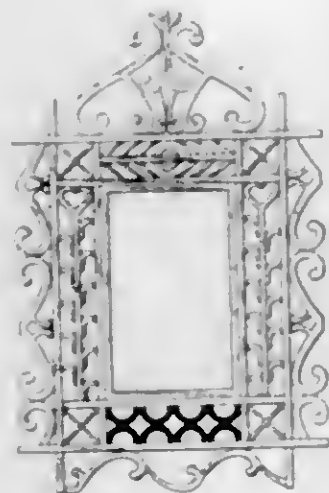
The ornamental design for an insulator, substantially as shown.

53,523. DOLL OR BABY CARRIAGE BODY. LEO D. PANGBORN, Eau Claire, Wis. Filed Mar. 5, 1919. Serial No. 280,864. Term of patent 7 years.



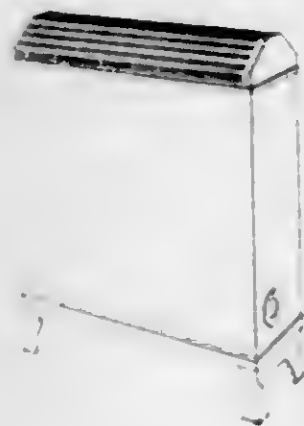
The ornamental design for a doll or baby carriage body, as shown.

53,524. PICTURE-FRAME. JOSEPH POZATEK, Chicopee Falls, Mass. Filed Jan. 30, 1919. Serial No. 274,142. Term of patent 3½ years.



The ornamental design for a picture frame, as shown.

53,525. GAS RADIATOR. THOMAS J. POTTER, Los Angeles, Calif. Filed July 1, 1918. Serial No. 242,951. Term of patent 14 years.



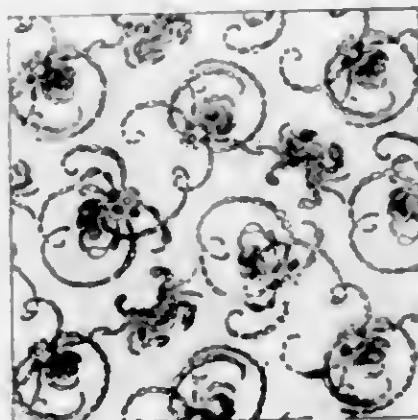
The ornamental design for a gas radiator, as shown.

53,526. PRINTED SILK. RUBY LOUISE REINHART, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed May 3, 1919. Serial No. 291,590. Term of patent 3½ years.



The ornamental design for printed silk, as shown.

53,527. PRINTED SILK. WILLIAM G. REITH, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed May 8, 1919. Serial No. 295,784. Term of patent 3½ years.



The ornamental design for printed silk, as shown.

53,528. SCREEN-DOOR. BYRON C. ROCKWELL, Camden, Ark. Filed Apr. 1, 1919. Serial No. 286,776. Term of patent 14 years.



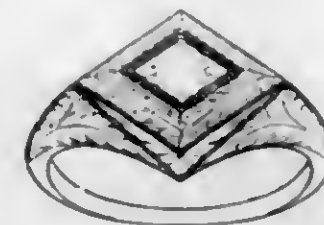
The ornamental design for a screen door, as shown.

53,529. SPARK PLUG. OTTO C. ROHDE, Toledo, Ohio, assignor to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 2, 1917. Serial No. 194,494. Term of patent 14 years.



The ornamental design for a spark plug, substantially as shown and described.

53,530. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,765. Term of patent 7 years.



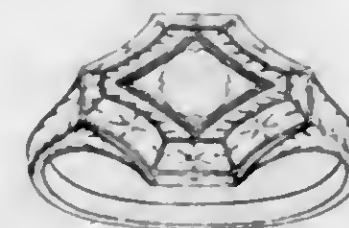
The ornamental design for a ring or similar article of manufacture as shown.

53,531. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,766. Term of patent 7 years.



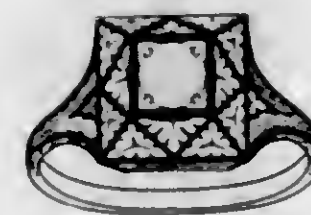
The ornamental design for a ring or similar article of manufacture as shown.

53,532. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,767. Term of patent 7 years.



The ornamental design for a ring or similar article of manufacture as shown.

53,533. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,768. Term of patent 7 years.



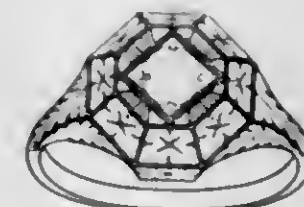
The ornamental design for a ring or similar article of manufacture as shown.

53,534. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,769. Term of patent 7 years.



The ornamental design for a ring or similar article of manufacture as shown.

53,535. RING OR SIMILAR ARTICLE OF MANUFACTURE. MAURICE J. SCHLESS, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,770. Term of patent 7 years.



The ornamental design for a ring or similar article of manufacture as shown.

53,536. WAIST. BERNARD SCHULTZ, Worcester, Mass. Filed Nov. 8, 1917. Serial No. 200,980. Term of patent 3½ years.



The ornamental design for a waist, as shown.

53,537. CAKE OF SOAP OR SIMILAR ARTICLE. ALBERT STERNER, Cincinnati, Ohio. Filed Feb. 27, 1919. Serial No. 279,642. Term of patent 14 years.



The ornamental design for a cake of soap or similar article as shown.

53,538. LIGHTING-FIXTURE. DENT A. TAYLOR, Wheeling, W. Va., assignor to H. Northwood Company, a Corporation of West Virginia. Filed Apr. 12, 1919. Serial No. 289,750. Term of patent 34 years.



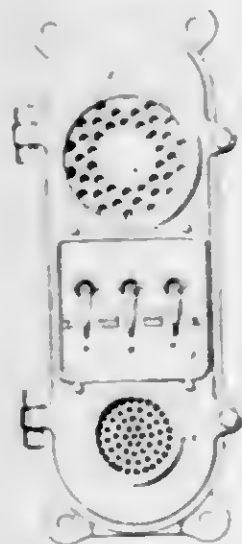
The ornamental design for a lighting fixture, as shown.

53,539. BADGE, BUTTON, OR SIMILAR ARTICLE. ARTHUR E. TEMPLEMAN, Grand Junction, Colo. Filed May 14, 1918. Serial No. 234,340. Term of patent 34 years.



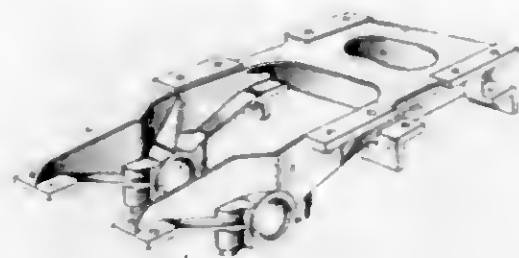
The ornamental design for a badge, button, or other similar article, as shown.

53,540. WALL TELEPHONE SET. JOHN S. TIMMONS, New York, N. Y. Filed Sept. 14, 1918. Serial No. 254,141. Term of patent 14 years.



The ornamental design for a wall telephone set, as shown and described.

53,541. ENGINE-BASE FOR MOTOR-CARS. JEAN K. VANATTA, Chicago, Ill., assignor to Mudge & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 2, 1918. Serial No. 215,213. Term of patent 14 years.



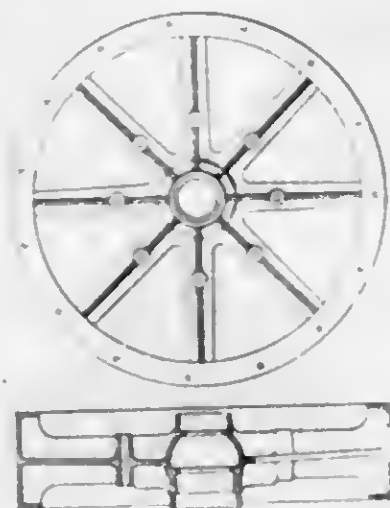
The ornamental design for an engine base for motor cars, as shown.

53,542. LAMP-STANDARD. THOMAS WELLS and EARL REES VANDEWALKER, Watertown, N. Y. Filed Jan. 21, 1919. Serial No. 272,376. Term of patent 7 years.



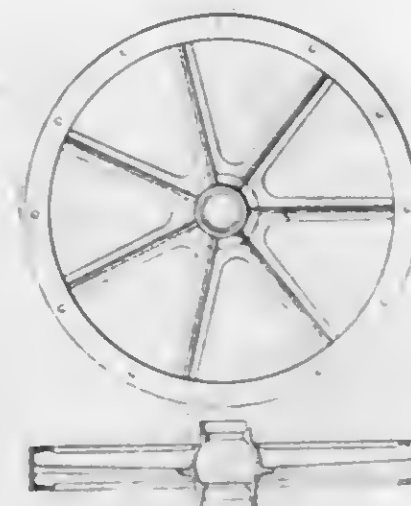
The ornamental design for a lamp standard, as shown.

53,543. VEHICLE-WHEEL. RALPH H. WEST, Cleveland, Ohio. Filed Dec. 20, 1915. Serial No. 67,923. Term of patent 14 years.



The ornamental design for a vehicle wheel substantially as shown.

53,544. VEHICLE-WHEEL. RALPH H. WEST, Cleveland, Ohio. Filed Dec. 20, 1915. Serial No. 67,924. Term of patent 14 years.



The ornamental design for a vehicle wheel substantially as shown.

53,545. INDICATOR, SIGN, OR SIMILAR ARTICLE. CHARLES A. WIDMER, Paterson, N. J. Filed Aug. 3, 1917. Serial No. 184,350. Term of patent 14 years.



The ornamental design for an indicator, sign, or similar article, substantially as shown and described.

53,546. INDICATOR, SIGN, OR SIMILAR ARTICLE. CHARLES A. WIDMER, Paterson, N. J. Filed Aug. 3, 1917. Serial No. 184,351. Term of patent 14 years.



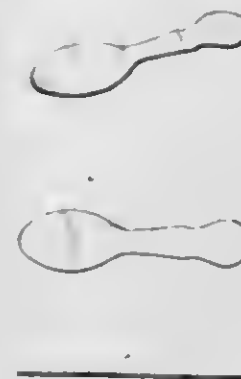
The ornamental design for an indicator, sign, or similar article, substantially as shown and described.

53,547. INDICATOR, SIGN, OR SIMILAR ARTICLE. CHARLES A. WIDMER, Paterson, N. J. Filed Aug. 3, 1917. Serial No. 184,352. Term of patent 14 years.



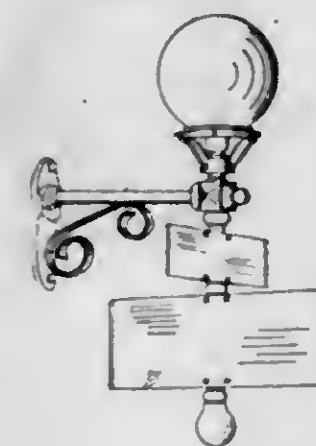
The ornamental design for an indicator, sign, or similar article, substantially as shown and described.

53,548. WOODEN ICE-CREAM SPOON. HARRY A. WILSON, Salisbury, Md. Filed Mar. 2, 1918. Serial No. 220,063. Term of patent 34 years.



The ornamental design for a wooden ice cream spoon as shown.

53,549. COMBINED LAMP-BRACKET AND SIGN SUPPORT. DE WITT H. WYATT, Columbus, Ohio, assignor to Charles A. Divine, Columbus, Ohio. Filed June 18, 1917. Serial No. 175,543. Term of patent 7 years.



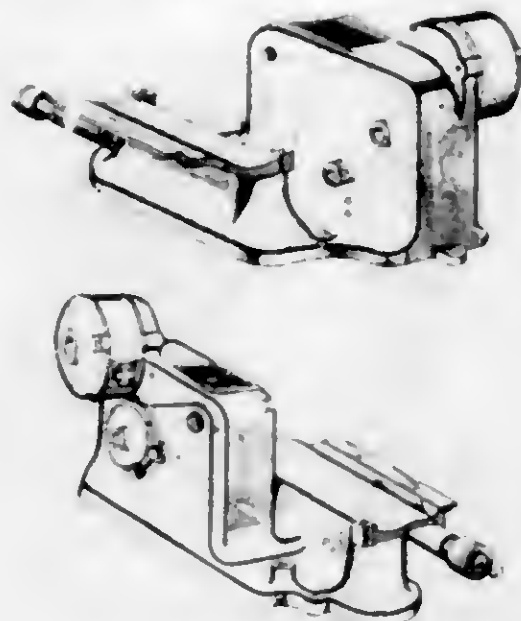
The ornamental design for a combined lamp bracket and sign support, as shown.

53,550. COMBINED LAMP-STANDARD AND STREET-INDICATOR. DE WITT H. WYATT, Columbus, Ohio, assignor to Charles A. Divine, Columbus, Ohio. Filed June 18, 1917. Serial No. 175,544. Term of patent 7 years.



The ornamental design for a combined lamp standard and street indicator, as shown.

53,551. FRAME FOR SLICING-MACHINES. FREDERICK A. WROANT, Hornell, N. Y., assignor to The A. J. Deer Company, Incorporated, Hornell, N. Y., a Corporation of New York. Filed Apr. 8, 1918. Serial No. 227,384. Term of patent 14 years.



The ornamental design for a frame for slicing machines, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 8, 1919.

[PUBLISHED JULY 9, 1919.]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 100,580. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa. Filed Jan. 13, 1917.



No claim being made to the words "Rust? Never!!" apart from the mark shown in the drawing.
Particular description of goods.—Hooks and Eyes, Snap-Fasteners, Safety-Pins, and Toilet-Pins.
Claims use since October, 1904.

Ser. No. 103,244. (CLASS 39. CLOTHING.) ADAM H. BARTEL CO., Richmond, Ind. Filed Apr. 24, 1917.



Particular description of goods.—Overalls.
Claims use since Mar. 20, 1917.

Ser. No. 105,223. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) COLONIAL STEEL COMPANY, Pittsburgh, Pa. Filed July 24, 1917.

THE BIT WITH THE GROOVE

The trade-mark consists in the words "The Bit with the Groove."

Particular description of goods.—Bits for Lathes for Cutting.
Claims use since June, 1917.

Ser. No. 107,326. (CLASS 39. CLOTHING.) MACON WOOLEN MILLS, Bibb county, Ga. Filed Nov. 12, 1917.



Particular description of goods.—Pants and Overalls.
Claims use since Aug. 8, 1917, and was first used for shipment in interstate commerce on Oct. 4, 1917.

264 O. G.—23

Ser. No. 109,793. (CLASS 39. CLOTHING.) ERNEST H. W. BADEN, St. Joseph, Mo. Filed Mar. 26, 1918.



Particular description of goods.—Reinforcing-Shapes for Garments. The Reinforcements are formed of cloth of suitable shape to be secured on the inner surface of portions of a garment by stitching the edges of the Reinforcements on the margins of the upper portion of the front opening and the front portions of the neckband and the shoulder-seams of a garment, while the lower edges of the Reinforcements are free and not stitched.

Claims use since Oct. 1, 1917.

Ser. No. 110,486. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.



The picture of the man being fanciful.

Particular description of goods.—Velv Grinding Compound, Neph-Foot Clutch and Frisk Compound, Leather-Dressing for Automobile-Tops and Upholstery, and Hand-Soap.

Claims use since Jan. 1, 1918.

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Ser. No. 110,852. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. S. BALDWIN, Omaha, Nebr. Filed May 11, 1918.



Particular description of goods.—Chocolate Candles. Claims use since Dec. 15, 1917.

Ser. No. 110,879. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) TRACTOR PRODUCING CORPORATION, New York, N. Y. Filed May 13, 1918.

LIBERTY

Particular description of goods.—Tractors. Claims use since Feb. 1, 1917.

Ser. No. 110,880. (CLASS 39. CLOTHING.) KORREKT PANTS MFG. CO., St. Louis, Mo. Filed May 14, 1918.

KIDS KORREKT KNICKERS

The mark consisting of the words "Kids" and "Knickers" and the misspelled word "Korrekt" distinctively combined and displayed one above the other, as shown in the drawing, the letter "K" being common to and forming the initial and capital letter of each of said words, no claim being made to the words "Kids" and "Knickers" apart from the mark shown in the drawing.

Particular description of goods.—Boys' Pants. Claims use since February, 1911.

Ser. No. 111,280. (CLASS 39. CLOTHING.) IAVING MOCH, New York, N. Y. Filed May 31, 1918.



Particular description of goods.—Ladies' Trimmed and Tilted Hats. Claims use since June 1, 1917.

Ser. No. 111,492. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) FLOOR SHINE PAINT & VARNISH CO., St. Louis, Mo. Filed June 11, 1918.

OLD KETTLE



Particular description of goods.—Varnishes, Japanes, and Enamels for Baking or Air-Drying. Claims use since about Feb. 1, 1918.

Ser. No. 111,684. (CLASS 39. CLOTHING.) RAYMOND C. ADLER, Dayton, Ohio. Filed June 20, 1918.



No claim being made for the words "Ware" and "Gud" apart from the mark as shown.

Particular description of goods.—Children's Outer Garments Consisting of Coats, Pants, and Overcoats, including Wash-Suits.

Claims use since about the 15th day of April, 1918.

Ser. No. 111,994. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) ALICE OETTINGER, Zurich, Switzerland. Filed July 8, 1918.

SAMYRA

Particular description of goods.—Dress-Protectors—Namely, Dress-Shields. Claims use since the 9th of September, 1917.

Ser. No. 113,193. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) MIL-KO-KO COMPANY, St. Paul, Minn. Filed Sept. 10, 1918.



Particular description of goods.—A Preparation in Powdered Form, Composed of Milk, Sugar, and Cocoa, for Making a Beverage Food.

Claims use since Apr. 1, 1918, although the trade-name "Mil-Ko-Ko" was used in the business of its predecessor, the Mil-Ko-Ko Company, a common-law association, since Nov. 6, 1917.

Ser. No. 113,200. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GRIFIN MFG. CO., INC., New York, N. Y. Filed Sept. 21, 1918.



The trade-mark is lined to indicate the color red. Particular description of goods.—Shoe-Polish. Claims use since May 1, 1918.

Ser. No. 113,660. (CLASS 10. FERTILIZERS.) NITRATE AGENCIES COMPANY, New York, N. Y. Filed Oct. 10, 1918.



The word "Brand" is disclaimed apart from the mark shown in the drawing.

Particular description of goods.—Fertilizers. Claims use since July 1, 1918.

Ser. No. 113,722. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) READ DRUG AND CHEMICAL CO., Baltimore, Md. Filed Oct. 14, 1918.

BRAND DUCHESS

Particular description of goods.—Perfumery, Toilet Water, Rouge, Handoline, Cold-Cream, Talcum Powder, Face-Powder, Lip-Pomade, Sachet, Vanishing Cream, and Cologne.

Claims use since the summer of 1875.

Ser. No. 114,185. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORENCE N. LEWIS, New York, N. Y. Filed Nov. 15, 1918.

Carino

Consisting of the word "Carino." Particular description of goods.—Face-Powders. Claims use since Oct. 1, 1918.

Ser. No. 114,658. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARGARET J. CALLAGHAN, Boston, Mass. Filed Dec. 10, 1918.

WATCH-IT-GROW

Particular description of goods.—An Ointment for the Scalp and Hair.

Claims use since on or about Oct. 1, 1917.

Ser. No. 114,673. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOLMES AND BARNES, LTD., Baton Rouge, La. Filed Dec. 10, 1918.

H. & B.

LIGHT LOAF

The letters "H. & B." are lined for blue and the words "Light Loaf" are lined for red.

Particular description of goods.—Wheat-Flour. Claims use since the 17th day of November, 1910.

Ser. No. 115,170. (CLASS 39. CLOTHING.) DAIRY HORTERY MILLS, HARTINGTON, N. C. Filed Jan. 14, 1919.

Daisy Knit

No claim being made to the exclusive use of the word "Knit" except in association with the mark as shown.

Particular description of goods.—Hosiery and Knitted Underwear for Men, Women, and Children.

Claims use since Sept. 14, 1911.

Ser. No. 115,571. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE MORGAN DRUG COMPANY OF THE CITY OF BROOKLYN, Brooklyn, N. Y. Filed Feb. 1, 1919.

BLOOD SUCCESS

Particular description of goods.—A Tablet, Compressed Chemical Cake, or Medicinal Compound for Use as a Body-Building or Body-Incubator.

Claims use since Jan. 15, 1901.

Ser. No. 115,755. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CRISI & CERCHIONE, New York, N. Y. Filed Feb. 11, 1919.

ANTONIO CLEOPATRA

Consisting of the words "Antonio E Cleopatra." Particular description of goods.—Olive-Oil. Claims use since Dec. 10, 1917.

Ser. No. 115,918. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KANSAS CITY MEDICINE CO., Kansas City, Mo. Filed Feb. 17, 1919.



No claim is made to the exclusive right to the words "Hair Restorant" or the word "Woods" apart from the mark shown on the drawing.

Particular description of goods.—A Hair-Restorative. Claims use since Jan. 30, 1919.

Ser. No. 116,068. (CLASS 39. CLOTHING.) ABBOT JACKET MANUFACTURING COMPANY, St. Louis, Mo. Filed Feb. 24, 1919.

PRO-TEX-ALL

Particular description of goods.—Workmen's Overall Combined Coat-Aprons and Workmen's One-Piece Overall-Suits.

Claims use since Mar. 20, 1914.

Ser. No. 116,150. (CLASS 39. CLOTHING.) THE DORMER BROTHERS COMPANY, Cincinnati, Ohio. Filed Feb. 26, 1919.



No claim being herein made to the words "Clean Scoured Double Heel and Toe."

Particular description of goods.—Men's Hosiery. Claims use since January, 1913.

Ser. No. 116,164. (CLASS 12. CONSTRUCTION MATERIALS.) NATIONAL MAGNESIA MANUFACTURING COMPANY, San Francisco, Calif. Filed Feb. 26, 1919.



The trade-mark consists of a blue triangle having arranged therein the monogram of the corporation, printed in red, no claim being made to the exclusive use of the words "National Magnesia Mfg. Co. S. F. Cal." or the words "85 Per Cent Magnesia Sectional Coverings," the exclusive use of these words not claimed being hereby disclaimed.

Particular description of goods.—Sectional Magnesia Pipe-Covering, Sectional Magnesia Boiler-Lagging, and Sectional Magnesia Locomotive-Lagging.

Claims use since February, 1917.

Ser. No. 116,203. (CLASS 39. CLOTHING.) FRANKLIN CLOTHING MFG CO., St. Louis, Mo. Filed Feb. 28, 1919.



No claim being made to the words "Suit with Extra Pants, Franklin Fashions" apart from the mark shown. Particular description of goods.—Men's and Boys' Outer Garments—Namely, Suits, Coats, Pants, Vests, and Overcoats.

Claims use since Feb. 1, 1919.

Ser. No. 116,280. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. C. MENDEL & SON, CO., INCORPORATED, Louisville, Ky. Filed Mar. 3, 1919.



The word "Cocoa" is disclaimed. Particular description of goods.—Cocoa-Beans Intended for Food Purposes. Claims use since August, 1915.

Ser. No. 116,359. (CLASS 39. CLOTHING.) C. & C. MFG. CO., New York, N. Y. Filed Mar. 7, 1919.



The lining on the drawing is for shading only. Particular description of goods.—Men's, Women's, and Children's Cotton Underwear and Men's, Women's, and Children's Silk Underwear. Claims use since Feb. 28, 1919.

Ser. No. 116,384. (CLASS 39. CLOTHING.) I. B. KLEINERT RIBBER COMPANY, New York, N. Y. Filed Mar. 7, 1919.

"JIFFY"

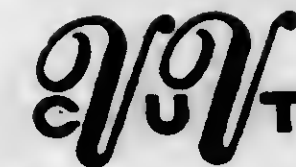
Particular description of goods.—Baby-Pants. Claims use since the 26th day of February, 1919.

Ser. No. 116,412. (CLASS 12. CONSTRUCTION MATERIALS.) CHARLES A. GOLDBLUM, New York, N. Y. Filed Mar. 8, 1919.

JONNIE-JINGLES

Consisting of the words "Jonnie Jingles." Particular description of goods.—Dolls. Claims use since Nov. 8, 1918.

Ser. No. 116,426. (CLASS 39. CLOTHING.) JOHN S. RICHMOND, Philadelphia, Pa. Filed Mar. 8, 1919.



No claim being made to the word "Cut" apart from the mark as shown.

Particular description of goods.—Women's and Children's Knitted and Woven Underwear. Claims use since Mar. 15, 1915.

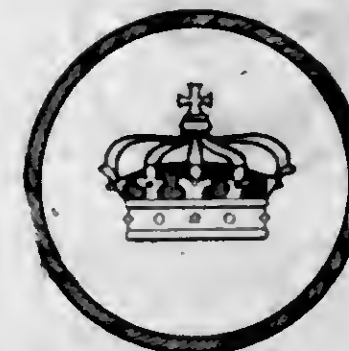
Ser. No. 116,781. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) LIBERTY HAIR PIN MANUFACTURING CO., Hazelton, Pa. Filed Mar. 21, 1919.



Applicant, without waiving any common-law right, hereby waives any claim to the hair-pin apart from the mark shown.

Particular description of goods.—Hair-Pins. Claims use since Mar. 6, 1919.

Ser. No. 116,787. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NATIONAL COMPOUND COMPANY, Riverside, N. J. Filed Mar. 21, 1919.



The lining shown on the drawing represents merely shading.

Particular description of goods.—Water-Softener Compound. Claims use since Feb. 12, 1916.

Ser. No. 116,848. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) LEO J. O'RILEY, Grand Rapids, Mich. Filed Mar. 24, 1919.



Particular description of goods.—Phonographs. Claims use since January, 1918.

Ser. No. 117,002. (CLASS 12. CONSTRUCTION MATERIALS.) ALEXANDER BARON, Brooklyn, N. Y. Filed Mar. 29, 1919.



No claim is made to the representation of the goods part from the other features shown in the drawing.

Particular description of goods.—Toy-Watch Dials and Cases. Claims use since about the 18th day of December, 1918.

Ser. No. 117,004. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BALTIMORE PEARL HONEY COMPANY, Baltimore, Md. Filed Mar. 29, 1919.



The diagonal stripes being colored red and yellow alternately. No claim is made to the word "Flakes" apart from the mark shown on the drawing.

Particular description of goods.—Corn Flakes. Claims use since Feb. 20, 1919.

Ser. No. 117,060. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) STRAUSS BROS. & Co., New York, N. Y. Filed Mar. 31, 1919.

HERO'S FAVORITE

Particular description of goods.—Mouth-Harmonica.
Claims use since about April, 1918.

Ser. No. 117,067. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) STRAUSS BROS. & Co., New York, N. Y. Filed Mar. 31, 1919.



Particular description of goods.—Mouth-Harmonica.
Claims use since about Jan. 10, 1919.

Ser. No. 117,082. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FOAMITE FIREFOAM COMPANY, New York, N. Y. Filed Apr. 1, 1919.

FIREFOAM

Particular description of goods.—Fire-Extinguishing Compounds.
Claims use since about June, 1916.

Ser. No. 117,099. (CLASS 39. CLOTHING.) ANN BLOCH AND CO., Cincinnati, Ohio. Filed Apr. 2, 1919.



No claim is made to the words "Tailored Clothes," "The Mark of Style & Service," and "Bloch's" apart from the mark shown.

Particular description of goods.—Men's and Young Men's Ready-to-Wear Coats, Vests, and Trousers.
Claims use since Feb. 25, 1919.

Ser. No. 117,180. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FEDERAL BISCUIT CO., Everett, Mass. Filed Apr. 5, 1919.

"ROYAL"

Particular description of goods.—Ice-Cream Cones.
Claims use since May 1, 1913.

Ser. No. 117,181. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FEDERAL BISCUIT CO., Everett, Mass. Filed Apr. 5, 1919.

"ACME"

Particular description of goods.—Ice-Cream Cones.
Claims use since May 1, 1913.

Ser. No. 117,232. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JACOB J. HONIGSMAN, Cleveland, Ohio. Filed Apr. 7, 1919.

"HUNICUR"

Particular description of goods.—Dyspepsia-Pills.
Claims use since March, 1911.

Ser. No. 117,240. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EDWARD MCCONNELL & CO., New York, N. Y. Filed Apr. 7, 1919.

CONNELLA

The lines in the drawing representing shading and not color.
Particular description of goods.—Flannel Piece Goods.
Claims use since Mar. 1, 1919.

Ser. No. 117,386. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OXOGAN PRODUCTS COMPANY, Thief River Falls, Minn. Filed Apr. 11, 1919.



Particular description of goods.—A Chemical Carbon-Preventive.
Claims use since Feb. 21, 1919.

Ser. No. 117,400. (CLASS 39. CLOTHING.) FRANKEL SPECIALTIES CORPORATION, New York, N. Y. Filed Apr. 12, 1919.



The picture appearing in the drawing being a portrait of Miss Bernice Frankel, a daughter of David R. Frankel, president of the applicant corporation.

Particular description of goods.—Shoes, Sandals, Slippers, and Boots Made of Leather, Cloth, Leather and Fabric Combined, or Felt; Legginettes (Children's Drawer-Leggings) Made of Fabric and Leather Combined, Felt, or Cloth; Socks and Red-Socks Made of Knit Goods, Cloth, or Felt; Rubbers, All for Children.
Claims use since Jan. 1, 1919.

Ser. No. 117,426. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE WORTHINGTON BALL COMPANY, Elyria, Ohio. Filed Apr. 12, 1919.

"DIRECTOR"

Particular description of goods.—Golf-Balls.
Claims use since Mar. 4, 1919.

Ser. No. 117,427. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE WORTHINGTON BALL COMPANY, Elyria, Ohio. Filed Apr. 12, 1919.

"MYSTERY"

Particular description of goods.—Golf-Balls.
Claims use since Mar. 4, 1919.

Ser. No. 117,453. (CLASS 39. CLOTHING.) INDUSTRIAL GARMENT CO., Chicago, Ill. Filed Apr. 14, 1919.



No claim is made to the words "Union Made" except in connection with the trade-mark as shown.

Particular description of goods.—Outer Work-Shirts and Overalls.
Claims use since May 6, 1918.

Ser. No. 117,479. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) WM. ENDERS MANUFACTURING COMPANY, Walden, N. Y. Filed Apr. 15, 1919.



Particular description of goods.—Mole-Collars, Horse Collars.
Claims use since Apr. 6, 1916.

Ser. No. 117,532. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KATZENBACH & RULOCK COMPANY, New York, N. Y. Filed Apr. 16, 1919.

EXCELLEREX

Particular description of goods.—A Chemical Material in Powdered Form for Accelerating Vulcanization of Materials Composed Principally of Rubber.
Claims use since Feb. 10, 1917.

Ser. No. 117,548. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



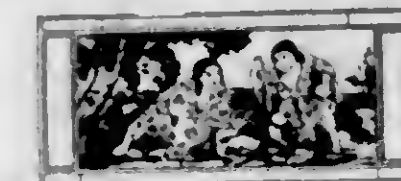
Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,549. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,550. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,551. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,552. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,553. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDERSEN, MEYER & CO. LIMITED, New York, N. Y., and Shanghai, China. Filed Apr. 17, 1919.



Particular description of goods.—Dye.
Claims use since Apr. 1, 1918.

Ser. No. 117,618. (CLASS 39. CLOTHING.) W. T. HOLMES COMPANY, Philadelphia, Pa. Filed Apr. 19, 1919.



Particular description of goods.—Leather, Fabric, and Combination Shoes for Women.
Claims use since March, 1906.

Ser. No. 117,636. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. F. BLANKE TEA & COFFEE CO., St. Louis, Mo. Filed Apr. 21, 1919.



Particular description of goods.—Coffee, Tea, and Spices.
Claims use since Dec. 15, 1895.

Ser. No. 117,672. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE JOHN J. HILDEBRANDT CO., Logansport, Ind. Filed Apr. 21, 1919.



No claim being made to the representation of a fish and the phrase "They Spin so Easy" apart from the mark shown in the drawing.

Particular description of goods.—Spinners and Artificial Flies Known as Artificial Baits and Used for Fish-Bait.

Claims use since Feb. 5, 1919.

Ser. No. 117,680. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ROBERT F. MACKENZIE CO., Cleveland, Ohio. Filed Apr. 21, 1919.



Particular description of goods.—Candy.
Claims use since 1901.

Ser. No. 117,687. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NIELSEN & KITTLE CANNING CO., Terminal, Calif. Filed Apr. 21, 1919.

Norseman

Particular description of goods.—Canned Sardines.
Claims use since Dec. 1, 1918.

Ser. No. 117,720. (CLASS 39. CLOTHING.) WILSON COMPANY, Arcade, N. Y., and Mills, Mosquero, and Solano, N. Mex. Filed Apr. 21, 1919.



Particular description of goods.—Sandals, Shoes, and Slippers Made of Leather, Fabric, and Combinations.
Claims use since June 1, 1916.

Ser. No. 117,738. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN O. NOTARI & CO., Chicago, Ill. Filed Apr. 22, 1919.



The portrait being that of Amerigo Vespucci, deceased.
Particular description of goods.—Canned Olive-Oil.
Claims use since Apr. 7, 1915.

Ser. No. 117,841. (CLASS 39. CLOTHING.) KELLNER BROS., New York, N. Y. Filed Apr. 25, 1919.



No claim being made to the word "Brand" apart from the mark shown.
Particular description of goods.—Children's Dresses.
Claims use since Jan. 1, 1919.

Ser. No. 117,950. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) WILLIAM REMBERT, St. Louis, Mo. Filed Apr. 28, 1919.



I disclaim the word "Washer" shown in said drawing.
Particular description of goods.—Laundry-Washing Machines.
Claims use since Feb. 6, 1916.

Ser. No. 118,197. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE TOLEDO REX SPRAY CO., Toledo, Ohio. Filed May 5, 1919.

REX

Particular description of goods.—Fungicides and Horticultural Insecticides.
Claims use since 1896.

Ser. No. 118,243. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RAYMOND E. TAYLOR, Portland, Oreg. Filed May 7, 1919.

HEPEON

Particular description of goods.—Preparation for the Treatment of Coughs, Colds, Bronchitis, Loss of Voice, and Sore Throat.
Claims use since on or about Oct. 1, 1917.

Ser. No. 118,350. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. & M. GIARDINA, Ensley, Ala. Filed May 12, 1919.

FIORE DI SICILIA



Particular description of goods.—Macaroni, Spaghetti, Vermicelli, and Macaroni Paste Products.
Claims use since October, 1917.

Ser. No. 118,436. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y. Filed May 13, 1919.

Caravel

Particular description of goods.—Silk Piece Goods.
Claims use since the 5th day of April, 1919.

Ser. No. 118,444. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MERIDIAN CANDY CO., Meridian, Miss. Filed May 13, 1919.

Mercco

Particular description of goods.—Candy.
Claims use since Apr. 15, 1919.

Ser. No. 118,525. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) A. S. ROSENTHAL CO., New York, N. Y. Filed May 15, 1919.

Rosemary

Particular description of goods.—Silk Piece Goods.
Claims use since Apr. 3, 1919.

Ser. No. 118,535. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STAVROS K. ASSANAKIS, New York, N. Y. Filed May 16, 1919.

CONCA D'ORO

Consisting of the words "Conca d'Oro."
Particular description of goods.—Olive-Oil.
Claims use since about Jan. 21, 1919.

Ser. No. 118,635. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed May 19, 1919.

Delicia

Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges, Lemons, and Grape-Fruit.
Claims use since Oct. 11, 1918.

Ser. No. 118,638. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed May 19, 1919.

Meritoria

Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges.
Claims use since Oct. 11, 1918.

Ser. No. 118,639. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed May 19, 1919.

Sonia

Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges.
Claims use since Oct. 11, 1918.

Ser. No. 118,642. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GIUSEPPE BIANCO & FIGLIO, New York, N. Y. Filed May 19, 1919.



Particular description of goods.—Olive-Oil.
Claims use since the latter part of 1913.

Ser. No. 118,662. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GREGO CANNING CO., INC., San Jose, Calif. Filed May 19, 1919.



Particular description of goods.—Canned Tomatoes, Canned Pears, Canned Apricots, Canned Cherries, Canned Peaches, Canned String-Beans, Canned Concentrated Tomato Pulp, and Canned Tomato Sauce.
Claims use since Aug. 1, 1913.

Ser. No. 118,667. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOWARD & CAREY CO., Mount Vernon, Ill. Filed May 19, 1919.

KEENER

Particular description of goods.—Coffee.
Claims use since Jan. 1, 1902.

Ser. No. 118,671. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) O. W. HUME COMPANY, San Francisco, Calif. Filed May 19, 1919. Under ten-year proviso.

O. W. Hume's

Particular description of goods.—Dried Prunes.
Claims use since 1893.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 8, 1919.

- 125,889. LEAD-PENCILS. AMERICAN LEAD PENCIL COMPANY, New York, N. Y. Filed January 8, 1918. Serial No. 108,349. PUBLISHED FEBRUARY 18, 1919.
- 125,890. LEAD-PENCILS, CHALK, DRAWING AND WRITING CRAYONS, AND DRAWING-PENCILS. AMERICAN LEAD PENCIL COMPANY, New York, N. Y. Filed July 2, 1918. Serial No. 111,917. PUBLISHED FEBRUARY 18, 1919.
- 125,891. GARTERS AND HOSE-SUPPORTERS. AMERICAN TEXTILE PRODUCTS COMPANY, Chicago, Ill. Filed January 6, 1919. Serial No. 115,002. PUBLISHED MARCH 4, 1919.
- 125,892. TANNED LEATHER HIDES FOR SHOE-UPPERS. ANCHOR LEATHER CO., Chicago, Ill. Filed November 30, 1917. Serial No. 107,070. PUBLISHED MARCH 11, 1919.
- 125,893. CERTAIN NAMED FOODS. AUSTIN, NICHOLS & CO., INC., Brooklyn and New York, N. Y. Filed September 19, 1916. Serial No. 98,073. PUBLISHED DECEMBER 3, 1918.
- 125,894. PAPER FOR CONTAINER LINER. BOGALUSA PAPER COMPANY, INC., Bogalusa, La. Filed June 17, 1918. Serial No. 111,605. PUBLISHED MARCH 11, 1919.
- 125,895. CROCHET-NEEDLES FOR HAND USE. THE BOYE NEEDLE COMPANY, Chicago, Ill. Filed December 21, 1917. Serial No. 108,082. PUBLISHED MARCH 11, 1919.
- 125,896. WRITING-PAPER. BYRON WESTON CO., Dalton, Mass. Filed August 22, 1916. Serial No. 97,545. PUBLISHED NOVEMBER 19, 1918.
- 125,897. COTTON THREAD. THE CLARK THREAD CO., Newark, N. J. Filed April 26, 1918. Serial No. 110,445. PUBLISHED MARCH 4, 1919.
- 125,898. IMITATION LEATHER FOR USE IN MAKING BOOTS AND SHOES. JOSEPH DEJOND, London, England. Filed January 9, 1918. Serial No. 108,375. PUBLISHED MARCH 11, 1919.
- 125,899. PINS HAVING HEADS OF CERTAIN NAMED MATERIALS OR SUBSTANCES AND FOR CERTAIN USES. RALPH C. DICK, Newark, N. J. Filed June 4, 1918. Serial No. 111,371. PUBLISHED FEBRUARY 25, 1919.
- 125,900. CERTAIN NAMED CLOTHING FOR MEN, WOMEN, AND MISSES. WALTER H. DILKE, Philadelphia, Pa. Filed August 18, 1917. Serial No. 105,708. PUBLISHED NOVEMBER 13, 1917.
- 125,901. RADIUM LUMINOUS BUTTONS ATTACHED TO OBJECTS TO BE LOCATED IN THE DARK. EASTERN LUMINOUS INDICATOR CO. INC., Waltham, Mass. Filed December 17, 1917. Serial No. 108,007. PUBLISHED MARCH 4, 1919.
- 125,902. AEROPLANES AND FLYING-BOATS. THE ENGEL AIRCRAFT COMPANY, Niles, Ohio. Filed September 19, 1918. Serial No. 113,243. PUBLISHED MARCH 4, 1919.
- 125,903. DRESSED AND DYED FURS. BERTRAM J. GOODMAN, Brooklyn, N. Y. Filed October 26, 1918. Serial No. 113,895. PUBLISHED MARCH 11, 1919.
- 125,904. STEEL PENS. GEORGE WADSWORTH HUGHES, Birmingham, England. Filed January 18, 1919. Serial No. 115,283. PUBLISHED MARCH 4, 1919.
- 125,905. CLOTHING-TICKETS. KELLER PRINTING COMPANY, New York, N. Y. Filed December 18, 1918. Serial No. 114,699. PUBLISHED FEBRUARY 25, 1919.
- 125,906. WRITING AND MAILING ENVELOPES. THE MILLER BROTHERS COMPANY, Newark, N. J. Filed March 28, 1918. Serial No. 109,849. PUBLISHED FEBRUARY 18, 1919.
- 125,907. PAPER COATED WITH A SILVER-LIKE COATING. NASHUA GUMMED AND COATED PAPER COMPANY, Nashua, N. H. Filed September 5, 1918. Serial No. 113,082. PUBLISHED FEBRUARY 18, 1919.
- 125,908. PRINTING AND WRITING PAPER AND CORRESPONDENCE-ENVELOPES. NATIONAL PAPER-TECH COMPANY, Springfield, Mass. Filed November 7, 1917. Serial No. 107,219. PUBLISHED FEBRUARY 4, 1919.
- 125,909. TOILET-PAPER. OSWEGO RIVER PAPER MILLS, Phoenix, N. Y. Filed February 5, 1918. Serial No. 108,843. PUBLISHED MARCH 4, 1919.
- 125,910. IMITATION LEATHER. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich. Filed November 8, 1917. Serial No. 107,246. PUBLISHED MARCH 11, 1919.
- 125,911. PNEUMATIC TIRES COMPOSED OF RUBBER AND CORD FABRIC. PERFECTION TIRE & RUBBER CO., Fort Madison, Iowa. Filed August 1, 1918. Serial No. 112,465. PUBLISHED FEBRUARY 25, 1919.
- 125,912. LEATHER BELTING. LOOYA A. RANVILLE, Grand Rapids, Mich. Filed July 24, 1918. Serial No. 112,309. PUBLISHED MARCH 11, 1919.
- 125,913. WOMEN'S AND MISSES' DRESS-SKIRTS. ADOLPH HUFF, New York, N. Y. Filed January 9, 1919. Serial No. 115,075. PUBLISHED MARCH 18, 1919.
- 125,914. DRESS-SHIELDS. SAMSTAG & HILDER BROS., New York, N. Y. Filed January 21, 1919. Serial No. 115,360. PUBLISHED MARCH 18, 1919.
- 125,915. MECHANICAL HAIR WAVERS OR CURLERS. JOSEPH W. SCHLOSS CO., New York, N. Y. Filed November 20, 1918. Serial No. 114,259. PUBLISHED FEBRUARY 18, 1919.
- 125,916. LIQUID POLISH FOR FURNITURE, PIANOS, AUTOMOBILES, AND ALL FINISHED SURFACES. CORNELIUS A. SCULLY, Leominster, Mass. Filed October 7, 1918. Serial No. 113,613. PUBLISHED FEBRUARY 25, 1919.
- 125,917. MOTOR-TRUCKS AND TRAILERS. STABILITY MOTORS COMPANY, Philadelphia, Pa. Filed August 7, 1918. Serial No. 112,618. PUBLISHED FEBRUARY 25, 1919.

125,918. INNER TUBES FOR PNEUMATIC TIRES. STERN'S TIRE & TUBE COMPANY, St. Louis, Mo., assignor to Surety Tire & Rubber Company, Wilmington, Del., a Corporation of Delaware. Filed June 11, 1917. Serial No. 104,384. PUBLISHED MARCH 11, 1919.

125,919. CERTAIN NAMED PAPER AND STATIONERY. WALTER B. TEMPLETON, Chicago, Ill. Filed September 12, 1918. Serial No. 113,151. PUBLISHED FEBRUARY 18, 1919.

125,920. CERTAIN NAMED FOODS. THERMOKEPT PRODUCTS CORPORATION, New York, N. Y. Filed November 19, 1918. Serial No. 114,249. PUBLISHED MARCH 18, 1919.

125,921. PRINTING-PAPER. S. D. WARREN COMPANY, Boston, Mass. Filed September 9, 1918. Serial No. 113,094. PUBLISHED FEBRUARY 25, 1919.

125,922. PRINTING-PAPER. S. D. WARREN COMPANY, Boston, Mass. Filed September 9, 1918. Serial No. 113,101. PUBLISHED MARCH 4, 1919.

125,923. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. NELSON, BAKER & Co., Detroit, Mich. Filed September 25, 1918. Serial No. 113,373. PUBLISHED MARCH 18, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

17,082 TEA. JOSEPH TETLEY & Co., London, England; Joseph Tetley & Co., Inc., successor. Registered October 1, 1889. Renewed October 1, 1919.

LABELS

REGISTERED JULY 8, 1919.

- 21,351.—Title: "HOLLY." (For Raisins.) CHARLES G. BONNER, Fresno, Calif. Filed May 19, 1919.
- 21,352.—Title: "DR. CANNARD'S FUTRELIEF FOOT LOTION." (For a Foot-Lotion.) R. CANNARD, Los Angeles, Calif. Filed April 26, 1919.
- 21,353.—Title: "CAROLENE." (For a Compound of Refined Nut-Oils and Evaporated Skimmed Milk.) THOMAS L. CARROLL, Chicago, Ill., assignor, by mesne assignments, to The Carolene Company, a Corporation. Filed October 11, 1917.
- 21,354.—Title: "MINT-U-LIP." (For Syrup.) CHELO-KOLA CO., Portland, Oreg. Filed May 19, 1919.
- 21,355.—Title: "ROB-ROY." (For Coffee.) THE DONALD COMPANY, Grand Island, Nebr. Filed May 19, 1919.
- 21,356.—Title: "GOLD MEDAL." (For Boots and Shoes.) DOROTHY DONO SHOE COMPANY, Boston, Mass. Filed April 8, 1919.
- 21,357.—Title: "BRONCHO THE DRINK WITH A KICK." (For a Non-Alcoholic Beverage.) EMPIRE BOTTLING WORKS, El Paso, Tex. Filed May 19, 1919.
- 21,358.—Title: "NO PROTEST." (For Cigars.) VICTOR LEVOA, Attica, Ind. Filed May 26, 1919.
- 21,359.—Title: "POLLY." (For Canned Tomatoes with Purée from Trimmings.) MONETA CANNING COMPANY, Moneta, Calif. Filed May 19, 1919.
- 21,360.—Title: "GOLD BEAM." (For Canned Tomatoes.) MONETA CANNING COMPANY, Moneta, Calif. Filed May 19, 1919.
- 21,361.—Title: "NORSEMAN." (For Canned Sardines.) NIELSEN & KITTLE CANNING CO. LTD., Terminal, Calif. Filed May 19, 1919.
- 21,362.—Title: "'SAMPECK' TRIPLE-SERVICE SUIT." (For Men's, Young Men's, Boys', Children's, and Juveniles' Outer Suits.) SAMUEL W. PECK & Co., New York, N. Y. Filed May 26, 1919.
- 21,363.—Title: "PEP." (For a Non-Alcoholic Beverage.) J. W. H. RANDALL, New York, N. Y., and Medmont, W. Va. Filed May 24, 1919.
- 21,364.—Title: "REDONDO." (For Canned Sardines.) REDONDO PACKING CO., Redondo, Calif. Filed May 19, 1919.
- 21,365.—Title: "KOZINE HAIR TONIC." (For a Hair-Tonic Preparation.) RIEBER & FREUDENBERGER, Louisville, Ky. Filed May 3, 1919.
- 21,366.—Title: "TIP TOP." (For Glöger-Beer.) JOSEPH S. ROTH, Monongahela, Pa. Filed May 24, 1919.
- 21,367.—Title: "RUSDUN." (For Biolog.) THE RUSSELL JONHES' MILLS, Oklahoma, Okla. Filed May 19, 1919.
- 21,368.—Title: "PRESIDENT." (For Oranges.) SAN JOAQUIN FRUIT CO., Tustin, Calif. Filed May 19, 1919.
- 21,369.—Title: "SENATOR." (For Oranges.) SAN JOAQUIN FRUIT CO., Tustin, Calif. Filed May 19, 1919.
- 21,370.—Title: "USCO KOLD PAK." (For Jar-Rubbers.) UNITED STATES RUBBER CO., New York, N. Y. Filed May 23, 1919.
- 21,371.—Title: "YOSEMITE." (For Canned Peaches.) WILLIAM CLUFF CO., San Francisco, Calif. Filed May 19, 1919.

PRINTS

REGISTERED JULY 8, 1919.

- 5,124.—Title: "SAVING, SERVICE, SATISFACTION." (For Automobile-Tires.) C. L. BROCKWAY, Seattle, Wash. Filed January 23, 1919.
- 5,125.—Title: "BUNTE THE QUALITY COCOA." (For Cocoa.) BUNTE BROTHERS, Chicago, Ill. Filed May 17, 1919.
- 5,126.—Title: "GET WISE, DAD, WEAR B. V. D." (For Athletic Underwear.) THE B. V. D. COMPANY, New York, N. Y. Filed April 7, 1919.
- 5,127.—Title: "I'LL SAY IT IS!" (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,128.—Title: "P. A. IS SUCH A SCUTTLE FULL OF SUNSHINE." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,129.—Title: "TELL IT TO YOUR OLD JIMMY PIPE!" (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,130.—Title: "SCRUB UP YOUR SMOKEDecks AND CUT FOR A NEW PIPE DEAL." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,131.—Title: "WHEN YOU NAIL THE GRAND IDEA." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,132.—Title: "TALK ABOUT INDOOR AND OUTDOOR SPORTS." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 15, 1919.
- 5,133.—Title: "MOTHER GOOSE BROOMS." (For Brooms.) M. G. SCOVILLE SON'S COMPANY, Ogden, Utah. Filed May 23, 1919.
- 5,134.—Title: "THOMAS AWNING COMPANY." (For Awnings.) C. THOMAS, San Francisco, Calif. Filed May 19, 1919.

DECISIONS

OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE AMERICAN STEEL FOUNDRIES.

Decided February 23, 1918.

TRADE-MARKS—"SIMPLEX"—NAME OF CORPORATION.

The word "Simplex" held properly refused registration as a trade-mark, in view of the decision of the court of appeals, on the ground that it is a mere name of a corporation.

ON APPEAL.

TRADE-MARK FOR BRAKE-RIGGING, ETC.

Messrs. Wilkinson & Huxley for the applicant.

CLAY, Assistant Commissioner:

The applicant, the American Steel Foundries, a corporation of New Jersey, appeals from a refusal to register its trade-mark "Simplex" for brake-riggings. The refusal was based apparently on the ground that the mark consists merely in the name of a corporation, although the Examiner in terms specifically refused registration "on the ground that the mark is descriptive," calling attention to the ruling in *ex parte Simplex Electric Heating Co.*, (123 MS. D., 114.)

That decision set forth that there was of record in this Office proof of incorporation of a concern called the "Simplex Electric Heating Co." in Massachusetts in the year 1902, and previous to that there was a corporation called the "Simplex Electric Company," incorporated March 16, 1895. This Office is also informed of the existence of the Simplex Electric Company, a firm in Boston, at least as early as October 28, 1890, which on that date registered a certain trade-mark (No. 18,552) consisting of the word "Simplex," for insulated wire. The decision relied on by the Examiner goes on to relate that the Court of Appeals of the District of Columbia had held in substance that "Simplex" was the distinguishing part of the names of those corporations and that for that reason the word "Simplex" was not registrable as a trade-mark. Wherefore the petition of the Simplex Electric Heating Company for instructions to the Examiner of Trade-Marks to reject any application for registration of "Simplex" as a trade-mark was granted.

The present applicant shows that it is the successor of the Simplex Railway Appliance Company, which was incorporated in Illinois on July 30, 1897,

and, further, that both the applicant and its predecessor, the Simplex Railway Appliance Company, have heretofore registered the trade-mark "Simplex"—the applicant in 1909 for car-couplings (No. 73,250) and its predecessor in 1911 for car-bolsters, (No. 81,752.) In the latter registration continuous use since August 1, 1897, is claimed, that being the same date claimed by the present applicant for "Simplex" brake-rigging.

This is an *ex parte* proceeding. The applicant contends that the rights of the Simplex Electric Heating Company should be inquired into only in an opposition, also that the goods of the applicant are clearly distinguished from all products of the Simplex Electric Heating Company, and that the word "Simplex" has a wide and varied use, both as a trade-mark and as the name of a corporation. The applicant also asserts that the Simplex Electric Heating Company does not have the exclusive right to the use of the word "Simplex" as its name because of the universal adoption and use of the same word by many other companies. These contentions may all be sound; but if it may be said that the word "Simplex" is, in the language of the statute, "merely the name of * * * a corporation," which the court has held to be the case, then it is entirely immaterial whether the goods of the parties are similar or not. The statute at this point makes no reference whatever to the goods for which the name is used as a trade-mark. It is probably true, as argued, that there is no real ground for refusing registration of any mark except the single ground that to do so would invade the rights of somebody else; but I see no escape from the conclusion that to register "Simplex" as a trade-mark for brake-rigging (or for strawberry jam or any goods whatever) would invade the rights of the Simplex Electric Heating Company, because that corporation has the sole right to use its name in trade.

The contention that the public previously had such rights in the word "Simplex" that the Simplex Electric Heating Company could not lawfully have appropriated the name to itself as its own was fully developed in *Simplex Electric Heating Company v. Ramey Co.*, (232 O. G., 1250, at page 1261,) and, indeed, it is therein mentioned that there had

been a previous "Simplex" company—namely, the Simplex Machine Company, incorporated in New York in 1881. Nevertheless the court of appeals reversed that decision (243 O. G., 793, and 7 T. M. R., 296) and apparently intimidated by silence that in the view of the statute it made no difference whether the Simplex Electric Heating Company had a right to adopt and segregate the name.

Verbally it is argued that the court, having taken such particular pains to show that the goods of the parties in that case were similar enough to cause confusion, indicates that the court considered the trade to be material to the question of use of a corporation's name; but that discussion was directed to another ground of rejection in that case and not to the matter of the corporate name. I am inclined to agree with this applicant's contention that the "mere name" referred to in the statute means a name to which the corporation has some claim as to its own property; but, as I understand it, the court has held that this is the case with "Simplex"—the name of the Simplex Electric Heating Company. Therefore under the court's construction of the wording of the statute the applicant's mark must be refused registration, and the Examiner's ruling is sustained.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE AMERICAN STEEL FOUNDRIES.

Decided May 5, 1919.

TRADE MARKS—"SIMPLEX"—NAME OF CORPORATION.

The word "Simplex" held properly refused registration as a trade-mark on the ground that it is a mere name of a corporation.

Mr. Geo. L. Wilkinson for the appellant.

Mr. T. J. Hostetter for the Commissioner of Patents.

PER CURIAM:

The Patent Office refused registration of the word "Simplex" as a trade-mark for brake-rigging, on the ground that it was merely the name of a corporation, and several corporations are referred to in the opinion of the Office denying the registration which have the word "Simplex" as the predominating word in their respective names.

The refusal is in accord with our decisions. (*The Asbestone Co. v. The Carey Mfg. Co.*, 41 App. D. C., 507; *in re United Drug Co.*, 41 App. D. C., 290; *Manafield Tire & Rubber Co. v. Ford Motor Co.*, 44 App. D. C., 205; *Hurrell v. Simplex Electric Heating Co.*, 44 App. D. C., 452; *Simplex Electric Heating Co. v. The Ramsey Co.*, 46 App. D. C., 400.)

For the reasons given by the Assistant Commissioner in his opinion, (264 O. G., 353,) which appears in the record, where he reviews all the contentions of the applicant in the light of the adjudged cases, we affirm the decision of the Patent Office.

Affirmed.

U. S. Circuit Court of Appeals—Second Circuit.

STANLEY WORKS v. TWISTED WIRE & STEEL CO.

Decided January 15, 1919.

[256 Fed. Rep., 98.]

1. PATENTS—VALIDITY AND INFRINGEMENT—BOX-STRAPPING.

The Howe reissue patent, No. 13,765, (original No. 1,043,771,) for box-strapping, is not invalid, as containing new matter, was not anticipated, and discloses invention, evidenced in part by its great commercial success in an old art; also held infringed.

2. TRADE-MARKS—UNFAIR COMPETITION.

Evidence which does not show that the public was deceived by believing defendant's product to be that of complainant does not warrant a finding of unfair competition.

APPEAL from the District Court of the United States for the Southern District of New York.

Suit in equity by the Stanley Works against the Twisted Wire & Steel Company. Decree for plaintiff, sustaining the charge of infringement of patent and denying the relief for unfair competition. Both plaintiff and defendant appeal. Affirmed.

Messrs. Mitchell & Allyn (Mr. Robert C. Mitchell and Mr. Louis W. Southgate of counsel) for the plaintiff.

Mr. Charles G. Hensley for the defendant.

Before ROGERS and MANTON, Circuit Judges, and HAND, District Judge.

MANTON, Cir. J.:

Since both parties appeal from the decree entered herein, we shall refer to the parties as they were referred to in the district court, to wit, plaintiff and defendant.

(1) The plaintiff in this bill in equity charged infringement of reissue Letters Patent granted to it July 7, 1914, No. 13,765, for an improvement in box-strapping invented by Leon S. Howe. The bill further charged unfair competition. The district judge sustained the patent, held that there was infringement, and dismissed the charge of unfair competition. The defendant denied that there was invention or infringement, but says that the patent in suit is invalid, because it claims, not a patentable combination, but a mere aggregation of old elements. It further claims that the reissue patent is invalid because it shows new matter. The defendant further contends that the district judge correctly held that there was no unfair competition in the trade by it.

(2) Box-strapping, used by manufacturers and merchants, consists of metal strips intended to reinforce the ends of heavy wooden packing-cases, to prevent them from breaking open. Ordinarily, these strips are nailed around each end of the packing-case, and made to tightly embrace the case, so as to perform the intended function. As packages are frequently pushed and handled over and about the floors of warehouses, railroad-cars, or on the decks of ships, it is essential that the sharp edges of the strapping, and the nails which are used to hold it, be so guarded and protected as to avoid

their catching in the floor, and thus prevent the strapping being torn from the case.

The patent in suit is intended to give practical effect to the idea that, by producing a strapping which could be applied by nails driven obliquely therethrough, the oblique driving of each successive nail would take up the slack between it and the last driven, and that such accumulative tightening would cause the strapping to hug tightly to the box, thereby avoiding the danger of the box breaking open. The inventor arranged to corrugate the median portion of the strap transversely, so as to form a central web portion having alternate ridges and furrows, the latter forming effective nail-receiving pockets, and the former constituting effective nail-holder shoulders or abutments; the idea being that a nail held obliquely could be safely driven without danger of glancing, the puncturing blows being utilized to take up the slack. The effect of corrugating the median portion is to increase the overall thickness of the web portion, so that, to the extent the overall thickness is increased, so also would the depth of the pockets and the height of the nail-holding ridges or abutments be increased, without respect to the actual thickness of the metal employed. The corrugation of the metal maintains the initial thickness, and thus affords a sufficient resistance to puncture by the nail to enable the blows to perform the slack-taking-up function before the strap is actually punctured, and it is claimed that by reason thereof comparatively thin sheet metal can be used for relatively wide strapping. By driving the nail obliquely, it enters the wood obliquely, and it is claimed that this, so driven, will continue further to take up the slack, insuring that the strapping will be caused to hug snugly upon the box. The side border of the strapping is left uncorrugated transversely, and thus avoids the danger of the sudden taking up of the slack, which would be caused by the stretch of the strapping longitudinally, and thus defeat the whole purpose of the invention. The transversely-corrugated central web, with its uncorrugated and non-stretchable borders, comprise the central idea of the invention. The furrows thus formed and the raised bearings guard and protect against the nail-heads striking the floor when they are driven fully down.

The plaintiff in his claims sets forth:

4. A metallic box strap for packing cases and the like, comprising a strip, transverse corrugations formed along the median portion thereof to produce substantially roughened surfaces on each face of the strip, and to increase the overall thickness thereof along said median portion, the shoulders formed thereby being arranged to hold the point of a nail to prevent slippage thereof, whereby said nail may be driven at an angle relatively to said strip, the take up slack therein in the act of applying the same; that part of the strip at opposite edges of said corrugated portion being relatively smooth to prevent stretching the central corrugated portion of said strip.

5. A metallic box strap for packing cases and the like, comprising a strip, transverse corrugations formed along the median portion thereof to produce substantially roughened surfaces on each face of the strip, and to increase the overall thickness thereof along said median portion, the shoulders formed by said corrugations being arranged to hold the point of a nail to prevent slippage thereof, whereby said nail may be driven at an angle relatively to said strip to take up slack therein in the act of applying the same; that part of the strip at the

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opposite edges of said corrugated portion being relatively smooth and provided with raised bearings.

7. A metallic box strap for packing cases and the like, comprising a strip, transverse corrugations formed along the median portion thereof to produce substantially roughened surfaces on each face of the strip, and to increase the overall thickness thereof along said median portion, the shoulders formed by said corrugations being arranged to hold the point of a nail to prevent slippage thereof, whereby said nail may be driven at an angle relatively to said strip to take up slack therein in the act of applying the same; that part of the strip at the opposite edges of said corrugated portion being relatively smooth and provided with raised bearings, said bearings being sufficiently raised to extend above the adjacent corrugated median portion of the strip sufficiently to guard the head of a nail driven through said median portion.

Howe's application was filed and the reissue patent granted before the acts of infringement began. The defendant does not charge the plaintiff with laches, and an examination of the application and the specifications, together with the claims of the reissue patent indicates that the patentee has been more definite in the reissue patent than what was disclosed by him in the original patent. The drawings are the same, except that in Figure 2 the transverse corrugations are illustrated definitely, instead of conventionally, as in the original patent. The object of permitting a reissue to be granted was intended to make the patent more specific, providing no new matter was introduced. There was no new matter introduced in the reissue patent; the original patent embodying a rather full disclosure of the basic idea of this invention, namely, the transversely-corrugated median portion or web, plus the non-stretchable borders. Box-strapping seems to have been old in the art, and when the plaintiff entered the field, in order to meet with success, it was obliged to show trade advantages over the prior forms. For instance, box-strapping with raised bearings on one surface formed by embossment one way, was old; the bearings being provided for the sole purpose of holding the sharp edges of the strapping away from the floor. The idea of providing a means for preventing the point of the nail from glancing out of a vertical position is old; but this invention provides a construction which makes safe the puncturing of the material by a nail placed obliquely anywhere throughout the length of the strap with hammer-blows incidental to puncturing the metal and the subsequent blows incidental to driving the nail into the wood, all operating to take up objectionable slack behind the nail. By transversely corrugating thin metal along the median line, forming relatively deep pockets and correspondingly high abutments, which provide a height even greater than the thickness of the stock, whereby the point of a nail, obliquely held, could be placed practically anywhere throughout the length of the strapping to avoid nails or knots in the packing-case, so that, when the nail was struck, it would not glance, but would have the effect of taking up slack before puncture would occur, and later, when the nail was driven in the wood by oblique driving, it tended to further draw the strap taut. In addition thereto, the borders of the strap were not transversely corrugated, but provided a non-stretchable border

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which, with the driving of the nails, would be drawn taut. The placing of this invention upon the market has resulted in an unusual commercial success, which is now frequently considered as evidence of invention. (*Washburn, etc., Co. v. Norwood*, 143 U. S., 275; 12 Sup. Ct., 443; 36 L. Ed., 154; *Benjamin, etc., Co. v. Northwestern, etc., Co.*, 251 Fed., 288; — C. C. A., —.)

This record shows that, when the plaintiff first engaged in manufacturing this strapping, it was then and prior thereto engaged in manufacturing box-strapping in a limited way, using only its by-product from its rolling-mills, or, as the witness Parsons described it, a by-product which it classified as waste. The annual sales of this patented product grew from 22,373,700 feet in 1913, to 100,281,800 feet in 1917. This speaks with great force for its novelty and utility. (*Barry v. Harpoon Mfg. Co.*, 209 Fed., 207; 126 C. C. A., 301.) This phenomenal success, with the advantages given to merchants and manufacturers who require a metal strapping in their business, leaves no doubt in our mind that invention is clearly shown.

The chief structure of the prior art relied upon by the defendant, is the Bowler strapping, covered by the Bowler patent, No. 458,510. This patent expired in 1896. It provided a central web portion, with closely-spaced minute score-lines cut into the sheet-metal stock, usually in one surface only; the object being to hold the nail from slipping either way. The result of scoring was to weaken the thin sheet-metal stock, so that the nail would penetrate more easily than it otherwise would. The corrugating process of the patent in suit is opposed to the scoring or cutting process. Corrugation preserves the initial resistance to puncture the sheet metal, and the blows used in puncturing the metal take up the slack in the strap. The alternate ridges and pockets, with the height and depth respectively obtained, make secure the anchoring of the point of the nail, so that it would not glance when driven obliquely. The exhibits indicate that the ridges and depth of the pockets make the height several times as great as the actual thickness of the material.

In the Bowler patent, while it shows the strapping transversely scored along its middle portion, it contributes no useful function thereto. Bowler first anchors the strapping with two nails at extended intervals, and provides for intermediate nails between the two anchored points, so that the two side bars of the strapping would be spread apart by the intermediate nails. This is illustrated in the patent drawing of Bowler. The nails in Bowler's are driven vertically, and not obliquely, thus losing the opportunity of taking up slack in the manner intended by the patent in suit. It further appears that the Bowler strapping was used on small boxes, such as orange-boxes. On the other hand, the defendants have virtually substituted the Howe strapping, describing it by sample which is marked Exhibit 10, which, as claimed by the plaintiff, is the infringing structure.

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The infringement of the patent in suit is plain, and needs no further comment. The abandonment of the manufacture of the Bowler "duplex" strapping and the substitution of this type (plaintiff's Exhibit 10) makes clear, we think, the claim of infringement.

(2) The district judge held that there was no proof warranting a finding by him of unfair competition, and that this cause of action is not made out. We are satisfied that the evidence does not warrant a finding that the public has cared anything about the source of plaintiff's goods, or has been deceived by believing that the merchandise of defendant's manufacture is that of the plaintiff. We approve these conclusions. (*Cresecent Tool Co. v. Kilborn & Bishop Co.*, 247 Fed., 209; 159 C. C. A., 393; *Shredded Wheat Co. v. Humphrey Cornell Co.*, 250 Fed., 900; — C. C. A., —.)

The decree is in all respects affirmed.

Supreme Court of the United States.

UNITED STATES OF AMERICA v. COLGATE & COMPANY.

Decided June 2, 1919.

MONOPOLIES—COMBINATION AND RESTRAINT OF TRADE—ANTITRUST ACT.

The manufacturer of products shipped in interstate trade is not subject to criminal prosecution under the Sherman Antitrust Act of July 2, 1890, because he specifies the resale prices and refuses to deal with any one who fails to maintain the same.

IN ERROR to the United States District Court for the Eastern District of Virginia.

Mr. Assistant Attorney-General Todd for the United States.

Mr. Charles Wesley Dunn, Mr. Charles E. Hughes, and Mr. Mason Traubridge for defendant in error.

Mr. Justice McKNIGHT delivered the opinion of the Court.

Writs of error from district courts directly here may be taken by the United States—

from a decision or judgment quashing, setting aside or sustaining a demurrer to any indictment or any count thereof where such decision or judgment is based upon the invalidity or construction of the statute upon which the indictment is founded. (Act of March 2, 1907, c. 2564; 34 Stat., 1246.)

Upon such a writ—

we have no authority to revise the mere interpretation of an indictment and are confined to ascertaining whether the court in a case under review erroneously construed the statute.

We must accept that court's interpretation of the indictments and confine our review to the question of the construction of the statute involved in its decision. (*United States v. Carter*, 231 U. S., 492, 493; *United States v. Miller*, 223 U. S., 599, 602.)

Being of opinion that—

the indictment should set forth such a state of facts as to make it clear that a manufacturer, engaged in what was believed to be the lawful conduct of its business, has violated some known law before it can be held into court to answer the charge of a commission of a crime—

and holding that it—

fails to charge any offense under the Sherman Act or any other law of the United States, that is to say as to the substance of the indictment and the conduct and act charged therein—

the trial court sustained a demurrer to the one before us. Its reasoning and conclusions are set out in a written opinion. (253 Fed., 522.)

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We are confronted by an uncertain interpretation of an indictment itself couched in rather vague and general language. Counsel differ radically concerning the meaning of the opinion below and there is much room for the controversy between them.

The indictment runs only against Colgate & Company, a corporation engaged in manufacturing soap and toilet articles and selling them throughout the Union. It makes no reference to monopoly, and proceeds solely upon the theory of an unlawful combination. After setting out defendant's organization, place and character of business and general methods of selling and distributing products through wholesale and retail merchants, it alleges:

During the aforesaid period of time, within the said eastern district of Virginia and throughout the United States, the defendant knowingly and unlawfully created and engaged in a combination with said wholesale and retail dealers, in the eastern district of Virginia and throughout the United States, for the purpose and with the effect of procuring adherence on the part of such dealers (in reselling such products sold to them aforesaid) to resale prices fixed by the defendant, and of preventing such dealers from reselling such products at lower prices, thus suppressing competition among such wholesale dealers, and among such retail dealers, in restraint of the aforesaid trade and commerce among the several States, in violation of the act entitled "An act to protect trade and commerce against unlawful restraints and monopolies," approved July 2, 1890.

Following this is a summary of things done to carry out the purposes of the combination: distribution among dealers of letters, telegrams, circulars and lists showing uniform prices to be charged; urging them to adhere to such prices and notices, stating that no sales would be made to those who did not; requests, often complied with, for information concerning dealers who had departed from specified prices; investigation and discovery of those not adhering thereto and placing their names upon "suspended lists;" requests to offending dealers for assurances and promises of future adherence to prices, which were often given; uniform refusals to sell to any who failed to give the same; sales to those who did; similar assurances and promises required of, and given by, other dealers followed by sales to them; unrestricted sales to dealers with established accounts who had observed specified prices, etc.

Immediately thereafter comes this paragraph:

By reason of the foregoing, wholesale dealers in the aforesaid products of the defendant in the eastern district of Virginia and throughout the United States, with few exceptions, resold, at uniform prices fixed by the defendant, the aforesaid products, sold to them by the defendant, and refused to resell such products at lower prices to retail dealers in the States where the respective wholesale dealers did business and in other States. For the same reason retail dealers in the aforesaid products of the defendant in the eastern district of Virginia and throughout the United States resold, at uniform prices fixed by the defendant, the aforesaid products, sold to them by the defendant and by the aforesaid wholesale dealers, and refused to sell such products at lower prices to the consuming public in the States where the respective retail dealers did business and in other States. Thus competition in the sale of such products, by wholesale dealers to retail dealers, and by retail dealers to the consuming public, was suppressed, and the prices of such products in the retail dealers and to the consuming public in the eastern district of Virginia and throughout the United States were maintained and enhanced.

In the course of its opinion the trial court said:

No charge is made that any contract was entered into by and on the part of the defendant, and any of its retail customers, in restraint of interstate trade and commerce, the averment being, in effect, that it knowingly and unlawfully created and engaged in a combination with certain of its wholesale and retail customers, to procure

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adherence on their part, in the sale of its products sold to them, to resale prices fixed by the defendant; and that, in connection therewith, such wholesale and retail customers gave assurances and promises, which resulted in the enhancement and maintenance of such prices, and in the suppression of competition by wholesale dealers and retail dealers, and by the latter to the consuming public.

In the view taken by the court, the indictment here fairly presents the question of whether a manufacturer of products shipped in interstate trade, is subject to criminal prosecution under the Sherman Act, for entering into a combination in restraint of such trade and commerce, because he agrees with his wholesale and retail customers, upon prices claimed by them to be fair and reasonable, at which the same may be resold, and declines to sell his products to those who will not thus stipulate as to prices. This, at the threshold, presents for the determination of the court, how far one may control and dispose of his own property; that is to say, whether there is any limitation thereon, if he proceeds in respect thereto in a lawful and bona fide manner. That he may not do so, fraudulently, collusively, and in unlawful combination with others, may be conceded. (*Eastern States Retail Lumber Dealers' Association v. The United States*, 234 U. S., 600, 614.) But it by no means follows that being a manufacturer of a given article, he may not, without incurring any criminal liability, refuse absolutely to sell the same at any price, or to sell at a named sum to a customer, with the understanding that such customer will resell only at an agreed price between them, and should the customer not observe the understanding as to retail prices, exercise his undoubted right to decline further to deal with such person.

The pregnant fact should never be lost sight of that no averment is made of any contract or agreement having been entered into whereby the defendant, the manufacturer, and his customers, bound themselves to enhance and maintain prices, further than is involved in the circumstances that the manufacturer, the defendant here, refused to sell to persons who would not resell at indicated prices, and that certain retailers made purchases on this condition, whereas, inferentially, others declined so to do. No suggestion is made that the defendant, the manufacturer, attempted to reserve or retain any interest in the goods sold, or to restrain the vendee in his right to barter and sell the same without restriction. The retailer, after buying, could, if he chose, give away his purchase or sell it at any price he saw fit, or not sell it at all, his course in these respects being affected only by the fact that he might by his action incur the displeasure of the manufacturer who could refuse to make further sales to him, as he had the undoubted right to do. There is no charge that the retailers themselves entered into any combination or agreement with each other, or that the defendant acted other than with his customers individually.

Our problem is to ascertain, as accurately as may be, what interpretation the trial court placed upon the indictment—not to interpret it ourselves; and then to determine whether, so construed, it fairly charges violation of the Sherman Act. Counsel for the Government maintain, in effect, that, as so interpreted, the indictment adequately charges an unlawful combination (within the doctrine of *Dr. Miles Medical Company v. Park & Sons Company*, 220 U. S., 373) resulting from restrictive agreements between defendant and sundry dealers whereby the latter obligated themselves not to resell except at agreed prices; and to support this position they specifically rely upon the above-quoted sentence in the opinion which begins "In the view taken by the court, etc." On the other hand defendant maintains that looking at the whole opinion it plainly construes the indictment as alleging only recognition of the manufacturer's undoubted right to specify resale prices and refuse to deal with any one who failed to maintain the same.

Considering all said in the opinion (notwithstanding some serious doubts) we are unable to accept the construction placed upon it by the Government. [Vol. 264.]

ernment. We cannot *e. g.* wholly disregard the statement that—

the retailer, after buying, could, if he chose, give away his purchase or sell it at any price he saw fit, or not sell it at all, his course in these respects being affected only by the fact that he might by his action incur the displeasure of the manufacturer who could refuse to make further sales to him, as he had the undoubted right to do.

And we must conclude that, as interpreted below, the indictment does not charge Colgate & Company with selling its products to dealers under agreements which obligated the latter not to resell except at prices fixed by the company.

The position of the defendant is more nearly in accord with the whole opinion and must be accepted. And as counsel for the Government were careful to state on the argument that this conclusion would require affirmation of the judgment below, an extended discussion of the principles involved is unnecessary.

The purpose of the Sherman Act is to prohibit monopolies, contracts and combinations which probably would unduly interfere with the free exercise of their rights by those engaged, or who wish to engage, in trade and commerce—in a word to preserve the right of freedom to trade. In the absence of any purpose to create or maintain a monopoly, the act does not restrict the long-recognized right of trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal. And, of course, he may announce in advance the circumstances under which he will refuse to sell.

The trader or manufacturer, on the other hand, carries on an entirely private business, and may sell to whom he pleases. (*United States v. Trans-Missouri Freight Association*, 166 U. S., 290, 320.)

A retail dealer has the unquestioned right to stop dealing with a wholesaler for reasons sufficient to himself, and may do so because he thinks such dealer is acting unfairly in trying to undermine his trade. (*National Retail Lumber Dealers' Association v. The United States*, 234 U. S., 600, 614. See also *Standard Oil Company v. United States*, 221 U. S., 1, 50; *United States v. American Tobacco Company*, 221 U. S., 100, 180; *Boston Store of Chicago v. American Graphophone Company et al.*, 246 U. S., 8.)

249.—AUTOMATIC WEIGHERS.

1. Miscellaneous.
2. Special types—
3. Material—
4. Fibrous.
5. Dough.
6. Overload—
7. Power.
8. Auxiliary chamber.
9. Catch-pan.
10. Feed-controlling float.
11. Shifting weight—
12. Alternating.
13. Stationary chamber.
14. Plural material.
15. Initial partial charge.
16. Discharging—
17. Filling.
18. Receptacle feed.
19. Rotary.
20. Power.
21. (Withdrawn.)
22. Multiple.
23. Alternating—
24. Regulator—
25. Oscillating chamber.
26. Separate weigh-chamber—
27. Oscillating feed-guide—
28. Pouring discharge.

249.—AUTOMATIC WEIGHERS—Con.

29. Discharging—
30. Alternating—
31. Divided weigh-chamber—
32. Feed cut-off.
33. Oscillating partition.
34. Oscillating feed guide.
35. Oscillating—
36. Shearing discharge cut-off.
37. Pouring discharge.
38. Single—
39. Regulator—
40. Power.
41. Intercontrol of feed and discharge—
42. Single feed cut-off.
43. Plural feed-stream.
44. Cooperating feed cut-off.
45. Power and feed cut-off—
46. Plural feed-stream.
47. Cooperating feed cut-off.
48. Plural feed-stream.

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In *Dr. Miles Medical Company v. Park & Sons Company, supra*, the unlawful combination was effected through contracts which undertook to prevent dealers from freely exercising the right to sell.

The judgment of the district court must be affirmed.

Changes in Classification.

(Order No. 2,503.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 25, 1919.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 73, Measuring Instruments, (Division XXXVI,) abolish subclasses—

168. Weighers—
169. Alternating feed—
170. Divided bucket.
171. Separate buckets.
172. Compound.
173. Discharge-poise—
174. Power.
175. Drip-poise—
176. Force feed.
177. Multiple valves.
178. Single valve.
179. Electrically controlled.
180. Miscellaneous.
181. Oscillating bucket.
182. Positively actuated.
183. Regulating and charge-handling.
184. Removable receptacle.
185. Rotary bucket.
186. Successive operation.

The patents formerly contained in these subclasses have been placed in class 249, Automatic Weighers, hereinafter established.

In class 253, Motors—Fluid, (Division IX,) abolish the following subclasses, with their definitions:

15. Grain-weigher type—
16. Oscillating bucket.
17. Rotary—
18. Peripheral supply—
19. Gravity-bucket—
20. Intermittent.

The patents formerly contained in these subclasses have been placed in class 249, Automatic Weighers, hereinafter established.

Establish, in Division XXXVI, class 249, Automatic Weighers, with the following subclasses and definitions:

249.—AUTOMATIC WEIGHERS—Con.

49. Discharging—
50. Single—
51. Cooperating feed cut-off.
52. Intercontrol of feed and discharge.
53. Oscillating weigh-chamber.
54. Single feed cut-off.
55. Intercontrol of feed and discharge.
56. Oscillating weigh-chamber.
57. Removable weigh-chamber—
58. Alternating—
59. Oscillating feed guide.
60. Single—
61. Receptacle feed.
62. Power and feed cut-off—
63. Cooperating feed cut-off.
64. Power.
65. Power cut-off—
66. Cooperating feed cut-off.
67. Plural feed-stream.
68. Cooperating feed cut-off.

J. T. NEWTON, Commissioner.

Patents Nos. 1,309,604 to 1,310,405.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

Vol. 264—No. 3.

TUESDAY, JULY 15, 1919.

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Total.....	806

Don't let careless expenditure make a slave of your purse. Buy wisely and increase your money holdings by investing in W. M. S.

China—Registration of Trade-Marks and Patents.

DEPARTMENT OF THE INTERIOR.

UNITED STATES PATENT OFFICE.

Washington, D. C., July 2, 1919.

The following cablegram received from the Department of State is published for the information of those concerned.

J. T. NEWTON,
Commissioner.

PARAPHRASE OF CABLEGRAM

From Consul-General at Shanghai, China. Dated June 27, 5 p. m. Received June 27, 10.10 a. m.

Starting August 1st Chinese customs charge fee for provisional registration of trade-marks [and] patents. Remittance of Mexican dollars 7 cents 50 must accompany applications from foreign countries. No change in filing procedure. It is important that this be given immediate publicity.

SAMMONS.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 20, 1919.

Romm & Company, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications of John Wansink, New York, of Broadway and Tenth streets, New York, N. Y., and Diana Walat Co., Inc., of 22 West Fifteenth street, New York, N. Y., for registration of trade-marks and trade-mark registered July 2, 1907, No. 63,738, to Romm & Company, of 23 East Eighth street, New York, N. Y., and a notice of such declaration sent by registered mail to said Romm & Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Romm & Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITERHEAD,
First Assistant Commissioner.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 878,413, dated February 4, 1908, to Alfred Muller, of Gautzsch, Germany, assignor, by mesne assignments, to Triumphatorwerk mit beschränkter Haftung, Leipzig, Lindemann, Germany, for "Calculating-machine." License applied for by Frederic F. Schaefer, 81 New street, borough of Manhattan, New York city.

Renewal of Forfeited Cases.

A petition for the renewal of a forfeited application need not be signed by the inventor or assignee, but may be signed by the attorney.

A power of attorney in the original application authorizing an attorney to transact all business in the Patent Office in connection with the application construed to be of sufficient scope to include the signing of a petition for renewal and the subsequent prosecution of the application. (*Ex parte Agee*, 101 O. G., 1609.)

Foreign Patents.

The receipt of Letters Patent from a foreign government will not prevent the inventor from obtaining a patent in the United States, unless the application on which the foreign patent was granted was filed more than twelve months prior to the filing of the application in this country, in which case no patent shall be granted in this country. (See Rule 29.)

APPLICATIONS UNDER EXAMINATION.

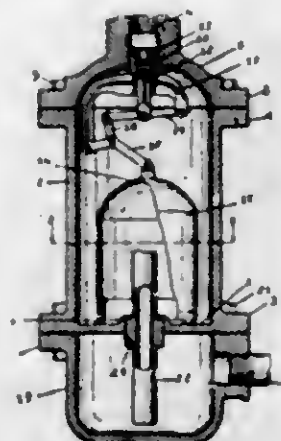
Condition at Close of Business July 11, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No of applications awaiting action.
		New.	Amended.	
314	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 17	May 17	327
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Jan. 31	Apr. 1	619
173	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 5	Dec. 17	157
214	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Feb. 13	June 3	656
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manufacturing; Music; Printed Matter; Tying Cords or Strands.	Mar. 31	Jan. 27	195
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 4	Apr. 7	37
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	Apr. 28	June 7	290
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 10	May 5	207
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Jan. 28	Apr. 11	327
235	10. Carriages and Wagons; Motor Vehicles.	Mar. 1	May 16	756
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 14	May 31	274
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements.	Dec. 30	Jan. 4	1143
329	13. Ammunition and Explosive Charge Making; Bolt, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements; Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 11	May 27	658
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structures; Wire-Working.	Mar. 20	May 3	227
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 5	May 8	588
112	16. Radiant Energy; Telegraphy; Telephony.	Feb. 6	Feb. 19	706
307	17. Latex Hasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 19	May 17	250
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 27	Mar. 10	456
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 24	Apr. 1	278
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales Undertaking.	June 2	June 2	278
312	21. Brakes and Gears; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 2	Mar. 13	309
249	22. Aeronautics; Firearms; Ordnance.	May 1	May 17	277
217	23. Acoustics; Com-Handling; Horology; Records; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 22	May 8	368
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines.	Jan. 9	Mar. 19	499
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 10	May 13	166
108	26. Electricity; Generation; Motive Power; Prime Mover and Dynamo Plants.	Nov. 21	Feb. 6	651
314	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 23	May 7	130
225	28. Internal-Combustion Engines.	Feb. 6	May 3	610
167	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 4	673
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Apr. 25	June 27	338
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 26	Mar. 20	384
274	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Jan. 9	May 5	147
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Paving; Roofs.	Feb. 11	Feb. 26	325
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 12	May 14	249
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	May 28	June 7	377
201	36. Pryers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	May 13	Mar. 21	714
107	37. Electric Lamps; Electricity; Circuit Makers and Breakers; Electricity, General Applications.	Mar. 8	Apr. 2	183
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stationery; Stone-Working; Walls.	June 9	May 13	224
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 13	Dec. 2	627
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 21	Mar. 24	419
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 7	Mar. 26	394
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electricity, Conduits; Electric Signaling.	Mar. 4	Mar. 17	592
352	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewage; Surgery; Water Purification.	Apr. 8	June 17	135
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Boats; Ships.	May 14	May 31	112
179	45. Clutches; Lubrication; Motors; Railway Brakes.	Mar. 14	Apr. 15	259
Oldest new case, Dec. 7; oldest amended, Nov. 21.				18,970
Total number of applications awaiting action.				
103	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:	May 21	June 20	1397
	Trade-Marks.	Apr. 25	June 16	566
	Designs.	June 2	July 8	243
	Labels and Prints.			

PATENTS

GRANTED JULY 15, 1919.

1,309,604. STEAM-TRAP. ADAM E. ARMSTRONG, Three Rivers, Mich. Filed Aug. 27, 1918. Serial No. 251,037. 6 Claims. (Cl. 137-103.)



6. In a trap, the combination of a float chamber having a discharge valve, a separating chamber below said float chamber, a centrally disposed tube depending into said separating chamber and extending upwardly into said float chamber, said tube having a port at the top of the separating chamber, a submerged float open at its lower end arranged in said float chamber so that said tube discharges thereto, and operating connections for said float to said valve.

1,309,605. FLEXIBLE SUPPORT. OLIVER L. RADGREN, Plainfield, N. J., assignor to Kerr Adjustable Strap Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 29, 1918. Serial No. 251,897. 5 Claims. (Cl. 42-28.)



1. In a flexible support, a link, a strap detachably secured at one end to said link and extended from said link to a point, then passed through a second link and returned upon itself forming a loop and extending to a point short of said first named link, thence passing through a friction buckle detachably mounted on said strap, thence returning upon itself and detachably secured to said second named link.

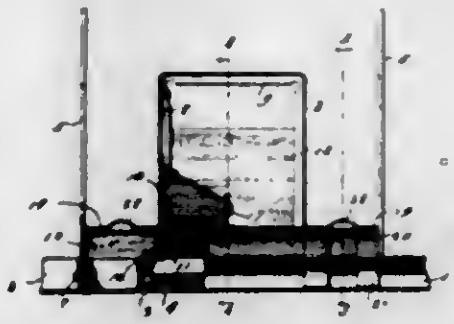
1,309,606. RAT AND MOUSE EXTERMINATOR. OSCAR L. HARTHOLOMEW, Grand Rapids, Mich. Filed Oct. 7, 1918. Serial No. 257,243. 1 Claim. (Cl. 43-22.)
In an exterminator for rats and other small animals, an elongated rectangular box provided with a removable top,

a transverse partition in said box near one of its ends, said partition extending from top to bottom and from side to side of said box and dividing it into a small and a large compartment, said one end of the box and said partition each having in its lower edge an entrance opening, a food



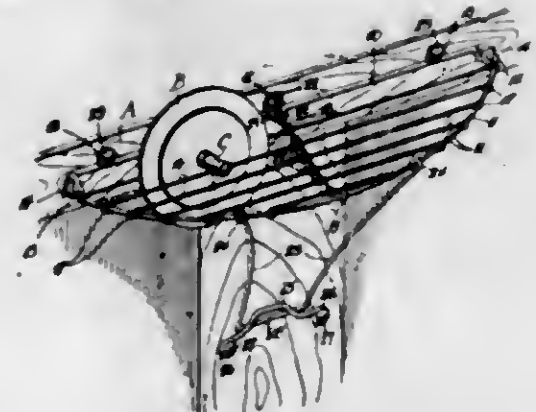
pan in said large compartment and located at the far end of the latter, and a foot pan in said large compartment, located substantially in the entrance opening of said partition, said foot pan containing a deadly poison which will burn the animal's feet.

1,309,607. MOLD. LEONARD A. HELLONRY, Dayton, Ohio. Filed Oct. 22, 1918. Serial No. 259,233. 12 Claims. (Cl. 25-121.)



8. A mold comprising a frame, a core mounted on the frame and comprising complementary members and means connecting the members comprising the core and securing the said core to the frame.

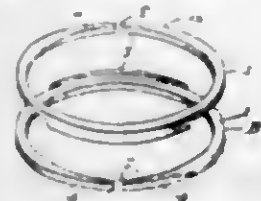
1,309,608. RACK. WALTER G. BONNER, Pepperwood, Calif. Filed Feb. 23, 1917. Serial No. 150,524. 4 Claims. (Cl. 65-65.)



1. In a rack, the combination of a two-part hinged wire frame, one part being provided with loops intermediate its ends adapted for securement against a fixed support, said second frame part being extended outwardly from the first part, a plurality of transversely extending bars secured across said second part, a spacing rod hingedly connected to the first part at one end and engaging the second part at its opposite end, said spac-

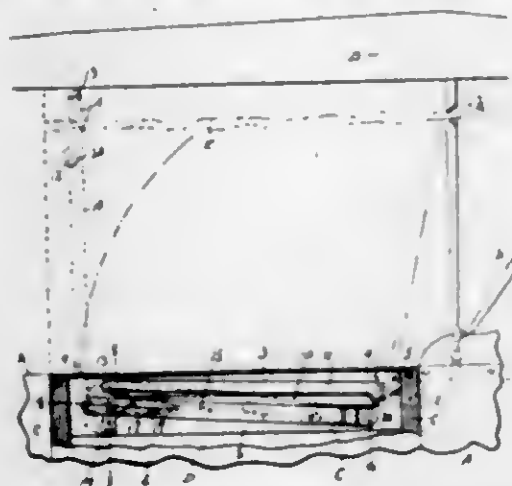
ing rod provided with a plurality of intermediately spaced apart loops engaging about said transverse rods to hold them in spaced relation.

1,309,600. PACKING-RING. CLARENCE R. BRYANT, Memphis, Tenn., assignor, by mesne assignments, to Brownlow Hyams, Chicago, Ill. Filed Oct. 23, 1915. Serial No. 57,536. 5 Claims. (Cl. 121-108.)



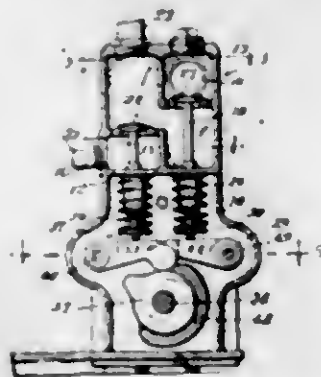
1. A packing ring, comprising a plurality of split members, one of the same being formed on its lateral meeting face with a projecting flange, and said members being disposed to one another so that said flange overlaps externally the end portions of another member.

1,309,610. CURTAIN-SUPPORT FOR AUTOMOBILE-DOORS. SIDNEY L. RUCK, Cortland, N. Y. Filed Sept. 25, 1917. Serial No. 193,124. 5 Claims. (Cl. 21-62.)



1. In combination with a vehicle door having a chamber open at the top, and a lid normally covering the opening, a curtain support hinged to the door within said chamber and composed of bar sections hinged together end to end to fold and unfold into and out of said chamber when the lid is open, and a locking bar hinged to the door within said chamber and cooperating with one of the first hinged bars to lock the curtain support in its unfolded position.

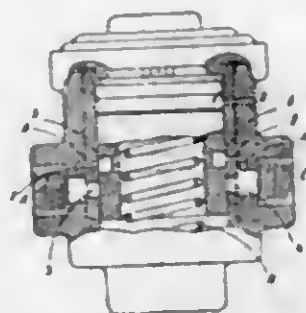
1,309,621. CONTROL-BOX. GEORGE WALDEMAR BUNGAT, Brooklyn, N. Y., assignor to Acme Die Casting Corporation, a Corporation of New York. Filed Aug. 30, 1916. Serial No. 117,596. 18 Claims. (Cl. 127-144.)



18. A fluid-controlling device having, in combination, an inlet valve, an exhaust valve, and valve-operating means for opening and closing the inlet and exhaust valve in al-

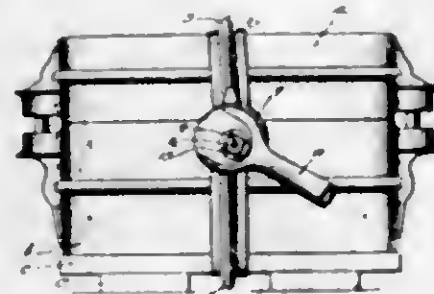
ternate relation and adapted to cause one of these valves to dwell at the open position while the other is kept closed and to dwell at the closed position while the said other valve is both opened and closed.

1,309,632. REGULATING DEVICE FOR THE AIR-DISCHARGE IN COMPRESSED-AIR BRAKES. FRANÇOIS JULES CHAPRAL, Paris, and ALFRED LOUIS EMILE SAILLOT, La Garenne-Colombes, France. Filed Mar. 3, 1915. Serial No. 11,821. 1 Claim. (Cl. 188-1.)



In an air brake system, which includes a triple valve, a brake cylinder and an auxiliary reservoir, a regulating device interposed between the triple valve and the brake cylinder, said regulating device comprising a sliding piston controlled by pressure of the air in the train pipe, resilient means for controlling the movement of the piston whereby the passage of the air from the auxiliary reservoir to the brake cylinder is controlled, the resilient means being such that the size of the passage from the auxiliary reservoir to the brake cylinder remains constant when the pressure in the train pipe is above a predetermined value, and that the size of the passage is reduced when the pressure in the train pipe is less than said predetermined value.

1,309,613. FOUNDRY-FLASK CLAMP. JOHN W. DEARLEY, Racine, Wis., assignor to Freeman Manufacturing Company, Racine, Wis. Filed Feb. 7, 1919. Serial No. 275,572. 2 Claims. (Cl. 144-296.)



1. A clamping device comprising a pair of engaging members, one of said members being provided with a tearing opening, a boss on the other engaging member, an eccentric disk journaled in the opening of the first specified engaging member, and provided with an eccentric bore receiving the said boss, and a handle on the cam disk.

1,309,614. BALL-THROWING TOY. WILLIAM L. DE HAVEN, Wichita, Kans., assignor of one-eighth to Chester A. Latham, Wichita, Kans. Filed Mar. 13, 1917. Serial No. 154,480. 3 Claims. (Cl. 46-54.)



1. In a device as described, in combination, a base-board, having oppositely-inclined sides, four walls forming an inclosure thereabout, a pair of vertical arms extending from the center of said base-board, a ring held

upon said arms projecting over said each inclined side of said base-board, said base-board being formed with a depression at its opposite ends, ball-throwers carried by said base-board and having rings seatable in said depressions.

1,309,615. TRANSPARENT-SIDED CURVED-WALLED VESSEL. JOSEPH DISTRA, Hamilton, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 1, 1913. Serial No. 803,874. 2 Claims. (Cl. 220-82.)



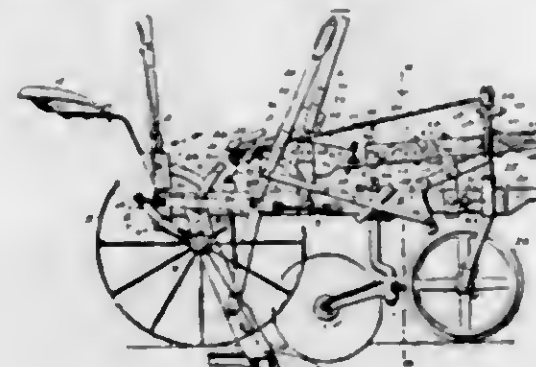
1. A wall for a vessel and comprising a flat sheet metal bendable member provided with an inset sheet of flexible, transparent material, said wall being adapted to be bent to curved form to form the body wall of a vessel.

1,309,616. SHEET-METAL DEVICE. CHARLES EISELER, Irvington, N. J., assignor, by direct and mesne assignments, of one-third to George Zisch and one-third to Newark Engineering and Refrigerating Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 30, 1917. Serial No. 204,663. 1 Claim. (Cl. 85-32.)



An article of manufacture made of sheet metal and having a central portion provided with a continuous screw thread, a gripping portion, and a contacting surface adapted to function as a washer, the said gripping portion being turned upwardly and extending beyond the threaded portion.

1,309,617. BEET-PULLING MACHINE. CONRAD ERFING, Moline, Ill., assignor to Moline Plow Company, a Corporation of Illinois. Filed May 5, 1917. Serial No. 166,670. 9 Claims. (Cl. 55-106.)



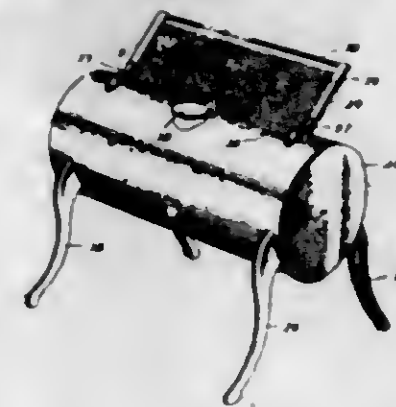
2. In a beet pulling machine, the combination of a frame, beet pulling elements carried thereby, swiveling guide wheels mounted on the frame, means on the frame for swiveling the guide wheels to guide the machine, and a draft pole mounted on the frame and movable laterally relatively thereto.

1,309,618. LUBRICATING COMPOUND. THOMAS J. FAY, Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1915. Serial No. 53,929. 6 Claims. (Cl. 64-19.)

6. A composition of matter for the purpose specified consisting of a plastic self-hardening cement of glycerin

and PbO having a pore, filling lubricating medium incorporated therewith in about the proportions specified while the cement is in a plastic condition.

1,309,619. DEODORIZER. HENRY W. FLANDERS, New London, Conn., assignor to The New London Chemical Company, New London, Conn., a Corporation of Connecticut. Filed Mar. 8, 1918. Serial No. 221,238. Renewed Nov. 23, 1918. Serial No. 263,946. 3 Claims. (Cl. 167-3.)

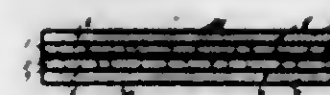


1. The herein described deodorizer comprising a horizontally disposed tank or receptacle, an insulating wall surrounding said receptacle, said wall being formed with a longitudinally disposed slot establishing communication between the interior of the receptacle and the atmosphere, and means extending through said slot for feeding the contents of the receptacle to the atmosphere.

2. The herein described deodorizer comprising a horizontally disposed tank or receptacle, an insulating chamber surrounding said receptacle, a passage extending longitudinally of the receptacle through said chamber to establish communication between the interior of the receptacle and the atmosphere, and means extending through said passage for feeding the contents of the receptacle to the atmosphere.

3. The herein described deodorizer comprising a horizontally disposed tank or receptacle, said receptacle including inner and outer cylinders spaced apart to provide insulating air chambers, said cylinders being formed with longitudinally extending registering slots, a wall connecting said slots and defining a longitudinally extending passage establishing communication between the interior of the receptacle and the atmosphere and means extending through said passage for feeding the contents of the receptacle to the atmosphere.

1,309,620. PROTECTING FABRIC. JACK FRIEDMAN, New York, N. Y. Filed Sept. 30, 1918. Serial No. 256,169. 5 Claims. (Cl. 80-36.)

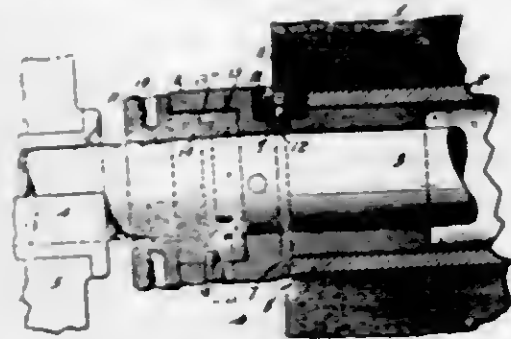


1. As a new article of manufacture, a fabric of the class described embodying a plurality of perforated aluminum plates, compacted masses of wood pulp secured to the exposed faces of said plates, a waterproof, non-combustible fabric positioned on the projecting surfaces of the masses of wood pulp, a layer of wood pulp exteriorly of said waterproof fabric, and a casing of suitable material.

1,309,621. WEB-ROLL SUPPORT. ROBERT C. HAWK, Pittsburgh, Pa., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Aug. 25, 1917. Serial No. 188,254. 7 Claims. (Cl. 242-68.)

7. The combination of a web roll and a core having hollow ends on which the roll is wound, a roll shaft, a

head extending into the core secured to rotate therewith surrounding the shaft and eccentric thereto, an eccentric



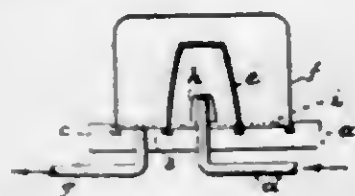
recess in the head, and a locking plug extending into the recess and eccentric to the shaft.

1,309,622. PROCESS OF THE OXIDATION OF AMMONIA TO NITRIC ACID. ABRAHAM HENWOOD, Cynwyd, Pa. Filed July 11, 1917. Serial No. 179,804. 12 Claims. (Cl. 23-1.)



1. The improvement in the art of oxidizing ammonia gas into nitric acid which consists in passing a mixture containing ammonia gas and oxygen over a hot catalyzer while maintaining a partial pressure of oxygen in the mixture of gases used equal to or greater than twice the partial pressure of the ammonia gas used and forming the majority of the total gas pressure.

1,309,623. CATALYZER. ABRAHAM HENWOOD, Cynwyd, Pa. Filed June 25, 1918. Serial No. 241,724. 12 Claims. (Cl. 23-28.)

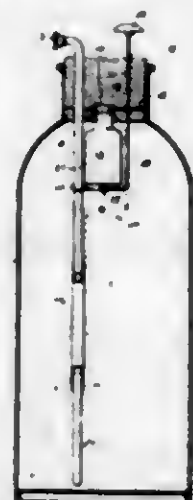


4. Means for catalytically combining gases comprising a gas passage and a catalyzer therein consisting of a porous diaphragm presenting an extended and substantially continuous surface of such negligible thickness that substantially the entire mass is active.

1,309,624. FIRE EXTINGUISHER. FRED J. HINDMAN, Lincoln, Neb. Filed Sept. 21, 1918. Serial No. 255,074. 2 Claims. (Cl. 169-7.)

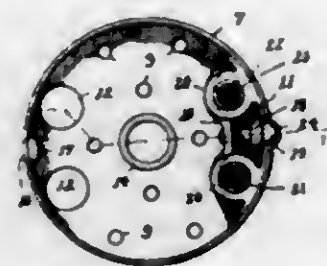
1. A fire extinguisher having two chemical containers, one within the other, a stopper for the outer container having a cavity at its inner end within which is secured a closure for the mouth of the inner container, sealing

means within such cavity, around the portion of the container therein, means to move the inner container to withdraw its mouth from said closure comprising a rod with which said inner container is pivotally connected,



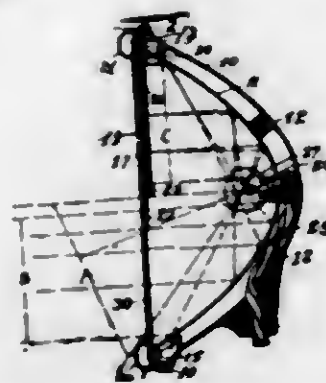
that extends to the exterior of the outer container and a discharge tube reaching from within the outer container to the outside thereof, said rod having a sliding connection with the portion of the tube within the container.

1,309,625. ELECTRIC-WIRE-OUTLET BOX. DAVID HJORTH, Bridgeport, Conn., assignor to The General Machine and Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 28, 1919. Serial No. 273,631. 7 Claims. (Cl. 285-26.)



1. An outlet box formed of sheet metal and including a back having cable openings therethrough and depending side walls with screw holes therein, a yoke adapted to engage cables when positioned in the cable openings, a screw arranged in the hole of the side wall to engage the yoke, a stop plate including a body portion to fit against the inner face of the side wall and having extensions with holes to receive the wires and means for securing the body portion to the side wall of the box.

1,309,626. LIGHT CONTROL FOR AUTOMOBILE LAMPS. GEORGE L. HOLLENBECK, Jamestown, N. Y. Filed Nov. 29, 1918. Serial No. 264,484. 3 Claims. (Cl. 240-48.4.)



1. In combination with a parabolic reflector, having a grooved rim with openings extending into the groove,

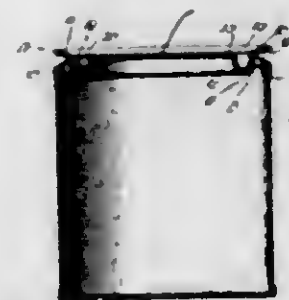
packing in the groove, a metal plate engaged with the packing and having pairs of spaced slits extending through its periphery, the metal between the slits of the pairs being bent inwardly and forming lugs extending through the openings, a mirror secured to the rear face of the plate, a glass cover engaged with the front face of the plate, and means to secure the glass cover against the plate to thereby hold the lugs of the plate in said openings of the rim.

1,309,627. KNEE-PROTECTOR. RUFUS H. HOOKER, Stephenville, Tex. Filed Apr. 30, 1915. Serial No. 24,989. 1 Claim. (Cl. 2-130.)



A knee protector comprising an elongated strip of material adapted to be formed into an arcuate tube having a longitudinally extending opening of considerable width in one side thereof, and spring clips adapted to secure the material in tube formation and having their ends spaced to provide an entrance opening coextensive with and lining with the opening in the tube and each clip having its ends curved in a direction away from the opening in the tube to permit the easy application of the protector.

1,309,628. FRICTION-TOP CAN. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 19, 1915. Serial No. 22,254. 3 Claims. (Cl. 220-42.)

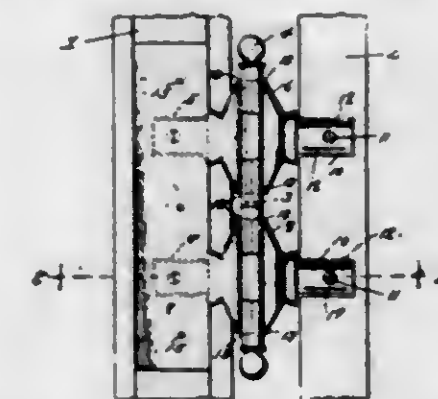


1. A container comprising a body provided with a ring secured about its top, said ring extending inwardly and upwardly before a cover is positioned, and a cover provided with a friction wall adapted to be engaged by said ring when in upper position, said ring being depressible to substantially a horizontal position after the cover is in place to cause it to bind against the friction wall of said cover.

1,309,629. HINGE. RICHARD W. HUBBARD, Ashtabula, Ohio. Filed June 11, 1918. Serial No. 239,427. 1 Claim. (Cl. 16-100.)

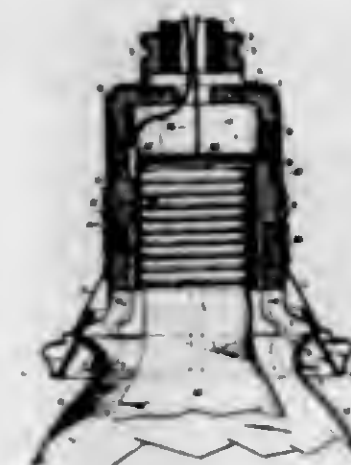
A hinge comprising hollow members having aligned knuckles and also having notches in their edge portions adjacent to the knuckles, a plate connecting the knuckles, said members further having a shank and also having longitudinal fins on the shank, said fins being of a corresponding thickness from their bases to their free longitudinal edges and throughout their areas, and closure

plates adapted to be arranged over the open sides of the hollow members and fastened to the elements to which



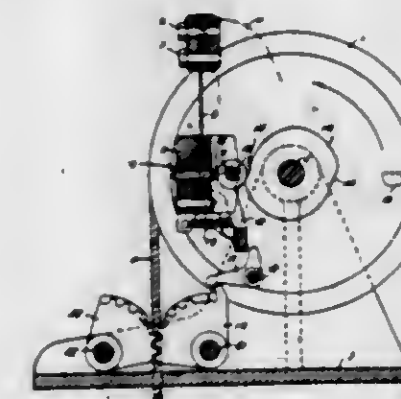
the hollow members are offset and having flanges seated in the said notches of the hollow members.

1,309,630. LAMP CONSTRUCTION. GEORGE E. HELGE, Newark, N. J., assignor to Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Mar. 28, 1916. Serial No. 87,155. 10 Claims. (Cl. 240-115.)



1. In construction of the class described, in combination, a shade, a member adapted to make connection with and support said shade, a socket fitted within said member, a bushing threaded within said member and supporting said socket therein and a shade-locking device threaded on the outer surface of said member.

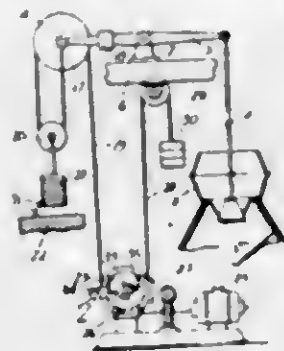
1,309,631. GOVERNOR. FREDERICK HYMAN, Glen Ridge, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 26, 1916. Serial No. 117,010. 8 Claims. (Cl. 74-46.)



2. In a governor, the combination of a governor sheave, a governor rope running over said sheave, a member carried by said sheave, means to retard the rope and inertia controlled means adapted to engage said member carried

by said sheave when the speed of the governor exceeds a predetermined amount to operate the retarding means to retard the governor rope.

1,309,632. BELL HOIST. FREDERICK HYMAN, Glen Ridge, N. J. Filed Dec. 14, 1917. Serial No. 207,044. 18 Claims. (Cl. 214-36.)



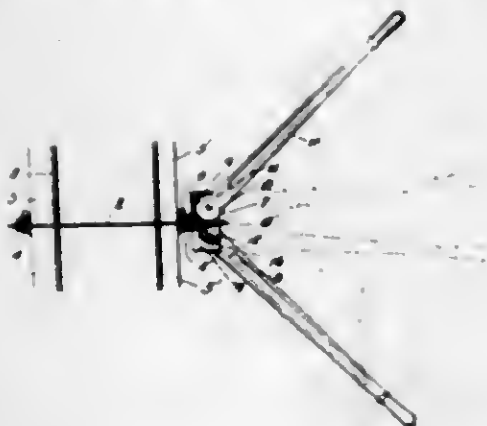
1. In bell hoisting apparatus, a bell and means to actuate the same comprising a lever supporting the bell, a sheave mounted on the lever, a sealing weight, a cable acting on the sheave and the weight, and means to actuate the cable.

1,309,633. DEMOUNTABLE TRACTION-WHEEL. CARL E. JOHNSON, St. Paul, Minn. Filed Aug. 15, 1917. Serial No. 186,386. 3 Claims. (Cl. 21-230.)



1. A demountable tractor rim formed of two channelled sections, each of said sections having interior bosses, said bosses being perforated on at least one of the sections, tractor pads arranged circumferentially about the rim, and connecting links provided with sleeves, means carried by the bosses for lubricating the link sleeves, the sleeves being pivotally mounted on said means, said sleeves being rabbeted to overlap, and the bosses being rabbeted to cooperate with said sleeves.

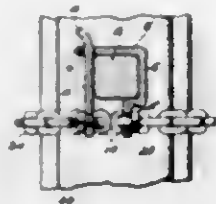
1,309,634. ROD PULLING AND CLAMP-TIGHTENING DEVICE. JOHN M. KELLEY, Kansas City, Mo. Filed July 3, 1916. Serial No. 112,334. Renewed June 7, 1919. Serial No. 302,485. 1 Claim. (Cl. 254-29.)



A device of the character described, comprising a head block having a base portion and spaced side walls; said base having an aperture therethrough and said side walls having converging slots arranged in converging pairs on

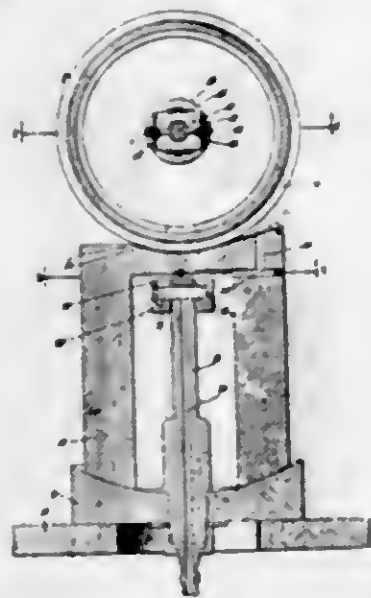
opposite sides of a line perpendicular to the base, gripper heads having trunnions slidably mounted in said slots and having handles for turning said heads in their mountings and the heads being serrated about their peripheries, circular relative to the trunnions whereby pressure on the handles forces said serrated surfaces against an interposed body and turns the said surfaces in progressive contact with the body to tighten the heads thereagainst and to move the body oppositely to the movement of the handles.

1,309,635. CLAMP FOR TIRE CHAINS. GEORGE T. KINNEY, Kansas City, Mo. Filed Jan. 18, 1919. Serial No. 271,768. 3 Claims. (Cl. 24-73.)



3. A clamping device for attaching tire chains to vehicle wheels, comprising a pair of spoke clamping members for engaging opposite sides of a spoke, one of said members being formed with an end opening and the other of said members being formed with a terminal finger adapted for detachable engagement with said opening, the other ends of said members being each provided with an enlarged bolt opening, and a chain retaining bolt extending through said bolt openings, whereby the device is clamped to the spoke.

1,309,636. GYROSCOPE. EMIL KLAHN, New Vernon, N. J. Filed Aug. 3, 1914. Serial No. 854,803. 24 Claims. (Cl. 74-78.)



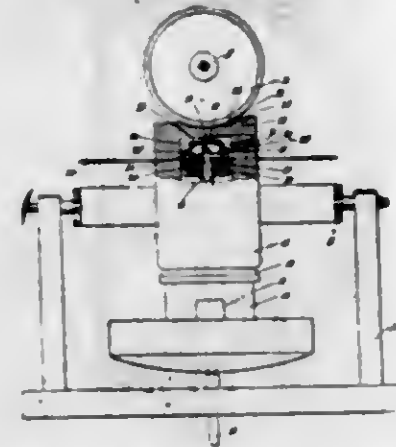
1. A gyroscope, comprising a fluid supported mass free to rotate about two mutually perpendicular horizontal axes, and a fluid supported carrying member therefor.

1,309,637. GYRO APPARATUS. EMIL KLAHN, New Vernon, N. J. Filed Nov. 8, 1915. Serial No. 60,191. 35 Claims. (Cl. 74-78.)

1. The combination with a gyroscope, mounted in substantially three degrees of freedom of rotation; of gearing, in connection therewith, having a predetermined velocity ratio and so mounted as to develop a lateral thrust, when affected by the horizontal component of the earth's rotation, to produce precession of the gyroscope.

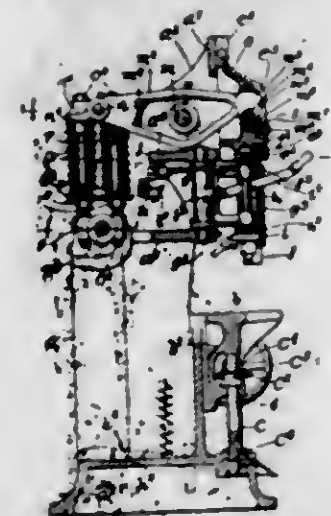
24. The combination with a gyroscope comprising a rotatable mass consisting of a portion of a sphere, a rotatable, hollow, fluid sustained support therefor, terminating in a spherical surface at the bottom and having a suitable

recess in its internal upper surface to provide a passage-way, a frame provided with a spherical cavity to receive the lower end of said support, a stem carried by said frame and extending into said support, a vertically movable cap thereon provided with suitable openings and with a pivot to cooperate with said recess, resilient means tending to force said cap upwardly, and means to limit the upward movement of said cap; a nozzle carried by said support and communicating with its interior to direct a stream of fluid into said passage-way to effect the spinning of said mass, means to admit fluid to said stem; of a shaft carried



by said hollow rotatable support; a cradle pivotally attached to said shaft to rock about an axis perpendicular thereto and upon which cradle is rotatably mounted said mass; a segmental gear fixed to said shaft in the plane of its axis, a pinion meshing therewith, a shaft driven by said pinion, two segmental gears, one upon each side of said pinion and rotatable with said pinion shaft, and two pinions carried by said cradle and freely rotatable relatively thereto, said two pinions meshing with the respective said two segmental gears.

1,309,638. ELECTRIC RIVETING APPARATUS. FRANK P. ROBERT, Amityville, N. Y. Filed May 9, 1916. Serial No. 96,314. Renewed Dec. 11, 1918. Serial No. 266,364. 6 Claims. (Cl. 219-2.)

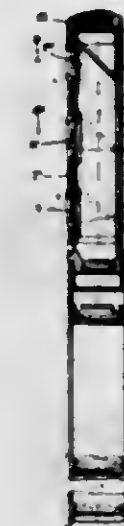


1. In an apparatus of the class described, a frame, a vertically movable plunger carriage, a plunger suspended from said carriage, a crank shaft, a rock beam mounted between the crank shaft and the carriage, and spring devices mounted between the crank shaft and the rock beam and through which and said beam the power of the crank shaft is transmitted to the plunger.

1,309,639. PERISCOPE. FREDERICK L. G. KOLLMONEN, Mountain Lakes, N. J. Filed Feb. 3, 1916. Serial No. 75,920. 22 Claims. (Cl. 88-1.)

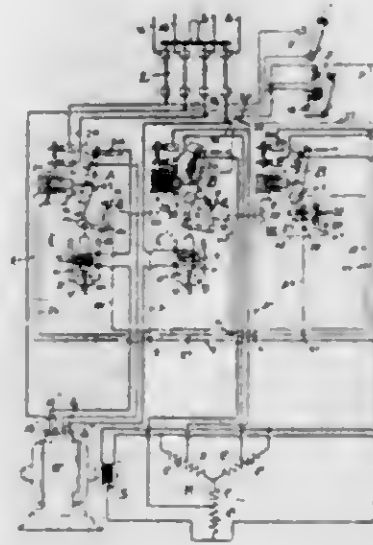
2. A periscope capable of giving different magnifying powers having a plurality of entrant lenses of different

focal lengths, said periscope also having reflecting means constructed and arranged so that operative relationship



can be established at will between any one of the entrant lenses and the rest of the lenses of the periscope.

1,309,640. MOTOR CONTROL. LOUIS LARSEN, Brooklyn, N. Y., assignor to The Smith Electric Company, New York, N. Y., a Corporation of New York. Filed Feb. 3, 1916. Serial No. 75,971. 3 Claims. (Cl. 172-289.)

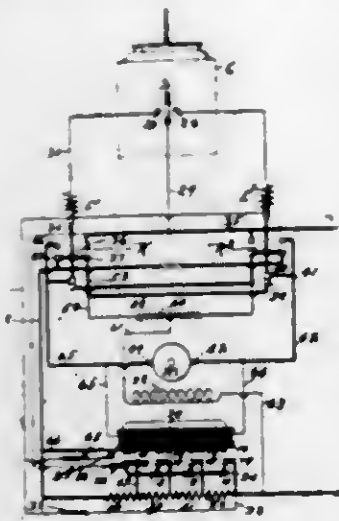


1. In a motor controlling apparatus, the combination of an electromagnetic switch, the switch comprising a pivoted lever, one arm thereof carrying contacts and the other arm, an anti-friction roller, adapted to serve as an interlocking element, an additional electromagnetic switch, comprising a pivoted lever, one arm thereof carrying contacts, and the other arm, a cam, the roller and cam being positioned relatively to each other, to bear against each other and permitting closing of the switches successively, an armature secured to the cam-bearing arm, and a spring adapted to move the armature, to move the contact-bearing arm to close the additional switch.

1,309,641. ACCELERATING MAGNET. DAVID C. LARSON, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 26, 1916. Serial No. 116,972. 2 Claims. (Cl. 172-288.)

1. The combination of a motor, means to start and stop the motor, resistance initially in the circuit of the motor, a plurality of arms for cutting out said resistance in steps, means controlled by one of said arms simultaneously to release the other arms after the first arm

has operated, and a second means carried also by said arm to prevent the operation of the starting means for



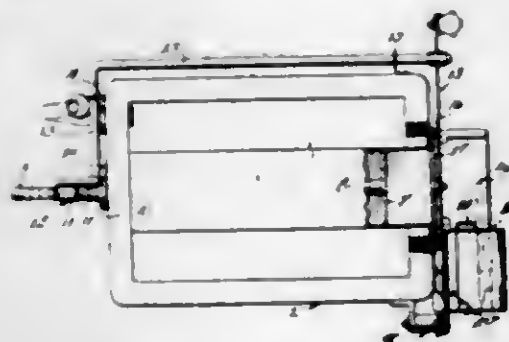
the motor unless all the resistance is first in the circuit of the motor.

1,309,642. REVERSE-PHASE RELAY. DAVID C. LARSON, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 23, 1917. Serial No. 176,544. 1 Claim. (Cl. 175-281.)



In an alternating current relay, the combination of a pair of electro-magnets, substantially U-shaped cores therefor, the cores set apart and slightly divergent from each other, an armature in the gap between the cores, a journal for the armature, at the opposite or other end of the magnets, the journal having a weight projecting from one side thereof adapted to turn the armature to one side of its pivot in an inoperative position and a contact projecting from the opposite side of the journal; the two projecting weights serving to accelerate the movement of the armature, it being turned to one side of its journal, and adapted to contact with another contact in operation.

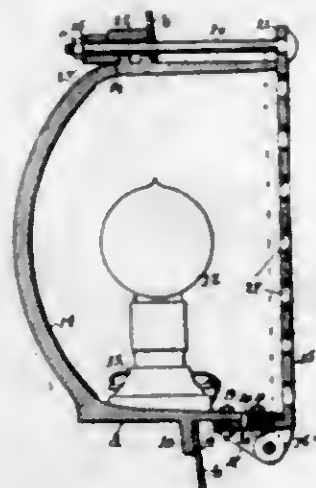
1,309,643. ICE-CREAM SANDWICH MACHINE. ARTHUR LEICH and JESSE S. BERNER, Milwaukee, Wis. Filed Oct. 3, 1918. Serial No. 256,679. 7 Claims. (Cl. 107-1.)



1. An ice-cream sandwich machine comprising a receptacle, a casing disposed within the receptacle, a plun-

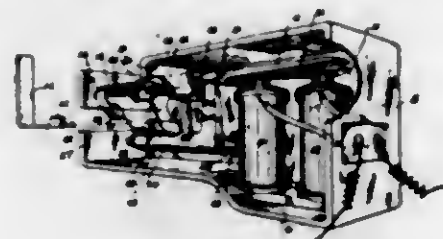
ger reciprocally mounted within the casing, a feed bar extending from the plunger, and means for selectively moving the plunger varying distances.

1,309,644. HEADLIGHT. LIVINGSTON LOHNER, Boston, Mass. Filed Feb. 3, 1919. Serial No. 274,644. 3 Claims. (Cl. 240-41.)



3. The combination with the dasher of a railway car having an opening through it, of a headlight casing secured to said dasher in line with said opening, a metallic closure member for the end of the casing in front of said dasher having a plurality of openings for the transmission of light through it, and means for locking said closure member to said casing, said means being extended to the rear side of said dasher.

1,309,645. ROTARY-GATE LOCK. PETER LOPEZ, New York, N. Y. Filed Oct. 1, 1918. Serial No. 256,453. 3 Claims. (Cl. 70-49.)

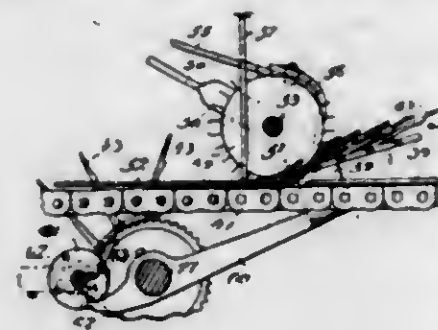


1. In a lock, a casing provided with two transverse openings therethrough one above the other, a latch provided with a keeper engaging portion and a cam engaging portion, said latch being eccentrically pivoted between said openings to normally swing under its own weight with the keeper engaging portion withdrawn from service position in the upper opening and the cam engaging portion advanced into service position in the lower opening, means exterior of the lock adapted to enter said lower opening and to impinge said cam-engaging portion so as to swing the latch into elevated position with the keeper engaging portion in service position in its opening, means associated with and actuable by the latch for limiting the movement thereof in either direction, and means for automatically locking said limiting means when the latch is moved into elevated position.

1,309,646. SHREDDING AND SPINNING MACHINE. GEORGE A. LOWRY, New York, N. Y., assignor, by mesne assignments, to A. Blair Ridginton. Filed Nov. 7, 1914. Serial No. 870,766. 24 Claims. (Cl. 13-2.)

14. In a shredding machine preparatory to spinning, and in combination with shredding devices, and a carrier for the leaves to be shredded, of feeding devices to receive and deliver the leaves to the carrier, wheels arranged at the point of delivery of the leaves and pos-

tioned over the line of feed thereof, and having pins to impale the leaves in successive order to transfer the



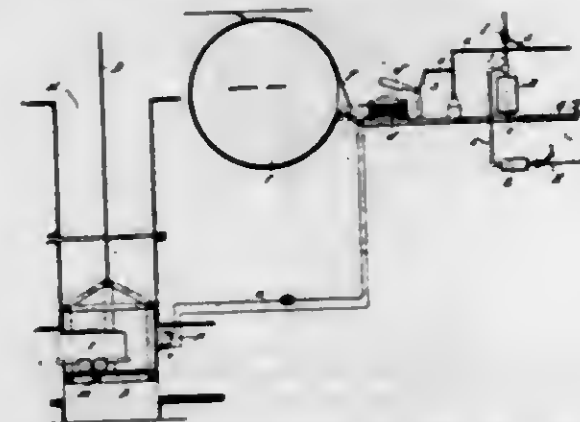
same from the feeding devices to the carrier, and means to press the leaves into impaling relation with respect to said pins.

1,309,647. FINGER-RING. DAVID HOUTON MCKELLAR, Motherwell, Scotland. Filed Nov. 8, 1918. Serial No. 261,669. 2 Claims. (Cl. 63-31.)



1. A signet ring formed with a recess upon the signet portion of said ring, undercut surfaces constructed at opposite points of such recess in order to constitute guides or guide surfaces, a hinge slide adapted to move in such guides or surfaces, a plate pivoted or hinged to said hinge slide in order to move with said slide when tilted up and capable of being pressed down into a reverse or inverted position in order to present one or the other of two signet devices or emblems represented on the two sides of a signet plate, substantially in the manner and for the purposes hereinbefore described and shown on the drawings.

1,309,648. CONTROLLING APPARATUS FOR ELEVATORS AND OTHER DEVICES. JAMES W. MCSHERRY, Duquoin, Ill. Filed Feb. 15, 1919. Serial No. 277,275. 5 Claims. (Cl. 187-28.)

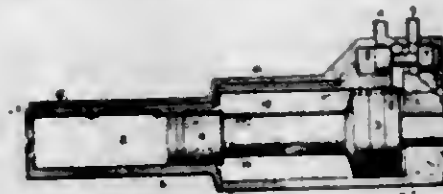


1. In a mine, the combination of an elevator cage that travels in the opening of the mine, a hoisting mechanism for said cage, a governing means for said hoisting mechanism adapted to be controlled by an engineer stationed outside of the mine opening, and means whereby an operative stationed in the mine can stop the elevator cage at will independently of said engineer.

1,309,649. PERCUSSIVE ENGINE. WILHELM MAURR, Johannesburg, Transvaal, South Africa. Filed Nov. 6, 1915. Serial No. 59,982. 3 Claims. (Cl. 121-11.)

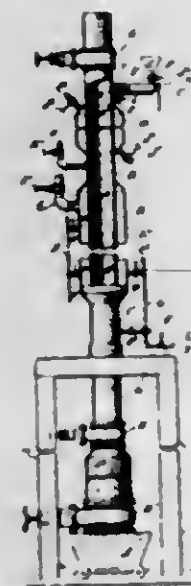
1. In a rock drill channeling machine or coal cutter, the combination with the cylinder and piston of passage means arranged within said cylinder and adapted to maintain continued fluid pressure on the rear working

piston area, a non-return valve in said passage means, and a distributing valve means adapted to supply work-



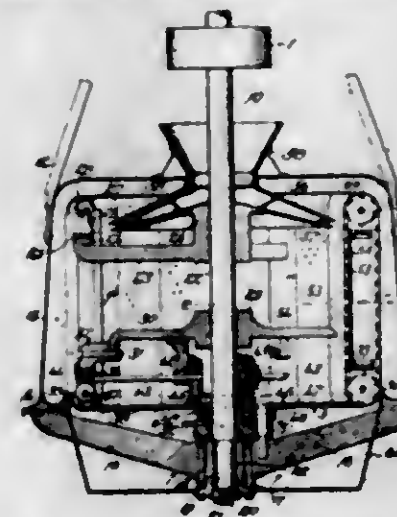
ing fluid to the front cylinder chamber during the rearward stroke and thereafter immediately to exhaust said chamber.

1,309,650. APPARATUS FOR THE PRODUCTION OF CYANOGEN COMPOUNDS. JOHN LUX MORGAN, New York, N. Y. Filed June 30, 1917. Serial No. 177,863. 7 Claims. (Cl. 23-13.)



6. In a furnace for producing cyanogen compounds, in combination, a chamber, an inlet therein for solid material, opening from a water-jacketed conduit, a water jacket inclosing such chamber for a section below such inlet, adapted to maintain a low temperature zone at and near the inlet for the material, means for supplying heat to the chamber, an inlet for gaseous material and separate outlets for the treated material and waste gases.

1,309,651. CONTINUOUS CENTRIFUGAL SEPARATOR. LORENZO M. MCLELLAN, San Juan, Porto Rico. Filed May 9, 1917. Serial No. 167,528. 17 Claims. (Cl. 210-25.)

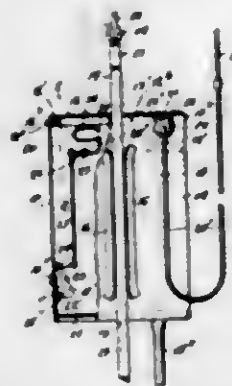


1. The combination with a separator casing; of a shaft rotatably mounted concentric of said casing, spiders fixed on said shaft, rotatable carrier wheels supported by said spiders, endless formminous belts carried by said wheels inwardly of the edges of the belts, said belts being arranged in overlapping relation, means to rotate said

shaft, and means to drive certain of said wheels in timed relation to said shaft.

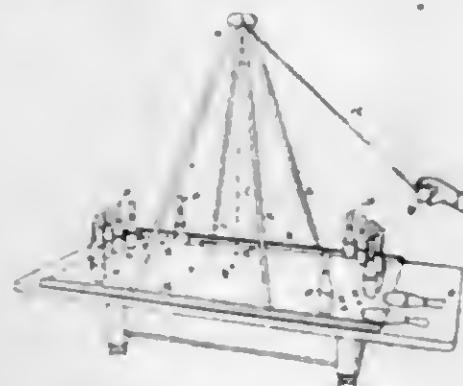
17. The combination with a separator casing, of a shaft rotatably mounted concentric of the casing, an upper and a lower spider, bearings supported by said spiders and forming upper and lower circular series, a sectional shaft having its sections connected by universal joints and journaled in the bearings of one series, other shaft sections journaled in the bearings of the other series, sprockets fixed on said sections, chains connecting the sprockets of the upper series with the sprockets of the lower series, endless foraminous bands carried by said chains and arranged to form a continuous inner separating wall, means to drive said first shaft and gearing connecting the first shaft with the universally jointed shaft and including a gear fixed on said first shaft, a gear rotatably mounted on said first shaft and having a different pitch diameter than the first gear, a fixed shaft, a double gear mounted on the fixed shaft and meshing with the first two gears, a bevel gear connected to the second gear and rotatable therewith, radially aligned bearings on one of the spiders, a shaft journaled in the last mentioned bearings, a bevel gear on said last shaft meshing with the first bevel gear, a worm on said last shaft, a worm wheel on one of the sections of the universally jointed shaft, and guides embracing the portions of the bands forming the outer wall and spaced to provide fluid escape openings.

1,309,652. BAILING TANK OR BUCKET. ARKIN MONTGOMERY NICHOLAS, Blenheim, via Deepwater, New South Wales, Australia. Filed Dec. 1, 1917. Serial No. 204,845. 3 Claims. (Cl. 103-54.)



1. A suction tank provided with an outlet communicating with the upper portion of the tank, and having a flat external seating surface, a suction pipe, and a pad secured to the inlet end of said pipe and having a flat surface perpendicular to the axis of said inlet end and adapted for an airtight engagement with said seating surface.

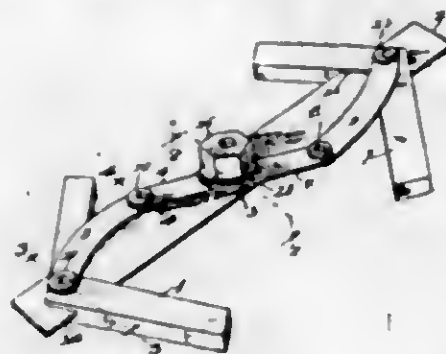
1,309,653. GAME APPARATUS. MILES G. NIXON, Chicago, Ill., and ORVALIN SMITH, Bridgeton, N. J. Filed Oct. 11, 1917. Serial No. 190,072. 3 Claims. (Cl. 46-59.)



2. A foldable game apparatus comprising a flexible grid having spots at each end thereof, plus adapted to be

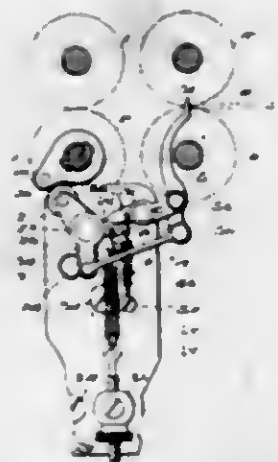
placed on said spots, rigid members for retaining said field in spread condition, a ball suspended above said field and adapted to be swung from end to end thereof, and a ball suspending frame comprising rigid members detachably supported at their lower ends by said field retaining members.

1,309,654. CENTERING TOOL. JOHN RUSSELL PARKER, Franklinville, N. C. Filed Apr. 3, 1918. Serial No. 226,364. 1 Claim. (Cl. 33-191.)



In a centering device a guide bar, sliding jaws on said guide bar, a centrally located pivot on said guide bar comprising a tubular body having exterior threads, a lever pivoted on said tubular body, means for connecting the lever to the jaws, and a nut on the tubular body, and adapted to exert pressure against the lever to bind it to the bar.

1,309,655. TRIPPING MECHANISM FOR MACHINES FOR MARKING MAIL, &c. FERNAND E. POOL, Port Chester, N. Y., assignor to Universal Stamping Machine Co., New York, N. Y., a Corporation of New Jersey. Filed Jan. 13, 1917. Serial No. 142,254. Renewed Mar. 14, 1919. Serial No. 282,733. 15 Claims. (Cl. 101-235.)



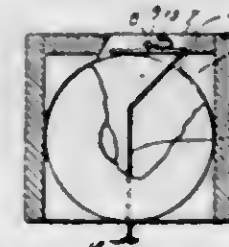
1. In a machine for marking letters and the like, having feeding rollers and printing and impression rollers; a stop-lever for arresting the printing roller or die; a trip having its free end lying in the path of the letters, a rocking-lever to which the trip is pivoted, a link connecting one end of the trip with one arm of the stop-lever, the length of the trip and the pivotal connections of the trip to the said rocking-lever and to the link, being so disposed that after a letter has engaged the trip and caused the latter to shift the stop-lever sufficiently to release the printing roller, the end of the trip is moved away from the advancing edge of the letter faster than the travel of said letter, substantially as described.

14. In a machine for marking mail matter and the like, having feed rollers and printing and impression rollers; tripping mechanism for controlling the printing operation, and a removable plate upon which said tripping mechanism is mounted said plate and mechanism thereon being attachable to or detachable from the ma-

chine as a unit independently of all other parts of the machine, substantially as described.

15. In a machine for marking letters and the like, having feeding and printing and impression members; a stop-lever for arresting the printing member; and a tripping mechanism including a trip-finger having its free end lying in the path of the letters, and means for varying the arc of movement of said trip-finger, said trip-finger and means for varying the arc of movement thereof being mounted upon a removable support, whereby the same may be attached to or removed from the machine as a unit independently of all other parts of the machine, substantially as described.

1,309,656. RECORD-EJECTOR FOR TALKING-MACHINES. NAPOLEON R. RIDDLE, Wilson, La. Filed Mar. 1, 1918. Serial No. 219,810. 1 Claim. (Cl. 211-16.)



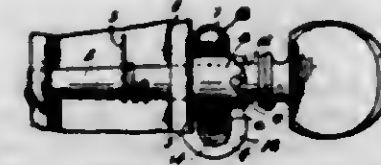
A record ejector including a cabinet having its front open and a vertical slot in its rear wall, pairs of spaced shelves secured in the cabinet and one shelf of each pair having a groove in one of its faces, padding secured to the opposing faces of said shelves to engage the faces of records, a vertical rod located in the slot and secured to the cabinet, spring pressed ejecting members journaled on said rod, end rods slidable in said grooves and pivoted to one end of the ejecting members and having their other ends disposed outwardly of the front of said cabinet.

1,309,657. BRACELET. NATHAN HOODMAN, New York, N. Y. Filed Nov. 9, 1918. Serial No. 261,810. 4 Claims. (Cl. 50-80.)



1. A bracelet formed of a plurality of blocks, each composed of a channelled member, a hinge socket piece having a transversely extending opening therein, carried by, and projecting beyond the end of, said channelled member, said channelled member having at the other end of the side flanges thereof, openings adapted to register with the opening in the hinge socket piece of the adjoining member, and a hinge pin passing through the openings in said side flanges and through said hinge socket piece, whereby said blocks are flexibly connected.

1,309,658. TUNING-PEG ADJUSTMENT FOR STRINGED MUSICAL INSTRUMENTS. CHARLES E. SAEG, Rochester, N. Y. Filed Nov. 25, 1918. Serial No. 263,949. 2 Claims. (Cl. 84-78.)



1. A tuning peg adjustment for stringed musical instruments comprising in combination with a head of a musical instrument and a tuning peg turning therein,

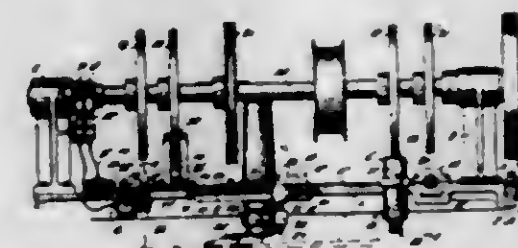
said peg being provided with a lateral projection, a frame having a hook projecting therefrom and detachably engaging with the head, a sleeve turning in said frame and formed with a series of notches in one end, said sleeve receiving the tuning peg therethrough and the projection on the peg being received in one of the notches, and means for turning the sleeve in the frame.

1,309,659. PUZZLE. WILLIAM H. SMILEY, Kansas City, Mo. Filed Jan. 15, 1917. Serial No. 142,388. 2 Claims. (Cl. 46-41.)



1. A puzzle comprising a number of blocks which when placed together will form a square, each block having some part of the Lord's Prayer on the face thereof, and each block having some part of the Ten Commandments on its face, some of the blocks containing in addition special indicia so that when the blocks are arranged in proper sequence both the complete Lord's Prayer and the Ten Commandments will appear in the square with proper coordination with a block having special indicia at each corner of the square.

1,309,660. MACHINE FOR MAKING HAIR-PINS. HOMER P. SMITH, Appleton, Wis., assignor of one-third to F. Edward Saecker and one-third to Herman G. Saecker, Appleton, Wis. Filed Feb. 5, 1918. Serial No. 215,600. 25 Claims. (Cl. 140-87.)

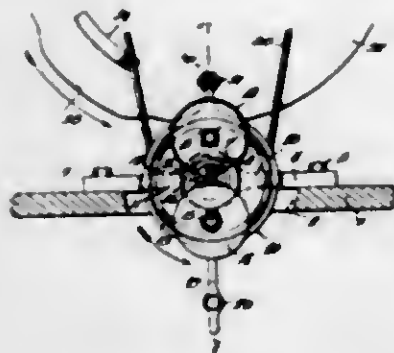


1. A wire working machine including means for supplying a continuous length of wire, means for gripping and holding the wire, means located between said gripping and holding means and said supply means for crimping the wire, and a cutting mechanism located in advance of the gripping and holding means with respect to the direction of travel of the wire.

1,309,661. CUTTING-OFF ATTACHMENT FOR HAIR-PIN MACHINES. HOMER P. SMITH, Appleton, Wis., assignor of one-third to F. Edward Saecker and one-third to Herman G. Saecker, Appleton, Wis. Filed May 27, 1918. Serial No. 280,811. 8 Claims. (Cl. 140-144.)

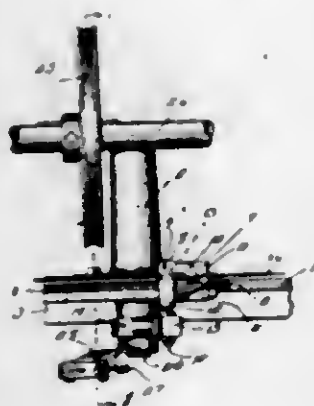
1. In a machine of the class described, a stationary tubular bearing spindle adapted to have a wire slide therethrough, a sleeve rotatable on said spindle, a cutting blade carried by the sleeve and disposed adjacent

one end of the spindle to sever a wire projected therefrom, said cutting blade being normally out of operative



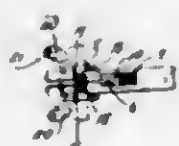
position, means within the stationary spindle for intermittently gripping the wire therein, and means for intermittently moving the blade into operating position.

1,309,662. WIRE-FEEDING MECHANISM FOR HAIR-PIN MACHINES. HOMER P. SMITH, Appleton, Wis., assignor of one-third to F. Edward Saecker and one-third to Herman G. Saecker, Appleton, Wis. Original application filed Feb. 5, 1918, Serial No. 215,500. Divided and this application filed May 27, 1918. Serial No. 236,812. 8 Claims. (Cl. 140-130.)



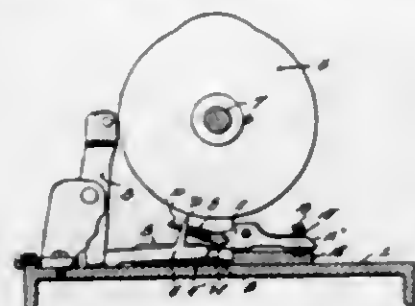
2. A wire-feeding mechanism including a reciprocative carriage, an angle lever pivoted at its angle to the carriage, one arm of the lever being engageable with the carriage to grip wire thereagainst, the other arm of the lever being provided with a wire guiding passage therethrough adjacent the pivot of the lever, and means engaging said other arm of the lever for rocking the lever and reciprocating the carriage.

1,309,663. WIRE-BENDING MECHANISM FOR HAIR-PIN MACHINES. HOMER P. SMITH, Appleton, Wis., assignor of one-third to F. Edward Saecker and one-third to Herman G. Saecker, Appleton, Wis. Original application filed Feb. 5, 1918, Serial No. 215,500. Divided and this application filed May 27, 1918. Serial No. 236,813. 12 Claims. (Cl. 140-87.)



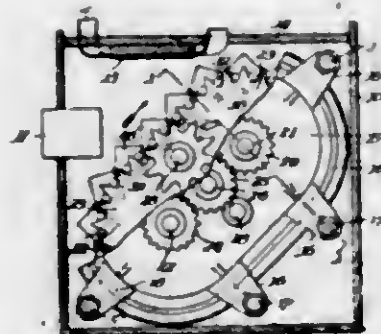
3. In a wire bending mechanism of the class described, an anvil, a forming bar movable toward and away from the anvil and having a kerf in one end to receive the later, means for moving the forming bar to bend a wire around said anvil, and means carried by the forming bar for ejecting the bent wire from the wire bending mechanism upon completion of the bending operation.

1,309,664. WIRE-CUTTING DEVICE. HOMER P. SMITH, Appleton, Wis., assignor of one-third to F. Edward Saecker and one-third to Herman G. Saecker, Appleton, Wis. Original application filed Feb. 5, 1918, Serial No. 215,500. Divided and this application filed June 21, 1918. Serial No. 241,166. 6 Claims. (Cl. 140-141.)



1. In a machine of the class described, a wire cutting device comprising a stationary blade, a movable gripping member having a cam face, a guide member adapted to engage the cam face of the movable gripping member to cause the same to engage the wire and roll it over the blade to effect a cutting, and means for urging the gripping member toward the guide member.

1,309,665. MOTION-PICTURE CAMERA AND PROJECTOR. OTTO R. TAKA, Chicago, Ill. Filed May 31, 1916. Serial No. 100,902. 11 Claims. (Cl. 88-16.5.)



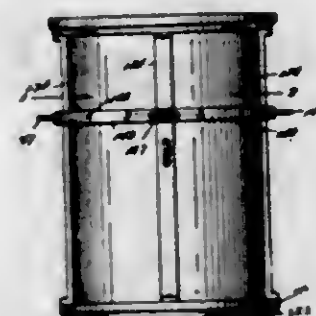
1. In a device of the class described, a plurality of reflecting units each having two reflecting surfaces, each of which surfaces is inclined at an angle of 45° with respect to a common plane, one inclined surface in each unit being turned 90° from the other.

1,309,666. MOVABLE COLUMN. CHARLES C. TOMKINSON, Plainfield, N. J., assignor to J. Edward Ogden, Mountainville, Cornwall, N. Y. Filed Jan. 26, 1918. Serial No. 213,863. 18 Claims. (Cl. 189-34.)



1. A structure having an open side, a column arranged to divide said open side into adjacent door openings, a support therefor arranged to move with the column across said open side, means for holding the column in a predetermined fixed position, said column being arranged to swing free from said holding means, and releasable means for locking the column from swinging.

1,309,667. ROLLING-SUPPORT FOR BARRELS. ROBERT W. VAIL, New York, N. Y., assignor of twenty per cent. to Clifford W. Hartridge, New York, N. Y. Original application filed Feb. 12, 1915, Serial No. 7,911. Divided and this application filed June 29, 1916. Serial No. 106,663. Renewed June 3, 1919. Serial No. 301,540. 1 Claim. (Cl. 220-74.)



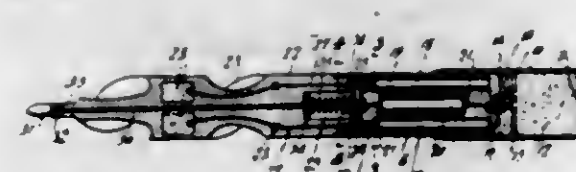
A barrel having a beveled bottom portion to permit of readily rolling when in tilted position, in combination with an annularly grooved ring rigidly mounted to the body of the barrel, a revoluble ring mounted thereover, means mounted in the revoluble ring and projecting into the grooved portion of the fixed ring for retaining the rings in revoluble relation, and handles attached to the revoluble ring.

1,309,668. BUSHING FOR BEARINGS AND METHOD OF MAKING THE SAME. EDWIN E. WAITE, Framingham, Mass. Filed Mar. 20, 1917. Serial No. 156,215. 13 Claims. (Cl. 154-2.)



1. A bushing or lining for bearings, composed of asbestos fabric in tubular form, said fabric having a reinforcing means, and having a coating of japan baked thereon.

1,309,669. EXPLOSIVE SHELL. EDWARD S. WARD, San Jose, Calif. Filed Dec. 3, 1917. Serial No. 205,164. 3 Claims. (Cl. 102-29.)



1. A projectile, including a cylinder, explosive in the cylinder, a signaling device embedded in the explosive, means for igniting the explosive to rupture the cylinder and discharge the signaling device and means for destroying the signaling device.

1,309,670. CORD-WEIGHT. ALFRED H. WEISS, Wilmette, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 4, 1912. Serial No. 734,835. 2 Claims. (Cl. 16-20.)

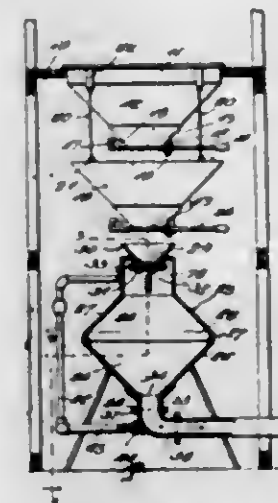
2. A cord weight including a pair of flat similarly formed members, integrally formed ears extending from the peripheries of said members, a portion of said integrally formed ears being pressed inwardly to form bearing surfaces for a rotatable member by which said cord weight is suspended, the remaining portion of the periph-

ery of said members being curved inwardly to meet continuously to form an enclosing casing, a weight member



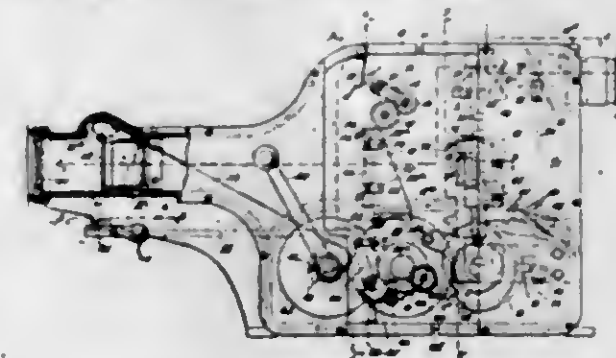
shaped to fit within said casing members, and means for suitably holding said casing members together to protect said weight member.

1,309,671. CONCRETE MIXING AND DELIVERING APPARATUS. CHARLES R. WEAVER, New York, N. Y., assignor to Pneumatic Concrete Machinery Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 27, 1917. Serial No. 204,230. 1 Claim. (Cl. 83-73.)



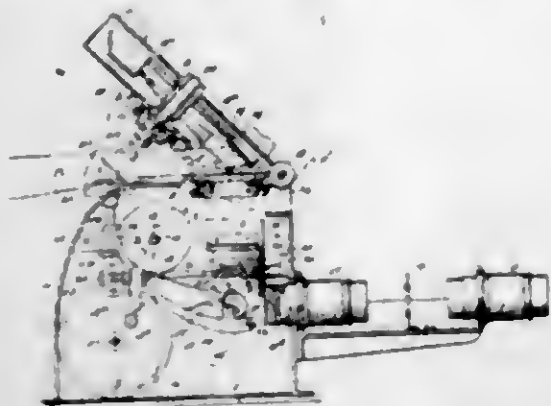
In a concrete mixing and delivering apparatus, a plurality of independent substantially duplicate conical mixing and conveying receptacles spaced apart and axially aligned one above the other, a top closure for the bottom one of said receptacles, and fluid pressure means for mixing material within the lower of said receptacles and discharging the mixed material therefrom.

1,309,672. METHOD AND APPARATUS FOR PRODUCING MOTION-PICTURES. WILLIAM BURTON WRACOTT, Boston, Mass., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed June 20, 1914. Serial No. 846,224. 17 Claims. (Cl. 88-10.8.)



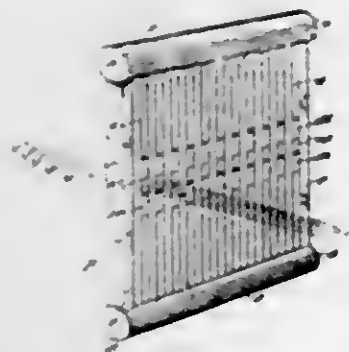
1. In producing motion pictures by projecting light through a moving film and thence through a lens system, the method of maintaining the projected images constant in size, comprising varying the equivalent focal length of the lens system in proportion to the effective distance between the film and the lens system.

1,309,673. CINEMATOGRAPHY. WILLIAM BURTON WRESCOTT, Wellesley, Mass., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed Oct. 9, 1914. Serial No. 865,902. 20 Claims. (Cl. 88-16.8.)



1. A motion picture machine having means to move a film continuously, a plurality of flat compensating reflectors, means to project a light beam in changing directions between successive film pictures and first one and then another of said reflectors, in combination with means to move said reflectors in relation to said changing directions.

1,309,674. COMBINED REED AND HEDDLE FRAME. JAMES A. WILSON, Central Falls, R. I. Filed Apr. 4, 1919. Serial No. 287,386. 4 Claims. (Cl. 139-73.)



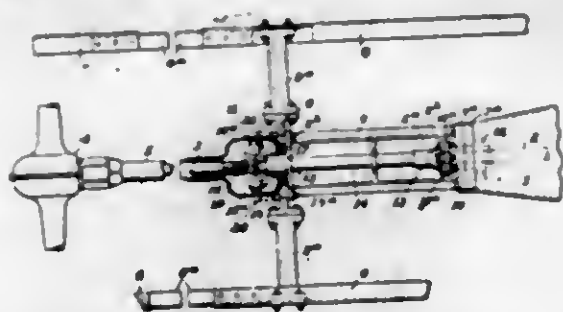
1. In a combined reed and heddle frame, the combination with opposite parallel frame members, of a series of heddles consisting of relatively thin flat bars extending between the frame members in parallel spaced relation therealong, and spaced blocks connecting the opposite sides of adjacent heddles of certain pairs, said blocks forming restricted openings adapted to serve as guides for the yarns passing between the heddles.

1,309,675. PULLEY. LEONARD A. YOUNG and WILLIAM MILLER, Detroit, Mich.; said Miller assignor to said Young. Filed July 10, 1918. Serial No. 244,136. 3 Claims. (Cl. 287-32.)



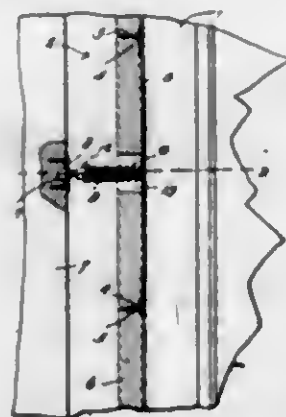
1. A device for fastening a member to a shaft, comprising the said member provided with an aperture for the shaft, said shaft, a spring piece or plate held by the said member from rotation and having its ends held from movement, and means for bowing the spring piece or plate to cause the ends of the same to bite into the shaft.

1,309,676. TRANSMISSION-EXTENSION MEANS FOR AUTOMOBILES. EDWIN R. ZIEGLER, York, Pa. Filed Feb. 10, 1919. Serial No. 270,025. 3 Claims. (Cl. 64-89.)



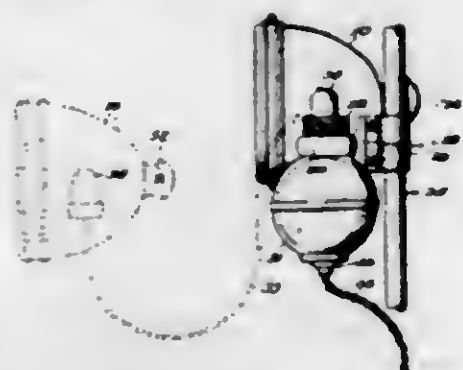
1. In combination a longitudinal frame member having means at one end for connection with the transmission casing of an automobile, a transverse frame member at the rear end of said first named member, a shaft rotatably carried by said members and having means at one end for connection with the transmission shaft, a sleeve on the other end of said shaft carrying a universal joint element, an antifriction bearing between the sleeve and transverse frame member, and a propeller housing element secured to said transverse frame member and retaining said bearing in position.

1,309,677. SASH-HOLDER. JOHN G. ADEN, Gothenburg, Nebr. Filed Mar. 17, 1919. Serial No. 283,009. 2 Claims. (Cl. 16-19.)



1. A sash holder comprising an elongated sash engaging strip, a spring retaining pin rigidly secured adjacent the strip and intermediate the ends thereof, a spring mounted for longitudinal movement along the pin and means carried by the pin to produce said longitudinal movement of the spring.

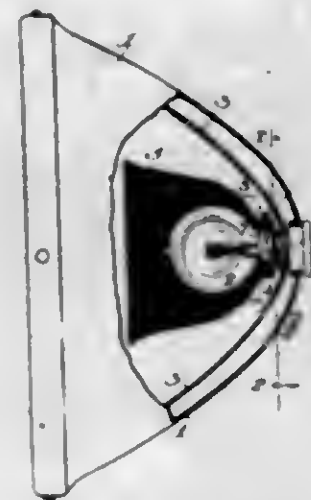
1,309,678. EXTENSION-LAMP. EARST G. K. ANDERSON, Chicago, Ill., assignor to Anderson Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1917. Serial No. 196,463. 11 Claims. (Cl. 240-7.)



10. A vehicle spot and trouble lamp comprising, in combination, a lamp casing, a supporting member secured

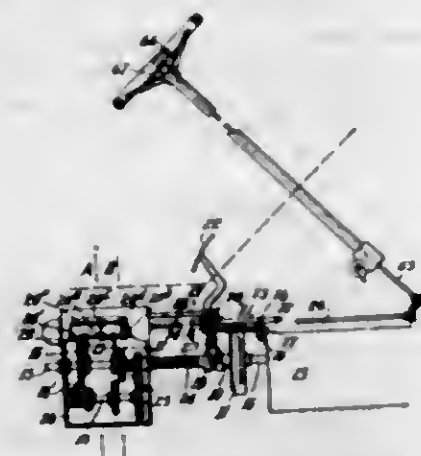
thereto, a take-up device for the lamp cord, a casing for said device including a hollow projection at one side thereof, a supporting bracket having means of attachment to a vehicle, said bracket including a ring member embracing said projection, said projection being provided with an internally tapered portion to engage an externally tapered portion on the supporting member, and means for releasably holding said tapered portions in engagement.

1,309,679. HEADLIGHT FOR AUTOMOBILES OR SIMILAR VEHICLES. JOHN U. BARR, New York, N. Y. Filed Nov. 15, 1916. Serial No. 131,472. 3 Claims. (Cl. 240-48.6.)



2. In a headlight, the combination with a lamp and its reflector, of a wire mesh screen carried by said lamp and interposed between said lamp and said reflector.

1,309,680. GEAR-SHIFTING MECHANISM FOR AUTOMOBILES AND THE LIKE. WILLIAM F. BOYD, Cambridge, Mass. Filed May 9, 1914. Serial No. 837,418. 16 Claims. (Cl. 74-58.)



1. A selective shifting mechanism including in combination one or more shiftable elements, an oppositely moving element interconnected with each; two abutments on each element, adapted for engagement with an actuator, the said elements being arranged so that half of said abutments, including one on each element, may concurrently be in a neutral plane, and the other half simultaneously in another neutral plane; said actuator, having a working stroke continuous in one direction, initially returning to one plane any abutment displaced therefrom, and terminally displacing an abutment from the other plane; and means to select the abutment that is to be displaced.

2. A selective shifting mechanism, including in combination one or more shiftable elements; an oppositely moving element interconnected with each; an actuator having a working stroke continuous in one direction; a neutralizing abutment on each element, movable therewith between an initial position corresponding to the actuator's initial

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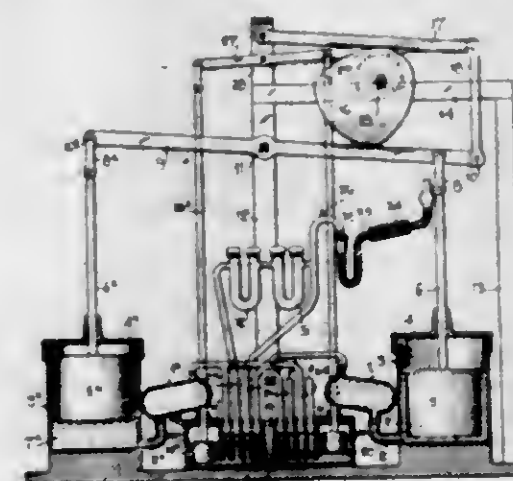
position and a neutral position where all of said abutments register together in a plane; means whereby the said actuator sweeps all of said abutments between initial and neutral and clears them at said plane, permitting immediate return of any; and a selector for predetermining a single element to be engaged and shifted by further movement of the actuator.

3. A selective shifting mechanism including in combination one or more shiftable elements, an oppositely moving element interconnected with each; actuating means adapted by preliminary movement to set the elements in neutral position; abutments for shifting the elements, one fast on each element, registering together in a single plane when the elements are in said neutral position; and a lug movable in said plane to a position opposite any one of said abutments, thereby selecting its element for shifting; the whole being adapted and arranged for the said lug to return to and remain in said plane after each shifting and until the next shifting, the actuating means being adapted to engage by its later movement and to move said lug and selected abutment and element.

4. A selective shifting mechanism, including in combination one or more elements shiftable by rectilinear sliding; an oppositely sliding element interconnected with each; a stud to which said elements are parallel and around which they are arranged; abutments, one on each element, movable to and from a neutral position; a lug, adjustable around said stud to a position toward any one of said abutments and adapted to engage it when it is in neutral position; and an actuator, having a working stroke continuous in one direction, initially setting said elements in neutral position, and terminally engaging said lug, and through it the selected abutment and element, to shift them.

5. A selective shifting mechanism, including in combination one or more shiftable elements, an oppositely moving element interconnected with each; abutments for shifting the elements, one fixed on each; said abutments registering together in neutral position and being movable thence in both directions, a lug adjustable into line with any one of said abutments and adapted to engage such abutment when in neutral position to press it in one direction, one of these parts being adapted to yield for the abutment to reach neutral position from the opposite direction; an actuator and means whereby it initially moves the abutments to neutral position and terminally moves said lug and selected abutment to shifting position on a continuous working stroke.

1,309,681. AUTOMATIC GAS-ANALYSIS APPARATUS. JOSEPH AUGUST FRIZ, State College, Pa. Filed Nov. 17, 1917. Serial No. 202,462. 6 Claims. (Cl. 23-3.)



1. A gas analysis apparatus, comprising a pair of similar capacity gas measuring bulbs, two mercury valves connecting with each, a pump for establishing communication and leading a gas through the apparatus at determinate intervals, a chamber for an absorbent of a desired gas constituent, and an indicator of the amount of gas absorbed.

1,309,682. CONSTRUCTION OF PRESSES. JOAL E. HAGSTROM, Brooklyn, N. Y., assignor to Independent Filter Press Co., Inc., New York, N. Y., a Corporation of New York. Filed July 7, 1917. Serial No. 179,273. 7 Claims. (Cl. 189—36.)

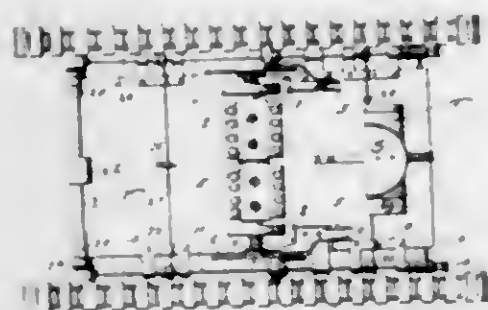


1. In a device of the character specified, in combination, a head having extended jaws on each side thereof, a structural beam the plane of which is perpendicular to the plane of the head, recesses within the structural beam capable of receiving the jaws, a reinforcing member shufftable upon the structural beam and means for locking the reinforcing member to the head.

1,309,683. RECOVERING BENZENE MONOSULFONIC ACID AND PRODUCING PHENOL. MARSTON LOVELL HAMLIN, Bloomfield, N. J., assignor to American Synthetic Dyes Incorporated, a Corporation of Virginia. Filed Aug. 25, 1918. Serial No. 116,781. 1 Claim. (Cl. 23—24.)

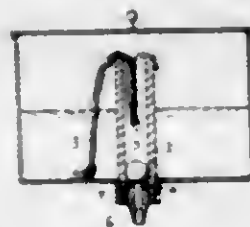
In the manufacture of synthetic phenol, the process which consists in converting benzene monosulfonic acid into a sodium salt thereof, part of which is insoluble and precipitates out, and part of which remains after the removal of the precipitate dissolved in the mother liquor; treating said mother liquor with magnesium carbonate and separating and recovering the magnesium salt of said acid, and fusing said sodium and magnesium salts together with caustic soda.

1,309,684. TRACTOR. ALFRED NEWTON HAMRICK, Crawford, Kans. Filed Dec. 12, 1918. Serial No. 266,447. 4 Claims. (Cl. 189—9.)



1. In a machine of the class described, the combination with a main frame mounted on wheels, power shafts extending along said frame and each divided into front and rear sections with a main section between them, connections between the two shafts and one pair of driving wheels, a jack shaft geared to both front sections, clutches connecting the sections, and manually operable mechanism for actuating said clutches of a power unit, connections between its main shaft and said power shafts and means for controlling the direction and speed of power transmitted.

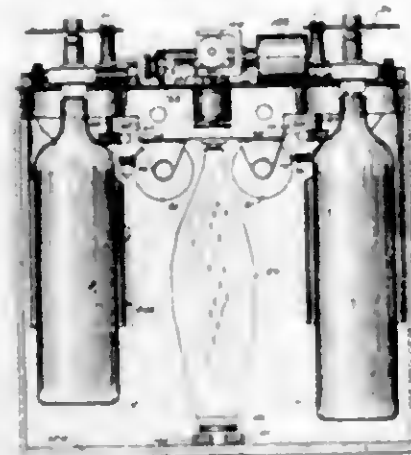
1,309,685. LUBRICATING APPARATUS. HANS HANSEN, Christiania, Norway. Filed Mar. 11, 1919. Serial No. 282,051. 1 Claim. (Cl. 184—69.)



In ball valves for lubricating apparatus, in which an oscillating or dancing movement is imparted to the valve

by the motion of the mechanism to be lubricated, whereby to intermittently open and close the oil feed through the valve, the combination with a receptacle, a receiver tube and a wick for conveying lubricant from said receptacle to the top of said tube, of a valve seat and a valve seated thereon in the lower end of said tube, a secondary oil receptacle or settling chamber being formed below said valve seat.

1,309,686. ANESTHETIC APPARATUS. JAY A. HEIDBRINK, Minneapolis, Minn. Filed Nov. 23, 1911. Serial No. 662,066. 7 Claims. (Cl. 128—203.)

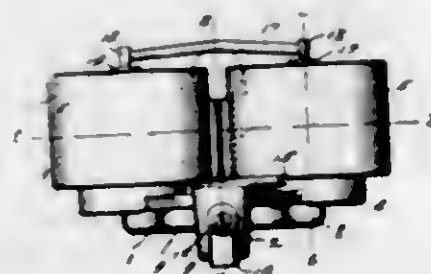


3. A gas administering machine comprising a plurality of sources of fluid supply under pressure, means for producing a mixture of such gases in predetermined proportions, means for delivering such mixture as the same is produced, and means for controlling and varying at will the rate of production and deliverance of said mixture while the relative amounts of gases in the mixture are kept constant, said controlling means being provided with an indicating device showing the quantity of mixture being produced.

1,309,687. AIR-TUBE FOR PNEUMATIC TIRES AND PROCESS OF MANUFACTURING THE SAME. ISAAC BENJAMIN JEFFRIES, Llanelli, Wales. Filed Aug. 24, 1918. Serial No. 251,295. 4 Claims. (Cl. 154—14.)

1. A process of manufacturing a pneumatic tube of the character described which consists in cementing unvulcanized strips of rubber to an unvulcanized foundation, cutting the loose edge of the strips toward the fixed edge to produce flaps, placing the strips in contact with a mandrel, and then applying pressure to the exterior foundation and vulcanizing the same.

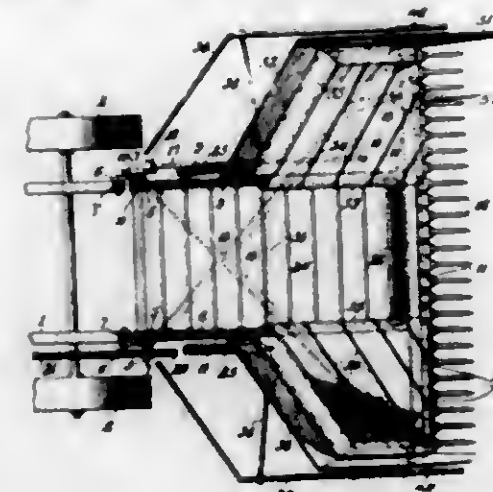
1,309,688. MEASURING-FAUCET. JOHN W. JOHNSON, Waterville, Kans. Filed Nov. 29, 1918. Serial No. 264,074. 1 Claim. (Cl. 221—116.)



A measuring faucet, comprising a valve casing, a nozzle, and a conduit projecting from opposite sides of the

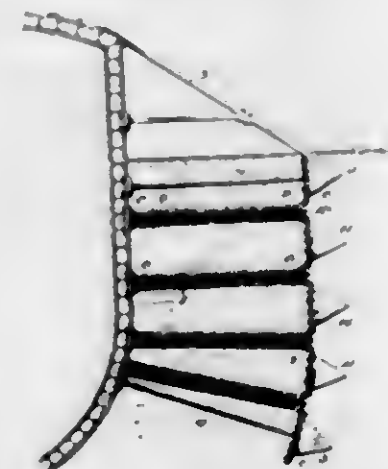
valve casing, the nozzle extending forwardly and downwardly and the conduit projecting rearwardly and upwardly and terminating in a plug, other conduits extending laterally and rearwardly from the valve casing and terminating in caps in the rear of the valve casing and at the sides of the middle conduit, a plug valve fitting the valve casing and having curved openings to register with the nozzle and conduits, closed measuring chambers detachably fitted to the said caps and an air connection between the upper ends of the measuring chambers.

1,309,689. ATTACHMENT FOR HARVESTERS AND OTHER AGRICULTURAL MACHINES. GEORGE W. JOAT, Marysville, Calif. Filed Apr. 5, 1918. Serial No. 226,875. 36 Claims. (Cl. 56—100.)



1. In an agricultural machine, a cutter-bar extending on opposite sides of the line of travel of the machine, centralized conveying means for grain delivered thereto from the cutter-bar, and reciprocatory grain-conveying means close to and on opposite sides of the first-named conveying means to the rear of and receiving from the cutter-bar, said reciprocatory conveying means having means for directing the received material diagonally rearward to the first-named conveying means.

1,309,690. TORPEDO-SHIELD. JOHN E. MOORE, JOHN BLACK, JR., JOHN C. CROSBY, and JOHN BLACK, Walterboro, S. C. Filed June 6, 1917. Serial No. 173,179. 2 Claims. (Cl. 114—240.)



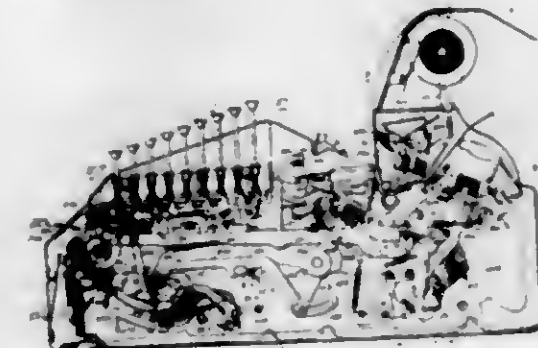
1. A torpedo shield for vessels, comprising a spring-pressed open-work structure provided with torpedo-deflecting projections distributed over the face of said structure and alternating with openings therein, each projection having surfaces inclined to said face for directing the firing end of the torpedo into one of said openings, and supports for the structure fast to the hull, said structure having slidable connection with said supports.

1,309,691. HOSE-SUPPORTER. CYRUS E. MORSEHOKE, Milwaukee, Wis. Filed Jan. 11, 1917. Serial No. 141,880. 7 Claims. (Cl. 241—6.)



7. In a hose supporter, the combination of a washable non-elastic strap, a resilient member, said strap and resilient member being provided with coacting coupling means, a washable tubular casing in which said elastic member is removably disposed, and non-elastic washable hanger straps removably connected to said resilient member and provided with hose attaching means.

1,309,692. ADDING-MACHINE. FREDERICK A. NIMMANN, Chicago, Ill., assignor to Comptograph Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1912. Serial No. 724,282. 20 Claims. (Cl. 235—60.)



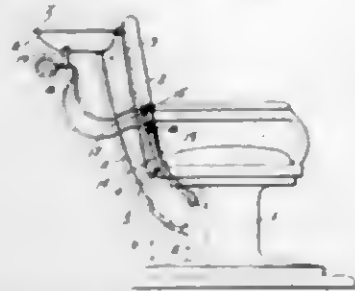
1. In a printing adding-machine, in combination: multiple-order adding-mechanism; printing mechanism, including a plurality of side-by-side type-members for the series of denominational orders; column-actuators for said orders, arranged in the same right-and-left succession; and swinging connections between said type-members and column-actuators, said connection extending transversely across the machine and being telescopically nested with each other; substantially as specified.

1,309,693. PLOW. LOUIS PETROFF, Tyler, Pa. Filed Mar. 23, 1918. Serial No. 224,276. 1 Claim. (Cl. 97—36.)



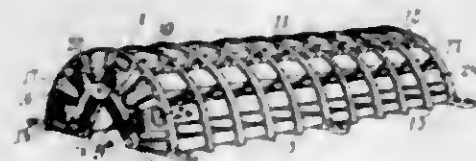
The combination of a wheeled platform, an implement carrying rack bar mounted to slide vertically through said platform, and an operating and locking mechanism therefor comprising a spur gear in engagement with said rack bar, a shaft for said spur gear, a bracket, an angularly disposed shaft mounted in said bracket, a universal joint having one of its elements formed with the spur gear shaft, a fixed collar in said bracket for holding the angularly disposed shaft against longitudinal movement, means for operating said shaft, a detent engageable with the teeth of said spur gear, and means for operating said detent.

1,309,694. BARBER-CHAIR. ALBERT E. PRITCHARD, New York, N. Y. Filed Nov. 17, 1917. Serial No. 202,512. 4 Claims. (Cl. 4-2.)



1. The combination of a barber's chair, a basin adjustably mounted thereon there being a mounting for said basin designed to permit the same to lie beneath the chair when not in use without disengaging it from the chair.

1,309,695. ROTARY BROOM OR BRUSH. LOUIS J. KEMMEL, Newark, N. J. Filed Sept. 26, 1918. Serial No. 255,775. 4 Claims. (Cl. 15-37.)



1. In a rotary brush, a skeleton frame comprising a plurality of substantially parallel circular disk members spaced apart and made up of part circular members removably secured together, lengthwise extending bars connecting said disks and forming separators for brush material, folded over brush material between said separator bars, and endwise removable brush material holding means inserted through aligned openings in the disks and passing through within the folded over parts of the brush material.

1,309,696. ELECTRIC WELDING. MONTAGUE H. ROBERTS, Jersey City, N. J., and CLAUDE C. VAN NEYS, New York, N. Y., assignors to Air Reduction Company, Inc., a Corporation of New York. Filed Feb. 4, 1919. Serial No. 274,027. 6 Claims. (Cl. 219-8.)



1. A method of improving the character of welds produced by the electric arc process which comprises blanketing the heated parts of the work during the welding operation with nitrogen and thereby excluding atmospheric oxygen.

1,309,697. ELECTRIC BOILER. ORA E. SARR, Sandusky, Ohio. Filed Apr. 23, 1918. Serial No. 230,290. 2 Claims. (Cl. 219-75.)



1. A steam generator including a shell, insulating bangers mounted therein, and heating elements supported

by the bangers and spaced apart, each element including a casing, a plate within the casing adapted to be heated by an electric current directed thereto, and dielectric means interposed between the plate and casing for spacing them apart, means connected to the plate for conducting electric current thereto, the current passing in one direction through some of the plates and in the opposite direction through the remaining plates.

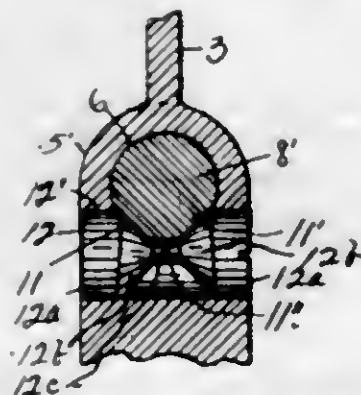
1,309,698. GRATING. PAUL H. E. SCHREINER, New York, N. Y. Filed Jan. 29, 1919. Serial No. 273,748. 1 Claim. (Cl. 189-82.)



Grating comprising a plurality of longitudinal members cut away at spaced intervals to form slots terminating short of their edges and with slits from the edges of the slots terminating below the slots at distances apart greater than the width of the slots, a plurality of narrower transverse members passing through said slots and provided with spaced notches in their upper edges, the parts of the longitudinal members between the slits therein being bent up under the transverse members to maintain the transverse members in positions with the parts thereof adjacent the notches overlapping the longitudinal members at the upper ends of the slots therein.

1,309,699. [WITHDRAWN.]

1,309,700. GAGE. LINO SCURA, Phoenix, N. Y. Filed Feb. 11, 1919. Serial No. 276,418. 4 Claims. (Cl. 33-103.)

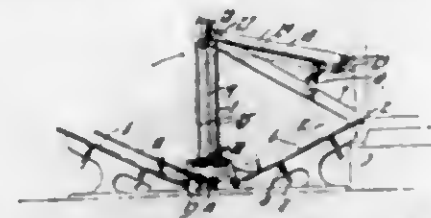


1. A gage including a horseshoe-shaped body, a plurality of sliding axially movable gage members supported by the arms of said body, each member having a portion V-shaped in cross section, and a locker rotatable in a plane at right angles to the axis of each gage member, the medial portion of each locker comprising two cones having a common axis which is eccentric to the axis of rotation of said locker and movable by turning the locker into frictional engagement with the V-shaped portion for locking the gage member in the adjusted positions.

1,309,701. FLIER ATTACHMENT FOR PRINTING, WAXING, CUTTING, AND LIKE MACHINES. ALBERT EDWARD SHALOW, Glen Huntly, near Melbourne, Victoria, Australia, assignor to James Clason Gates, Melbourne, Victoria, Australia. Filed June 1, 1918. Serial No. 257,777. 1 Claim. (Cl. 271-64.)

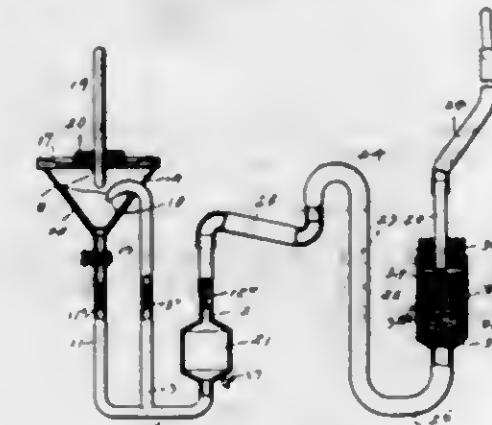
In a flier attachment for printing, waxing, cutting, and like machines, the combination of a rocking flier gate, two inclined receiving tables symmetrically disposed with respect to said gate, means for varying the inclination of each table, means for varying the travel of the gate, transversely arranged feeding tapes, vertical

feeding tapes on either side of said gate adapted to receive sheets from said transverse tapes, and means for



adjusting the tension of said tapes, the tables being adapted to receive varying sizes of sheets.

1,309,702. METHOD OF AND APPARATUS FOR TESTING CEMENT. WILLIAM G. SKINNER, Yorktown, Va. Filed Apr. 17, 1918. Serial No. 229,117. 8 Claims. (Cl. 73-51.)



1. The method of determining the coefficient of fineness of comminuted mineral substances which consists in applying to the surface areas of a definite quantity of said material an adherent coating of a liquid of known specific gravity and measuring the quantity of liquid so held.

1,309,703. DECORATED RUBBER ARTICLE AND METHOD OF MAKING SAME. ALBERT A. SOMERVILLE, Flushing, N. Y., assignor to New York Belting & Packing Company, a Corporation of New York. Filed Feb. 7, 1918. Serial No. 215,835. 7 Claims. (Cl. 18-50.)

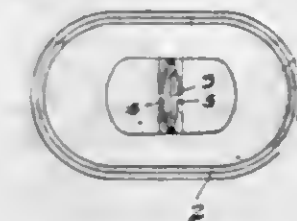
7. The method of making a decorative rubber article by compounding a mass of unvulcanized rubber with a light-sensitive material, forming the compound into the article desired, and subjecting the surface of the article to light rays conforming with the desired design, and then subjecting the article to the action of heat.

1,309,704. THERMIONIC AMPLIFIER. ERWIN R. STOKER, New York, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 13, 1917. Serial No. 174,417. 8 Claims. (Cl. 250-27.)



1. The method of heating the cathode of a thermionic amplifier or the like, which consists in generating an auxiliary gas or vapor discharge which is independent of the main discharge and of which said cathode serves as the anode.

1,309,705. DISPLAY-CARD HOLDER. CHARLES MARTIN SOCK, Salem, W. Va., assignor of one-half to Joe Harris, Salem, W. Va. Filed Nov. 29, 1918. Serial No. 264,640. 1 Claim. (Cl. 40-149.)



A device of the character described comprising a base formed as a plate having stamped from opposite sides of its center tongues bent to extend upwardly at right angles to the base and adapted to grippingly engage an article disposed therebetween with the major portions of the tongues engaging flat against the sides of the article, said tongues having their extremities divergently deflected whereby to provide a flaring entrance opening.

1,309,706. TWIST-DRILL. GEORGE A. TAYLOR, Hyde Park, Mass. Filed Aug. 24, 1917. Serial No. 187,960. 3 Claims. (Cl. 77-70.)



1. The improved drill for metal work having a cutting edge which is a convex curve, one end being at or near the dead metal and the other end being nearly tangent to the front edge of the land.

1,309,707. CIGARETTE-HOLDER. DAVID S. TINNIN, Washington, D. C. Filed June 5, 1917. Serial No. 172,944. 1 Claim. (Cl. 181-51.)



In an article of the class described, a finger ring having a cigarette-receiving socket, and an ash-receiving member extending from the ring and having a main receiving bowl and a pivoted bowl mounted therein and arranged to discharge therefrom.

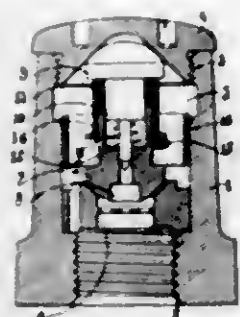
1,309,708. AERIAL TORPEDO. ANTHONY VELO, Washington, D. C., assignor of one-third to Edward S. Clark, Garden City, N. Y., and one-third to C. C. Hines, Washington, D. C. Filed May 9, 1917. Serial No. 167,520. 29 Claims. (Cl. 102-2.)



1. In an aerial drop bomb, a firing pin, a spring for actuating said pin, a locking device for engaging and

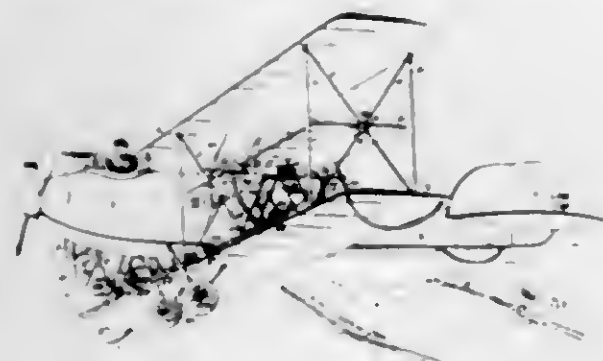
holding the pin fixed and immovable, means for moving said locking device into engagement with the firing pin and thereafter releasing it to permit firing motion of said pin, and means for tensioning the spring while the pin is held fixed and immovable by said locking device.

1,309,709. FUSE FOR PROJECTILES. FREDERICK WILLIAM VICKERT, London, England. Filed Apr. 28, 1919. Serial No. 293,288. 2 Claims. (Cl. 102—39.)



1. A fuse for projectiles including in combination, an attaching body having a chamber, a closure cap for the chamber, a primer seated in the chamber, a striker pellet having a cylindrical body, a detonator pellet having a tubular stem designed to receive the body of the striker pellet, spring means between the pellets for yieldingly holding them respectively against the cap and the primer, a clock spring arranged about the body of the striker pellet and positioned between the head of the striker pellet and the end of the stem of the detonator pellet, and an inertia collar frictionally engaged with the outer surface of the stem of the detonator pellet and with the outer surface of the clock spring.

1,309,710. AEROPLANE. JEAN F. WERN, Sr., New York, N. Y. Filed Nov. 14, 1917. Serial No. 201,979. 17 Claims. (Cl. 244—29.)

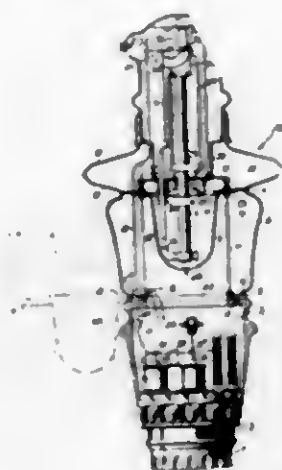


2. An aeroplane having a fixed sustaining plane structure and a main propeller structure and power plant, combined with an auxiliary sustaining plane structure disposed parallel to the fixed sustaining plane structure, an auxiliary propeller structure disposed in a plane parallel to that containing the main propeller, and means for sustaining said auxiliary plane and said auxiliary propeller structure pivotally on an axis transversely of the aeroplane, and means for inclining said auxiliary plane and said auxiliary propeller structure on the pivotal axis.

1,309,711. POST TYPE ARC-LAMP. CHRISTIAN AALBORG, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 4, 1915. Serial No. 25,720. 7 Claims. (Cl. 176—41.)

7. An arc lamp comprising a housing having an opening and a supporting member for said housing and nor-

mally closing said opening, said housing being eccentrically pivoted to said member in order that the housing



may be moved with respect to said member to provide access to said housing through said opening.

1,309,712. FRUIT-PICKER. ALONZO SCOTT ADAMS, Waltham, Mass. Filed Dec. 4, 1918. Serial No. 265,235. 6 Claims. (Cl. 56—338.)



4. A fruit-picker comprising an elongated handle and having at one end thereof a stationary-jaw, and a movable-jaw held normally in contact therewith, a reciprocating cutting-tool mounted upon the stationary-jaw, a hand-grip arranged to oscillate upon the said handle, mechanism connecting the hand-grip with the said movable-jaw whereby the jaw is opened when the hand-grip is moved in one direction and mechanism connecting the hand-grip with the said cutting-tool whereby the said tool is operated by the opposite movement of the hand-grip and means for automatically returning the said hand-grip to a neutral position.

1,309,713. TOILET-POWDER PACKAGE. EUGENE J. ALEXANDER, West Haven, Conn. Filed Sept. 1, 1917. Serial No. 189,266. 3 Claims. (Cl. 132—34.)

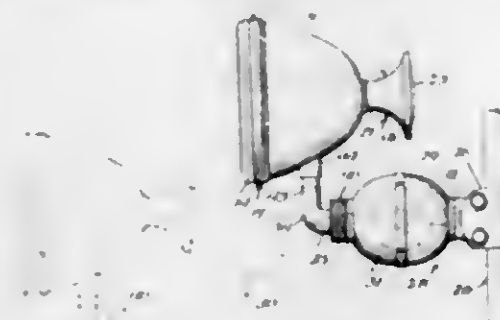
2. A toilet powder package of the character described, comprising a collapsible pouch having a top sealed to the inner walls thereof and adapted to be perforated, a bottom formed of a stiff layer having an open center

and to which the lower edges of the pouch are secured and a bottom seal secured over said opening, the powder



being contained between said top and bottom and said top affording a receptacle for a powder puff.

1,309,714. SPOT-LAMP. ERNEST G. K. ANDERSON, Chicago, Ill., assignor to Anderson Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1916. Serial No. 129,763. 8 Claims. (Cl. 240—7.)



8. A vehicle lamp comprising, in combination, a lamp casing, a take-up device for a lamp cord, a mounting support for the lamp casing having means of attachment to a vehicle and embracing a fixed casing to inclose and support said take-up device, said support embracing also a member having a rotative, separable joint at said take-up device casing, and provided at its outer end with a lamp casing bearing constructed with means to permit the lamp casing supported thereon to swing in a plane at a right angle to the plane of rotation of said joint.

1,309,715. RATCHET-TOOL. EDWARD H. BARTON, Sprague, Wash. Filed Sept. 26, 1917. Serial No. 193,358. Renewed Dec. 12, 1918. Serial No. 266,496. 6 Claims. (Cl. 7—16.)

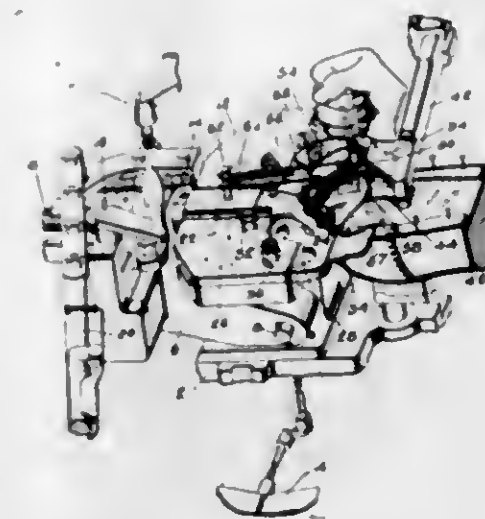


2. In a tool of the character described, a shank having a bifurcated end, a bit mounted in the bifurcated end for swinging movement to permit reversal thereof, a freely rotatable sleeve slidable on the shank for movement over the bifurcated end to hold the bit in its reversed position, a pivot screw for detachably holding the bit in said bifurcated end and forming a stop for the sleeve, and a spring for normally holding the sleeve in extended position against the stop.

1,309,716. LASTING-MACHINE. NILS P. HOLIX, Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 28, 1916. Serial No. 133,581. 14 Claims. (Cl. 12—14.)

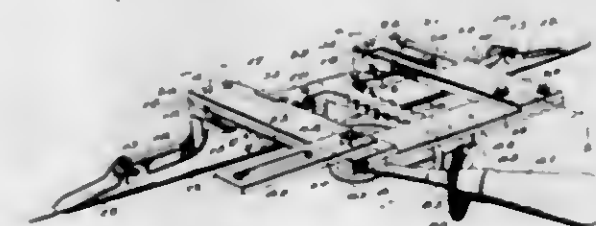
1. Toe lasting mechanism having, in combination, a toe head, inwardly moving wipers thereon, an expansible

spreader, manual means for holding the spreader against the center of the upper at the toe, and means operating in



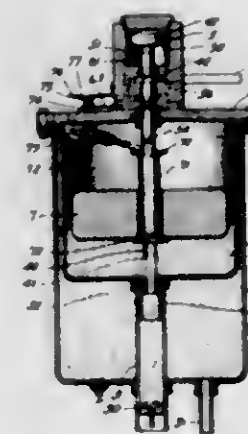
response to movement of the wipers for expanding the spreader to clamp the upper at the corners of the toe.

1,309,717. SECTION-INSULATOR AND HAND-SWITCH. NEWTON K. BOWMAN, Canton, Ohio. Filed Apr. 29, 1918. Serial No. 231,527. 11 Claims. (Cl. 161—39.)



1. A section insulator and switch including companion splice sleeves, means connecting the sleeves but insulating the said sleeves with respect to each other, a frame projecting from the said sleeves, a switch carriage reciprocable upon the frame and including switch blades, switch blades carried by the splice sleeves, and means for reciprocating the carriage to shift the switch blades thereon into or out of engagement with the switch blades of the said sleeves.

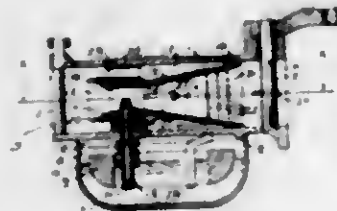
1,309,718. VACUUM FEED FOR OIL-ENGINES. GEORGE C. CLARK, Everett, Wash. Filed Mar. 3, 1919. Serial No. 280,464. 7 Claims. (Cl. 158—36.)



1. A vacuum feed device comprising an upper intake or suction chamber and a lower feed chamber having a trans-

for port connecting them, a valve controlling said transfer port, a cylinder and a piston therein connected to actuate said transfer valve, a float in the intake chamber and means controlled by said float and operated independently of said piston to apply air pressure to said piston to thereby operate the transfer valve.

1,309,719. CARBURETER. HENRY E. CURTIS, San Jose, Calif. Filed Apr. 18, 1917. Serial No. 162,911. 2 Claims. (Cl. 261-41.)



1. A carbureter comprising a cylinder having a valve-controlled mixture outlet at one end thereof and an air inlet at the other end thereof, a Venturi tube fixedly positioned therein intermediate said inlet and said outlet and provided with outwardly extending and spaced portions to engage said cylinder and form therewith an expansion chamber having an unbroken outer wall, one of said outwardly extending portions having a thickness greater than its width and provided with conduits forming open but restricted communication between said expansion chamber and said air inlet, and said tube having a plurality of orifices formed therein connecting said expansion chamber with the interior thereof, and fuel nozzle discharging into said tube and connected to a fuel supply.

1,309,720. SIGNAL RECORDER. HERMAN W. DOUGHTY, Binghamton, N. Y., assignor, by mesne assignments, to The Gamewell Fire Alarm Telegraph Company, a Corporation of New York. Filed Nov. 30, 1914. Serial No. 574,532. 25 Claims. (Cl. 234-27.5.)

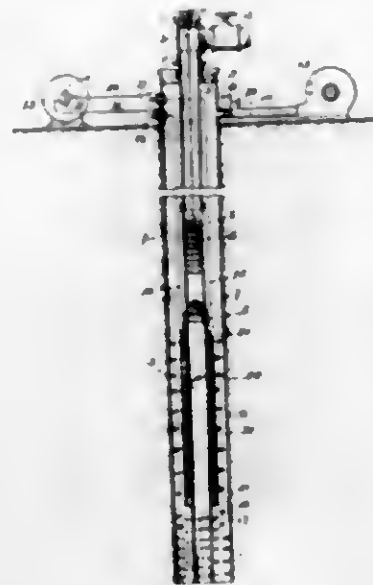


1. In a signal recorder, a record tape, propelling mechanism therefor, a platen around which said tape is drawn, an inkling pad, a pivoted fulcrum block, a marker having an extension arranged in said fulcrum block for relative sliding movement therewith, said marker and block being arranged for conjoint angular movement about the pivot of said fulcrum block and an operating lever pivotally connected with said marker, said operating lever and pivoted fulcrum block serving to guide said marker into substantially perpendicular contact with the surface of said pad and the tape at the platen.

1,309,721. APPARATUS FOR HEATING OIL WELLS. WILLIAM H. DRINKER, Deloit, Kans. Filed Feb. 14, 1919. Serial No. 277,028. 4 Claims. (Cl. 166-17.)

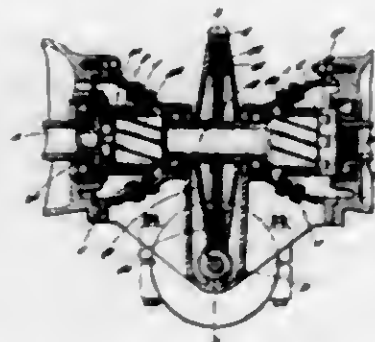
1. In an apparatus of the kind described, the combination with the casing of an oil well closed at its upper end, an induction conductor in said casing extending through

said casing, a shut-off valve in said conductor, an air compressor discharging into said casing, and means for



heating oil in said casing adjacent to the lower end of said conductor.

1,309,722. STARTING OF INTERNAL-COMBUSTION ENGINES. THOMAS SMITH DUNCAN, Westminster, London, England, assignor to Vickers Limited, Westminster, London, England. Filed Apr. 25, 1919. Serial No. 292,653. 6 Claims. (Cl. 74-7.)



6. Starting apparatus for a pair of coaxial internal combustion engines, comprising a spindle having screw threads or helical grooves at its ends upon which clutch members are mounted, one of said members adapted to engage the clutch member of one of said engines, when the spindle is rotated in one direction, and the other of said clutch members adapted to engage the clutch member of the other of said engines when the spindle is rotated in the opposite direction.

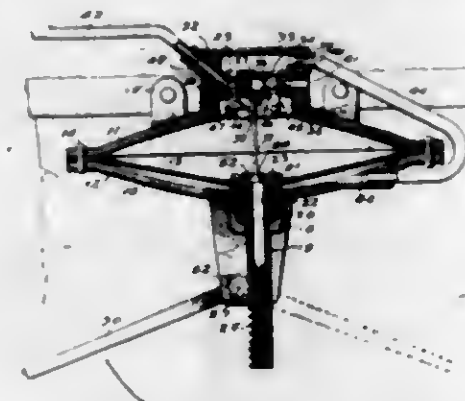
1,309,723. FERTILIZER AND PROCESS OF MAKING SAME. GEORGE H. EARP-THOMAS, Glen Ridge, N. J. Filed Apr. 10, 1917. Serial No. 160,990. 35 Claims. (Cl. 71-10.)

1. The process of preparing a fertilizer which comprises subjecting finely divided raw phosphate rock to the decomposing action of nitro-bacteria in the presence of an admixed humus-like material which has been treated to improve it as a culture medium.

1,309,724. APPARATUS FOR CLEANING AUTOMOBILE WIND SHIELDS. WILLIAM MITCHEL FOLBERTH, Cleveland, Ohio. Filed Apr. 7, 1919. Serial No. 288,414. 5 Claims. (Cl. 15-59.)

1. In an apparatus for cleaning automobile windshields or the like, a diaphragm casing, a diaphragm arranged

within the casing, cleaning apparatus connected with the diaphragm to be operated thereby, a pipe adapted for connection with a suction inducing means and adapted to have communication with the diaphragm casing upon one



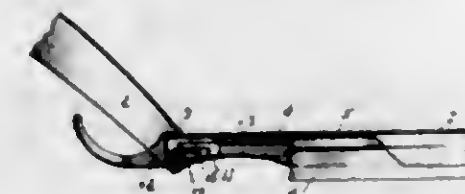
side of the diaphragm, a valve to control the communication between the pipe and the diaphragm casing, a valve for controlling the communication between the diaphragm casing and the atmosphere, and means actuated by the movement of the diaphragm to shift the valves.

1,309,725. BACK-REST. CARL GERSTENMAIER and WALTER GERSTENMAIER, St. Paul, Minn. Filed Aug. 17, 1918. Serial No. 250,411. 4 Claims. (Cl. 155-22.)



1. In a device of the class described in combination with a seat having a surrounding downturned edge, of a back member in connection with a bar overlying and engaging said downturned edge at the front and rear thereof to hold it located thereon and means in connection with said bar to hold it in locked engagement with said downturned edge.

1,309,726. RAZOR. EDWARD H. GIBBON, Adrian, Mich. Filed Nov. 29, 1918. Serial No. 264,496. 3 Claims. (Cl. 30-12.)



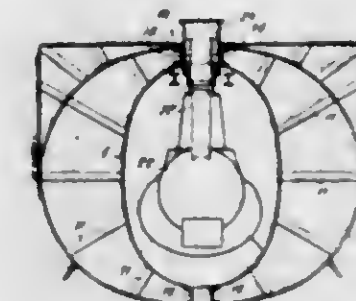
1. In a razor, a handle and a pivot in one end thereof, a holder slidably mounted on the pivot and comprising two sides and a back, a blade slidably mounted between the outer ends of the sides of the holder, and an ejector engaging said pivot and slidable between the inner ends of the sides of said holder and adapted to contact with said blade to slide it out longitudinally when the pivot is moved outwardly in slots in said holder.

1,309,727. WRENCH. JAMES A. GREIG and WILLIAM F. BALKENOL, Lismore, Minn. Filed Apr. 24, 1918. Serial No. 230,564. 1 Claim. (Cl. 81-57.)



A wrench comprising a head having integrally formed therewith an elongated support terminating in an integrally formed and laterally directed extension, said head immediately adjacent the support being provided with an opening and with a second opening, a shank disposed through the second opening and provided with a shoulder for contact with a face of the head, said shank being also provided with a socket in an end thereof, means engageable with the shank and coacting with the opposite face of the head for holding the shank in applied position, said shank being also provided with a gear, a shaft loosely disposed through the support and extending within the first named opening in the head, a second gear in mesh with the gear of the shank and positioned within the first opening of the head and secured to the shaft, said support being arranged on an obtuse angle relative to the head and the extension being disposed longitudinally in a direction opposite to that of the socket and in substantially the same plane.

1,309,728. TESTING-TANK FOR SUBMARINES. HUGO E. GRIENHAGER, New London, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Oct. 11, 1917. Serial No. 195,886. 4 Claims. (Cl. 114-0.5.)



1. A testing craft comprising an inner hull of substantially elliptical cross section with its major axis vertical and of requisite dimensions to house a submarine boat, and an outer hull embracing the inner hull and being fastened thereto to strengthen it.

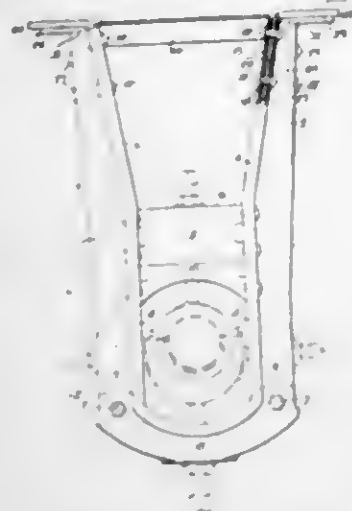
2. A testing craft comprising an inner hull of requisite dimensions to house a submarine boat, and an outer hull of substantially elliptical cross section with its major axis horizontal, the outer hull being fastened to the inner hull to strengthen it.

3. A testing craft comprising an inner hull of substantially elliptical cross section with its major axis vertical and of requisite dimensions to house a submarine boat, and an outer hull of substantially elliptical cross section with its major axis horizontal, the outer hull being attached to the inner hull to strengthen it.

1,309,729. SHAFT HANGER. HOWARD T. HALLOWELL, Philadelphia, Pa. Filed Aug. 21, 1915. Serial No. 46,689. 7 Claims. (Cl. 64-14.)

1. In a shaft hanger, a leg of pressed sheet metal, a separate foot therefor having a portion disposed on the inside of said leg and another portion overlying the upper end of said leg; said leg having continuous beaded edges and a longitudinal hollow reinforcing rib intermediate

said beveled edges, and the foot having a rib on its portion adjacent the leg fitting the hollow reinforcing rib of



the latter, and unitary means for connecting said leg and foot together.

1,309,730. HINGE. HENRY L. HARKELL, Ludington, Mich., assignor to Haskell Manufacturing Corporation, a Corporation of New York. Filed Aug. 9, 1918. Serial No. 249,076. 6 Claims. (Cl. 10—11.)



4. A hinge made of two sheets of laminated wood veneer each folded so as to form two leaves joined by a semi-cylindrical member, each semi-cylindrical member having sections removed at intervals to form hinge knuckles, the excisions extending approximately in a plane at right angles to the corresponding leaves and containing the axis of the corresponding semi-cylindrical member, and each leaf being slitted for a short distance at the ends of the knuckles so that the portions of each leaf lying between adjacent knuckles are in the form of tongues each adapted to rest upon an opposed knuckle or that part of the hinge leaf lying in the vicinity of the knuckle depending upon the angular position of the hinge.

1,309,731. STAPLE BINDER. JOHN WILLIAM HAWKINS, Kokomo, Ind. Filed May 11, 1918. Serial No. 233,922. 13 Claims. (Cl. 1—3.)



2. In a staple binder, the combination with guide bars, a head for supporting the guide bars, and a staple driving

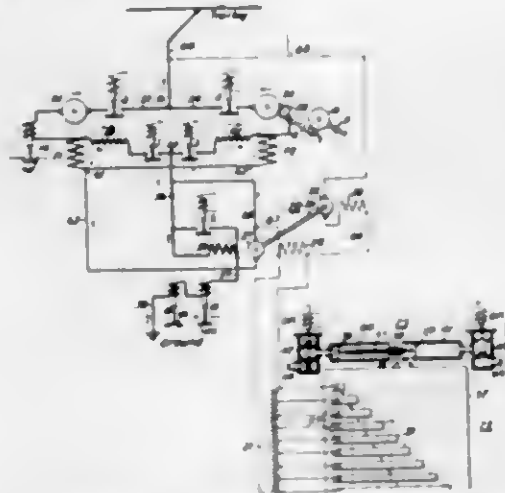
hammer cooperating with said guide bars, of mandrels, and means to removably attach the mandrels to the head and guide bars, said mandrels having ways thereon for guiding the staples.

1,309,732. SHUT-OFF NOZZLE. WILLIAM G. HAWLEY, Elmira, N. Y., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y., a Corporation of New York. Filed Sept. 19, 1917. Serial No. 192,095. 2 Claims. (Cl. 137—17.)



2. In a shut-off nozzle, the combination of a body portion having a longitudinal passage and a transverse recess, a revoluble plug disposed in said recess across said passage and formed with a radial projection, a recessed complementary segment portion fitting over said plug projection and normally closing said passage, said plug and segment portion having a common transverse passage in communication with the space between the plug and the segment, and an auxiliary passage for admitting liquid from said body portion into said common passage to provide a pressure tending to force said segment portion outward.

1,309,733. SYSTEM OF CONTROL. REDOLF E. HELL-MUND, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 15, 1917. Serial No. 174,884. 16 Claims. (Cl. 172—179.)



1. In a system of control, the combination with a supply circuit and a dynamo-electric machine, of means for automatically controlling the machine speed, means for disconnecting the machine from the supply circuit under predetermined current conditions, and means for reconnecting the machine under subsequent speed conditions.

1,309,734. WRECKING TOOL. JOHN HEMPLING, Sr., New Germany, Minn. Filed Nov. 18, 1918. Serial No. 263,014. 4 Claims. (Cl. 254—131.)

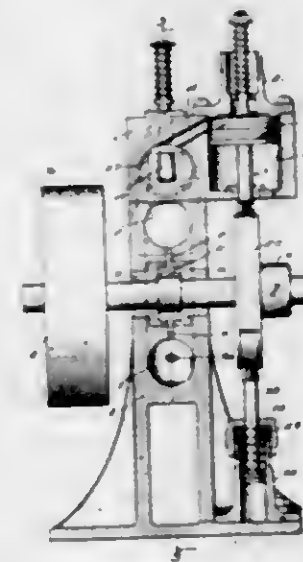
1. A wrecking tool comprising a straight bar forming a handle having one end curved, a head formed upon the

terminal of the curved end and comprising lateral extensions on the handle, and a pair of spaced tangs extending from said lateral extensions parallel to each other and to the handle, said tangs having concave upper surfaces and convex lower surfaces, the under surfaces of



said lateral extension projecting below the under surface of the tangs and rounded to form a cam surface acting as a fulcrum for pivotal movement of the tool and to form a rounded shoulder on the under surface of said head.

1,309,735. ROTARY ENGINE. FRANK L. HENIG, Chicago, Ill., assignor to Henig Engine Co., a Corporation of Illinois. Filed Aug. 14, 1915. Serial No. 45,477. 5 Claims. (Cl. 123—14.)



1. In a rotary engine, a body having an annular chamber, a piston slidable in the chamber, a charging cylinder formed in the body and projecting outwardly from a side thereof, an explosion chamber communicating with the annular chamber and with the cylinder, a slide cooperating with the piston, a plunger in the cylinder having a depending stem extending along one side of the body, a shaft carrying the piston, a cam on the shaft, a strap connected to the depending stem and encircling the cam, a stem depending from the bottom portion of the strap, a tubular riser receiving the last-named stem, a spring encircling and connected at one end to said last-named stem, and a cap adjustable on the riser and engaging the other end of the spring and engageable with the strap to restrict the downward movement thereof.

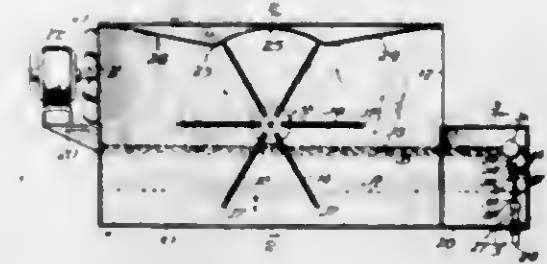
1,309,736. TESTING-TANK FOR SUBMARINES. FRANK WARREN HARRIS and THOMAS MCCHEVNE GUNN, New London, Conn., assignors to Electric Boat Company, a Corporation of New Jersey. Filed Mar. 24, 1916. Serial No. 86,521. 9 Claims. (Cl. 114—0.5.)



1. In an apparatus of the kind described, in combination, a testing-tank including a plurality of separable

hollow tank-subdivisions, a ballast tank carried by each of said subdivisions, and means for flooding and emptying said tanks.

1,309,737. AIR WASHER AND HUMIDIFIER. ROBERT A. HIG, Chicago, Ill. Filed Nov. 17, 1916. Serial No. 131,836. 5 Claims. (Cl. 261—92.)



1. In an air washer and humidifier, the combination of a tank to contain a liquid, said tank being open at the upper portion of both end walls thereof, a paddle wheel having radial screen paddle blades rotatably mounted in and transversely of the tank and dipping into the liquid contained in the latter, an air-forcing device positioned opposite one open end of said tank, and an air guide slidably engaged continuously by the outer transverse edge of one or more of the blades as the paddle wheel rotates, whereby to cause all of the air delivered by said air forcing device to pass through said blades and turn said paddle wheel.

1,309,738. INTERNAL WORK OF TUBULAR WELLS. MILTON N. LATTA, Valentine, Nebr. Filed Apr. 5, 1918. Serial No. 226,898. 5 Claims. (Cl. 103—61.)

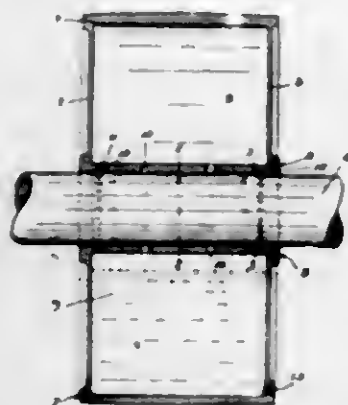


3. In a device as described, a well casing, a cylinder in the well casing, a pump rod filling the major portion of the bore of the well casing and constituting a water displacement rod, a plunger operating in the cylinder, a connecting member between the plunger and said rod, having a plurality of orifices arranged to direct a water spray over the adjacent portion of the plunger to dislodge sand, and means arranged at intervals throughout the length of the pump rod for supporting grains of sand when the operation of the pump rod ceases, including coupling members having a ledge and an adjacent annular concavity in the plunger rod.

1,309,739. SELF-OILING PULLEY. HENRY L. MCCULLOUGH, Minneapolis, Minn., assignor to Arthur Loren McCullough, Minneapolis, Minn. Filed Oct. 14, 1916. Serial No. 125,582. 2 Claims. (Cl. 64—26.)

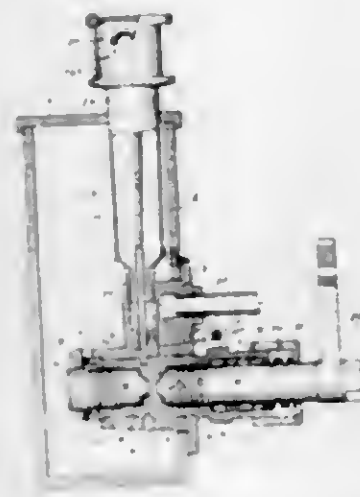
1. A pulley comprising a sleeve with an integral head, and a rim with an integral head, both of said heads being

the full diameter of the interior of said rim and said sleeve being primarily open at both ends, said sleeve being telescoped into the rim head and the rim being telescoped onto the sleeve head, the said sleeve having radial perforations affording oil passages for oil ducts within the pulley.



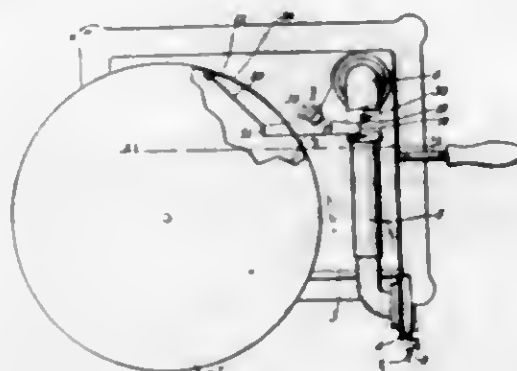
2. A hollow pulley adapted to contain oil and having a sleeve extended axially through the pulley for engagement with the shaft, said sleeve, adjacent to the heads of the pulley having internal annular channels and radial oil ducts opening therefrom into the interior of the pulley, the said latter noted oil ducts being circumferentially so close together that the horizontal line intersecting the inner extremities of the adjacent lower members of said perforations will not touch the undersurface of a shaft fitting said sleeve.

1,309,740. FORCE FEED LUBRICATOR. HENRY L. McFARLANE, Minneapolis, Minn. Filed Apr. 16, 1917. Serial No. 162,330. 6 Claims. (Cl. 184—34.)



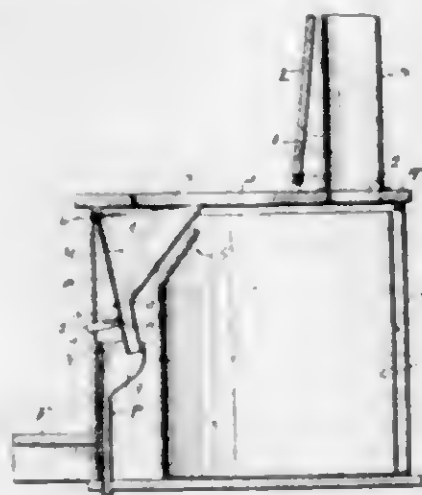
3. A pump lubricator comprising a container for the lubricant, an oscillating valve for receiving a quantity of the lubricant from said container and carrying it to a discharge, primary and secondary plungers working with threaded engagement in said valve, said secondary plunger operating to force the lubricant to said discharge, a sight feed device receiving from said primary plunger and delivering to said secondary plunger, means for oscillating said secondary plunger, means limiting the oscillatory movement of said valve to a movement less than that of said secondary plunger, and means for limiting the oscillatory movement of said primary plunger to a movement less than that of said valve, the frictional engagement between said valve and secondary plunger being greater than that under which said valve is seated and greater than that friction which is between said valve and primary plunger.

1,309,741. PHONOGRAPH LOCKING OR BRAKING DEVICE. RAY H. MANSON, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed July 6, 1915. Serial No. 38,369. 5 Claims. (Cl. 74—46.)



1. In a device of the class described, the combination of a frame, a rotatable tablet support on said frame having a downwardly extending peripheral flange, a swinging tone arm pivoted in said frame and adapted to carry a tablet engageable needle, said tone arm adapted to be moved to needle tablet engaging position and to tablet disengaging position, braking and locking mechanism for said tablet, including a flat member extending under the edge of said flange and lying flatwise of the top of the frame, means to pivot said member to the frame between said tablet support and the tone arm, a spring arm integral with said member and at right angles or substantially at right angles thereto, a shoe on one end of said arm adapted to engage the inside surface of the flange, a cam on the other end of said member integral therewith and at right angles thereto and a pin on said tone arm adapted when the arm is moved to tablet disengaging position to engage the said cam, rock said member on said pivot and cause said shoe to engage the flange.

1,309,742. DRY CLOSET. JOSEPH B. MOORE, Beaumont, Tex. Filed Apr. 12, 1919. Serial No. 289,487. 4 Claims. (Cl. 4—20.)



1. A device of the character described comprising a chest having an opening in its top and a funnel-shaped member supported for swinging movement within the chest and partially underlying the opening, and yielding means for constantly swinging the member toward the top of the chest.

1,309,743. MORTAR-BOMB. FRANK L. NICHOLS, Stamford, Conn., assignor to International Munitions Company, Inc., of Delaware. Filed July 5, 1918. Serial No. 243,439. 12 Claims. (Cl. 102—29.)

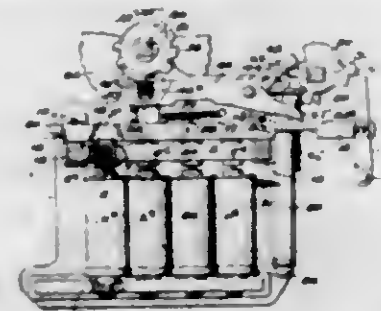


1. In a projectile, means for providing a peripheral channel during its descent into its mortar from the muzzle, and means for instantly effecting a closure of this channel upon and by, the functioning of an expelling charge.

1,309,744. PROCESS OF PRODUCING POTASSIUM HYDRATE FROM GREEN SAND. BENJAMIN A. PRACOCK, Philadelphia, Pa., assignor to Robert Gillebrist, New York, N. Y. Filed Aug. 3, 1918. Serial No. 248,145. 2 Claims. (Cl. 23—22.)

2. The process of extracting the combined potassium carried by naturally occurring potassium bearing silicates which consists in converting said silicates into the form of potassium zeolites; adding to said zeolites calcium hydrate and water; boiling the mixture thus produced in a finely divided condition until substantially all the potassium present has been converted into a crude hydrate; and separating out said hydrate, substantially as described.

1,309,745. MACHINE-TELEGRAPH. LOUIS MAXWELL, Potts, Baltimore, Md., assignor to Austin McLanahan, Baltimore, Md. Filed May 1, 1916. Serial No. 94,622. 25 Claims. (Cl. 178—34.)



3. A machine telegraph, comprising a sunflower device, a series of selecting elements, a magnet individual to each of said selecting elements, means to operate said magnets controlled by said sunflower device, a rotatable type wheel, and means entirely mechanical controlled by said selecting elements to control selectively the motion of said type wheel.

1,309,746. COBBLER'S OR SHOEMAKER'S KNIFE. ROBERT E. REED, Morrill, Nebr. Filed Feb. 8, 1919. Serial No. 275,761. 1 Claim. (Cl. 30—20.)

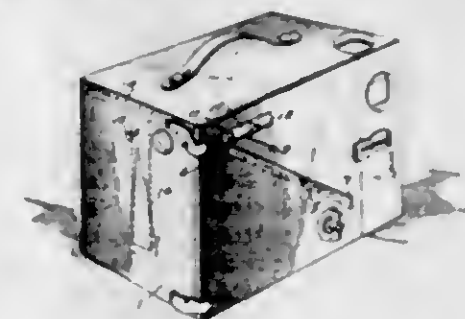
The combination with a handle member provided with an extension, one edge thereof having a recess, of a thin

cutting blade detachably mounted in said recess, said blade having a laterally protruding portion provided with opposite cutting edges at acute angles, the extension adapted to cooperate with one face of the sole, thereby guiding the blade when trimming the edge of the sole.



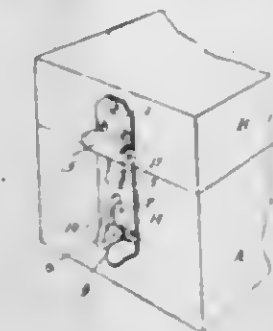
the lateral portion of the blade having an end cutting edge at obtuse angles to the first edges, thereby forming channel cutting gouge corners, the blade and the handle member being so disposed with relation to the sole of the shoe for guiding the instrument, whereby either one of the gouging corners may be adapted to form a stitch receiving channel.

1,309,747. CAMERA. FRANK EDWARD RUSSELL, Batavia, N. Y. Filed Dec. 12, 1918. Serial No. 266,459. 2 Claims. (Cl. 95—1.1.)



2. In a camera, a chamber supported near one end thereof and having its rear end open and adjacent to the film when the film is in exposed position, said chamber also being open at one end and abutting the camera wall at the said open end, the camera having an opening at the said open end of the chamber, means for closing the camera opening, said camera and chamber having registering openings at the said end and near the film when the film is in exposed position, a strip of translucent material adapted to enter the registering openings and to extend between the chamber and the film, and means for pressing the film toward the strip.

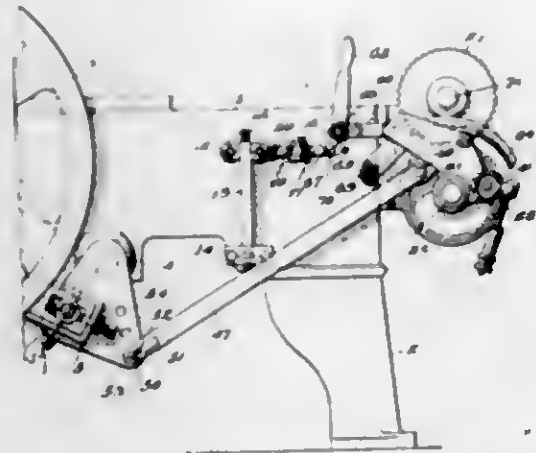
1,309,748. HINGE-HASP. ANTON SCHROEDER, St. Paul, Minn. Filed Dec. 24, 1917. Serial No. 208,541. 1 Claim. (Cl. 70—83.)



A hasp of the class described, comprising a staple, a hinge member formed with an opening to receive said staple and with spaced pintle receiving lugs at one end, and a supporting plate for said hinge member having a pintle receiving lug fitting between said spaced lugs, a pintle in said lugs hingedly connecting said plates, a spring arranged in connection with said supporting plate and overlapping said hinge member, and a cover pivoted on said pintle and arranged over said pintle and said

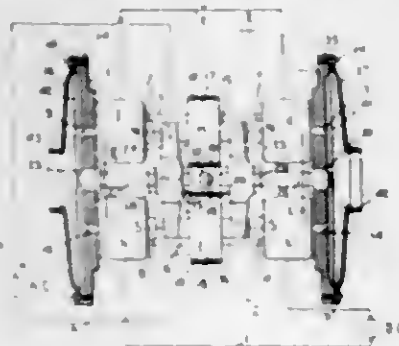
lugs to cover the joints between the latter and to form a stop limiting the movement of said hinge member in the manner set forth.

1,309,749. FEED MECHANISM. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed May 28, 1915, Serial No. 31,019. Divided and this application filed May 8, 1917. Serial No. 167,245. 29 Claims. (Cl. 10—15.)



3. In a device of the character described, the combination with movable dies; of a mechanism for feeding material to said dies; means for operating the same intermittently; feed controlling means; and means comprising a trip latch released by a trip bead receiving motion direct from the dies, whereby said feed controlling means is locked in predetermined positions of said dies.

1,309,750. POLARIZED SIGNALING MECHANISM. DANIEL S. WILSON, West Somerville, Mass., assignor to Samson Electric Company, Canton, Mass., a Corporation of Massachusetts. Filed May 25, 1917. Serial No. 170,870. 9 Claims. (Cl. 177—7.)

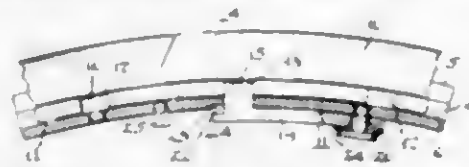


1. A polarized synchronous vibrating signaling mechanism comprising complementary exciting magnets having their poles facing one another, a solenoid having a core located intermediate of and in axial alignment with said magnet poles, means for passing an alternating current through said solenoid to polarize the core thereof in such a manner as to cause attraction between the pole of one magnet and the adjacent end of the core, and repulsion between the other end of the core and the pole of the magnet adjacent to it, whereby the magnetic flux in the core in cooperation with the fields of the magnets will cause a reciprocation of the core in the axial direction of said magnets and core and means operable by said reciprocation to produce a recognizable signal.

1,309,751. VEHICLE-WHEEL RIM. LEE V. ANNABER, Cleveland, Ohio, assignor to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 20, 1917. Serial No. 157,046. 6 Claims. (Cl. 152—21.)

1. The combination with a wheel rim having an encircling groove or depression near one edge; of a split

side-flange adapted to removably seat in such groove; and two abutments, one fixed and the other removable, located in said groove and adapted to engage the respective ends of said flange.

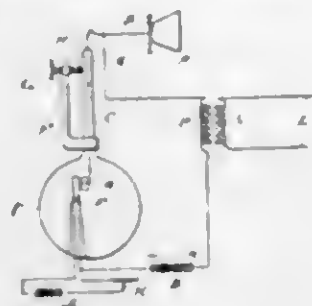


1,309,752. LEVEL-VIAL. ROBERT B. BOSSLER, Pittsburgh, Pa. Filed Apr. 30, 1918. Serial No. 231,657. 4 Claims. (Cl. 33—211.)



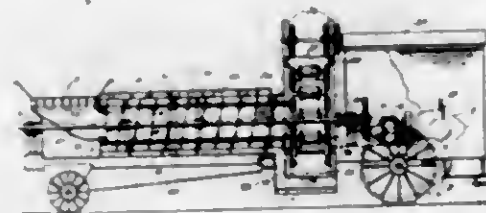
1. A spirit level-vial having therein a liquid in which is a bubble, and a foreign body suspended within the bubble.

1,309,753. MEANS FOR TRANSFORMING MECHANICAL VIBRATIONS INTO ELECTRICAL VIBRATIONS. LEE DE FOREST, New York, N. Y., assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 22, 1910. Serial No. 73,678. 2 Claims. (Cl. 170—171.)



1. In a device of the class described, the combination with a source of mechanical vibrations, a vessel provided with a comparatively thin neck, electrodes sealed in said vessel, one of said electrodes extending through said neck and connected to said source, said mechanical vibrations causing corresponding vibrations of said neck and variations in an output circuit also connected to said electrodes.

1,309,754. PORTABLE WASHING PLANT. JAMES P. DOVEL, Birmingham, Ala. Filed Sept. 21, 1915. Serial No. 31,881. 3 Claims. (Cl. 83—50.)



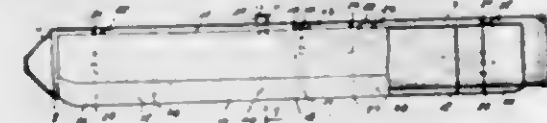
1. In a portable ore washer, a wheeled frame, a hopper set low on said frame and adapted to receive material from a steam shovel, a stationary screen in the hopper, a feed chute under said screen, a double rotating screen horizontally disposed under said chute arranged to discharge into one end, positive helical feed means to advance the material lengthwise in the screen, a sludge trough mounted closely under the screen, a helical feed screw carried by the screen and adapted to force the feed of sludge lengthwise of said trough, an under-hung sludge tank into which said trough discharges, and an elevator boot mounted in said tank below the normal water level therein and disposed beneath the discharge ends of said screen.

1,309,755. JACK. HERMAN H. GOETTER and JULIA TRUPAK, Milwaukee, Wis. Filed Aug. 25, 1915. Serial No. 47,275. 1 Claim. (Cl. 254—131.)



A jack, comprising, a one-piece body member of elongated rectangular form and provided with a cutaway portion extending through approximately half the length thereof to form an upper bifurcated end defining a pair of spaced upper arms, said arms having aligned openings near their upper ends, a fulcrum bolt engaging said openings and connecting said arms to brace the same, a lever member provided with an aperture at a point near one end of the lever and adjacent the lower edge thereof, the upper short end of the lever being curved from one edge to the other edge and the upper short end of said lever being grooved, the position of the bolt with relation to the grooved end permitting said grooved end to swing upwardly and outwardly beyond an imaginary line drawn vertically through the axis of the bolt and said body member to swing inwardly toward and impinge against the part being raised when the long arm of the lever is moved to its lower position to automatically lock the parts in adjusted position, substantially as described.

1,309,756. TESTING-TANK FOR SUBMARINES. HUGO E. GRIENHART and ROBERT C. SIMPSON, New London, Conn., assignors to Electric Boat Company, a Corporation of New Jersey. Filed Sept. 28, 1917. Serial No. 193,665. 9 Claims. (Cl. 114—47.)



1. Apparatus for testing the hull strength of a submarine boat, comprising a testing tank constructed and arranged to inclose the boat and to withstand a bursting pressure in excess of the crushing pressure for which the boat is designed, buoyant means for supporting the tank at the surface of the sea, and means for transferring fluid from the buoyant means to the tank to apply pressure to the boat therein.

1,309,757. METHOD OF MANUFACTURING COMPOSITE ARTICLES. WILLARD H. KEMPTON, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 28, 1918. Serial No. 242,499. 6 Claims. (Cl. 18—50.)



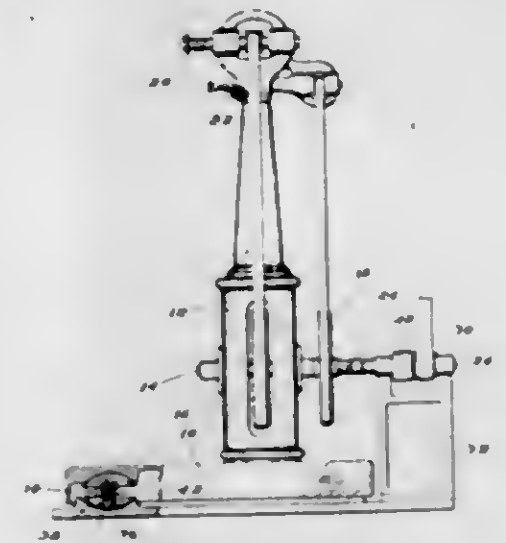
1. The method of manufacturing a composite article which consists in molding together a fabricated fibrous sheet material associated with an initially inactive adhesive material and a body containing a comminuted filler and similar adhesive material, the said adhesive materials being hardened and rendered active as a result of the molding operation.

1,309,758. COMPOSITE ARTICLE. WILLARD H. KEMPTON, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed June 28, 1918. Serial No. 242,499. Divided and this application filed Aug. 10, 1918. Serial No. 249,349. 6 Claims. (Cl. 154—46.)



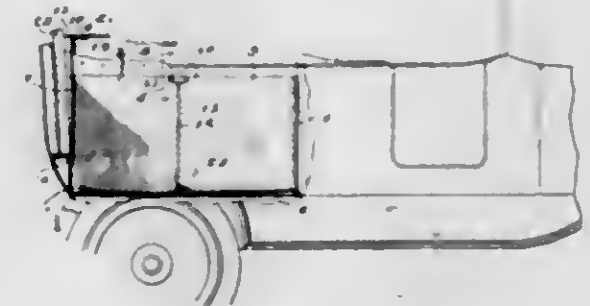
1. A hard and rigid composite molded article comprising agglomerated material, a non-metallic laminated material of relatively great tensile strength and a heat-hardened binder intimately associated with and uniting said materials.

1,309,759. RESILIENT MOUNTING FOR MACHINERY. CUTLER D. KNOWLTON, Rockport, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 3, 1917. Serial No. 200,080. 12 Claims. (Cl. 267—43.)



1. A mounting for machinery, comprising a machine base having a plurality of inverted segmental spherical cups in its bottom surface, a resilient load-sustaining spheroidal unit arranged in each of said cups, and a plurality of segmental spherical cups sustaining said units respectively.

1,309,760. COLLAPSIBLE-BODY INSERT FOR AUTOMOBILES. ALFRED T. KVADNSTRÖM, Detroit, Mich. Filed Mar. 1, 1918. Serial No. 219,804. 6 Claims. (Cl. 21—7.)



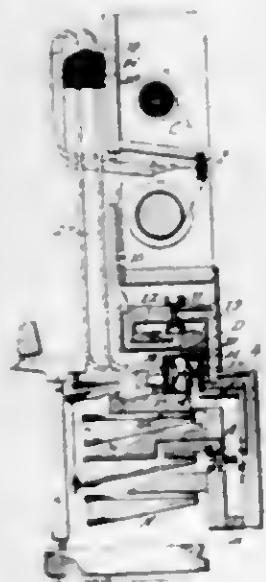
1. A collapsible lining for the tonneau of automobiles comprising a floor portion in two connected sections, a pair of side wall sections hinged to one of the floor sections, a front wall hinged to the other of said floor sections, and a second pair of side wall sections hinged to the front wall and cooperating with the first-mentioned side wall sections.

1,300,761. CLUTCH. OSKAR KYLIN, Elkhart, Ind., assignor to Foster Machine Company, Elkhart, Ind., a Corporation of Indiana. Filed Mar. 27, 1918. Serial No. 224,039. 2 Claims. (Cl. 192-13.)



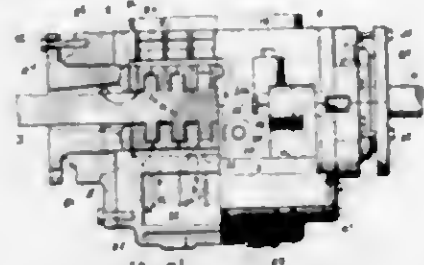
1. In a clutch, a shaft; a drum revolvably mounted upon the shaft; a carrier member rigidly mounted upon said shaft; a split expansible clutch ring mounted upon the carrier member and arranged within said drum; a plurality of clutch ring expanding levers fulcrumed in said carrier member and operatively connected with the clutch ring adjacent its opposing ends; an actuating member mounted in the carrier member and adapted to move radially thereof, said actuating member being adapted also to engage between said expanding levers when outwardly radially actuated for actuating said levers apart; centrifugally actuated means carried by said actuating member for normally effecting disengagement between it and said expanding levers; and means for outwardly radially actuating said actuating member between said expanding levers, whereby clutch ring expansion is effected.

1,300,762. PLAYER PIANO FOR PRODUCING SOLO EFFECTS. HENRIET J. LA JOIE, Orange, N. J., assignor to Autopiano Company, a Corporation of New York. Filed Nov. 27, 1916. Serial No. 133,565. 4 Claims. (Cl. 84-168.)



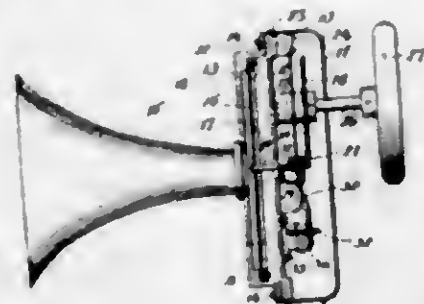
2. In a player piano, the combination of the actions, a series of power pneumatics and valves for operating the same, a tracker bar a series of compartments each connected to a group of three valves for the intermediate power pneumatics, two additional compartments connected to control a larger number of the valves for the power pneumatics above and below the groups of intermediate valves, a wind trunk, a restricted opening from each of said compartments to said wind trunk, a large opening between each of said compartments and said wind trunk, there being a plurality of such openings between each additional compartment and said wind trunk, valves for controlling said openings, all of the valves controlling the openings to an additional compartment being connected to operate together, pneumatics for operating said valves, and recent openings in the tracker bar for controlling the action of said pneumatics.

1,300,763. THRUST-BEARING FOR POWER-SHAFTS. WILLIAM MCKENNETT, Lakewood, Minn. Filed Apr. 29, 1918. Serial No. 231,501. 7 Claims. (Cl. 64-25.)



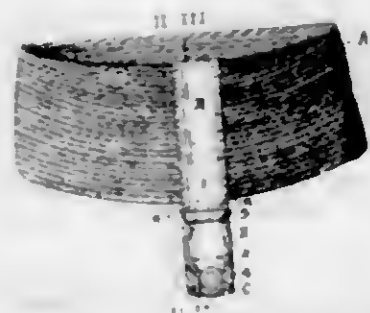
1. The combination with a rotatable power shaft having a collar formed thereon or secured thereto, of a slidable bearing collar encircling said shaft adjacent to one side of said shaft collar, means for preventing the rotation of said slidable bearing, a normally stationary support, and adjusting means partly engaging said support, said adjusting means encircling said shaft and being adapted to push said bearing collar into contact with the opposing side of said shaft collar.

1,300,764. DIAPHRAGM-HORN AND MEANS FOR OPERATING THE SAME. ALGER L. McMEATRY, Sound Beach, Conn., assignor, by mesne assignments, to Lovell-McConnell Manufacturing Company, a Corporation of Delaware. Filed Feb. 6, 1912. Serial No. 675,600. 18 Claims. (Cl. 116-1.)



1. To a horn or signal, a vibratory diaphragm, an elastic member fixed at one end, a spindle on the diaphragm connected to the elastic member intermediate the length of the latter, means for actuating the elastic member to cause vibration of the diaphragm, said means comprising a toothed wheel adapted to contact with the elastic member, and means for adjusting the position of the elastic member in relation to the wheel.

1,300,765. MAN'S GARTER. CLIFFORD L. MEYER, Bellevue borough, Pa. Filed June 18, 1918. Serial No. 240,625. 1 Claim. (Cl. 241-6.)



In a man's garter, the combination of a leg encircling annulus formed by permanently attaching together a length of relatively wide elastic webbing, a narrow straight sided strap of non-elastic material covering and overlapping the line of attachment and sewed to said webbing, said strap beginning at the front bottom of said annulus, extending up the front, over the top and down

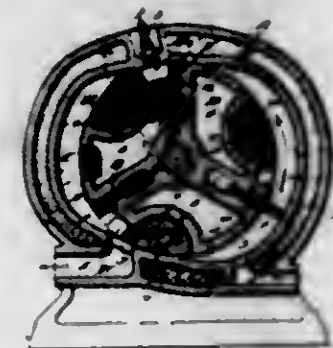
the inside of the same, the inside end of said strap being extended below the annulus and folded to form a lower loop and then brought up to the bottom of the annulus and folded again to form an upper loop and the extremity being secured between the upper portion of the strap and the annulus, a supporter button member mounted in the lower loop, and a clasp member mounted in the upper loop, substantially as described.

1,300,766. SOUND-BOX FOR PHONOGRAPHS. ALBERT W. MILLS, West Orange, N. J. Filed June 19, 1918. Serial No. 240,820. 3 Claims. (Cl. 274-35.)



1. An apparatus for phonographs comprising sound boxes, a sound tube, a throughway member having a convex outer surface, means for communication between the throughway member and the sound tube, diaphragms for the sound boxes, individual means for communication between the sound boxes and said throughway member, said means for communication for one of the sound boxes being a neck having a concave mouth for engaging the convex outer surface of the throughway member, a vibratory shaft, means for supporting the sound boxes and the vibratory shaft, means for connecting the vibratory shaft to the diaphragms of the sound boxes, and a record-disk operated means for vibrating said shaft.

1,300,767. ROTARY GAS-ENGINE. CHARLES W. MOROAN, Racine, Wis., assignor to Gasoline Turbine Motor Company, Racine, Wis. Filed Aug. 20, 1915. Serial No. 46,468. 6 Claims. (Cl. 123-16.)



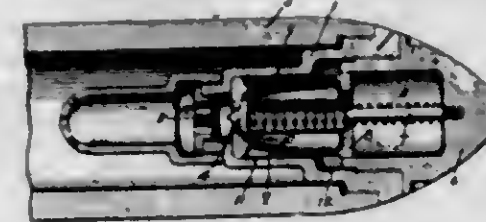
1. In a rotary engine the combination of a shell provided with offset compression and working cylinders, division heads between the cylinders, a rotor engageable with the division heads, a series of oscillatory working pistons mounted within the rotor, and a series of reciprocative compression pistons mounted in said rotor, the rotor being provided with pockets between each working and compression piston; the combination of a pair of circular fixed rails positioned at reciprocative ends of the rotor, a series of tumblers in pivotal union with the ends of said rotor engageable with the rail, and a link connection between pairs of said tumblers and the ends of the working pistons.

1,300,768. PERCUSSION-FUSE FOR PROJECTILES. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1917. Serial No. 152,222. 4 Claims. (Cl. 102-39.)

1. In an explosive projectile, the combination with a body portion and a nose, of a fuse mechanism mounted therein and comprising a firing plunger, a spring acting

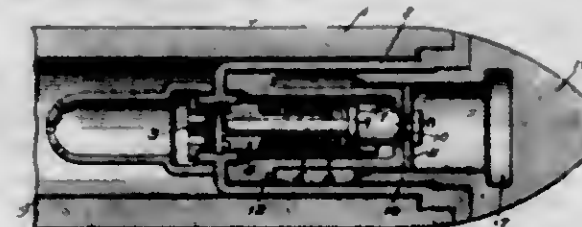
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on said plunger, and a member movable by inertia upon impact of the projectile for first retracting the plunger



to compress said spring and then adapted to release the plunger, thereby permitting the reverse movement of the plunger by the spring.

1,300,769. PERCUSSION-FUSE. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1917. Serial No. 152,223. 3 Claims. (Cl. 102-39.)



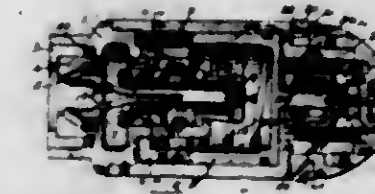
1. A fuse mechanism comprising a firing plunger, a spring acting on said plunger, a collapsible ring normally engaging said plunger, and a member operated by inertia upon impact of the projectile for moving said ring and plunger and thereby stretching the spring.

1,300,770. TIME-FUSE FOR PROJECTILES. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 23, 1917. Serial No. 176,003. 12 Claims. (Cl. 102-36.)



1. In a projectile, the combination with a fuse mechanism, of a chamber having an air inlet and a vent port, means for closing said inlet port upon charging the chamber with air to a predetermined pressure during the flight of the projectile, and means operated upon a predetermined reduction in pressure in said chamber through said vent port for effecting the operation of said fuse mechanism.

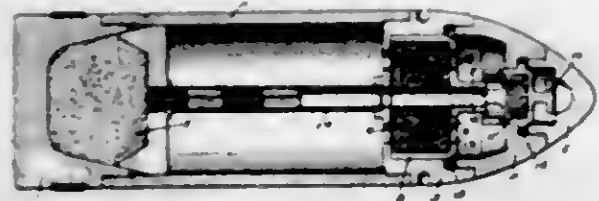
1,300,771. PROJECTILE TIME-FUSE. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 23, 1917. Serial No. 176,004. 11 Claims. (Cl. 102-36.)



1. In a projectile, the combination with a chamber having a vent port and a time fuse mechanism operated ac-

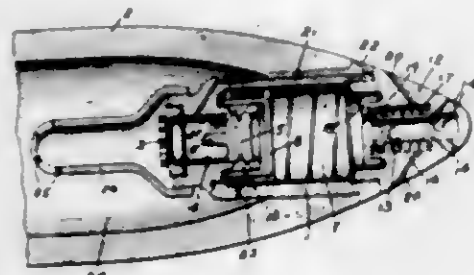
conform to the pressure in said chamber, of a gas forming substance and means operated upon firing the projectile for effecting the generation of gas from said substance to thereby create a fluid pressure in said chamber.

1,309,772. ORDNANCE-PROJECTILE. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 3, 1917. Serial No. 178,353. 2 Claims. (Cl. 102-29.)



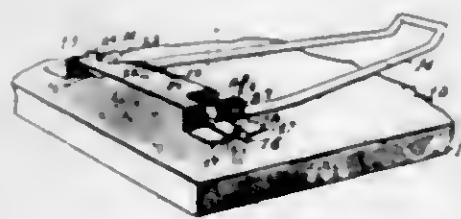
1. A projectile comprising a casing, a primer therein, and a firing plunger containing a cartridge formed of a substance adapted upon ignition to generate an obnoxious gas.

1,309,773. PNEUMATICALLY-OPERATED IMPACT-FUSE. EDWARD W. NEWELL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1917. Serial No. 152,224. Renewed Jan. 21, 1919. Serial No. 272,354. 9 Claims. (Cl. 102-39.)



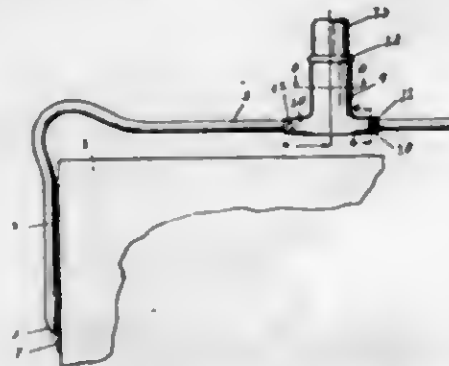
1. A projectile provided with a chamber and having inlet ports through which air from the atmosphere is compressed into said chamber by the flight of the projectile, a firing plunger for detonating the projectile, and means operated upon impact of the projectile for supplying fluid from said chamber to operate the firing plunger.

1,309,774. FOLDING TABLE. OTTO M. OTTE, Jamestown, N. Y. Filed Apr. 4, 1919. Serial No. 287,583. 4 Claims. (Cl. 45-11.)



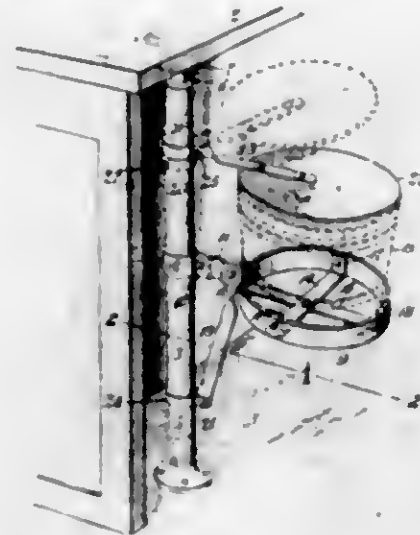
1. In a folding table, a top, spring legs for said top having out-turned inner ends, a sheet metal clip on the under side of said top having a raised central portion with spaced recesses near the ends thereof to receive said inner ends of said legs, the end portions of said clip each having spaced bowed parts at right angles to one another hinging said out-turned inner ends to the under side of said top and to removably hold said spring legs in the set-up position.

1,309,775. HANDLE. IRA J. OWEN and BERNARD J. BOUWMESTER, Grand Rapids, Mich., assignors to Bissell Carpet Sweeper Co., Grand Rapids, Mich. Filed Feb. 6, 1919. Serial No. 275,381. 4 Claims. (Cl. 287-54.)



1. In a handle, the combination of a ball-like shank, a pair of sheet metal socket members of semi-cylindrical cross section disposed edge to edge and each having a pair of laterally projecting semi-cylindrical arms at their lower end disposed edge to edge embracing said shank and spot welded thereto, a socket bushing formed of sheet metal rolled into a cylinder and spirally corrugated providing threads, said bushing having notches in its lower end engaging said shank, and a flanged ring embracing the upper end of said socket members and overlapping the upper end of said bushing.

1,309,776. DEVICE FOR SUPPORTING TUBS. JOHN E. POWERS, Pike, N. Y. Filed Apr. 6, 1918. Serial No. 226,091. 1 Claim. (Cl. 248-41.)

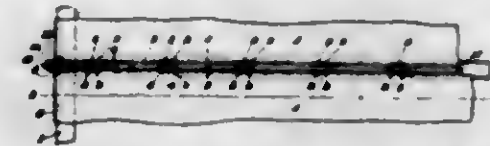


A device for supporting tubs and the like comprising an upright shaft, a socket adapted to receive said tub and comprising an upright annular wall constructed from a strip of band metal which has its ends connected, an arm formed integrally with one end of said wall, a collar embracing said shaft and constructed of a strip of band metal which has its ends connected and one end of which is formed integrally with said arm, and a bar extending across the space within the lower part of said wall and connected therewith.

1,309,777. CAR-ROOF. GEORGE W. RISTINE, JR., Chicago, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed May 11, 1917. Serial No. 168,367. 6 Claims. (Cl. 108-5.)

1. In a car roof, a carline, roof plates supported by said carline and having openings formed therein, members engaging said openings, said members having grooves in their upper surfaces and means engaging said grooves to retain the roof plates on said carline, and means for applying tension to said means.

2. In a car roof, a carline, roof plates supported by said carline and having openings formed therein, resilient members engaging said openings, said members having grooves formed in their upper surfaces, and means engaging said grooves to retain the roof plates on said carline, and means for applying tension to said means.

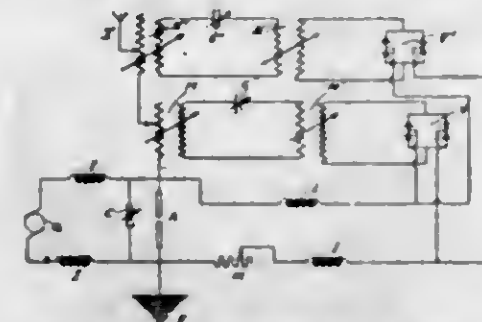


3. In a car roof, a carline, roof plates supported by said carline and having openings formed therein, members engaging said openings, said members having grooves formed in their upper surfaces and a rod extending from side to side of the roof, adapted to engage the grooves in said members and retain the roof plates on said carline, and means for applying tension to said rod.

4. In a car roof, side plates, a carline, roof plates supported by said carline and having openings formed therein, members engaging said openings, said members having grooves and a rod extending from side to side of the roof, adapted to engage the grooves in said members and retain the roof plates on said carline, said rod being secured to said side plates, and means at the sides of the roof for applying tension to said rod.

5. In a car roof, a carline of flanged section, roof plates supported by the flanges of said carline, flanges on said roof plates extending between the flanges of said carline and having openings formed therein, members engaging said openings, said members having grooves formed therein and rod means engaging said grooves to retain the roof plates on said carline, and means for applying tension to said rod means.

1,309,778. RADIOTELEGRAPH TRANSMITTING SYSTEM. OSCAR C. ROOS, Allston, Mass. Filed July 14, 1917. Serial No. 180,527. 10 Claims. (Cl. 250-17.)



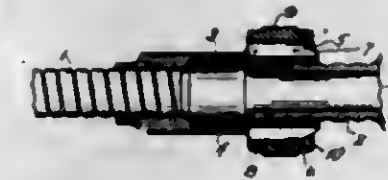
1. A radio-telegraph transmitting system, comprising in combination an antenna system, means for creating electrical oscillations therein, a circuit associated with the antenna and attuned to one of the harmonics of the fundamental thereof, and a parallel-branch circuit, one branch of which includes a capacity and the other an inductance, serially connected with said circuit, said parallel-branch circuit being attuned to the fundamental of said antenna system.

1,309,779. BARREL, KEG, OR THE LIKE. RICHARDSON ROWNTREE, Seattle, Wash. Filed Feb. 13, 1918. Serial No. 216,888. 10 Claims. (Cl. 217-96.)



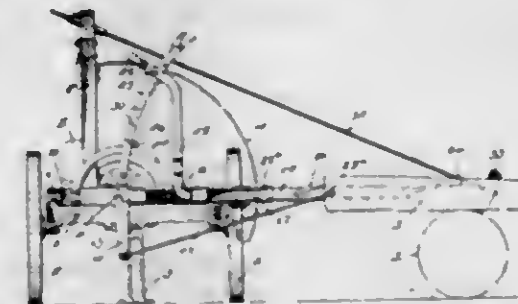
1. A veneered barrel comprising a plurality of veneered staves joined together to form a smooth continuous contour without a straight transverse line of jointure therebetween.

1,309,780. HOSE-CLAMP. JACOB O. SCHONFARBER, Providence, R. I. Filed Mar. 14, 1919. Serial No. 282,601. 2 Claims. (Cl. 285-75.)



2. A hose clamp comprising, in combination with a flexible pipe, a coupling sleeve secured over the end of the pipe, the projecting end of the sleeve being longitudinally slitted, a rubber lining interior of the sleeve and lapping the inner end of the pipe, said slitted end adapted to receive a second pipe, and means for clamping the slitted end inwardly about the second pipe.

1,309,781. PORTABLE SAW. ANTHONY F. SCHOOL, South Kaukauna, Wis. Filed May 3, 1918. Serial No. 282,282. 2 Claims. (Cl. 143-63.)



1. A sawing machine comprising a main frame, a member pivoted on the main frame for vertical swinging movement, a second member pivoted on the first member for vertical swinging movement, a saw movably carried by said second member, a drive means on the main frame, a drive connection between the drive means and saw operative in various relative positions of said members and main frame, a lever connected with the first named member for swinging the same, said lever being curved substantially on an arc having as its center the pivotal connection of the said two members, a lever carried by the said second named member and transversing the first lever, means for holding the first named lever adjustably against swinging movement, and means carried by the second named lever and engageable with selective portions of the first named lever for holding said levers against relative movement.

1,309,782. WALL-FINISHING-COMPOSITION. ROBERT SHARP, San Jose, Calif. Filed Dec. 17, 1917. Serial No. 207,595. 4 Claims. (Cl. 134-45.)

4. A wall finishing composition comprising Paris white substantially 20 parts, water glass substantially 1 part, glue substantially 1 part, alum substantially 1 part, and raw linseed oil substantially 1 part.

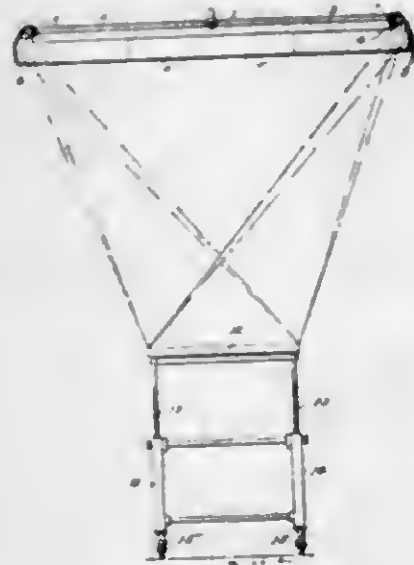
1,309,783. HOOD. HYMAN SLAWIN, Philadelphia, Pa. Filed Jan. 31, 1918. Serial No. 215,918. 4 Claims. (Cl. 2-120.)



4. In a shaped hood, the head cover having an opening over the nose, eyes and mouth, in combination with a

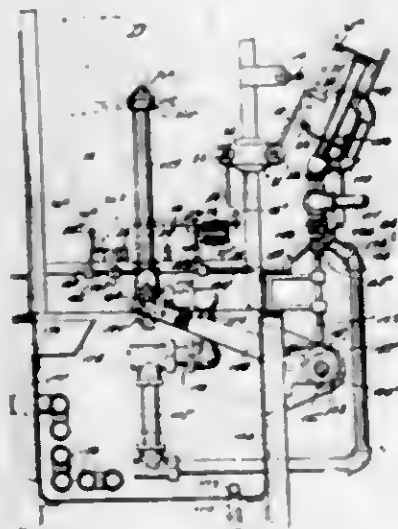
face cover, formed of duplicate pieces, seamed together by a vertical seam, the edges that are united, at this seam, of these pieces, having the requisite contour for forming the nose projection, a close fitting covering for the upper lip, and the mouth opening, and having a mouth flap covering the mouth opening.

1,309,784. ILLUMINATING-FIXTURE. WILLIAM H. SPENCER, New York, N. Y., assignor to George Frink Spencer, New York, N. Y. Filed July 5, 1917. Serial No. 178,857. 3 Claims. (Cl. 240-3.)



3. The combination with a reflector comprising flat vertical walls joined at their ends to form an inner polygonal frame, an annular top wall projecting outwardly from the upper edge of said polygonal frame, and an outer frame comprising sections depending from the outer edge of said annular top wall and having their ends joined, said sections being provided with inwardly presented concave reflecting surfaces adapted to project the light rays from all of said sections on to a common illuminated area, of a line source lamp extending substantially the entire length of each section and arranged above the lower edge of said inner polygonal frame.

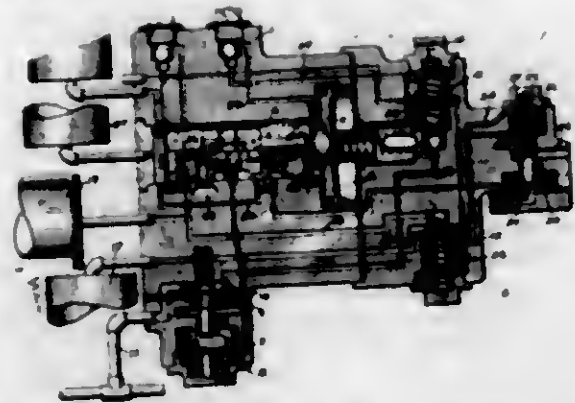
1,309,785. CLEANSING MACHINE OR APPARATUS. BRUCE E. TAYLOR, Mount Vernon, N. Y., assignor to Borden's Condensed Milk Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1918. Serial No. 226,750. 21 Claims. (Cl. 141-7.)



21. In an apparatus for cleansing articles, means for intermittently discharging fluid against an article, said means comprising a valve controlling the discharge and having a therefrom downwardly projecting reciprocating stem; a reciprocating push-rod upwardly movable toward,

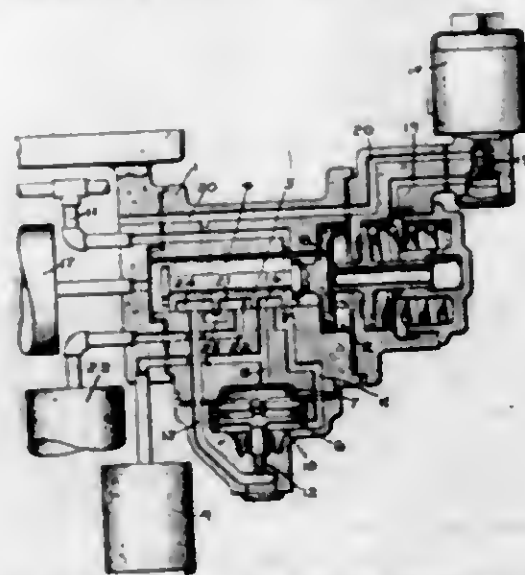
without contacting, the stem; a block interposable between said push rod and stem; means actuated by the article to so interpose the block; an oscillatory shaft; a cam carried by the shaft and cooperating with the push-rod; and a swingable plate interposed between, and contacted by, the cam and the push-rod and hinged to an adjacent stationary part of the apparatus.

1,309,786. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkesburg, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1918. Serial No. 250,939. 3 Claims. (Cl. 188-1.)



1. In a fluid pressure brake, the combination with a source of fluid under pressure and a brake cylinder, of valve means subject on one side to fluid pressure from said source for supplying fluid to the brake cylinder, a pilot valve device for controlling the operation of said valve means and a valve controlled by said pilot valve device for normally supplying fluid to the opposite side of said valve means.

1,309,787. BRAKE-APPLICATION-VALVE DEVICE. WALTER V. TURNER, Wilkesburg, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1918. Serial No. 250,940. 4 Claims. (Cl. 188-14.)

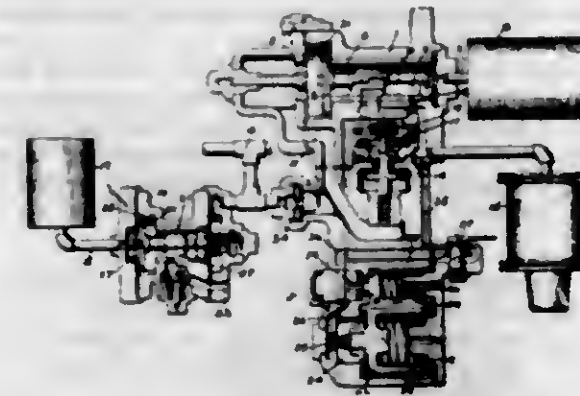


1. In a fluid pressure brake, the combination with a brake application valve device and a brake pipe, of a discharge valve for venting fluid from the brake pipe, a piston controlled by said valve device for operating said valve, and means for normally preventing the venting of fluid from the brake pipe past the discharge valve.

1,309,788. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkesburg, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1918. Serial No. 250,941. 7 Claims. (Cl. 188-15.)

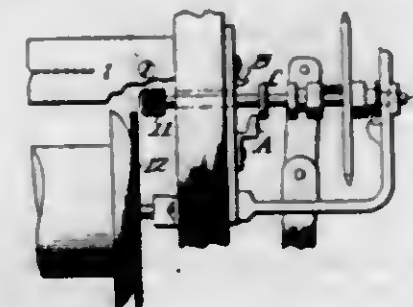
1. In a fluid pressure brake, the combination with a brake pipe and a valve device operated upon a sudden reduction in brake pipe pressure for effecting an emer-

gency application of the brakes, of means for retarding the application of the brakes at a low standard brake pipe



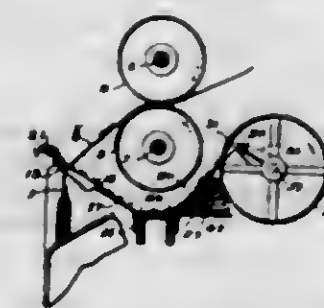
pressure and operative at a high standard brake pipe pressure to prevent the retardation of the brake application.

1,309,789. GEARING FOR NOTE-SHEET PROPELLING. JOSEPH VELEHRADSKY, New York, N. Y., assignor to Autoplane Company, a Corporation of New York. Filed Oct. 1, 1917. Serial No. 194,213. 4 Claims. (Cl. 74-7.)



1. In gearing for note sheet propelling, the combination of a take-up spool, a gear thereon, a shaft arranged parallel to the axis of the take-up spool, a pinion carried thereby, means for moving the shaft axially, and means for causing the pinion to move over and then into mesh with said gear.

1,309,790. MEANS FOR REMOVING FLUFF OR DUST FROM SPINNING-FRAME GUIDES. WILLIAM E. WALSH, Lowell, Mass. Filed Nov. 18, 1918. Serial No. 262,960. 7 Claims. (Cl. 118-19.)

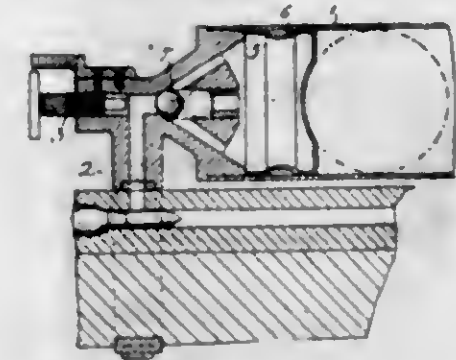


1. In a spinning machine, the combination of drawing rolls, a spindle, a guide for a roving between said rolls and spindle, and means to produce intermittent puffs of air to remove fluff or dust from said guide.

1,309,791. DEVICE FOR SHOOTING GRENADES. NIELS WALTERSEN AARSEN, Christiansia, Norway. Filed Dec. 8, 1917. Serial No. 206,170. 5 Claims. (Cl. 89-1.)

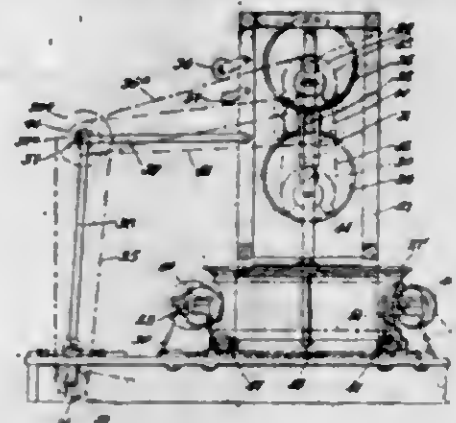
2. Grenade throwing device for rifles comprising a grenade throwing tube, a channel connecting the back end of said grenade throwing tube with the bore of the rifle,

means for throttling or closing the said channel in order to regulate the range of the grenade throwing device and



a nonreturn valve in the channel for preventing the escape of gas into the rifle bore after the bullet has passed out of the same.

1,309,792. GLASS BEVELING AND POLISHING APPARATUS. FREDERICK A. ANTONCICH, Brooklyn, N. Y. Filed Dec. 20, 1916. Serial No. 137,967. 5 Claims. (Cl. 51-8.)



1. In a glass-beveling apparatus, glass-supporting means provided with a shaft, a support for said shaft provided with elongated openings for the shaft and cams for moving said shaft back and forth in said openings.

1,309,793. SPECTACLES. CHANA BENORVIK, Yankton, S. D. Filed Mar. 24, 1919. Serial No. 284,730. 2 Claims. (Cl. 68-41.)

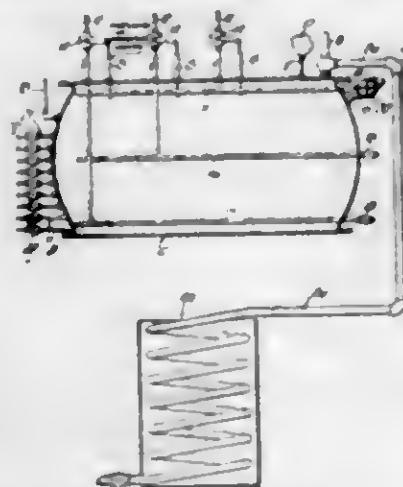


1. In combination, a primary or carrying frame having a nose piece and temples and having substantially straight intermediate portions, and a secondary frame comprising half lens carrying members having substantially straight sides and eyes secured to the straight portions of one of said frames near each end thereof and engaging corresponding portions of the other frame.

1,309,794. PROCESS FOR SEPARATING HYDROCARBONS FROM WATER. WALTER ARTHUR BROWN, Los Angeles, Calif., assignor of one-half to Floyd G. White, Los Angeles, Calif. Continuation of application Serial No. 68,532, filed Dec. 27, 1915. This application filed July 12, 1916. Serial No. 106,853. 13 Claims. (Cl. 190-25.)

1. The herein described process of separating hydrocarbons and water from a mixture thereof, embodying heating the liquids and simultaneously holding them under a

pressure just sufficient to prevent the liquids from foaming over by reason of the water boiling but not sufficient to prevent vaporization of the lighter hydrocarbons which



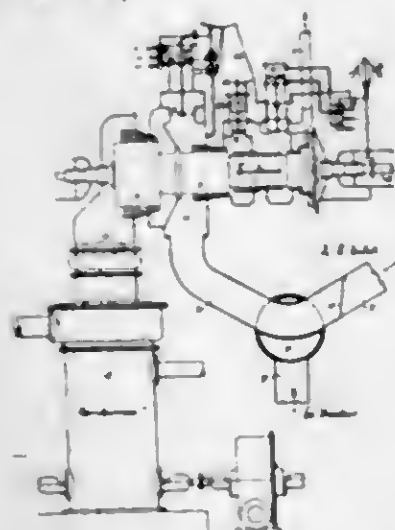
vaporize more readily than water, and holding the liquids subject to such temperature and pressure for a length of time sufficient to cause the mixture to break down; and then separating the water out of the mixture.

1,309,795. TIRE-STEM CAP. ROBERT A. CAMPBELL, Minneapolis, Minn. Filed May 31, 1918. Serial No. 237,490. 6 Claims. (Cl. 152—12.)



1. The combination with a tire stem of a cap, a dust cover, means for turning said cap and said dust cover together and means including a swiveled joint for producing longitudinal movement of said dust cover upon said cap.

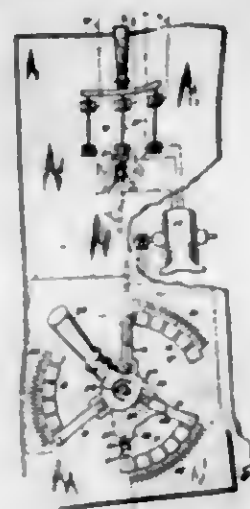
1,309,796. TURBINE SYSTEM. HANS P. DAHLSTRAND, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 14, 1916. Serial No. 91,840. 12 Claims. (Cl. 60—43.)



1. In a turbine system, a high pressure stage, a low pressure region in open communication with said stage, a

low pressure stage, a condenser communicating with said low pressure stage, a low pressure stage valve between said region and said low pressure stage, means for controlling the operation of said stage valve, low pressure fluid conducting means communicating with said region, a high pressure inlet valve, governor means for operating said high pressure valve, and means associated with said governor means for taking the control away from said stage valve controlling means and for operating said stage valve, only when the speed of said turbine reaches a predetermined high value.

1,309,797. MOTOR-CONTROLLER. EDWARD I. DEUTSCH, North Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 26, 1915. Serial No. 42,443. 18 Claims. (Cl. 200—7.)



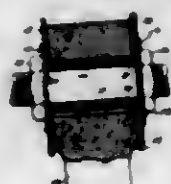
16. In motor control apparatus, a line switch, a controller, means for biasing the controller to one position, and means for holding the controller in another position and by its movement to holding position preventing closure of said switch with the controller in the second-named position.

1,309,798. AUTOMATIC AEROPLANE-CAMERA. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 10, 1917. Serial No. 200,460. 10 Claims. (Cl. 88—17.)



1. The combination with an aeroplane body having an opening in the bottom thereof, of a support above the opening, springs on the support and a camera hung from the springs with its lens aligned with the opening.

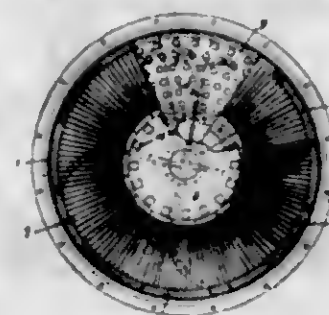
1,309,799. FLANGED ARTICLE. EDGAR C. GEORGE, Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 27, 1915. Serial No. 4,793. 19 Claims. (Cl. 173—311.)



2. A method of forming a flanged insulating bushing which comprises forming a tubular body portion with bev-

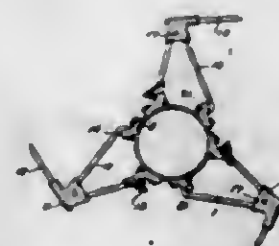
eled ends, distorting a sheet of insulating material to provide a flange portion having an oppositely beveled, axial, tubular extension, and uniting said oppositely beveled parts with the beveled surfaces thereof in engagement.

1,309,800. GRANULATOR. EDWARD N. GREENLEAF and GEORGE T. HANSEN, Salt Lake City, Utah, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 19, 1915. Serial No. 46,728. 6 Claims. (Cl. 83—9.)



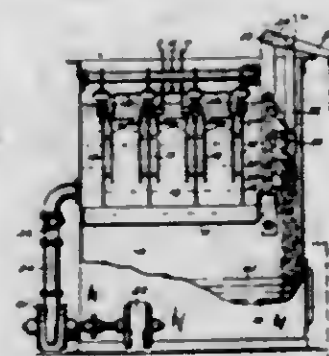
1. In combination, a casing forming a comminuting chamber, a discharge sizing screen comprising spaced bars located directly adjacent an end of said chamber, and means within said casing for gauging the level of liquid in said chamber, said means being spaced from and located on the side of said screen remote from said chamber.

1,309,801. TILLER. CARL F. HADDER, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 9, 1917. Serial No. 201,692. 7 Claims. (Cl. 97—62.)



1. As an article of manufacture, a disintegrating element comprising a bifurcated arm having a socket associated therewith, and a disintegrating tool frictionally held within said socket and lying in the plane of the bifurcations of said arm.

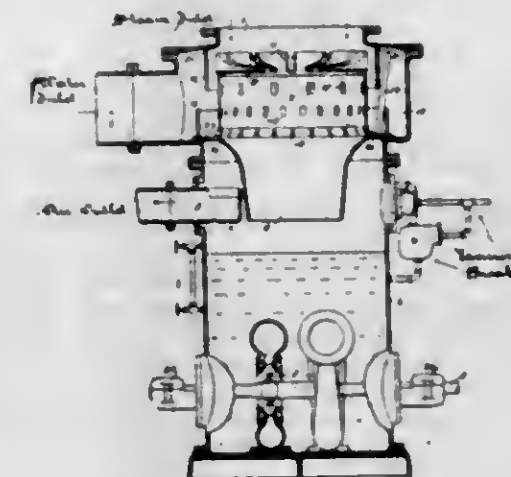
1,309,802. LIQUID RHEOSTAT. HENRY C. HOLTHOFF, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 16, 1917. Serial No. 181,424. 13 Claims. (Cl. 219—57.)



12. In a liquid rheostat, a casing for containing liquid, electrodes disposed in said casing, and means for deter-

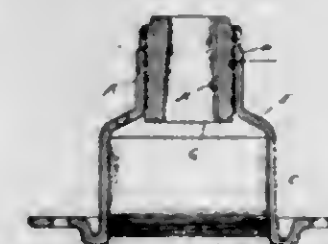
mining the level of liquid in said casing and controlling the discharge of liquid therefrom, said means comprising a swingably mounted gate extending in substantially opposite directions from the axis of rotation.

1,309,803. CONDENSER. CHENOWETH HOSUM, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 11, 1915. Serial No. 66,646. 8 Claims. (Cl. 261—113.)



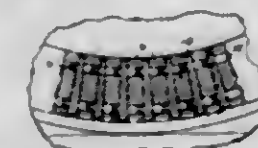
1. In combination, a casing forming a condensing zone and having superposed series of orifices opening into said zone, the orifices of an upper series being larger than those of a lower series, a steam inlet for said casing, means for injecting water into said zone through said orifices, and an outlet from said casing.

1,309,804. WHEEL-HUB. JOHN KELSEY, Detroit, Mich., assignor to Kelsey Wheel Company, Inc., Detroit, Mich., a Corporation of New York. Filed Dec. 4, 1914. Serial No. 875,506. 2 Claims. (Cl. 21—31.)



1. A wheel hub, comprising a pressed sheet-metal member and a reinforcing bushing therefor, said members having complementary broached faces forming a multiplicity of longitudinally-extending interlocking serrations of slight depth relative to the thickness of the sheet-metal, said bushing and sheet-metal member being pressed into engagement with each other.

1,309,805. PULVERIZER. CHARLES S. LINCOLN, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 1, 1916. Serial No. 107,478. 8 Claims. (Cl. 83—11.)



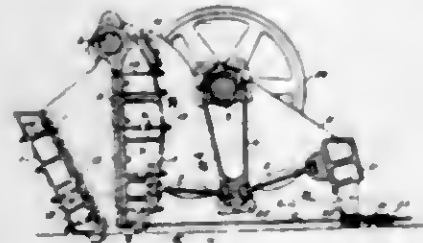
1. As an article of manufacture a sparring block for grate bars, having a pair of retaining lugs spaced equidistant from its opposite ends.

1,309,806. BACK STOP. PHILIP S. MEDART, St. Louis, Mo., assignor to Fred Medart Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 20, 1919. Serial No. 283,905. 6 Claims. (Cl. 46—59.)



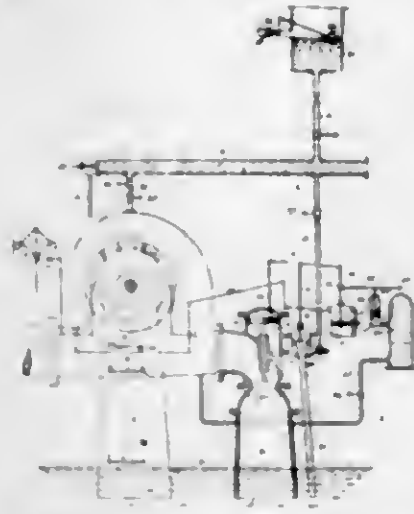
1. In a basket ball back stop, the combination of a plurality of uprights adapted to engage in sockets in a floor, a stop board fixedly secured to the upper portions of said uprights, inclined braces extending rearwardly from the upper portions of said uprights, and lateral guy members extending from the upper portions of said uprights to the floor of the room and provided with tensioning turn buckles, substantially as set forth.

1,309,807. JAW CRUSHER. RAY C. NEWHOUSE, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 26, 1916. Serial No. 81,048. 6 Claims. (Cl. 83—53.)



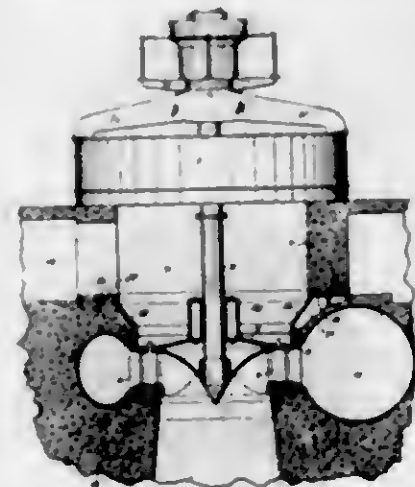
3. In a crusher, a frame, a jaw movably suspended from said frame, a toggle element for moving said jaw, means for actuating said toggle element, frame bracing means between said jaw and said actuating means and above said element, and means for maintaining engagement between said jaw and said element, the space above said engagement maintaining means and below said toggle element being vacant and said jaw being formed to automatically release said element when said engagement maintaining means is released.

1,309,808. RELIEF MECHANISM. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 1, 1916. Serial No. 88,735. 9 Claims. (Cl. 137—69.)



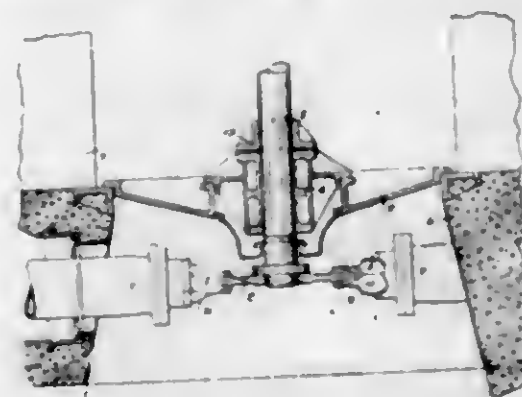
1. In combination, a source of fluid pressure, a fluid pressure operated relief valve for said source, and a plurality of independent sources of fluid under pressure for operating said relief valve in one direction.

1,309,809. HYDRAULIC TURBINE. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 29, 1918. Serial No. 233,583. 12 Claims. (Cl. 253—120.)



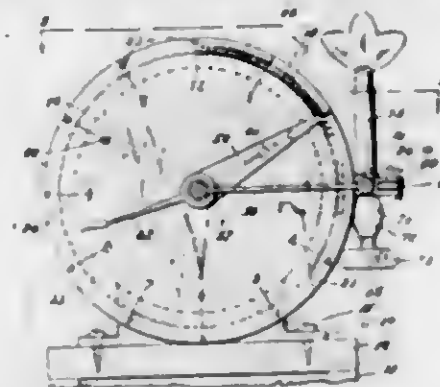
1. In a hydraulic machine, a fluid conducting casing, a foundation, means carried by said foundation and extending laterally over said casing, a dynamo-electric machine above said casing, and an intermediate support between said machine and said means.

1,309,810. WATER-WHEEL BUCKET. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 11, 1918. Serial No. 234,352. 14 Claims. (Cl. 253—114.)



1. A water wheel bucket having at least two pockets located side by side in a direction longitudinally of the wheel axis, one of said pockets being larger than another.

1,309,811. GAS-CONSUMER'S INDICATOR. STEFAN FORERACH, New York, N. Y. Filed Aug. 6, 1918. Serial No. 248,625. 5 Claims. (Cl. 116—49.)



1. In a gas register, the combination with an indicator containing a clock mechanism and having a circular face,

of a circular row of plungers movable in said face, an arm rotatable over said plungers by said clock mechanism and means for moving said arm so as to depress any of said plungers with which the arm is in register.

1,309,812. PULLING-OVER MACHINE. WALTER PROULX, Lewiston, Me. Filed Jan. 4, 1918. Serial No. 210,277. 8 Claims. (Cl. 12—4.)



7. In a machine for pulling over turn shoes, in combination, means for engaging the upper only of the shoe to allow the lining to be thrown back to expose the tip marking for gaging, manually operable means operating independently of the operation of said upper-engaging means for independently engaging the lining only to lay it over the upper, means for simultaneously pulling over the upper and lining, and means for inserting a plurality of fastenings simultaneously through said pulled over upper and lining, and in freely exposed relation thereto whereby they may be readily observed and drawn in a subsequent manipulation of the shoe.

1,309,813. VIBRATION-RECORDER. HARR SATTLEB, Sheboygan, Wis. Filed Oct. 2, 1918. Serial No. 250,614. 5 Claims. (Cl. 234—30.)

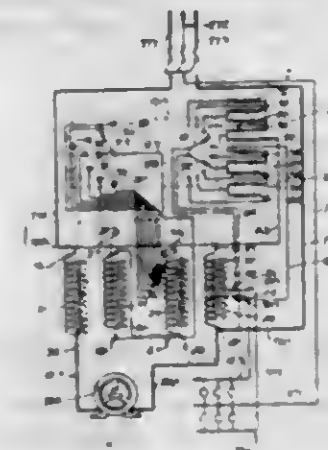


1. A vibration recorder including a main support, studs projecting from said main support, a carrying plate mounted on said studs, a journal member projecting outwardly from the carrying plate, a record member mounted on said journal member, a clock mechanism assembly unit secured to said plate between the plate and support, a drive connection between said clock mechanism unit and record member, and a vibratory stylus carried by the main support and engaging the record member.

1,309,814. INSTANTANEOUS-VOLTAGE-REGULATING MEANS. EDMUND O. SCHWITZER, Chicago, Ill. Filed May 9, 1917. Serial No. 107,590. 14 Claims. (Cl. 171—119.)

1. In combination, a three-phase supply circuit comprising three transformer windings, a group of lamps operated from a single phase of said supply circuit, a three-phase motor connected to said supply circuit, and regu-

lating means having windings in series with said motor and said lamps for compensating the voltage impressed



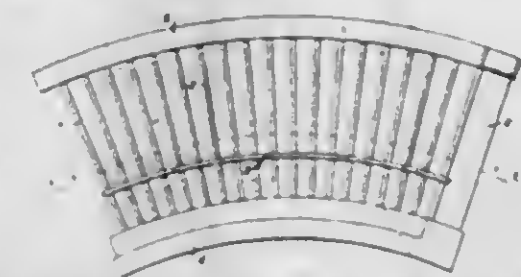
on said lamps in accordance with current drawn by said motor.

1,309,815. PERCUSSION-TOOL. ALBERT SCHINKER, Grand Haven, Mich., assignor to Keller Pneumatic Tool Company, Grand Haven, Mich., a Corporation of Michigan. Filed Apr. 15, 1918. Serial No. 228,600. 3 Claims. (Cl. 121—20.)



2. A percussion tool having, in combination, a body, a rivet set operable in the body, a ring fitting neatly upon the body, and a ball mounted in the body and movable, when the ring is moved circumferentially of the body, either into or out of operative engagement with the rivet set, said ring having a pin-and-slot connection with the body permitting its circumferential movement thereon but preventing its longitudinal movement upon the body.

1,309,816. BLADE-BRACING AND METHOD OF LOCATING THE SAME. CHARLES EDWIN SEARCH, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 16, 1918. Serial No. 217,985. 10 Claims. (Cl. 253—77.)

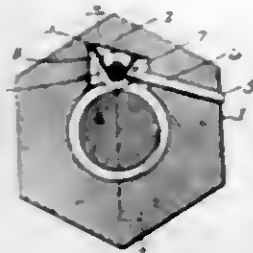


8. In combination, a plurality of blades rigidly secured at corresponding ends, and bracing means secured to the inlet edges of said blades intermediate their ends, said bracing means being nearer the fixed blade ends than the opposite ends of said blades.

1,309,817. LOCK-NUT. EDWIN C. SEMPLE, Chicago, Ill. Filed Mar. 3, 1919. Serial No. 280,442. 11 Claims. (Cl. 151—25.)

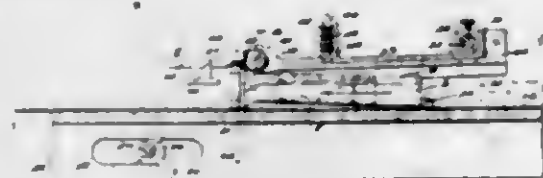
7. In a lock nut, the combination with a threaded bolt, of a nut having a recess on its inner threaded surface

formed adjacent the outer end of said nut and extending through only a portion of the thickness of the nut; a locking roller held loosely in said recess; a plunger on one side of the nut projecting into said recess and having



its inner end slightly enlarged, said plunger adapted to be depressed to force said locking roller out of locking position; and a spring passing under said roller and having its respective ends bearing against the side walls of said recess.

1,309,818. ROBBIN-STRIPPING MACHINE. JOHN D. SHARPLES and THOMAS CROWE, Taftville, Conn., assignors to Old Colony Machine Company, New Bedford, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1918. Serial No. 265,302. 14 Claims. (Cl. 19—15.)



11. The combination with a runway, a belt supporting table adjustable vertically in said runway, and a bobbin carrying belt operating over said table, of a frame pivotally mounted above said runway and having means to sever coils of roving or yarn on bobbins carried by said belt, means to take under and raise said coils of roving or yarn in position to be severed, and means to be actuated by said bobbin to raise the free end of said frame.

1,309,819. PREPARED PACKAGE OF LUBRICATING-GREASE. WILLIAM C. SHEPARD, Seattle, Wash. Filed Sept. 3, 1918. Serial No. 252,481. 3 Claims. (Cl. 221—60.)

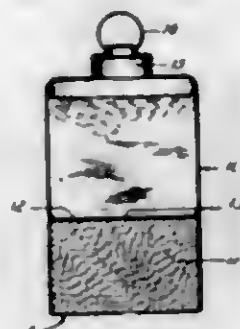


1. A receptacle for lubricant grease comprising an animal's bladder, a spout connected with the neck of said bladder and a bag of fabric surrounding the said bladder and loosely fitting said bladder prior to filling and adapted to be engaged by the bladder upon expansion when filling to regulate the quantity of lubricant placed therein.

1,309,820. MOTH-GUARD. EATON GOODSELL SHERMAN, Hollywood, Calif. Filed May 8, 1918. Serial No. 233,375. 2 Claims. (Cl. 167—3.)

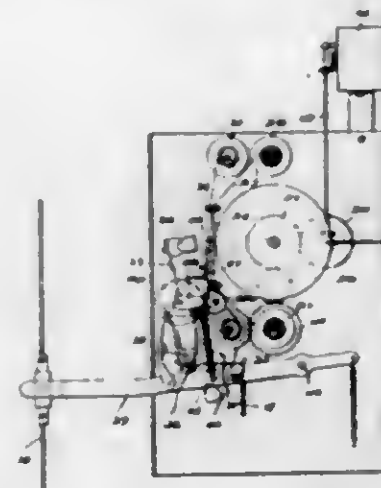
1. A moth dispenser, comprising a receptacle adapted to contain a moth repelling liquid, said receptacle having

a small opening at its bottom and being otherwise substantially air tight and non-porous, and a plug of porous material stopping said bottom opening and through which the liquid must percolate to reach the atmosphere, the porous plug being exposed to atmosphere substantially on its lower surface only.



2. A moth dispenser, comprising a non-porous receptacle having a false bottom and having a substantially air tight compartment above said bottom, adapted to contain a moth repelling liquid, said bottom having a small outlet aperture, the compartment below said bottom being open at its bottom, and a plug of porous material filling said lower compartment and through which the liquid must percolate in order to reach the atmosphere at the lower surface of the plug, the porous plug being exposed to atmosphere substantially on its lower surface only.

1,309,821. SIGNALING SYSTEM. WALTER P. SPANBOOM, Rochester, N. Y. Filed July 23, 1914. Serial No. 852,624. 4 Claims. (Cl. 234—27.)

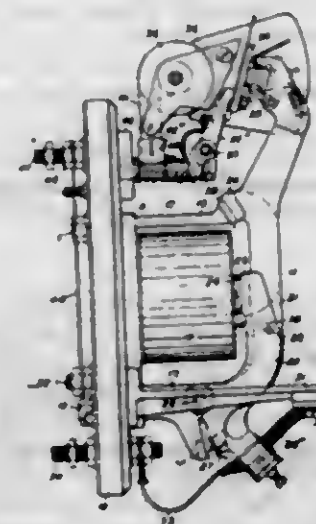


1. A signaling system employing a signal, and a recording mechanism comprising a time printing mechanism, a suitably driven tape on which said time printing mechanism operates, a device for marking on the tape lines corresponding in lengths to the durations of the signals, and means for operating the time printing mechanism simultaneously with each operation of such marking device to cause the printing device to operate on the tape with said marking device.

1,309,822. SWITCH. HALFOAN A. STEEN, Milwaukee, Wis., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, a Corporation of Delaware. Filed Sept. 6, 1910. Serial No. 580,532. 12 Claims. (Cl. 175—281.)

1. In combination, a switch, and an electromagnet for actuating said switch, said electromagnet comprising co-operative fixed and movable parts, the movable part of said electromagnet comprising two pivotally mounted and

relatively movable armature portions movable about the same axis and engageable with separate spaced polar por-



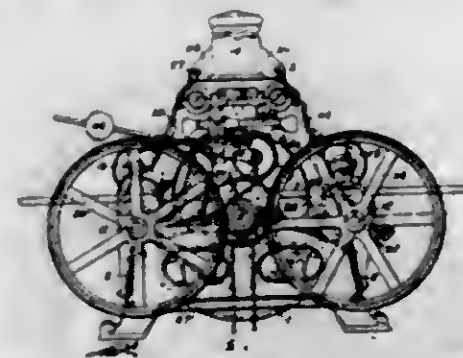
tions of the fixed part of said electromagnet, and said spaced polar portions being in series in the normal magnetic circuit of said electromagnet.

1,309,823. CASTING-MACHINE. FRANCIS WILLIAM STOKES, Nottingham, England. Original application filed July 9, 1918. Serial No. 244,099. Divided and this application filed Feb. 14, 1919. Serial No. 277,080. 3 Claims. (Cl. 22—65.)



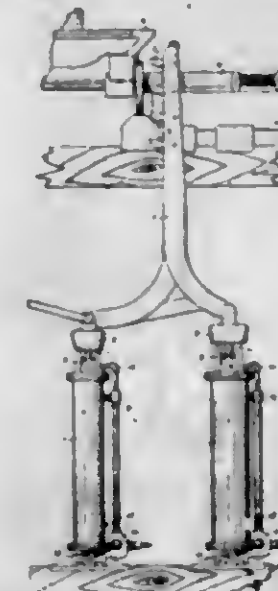
1. A pouring mechanism comprising a support, a member swiveled to said support for horizontal oscillation, bearings fixed to said member, a rock shaft carried by the bearings and having an operating handle, and a pourer fixed to said shaft.

1,309,824. FEED-ROLL MECHANISM. WILLIAM HENRY TROUT, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed Mar. 5, 1910. Serial No. 547,388. Divided and this application filed Nov. 4, 1916. Serial No. 129,903. 14 Claims. (Cl. 143—56.)



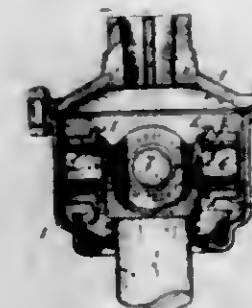
1. In combination, means for feeding bodies, a pressing device for urging the bodies against said feeding means, a lever having at one end a fulcrum and associated at its opposite end with said pressing device, and lever manipulating means comprising a power actuated device having a movable portion extending over said lever and means connecting said portion with a medial portion of said lever.

1,309,825. AIR-CUSHION FOR STEAM-NIGGERS. WILLIAM HENRY TROUT, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 31, 1917. Serial No. 172,093. 5 Claims. (Cl. 121—105.)



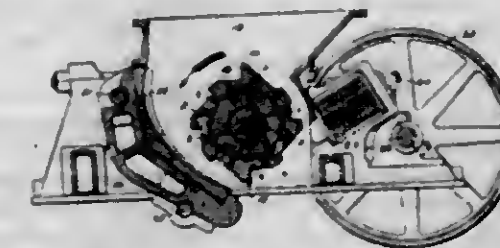
1. In combination, an upright cylinder having an upper head and having a fluid discharge port at its lower extremity, a piston reciprocable in said cylinder and having a rod penetrating said cylinder head, a plunger associated with said cylinder head, and a cap associated with said piston rod and co-operable with said plunger to provide a cushion for said piston as it approaches said port.

1,309,826. UNIVERSAL JOINT. BEATRIS H. USCHEL, Bowling Green, Ohio. Filed Apr. 14, 1919. Serial No. 290,027. 3 Claims. (Cl. 64—102.)



1. In a universal joint, a member having a hole adapted for the reception of a bushing, in said opening a bushing having a flange the edge of which has two parallel straight portions, said member being recessed for engagement with said straight edge-portions of the flanges, whereby the bushing is prevented from turning.

1,309,827. ROLL-CRUSHER. PAUL C. VAN ZANDT, Chicago, Ill., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 20, 1915. Serial No. 52,123. 4 Claims. (Cl. 83—12.)



3. In a crusher, a roll having two longitudinally arranged series of projections, the projections of one series

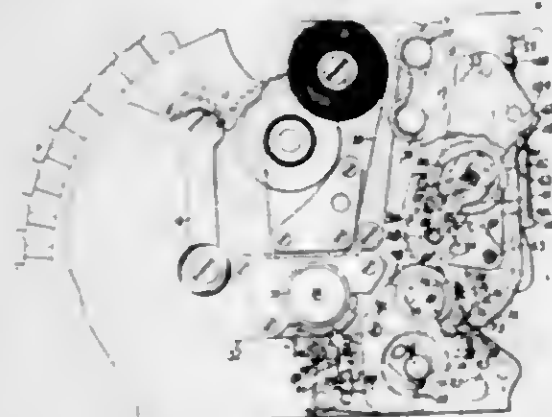
alternating with those of the other, one series comprising projections of different heights and the other comprising projections of equal heights.

1,309,828. GREASE-CUP. LOUIS N. VINCENT, Seattle, Wash. Filed May 18, 1918. Serial No. 235,354. 8 Claims. (Cl. 184-46.)



8. In a grease cup, a grease receptacle having a dome-shaped upper portion with a hole therein, an exteriorly screw-threaded lower portion, a follower, a stem projecting from said follower through the hole in the dome-shaped upper portion, a sleeve, an abutment thereon, said sleeve mounted on the stem and a weight mounted on said sleeve and adapted to be reciprocated thereon, a spring engaging the abutment on the sleeve and increasing in diameter to its engagement with the dome-shaped end of the cup, and a washer secured to the end of the spring to center same about the stem.

1,309,829. CHECK-ISSUING MECHANISM FOR CASH-REGISTERS. EDWARD J. VON PRIN, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Ohio. (Incorporated in 1906.) Filed July 16, 1914. Serial No. 851,385. Renewed May 29, 1919. Serial No. 300,776. 17 Claims. (Cl. 211-33.)



1. In a machine of the class described the combination with an arm having oscillating and bodily movements for cooperating with openings in a paper-strip to adjust the strip in proper position; of means for bodily moving the arm into cooperative relation with the openings, and means for oscillating the arm to adjust the strip in proper position.

1,309,830. FLEXIBLE-PIPE COUPLING. ERNEST W. AMAKER, Chicago, Ill. Filed Jan. 20, 1916. Serial No. 73,109. 1 Claim. (Cl. 285-175.)

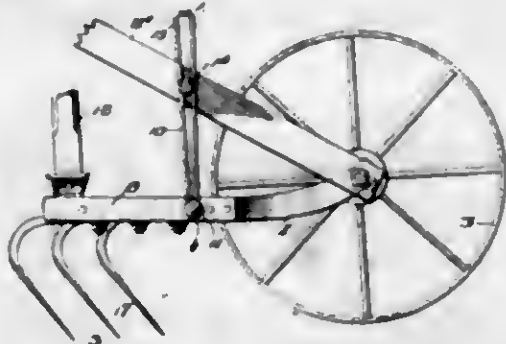
A coupling of the kind specified comprising a tubular female member having a head the diameter of the bore of which is greater than that of the stub extending therefrom, and the diameter of the bore of said head being stepped to a still greater diameter for a portion of its length extending back from and including the mouth of the same; said greater bore being provided with an inwardly projecting annular flange whose inner circumference exceeds that of the rear end of the bore of the head, which latter, at the mouth thereof, is provided with spaced apart in-

wardly projecting studs the distance between the ends of which is greater than that of the diameter of the inner circumference of said annular flange, and a compressible packing ring the diameter of whose inner circumference corresponds to that of the rear end of the bore of the head and seated in and filling the annular space between the said annular flange and said rear end, in combination



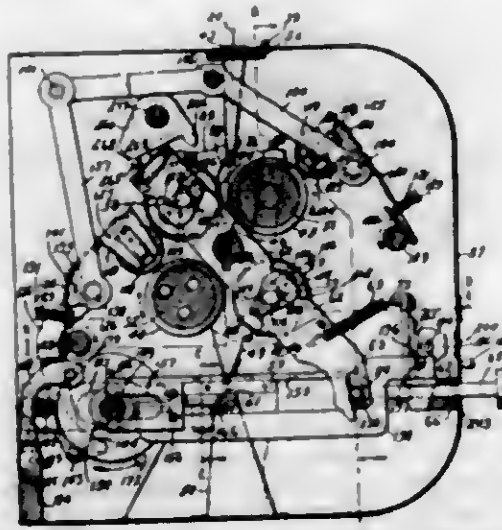
with a tubular male member the diameter of the advanced end portion of which corresponds to the diameter of the inner end of the bore of the head of the female member and which, at a point a distance back from its extremity exceeding the width of said packing ring, is stepped to a greater diameter not exceeding the inner circumference of the inwardly projecting annular flange of said female member, and, at a point back from said step a distance exceeding the width of said inwardly projecting annular flange is provided with an outwardly projecting annular flange having recesses in its circumference through which the studs of said female member are adapted to pass.

1,309,831. GARDEN-CULTIVATOR. JAMES G. ALEXANDER, Ames, Iowa, assignor to Alexander Mfg. Co., Inc., Ames, Iowa. Filed Sept. 21, 1918. Serial No. 255,093. 7 Claims. (Cl. 97-42.)



1. In a cultivator, the combination with a frame, of freely movable spring sides secured to said frame, and a reversible head positioned between said freely-movable spring sides and capable of being quickly attached or detached by springing said sides outwardly.

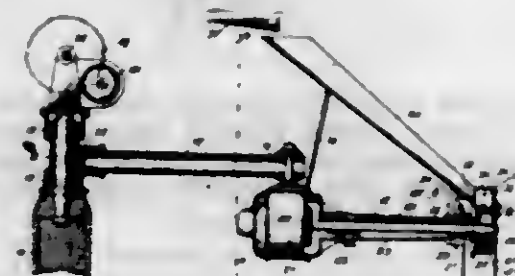
1,309,832. TICKET-PRINTING MECHANISM. HENRY CHARLES BAXWELL, London, and FREDERICK PHILLIPS, Bromley, England, assignors to The National Cash Register Company, Dayton, Ohio, a Corporation of Ohio. (Incorporated in 1906.) Filed Dec. 20, 1915. Serial No. 67,807. Renewed May 29, 1919. Serial No. 300,772. 20 Claims. (Cl. 211-33.)



4. In a machine of the class described, the combination with a feeding device common to a plurality of ticket

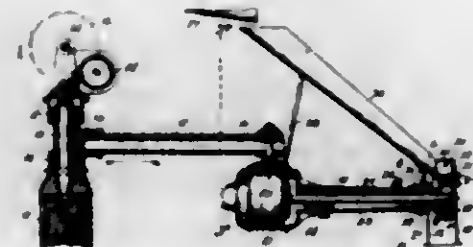
strips, of a cooperating feeding member for each ticket strip and normally out of engagement therewith, manipulative devices for selectively moving any desired member into engagement with said feeding device to feed the corresponding ticket strip, and means for retaining the selected member in engagement with said feeding device while the selected strip is being fed.

1,309,833. MOLDING APPARATUS. ELMER O. BEARDSLEY, Chicago, and WALTER F. PIPER, Oak Park, Ill. Filed Jan. 27, 1919. Serial No. 273,265. 41 Claims. (Cl. 22-36.)



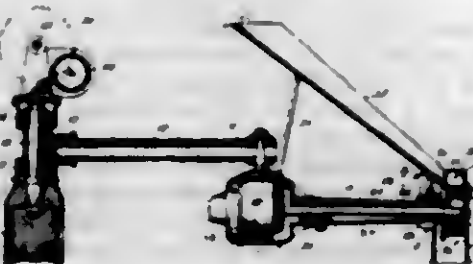
1. In a molding machine, the combination of a rammer head comprising a rotor, mechanism for driving the rotor, and means for feeding mold material to one side of the rotor.

1,309,834. METHOD OF MAKING MOLDS FOR STEEL CASTINGS. ELMER O. BEARDSLEY, Chicago, and WALTER F. PIPER, Oak Park, Ill. Filed Jan. 29, 1919. Serial No. 273,862. 4 Claims. (Cl. 22-197.)



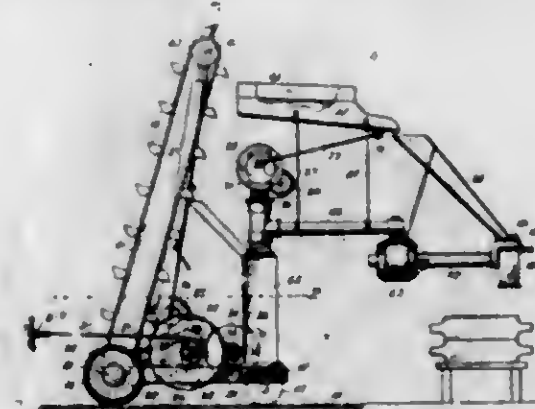
1. That improvement in making molds for steel founding which consists in projecting wads of mold-material into a mold at a velocity of not less than approximately 7000 feet per minute.

1,309,835. METHOD OF MAKING MOLDS FOR FOUNDING. ELMER O. BEARDSLEY, Chicago, and WALTER F. PIPER, Oak Park, Ill. Filed Jan. 29, 1919. Serial No. 273,863. 9 Claims. (Cl. 22-197.)



1. That improvement in making molds which consists in projecting wads of mold material into a flask at a velocity of not less than approximately 4000 feet per minute to form a mold.

1,309,836. PORTABLE MACHINE FOR MAKING MOLDS. ELMER O. BEARDSLEY, Chicago, and WALTER F. PIPER, Oak Park, Ill. Filed Jan. 31, 1919. Serial No. 274,190. 10 Claims. (Cl. 22-36.)



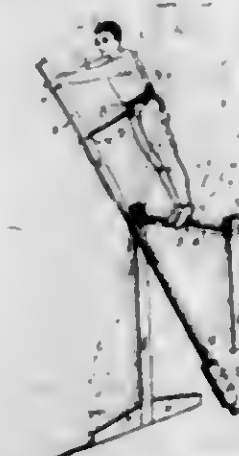
1. In a machine for making molds the combination of a portable truck, a sand-projector mounted on the truck, mechanism for driving the projector, means mounted on the truck for delivering sand to the projector, a cable, and means for winding the cable to propel the truck.

1,309,837. MILL-PINION. EDWARD S. BLACK, Chicago, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Jan. 22, 1919. Serial No. 272,422. 7 Claims. (Cl. 74-28.)



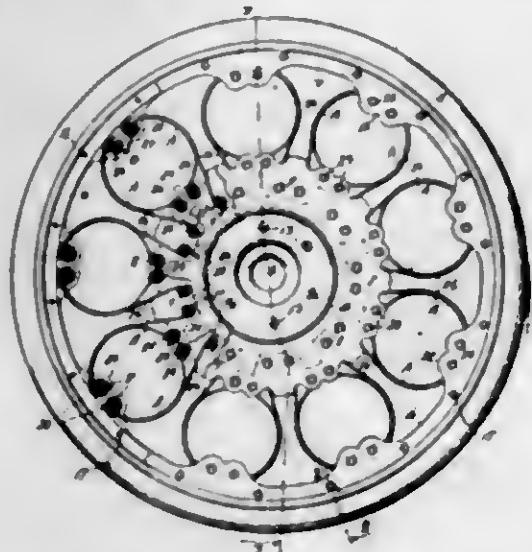
1. A mill pinion having two separable annular toothed members with interengageable portions for forming a positive drive connection.

1,309,838. TOY. JOSEPH BOXNET, Miles City, Mont. Filed Mar. 8, 1919. Serial No. 281,363. 4 Claims. (Cl. 46-40.)



1. In a toy, the combination with a figure, having pointed extensions upon the lower surfaces of the feet of the figure and provided with outstretching arms, of a counter balancing bar connected pivotally between the outer ends of the outstretching arms and having a portion thereof below said connection and adjustably connected to the figure.

1,309,839. SPRING-WHEEL. GEORGE W. BOWMAN, PALLADES, Colo., assignor to The Universal Spring Wheel and Manufacturing Company, Pallades, Colo., a Corporation of Colorado. Filed Jan. 23, 1917. Serial No. 143,916. Renewed May 24, 1919. Serial No. 299,560. 2 Claims. (Cl. 132-59.)



1. A wheel comprising a hub, a rim, circular springs located between the hub and rim each spring comprising two approximately semi-circular spring members, hinge pins arranged on the hub adjacent each other and with which the inner extremities of the said spring members are respectively connected, other hinge pins mounted adjacent each other on the rim and with which the outer extremities of the said spring members are respectively connected, each extremity of each of said spring members being connected to a hinge pin independently of the other member, spoke springs also located between the hub and rim, the outer extremities of the spoke springs being mounted on the same pins with which the corresponding extremities of the semi-circular spring members are connected, and other hinge pins mounted on the hub and with which the inner extremities of the said spoke springs are respectively connected, the inner extremity of each spoke spring being connected to a hinge pin independently of every other spring member.

1,309,840. ELECTRIC SWITCH. CARL BRAMMING, Chicago, Ill., assignor to Accessories Manufacturing Co., a Corporation of Illinois. Filed May 3, 1917. Serial No. 166,237. 7 Claims. (Cl. 175-283.)



1. In an electric switch, in combination, a pair of spring terminals, a spring-retracted plunger connector in one position directly connecting said terminals, and means for varying the length of alternate movements of the plunger in either direction, the plunger remaining in engagement with the terminals at the end of its shorter outward movement and being releasable therefrom by the shorter inward movement.

1,309,841. TABULATOR FOR AUTOMOBILES. WILLIAM H. CARMICHAEL, Miami, Fla. Filed May 18, 1918. Serial No. 235,363. 3 Claims. (Cl. 281-8.)

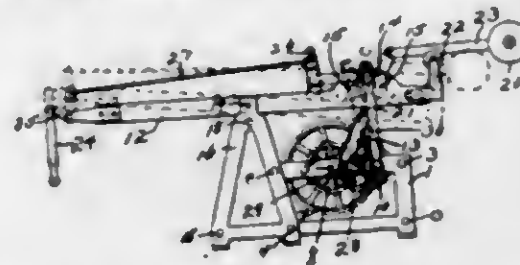
2. A tabulator including an inclosing casing having a slot in one portion thereof, a shaft mounted in an op-

posite portion of the casing to rotatably support a roll of paper, a table in the casing to support a portion of the paper, a secondary feed-roll and a pressure roll arranged in the casing adjacent to the slot and adapted to tem-



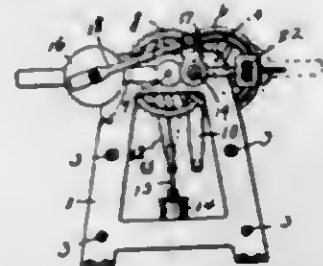
porarily hold and prevent the paper from passing through the slot, and a primary feed-roll and a pressure roll arranged in the casing to move the paper into space in the casing in folded order while held by the secondary feed-roll and the adjacent pressure roll.

1,309,842. PUMP-JACK. WILLIAM L. DAYTON, Fort Worth, Tex., assignor to Gravity Pump and Power Co., Fort Worth, Tex. Filed Mar. 20, 1918. Serial No. 223,482. 6 Claims. (Cl. 74-14.)



1. A pump jack comprising a frame, a walking beam fulcrumed on said frame, a power wheel provided with a shaft journaled in said frame, a lever fulcrumed on said walking beam, a shiftable weight connected to one end of said lever, and operative connections for the other end of said lever with said shaft for actuating said walking beam and said weight.

1,309,843. PUMP-JACK. WILLIAM L. DAYTON, Fort Worth, Tex., assignor to Gravity Pump and Power Co., Fort Worth, Tex. Filed Mar. 20, 1918. Serial No. 223,483. 4 Claims. (Cl. 74-14.)



1. A pump jack comprising a frame, a power shaft journaled in said frame, a crank shaft journaled in said frame and gearing for driving said crank shaft from said power shaft, a sucker rod to be actuated by said crank shaft, a lever rigid with said crank shaft, a slidable weight mounted on said lever, a crank provided with a pivot shaft journaled in said bar, and gearing on said crank shaft and on the pivot shaft of said crank for actuating said crank to reciprocate said weight on said bar.

1,309,844. ARTICLE-HOLDER. OSCAR LLOYD DENNES, Ardmore, Okla. Filed Apr. 5, 1919. Serial No. 287,853. 1 Claim. (Cl. 24-80.)

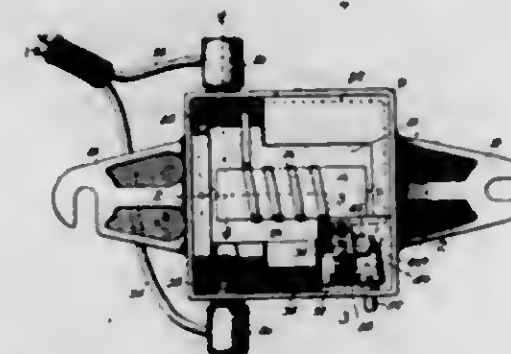
A clamp comprising a pair of pivotally connected plates having projecting portions on opposite sides of its center,

the projecting portions on one side of the center having outstanding flanges which are opposite each other and form jaws, the projecting portions on the other side of the center forming finger pieces for swinging the plates relative to each other to spread the jaws, a button on one



side of the plates, said button having its shank attached to one of the plates, and the other plate being recessed to clear the shank, and a spring anchored to the shank and having its ends engageable with the finger pieces to swing the plates in a direction to bring the jaws together.

1,309,845. ELECTRIC VULCANIZER. OLIVER C. DENNIS, Chicago, Ill. Filed Nov. 26, 1915. Serial No. 63,405. 2 Claims. (Cl. 219-19.)



1. In a portable electric vulcanizer, the combination of a case, an electrical resistance element in the case, a switch for controlling the flow of current through said element comprising a resilient member within the case and having one of its ends fixed to and insulated from the case and another member fixed to and insulated from the case and connected to said element, a button fixed to the movable end of the resilient member and extended to the outside of the case, and an automatic cut-out for releasing the resilient member when the vulcanizing temperature is reached.

1,309,846. EXCAVATING-BUCKET. ROBERT M. FORTHAM, Buffalo, N. Y. Filed Oct. 22, 1917. Serial No. 197,899. 2 Claims. (Cl. 37-30.)



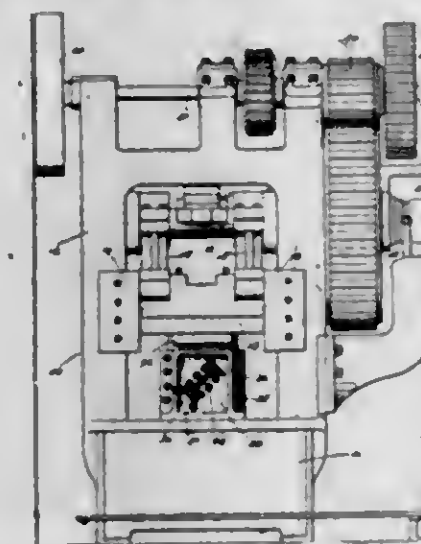
1. In an excavating bucket, the combination with a crosshead, of toggle arms hinged upon said crosshead, complementary jaws hinged on the lower ends of said toggle arms, a cylinder positioned between said jaws and pivoted to extensions thereof, a piston within said cylinder, a piston rod fixed to said piston at one end and hinged at its other end to said crosshead, said cylinder having an air vent, a return cylinder attached to the aforesaid cylinder, a plunger entering said return cylinder and having connections with said crosshead, fluid connections with both cylinders for operating the same.

1,309,847. PHOTOGRAPHIC OBJECTIVE. CHARLES W. FREDRICK and FRED E. ALTMAN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 2, 1916. Serial No. 134,733. 12 Claims. (Cl. 88-37.)



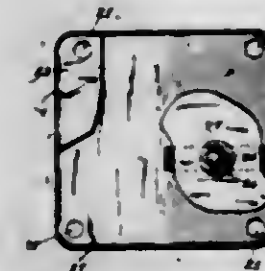
2. In a four lens objective, the combination with two identical positive lenses of two different negative lenses, the constants of the objective being such that the objective is corrected for coma.

1,309,848. STRUCTURAL-SHAPE SHEAR. CHARLES GABRIEL, Chicago, Ill., assignor to A. M. Castle & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1916. Serial No. 87,180. 9 Claims. (Cl. 164-58.)



1. A shearing device of the class described comprising a pair of die holders and a pair of dies each mounted in one of said die holders, each die comprising parts of different contour which are adjustable for providing different shapes, said parts also being reversible to permit the operation of different cutting edges.

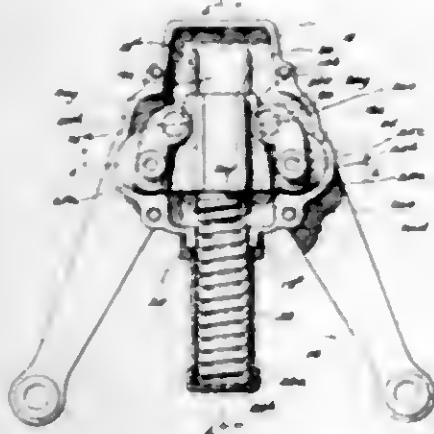
1,309,849. CONDUIT-BENDER. ROBERT HALSEY HENDERSON, East Orange, N. J. Filed Feb. 19, 1917. Serial No. 149,547. 1 Claim. (Cl. 153-32.)



A pipe bending device, comprising a substantially square base plate, there being in said base plate bolt holes for attachment of said base plate to a support, an open, hook-shaped abutment on said base plate, said abutment being located at one corner of said base plate and integrally formed therewith, a bracket extending from said base plate and integrally formed therewith, said bracket having medially a vertically disposed bolt hole, a forming member, said forming member being located

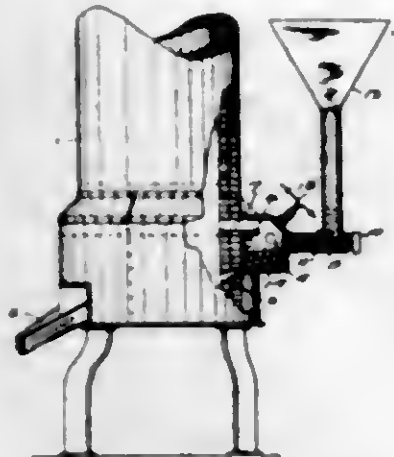
upon the upper surface of said bracket and secured thereto by a bolt, said bolt being secured to said holding member and passing through the hole in said bracket, said forming member having an arcuate groove of varying radii, said groove being deeper than the radius of the pipe to be bent, said groove fitting said pipe by a close, sliding, fit, said pipe while being bent, being permitted to expand to wedge itself in said groove, and to be movable in said groove after recovering its normal condition.

1,309,850. SHOCK-ABSORBER. JAMES B. HORNE, St. Charles, Ill. Filed July 13, 1914. Serial No. 850,696. 13 Claims. (Cl. 21—105.)



1. In a device of the class described, arms, a movable block provided with inclined sides, said arms being provided with means contacting and contacting with said sides of said block in such wise that the latter will resist movement of said arms in one direction, and means to normally return said block to normal position, said means comprising a spring member.

1,309,851. PROCESS AND MECHANISM FOR MELTING BORINGS. SAMUEL J. HUNSA, Newark, and EDWIN J. SCHWABHARTER, Jersey City, N. J. Filed Dec. 7, 1918. Serial No. 265,724. 4 Claims. (Cl. 266—27.)

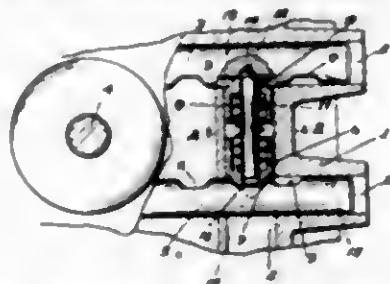


2. In an apparatus for melting pig iron, scrap iron and iron borings, an auxiliary furnace having a heater and connected with a suitable source of air pressure for producing a blast in the auxiliary furnace, a cupola furnace, the bottom of the auxiliary furnace connected with the cupola furnace at a point below the melting zone of the cupola furnace for directing the melt of the auxiliary furnace below the melting zone of the cupola furnace.

1,309,852. COMBINED SHIFT LOCK AND RETAINER. GEORGE C. JESSEN, Oakland, Calif. Filed Aug. 20, 1918. Serial No. 250,637. 7 Claims. (Cl. 74—83.)

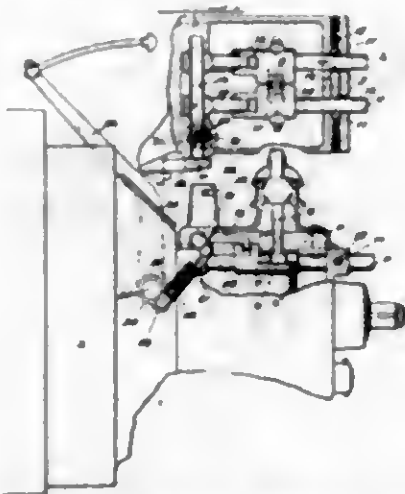
1. In combination with a pair of spaced movable shifter devices provided in their adjacent surfaces with stops, a member through which said devices operate and provided

with a bore connecting said devices, a member within said bore for cooperating with said stops to provide an interlock between said shifter devices, whereby one device is



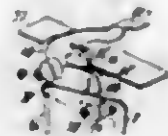
locked from movement on the movement of the other device, and a pair of retainer devices within said bore for retaining said shifter devices in their set position.

1,309,853. SHIFT-LOCK MECHANISM. GEORGE C. JESSEN, Oakland, Calif. Filed Dec. 24, 1918. Serial No. 268,191. 8 Claims. (Cl. 74—83.)



1. A gear shifting device including a casing, gear shifter elements therein provided with stops, a hand device for operating said elements, swinging fingers cooperating with said elements for locking the same in their adjusted position, said fingers incrimped at one end and their free ends adapted for swinging movement into and out of engagement with said stops, and releasable lock controlled means for locking said fingers in engagement with said stops.

1,309,854. COMBINED TYPE-WRITING AND COMPUTING MACHINE. ARTHUR A. JOHNSON, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Jan. 30, 1918. Serial No. 214,447. 21 Claims. (Cl. 235—60.)

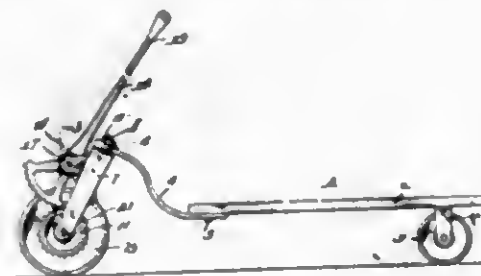


1. In a machine of the class described, the combination with a series of jacks, of a shaft on which they are slidably journaled, a traveling denomination-selector adapted to select said jacks serially to effect computations, and a device for shifting a predetermined number of jacks to position where the denomination-selector will be ineffective thereon to effect computations.

1,309,855. TOY VEHICLE. CLINTON JOHNSON, Columbus, Ohio. Filed Mar. 28, 1919. Serial No. 285,839. 2 Claims. (Cl. 208—37.)

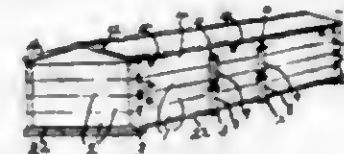
1. A toy vehicle of the class described, comprising a wheel frame, a fork member swiveled to the forward

portion of said frame, a wheeled axle rotatably supported by said fork member, an oscillatory handle structure pivotally carried by said fork member to effect the rotation of said axle and capable of shifting the latter to govern the steering of the vehicle, said handle structure including a segmental gear situated below its point



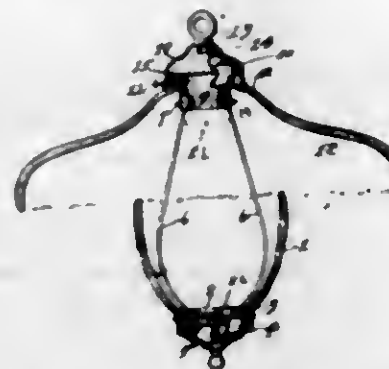
of pivotal connection with said member, a pinion loosely mounted on said axle and in mesh with said gear, ratchet means rotatable with said pinion, and a pawl carried by said shaft for engagement with said ratchet means upon alternate oscillations of said handle structure.

1,309,856. KNOCKDOWN EXTENSION COVERED WAGON-BED. CHARLES J. JOLY, Ennis, Tex. Filed Feb. 5, 1919. Serial No. 275,171. 3 Claims. (Cl. 21—7.)



1. An extension body for wagons having detachable and replaceable side and end boards and keeper brackets attached to the edges of the end boards and provided with male members, cooperating keeper brackets attached to the side boards and provided with female members countersunk in said side boards to receive said male members, and braces for the side boards to prevent lateral spreading consisting of permanent members attached to the lower side boards and extending members hingedly connected to said permanent members.

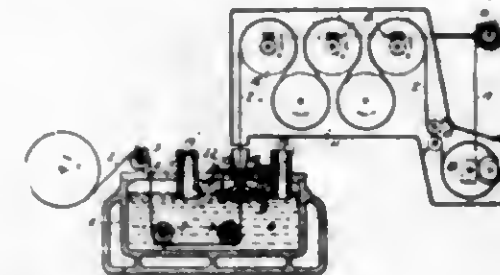
1,309,857. LIGHTING-FIXTURE. CHARLES E. JONES, Chicago, Ill., assignor to Metal Arts & Crafts Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1914. Serial No. 859,282. 3 Claims. (Cl. 240—111.)



1. In a device of the character described, the combination with a support for an inverted shade, said support having an upwardly extending frame, of a sleeve having perforations formed therein to be engaged by the upper ends of the frame, a shade holder, means mounted within said sleeve, to prevent the disengagement of the said frame therefrom, and means to secure the said sleeve in position.

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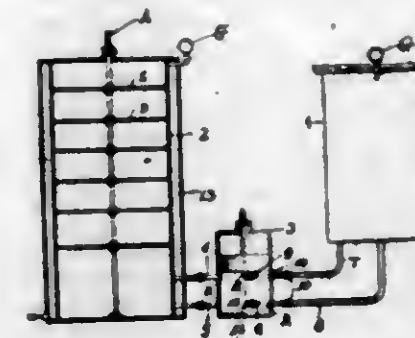
1,309,858. COATING-MACHINE. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 15, 1918. Serial No. 222,600. 17 Claims. (Cl. 91—38.)



1. In apparatus for coating a band of sheet material, means for applying coating to the band, an element having a discontinuous surface contacting with the coated band and adapted to scrape the coating from portions only of the band as it leaves the coating applying means and a second element adapted to scrape and spread the coating remaining on the band.

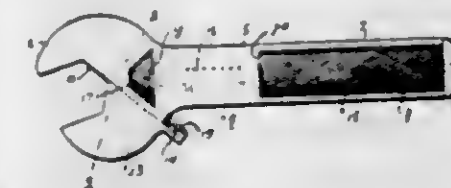
17. The process of coating a flexible band, which consists in applying a coating material to the band, scraping the applied material from portions only of the band and spreading the remaining material evenly over the surface of the band.

1,309,859. DISINFECTING APPARATUS. SADAOSIRO KAWANISHI, Tokyo, Japan. Filed May 8, 1918. Serial No. 233,260. 3 Claims. (Cl. 167—3.)



1. In apparatus of the class described, the combination of a casing, a service tank to contain a gas, a pump, and connections between the said tank and the pump, said connections having cut off valves and also having controlling valves whereby the pump may be used to exhaust air from the casing and to force gas from the tank into the casing.

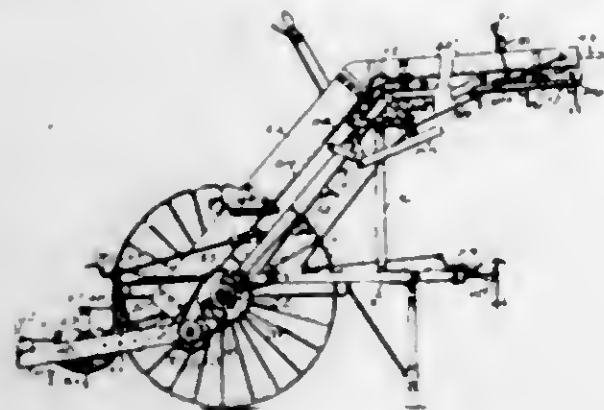
1,309,860. WRENCH. FRANKLIN M. KLEINE, Minneapolis, Minn. Filed Oct. 28, 1918. Serial No. 259,995. 2 Claims. (Cl. 81—165.)



2. In a wrench, the combination with a one-piece body having a fixed jaw at one end, and a pair of spaced arms at its opposite end, thereby causing a crotch to be formed at one end of the space between the arms and adjacent the end of the body, a cone-shaped chamber between the body and the fixed jaw, of a movable jaw having sliding

connections with one of the faces of the fixed jaw, a bore connecting the crotch between the arms and the chamber, a knurled cylinder body movably mounted between the arms and having a rod extension passing through the bore and protruding into the chamber, the other end of the cylinder having a projection, a cone worm on the projecting end of the rod and mounted in the chamber, and having a meshing engagement with a part of the movable jaw, and a cap detachably fixed to the ends of the arms and receiving said projection, whereby the cylinder may be rotated freely and without binding.

1,309,861. HAY GATHERER AND LOADER. CLEMENS LECHTERBERG, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Dec. 9, 1911. Serial No. 664,700. Renewed May 24, 1918. Serial No. 236,412. 7 Claims. (Cl. 56-358.)



1. In a hay loader, a jointed elevator embodying an endless conveyor, a series of compressor bars overlying said endless conveyor, a yielding revolving raking mechanism supported in the rear of said conveyor and having strippers associated therewith, and means flexibly connecting the lower ends of said compressor bars with said strippers so that the compressor bars may rise and fall to adapt themselves to the quantity of hay passing between themselves and the conveyor.

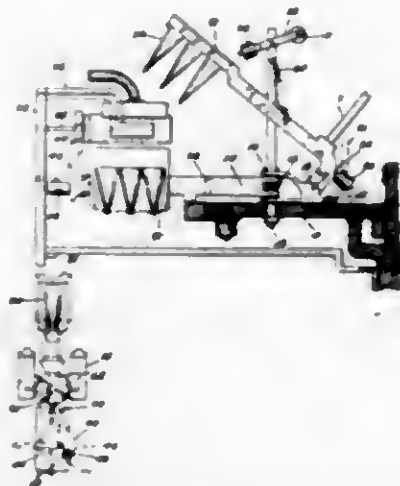
3. In a hay loader, a raking mechanism comprising a central shaft, arms outstanding from said central shaft, a plurality of revolving rake shafts mounted on said arms, rake teeth mounted upon said rake shafts, a disk having a circular groove mounted eccentric with respect to said central shaft, an arm mounted upon each of said rake shafts having end portions engaging with said grooves, whereby said arm and groove cooperate during the revolution of said raking mechanism to independently rotate said rake shafts in order to withdraw said rake teeth from the hay and parallel flexible strippers extending around the under side of said raking mechanism and between the teeth thereof.

4. In a hay loader, an elevator embodying an endless conveyor, a series of compressor bars overlying said endless conveyor, a revolving raking mechanism for delivering hay to said conveyor, a stripper member extending around the underside of said raking mechanism, a swinging link secured at one end to said stripper, and at its other end to the lower end of said compressor bars, whereby said compressor bars are free to rise and fall according to the amount of hay passing between said bars and said endless conveyor.

1,309,862. BATTER FEEDING MECHANISM FOR ICE-CREAM CONE MANUFACTURING APPARATUS. LEWIS LEWIS, Hamilton, Ontario, Canada. Original application filed Oct. 10, 1917. Serial No. 197,502. Divided and this application filed Sept. 19, 1918. Serial No. 251,822. 6 Claims. (Cl. 107-28.)

3. In apparatus for the manufacture of ice cream cones, the combination of a support; arms extending outwardly

and then downwardly from said support; grooved guides carried at the lower ends of said arms; a batter feeder



casing provided with flanges adapted to slide into said grooves.

1,309,863. PROCESS OF PREPARING PATENT-LEATHER. JAMES McDONALD, Cincinnati, Ohio. Filed Apr. 18, 1917. Serial No. 102,862. 5 Claims. (Cl. 91-68.)



1. That process of treating leather which consists in treating a hide with desired fluid, wiping off the hide, and then applying a brush, of a length to bridge the hide, with a circular movement of the entire brush in a plane parallel to the surface treated, whereby among other things, the brushing of the hide is so done as to apply equal brushing pressure at a like speed to all points of the hide.

1,309,864. SUPPLEMENTAL OILER FOR JOURNALS. DANIEL M. MAHANEY, New York, N. Y. Filed Dec. 3, 1918. Serial No. 265,142. 3 Claims. (Cl. 64-28.)



1. A supplemental oiler for journals of the class described mounted in journal boxes having the usual brasses and pivoted covers, said oiler comprising a reservoir mounted on the inner face of the cover of said box, a discharge pipe connected with said reservoir and a valve in said pipe, said valve being normally closed, means secured to the box in juxtaposition to said valve for opening the same, and means involving a fusible device secured in the inner face of the brass of the journal for holding said first named means in an inoperative position.

1,309,865. WATCH-HOLDER. ALEXANDER MILNE, Newark, N. J. Filed Jan. 30, 1919. Serial No. 274,005. 2 Claims. (Cl. 224-4.)

1. A watch holder composed of a base and a cover, the base being formed with a front wall curved to conform to the back of a watch, a rearwardly extending rim connected to said front wall and adapted to hold a watch spaced away from a supporting surface, the said cover being formed with a front wall curved to conform to the

front of a watch and provided with an opening therein to render the watch visible, a rearwardly extending rim connected to the front wall, and an annular flange connected to the rear of said rim, the rim of the cover being provided with an opening for the passage of a watch



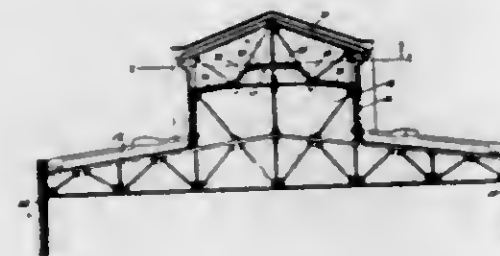
stem therethrough, the front walls of the said cover and base forming a watch-receiving receptacle with the said rim spacing said watch-receiving receptacle away from the supporting surface, the annular flange of said cover being arranged for securement to a supporting surface.

1,309,866. REFRIGERATOR LINING. HUGO MOCK, New York, N. Y. Filed Jan. 27, 1919. Serial No. 273,210. 4 Claims. (Cl. 220-43.)



1. In a heat insulator, the combination of metallic plates spaced apart and hermetically joined together by a vitreous material so as to inclose an air space, said plates having a vitreous lining on the outside and a partially vitreous lining for a part of their surfaces on the inside.

1,309,867. VENTILATOR. MERRITT J. MOREHOUSE, Evanston, Ill. Filed Aug. 24, 1918. Serial No. 251,315. 9 Claims. (Cl. 98-27.)



1. A ventilator for a building comprising, in combination, a pair of roofs spaced to permit free passage of air currents therebetween, the inner roof having an opening, and means for deflecting such currents from their entering direction toward the outer roof across the opening in the inner roof.

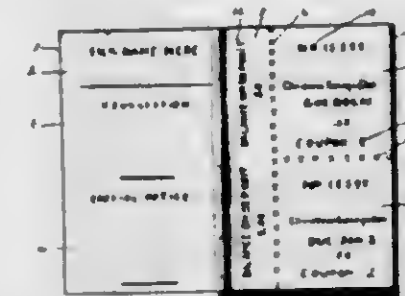
4. A ventilator comprising, in combination, a roof, a monitor surmounting the roof and having the lower portions thereof open, a roof covering the monitor, and a sub-roof joining the walls thereof at the upper margins of their closed portions, such sub-roof being inclined upwardly from each side and having an opening at its median portion, the inner portion of each side of the sub-roof having a greater pitch than the outer portions thereof.

1,309,868. SUPPORTING-FOOT FOR ARTICLES OF FURNITURE. EDWARD G. WATKINS and CHARLES A. BROWN, Gardner, Mass., assignors to Heywood Brothers and Wakefield Company, Gardner, Mass., a Corporation of New Jersey. Filed June 30, 1914. Serial No. 848,297. 1 Claim. (Cl. 155-33.)



In an article of furniture, the combination with a leg member L-shaped in cross section and having a supporting foot at its lower end, of a triangular spherical segment having its apex fitting the reentering angle of the leg member, with its sides contacting with the inner sides of the leg member and having upturned integral ears attached to the sides of the leg member.

1,309,869. DEPOSIT-BOOK. FRENCH R. WHITE, Independence, Mo. Filed Nov. 24, 1915. Serial No. 63,225. 1 Claim. (Cl. 283-51.)



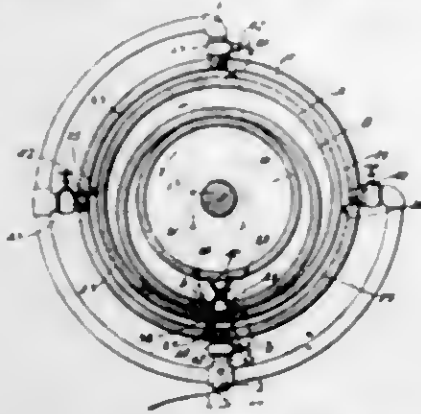
A deposit book, comprising a plurality of leaves arranged to form stub portions and a plurality of separable coupon portions, said stub portions bearing in progressive order and opposite to the respective coupons indication of the balance on deposit at the time the respective coupons are detached therefrom by the bank, said coupons bearing predetermined dates for making deposits and the amounts to be deposited on such dates and likewise bearing the depositor's identification number and a coupon serial number.

1,309,870. TROLLEY-WIRE CLAMP. DORREY G. WINCHESTER, Pruden, Tenn. Filed Sept. 10, 1918. Serial No. 254,808. 2 Claims. (Cl. 191-43.)



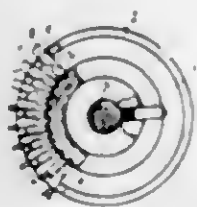
1. In a trolley wire clamp, a pair of jaw plates for disposition on opposite sides of the wire, transverse fasteners extending through and between the ends of said jaw plates and having loose connection therewith to provide fulcrums on which said plates may rock, a wedge between the upper edges of said plates for rocking them in a manner to grip the wire between their lower edges, a bolt screwed between said jaw plates and extending upwardly through said wedge, the upper end of said bolt having a threaded socket to receive a hanger stud, and a polysided collar slidable but nonrotatable on the upper end of said bolt for depressing said wedge when the collar is rotated to thread the bolt onto the hanger stud.

1,309,871. ROTARY STEAM-ENGINE. BENNET HENRY ALLEN, Aberdeen, Wash. Filed Apr. 5, 1918. Serial No. 229,919. 14 Claims. (Cl. 121-66.)



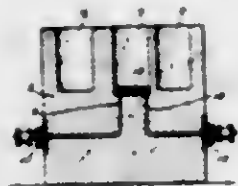
1. In a rotary steam engine, the combination of a shaft, a stationary cylindrical casing in the longitudinal center of which said shaft is journaled, said casing having an annular raceway eccentric to the shaft, pairs of cylinders fixed to the shaft and rotating within the cylindrical casing and concentric with the shaft, means to admit and exhaust steam through the stationary casings and to and from the interior of the cylinders aforesaid, and rotating abutment means within the cylinders against which the admitted steam reacts to rotate the cylinders, said abutment means including members having a pair of closely related parallel disks extending radially outward from the shaft but free thereof and between the rotating cylinders, said disks being eccentric to the shaft and having free bearing rotation in said raceway around a fixed axis.

1,309,872. CALCULATING-MACHINE. VICTOR OSKAR JULIUS ANDERSSON, Malmö, Sweden. Filed Apr. 9, 1918. Serial No. 227,427. 2 Claims. (Cl. 235-79.)



1. An adjusting mechanism for calculating machines comprising a pin wheel, adjusting pins rotatably mounted in said wheel, slots in the shank of said pins, the slots in each pin being disposed at right-angles to each other, an adjusting disk mounted at the side of said pin wheel, cam segments in the side of said adjusting disk, cooperating with the slots in the said adjusting pins and means to rotate said adjusting disk, so that its cam segments are caused to engage and disengage the slots in pin shafts, thereby causing the pins to revolve.

1,309,873. ELECTRIC HEATER. PHILIP F. APPEL, Seattle, Wash. Filed July 3, 1917. Serial No. 178,866. 2 Claims. (Cl. 210-35.)



1. An electric heater of the class described, which embodies a mass of refractory earthy material that is a non-conductor of electricity, within which mass is formed

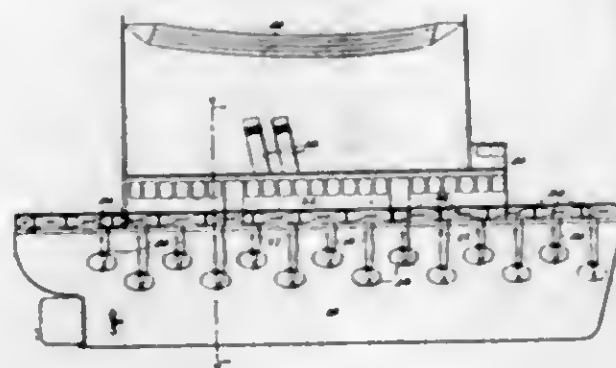
a plurality of recesses which extend inwardly from its surface, said recesses being so relatively disposed with respect to a certain one of them that the distance between different adjacent ones of them is different; an electrical heating element disposed in said certain one of said recesses; and means for connecting said heating element with an electric circuit.

1,309,874. COMBINED WRENCH AND PLIERS. WILLIAM D. ARNOT, Bellevue, Wash. Filed Nov. 27, 1918. Serial No. 264,341. 5 Claims. (Cl. 7-3.)



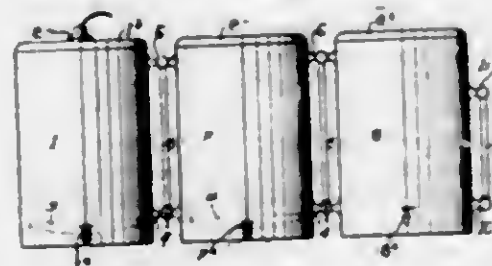
1. In a tool of the class described, a handle having a head at one end provided with a fixed jaw, a jaw movable in said head toward and away from said fixed jaw, a threaded shaft carrying said movable jaw, rotary means carried by said shaft operable to adjust said movable jaw, and another handle pivoted to said head and having a connection with said shaft to operate the tool as a plier.

1,309,875. SHIP CONSTRUCTION. FELIX BARNAK, Rosemont, W. Va. Filed Jan. 17, 1919. Serial No. 271,731. 1 Claim. (Cl. 114-68.)



2. A ship construction comprising a hull, pockets in the sides of the hull opening outwardly thereof, closing lids for said pockets, opening springs for said lids, retaining latches for the latter, a removable deck upon said hull, releasing cords for said latches extending to points upon the deck whereby said latches are adapted for simultaneous automatic opening, an inflatable float within each pocket, an inflating tube for each float extending to a source of air supply upon the deck, the said floats being adapted for inflation when removed from the pockets and adjustable positioning means for the floats at the opposite sides of the deck.

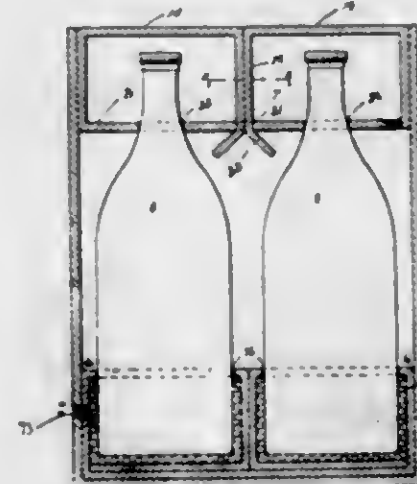
1,309,876. WATER-PURIFYING APPARATUS. JOSEPH W. BRENKERT, San Diego, Calif. Filed Mar. 22, 1916. Serial No. 85,843. 3 Claims. (Cl. 210-1.)



1. In an apparatus of the class described, the combination of an electropurifying vessel, a dish shaped partition loosely mounted in the bottom thereof provided with

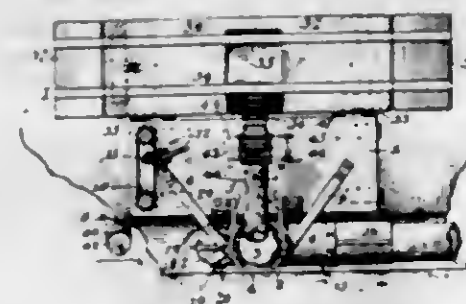
a hole in the center, a drain faucet secured in the wall of said electropurifying vessel and communicating with the interior thereof below the outer edge of said partition, whereby the sediment from said vessel may be readily removed, another vessel adjacent thereto, conducting means between said vessels provided with means for making them non communicating and with a gage in connection therewith.

1,309,877. SHIPPING-BOX. WILLIAM G. BROWNE, Denver, Colo. Filed Oct. 5, 1916. Serial No. 123,852. 2 Claims. (Cl. 217-21.)



1. A shipping box for bottled goods, comprising a packing tray, said packing tray being formed of a sheet of card board, channel cushion members secured to the opposite extremities of said sheet of card board, the said sheet of card board adapted to be folded from its opposite extremities to form two box-shaped members with said channel members riveted therein, and the tops of said box-shaped members having openings therein through which the bottoms of the bottles are received.

1,309,878. CONCRETE-PIPE MACHINE. JOHN H. CARR, Alhambra, Calif. Filed Nov. 2, 1915. Serial No. 59,171. 1 Claim. (Cl. 25-32.)



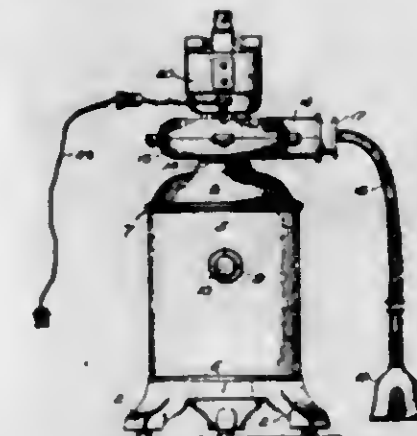
A machine of the class described having a standpipe movably supported in vertical position and having a shaping elbow at its lower end, an inner forming tube extending through the central portion of said standpipe and elbow and connected with a source of compressed air, the plastic or soft concrete standing in the pipe exerting a pressure for driving the materials out into the form of a pipe from between the said elbow and shaping tube, a cap adapted to be applied to the upper end of said standpipe and having a connection with a source of compressed air, whereby air may be introduced between the standpipe and the inner forming tube for clearing the mechanism of green cement when the pipe forming operation is discontinued.

1,309,879. VACUUM AIR-SEPARATOR. ERNEST M. DAVIDS, Tropico, and LYCURGUS LINDSAT, Los Angeles, Calif. Filed Jan. 6, 1919. Serial No. 269,921. 2 Claims. (Cl. 83-40.)



1. A separator comprising a funnel-shaped outer shell; means for discharging material into the bottom of the outer shell; an elbow extending downwardly from the bottom of the outer shell; a spout extending downwardly from the bottom of the elbow; an air intake leading horizontally into the bottom of the elbow; an inner funnel-shaped shell concentrically mounted in the outer funnel-shaped shell and forming a chamber between the two shells; a take-off spout leading from the bottom of the second funnel-shaped shell downwardly and outwardly through the first shell; rims extending upwardly from the inner and outer shells and forming an extension chamber, there being openings through the inner shell from the extension chamber; said openings being evenly spaced apart around the shell; adjustable swinging gates arranged in the openings, the gates all pointing in the same direction; a cover fitting upon the rims; a baffle extending downwardly from the cover concentric to the inner rim; a suction pipe extending downwardly through the cover concentric to the baffle; a suction fan connected to the suction pipe; a spout leading outwardly and downwardly through the outer rim; and adjustable gates for controlling the circulation.

1,309,880. AIR-CHARGING DEVICE. FRANK C. DORRMENT, Detroit, Mich., assignor of one-half to George J. Lowe, Cleveland, Ohio. Filed Oct. 24, 1918. Serial No. 250,559. 5 Claims. (Cl. 128-186.)

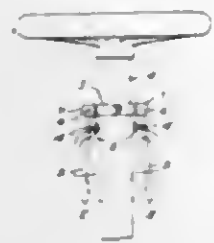


1. An apparatus of the character described comprising a container adapted to receive air above the bottom thereof and hold a volatile liquid on the bottom thereof, a casing communicating with the top of said container having an outlet, and means in said casing adapted to produce a partial vacuum in said container to cause air to travel downwardly toward the bottom of said container and then upwardly through said casing.

1,309,881. CIRCUIT-CLOSER. FREDERICK E. EDWARDS, San Francisco, Calif. Filed Aug. 6, 1917. Serial No. 184,612. 3 Claims. (Cl. 200-27.)

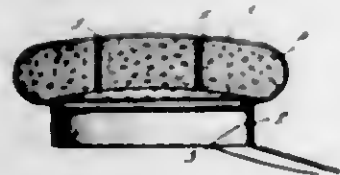
1. An apparatus for controlling a signal device on an automobile, comprising a movable arm arranged to be engaged by the knee of the driver, circuit closing means

operated by the movement of said arm, and a pivotal mounting for said arm whereby the arm may be swung



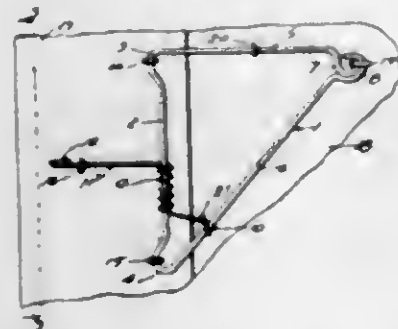
into and out of the path of movement of the knee of the driver.

1,309,882. SAFETY HEADCOVERING FOR THE PROTECTION OF WORKMEN'S SKULLS. ROBERT ANDERSON FALCONER and FRANK MENDIENZA, Shooter Island, N. Y. Filed Nov. 11, 1918. Serial No. 262,089. 2 Claims. (Cl. 2-108.)



1. A head protector comprising a hat or cap having a lower part to fit around the head of a person and a crown beyond said lower part, said crown extending outward beyond the said lower part, and a block fitted in said crown and extending outward beyond said lower part a considerable distance, whereby the head and features of the person are protected from falling bodies.

1,309,883. HINGE. CHARLES F. FISHER, Los Angeles, Calif. Filed May 5, 1919. Serial No. 294,951. 2 Claims. (Cl. 10-25.)



1. A hinge comprising a wire bent to form a straight central portion, bearings at the ends of the central portion, braces extending from the bearings, mating eyes at the ends of the braces, and a torsion spring mounted upon the straight central portion, one end of the spring being connected to a brace and the other end of the spring extending straight out from the central portion.

1,309,884. DOLL EYE-ACTUATING DEVICE. MAX FRANK, New York, and HUGO FROSTHACH, Brooklyn, N. Y. Filed Jan. 18, 1919. Serial No. 271,815. 5 Claims. (Cl. 40-40.)

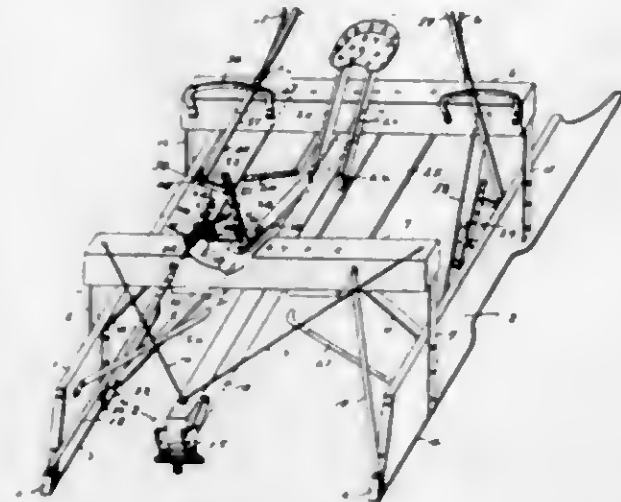
1. In a doll eye mechanism, the combination with the hollow head of a doll having openings simulating eyes, of a pair of eye balls, gimbal joint mountings for said eye balls, and a plurality of counterweights, one pair of said weights for causing the eyeballs to oscillate for simulat-

ing the opening and closing of the eyes, and the others of said counter weights being so arranged as to cause said



eyeballs to move simultaneously laterally in one or the other directions upon the corresponding movement of said head to simulate the lateral movement of the eye pupils.

1,309,885. BEAN-VINE CUTTER. JOSEPH FRITSCH, Puente, Calif. Filed June 20, 1918. Serial No. 241,060. 2 Claims. (Cl. 55-60.)



1. In a bean harvester, a runner, a bearing at the inner side and lower edge of the runner and near its forward end, a plute rotatably mounted in the bearing parallel with the runner, a cutter bar pivotally connected to the rear end of the plute and extending inwardly and backwardly to near the rear of the runner, an arm rigidly connected to the cutter bar and extending toward the runner, means for adjustably and pivotally connecting the arm to the runner, a bell crank lever pivotally connected to the runner to swing transversely of the runner, a link connecting the lower end of the bell crank lever to the cutter bar, and a handle, latch and sector construction for adjusting the position of the bell crank lever to adjust the position of the cutter bar.

1,309,886. WINDOW VENTILATOR. ALBERT B. FINE, Macomb, Ill. Filed Aug. 22, 1918. Serial No. 250,975. 3 Claims. (Cl. 98-31.)



1. A window ventilator including a frame-like casing, an inwardly and upwardly swingable panel in the front of said casing normally disposed in a vertical plane when closed, manually operable means to open said panel in-

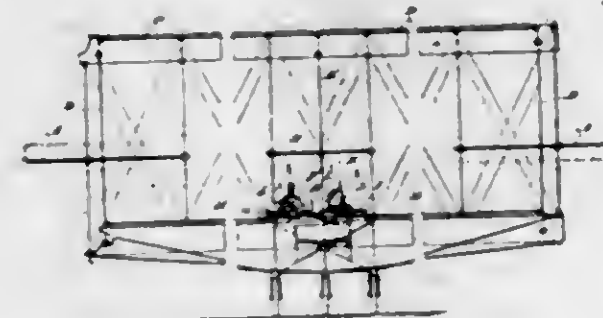
cluding a pivoted link, and means to maintain said link against pivotal movement to retain the panel in adjusted open positions.

1,309,887. ELECTRIC-WIRING TERMINAL. LE ROY MYRON FULTON, Des Plaines, Ill. Filed June 19, 1918. Serial No. 240,748. 1 Claim. (Cl. 173-269.)



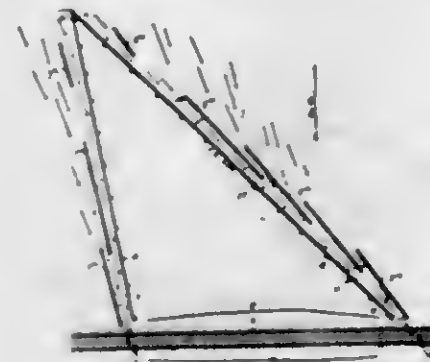
A device of the character described including a base; two extensions secured thereto and adapted to overlap one another; means affixed to one of said extensions and disposed adjacent the base for engaging a wire, extending longitudinally of that extension, upon that extension and passing over the wire between the wire and the other extension and adapted to allow the wire to be doubled back over said means to form a bight thereabout between the extensions; and additional means adjacent the end of said extensions opposite said base to clamp the extensions together with the overlying sections of the wire therebetween, whereby the extensions are secured together at their ends with said first mentioned means and the associated bight portion of the wire disposed between them to afford a multiplied and resilient pressure upon the portion of the wire associated with said first mentioned means.

1,309,888. STABILIZING MECHANISM. CLAUDE W. GIBSON, Boise, Idaho, assignor of one-fourth to Allen B. Eaton, Boise, Idaho. Filed Dec. 22, 1915. Serial No. 68,144. 25 Claims. (Cl. 244-29.)



1. An automatic electric controller to control the rectifiers to rectify the machine, said controller having an electric gravity switch, and a gravity-inertia switch which automatically breaks the circuit in case the gravity switch closes the circuit through momentum as contrasted with the tilt of the machine.

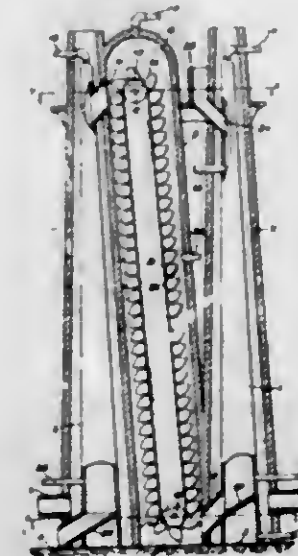
1,309,889. SUCTION-DRAFT SNOW-FENCE. HIRSH N. GILMORE, Miles City, Mont. Filed Jan. 15, 1919. Serial No. 271,309. 4 Claims. (Cl. 104-278.)



1. The herein described method of protecting an object from drifting snow which consists of embodying a two-part fence the parts of which form an angle of not less

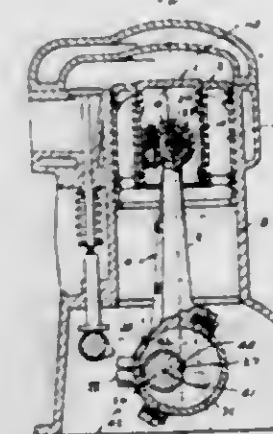
than twenty degrees directed into the prevailing storm winds and disposed in such relation to the object to be protected as to direct the blast at an angle across the opposite ends of such object.

1,309,890. APPARATUS FOR DISTILLING SHALE AND THE LIKE. HAROLD H. GODFREY, Los Angeles, Calif. Filed May 5, 1919. Serial No. 294,875. 2 Claims. (Cl. 190-19.)



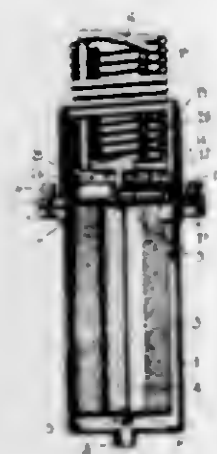
1. An apparatus for distilling shale and the like comprising two heaters in the form of vertical flues mounted upon a foundation, an elevator shaft connecting the bottom of one heater to the top of the other heater, an elevator in the elevator shaft, a retort mounted in each of the heaters, a funnel at the top of one heater and having a spout discharging into one retort, a spout leading from the bottom of the retort to the bottom of the elevator shaft, a spout leading from the top of the elevator shaft to the top of the other retort, a spout leading outwardly of the second retort, and a pump connecting the bottom of the elevator shaft to the upper part of the first retort.

1,309,891. COMPOUND PISTON FOR INTERNAL-COMBUSTION ENGINES AND THE LIKE. ERNEST GRIFFITH, Long Beach, Calif., assignor of one-half to George D. Gilmore, Los Angeles, Calif. Filed June 20, 1918. Serial No. 241,039. 4 Claims. (Cl. 123-51.)



1. An internal combustion engine comprising a cylinder, a combustion chamber at one end thereof, a plurality of pistons slidably mounted upon each other, the cross-sectional area of any of said pistons being at least a major part of any other of said pistons, a crank shaft and connecting rods forming a compound transmission from the pistons to the crank shaft, said connecting rods being of substantially the same length and the same strokes, the strokes being differently timed.

1,309,892. WATER HEATER AND FILTER. CHARLES JOHNS, JR., and ALBERT E. JOHNS, Detroit, Mich. Filed July 29, 1917. Serial No. 42,636. Renewed Feb. 17, 1919. Serial No. 277,659. 1 Claim. (Cl. 210-1.)



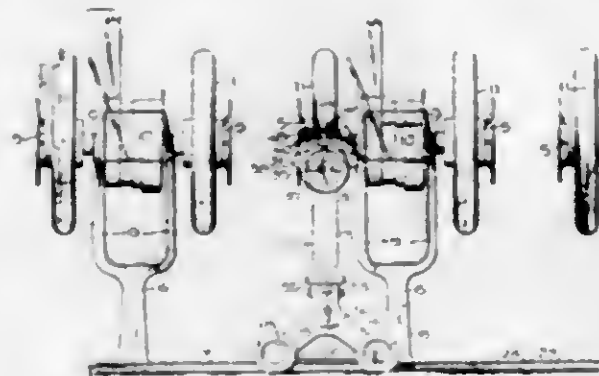
A water filter and heater comprising an upright casing with heating coils therein, a water filter cylinder disposed below and in axial alignment with the coils and provided with an enveloping casing, a cap comprising a division wall between the filter and coils and containing water outlet connections from the filter to the coils, a gas burner extending into the coil casing on the cap, and a water outlet connection from the filter and a hot water outlet from the coils together with a hot water faucet controlling the outlet from the coils and interconnected with a gas cock from the burner, to open simultaneously therewith, and a cold water faucet from the cold water inlet, the cap forming an insulating element between the filter chamber and cylinder and the chamber formed by the coil casing.

1,309,893. LANTERN. ANDREW J. JOHNSON, Green Bay, Wis. Filed May 7, 1918. Serial No. 233,123. 1 Claim. (Cl. 240-13.)



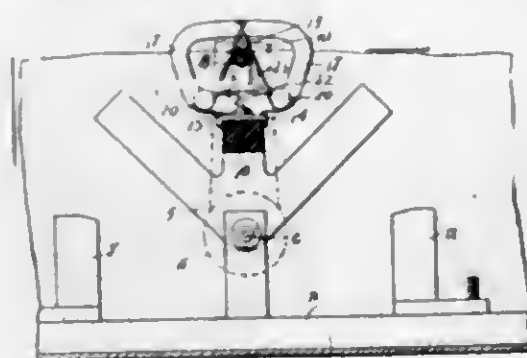
A lantern of the class described comprising a tubular body member of transparent non-frangible material, a thin metal sleeve arranged flush with the lower end of said member with their adjacent ends abutting, an inverted U-shaped brace composed of a strip of flat metal with its legs straddling said sleeve and member and riveted thereto, said sleeve having a bayonet slot in its lower edge, a cup-shaped member with a centrally disposed socket and a flared base with an annular shoulder at the juncture of its base on which said sleeve rests, said cup-shaped member having a laterally projecting headed stud for detachable connection with the slot in said sleeve, a disk-shaped deflector having diametrically opposite recesses to receive the arms of said brace, the periphery of said deflector extending laterally beyond the side walls of the body member, and a suspension element in the form of an eye bolt extending through said curved brace portion and deflector, the eye portion projecting outwardly to form a suspension device.

1,309,894. TREADING-MACHINE. KARL B. KILBORN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 13, 1916. Serial No. 131,048. 3 Claims. (Cl. 154-10.)



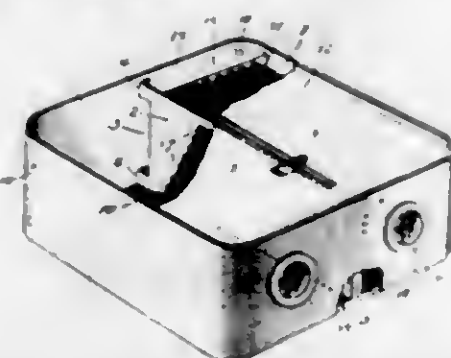
1. An apparatus for treading tires including a trackway, a plurality of revolvable tire holders arranged in proximity to said trackway, a frame mounted for movement upon the trackway, a stitchee head carried by the frame and stitchees mounted upon said stitchee head for a variable and successive engagement with the periphery of the tires mounted upon the said tire holders.

1,309,895. QUICK-BREAK SWITCH. KNUD KNUDSEN, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Aug. 23, 1918. Serial No. 251,160. 9 Claims. (Cl. 175-282.)



4. As an article of manufacture, a quick break attachment for switches, comprising a unitary attachable element provided with spaced out-standing arms and spring elements provided with out-standing spring arms disposed between the spaced out-standing arms and exerting tension in reverse directions.

1,309,896. REGENERATOR FOR BREATHING APPARATUS. FREDERICK WILLIAM KOEHLER, Wilkesburg, Pa., assignor to American Atmos Corporation, Wilkesburg Station, Pittsburgh, Pa., a Corporation of New York. Filed Mar. 27, 1919. Serial No. 285,700. 11 Claims. (Cl. 128-191.)



1. A regenerator for breathing apparatus and the like, comprising a casing and a unit for distributing regenerat-

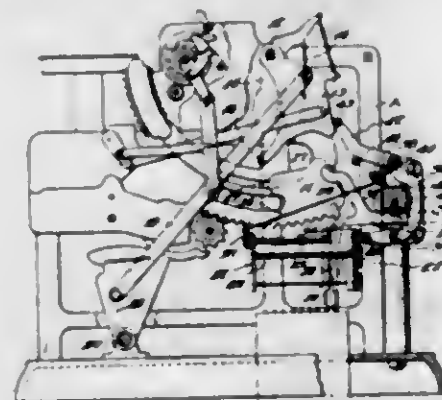
ing material therein, comprising end grids and parallel reticulated tubular members held in place by said grids, the regenerating material being distributed between the tubular members and grids.

1,309,897. LOCK FOR ACCUMULATOR MECHANISM OF ADDING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1916. Serial No. 73,268. 15 Claims. (Cl. 235-60.)



1. In a device of the character described, the combination of adding wheels; carrying bars associated therewith and adapted to assume carrying and non-carrying positions; means for positively locking the bars in each position against movement toward the other position, said adding wheels being operable to release said carrying bars.

1,309,898. AUTOMATIC NAUGHT-STOP FOR ADDING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 18, 1919. Serial No. 79,014. 15 Claims. (Cl. 235-58.)



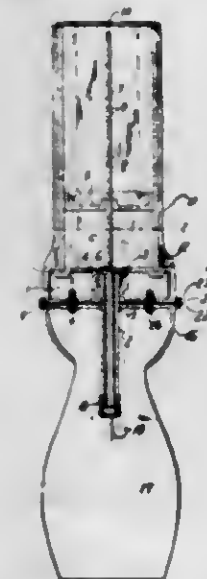
1. The combination with a tabulator printer having type segments, means for positively maintaining said segments in naught printing position, means for supporting said naught-stopping means in naught printing position, means for determining the position of said segments for printing position, means for operatively connecting said determining means with said supporting means whereby to rock said supporting means out of supporting position when one of said determining means is positioned thereby permitting the free movement of said segments retracting means for said type segments, means for restoring said naught stopping means, and means for operatively connecting said segment retracting means with the restoring means of said naught stopping means so that the withdrawal of said segment-retracting means will actuate said restoring means.

1,309,899. MACHINE-BASE. MEREDITH LEITCH, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 31, 1917. Serial No. 188,046. 9 Claims. (Cl. 248-30.)



2. A machine stool comprising a series of upright panels of sheet metal, and corner pieces uniting adjacent panels and extending above and below the same, the part of each corner piece extending below the panels being shaped to form a supporting foot and the part of each corner piece extending above the panels and being cut and bent to form a horizontal shelf overlying adjacent panels.

1,309,900. FOUNTAIN-BRUSH. RONALD W. MACDONELL, Oakland, Calif. Filed Sept. 3, 1918. Serial No. 252,296. 4 Claims. (Cl. 15-50.)

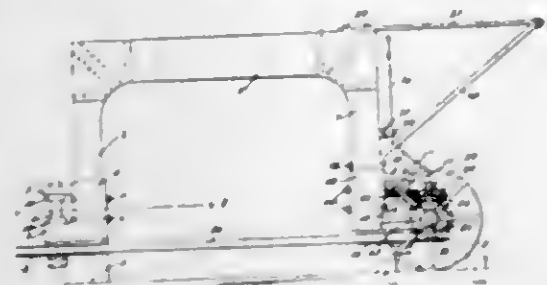


1. In a fountain brush, the combination of a bristle casing, bristles contained therein, a tube for supplying fluid material, extending longitudinally in said bristles, and rotatable with said casing, a threaded stem rotatable with said casing, a reservoir around said stem, a plunger non-rotatable in said reservoir and through which said stem is screwed, means for inclosing said reservoir rotatable in one direction relatively to said casing, and means for preventing rotary movement of said inclosing means in the other direction.

1,309,901. WOOD-SAWING DEVICE. DEMOS B. MACCORT, Gilbert, Wash. Filed June 29, 1918. Serial No. 242,032. 3 Claims. (Cl. 143-19.)

1. In a device of the class described, an upstanding U-shaped frame; a shaft journaled on one end of the frame; outstanding upper and lower bearings on the other end of the frame; a drive shaft journaled in the upper and lower bearings; a band saw carried by the shaft; a pinion secured to the drive shaft; a stub-shaft fixed in the lower bearing; a pinion journaled on the stub-shaft and meshing

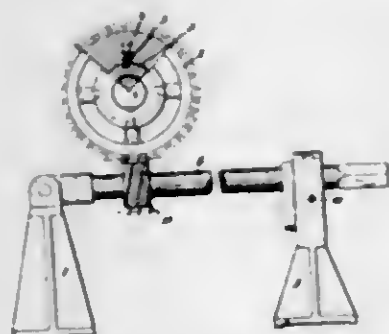
into the pinion of the drive shaft, the pinion on the stub-shaft carrying a beveled gear; an axle mounted in the lower bearing; ground wheels carried by the axle; a beveled gear journaled on the axle and meshing into the beveled gear on the stub-shaft; and means movable on the axle and under the control of an operator for coupling the beveled gear on the axle with a source of power.



2. In a device of the class described, a frame; an axle mounted in one end of the frame; a shaft journaled on said end of the frame; a gear train including a driving member mounted on the axle, and means for operatively connecting the driving member with the shaft; a clutch interposed in the driving train; a second shaft journaled on the frame; a band saw operatively connected with the shafts; and ground wheels on the axle.

3. In a device of the class described, a frame; a shaft journaled in the frame; an axle carried by the frame and disposed at right angles to the shaft; intermeshing pinions, one of which is carried by the shaft, the other of which is journaled on the frame; a beveled pinion mounted to move with said other pinion; a beveled pinion journaled on the axle and meshing into the first specified beveled pinion; a driving element journaled on the axle; a clutch forming a connection between the driving element and the last specified beveled pinion; a second shaft mounted on the frame; a band saw operatively connected with the shafts; and ground wheels carried by the axle.

1,309,902. MECHANICAL STARTING APPLIANCE FOR ENGINES. WILLIAM HENRY MARTIN, Temerfield, New South Wales, Australia, assignor to Thomas Hammond Martin, Sydney, New South Wales, Australia. Filed May 6, 1919. Serial No. 295,234. 5 Claims. (Cl. 74-36.)

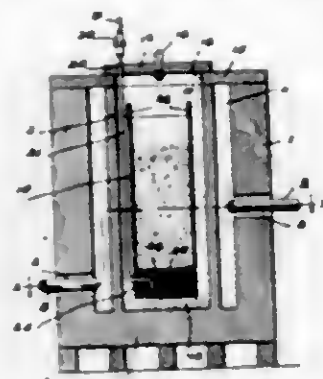


2. In appliances for starting engines, a composite device consisting of a box worm wheel, a ratchet wheel inclosed therein, pawls for connecting the worm wheel with the ratchet, in combination with a worm shaft that is susceptible to a rotary movement and to a limited movement in a vertical plane, a worm upon the worm shaft such worm meshing with the worm wheel upon the crank shaft and means for disengaging the worm from the worm wheel as and for the purpose herein set forth.

1,309,903. APPARATUS FOR THE MANUFACTURE OF ALKALI CYANIDE. FLOYD J. METZGER, New York, N. Y., assignor to Air Reduction Company, New York, N. Y., a Corporation of New York. Filed July 25, 1917. Serial No. 182,644. 6 Claims. (Cl. 23-13.)

1. In apparatus for the production of alkali cyanide, the combination of a furnace provided with a furnace chamber, a retort situated within said chamber and having an

external diameter less than the internal diameter of the said furnace chamber whereby a space is provided between the said retort and the interior surface of the said



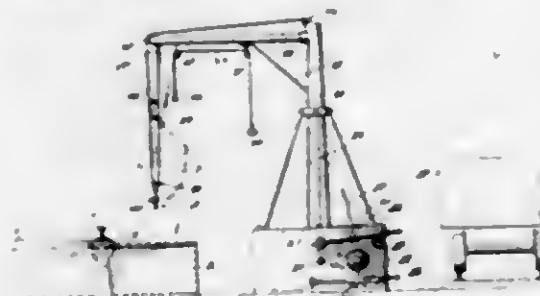
chamber, and a conduit extending into the said furnace chamber intermediate the said retort and the interior surface of the said chamber, said conduit entering the said retort at a point at or near the bottom thereof.

1,309,904. SALES TAG. RAYMOND L. MILLS, CHARLES F. H. MILLS, and ARTHUR D. CARREL, Grand Rapids, Mich. Filed Feb. 20, 1919. Serial No. 278,298. 3 Claims. (Cl. 40-2.)



3. In a sales tag, a main tag securely attached to the article for sale with a clear open space between the tag and the surface of the article, a narrower duplicate tag made integral with the main tag and arranged to fold backwardly between the main tag and the surface of the article, and then folded forwardly and made easily accessible for withdrawal therefrom, the tags so constructed as to be readily disconnected.

1,309,905. ASH-HANDLING DEVICE. ALFRED A. MOORE, Endeavor, Wis. Filed Dec. 6, 1917. Serial No. 205,856. 4 Claims. (Cl. 214-40.)

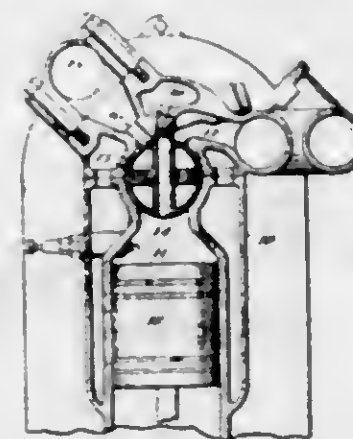


1. An ash handling device comprising a pit, a trackway supported above said pit, a tank extending under said trackway, a wire mesh cylinder carrying basket adapted to be placed within said tank, a water supply means communicating with said tank, rollers supported upon the sides of said basket, a ball pivotally secured to said basket, a pulley block secured to the upper end of said ball, and a tripping cable passing over said pulley block and secured to the bottom of said basket for facilitating the dumping of said basket when the same is raised and moved to a desired position.

1,309,906. VALVE MECHANISM FOR GAS ENGINES. FRANK L. MORSE, Ithaca, N. Y. Filed Nov. 18, 1915. Serial No. 62,092. 8 Claims. (Cl. 123-80.)

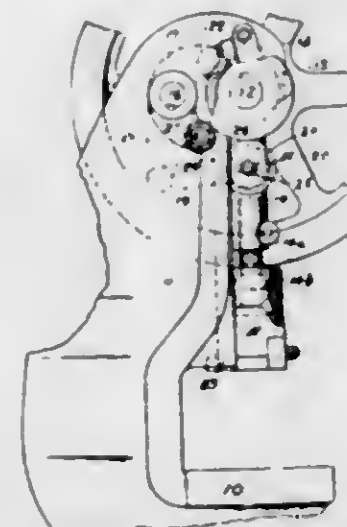
1. In an engine, the combination with a rotary valve having ports, of a rotatable element driven by the engine

at a substantially uniform rate, and an intermediate variable speed mechanism so connected as to gradually



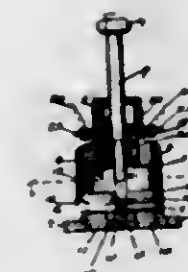
accelerate the movement of the valve during the opening of the port and to gradually retard said movement during the closing of said port.

1,309,907. PUNCHING-PRESS. FRANK L. MORSE, Ithaca, N. Y. Filed Oct. 13, 1916. Serial No. 125,383. 14 Claims. (Cl. 164-100.)



1. In a punching press, the combination with a rotary shaft, an eccentric mounted thereon, a pitman connected to the eccentric, and a punch operated thereby, the arrangement of said parts being such that the punch engages the stock at substantially the highest position of the eccentric, of mechanism operating after the completion of the downward movement of the eccentric to separate the punch and stop to allow for the shifting of the latter.

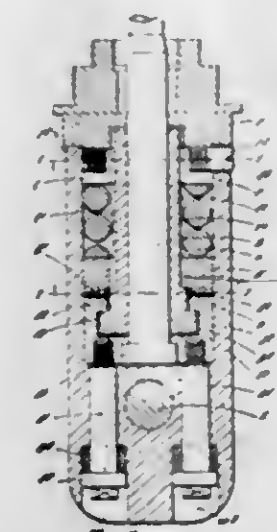
1,309,908. AUTOMATIC HEAT-CONTROLLED CUT-OUT. WILLIAM C. NEWELL, Portland, Oreg. Filed June 27, 1917. Serial No. 177,413. 10 Claims. (Cl. 200-33.)



8. In a circuit controlling device, a latch member movable in opposite directions, a member carrying the same, a fusible material for holding said latch member against

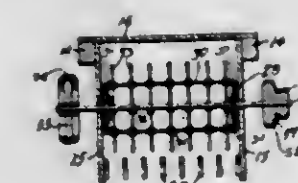
movement relative to the carrying member, and a yielding means positioned to be engaged by said latch member and to be moved thereby when said latch carrying member is moved adjacent thereto, substantially as described.

1,309,909. SUBMARINE MINE. THOMAS KEPPEL, North, Westminster, London, England, assignor to Vickers Limited, Westminster, England. Filed June 21, 1917. Serial No. 176,002. 6 Claims. (Cl. 102-3.)



1. In a firing gear for submarine mines of the type comprising a buoyant casing for an explosive and an anchor for normally holding the casing submerged, the combination of a socket adapted to be secured to the mine casing, a firing rod displaceable longitudinally relatively to the casing, a clutch device consisting of rotating and non-rotating members disposed co-axially with respect to said rod, a firing arm connected to the rotary member of the clutch device, and means for normally holding said rotary element against rotary movement relative to the mine casing, said means being releasable, so that when a ship strikes the firing arm the angular movement given to said rotary element will free it from the mine casing to permit movement of the firing rod relative to the mine casing to occur.

1,309,910. BEAN-THRESHER. LESTER DONALD PAULSON, Clear Lake, Iowa. Filed July 22, 1918. Serial No. 246,248. 4 Claims. (Cl. 130-30.)

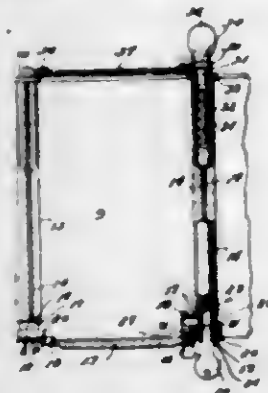


3. In a device of the character described, the combination of a supporting frame, a rotatable shaft carried by said frame, a rotary beater frame keyed upon said shaft, one piece tines consisting of the members extending at substantially right angles to each other, said tines engaging said shaft and said the members extending to engage said beater frame, and means for fixing said the members upon said beater frame.

1,309,911. STORE-FRONT. ROGER S. PEARSE, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1915. Serial No. 59,700. 2 Claims. (Cl. 211-8.)

2. A store front comprising a plurality of disjoining compartments provided with doors accessible from the

exterior of the store, locking means for the doors controlled by keys inserted at the exterior of the store, means



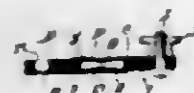
for locking the keys against removal, and means operable from the interior of the store for releasing the keys.

1,309,912. CARTER. HARRY J. PENN. Madison, N. C. Filed Feb. 28, 1919. Serial No. 279,710. 1 Claim. (Cl. 241-5.)



In a carrier, a length of elastic material folded transversely intermediate its ends and extended reversely to form a pad of double thickness, the said reversely extended material continuing beyond the pad, and thence folded transversely and extended back toward the pad and secured to the length to form a guard, a fastening element carried by said end of the length and having its attached part spaced from the wearer's leg by the guard, a second fastening element carried by the opposite end of the length for cooperation with the first mentioned fastening element, the pad underlying both fastening elements when the same are engaged.

1,309,913. SPARK GAP MECHANISM. CHARLES J. REED, Glenside, Pa. Filed Aug. 8, 1917. Serial No. 185,113. 21 Claims. (Cl. 123-165.)



1. A spark gap mechanism comprising a body of insulating material having an aperture, and electric conductors extending into said aperture from opposite ends thereof to form a spark gap.

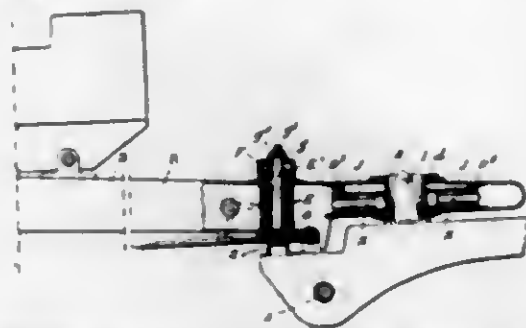
2. A spark gap mechanism comprising a flat support having an aperture, electric conductors on opposite sides of the support formed of flat stock, and means for electrically insulating said conductors from each other, said conductors being so formed relatively to each other as to establish a sparking relation in said aperture.

3. A spark gap mechanism comprising a flat elongated support having an aperture, electric conductors on opposite sides of the support formed of flat stock, and means for electrically insulating said conductors from each other, said conductors being so formed relatively to each other as to establish a sparking relation in said aperture.

4. A spark gap mechanism comprising a flat elongated support of insulating material having an aperture, and electric conductors on opposite sides of the support formed of flat stock and having portions in said aperture in sparking relation.

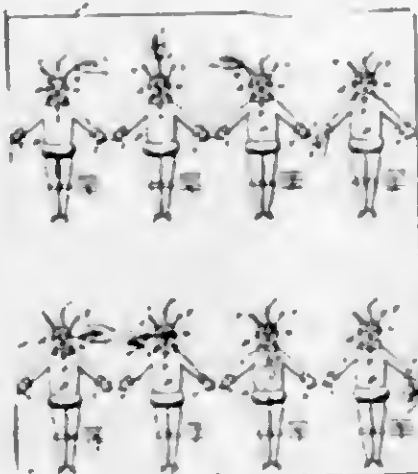
5. A spark gap mechanism comprising a support having an aperture, electric conductors on opposite sides of said support and across the aperture, one of said conductors having a cone-shaped projection extending into said aperture and means for electrically insulating said conductors from each other.

1,309,914. APPARATUS FOR CONNECTING GUN-CARRIAGES TO THEIR LIMBERS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,185. 11 Claims. (Cl. 89-40.)



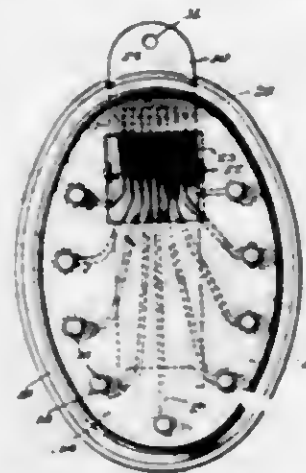
1. In combination with a trail, a limber and a coupling between the forward end of the trail and said limber, an elastic supporting member on said trail adapted to rest upon the limber for taking the weight of the trail.

1,309,915. MUSICAL EDUCATIONAL CHART. SAMUEL SIEGEL, Chicago, Ill., assignor to Anna Siegel, Chicago, Ill. Filed Mar. 11, 1915. Serial No. 13,722. 2 Claims. (Cl. 84-85.)



1. A music chart for use with a sound producing manikin having movable parts for producing different tones of an octave, comprising a series of pictures of the manikin with the representations of the movable parts thereof illustrated in the pictures with the desired movable parts shown in operative positions in the pictures for indicating the desired series of tones to be produced, the chart also having illustrated thereon tone indicating data located relatively to the corresponding moved parts in the pictures.

1,309,916. FIRE-ALARM. JOHN H. SMIDLEY, Baltimore, Md. Filed Nov. 27, 1918. Serial No. 264,308. 7 Claims. (Cl. 116-11.)



1. A fire alarm comprising a hanger, a gravity-operated cartridge holder slidable in relation to said hanger, a

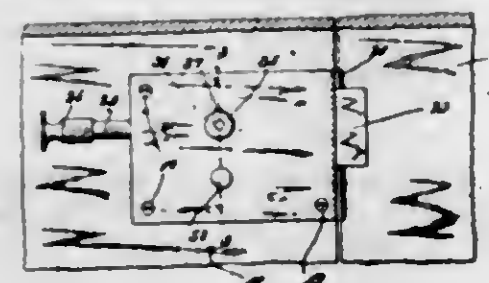
fusible connector by which said holder is normally attached to said hanger, adapted to release the latter when subjected to a certain degree of heat, cartridges carried by said holder, differentially timed fuses for said cartridges having friction ignitable terminals, and a stationary friction surface in contact with which said terminals move when said holder is released.

1,309,917. CRANK-PISTON CONNECTOR. NAWOKICHI TANAKA, Boston, Mass. Filed Mar. 14, 1919. Serial No. 282,719. 10 Claims. (Cl. 74-5.)



1. A connecting medium of variable connection length for a crank and a reciprocating member, comprising a rod and a cam mechanism adapted to operate between said rod and said crank, in response to angular variation of the relative inclination between the rod and said crank, as herein substantially described.

1,309,918. LOCK AND BOLT. CARMINE TERRACCIANO, New York, N. Y. Filed Sept. 29, 1917. Serial No. 193,960. 8 Claims. (Cl. 70-40.)

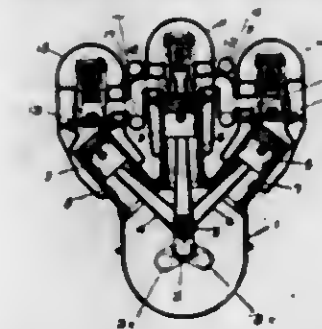


1. A lock comprising a casing, a bolt having a rectangular cross section throughout slidable longitudinally in said casing, a flat level plate movable transversely in said casing in intimate contact with said bolt, a detent formed with said plate engageable with recesses in said bolt, an elliptic spring secured to said plate whereby said detent is held in engagement with said bolt, a barrel lock, a bar extending therefrom into said casing, a rotatable sleeve engaged on said bar, and a single lateral two stepped ward formed with said sleeve, one of the steps being engageable with said plate and the other step with said bolt.

1,309,919. INTERNAL-COMBUSTION ENGINE. FRED I. TONE, Indianapolis, Ind. Filed Sept. 16, 1916. Serial No. 120,497. 4 Claims. (Cl. 123-55.)

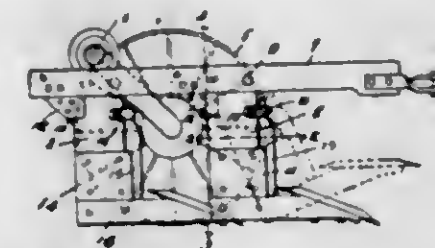
1. In an internal combustion engine, in combination with cylinders arranged in three rows extending longitudinally of the engine shaft, an exhaust manifold be-

tween each of the side rows and the central row, each of said exhaust manifolds having common communication



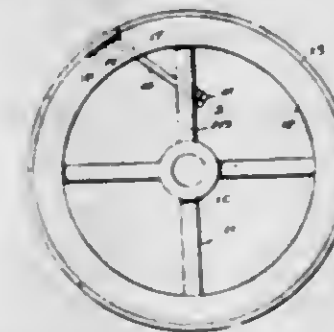
with the cylinders of said side row and with the central cylinders on one side of the latter.

1,309,920. SUBSOILER, PLOW, AND THE LIKE. HENRY FRED TOWNER, Santa Ana, Calif. Filed Feb. 27, 1919. Serial No. 279,634. 4 Claims. (Cl. 97-32.)



4. In sub-soilers, plows and the like, a frame, a standard pivotally connected thereto, plates secured to the sides of the standard and extending beyond the forward edge thereof, a cutter lying in the space between the said plates and adapted to bear against the standard, and a clip secured to the standard and embracing the cutter at its upper end.

1,309,921. PULLEY. PEDER O. TVEEN, Watford City, N. D. Filed May 13, 1918. Serial No. 234,194. 2 Claims. (Cl. 64-45.)

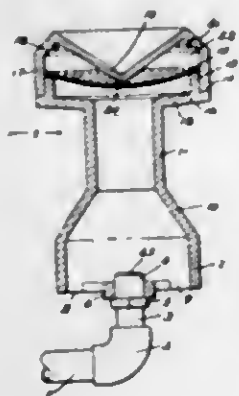


1. The combination with a pulley including a rim and spoke having aligned openings the rim also having a recess communicating with the opening therein of a cover for the rim engageable about the periphery thereof and having one end secured thereto, and a tightening device secured to the other end of said cover and including a plate counter-sunk in said recess, and a bolt extending from said plate and through the openings in said rim and spoke whereby said cover may be tightened about rim.

1,309,922. GAS-BURNER. FRED J. WARD, Long Beach, Calif. Filed Apr. 22, 1919. Serial No. 291,863. 2 Claims. (Cl. 158-112.)

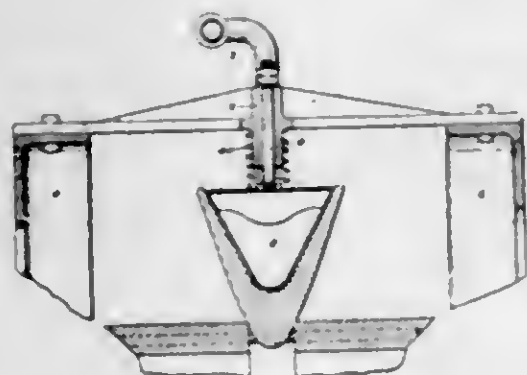
1. A gas burner comprising a supporting crosspiece having a central opening to fit an orifice, a straight annular wall formed integral with the ends of the crosspiece and forming air passages at the sides of the crosspiece, a tapered annular wall extending upwardly from the straight annular wall, a straight neck extending upwardly

from the tapered annular wall, a burner screen base extending outwardly from the upper end of the neck and having an annular flange extending upwardly into its edge and forming a shoulder outside of the flange, a concavo-convex mixing screen resting upon the annular flange and a burner screen having a straight annular wall



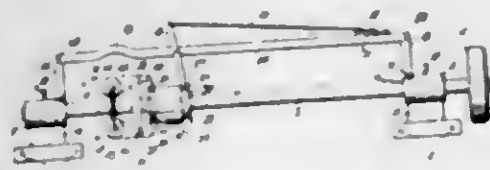
fitting around the flange upon the shoulder, an inclined annular perforated wall extending upwardly and inwardly from the straight annular wall, and an inverted cone extending downwardly and inwardly from the upper edge of the inclined wall and fitting against the center of the mixing screen.

1,306,923. PNEUMATIC SCRAPER FOR CLEANING FISH. EDWARD H. WAGG, Seattle, Wash., assignor to Smith Cannery Machines Co., Seattle, Wash., a Corporation of Washington. Filed Dec. 8, 1917. Serial No. 206,274. 10 Claims. (Cl. 17-10.)



1. A fish cleaning device comprising a scraper, means for yieldingly holding it toward the fish and means for pneumatically holding the fish against the scraper.

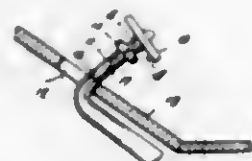
1,306,924. AUTOMATIC SPARK TIMING MECHANISM. DELBERT WELLS, Paoli, Ind. Filed Jan. 3, 1918. Serial No. 210,170. 3 Claims. (Cl. 264-15.)



1. An automatic spark timing mechanism comprising longitudinally spaced bearings, a shaft rotatably mounted in the bearings, a vertical standard mounted on each bearing, a bar secured to the tops of the standards, a slidable sleeve mounted on the shaft, means carried by the shaft for operating the sleeve, a lever pivotally connected to the bar and engaging the sleeve, a lever piv-

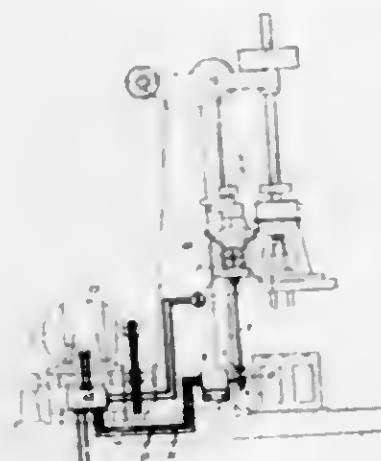
otally connected to the top of the bar, a rod connecting the two levers, and a rod leading from the second mentioned lever to the timing mechanism.

1,306,925. AUTOMOBILE LOCK. LAURENCE W. WELSH, Baltimore, Md. Filed Apr. 8, 1919. Serial No. 288,514. 1 Claim. (Cl. 70-128.)



A lock for a depressible motor vehicle clutch pedal, comprising a padlock having a shackle extending from one end thereof for engagement around the pedal shank, and an elongated rigid bar carried by the body of the padlock and extending transversely thereof and projecting from opposite sides to lie alongside the pedal shank, said bar being fastened to the body of the padlock between the legs of the shackle and to that end of the body from which the shackle legs extend, the fastening means being covered by the pedal shank when the padlock is applied thereto.

1,306,926. CONTROL MECHANISM. FIELD WHITE and JOHN B. BARRIS, Detroit, Mich. Filed June 18, 1917. Serial No. 175,267. 2 Claims. (Cl. 10-136.)

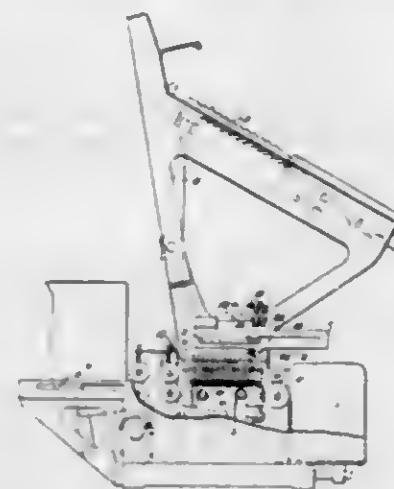


2. The combination with a power drill press and reversible electric motor positively driving the same, of a reversing switch controlling the motor switch, a master switch controlling a reversing switch, stops adjustably secured to the reciprocating parts of the press to move in synchronism with the longitudinal movement of the drill spindle and arranged to throw the reversing switch alternately into reverse and direct position at predetermined points in either direction of travel of the reciprocating parts and stops adjustably secured to the reciprocating parts of the press to move in synchronism with the longitudinal movement of the drill spindle and arranged to throw the master switch into cut out position at either limit of movement of the drill spindle, as predetermined.

1,306,927. PERFORATING MACHINE. ROBERT NEIL WILLIAMS, Norwich, England, assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1917. Serial No. 201,227. 3 Claims. (Cl. 164-112.)

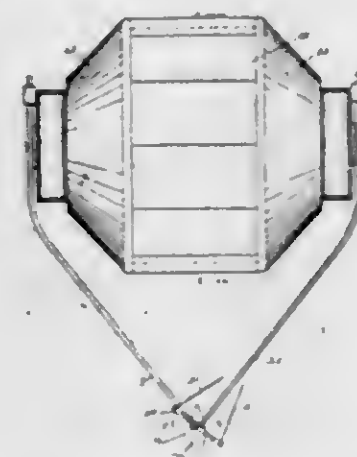
1. In a perforating machine means for the production of secondary perforations which are consequential to the setting of certain punches for producing main or primary perforations, means whereby the setting of the punch for producing the secondary perforations may be altered in

consequence of the setting of other punches for producing primary perforations, whereby the formation of the



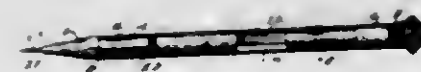
secondary perforation is controlled by a plurality of settings of the primary punches.

1,306,928. ROTARY HYDROPLANE. MEAR R. WOLFARD, Cambridge, Mass. Filed Oct. 8, 1917. Serial No. 195,284. 7 Claims. (Cl. 115-20.)



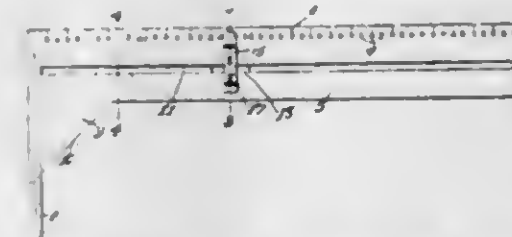
1. A rotary hydroplane comprising a buoyant hull, and an endless series of water-engaging vanes, the series surrounding the hull, means being provided for impelling the vanes, said vanes sloping outward and backward as referred to the direction of rotation, and their number, height and slope being such as will simultaneously sustain and propel the hull substantially on the surface of a body of water, when traveling at a high speed.

1,306,929. LEAD-PENCIL. FREDERICK J. YOUNG, Los Angeles, Calif. Filed June 10, 1918. Serial No. 241,697. 4 Claims. (Cl. 120-18.)



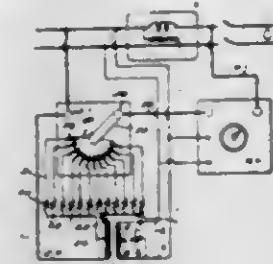
1. A pencil of the character described, comprising a tubular body of uniform diameter and bore throughout the length thereof, a conical bottom member having a bore therein and a reduced stem removably insertible in one end of said body, a top member having a bore extending therethrough and having a reduced stem rotatably insertible in the opposite end of said body, a lead holder having its lower end threaded into said bottom member, and a head removably supported on the outer end of said top member, whereby said top member may be rotated in said body and said holder may be threaded into said bottom member for extending and retracting the lead.

1,306,930. GAGE. JAMES M. AKIN, San Luis Obispo, Calif. Filed May 9, 1917. Serial No. 167,541. Renewed Dec. 28, 1918. Serial No. 268,706. 1 Claim. (Cl. 33-42.)



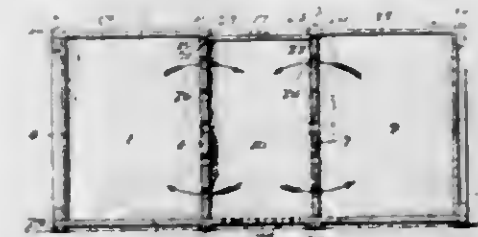
An instrument of the class described comprising a body portion having a central longitudinally extending slot therein and a plurality of openings adjacent one edge, a block slidable in said slot and having a bolt extending therefrom, a spring member mounted on said bolt and extending transversely of said body portion and having its ends in engagement therewith and its intermediate portion spaced therefrom, a scriber carried by one end of said spring member and adapted to project through any one of the openings in said body, and means mounted upon said bolt for engaging said spring member to retain the same in adjusted positions.

1,306,931. METER-TESTING APPARATUS. HENRY J. BLAKENLEE, West Hartford, Conn. Filed Nov. 2, 1916. Serial No. 129,171. 2 Claims. (Cl. 171-119.)



1. A portable load box for meter testing having means for the attachment of current and potential leads, a low voltage transformer for supplying current, a plural number of conducting contacts, a plural number of constant resistance coils connected in multiple between the secondary winding of the transformer and said contacts, said resistances being so calibrated that each when connected with the others in sequence will increase the current flow to the desired unitary amount, and a single manually operated switch arranged to electrically connect said contacts together sequentially and accumulate the currents which will flow through the several resistances.

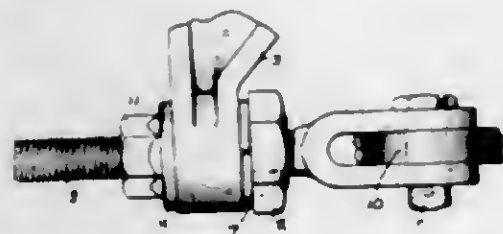
1,306,932. SHIPPING CRATE. THOMAS L. BOWEN, Miami, Fla., assignor of one-half to John S. Collins, Miami, Fla. Filed Feb. 23, 1918. Serial No. 218,632. 1 Claim. (Cl. 217-7.)



A shipping crate having bottom, front, back and end walls, and comprising separate compartments for perishable articles, and an intermediate chamber for containing ice, having drainage perforations in said bottom, and separated from said compartments by partitions having perforations affording direct communication between said compartments and chamber, and arranged to direct cold air from said chamber into said compartments adjacent

to the bottom thereof, and to direct relatively warmer air from the top of said compartments into said chamber, said partitions having rabbets along their upper free edges, separate closures for said compartments, arranged to be securely fastened to prevent access to said articles in transit, and having their opposed ends overhanging said rabbets to form opposed grooves, a readily removable closure for said chamber arranged to permit free access thereto in transit, and having its edges slidably engaged in said grooves, and its closed position limited by said back wall, and means engageable with said front wall to prevent its accidental displacement.

1,309,933. BRAKE SLACK-ADJUSTER. THOMAS L. BERTON, St. Louis, Mo., assignor to American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 6, 1917. Serial No. 200,499. 2 Claims. (Cl. 188-51.)



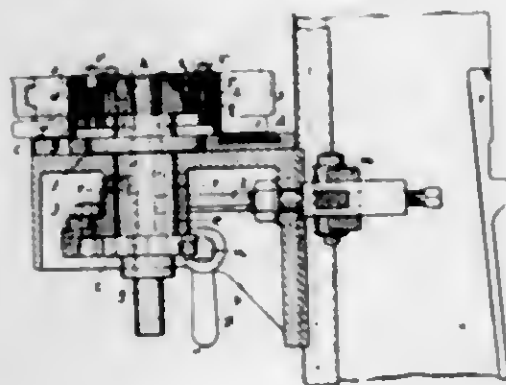
1. A slack adjuster comprising a rigid fulcrum bracket, an adjuster nut rotatably mounted in said bracket and having a shoulder at one side thereof, a locking means on said adjuster nut at the other side of the bracket, and an adjusting screw extending longitudinally through said nut and carrying a fulcrum for a truck lever.

1,309,934. SLACK-ADJUSTER. THOMAS L. BERTON, St. Louis, Mo., assignor to American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 6, 1917. Serial No. 200,500. 8 Claims. (Cl. 188-51.)



1. A slack adjuster comprising a rigid bracket attached to the truck frame and having a trunnion, a collar mounted to have a limited swinging movement thereon, and an adjusting screw supported on said collar.

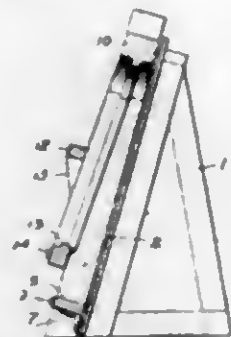
1,309,935. BOTTLE-FEEDING MECHANISM. AMOS CALLESON, Brooklyn, N. Y., assignor to Adrance Machine Works, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 15, 1917. Serial No. 207,224. 6 Claims. (Cl. 193-1.)



3. A rotary advancer including a rotary centering body member, two sections arranged on said member and hav-

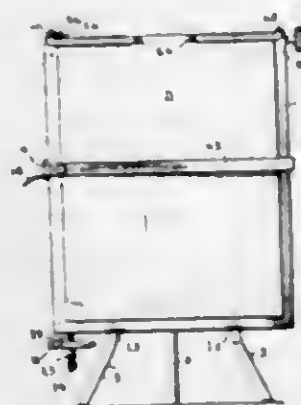
ing article-supporting devices in different radii and each being rotatable on said member around the axis of rotation of the advancer, and gearing to adjust said sections in opposite directions around said axis.

1,309,936. PROCESS FOR MAKING FLIGHT TULLIES. DOMINIC F. CANNON, Ford City, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Nov. 14, 1918. Serial No. 262,427. 3 Claims. (Cl. 25-156.)



1. The method of making clay tullies which consists in tamping the clay into a mold with such mold in an upright position, but inclined away from a vertical plane, removing the upper and lateral sides of the mold and permitting the tulle to dry in an upright position while resting upon the lower side of the mold and against the back board.

1,309,937. COPY LINER. GEORGE P. DOHERTY, Cleveland, Ohio. Filed May 20, 1914. Serial No. 839,811. Renewed Dec. 18, 1918. Serial No. 267,404. 3 Claims. (Cl. 120-34.)



1. In a device of the character described, the combination with a guide bar, of a carriage slidably held upon said bar having a collar, a slidably held trip rod passing through said collar, a dog pivotally secured to said carriage in normal contact with said rod, a spring in engagement with said dog, a lever pivotally secured to said carriage having a cam to engage said trip rod, and a plunger in contact with said dog and lever.

1,309,938. METHOD FOR MAKING BULLETS, ESPECIALLY SHRAPNEL. CHARLES J. ELLSWORTH, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Dec. 23, 1914. Serial No. 878,703. 5 Claims. (Cl. 29-122.)

1. A process for making slugs, bullets or the like, comprising feeding a bar or stock of metal to cupped shaping dies, and stamping completely-shaped articles out of the stock, and having a sufficient length of stock between the dies and feeding means to permit said stock to flex or yield in the line of feed when acted upon by said dies.

2. A process for making slugs, bullets or the like, comprising feeding a bar or stock of metal to cupped shaping dies, and stamping completely-shaped articles out of the stock, and having a sufficient length of stock between the dies and feeding means to permit said stock to flex or yield in the line of feed when acted upon by said dies, and guiding said stock intermediate the feeding means and dies.

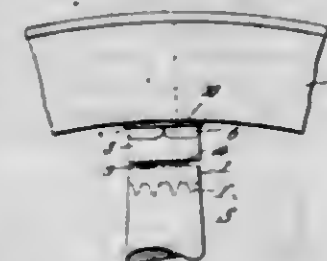


3. A process for making slugs, bullets or the like, comprising feeding a bar or stock of metal to cupped shaping dies, and stamping completely-shaped articles out of the stock, and having a sufficient length of stock between the dies and feeding means to permit said stock to flex or yield in the line of feed when acted upon by said dies, and supporting said stock intermediate the feeding means and dies.

4. A process for making slugs, bullets or the like, comprising feeding a bar or stock of metal to cupped shaping dies, and stamping completely-shaped articles out of the stock, and having a sufficient length of stock between the dies and feeding means to permit said stock to flex or yield in the line of feed when acted upon by said dies, and guiding said stock intermediate the feeding means and dies, and permitting said stock to move in the line of movement of said dies.

5. A process for making slugs, bullets or the like, comprising forming in cupped dies completely shaped slugs in successive portions of a bar or stock, and leaving a web or "flash" of appreciable thickness between the formed article and the stock, and feeding the strip of connected articles and scrap to stripping dies in line with the forming means for stripping the articles from the scrap, and performing the stripping at a time beginning before the action of the forming dies.

1,309,939. WHEEL-TIGHTENING DEVICE. TILMAN N. GINSON, Webster county, and AARON G. FRIDAY, Macon, Miss. Filed Apr. 10, 1916. Serial No. 90,171. 1 Claim. (Cl. 21-173.)



In a wheel, a felly having relatively movable ends; a dowel pin connecting the ends; a plate between the ends and bifurcated to straddle the pin; and a screw threaded into one of said ends, the screw having a head, and the plate having a notch in its outer end wherein the head is received, the screw constituting means for advancing the plate, the engagement between the head and the notch serving to prevent the plate from working transversely of the pin and projecting beyond the sides of the felly, the cooperation between the head and the notch permitting the head to be countersunk flush with the inner curve of the felly and permitting the inner end of the plate to be disposed flush with the inner curve of the felly.

1,309,940. BEET-HARVESTER. PHILIP L. HANNUM, Dalhart, Tex. Filed Sept. 14, 1918. Serial No. 254,041. 2 Claims. (Cl. 56-141.)

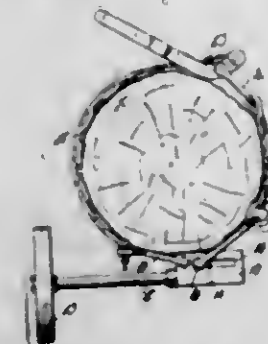
1. In a beet harvester, a frame having plows carried thereby for removing beets from the soil; a pair of rota-

table concave disks provided with fingers, said disks being carried by said frame at the rear of said plows and having their axes disposed angularly with respect to each other, the beets being lifted between the fingers of the rotating disks; a shoe arranged at the rear of said disks; a plurality of upwardly and rearwardly inclined



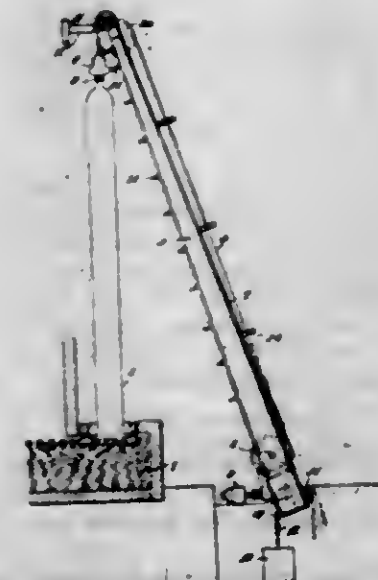
rack bars having their lower ends slidably mounted within said shoe, said rack bars being adapted to receive the beets from said disks; an operable crank shaft having said rack bars connected thereto at their upper ends; and means for rotating said crank shaft for reciprocating said rack bars whereby the soil is loosened and shaken from the beets.

1,309,941. POST-CLAMP. ROBERT L. HERBST and LOUIS MORACK, Hortonville, Wis.; said Morack assignor to said Herbst. Filed May 21, 1915. Serial No. 29,634. 2 Claims. (Cl. 24-19.)



1. A device for preventing the splitting of posts or piles while driving the same, consisting of a flexible element for encircling the upper end of the post or pile, and adjustable means detachably connecting adjacent ends of the flexible element for drawing the same tightly around the post or pile.

1,309,942. GLASS-DRAWING APPARATUS. HALBERT K. HITCHCOCK, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Oct. 8, 1917. Serial No. 195,436. 9 Claims. (Cl. 49-17.1.)



3. In combination in apparatus for drawing glass articles from a bath of molten glass, a tilting take-down

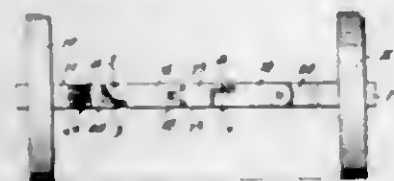
frame, a bait, and means for lifting the bait and supplying air thereto carried by the frame and including an operating line, a flexible air supply pipe and reeling means for said line and pipe mounted upon the axis of movement of the frame.

1,309,943. APPARATUS FOR PUMPING FLUID. HARRY ALBERT HUMPHREY, London, and WILLIAM JOSEPH RUSSELL, Wolverhampton, England, assignors to Humphrey Gas Pump Company, a Corporation of New York. Filed Dec. 2, 1915. Serial No. 64,724. 7 Claims. (Cl. 123-74.)



1. The combination of a vertical power cylinder, a power piston operating therein, work absorbing elements connected therewith adapted to acquire momentum on the power stroke of the piston and operating by gravity to cause the return stroke of the piston, and means for utilizing elastic cushions by compressing the same when starting the apparatus from rest, or on decreased external work resistance, or when greater energy is generated on combustion, or when for other reasons, the length of stroke increases, said cushions not compressed when the apparatus is working normally.

1,309,944. FLEXIBLE AXLE. CARRIE I. JACKSON, Pepin, Wis. Filed Aug. 29, 1917. Serial No. 188,797. 2 Claims. (Cl. 21-183.)

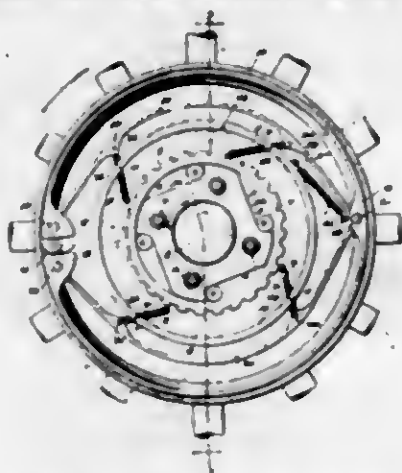


1. The combination with adjacent reduced ends of a pair of axles, of a coupling comprising end links, said end links having a recess in one end to receive the reduced ends of the axles and an ear on the opposite end, means passing through the end links and reduced ends to rigidly connect the end links to the axles, and intermediate links pivotally connected to the ears of the end links and to one another.

1,309,945. EMERGENCY-BRAKE. JOHN J. KELLUM and WILLIAM E. HENDRICKSON, Red Lodge, Mont. Filed May 25, 1918. Serial No. 236,563. 6 Claims. (Cl. 74-13.)

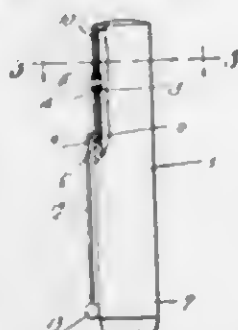
2. In a mechanism of the class described, the combination with a wheel structure having an axle attached thereto, a brake drum carried by said axle, of a roller-carrying plate secured to said wheel structure, and means including pivotally mounted levers cooperating with said roller-

carrying plate and said brake drum for locking the brake drum and plate and wheel structure against independent



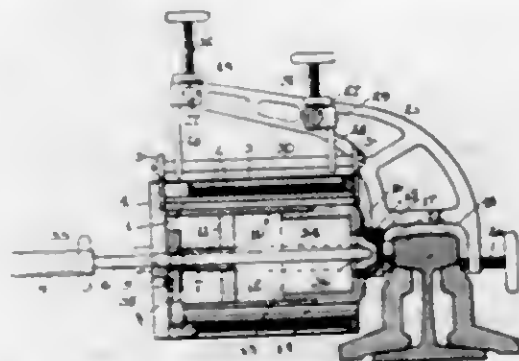
rotary movement and also against rotary movement in one direction.

1,309,946. FOUNTAIN-PEN CLIP. JOSEPH WARREN KESSEL, Brooklyn, N. Y. Filed Apr. 17, 1919. Serial No. 290,717. 2 Claims. (Cl. 24-11.)



2. In combination with a pen cap having a groove formed therein, said groove having a pocket formed at one end thereof, a clamping arm having a base section positioned in the groove, the base section having a finger fitted in the pocket of the groove, and means for securing the arm to the pen cap.

1,309,947. METHOD OF ELECTRIC WELDING AND APPARATUS FOR USE THEREIN. JOHN G. KJELLGREN, Brooklyn, N. Y., and GEORGE H. STEPHENSON, Cleveland, Ohio, assignors to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 14, 1916. Serial No. 136,831. 22 Claims. (Cl. 219-12.)



1. In apparatus of the character described, the combination of means for forming an electric arc; and means for controlling such arc, including an electro-magnetic coil and a plurality of cores for such coil.

22. In a method of uniting contacting metal bodies, the steps which consist in holding a heat-distributing plate under pressure against one such body, establishing an arc between such plate and an adjacent electrode member, and subjecting such arc to the influence of the magnetic field produced by an electro-magnetic coil adjacent to and coaxial with such arc, such coil having two cores one within, spaced from, and terminating short of the other.

1,309,948. MUCILAGE-JAR. LEO S. KOATCHEK, Chicago, Ill., assignor to Columbia Fastener Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 36, 1919. Serial No. 293,666. 2 Claims. (Cl. 91-67.4.)



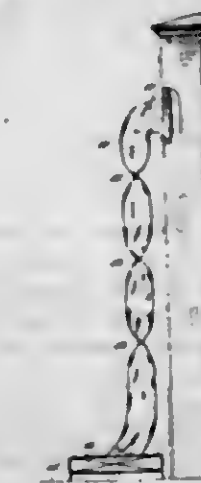
1. In a dispensing apparatus of the character described, in combination, a receptacle having an open top, a closure cap therefor having an opening therein, a movable member normally closing said opening, resilient means acting on said movable member, a support for said resilient means adapted to be clamped between the open top of the receptacle and the closing cap, said last mentioned means comprising a U-shaped seat having a depending portion in which the resilient means is seated, and outwardly depending ends adapted to be gripped between the cap and the receptacle.

1,309,949. FORK ATTACHMENT. LEWIS LATTIMORE, Bonesteel, S. D. Filed Jan. 31, 1919. Serial No. 274,256. 6 Claims. (Cl. 53-2.)



1. In a device of the class described, the combination of a handle, a head mounted upon said handle, a bar extending transversely across said handle, securing means carried by said bar and engaging said head, a clamp mounted upon said handle, and means adjustably connecting said bar to said clamp, and thus holding said head upon said handle.

1,309,950. FIRE-ESCAPE. JOSEPH LARCKA, Newark, N. J. Filed Dec. 31, 1918. Serial No. 269,079. 4 Claims. (Cl. 227-7.)



1. A fire escape comprising a hoop adapted for rotatable mounting in the window of a building, a flexible tube

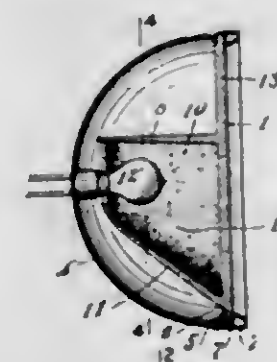
having one end thereof secured open to the said hoop and adapted for depending outwardly of a window and means for rotating said hoop during the operation of the device.

1,309,951. POTATO-PEELER. HANS LEE, Iowa City, Iowa. Filed Mar. 6, 1919. Serial No. 281,049. 1 Claim. (Cl. 30-20.)



A potato peeler comprising a support having at one end a laterally extending cutting blade arranged with its cutting edge adjacent to the support and having at the other end of the said blade a ring for engagement by the little finger, the support having a sheath for engagement by the middle and ring fingers, the index finger being adapted to lie at the opposite edge of the sheath from the ring, said support having a scraping blade at the opposite end from the cutting blade and extending laterally in both directions from the support.

1,309,952. HEADLIGHT FOR AUTOMOBILES. LAWRENCE L. LEHMANN, Dayton, Ohio. Filed Apr. 21, 1919. Serial No. 291,703. 4 Claims. (Cl. 240-48.2.)

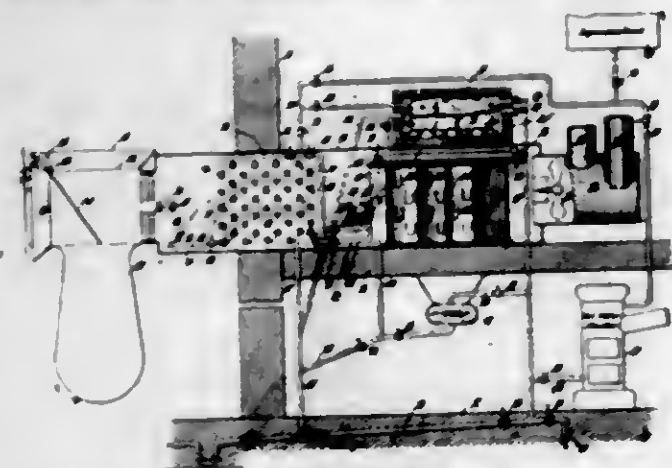


1. A light reflecting and diffusing lens for headlights, comprising a transparent front plate, a rearwardly extending horizontal reflecting plate integral with said front plate and adapted to reflect the light downwardly, said horizontal reflecting plate extending in downward continuous light diffusing side and bottom walls through which the reflected light is diffused, in combination with a reflector arranged in the rear of the lens and adapted to reflect the light forwardly through said diffusing walls and the front plate.

1,309,953. COMBINED COOLING, VENTILATING, HEATING, HUMIDIFYING, AND PURIFYING APPARATUS. BENJAMIN MACFADDEN, New York, N. Y. Filed Aug. 24, 1916. Serial No. 116,643. 16 Claims. (Cl. 261-103.)

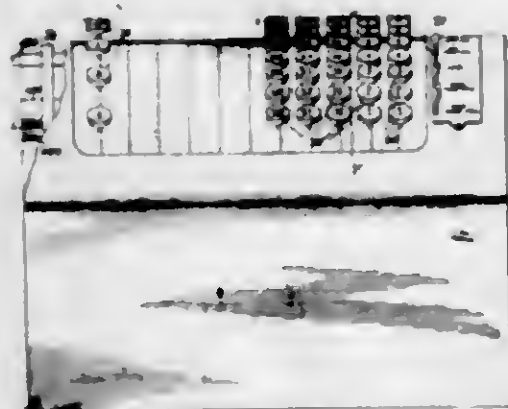
1. In combination, a continuous elongated box open at both ends; coils connected in series in said box; absorbent material around the coils at the inlet end of said series; means for passing water through the covered coils at the inlet end of the box and thence through the remaining coils; means for spraying water on the absorbent ma-

terial; a conduit connecting the outlet end of said box with the room to be cooled; and means for causing a



current of air to pass through said box to the room to be cooled.

1,309,954. RAILROAD TICKET-ISSUING MACHINE. HAARON A. MARTIN, Christiania, Norway, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Ohio. (Incorporated in 1906.) Filed Feb. 6, 1915, Serial No. 6,490. Renewed May 29, 1919. Serial No. 300,773. 107 Claims. (Cl. 101—66.)



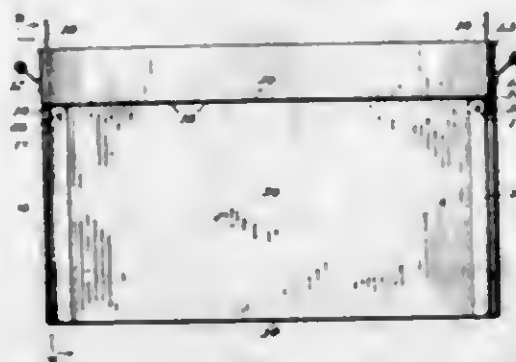
1. In a machine of the class described, the combination with a plurality of destination devices carrying type to print on one style of ticket and employed only when tickets of that style are to be issued, of adjustable printing means controlled by said destination devices when tickets of the one style are issued, and manipulative means employed when another style of ticket is to be issued and constructed to control said printing means for printing on the last mentioned style of ticket.

27. In a machine of the class described, the combination with a main operating mechanism, of normally detached destination devices, separately insertible into the machine, means normally preventing insertion of the device into the machine, and manipulative means for operating said preventing means to permit insertion of a destination device.

47. In a machine of the class described, the combination with two printing mechanisms, of a plurality of groups of manipulative devices, and means controlled by the manipulative devices whereby both of the printing mechanisms may be operated when manipulative devices of one group are employed, or only one of said mechanisms operated when manipulative devices in each group are employed.

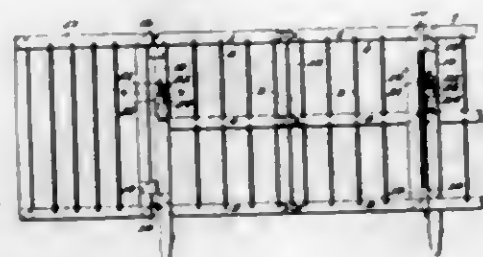
106. In a machine of the class described, the combination with ticket strip feeding rollers having a constant extent of movement and constructed to feed tickets during a part only of said movement, of a main driving mechanism, and transmission gearing connecting the main driving mechanism and the feeding rollers, said gearing comprising elliptical gears constructed to drive the rollers at a varying speed reaching its maximum during the time the rollers are feeding the ticket strip.

1,309,955. BOILER CONSTRUCTION. STANLEY NAVROT, Hellwood, Pa. Filed Feb. 8, 1919. Serial No. 275,768. 3 Claims. (Cl. 68—30.)



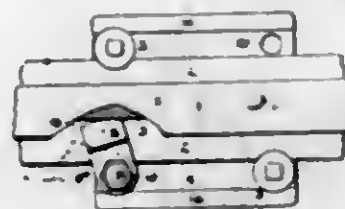
3. A device of the class described comprising a boiler, a perforated supporting tray freely positioned within the boiler, supporting legs for the tray pivoted beneath the opposite end portions of the tray, normally vertical means for inwardly swinging the legs and for elevating the tray pivoted to the opposite ends of the latter, and extension members normally engaging the ends of the boiler when said means are vertically positioned for preventing inward swinging movement of the upper portions of said means.

1,309,956. PORTABLE FENCE. MARIA ZOFIA OBOREKI, Chicago, Ill. Filed Oct. 19, 1918. Serial No. 258,837. 4 Claims. (Cl. 256—31.)



1. In a portable fence, a fence section having top and bottom rails rigidly connected by flat end rails, bearing plates vertically adjustably secured to the opposite faces of one of said end rails, and outwardly swingable anchoring members pivotally secured to said bearing plates.

1,309,957. ANTICREEPING DEVICE FOR RAILWAY-TRACKS. DUNCAN McEWING PATRICK, Johannesburg, Transvaal, South Africa. Filed July 17, 1917. Serial No. 181,089. 8 Claims. (Cl. 238—304.)



3. The combination with a rail having a base and web, of a plate pivoted adjacent thereto, and having cam shaped undersurface and edge, said undersurface and edge bearing respectively against the base and web of the rail.

1,309,958. SHOE-TONGUE PAD. AUGUSTA PHILLIPS, Brooklyn, N. Y. Filed Dec. 11, 1918. Serial No. 266,208. 2 Claims. (Cl. 36—84.)

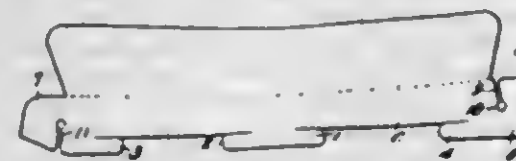
1. A shoe tongue pad comprising a base member approximately of the outline of a shoe tongue and an adjustable member shorter and less in width than the base member

and applied about the middle portion of said base member, thereby affording two thicknesses of the material for



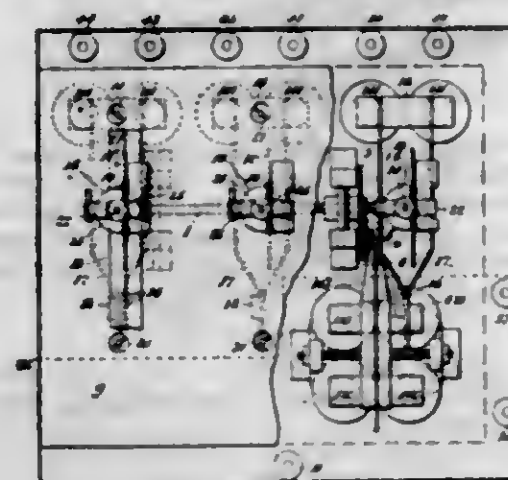
the instep, and said base member being slit to receive said adjustable member and both of said members being of soft material.

1,309,959. COLLAR AND ATTACHING MEANS. JOSEPH POLIVKA, New Brunswick, N. J. Filed May 22, 1918. Serial No. 236,003. 2 Claims. (Cl. 2—62.)



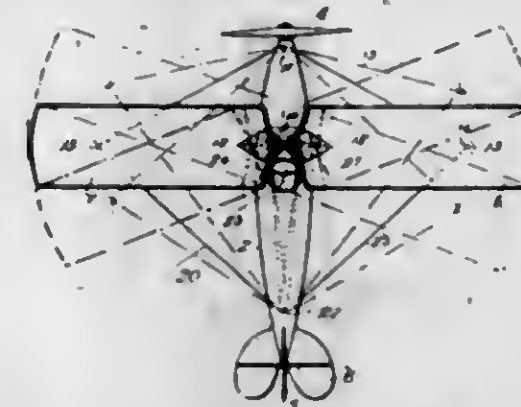
1. A collar, comprising inner and outer folds, the inner fold being of less depth than the outer fold and having its middle and end portions widened, the middle widened portion having slits extending inwardly in line with the lower edge of the fold to form oppositely outwardly extending longitudinal tabs and the end widened portions having slits extending outwardly from their inner ends in line with the lower edge of the fold to form inwardly extending longitudinal tabs, the several tabs being wholly below the inner fold and entirely above the lower edge of the outer fold.

1,309,960. TELEGRAPH APPARATUS. EDWIN POPA, Quebec, Quebec, Canada. Filed June 21, 1915. Serial No. 35,203. 9 Claims. (Cl. 178—92.)



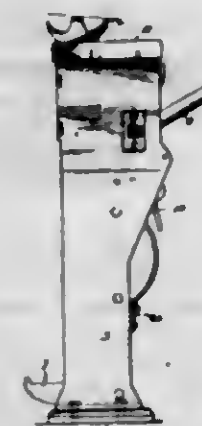
9. The combination, in a telegraph receiver, of means registering a plurality of systems of arbitrarily selected signals based on a common system of electrical alternations, measuring means, and means for moving the measuring means uniformly in relation to all the registering means to determine the value of the signals of each system by the intervening distance traveled by the measuring means.

1,309,961. AEROPLANE. NICHOLAS RIPPENBAIN, Perth Amboy, N. J. Filed Sept. 5, 1917. Serial No. 189,743. 4 Claims. (Cl. 244—29.)



4. An aeroplane having a fuselage, wings attached to the fuselage and extending in opposite directions therefrom, a wing on one side of the fuselage being pivotally connected therewith to swing fore and aft from a normal transverse position and to tilt axially to vary the angle of incidence, operating wires connected with the pivoted wing, guiding means on the fuselage for said wires, and means on the fuselage connected with said wires for operating them to cause said fore and aft and tilting movements of the wing with respect to the direction of flight.

1,309,962. LIFTING-JACK. PETER JACOB SAUSEN, Head of Jarvis Inlet, British Columbia, Canada. Filed June 29, 1918. Serial No. 242,602. 3 Claims. (Cl. 254—111.)

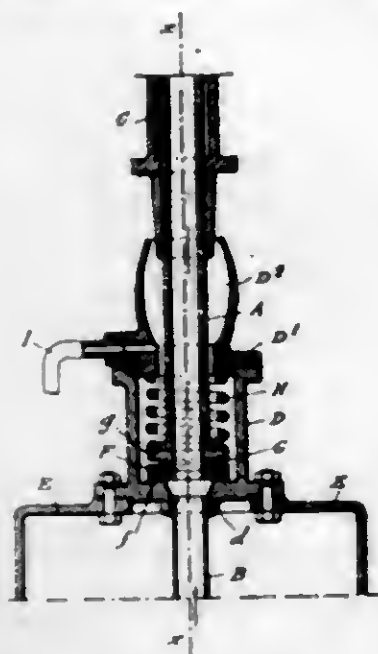


1. A lifting jack comprising a lifting bar provided on one face with a double row of teeth alternately arranged, a pair of aligned lifting dogs engaging with said teeth, a lifting handle engaging with said dogs and means for releasing said dogs from the teeth.

1,309,963. JOINT FOR TELESCOPIC TUBES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,866. 3 Claims. (Cl. 285—91.)

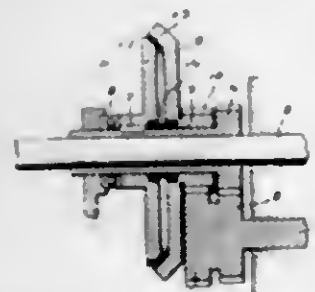
3. In a telescopic duct, in combination with a relatively stationary tube element and a relatively movable tube element, a joint between said elements comprising a box on said stationary element provided with an interior flat surface, a head on said movable element provided with a curved surface, a washer between said box and head provided with a flat surface designed to engage and slide on said first mentioned flat surface and a mating curved surface designed to engage said first-mentioned curved surface and permit relative movement therebetween.

tween, means to hold said engaging surfaces in operative contact while permitting said relative movement there-



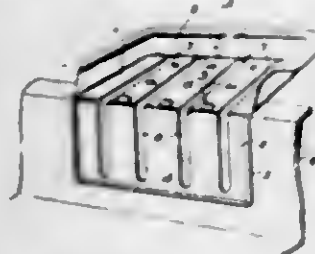
between, a hollow extension on said box for receiving fluid leaking past said joint, and a discharge pipe leading from said hollow extension.

1,309,964. BRAKE-GEARING. HANA SCHNEIDER, New York, N. Y. Filed Aug. 3, 1918. Serial No. 248,142. 1 Claim. (Cl. 74-13.)



In brake gearing, the combination of a driving shaft, a stationary shaft, a tubular shaft rotatably mounted on said stationary shaft, a male brake member splined to said tubular shaft, a female brake member rotatably mounted on the tubular shaft, spring means for holding the said members apart, a thrust bearing for the male member, a gear connected with said female member, a gear connected with the tubular shaft, said gears being of different diameters and a pair of gears of different diameters on the driving shaft meshing with said gears.

1,309,965. CONTAINER FOR SOAP. WILLIAM C. SCHWAB, Canton, Ohio. Filed July 24, 1918. Serial No. 246,465. 2 Claims. (Cl. 45-28.)



1. In a soap dish, the bottom portion and an apron depending from said bottom portion, grooves formed in said bottom portion of said apron, raised portions intermediate said grooves in said bottom portion, said raised portions being designed to hold a cake of soap away from

contact with said bottom portion, means for attaching said soap dish to a sink, tub or the like, the said depending apron within the said sink or tub, the said grooves being designed to convey water from the cake of soap to the sink or tub.

1,309,966. TROLLING-SPOON. JOHN A. SEBENIUS, Shelton, Wash. Filed Jan. 2, 1919. Serial No. 269,247. 1 Claim. (Cl. 43-30.)



A trolling spoon formed from sheet metal and consisting of a body and a tail, both body and tail being concavo-convex, and the convex and concave surfaces of the tail being oppositely arranged to those of the body for the purpose specified, said spoon having at the tail end an opening for engagement by the hook and having at the other end a lug offset in the direction of the concave face of the body, and a swivel connected to the lug.

1,309,967. INDURATED ORGANIC SUBSTANCE AND PROCESS FOR PREPARING THE SAME. WILLIAM W. SIMONSON and LEWIS V. D. BLAIS, Cincinnati, Ohio, assignors to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed June 1, 1918. Serial No. 237,830. 51 Claims. (Cl. 134-26.)
4. The process of producing a desired indurated shellac metal compound, which consists in subjecting shellac to the action of caustic soda in solution, to produce a sodium shellac compound, subjecting said sodium shellac compound to the action of a metal salt in solution to effect substitution of the metal of said salt for the sodium, and treating the precipitate by heat to complete its induration.

1,309,968. AEROPLANE. CHARLES E. STACY and CORNELIUS D. STACY, Dayton, Ohio. Filed June 17, 1916. Serial No. 104,148. 1 Claim. (Cl. 244-29.)



In an air-plane, the combination with the main sustaining planes, of two sub-planes mounted in the rear ends of the main planes on downwardly and outwardly inclined axes, said sub-planes being arranged substantially as far in the rear of the center of gravity of the machine as to the side of the center of gravity.

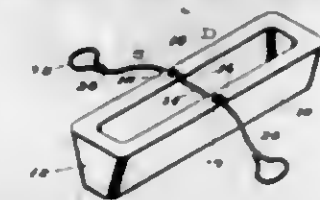
1,309,969. PLOWING-MACHINE. EARL M. STREAY, Buford, Colo. Filed Jan. 30, 1919. Serial No. 273,979. 7 Claims. (Cl. 97-25.)



7. In a spading plow, the combination with a pair of crank shafts and means for revolving them simulta-

neously and in unison; of a shovel whose standard embraces like cranks on the two shafts, a bearing at one end of the standard on the upper shaft, a shovel at the lower end of the standard, a bearing for the lower shaft at the mid-length of the standard, and springs above and below the last-named bearing, for the purpose set forth.

1,309,970. DIE-SUPPORT. FRANK A. TAYLOR, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 19, 1917. Serial No. 197,402. 15 Claims. (Cl. 164-29.)



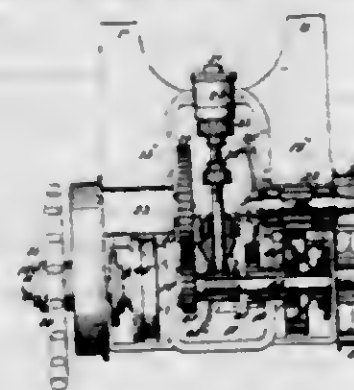
1. The combination with a die, of a supporting arm fixed to and projecting outwardly from the die into proximity with the plane of the operating portion thereof.

1,309,971. MATERIAL FOR CONTAINERS OR OTHER LIKE ARTICLES. SHELDON P. THACHER, Weehawken, N. J., assignor to New York Belting and Packing Company, a Corporation of New York. Filed Nov. 6, 1917. Serial No. 200,513. 9 Claims. (Cl. 154-50.)



1. A material for making containers and other like articles embodying a ply of fibrous material, a ply of vulcanized rubber on one side thereof and a costing impermeable by fluids deleterious to the rubber, upon the other side thereof.

1,209,972. ONE-PIECE TRACTOR-FRAME AND TRANSMISSION UNIT. WILLIAM TURNBULL, Peoria, Ill., assignor to The Holt Manufacturing Company, Stockton, Calif., a Corporation of California. Filed May 25, 1918. Serial No. 230,527. 8 Claims. (Cl. 180-17.)

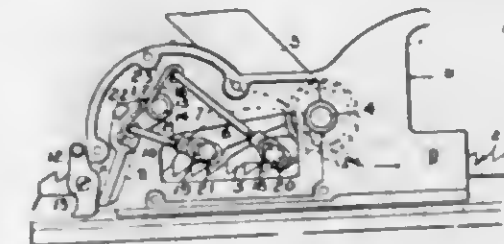


1. In a self-propelled vehicle, a main frame, a lower transmission housing section carried thereby, a removable upper housing section supplemental thereto, and a transmission mechanism carried by the upper housing section and removable therewith.

1,309,973. JACK. CLYDE S. WRIGHT, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 19, 1918. Serial No. 258,894. 4 Claims. (Cl. 255-35.)

1. In a jack, a rack, a carriage adapted to travel thereon, an operating lever mounted on the carriage, two pawls

carried by the lever on opposite sides of its fulcrum, a one-part reversing lever carried by the carriage, means for locking it in a stationary position, a spring mounted directly on the reversing lever and having two spring-members, and links connecting the spring members respectively



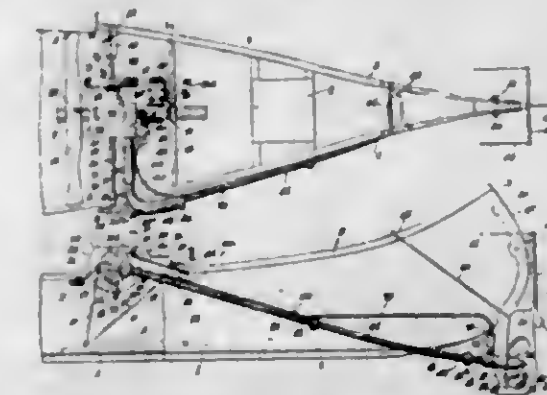
to the pawls, there being a lost motion connection between the spring-members and the pawls to put one or the other of said spring-members under tension when the carriage is moved backwardly and to move the pawl away from the rack when released therefrom.

1,309,974. GAGE-COCK. CLYDE S. WRIGHT, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 7, 1918. Serial No. 205,694. 4 Claims. (Cl. 251-120.)



3. In a gage-cock, a shank for insertion into a boiler wall, having a longitudinal opening terminating in a valve-seat, a weight-valve pivoted to the shank so as to be swung into and out of alignment with the shank and having a longitudinal opening in alignment with the opening in the shank when the weight-valve and shank are in alignment, and a power plunger working in the said opening in the weight-valve and arranged to feed packing along the inner end of the said opening, there being a lateral opening in the weight-valve for the insertion of packing into the said longitudinal opening of the weight-valve.

1,309,975. MOTOR-DRIVEN CANOE. HENRY CLAY WATSON, New York, N. Y., assignor of one-third to Arthur Wright, New York, N. Y. Filed July 10, 1914. Serial No. 850,072. 16 Claims. (Cl. 115-17.)



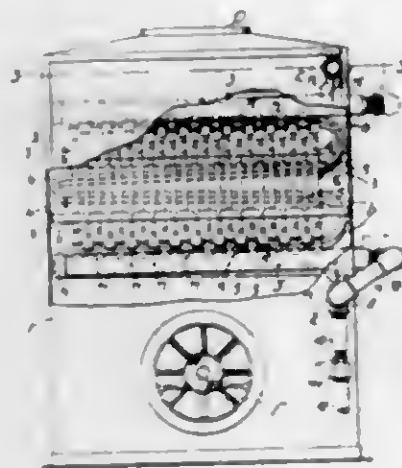
1. In combination a canoe, a marine propeller thereon and a motor carried by the canoe and connected to the propeller by a shaft construction passing into the canoe above the water line and around and below the top of the canoe stern.

1,309,976. BEDCLOTHES-HOLDER. BENJAMIN SAMUEL ZIEIN and HANNAH SINGAR, Philadelphia, Pa. Filed Mar. 13, 1919. Serial No. 282,424. 2 Claims. (Cl. 24-73.)



2. A bed clothes holder constructed as set forth in claim 1, and further characterized by the fact that the auxiliary member holds the ends of the eye so closely together that the flexible element cannot pass between said ends, into the eye.

1,309,977. AIR-HEATING APPARATUS. HENRY BARTZ, St. Louis, Mo. Filed Mar. 3, 1918. Serial No. 220,499. 8 Claims. (Cl. 257-137.)

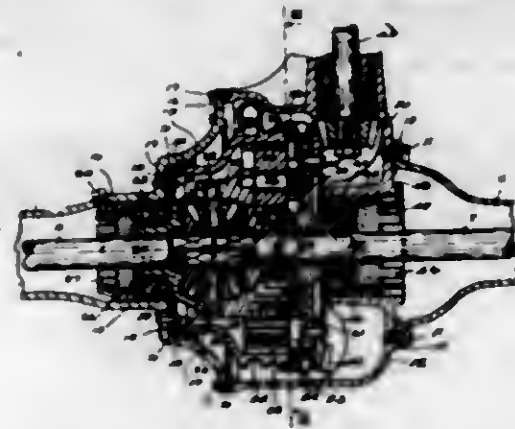


1. In an air heating apparatus, a suitable casing, steam pipes disposed along the inner surfaces of two contiguous vertical walls thereof, drain pipes located below the steam pipes and disposed along the corresponding walls with the steam pipes, independent sets of coils leading from each steam pipe to its corresponding drain pipe or that disposed along the same wall, the sets between the one steam pipe and its corresponding drain pipe intersecting the sets of coils of the other steam pipe and its drain pipe at substantially the angle which the continuous walls of the casing make with each other, the individual pipes of the coils of the respective sets being disposed in distinct substantially horizontal planes and out of vertical alignment with one another.

1,309,978. DRIVING GEAR FOR MOTOR VEHICLES. ARTHUR F. HANSEN, Sedro Woolley, Wash., assignor to The Perfecto Gear Differential Co., Seattle, Wash., a Corporation. Filed May 28, 1918. Serial No. 237,156. 5 Claims. (Cl. 74-99.)

1. A transmission of the class described comprising a differential gear, a cage for said gear, pinions mounted for rotation on said cage, a rotatably mounted disk having clutch recesses formed in the periphery thereof, a gear wheel on the hub portion of said disk and disposed to mesh with said pinions, a ring member surrounding said cage; an internal gear on said ring member and disposed to mesh with said pinions, means for driving said disk, a fixed axle

housing, a clutch member secured within said housing, clutch elements on both ends of said ring member and



means for shifting said ring member to selectively lock said ring member to said disk or to said axle housing.

1,309,979. PROCESS OF MAKING CREAM CENTERS FOR COATED CANDY. JAMES P. BOOKER, New York, N. Y., assignor to The Nulomoline Company, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1917. Serial No. 191,138. Renewed May 16, 1919. Serial No. 297,562. 3 Claims. (Cl. 99-11.)

1. The method of making cream centers for candies which includes incorporating yeast with the fondant composing said center.

3. The method of making candy with cream centers which consists of carrying out the following formula: viz: 45 pounds of confectioners' sugar, 10 quarts of water, cook the same to 240 degrees F., add 5 pounds of invert sugar, cook to 242 to 246 degrees F. and then add four small cakes of yeast and coat the center thus produced.

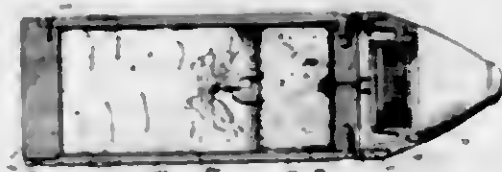
1,309,980. CELLULOSE-ESTER COMPOSITION. HANS T. CLARKE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 26, 1919. Serial No. 293,005. 11 Claims. (Cl. 100-40.)

1. A composition of matter comprising a cellulose ester and a dialkyl ester of oxalic acid in which each of the alkyl groups contains from 4 to 5 carbon atoms.

1,309,981. CELLULOSE-NITRATE COMPOSITION. HANS T. CLARKE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 26, 1919. Serial No. 293,006. 11 Claims. (Cl. 106-37.)

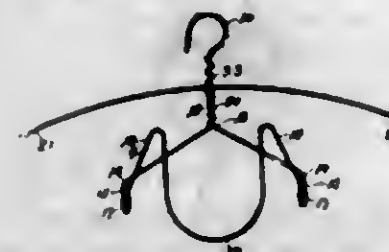
1. A composition of matter comprising cellulose nitrate and a dialkyl ester of oxalic acid in which each of the alkyl groups contains from 4 to 5 carbon atoms.

1,309,982. CARRIER-SHELL. ROY ANDREW DARLINO, Evanston, Ill. Filed Dec. 9, 1918. Serial No. 266,008. 16 Claims. (Cl. 102-29.)



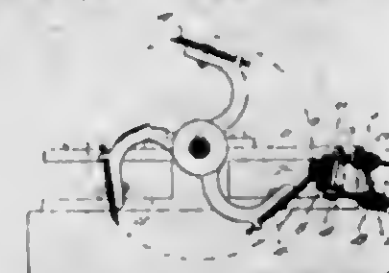
1. A projectile having a shell body, and a flare lamp discharged from the shell body by the gases generated upon ignition of the flare.

1,309,983. GARMENT-SUPPORTER. GEORGE A. GOLAR, Dorchester, Mass. Filed Nov. 11, 1916. Serial No. 130,712. Renewed Feb. 14, 1919. Serial No. 277,102. 1 Claim. (Cl. 211-13.)



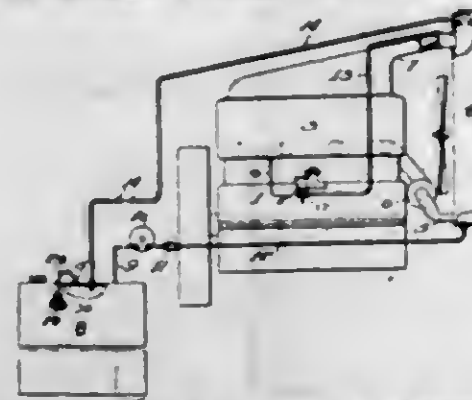
A device of the type described, formed of a single wire, the upper terminal being bent into eye or hook form, said wire then being extended downwardly, the resultant downward portion being deflected laterally and diagonally, again extended or bent downwardly substantially parallel with the shank forming portion of said hook or eye, again deflected or bent diagonally, thence bent downwardly and again laterally, thence upwardly, thus forming a hook-terminal, when it is doubled back upon itself and again extended upwardly, said wire then bent curved into U-formation with the convexity or bottom of the U presented downwardly, the aforesaid shaping or bending of the wire up to the U then being duplicated upon the opposite side to the first referred to vertical portion, where the wire is coiled or twisted around said first referred to vertical portion, it then being extended laterally some distance and returned substantially parallel with itself, and again coiled upon said vertical portion, the wire finally being extended in duplicate loop formation upon the opposite side and again twisted upon said vertical portion.

1,309,984. CLAMP FOR FEED-CUTTER SHARPENERS. CHARLES A. HOLM, Tigerton, Wis. Filed Jan. 10, 1918. Serial No. 211,201. 1 Claim. (Cl. 24-125.)



In a clamp, the combination with an element, of a pair of clamping bars positioned against opposite sides of said element and having their rear edges projecting beyond the same and formed with bolt holes, eye-bolts whose eyes align with said bolt holes and contact with the remote sides of said bars, clamping bolts passing through said bolt holes and eyes for clamping said bars against said element, for securing said eye-bolts in place, and for permitting pivotal movement of said eye-bolts, and nuts threaded on said eye-bolts to coast therewith in securing the entire device in place.

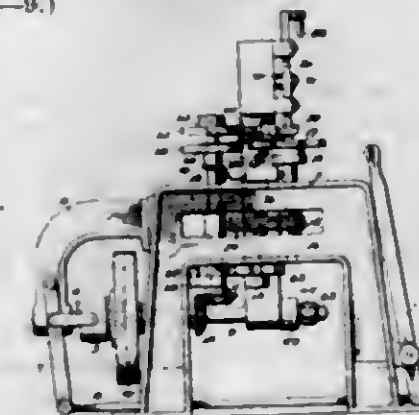
1,309,985. COMBINED COOLING AND LIQUID-FEED SYSTEM. WESLEY JAY, Chicago, Ill. Filed Apr. 9, 1918. Serial No. 227,486. 6 Claims. (Cl. 123-119.)



1. In combination with an internal combustion engine having a carburetor and a circulatory cooling system comprising a jacket enclosing the explosion chamber of

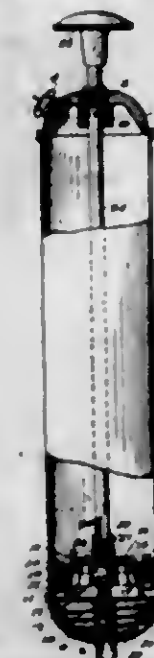
the engine, and a radiator in said circulatory system, a main liquid fuel supply tank at a lower level than the carburetor; a conduit by means of which the fuel passes to the radiator before it reaches the cooling jacket, and means for causing flow of the liquid fuel from said main low tank into the radiator to a high level therein, and a conduit from the radiator to the carburetor; whereby the radiator serves as a reservoir for supplying the carburetor with liquid fuel by gravity flow.

1,309,986. SOAP-PRESSING MACHINE. ROSE A. JONES, Covington, Ky. Filed Apr. 8, 1913. Serial No. 739,764. Renewed Apr. 20, 1916. Serial No. 94,519. 5 Claims. (Cl. 25-9.)



5. A machine of the class stated, comprising a rotatable carrier having a series of openings passing through it, mechanism to impart step-by-step rotary movement to said carrier, mechanism to feed material to said openings and comprising a delivery chute having an open mouth registering with one of the stopping positions of said openings and a plate adapted to reciprocate across the mouth of said chute to alternately support the material in said chute and allow the same to be discharged therefrom into said openings, mechanism to reciprocate said plate, a stationary support on which the material within said openings is carried during the first step of the carrier after receiving the material, a pair of reciprocating dies adapted to engage the material in the second stopping position of said carrier and press it within said opening, means comprising a reciprocating plunger adapted to engage the pressed material on the third stopping position of said carrier and eject the same from the carrier, a power shaft, and means connecting all said mechanisms to said power shaft.

1,309,987. PUMP. JOHN M. KELLEY, Rochester, N. Y. Filed Apr. 8, 1918. Serial No. 227,368. 3 Claims. (Cl. 103-63.)



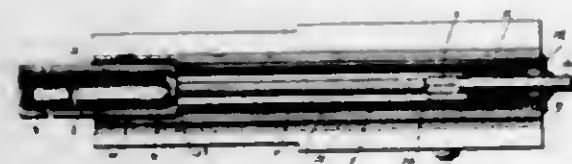
1. A pump piston embodying a plate, a packing ring, and resilient fingers retaining said packing ring in contact with the plate and acting to expand said ring against the walls of the cylinder.

1,309,988. WRIST-WATCH. REGINALD H. KNIVETT, New York, N. Y. Filed Apr. 16, 1918. Serial No. 228,957. 1 Claim. (Cl. 224-4.)



A support for a wrist watch comprising a watch-supporting pocket open on one side to expose the face of the watch toward the wrist, diametrically opposite outstanding tongues extending from the open side of the pocket, a cover for said side of the pocket, a wrist strap passing through the cover and also through one of the tongues to provide a loose connection between the cover of the pocket, and separable fastener members on the other tongue and on the strap.

1,309,989. FLUID RECOIL-BRAKE FOR GUNS. EARNEST C. MORIAITY, U. S. Army. Filed Apr. 16, 1919. Serial No. 290,597. 8 Claims. (Cl. 89-13.) (Filed under the act of Mar. 3, 1882, 22 Stat. L., 625.)



1. In a fluid brake for guns, a brake cylinder, a piston moving therein, an independently longitudinally movable sleeve encircling said piston and having a longitudinally extending chamber communicating at one end thereof with the space interior of said sleeve and at the other end thereof with the space outside of said sleeve.

1,309,990. AUTOMATIC LOOP MAKING AND RETAINING DEVICE. CHARLES EDELMAN, New York, N. Y., assignor to Cru Patents Corporation, a Corporation of New York. Filed Mar. 17, 1915. Serial No. 15,068. 6 Claims. (Cl. 88-17.)



1. In a motion picture machine, the combination with an intermittently and a continuously rotated sprocket, a film guide, located between said sprockets and adapted to be moved by an increase in the size of a loop in the film and means actuated by the movement of said guide for controlling the operation of said continuously rotating sprocket.

1,309,991. TOKEN-HOLDER. GEORGE R. WILLIAMS, Battle Creek, Mich. Filed Aug. 12, 1918. Serial No. 249,535. 2 Claims. (Cl. 133-6.)

1. In a token holder, the combination of two circular uniformly spaced plates meeting at their edges and separated at their centers by a spacer, a curved oppositely-disposed cut-away portion made in their edges forming a slot opening between said plates, and an opening formed

in the contacting edges of said plates either side of said slot, a spring fitted between said plates near their inner edges and having its ends extending through said slot and



curved from said slot and bent downwardly to enter said openings, and means to hold said plates in engagement at their edges.

1,309,992. MOTION-PICTURE APPARATUS. HAROLD WORKMAN, Glasgow, Scotland. Filed May 8, 1916. Serial No. 96,193. 7 Claims. (Cl. 88-16.4.)



1. Apparatus for illuminating a multiplicity of gate apertures and directing the light through corresponding projection lenses in a color cinematograph projector, comprising, in combination, a source of light, a condenser to produce a main beam, means for deflecting a portion of the condensing light toward a gate aperture, so that the gate aperture is covered and marginally surrounded by a secondary beam separated by the deflecting means, and means for redirecting the deflected secondary beam to pass normally through said gate aperture and through the center of the corresponding projection lens.

1,309,993. STEAM-TURBINE PLANT WITH HORIZONTAL AXIS. HENRICH ZOELLY, Zurich, Switzerland. Filed Aug. 9, 1917. Serial No. 185,265. 9 Claims. (Cl. 60-95.)



1. The combination with an annular surface condenser; of a horizontal elastic fluid turbine supported within the annulus of said condenser and projecting to one side thereof, and feet for the condenser, said feet supporting the condenser and therethrough the turbine, and said turbine discharging directly into the condenser.

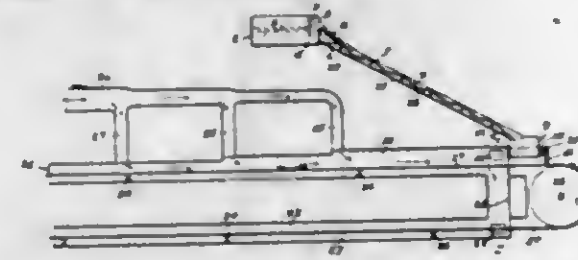
1,309,994. DRINKING-TUBE FOR LIQUID-CONTAINERS. JOHN W. McATLIFE, Pelham, N. Y. Filed Apr. 26, 1919. Serial No. 292,782. 7 Claims. (Cl. 215-117.)



1. The combination with a liquid container having a removable top, of a drinking tube device arranged within

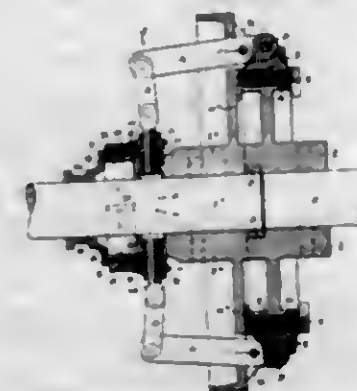
the container and adapted to have its upper end raised out of the container when the latter is opened, and a stop device for limiting the upward movement of the device.

1,309,995. MACHINERY FOR SOLIDIFYING LIQUEFIED SOLIDS. CARLETON BATES, Milwaukee, Wis., assignor to United States Gine Company, Milwaukee, Wis. Filed Dec. 4, 1916. Serial No. 134,909. 3 Claims. (Cl. 62-114.)



3. In an apparatus for cooling liquefied solids, the combination of a froth remover; a precooler; a cooling chamber; a conveyor; means for supporting and causing said conveyor to traverse said cooling chamber; means for feeding the said solids in liquid form to the conveyor traversing said cooling chamber; and means for causing the circulation of chilled air within the cooling chamber.

1,309,996. FRICTION-CLUTCH. JAMES BOWEN, Mannheim, Pa., assignor to Bond Foundry & Machine Company, Mannheim, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1919. Serial No. 282,789. 6 Claims. (Cl. 192-11.)



1. The combination, in a friction clutch of the character specified, of a plurality of radially movable clutch members, levers acting thereon, screw stems connected to said levers, nuts engaging said screw stems, pinions on said nuts, and an annular rack adjustable into or out of engagement with said pinions.

1,309,997. LOOM. ANDREW BROWNING, Philadelphia, Pa., assignor to The Hirst-Roger Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 27, 1917. Serial No. 183,064. 3 Claims. (Cl. 139-23.)



1. The combination, in a loom, of the swinging lay, a rod for depressing the pile warp threads, means for detachably mounting said rod on the lay, and means for engaging and retaining said rod when the lay is at the forward end of its swing whereby said rod is caused to produce loops of pile warp thread at the back of the fabric.

1,309,998. VENDING DEVICE. JOSEPH BUCKER, Oak Park, Ill. Filed Oct. 31, 1917. Serial No. 199,559. 6 Claims. (Cl. 206-21.)



1. In a match vending machine, the combination of a receptacle, pivotally mounted single-delivery means, means for resisting the discharge of each match to afford the engagement thereof by said delivery means, means manually operable in one direction and upon release spring-actuated to reverse direction for automatically igniting each delivered match, and a retainer for the ignited match arranged to receive the ignited match from said delivery means.

1,309,999. PROCESS OF RECOVERING WAX FROM SUGAR-CANE. RAYMOND U. BUNGER, Yonkers, N. Y. Filed Feb. 27, 1919. Serial No. 279,646. 5 Claims. (Cl. 87-19.)



2. A continuous process of recovering wax from sugar cane consisting of flowing hot water at a temperature sufficient to melt the wax from the surfaces of the cane stalks through a tank, delivering cane stalks into one end of said tank, propelling cane stalks through said tank and submerged in the hot water flowing there-through, allowing the wax liberated by the hot water to collect as a film on the surface of the hot water, removing the cane stalks from the opposite end of said tank, overflowing said tank from its water surface level to carry off the water and the collected film of wax, and then delivering said overflow of water and wax to separating means for removing the wax from the water.

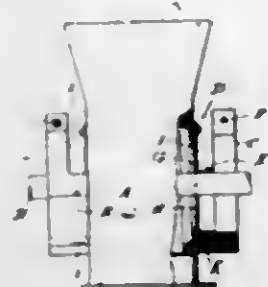
1,310,000. TYPE-WRITING MACHINE. LEE S. BURRIDGE, deceased, New York, N. Y., by Francis O. Burridge, executor, New York, N. Y., assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 27, 1915, Serial No. 52,594. Divided and this application filed Oct. 30, 1917. Serial No. 199,237. 10 Claims. (Cl. 197-139.)



1. In a typewriting machine, a platen, a rail extending lengthwise of the platen and movable therewith in letter-

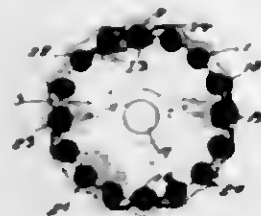
feed and reverse directions, a marginal paper-finger carrier slidable on said rail, a paper-finger movable on said carrier transversely of the rail, a rack extending lengthwise of the rail and movable therewith, and a tooth on the paper-finger, shiftable into and out of the rack by said transverse movement of the paper-finger, for holding the paper-finger and its carrier in any adjusted position along the rail.

1,310,001. SIDE CLOSING PLATE. EDWARD B. CAMPBELL, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Co., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 10, 1919. Serial No. 276,165. 1 Claim. (Cl. 64-22.)



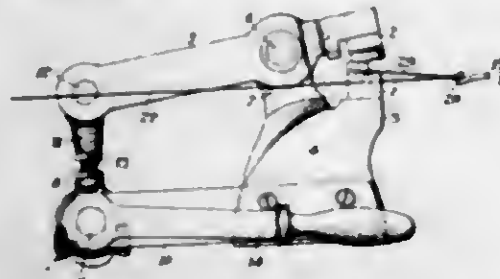
The combination with a mill shaft and a casing having an offset bearing housing connected by a semi-circular web to said casing,—said casing having an opening in its side opposite said offset housing and said web having a groove concentric with said opening and substantially in the plane of the outside face of the casing,—of a circular divided closing plate fitting against the face of said casing and rotatably located partly within said web groove and partly outside of said groove, and means to secure said closing plate in its rotated closing position.

1,310,002. COUPLING. CHARLES HANSELL CLARK, New York, N. Y. Filed May 19, 1915. Serial No. 29,243. 19 Claims. (Cl. 64-96.)



1. A coupling comprising two resiliently connected sprocket wheels mounted respectively upon the members to be coupled, and a chain encircling said wheels and connecting the same.

1,310,003. WIRE-TWISTING MACHINE. JOSEPH COZZO, Rochester, N. Y., assignor to American Piano Company, New York, N. Y., a Corporation of New Jersey. Filed June 10, 1916. Serial No. 102,832. 8 Claims. (Cl. 140-73.)



1. A device of the character described comprising a rotatable wire-twisting member; a wire-receiving member having means to clamp the wire in a line with the axis of rotation thereof; and an abutment extending from said

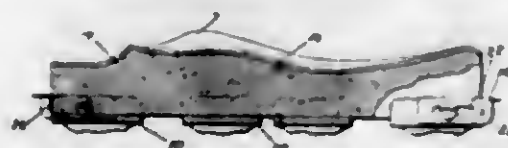
line and substantially co-planar therewith to resist revolution about said axis of wire portions not substantially co-linear therewith.

1,310,004. COMPOSITE STICK. ROBERT B. COLEMAN, Los Angeles, Calif. Filed Aug. 3, 1916. Serial No. 113,362. 1 Claim. (Cl. 44-1.)



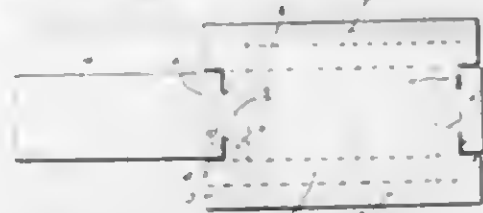
An article of manufacture comprising a fuel stick made up of loose materials pressed together into form and having longitudinally disposed retaining grooves in its sides, and binding wires around said stick, longitudinally thereof, in said grooves, and twisted together at the end of said stick, at a space therefrom, whereby to leave a definite slack space between the end of the stick and the wires for expansion purposes, substantially as shown and described.

1,310,005. PRESSING-FORM. HERMAN A. DAVENPORT, Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 8, 1916. Serial No. 70,953. 4 Claims. (Cl. 12-38.)



1. A pressing form for sole laying machines having, in combination, a continuous pressing pad, a support for the pad having a flange at its sides to prevent transverse movement of the pad, and a rigid locating stay at each end of the support to engage the pad and hold it from longitudinal movement, one of said stays being movable to permit removal or insertion of the pad.

1,310,006. PAPER BOX MEMBER. GEORGE DIAMOND, Milwaukee, Wis. Filed Feb. 17, 1919. Serial No. 277,531. 1 Claim. (Cl. 229-34.)



A box formed of a blank comprising a bottom section, outer side wall sections extending from the bottom section, inner side wall sections extending from the outer side wall sections and separated therefrom by fold lines, securing flaps extending from the ends of the side wall

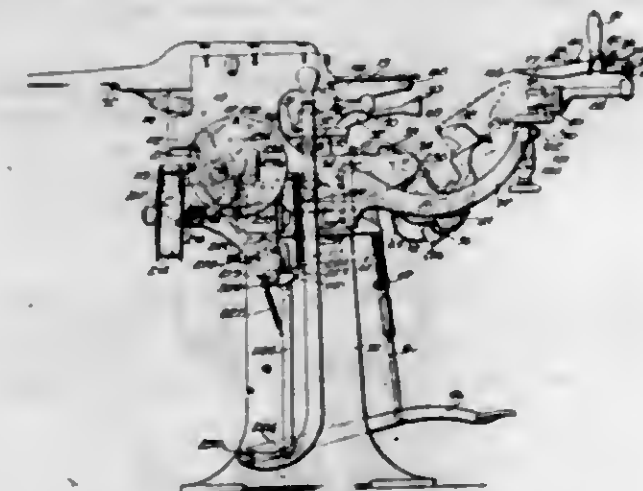
sections and separated from each other by fold lines, outer end wall sections extending from the bottom section and separated from said securing flaps by fold lines forming straight continuations of the fold lines separating the side wall sections from the bottom, said outer end wall sections being provided with fold lines extending inwardly at angles of forty-five degrees from the corners of the bottom section, inner end wall sections extending from the outer end wall sections, the junctures of said sections being slit from their outer ends to said oblique fold lines, and an inner bottom section extending from one of the outer wall sections.

1,310,007. SCRUBBING-BRUSH. MELL BERT DUMAS, Milwaukee, Wis. Filed Feb. 11, 1918. Serial No. 210,662. 2 Claims. (Cl. 15-13.)



1. A scraper device comprising an elongated flattened handle, a blade projecting from one end portion of the handle and lying in a plane disposed substantially at right angles to the plane of the handle and including the longitudinal axis of the handle, said blade having a straight scraping edge on the side remote from the handle, and having a curved scraping edge extending from the outer end of the straight scraping edge and merged into the other side of the blade, the juncture of said scraping edges forming a scraping point at the portion of the blade most remote from the handle.

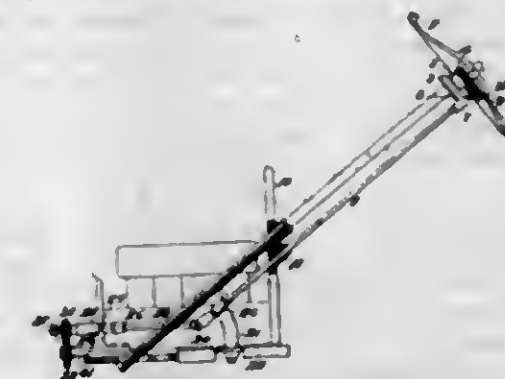
1,310,008. SHOE-TURNING MACHINE. EDWARD ENICKSON, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 23, 1917. Serial No. 187,845. 40 Claims. (Cl. 12-57.)



1. A shoe turning machine, having in combination, a support about which the sole is bent, a cooperating upper support, a turning member engaging with the toe portion of the shoe, and means for relatively actuating the turning member and sole support to cause the turning member to engage with and force the toe portion of the shoe rearwardly and turn the forepart in the opposite direction from the shank toward the toe.

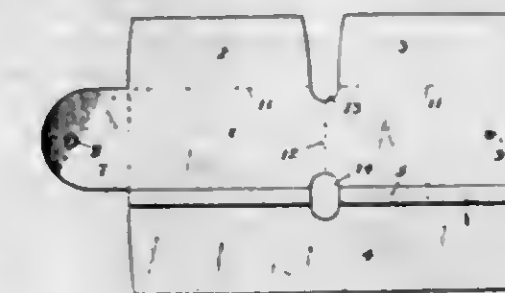
18. A shoe turning machine, comprising a head, a forepart spreader detachably mounted upon the head, and connections for supporting the head adapted to permit a free movement of the head in any direction in a single plane.

1,310,009. AUTOMOBILE-STARTER. AUGUST A. FILICKY, San Francisco, Calif. Filed Apr. 19, 1919. Serial No. 291,203. 6 Claims. (Cl. 74-7.)



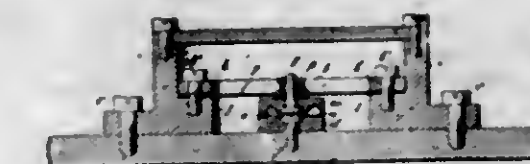
1. In combination with a steering wheel of an automobile and means, movable into operative and inoperative positions, for rotating the engine shaft of an automobile, an operative connection between said means and the steering wheel of the automobile whereby a rotary movement of the steering wheel operates said means when the latter is in its operative position to rotate said engine shaft, and a different movement of the steering wheel moves said means from operative to inoperative position.

1,310,010. BILL-FOLD. MAX FREUND, New York, N. Y. Filed Mar. 27, 1919. Serial No. 285,513. 1 Claim. (Cl. 150-38.)



An article of the class described, comprising an elongated body portion, a pair of flaps formed integral on one of the longitudinal sides of said body portion, a cut-away portion on the body portion intermediate said flaps, a flap at the opposite longitudinal side of said body portion, an expansible strip connecting said flap and body portion, and a cut-away portion on said strip and flap, said flap and body portion being adapted to be folded on a line connecting the two cut-away portions.

1,310,011. SUBMARINE SOUND-SIGNALING. JOHN GARDNER, Fleetwood, England. Filed July 31, 1917. Serial No. 183,813. 4 Claims. (Cl. 179-122.)



1. In a device of the kind described, a microphonic instrument comprising an electrode, a sound-receiving wall, said electrode being rigidly connected thereto, a diaphragm, a second electrode mounted thereon in electrical contact with said first electrode, a support for said diaphragm also connected to said sound-receiving wall whereby the sound waves may be conveyed thereto and the electrode mounted thereon will be given a greater amplitude of vibration than said first electrode.

1,310,012. PROCESS OF PRODUCING A SYRUP AND A FEED. HERBERT C. Goss, Takoma Park, Md. Filed Feb. 18, 1919. Serial No. 277,750. 1 Claim. (Cl. 99—11.)

A process of making a syrup consisting in adding water to sweet potatoes, boiling the mass, adding ground malt, the further boiling of this mixture, and subsequently separating the liquid portion of the mixture from the solid portion thereof, the said liquid portion being adapted for use as a syrup.

1,310,013. PROCESS FOR RECLAIMING RUBBER. HANA RICHARD MARSTEL, Franklin, Mass. Filed Dec. 23, 1918. Serial No. 268,079. 8 Claims. (Cl. 18—52.)

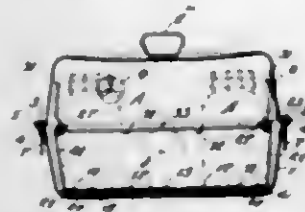
1. The process of reclaiming vulcanized rubber consisting in swelling the rubber while under pressure and then releasing the pressure thereon suddenly.

1,310,014. TOOL FOR FORMING CERVICAL FILLINGS. WILLIAM O'HALLORAN, Stoughton, Mass. Filed Sept. 20, 1918. Serial No. 254,982. 2 Claims. (Cl. 32—10.)



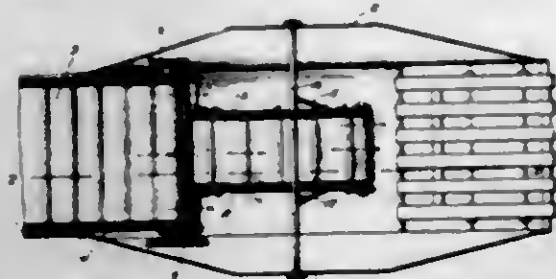
1. A dental tool comprising a shank and a tamping head of ductile metal, having a central portion seated on and rigidly backed by one end of the shank, and oppositely projecting flexible wings, said central portion and wings forming a curved face adapted to conform to the labial face of a tooth and to be bent to and retain different curvatures.

1,310,015. CULINARY UTENSIL. GEORGE L. HANNAON, Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 30, 1916. Serial No. 106,781. 4 Claims. (Cl. 53—1.)



1. A device of the character set forth comprising a frame adapted to receive articles, a resilient supporting member depending from each end of the frame, and a removable bottom plate between the lower ends of said supporting members, the parts being so proportioned that the supporting members are under tension when the bottom plate is between them.

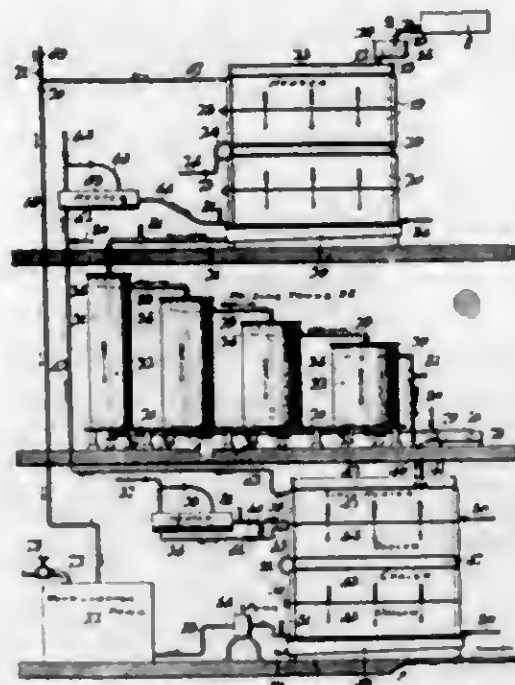
1,310,010. DISTRIBUTING APRON FOR SHOCK-LOADERS. HENRY HANNEASON, Halstad, Minn. Filed Dec. 31, 1918. Serial No. 269,031. 6 Claims. (Cl. 193—19.)



5. The combination, with a bundle receptacle, of an elevating apron mounted to deliver bundles to said re-

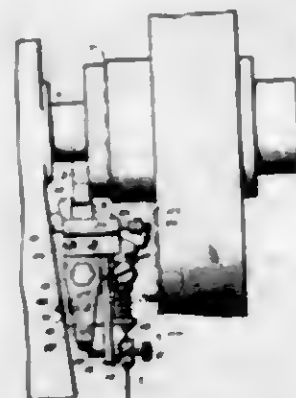
ceptacle, a distributing apron mounted to receive the bundles from said elevating apron, said distributing apron being of less width than said elevating apron for receiving the bundles from the middle portion of said elevating apron for delivery near one end of said receptacle while the bundles at the sides of said elevating apron are discharged upon either side of said distributing apron.

1,310,017. APPARATUS FOR PASTEURIZING FLUIDS. SAMUEL M. HURLINGS, Haddonfield, N. J. Filed Mar. 28, 1914. Serial No. 827,813. 7 Claims. (Cl. 257—11.)



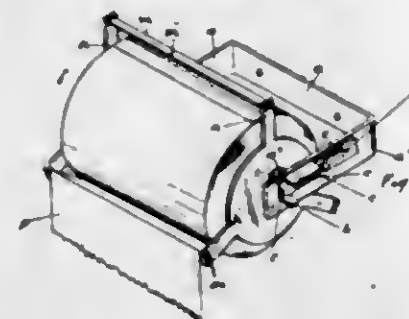
1. In pasteurizing apparatus, the combination with a plurality of heating means, of fluid holding means, means for conveying fluid to be pasteurized from one heating means to the holding means, means for conveying such fluid from the holding means to the other heating means, and means for supplying heating medium to the second heating means and for directing it from such second heating means to the first heating means.

1,310,018. SPRING SAFETY-LATCH. RICHARD HOKLE-MANN, New York, N. Y. Filed Nov. 9, 1917. Serial No. 201,048. 13 Claims. (Cl. 74—46.)



1. In a device of the class described, the combination with a clutch mechanism having a definite path of travel, a pair of stop members each movable across the path of the clutch member to intercept the movement of the same, said mechanism normally held by the most advanced of the pair of stop members and means for removing said advanced member from the path and for interposing the other member across said path, of resilient means acting on said other member for absorbing the shock imposed thereon by said clutch mechanism contacting therewith.

1,310,019. PAPER-ROLL FIXTURE. ARTHUR D. HOSFELDT, Portland, Oreg. Filed Oct. 12, 1917. Serial No. 196,337. 11 Claims. (Cl. 211—33.)

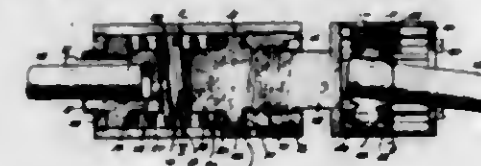


3. A device of the character described comprising a bracket, a reel supported thereby and rotatable in one direction only, one side of the reel being removable, cutter bars radially disposed on the reel sides, opposed cone sections on said shaft one thereof being removable, and means for securing such cone in place on the shaft.

1,310,020. SOLUTION FOR AND PROCESS OF HARDENING STEEL. CHARLES A. HUESTIS, Elmhurst, N. Y. Filed Oct. 10, 1918. Serial No. 257,644. 6 Claims. (Cl. 148—29.)

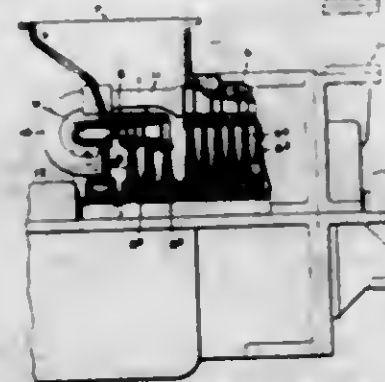
4. In a composition for hardening steel, a mixture of soap, kerosene oil and salt in approximately the proportion of four pounds of soap, three gallons of kerosene oil, and one-quarter pound of salt.

1,310,021. SHOCK-ABSORBER. JAMES A. JOHNSON, Chicago, Ill., assignor of one-half to Leo J. Remm, Chicago, Ill. Filed July 2, 1917. Serial No. 178,091. 7 Claims. (Cl. 64—89.)



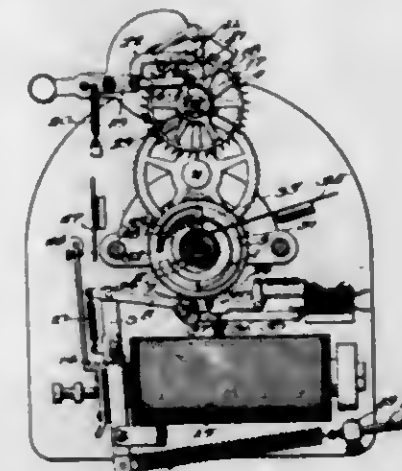
1. In a device of the class described, the combination of a driving shaft, a load shaft, a casing, a boss keyed to the driving shaft and secured to the casing, a threaded hub in the casing adapted for longitudinal and rotative movement therein, a boss on the hub, a bushing mounted in the casing adapted to turn therewith and having threads for cooperation with the threads on said hub, said boss having notches in the inner ends thereof and a spring within the casing and surrounding the bosses tending normally to hold the latter in spaced relation, substantially as described.

1,310,022. ELASTIC-FLUID TURBINE. OSCAR JUNG GANN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 21, 1919. Serial No. 278,455. 7 Claims. (Cl. 253—70.)



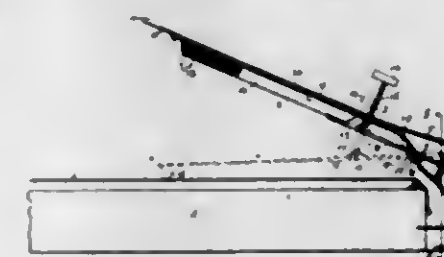
1. In an elastic fluid turbine, an ahead section, a reversing section, and conduit means for conveying elastic fluid discharged from the ahead section to the reversing section to cool the latter when it is running idle.

1,310,023. MECHANICAL MOTOR. WILLIAM F. KRAUTER, Chicago, Ill., assignor, by mesne assignments, to International Time Recording Company of New York, New York, N. Y., a Corporation of New York. Filed May 27, 1918. Serial No. 236,601. 15 Claims. (Cl. 58—41.)



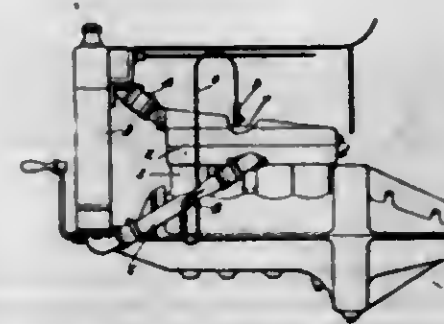
15. The combination with an electro-magnet; of an energizing circuit therefor; a switch for closing said circuit; a second switch for closing the magnet circuit; mechanism for operating said switches; and mechanism operated by the magnet for normally preventing closure of the second switch, but permitting such closure when the magnet circuit is inoperative.

1,310,024. KEYED ZITHER. JAMES KRAWCZYK, Syracuse, N. Y. Filed May 31, 1918. Serial No. 237,388. 3 Claims. (Cl. 84—110.)



1. In a musical instrument, the combination with the treble and the bass strings, and a plurality of flexible-striker levers pivotally held above the treble strings, of a depressible key for each striker lever, a support for said levers, said support having hinge-loops alternating with similar loops of said levers, a music rack pivoted to said support and having perforations to receive the stems of said keys, and mechanical means for operating the bass strings independently of the other strings.

1,310,025. CIRCULATING SYSTEM. ROBERT M. LA PORTE, Baltimore, Md. Filed Dec. 3, 1917. Serial No. 205,137. 4 Claims. (Cl. 123—175.)



1. In a circulating system for internal combustion engines including a radiator, a water jacket, and top and

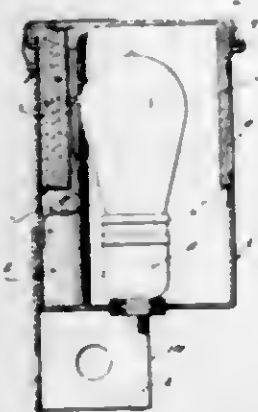
bottom connections arranged to give thermosiphonic circulation, a nozzle in the lower radiator connection turned in the direction of thermosiphonic circulation, a gas tube leading from the exhaust to said nozzle, and a gravity actuated non-return valve near the lower radiator connection so that it is subject to the cooling influence of the cold water from the radiator.

1,310,026. THERMAL VALVE AND TRAP FOR WET LINES. SAMUEL LUTHERY, East Cleveland, Ohio. Filed June 10, 1916. Serial No. 102,823. 8 Claims. (Cl. 236—59.)



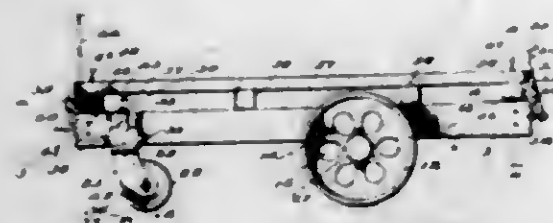
1. In a steam trap, a chamber provided with a horizontal division wall, inlet and outlet openings for said chamber on respective sides of said wall, a valve seat in said division wall, said valve seat having an outlet opening therein, and a thermal loop secured to said division wall, and a valve for said valve seat, the point of attachment of said thermal loop being so positioned as to seat said valve exactly of said valve seat, the attached end of said loop being inserted between said valve seat and said partition.

1,310,027. MARKING-LIGHT FOR LOCOMOTIVES. ABRAHAM N. LUCAS, Milwaukee, Wis. Filed June 11, 1918. Serial No. 239,444. 2 Claims. (Cl. 240—23.)



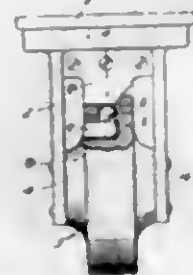
1. A lamp casing comprising a rectangular container, apertures formed in adjacent sides of the container, glass slides adapted to close the apertures, a partition secured to the side walls of the container interiorly of the same whereby a staff socket is formed, and a cover adapted to close the container, said cover being provided with an opening in registry with said socket.

1,310,028. TRAILER-TRUCK. JAMES J. MAHAN and JOHN J. REILLY, Jersey City, N. J. Filed Apr. 23, 1918. Serial No. 230,339. 3 Claims. (Cl. 21—65.)



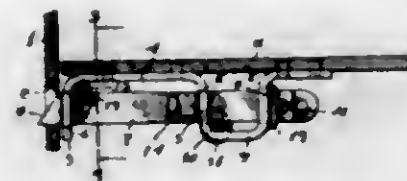
1. The combination with a truck frame consisting of side and end bars, gusset plates secured on said bars at the ends thereof and having openings therethrough, a platform adapted to extend over the truck frame, and revolvable bearing members mounted on the under side of the platform and adapted to rest in said openings.

1,310,029. CASTER. EDWARD T. MALLOY, Hamilton, Ohio. Filed May 8, 1919. Serial No. 293,671. 3 Claims. (Cl. 16—4.)



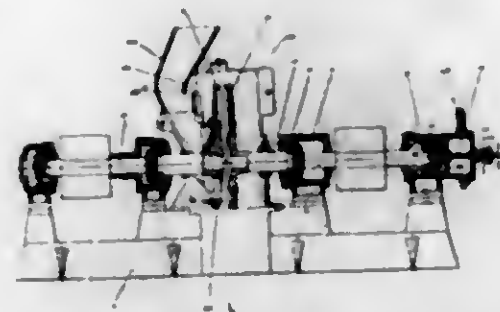
2. A caster comprising, a pair of separated housing horns, a wheel center narrower than the distance between the horns, hubs projecting from the sides of the wheel center to the horns, means for preventing the rotation of the wheel center with reference to the housing, a tire disposed for rotation upon the wheel center and having a width substantially the same as that of the wheel center, the periphery of the wheel center and the bore of the tire being provided with grooves to form the race-way for a series of anti-friction balls, the wheel center being provided with a plugged hole communicating with the groove in its periphery, and a series of anti-friction balls disposed in the grooves of the tire and wheel center, combined substantially as set forth.

1,310,030. LATCH FOR DREDGER-BUCKETS. EUGENE J. MOYNIHAN, San Francisco, Calif. Filed July 13, 1918. Serial No. 245,776. 5 Claims. (Cl. 70—42.)



1. The combination with a dredger bucket of a frame upon the lower surface of the bucket bottom and having apertured portions extending laterally from said bottom and a portion spaced apart from and parallel with said bottom; a bar slidably mounted within the apertures and arranged to engage an aperture in said bucket to support the bottom thereof in a closed position; and anti-friction rollers mounted between the spaced apart portion of the frame and the bottom of the bar and between the said bar and the bottom of the dredger bucket bottom.

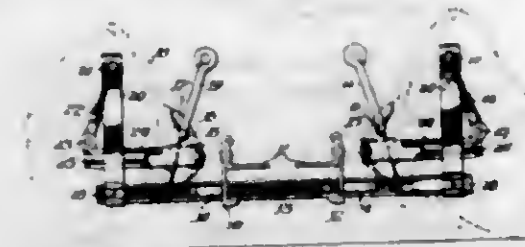
1,310,031. GRINDING-MILL. ARMAND LYNNE PARCHALL, Springfield, Ohio, assignor to The Bauer Bros. Company, Springfield, Ohio, a Corporation of Ohio. Filed Aug. 15, 1916. Serial No. 114,967. 2 Claims. (Cl. 83—8.)



1. In an attrition mill, a casing, a revolvable grinding member in said casing, a chute to receive the material to be ground and discharge the same by gravity near the axis of said grinding member and a passage way from said

casing having opposite vertical walls providing a downward discharge into said chute whereby the material to be ground will fall free of the discharge opening of said passageway and be assisted in its fall by the pressure from said opening.

1,310,032. BRAKE-SUPPORTING MECHANISM. ARMAND H. PEYCKE, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 5, 1918. Serial No. 226,909. 11 Claims. (Cl. 188—70.)



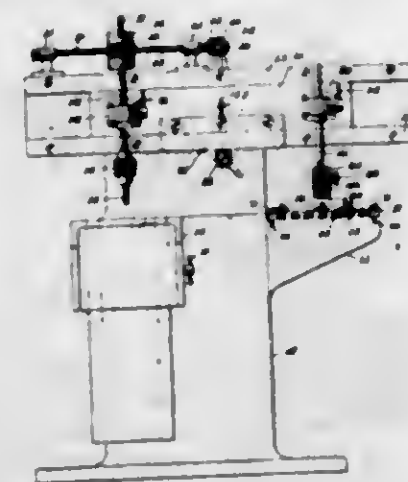
1. In brake mechanism, safety bars, a member extending therebetween, a brake beam, brake heads carried thereby, and a hanger for supporting said brake beam, said brake beam also being supported by the member extending between said safety bars.

1,310,033. BRAKE-RELEASING MEANS. ARMAND H. PEYCKE, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed May 15, 1918. Serial No. 234,575. 2 Claims. (Cl. 188—70.)



1. In brake mechanism, the combination of a hanger, a support therefor, and a releasing spring mounted on one side thereof, passing between a portion of the hanger and said support for holding the spring in place, one end of the spring terminating on the opposite side of the hanger.

1,310,034. TRANSFERRING MASTER-DRILL DEVICE. JAMES POWERN, New York, N. Y. Filed June 6, 1917. Serial No. 173,093. 13 Claims. (Cl. 77—5.)

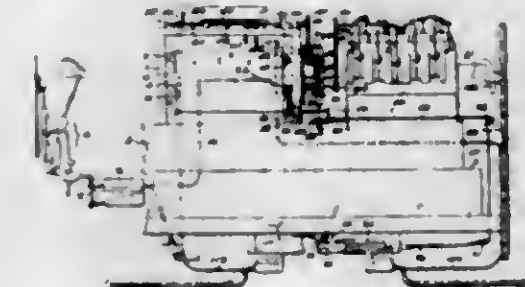


1. A drill-pilot machine comprising, a work-supporting means, a pilot, a rotatable drill, means for moving the pilot and the drill in parallel paths in conformity to each

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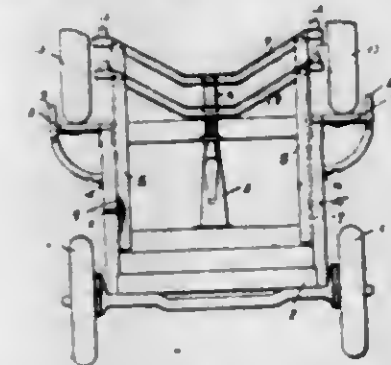
other, means for moving the pilot and the drill in the same path in conformity to each other and transversely to the first-mentioned paths, a positioning supporting means having means for engaging positioning gage-points therewith, gage-points for engaging the positioning supporting means at desired positioning locations, means for engaging the pilot with a gage-point when such gage-point is engaging the positioning supporting means, and means for rotating the drill; movement of the pilot and the drill in said paths in conformity to each other permitting working rotation of the drill in position in conformity to the pilot, when the pilot is in engagement with a gage-point which is engaging said positioning supporting means.

1,310,035. MUSICAL INSTRUMENT. GUY M. RUSSELL, Rochester, N. Y., assignor to American Piano Company, New York, N. Y., a Corporation of New Jersey. Filed June 11, 1915. Serial No. 33,023. 22 Claims. (Cl. 84—100.)



1. In an automatic musical instrument, the combination of a music spool and a take-up spool, means for alternately driving said spools, controlling means co-operating with said driving means and controlling the operation of the same and including means for selecting during the playing of a note sheet any desired continuous portion thereof, a means co-operating with said selecting means for repeating the playing of said selected portion.

1,310,036. LOADING DEVICE FOR AUTOMOBILES. CARL CLYDE SMITH, Oakland, Calif. Filed July 23, 1918. Serial No. 240,384. 4 Claims. (Cl. 234—2.)

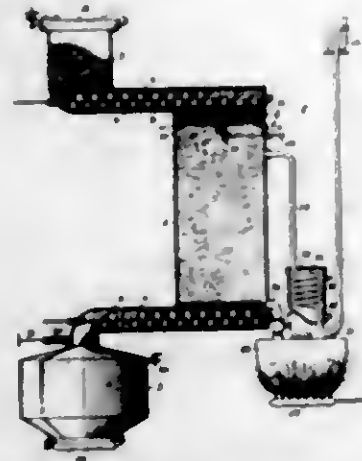


1. A loading device for automobiles and other similar articles of the kind described, having a frame with folding or adjustable runways as shown, a lifting jack mounted on said frame at either end thereof; the said jacks having cross arms rigidly attached in a suitable manner to the upper end of the said jacks, the said arms extending outwardly from the said jacks and parallel with the end of the said frame.

1,310,037. COATING PROCESS AND APPARATUS. WALTER O. SNELLING, Long Island City, N. Y. Filed May 31, 1916. Serial No. 100,846. 24 Claims. (Cl. 91—68.)

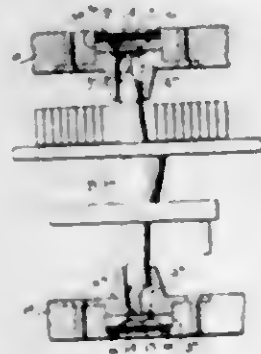
1. The process that comprises treating a hygroscopic crystalline substance with a vaporous coating material.
2. The process that comprises causing a hygroscopic fragmentary substance to fall freely through a vaporous condensable coating material.

20. The process that comprises vaporizing nitronaphthalene under subatmospheric pressure sufficiently low to substantially prevent decomposition of the nitronaphthalene, and bringing the resulting vapor into contact with crystalline ammonium nitrate.



24. Apparatus for coating fragmentary material comprising a treating vessel, a hopper, a conveyor for bringing fragmentary material from the said hopper to the top of the said treating vessel, and a feeding device disposed at the top of the said treating vessel and comprising two superposed and radially slotted disks, the said disks being relatively movable to progressively bring the slots in the said disks into alignment.

1,310,038. TIMEPIECE. ANGUS SWEENEY, Jerome, Idaho. Filed Apr. 20, 1918. Serial No. 229,748. 1 Claim. (Cl. 58-140.)

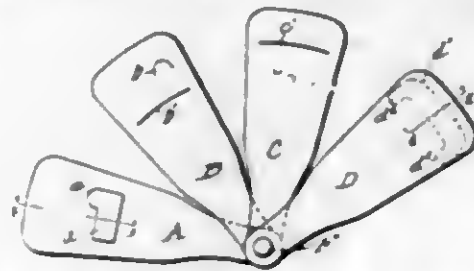


In combination with a support provided with an opening therethrough, the outer margin of the opening being defined by an inwardly directed flange, a setting removably arranged within the opposite end portion of the opening, a second setting loosely mounted within the opening between the first named setting and the inwardly directed flange, a coil spring interposed between the marginal portion of the second setting and the inwardly directed flange for constantly urging the second named setting toward the first named setting and permitting a yielding movement of the second named setting, said spring and second setting being housed within the opening, and a balance staff having an end portion mounted within the first named setting and contacting with the second setting.

1,310,039. FAN. HERBERT A. THORNDIKE, Pittsburg, Mass., assignor to Diadem Manufacturing Company, Pittsburg, Mass., a Corporation of Massachusetts. Filed May 21, 1917. Serial No. 109,815. 3 Claims. (Cl. 230-33.)

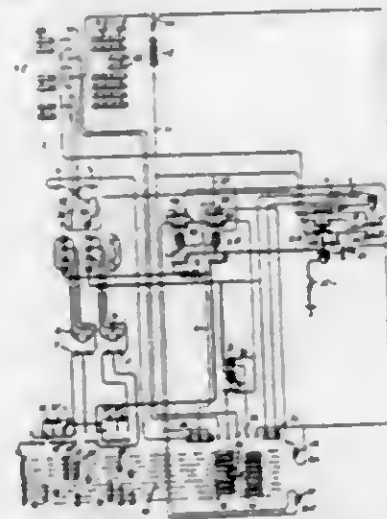
1. As an article of manufacture, a fan comprising two outside plates and an odd number of leaves of only two forms pivoted together and alternately arranged, free from each other at their edges, and having means thereon for limiting the swinging motion of the leaves and plate in both directions, said means consisting of tongues lo-

cated on all the leaves and on one plate and slots in all the leaves for receiving the tongues, said plates being free from slots extending through them, but one having



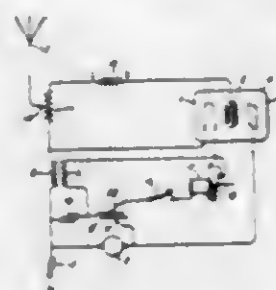
means on the inner side for entering the slot in a leaf and the other having means on the inner side for receiving the tongue of a leaf.

1,310,040. SYSTEM OF MOTOR CONTROL. JOHN F. TAITLIE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 20, 1916. Serial No. 104,721. 9 Claims. (Cl. 172-179.)



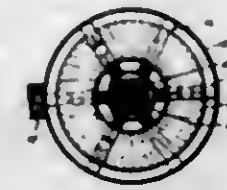
1. The combination with a controller for starting electric motors, of means for causing the controller to advance step by step under the control of the motor current, and means whereby the current control is rendered more sensitive only when the controller is being advanced from one step to the next and after a step is begun the advance of the controller is rendered independent of the motor current until the step is completed.

1,310,041. WIRELESS SIGNALING SYSTEM. WILLIAM C. WHITE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1917. Serial No. 143,045. 6 Claims. (Cl. 250-19.)



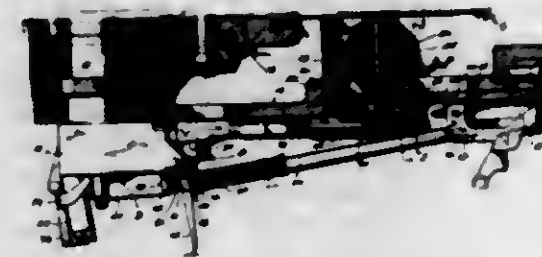
1. The combination in a wireless signaling system of an antenna, an electron discharge device connected to said antenna and having plate and grid circuits so adjusted and coupled to each other that radio frequency continuous oscillations will be produced in said antenna, an inductance in said plate circuit, and means operatively related to said plate circuit for intermittently short-circuiting said inductance and thereby interrupting the production of oscillations by said electron discharge device.

1,310,042. ELECTRICAL APPARATUS. WILLIAM S. WILLIAMS, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 14, 1918. Serial No. 266,752. 8 Claims. (Cl. 175-356.)



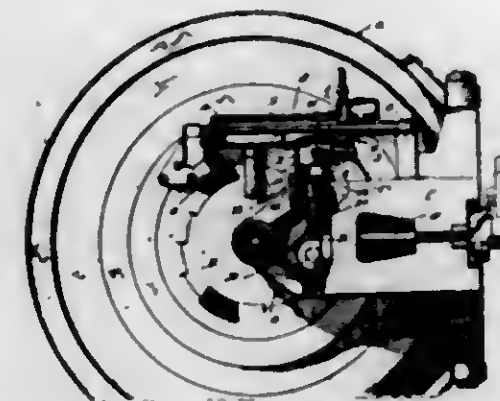
2. In an electrical apparatus, the combination with windings composed of coils in assembled relation, of spacing means for said windings each comprising leg members extending over the edges of said coils perforated filling members, and a securing member traversing the perforation in said filling members and forming in cooperation with said other members a U-shaped spacing device.

1,310,043. FIRING MECHANISM FOR GUNS. DORSEY FROST ASSURBY, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Feb. 3, 1916. Serial No. 75,981. 25 Claims. (Cl. 89-27.)



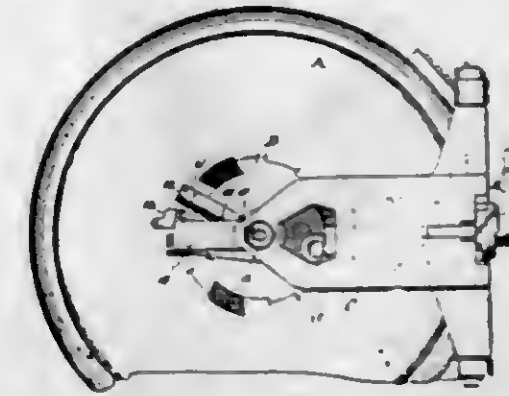
1. In a breech mechanism, the combination of a carrier, a plug, a plug rotating shaft, a firing lock frame including an operator bar and an operator, a slidable member between the operator bar and shaft reciprocated by the opening and closing rotation of the shaft, and means whereby the reciprocation of the member will reciprocate the lock frame.

1,310,044. PLUG-OPERATING DEVICE FOR BREECH MECHANISMS. DORSEY FROST ASSURBY, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Feb. 14, 1916. Serial No. 78,130. 21 Claims. (Cl. 89-20.)



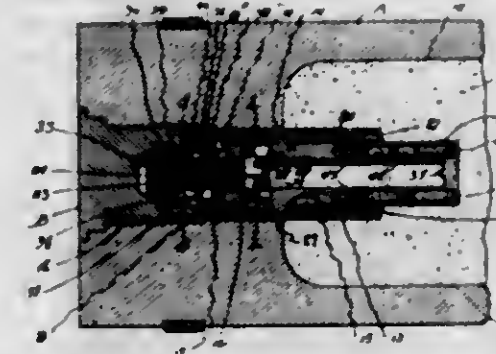
1. In a gun, the combination of a movable breech plug, and a motor for moving the plug toward locked position, said plug being movable away from and in advance of the motor toward locked position.

1,310,045. BREECH MECHANISM. DORSEY F. ASSURBY, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Mar. 15, 1916. Serial No. 84,348. 36 Claims. (Cl. 89-20.)



1. In a breech mechanism, the combination of a carrier, a breech plug mounted on the carrier for both rotatable and longitudinal movements, and means operating between the plug and carrier whereby successive units of either movement of the plug will produce varying amounts of the other movement.

1,310,046. DETONATING-FUSE. DORSEY F. ASSURBY, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed June 24, 1916. Serial No. 105,564. 17 Claims. (Cl. 102-39.)



1. In a fuse, an adapter, a fuse stock slidably supported by the adapter, a detonator slidable in the stock, and centrifugally released means carried by the stock and normally holding the detonator against movement.

1,310,047. DEMOUNTABLE WHEEL-RIM. EARL KING BAKER, Chicago, Ill., assignor to Universal Rim Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1916. Serial No. 87,600. 14 Claims. (Cl. 152-21.)



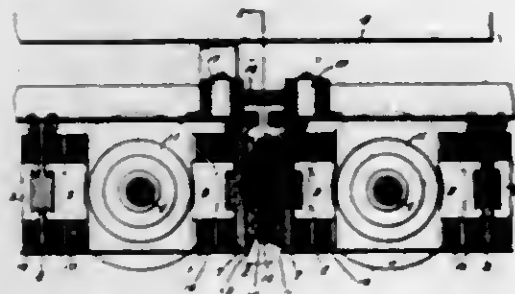
1. The improvement herein described, comprising a wheel, in combination with a tire-carrying transplit rim demountably held thereon in only single narrow-line cylindrical contact therewith.

1,310,048. DEMOUNTABLE RIM AND COMPLEMENTARY WHEEL. ERLE KING BAKER, Chicago, Ill., assignor to Universal Rim Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1916. Serial No. 89,761. 3 Claims. (Cl. 152-21.)



1. A motor vehicle wheel having a fixed rim provided with a substantially conical back flange, in combination with a demountable, tire-carrying, flanged rim, of enough greater circumference to allow it to be buttoned on to the fixed rim, and having an inner circumferential corner in substantially single-line conical contact with said back flange, an anti-cresping device connecting the fixed and demountable rims, a plurality of pressure lugs contacting only the outer side flange of the demountable rim, and bolts in the wheel for tightening said lugs axially against said outer side flange; whereby the demountable rim is fixedly sustained only by said back flange of the fixed rim, substantially as and for the purposes specified.

1,310,049. ELECTRIC LOCOMOTIVE OR CAR. ASA F. HATCHER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 21, 1918. Serial No. 223,723. 11 Claims. (Cl. 105-49.)



1. In an electric locomotive or car, a plurality of trucks, each of said trucks comprising a truck frame, pole pieces for an armature, and a motor armature operatively located with reference to said pole pieces, and a joint of low magnetic reluctance between said trucks for permitting relative movement therebetween and for conveying magnetic flux from one truck to another, said joint comprising members having projections and indentations, the projections on one of said members fitting into the indentations on the other member.

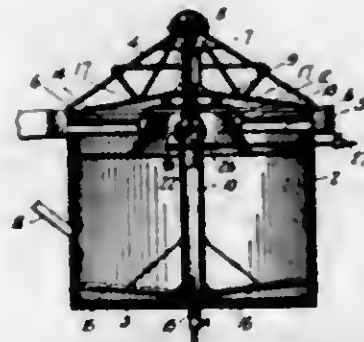
1,310,050. SOLE PROTECTOR. WILLIAM H. BETTS, St. Louis, Mo., assignor of one-half to Frank Rought, St. Louis, Mo. Filed Aug. 20, 1917. Serial No. 187,041. 1 Claim. (Cl. 36-74.)



A sole protector for shoes and the like comprising a relatively thin and flat combined driving head and wear plate, and a pair of prongs formed integrally with the ends of said plate each of which is disposed centrally of the longitudinal axis of the plate and at the ends thereof, and directly opposite to each other, said prongs being of

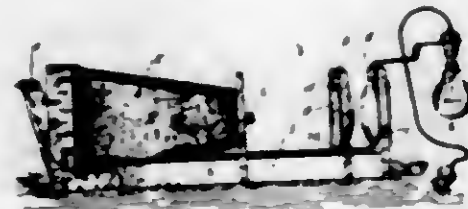
equal widths and of greater widths than thicknesses and substantially uniform widths from the ends of the plate to their edges and having their inner and outer faces gradually curved and tapered from the plate to their edges, the curvatures of the inner faces being struck from arcs of circles of greater diameter than the outer faces, whereby, upon applying the protector to the sole by driving upon the driving head, the said prongs will be simultaneously inserted into the material and be gradually and uniformly curved toward each other within the material without the use of any subsequent clenching.

1,310,051. FLOTATION ORE-SEPARATING APPARATUS. ALFRED L. BROMFIELD, Denver, Colo., assignor to The Dorr Company, a Corporation of Delaware. Filed July 15, 1916. Serial No. 109,503. 17 Claims. (Cl. 82-85.)



1. In apparatus of the character described, a container, a downwardly facing partition dividing the upper portion thereof into a central frothing zone and a surrounding settling zone having an overflow for super-natant froth, and an air-lift having an ingress-opening adjacent the bottom of the container, and an egress-opening to discharge ascending material into the frothing zone.

1,310,052. APPARATUS FOR ENLARGING PHOTOGRAPHS. PIERRE BOCCARD, Paris, and LOUIS LAMAIN, La Garenne-Colombes, France. Filed July 16, 1918. Serial No. 245,233. 2 Claims. (Cl. 88-24.)

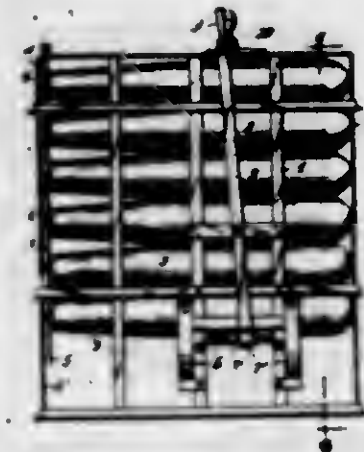


1. Photograph enlarging apparatus comprising a base, a light proof cone arranged on the base and having an objective lens at the smaller end and means at the larger end for holding a sensitized sheet; a pair of brackets on the base, condenser lenses carried by the brackets, one of said brackets also having negative holding means, and the other bracket being provided with a light diffusing sheet, and a source of light spaced from said sheet.

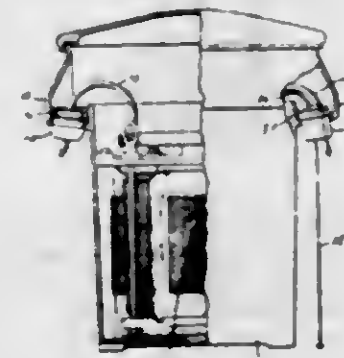
1,310,053. BOMB-HOPPER FOR AERIAL CRAFT. EDWARD S. BROWN, Ridgewood, N. J., assignor of one-half to Guyler K. Sanborn, Elizabeth, N. J. Filed May 29, 1917. Serial No. 171,030. 7 Claims. (Cl. 244-1.)

1. A hopper or magazine for bombs adapted to hold a series of bombs disposed horizontally one above the other and each provided with a rearwardly extending rod connected to a firing portion thereof and means for locking

said rods in inoperative position while the bombs are disposed in the hopper, said means being adapted to automatically free the rod of the lowermost bomb as the bomb leaves the hopper whereby it may assume operative position for exploding the charge in the bomb on impact.



1,310,054. PROTECTIVE DEVICE FOR ELECTRICAL APPARATUS. LEWIS R. BROWN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 9, 1918. Serial No. 265,851. 9 Claims. (Cl. 175-30.)



1. The combination with an incased electrical apparatus having a lead opening in its casing, of a bushing for the lead secured in said opening, said bushing being provided with another passage extending from its lead passage to a conducting part of said casing.

1,310,055. MANHOLE. GEORGE CALDWELL, Philadelphia, Pa. Filed Jan. 18, 1919. Serial No. 271,812. 4 Claims. (Cl. 182-10.)



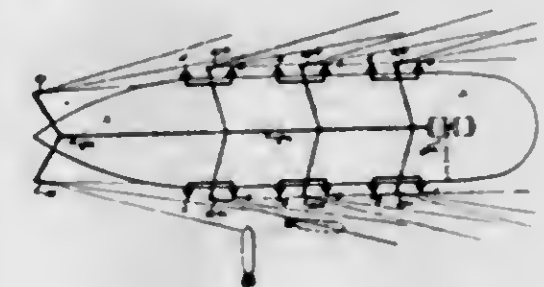
2. In a manhole, a box having on its inner wall a shoulder, a cover for said box having depending legs, which are adapted to be seated on said shoulder, and a strainer in said box formed of a hollow body having outlets in its side wall, a rim at the top, adapted to be seated on said shoulder, and a closed bottom, said rim being cut away at intervals forming passages through which said legs of the cover may enter to be seated on said shoulder permitting said cover to be rotated in its locking and unlocking motions without moving said strainer.

1,310,056. WRENCH. JESSE THOS. CAMPBELL, Elbridge, Tenn. Filed Feb. 5, 1919. Serial No. 275,140. 6 Claims. (Cl. 81-134.)



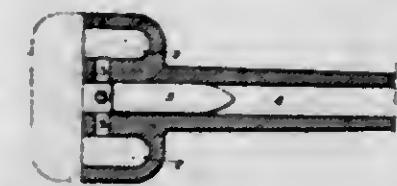
1. A wrench comprising a handle having a fixed jaw; a movable jaw cooperating with the fixed jaw and including a stem slidable in the handle; and levers disposed on opposite sides of the stem, the levers being pivoted at their outer ends to the handle and having their inner ends free for swinging movement toward and away from the stem, the levers being exposed to be gripped simultaneously, the levers and the shank having interengaging elements, those of said elements which are on the levers being located between the ends of the levers.

1,310,057. TORPEDO-DEFLECTING MEANS FOR SHIPS. CHARLES H. CASPAR, Philadelphia, Pa. Filed May 5, 1917. Serial No. 166,597. 8 Claims. (Cl. 114-240.)



7. The combination, with a ship, of a pipe extending along the sides of the same, pumping apparatus in operative connection with said pipe, nozzles operatively connected to said pipe for discharging water into the sea, supports for said nozzles occupying relatively fixed positions with respect to the ship; said nozzles being universally mounted in said supports whereby their range is such as to permit of discharge of fluid into the sea to create a wall of rearwardly and outwardly flowing liquid alongside the ship.

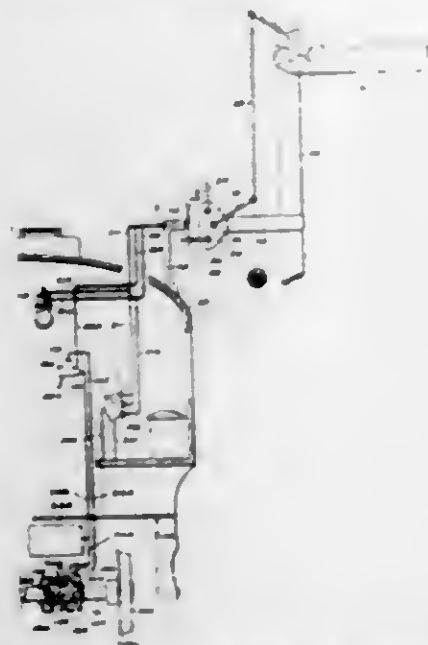
1,310,058. ORDNANCE. CHARLES H. CASPAR, Philadelphia, Pa. Filed Mar. 28, 1918. Serial No. 225,306. 4 Claims. (Cl. 89-1.)



1. Ordnance comprising a barrel having a bore for receiving a projectile and an enlarged breech, a plurality of explosive charge-receiving chambers formed within

said enlarged breech, and gas passages connecting said chambers with the bore of said barrel behind the projectile, whereby the force developed in said chambers is directed against the rear of the projectile to drive it from the barrel of the gun.

1,310,059. AUTOMATIC TRAIN CONTROL. EPHRAIM CHABOT, Nashua, N. H. Filed June 11, 1917. Serial No. 173,939. 14 Claims. (Cl. 246-182.)



7. The combination with means for automatically and pneumatically effecting the application of the brakes of an engine, of means whereby manual control of the brakes can be maintained when the speed is below a predetermined rate, said means including a pneumatic cut-off, a manually operable device for shifting said cut-off, and an air pressure mechanism for preventing or permitting effective operation of said device.

1,310,060. ELECTRIC-RESISTANCE FURNACE. EDGAR F. COLLINS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 21, 1918, Serial No. 255,140. Renewed Apr. 30, 1919. Serial No. 293,810. 12 Claims. (Cl. 219-36.)

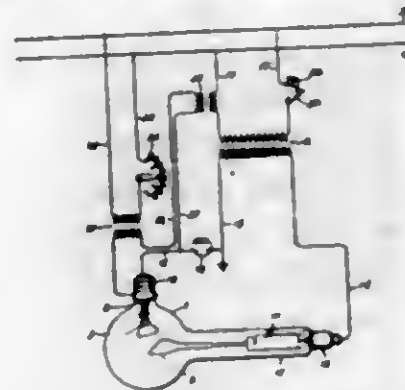


1. An electric furnace comprising a casing, circumferential frames supported at different heights by the inner wall of said casing, refractory insulating members on each of said frames and a looped resistance heater supported at bends by said members and extending between said frames.

1,310,061. X-RAY APPARATUS. WILLIAM D. COOLIDGE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 13, 1917. Serial No. 161,892. 3 Claims. (Cl. 250-35.)

1. An electron discharge device comprising a bulb, evacuated to a pressure so low that conduction of energy may

occur in the evacuated space independently of gas ionization, a cathode and an anode mounted in said bulb, means for heating said cathode, and a conductor surrounding said



cathode for focusing the cathode discharge upon said anode, said conductor being located and proportioned to receive an electron discharge from a heated focal spot on said anode.

1,310,062. DEPOSITING-NOZZLE FOR CAKE-COATING MACHINES. WILLIAM CORTELLI, JR., Philadelphia, Pa. Filed Sept. 5, 1917. Serial No. 180,703. 5 Claims. (Cl. 107-1.)



1. A two-part nozzle for cake coating machines comprising a body member having a pair of chambers, each with a separate outlet, a partition between said chambers having its upper portion diametrically disposed with respect to said body member whereby the inlet to each chamber is of substantially the same size and shape; the upper edge of the wall of said body member and said upper portion of the partition being in the same plane, and a supplemental detachable member in threaded engagement with the chambered body and having a discharge opening in communication with the outlet from one of said chambers; the outlet from the other chamber discharging through said supplemental member.

1,310,063. ELECTRICAL APPARATUS. JOSEPH R. CUMMINGS, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 2, 1918. Serial No. 265,047. 8 Claims. (Cl. 175-356.)

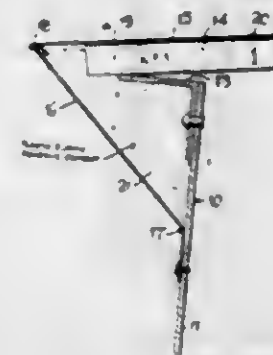


1. In an electrical apparatus, the combination with coils of winding in assembled relation, of a combined lead anchoring and spacing device.

1,310,064. OIL-TANK CONSTRUCTION. JOHN W. CUNNINGHAM, Tulsa, Okla. Filed Jan. 27, 1917. Serial No. 144,993. 2 Claims. (Cl. 220-125.)

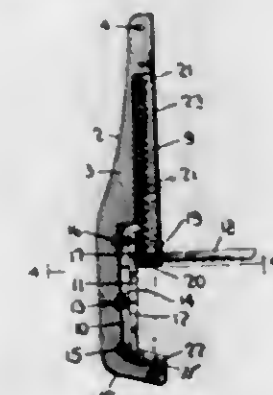
1. A tank comprising a metallic vertical wall, an angle iron attached to the upper edge of the wall and having a horizontal flange projecting outward from the wall at its upper edge, roof members resting upon the flange of the angle iron and extending beyond said flange, roof sheath-

ing attached to said roof members, a band of sheet metal having its lower margin in contact with the wall of the tank below the angle iron and attached thereto to form a gas tight joint, the sheet metal band above this joint but below the lower edge of the angle iron being outwardly and upwardly deflected to a point approximately level with



the outer edge of the roof sheathing and having its upper edge connected to the roof sheathing, and filling material disposed in the space between the band and the wall and extending upward to the upper edge of the band to thereby cover the joint between the wall and the roof and prevent the escape of gases from said joint.

1,310,065. MAIL-CATCHER. DUNCAN W. DALLAN, Chambers county, Ala. Filed Nov. 30, 1917. Serial No. 204,797. 2 Claims. (Cl. 258-22.)



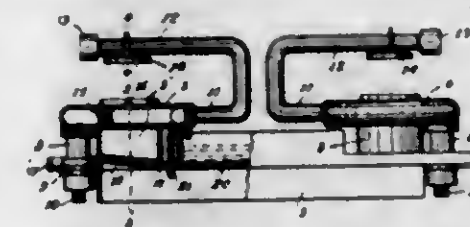
1. A mail bag catcher comprising a body part having an opening therein, a bodily movable jaw, a pin pivotally connected with said jaw and having sliding movement in said opening, springs connecting said jaw to said body part, a second jaw pivoted to said body part, and means on the first-named jaw for normally retaining the second jaw in an open position.

2. A mail bag catcher comprising a body part, a jaw slidable as a whole connected thereto, said jaw moving rearwardly upon impact of a mail sack, a shoulder on said jaw adjacent one of its ends, a second jaw pivoted to said body part in front of the first named jaw, said pivoted jaw having a part thereof extending beyond its pivot and engaging said shoulder on the slidable jaw when the jaws are in an open position, and means for closing said pivoted jaw when a mail bag strikes and moves the first named jaw away from the pivoted jaw so that the notch in the slidable jaw is carried away from the pivoted jaw to permit said pivoted jaw to swing and close.

1,310,066. BURNER. WILBUR F. DAY, St. Paul, Minn. Filed Jan. 20, 1919. Serial No. 272,035. 14 Claims. (Cl. 158-53.)

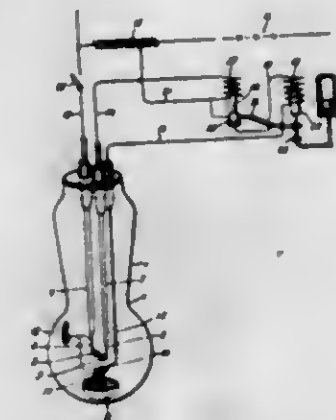
1. A liquid fuel burner comprising a base, an air admission chamber mounted thereon, a priming pan encircling the walls of said chamber, a vapor generator seated on said chamber, a coupling removably connecting said vapor generator with a liquid fuel supply pipe, said generator com-

prising an outer hollow ring portico, an intermediate hollow portion bridging the opening in said ring and communicating at one end therewith, and at its opposite end with



said supply pipe coupling, said intermediate portion having a nozzle opening in its upper walls and means for closing the passage through said intermediate portion between said nozzle and said supply pipe opening.

1,310,067. INCLOSED-ARC DEVICE. PHILIP K. DEWEES, Jr., Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 6, 1916. Serial No. 82,378. 13 Claims. (Cl. 176-1.)



1. An electric arc device comprising the combination of a sealed container, electrodes of refractory material therein, a quantity of an amalgam of an alkali metal and means distinct from said electrodes for vaporizing and ionizing part of said amalgam preliminary to starting an arc between said electrodes.

1,310,068. DIE. GEORGE C. FLOWEN, Pittsburgh, Pa. Filed Oct. 9, 1918. Serial No. 257,438. 7 Claims. (Cl. 164-13.)

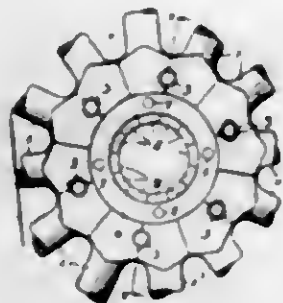


1. Mechanism for shearing and punching a flattened blank comprising a bottom support and a fixed die provided with positively arranged shearing edges and clearance openings for waste material at each end of said support, and a composite die having co-acting shearing edges and a punch, and means for actuating said die and punch.

1,310,069. WHEEL. FRED W. FAENCH, Grandville, Mich. Filed Dec. 14, 1917. Serial No. 207,063. 2 Claims. (Cl. 21-31.)

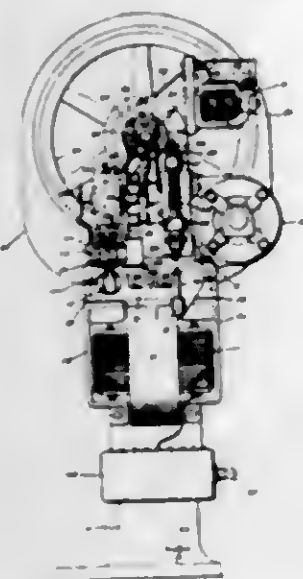
1. A demountable wheel comprising a plurality of radially disposed spokes, the inner ends of which meet to form a solid disk with a central opening therethrough, said disk having an annular depression in its inner side surrounding the opening through said disk, a flat

ring seated in said depression, a flange having a central opening therethrough located against the opposite outer



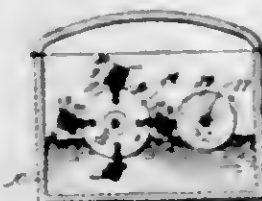
side of the disk, and rivets passing through the ring, flange and disk permanently connecting the same together.

1,310,070. ELECTRIC WELDING. HENRY GRUENHÖNER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 26, 1918. Serial No. 230,948. 11 Claims. (Cl. 219-10.)



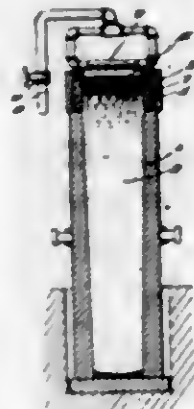
1. The method of electric line welding which consists in applying welding electrodes to the work, impressing upon said electrodes a current rising intermittently to a value sufficient to produce welding, and moving said electrodes while in contact with the work during the intervals only when the value of said current is sufficient to produce welding.

1,310,071. MACHINE FOR SHAPING AND POLISHING ARTICLES OF CELLULOID AND THE LIKE. WILLIAM GRANT, Leominster, Mass. Filed June 12, 1918. Serial No. 239,633. 10 Claims. (Cl. 51-7.)



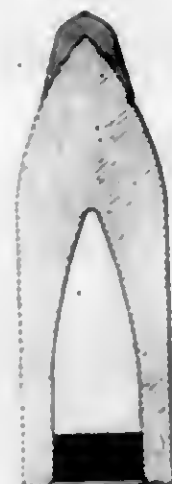
1. In a machine for shaping articles of celluloid and the like, the combination with a tank for a liquid containing a grinding material, of a drum rotatable therein partially submerged in the liquid, and yielding supports on the drum for the articles to be operated upon.

1,310,072. METHOD OF CASTING INGOTS. ROBERT A. HADFIELD, Westminster, England. Filed May 7, 1914. Serial No. 836,922. 7 Claims. (Cl. 22-216.)



1. The herein described improvement in casting ingots and the like, which consists in casting the metal, placing solid fuel on the upper end thereof, and causing a fluid fuel flame to play upon the solid fuel.

1,310,073. CAP FOR ARMOR-PIERCING PROJECTILES. ROBERT ABBOTT HADFIELD, Westminster, London, and ALEXANDER GEORGE MACKENZIE JACK, Sheffield, England. Filed May 26, 1914. Serial No. 840,984. 13 Claims. (Cl. 102-28.)



1. A cap for an armor piercing projectile having its front portion stiffened in from about 400 to about 500 ball hardness and gradually diminishing in stiffness rearwardly from said front portion.

1,310,074. PROCESS RELATING TO THE TEMPERING OF PROJECTILES AND APPARATUS THEREFOR. ROBERT A. HADFIELD, Westminster; ALEXANDER G. M. JACK, Sheffield; ISAAC B. MILNE, Totley, and WILLIAM E. PARKER, Sheffield, England. Filed June 27, 1914. Serial No. 847,680. 22 Claims. (Cl. 148-37.)



18. The herein described process of tempering projectiles which consists in supporting the same on a suitable

support with the axes of all vertical and parallel, each being carried independently on a suitable rotatable standard on said support, and each being arranged with point down and immersed in hot, tepid or cold water flowing through a suitable trough, moving the support through a chamber or series of chambers to heat and then cool the projectile bodies, and while so moving the support, rotating the entire group of projectiles and rotating each projectile independently of the others, substantially as described and shown.

1,310,075. MANUFACTURE OF ARMOR-PIERCING PROJECTILES. ROBERT ABBOTT HADFIELD, London; ALEXANDER GEORGE MACKENZIE JACK, Sheffield, and ISAAC BERNARD MILNE, Totley, England. Filed June 28, 1918. Serial No. 36,886. 12 Claims. (Cl. 148-13.)

12. The process of producing an armor piercing projectile having the head of different degrees of hardness varying at the pointed front end from about 700 to 600 ball hardness, diminishing in hardness to about 400 at about the front end of the cavity, about 300 around the cavity and the rearward portion under 300, which consists in heating the projectile all over to a hardening temperature, the external shoulder portion about 900° C. or over, the point about 900° C. or a little under, and the base to about or under 800° C., and then dipping the projectile in a cooling medium and leaving it there till cold, and then tempering the projectile by heating the base in a furnace to a temperature of about 670° to about 705° C., its interior having a temperature of about 605° C., while its pointed end is immersed to about eight and one half inches in water kept cold, then permitting the projectile to cool in the furnace to a base temperature of about 320° C. to about 300° C. and a core temperature of about 290° C. to about 255° C., and then quenching the same outright in water.

1,310,076. CAPPED ARMOR-PIERCING PROJECTILE AND CAP THEREFOR. ROBERT ABBOTT HADFIELD, Westminster, and ALEXANDER GEORGE MACKENZIE JACK, Sheffield, England. Filed Apr. 23, 1914. Serial No. 833,873. Renewed Mar. 30, 1917. Serial No. 158,731. 10 Claims. (Cl. 102-28.)



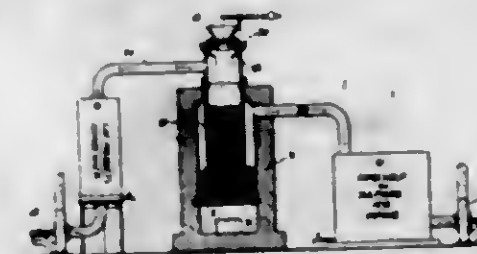
1. An armor piercing projectile fitted with a cap having its front end portion made of gradually increasing stiffness, as distinguished from being hardened, in a forwardly extending direction from the part thereof in front of the point of the projectile.

1,310,077. EYE-PROTECTOR. EDWIN V. HEAFORD, Denver, Colo. Filed Dec. 12, 1916. Serial No. 130,485. Renewed Apr. 21, 1919. Serial No. 291,632. 2 Claims. (Cl. 2-149.)



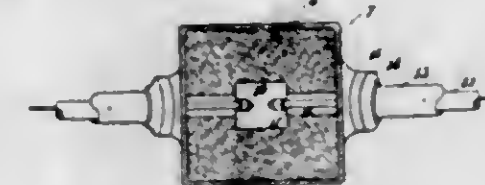
1. An eye protector adapted to be applied to the frame of an eye glass, comprising a strip of material having parts adapted to cover the lenses of the eye glass, said parts having a connecting bridge strip conforming to the nose piece of the eye glass frame, and said strip of material having notches therein adjacent said bridge strip adapted to receive the frame of the eye glass.

1,310,078. DISTILLING APPARATUS. INGECIN HECHENBLEIKNER and PETER S. GILCHRIST, Charlotte, N. C., assignors to Chemical Construction Co., Charlotte, N. C., a Corporation. Filed Feb. 15, 1919. Serial No. 277,151. 3 Claims. (Cl. 23-1.)



1. A distilling furnace comprising a lower fuel chamber, an upper fuel chamber communicating therewith, means to feed the material to be treated into the upper fuel chamber, and separate vapor outlets from the chambers respectively, and separate condensers to which said outlets lead respectively.

1,310,079. ELECTRIC FURNACE. INGECIN HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation of North Carolina. Filed Mar. 22, 1919. Serial No. 284,348. 2 Claims. (Cl. 204-64.)

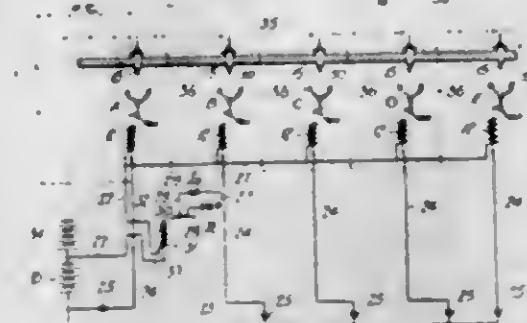


1. An electric furnace comprising a casing having a chamber therein, a bracket supported on the casing, an electrode extending through the casing wall and into the chamber and having an outer threaded part, and an adjusting nut on the threaded part of the electrode, bearing against the bracket, to adjust the electrode in or out.

1,310,080. MANUFACTURE OF PHOSPHATE FERTILIZERS. ABRAHAM HENWOOD, Cynwyd, Pa. Filed Dec. 11, 1917. Serial No. 206,595. 12 Claims. (Cl. 71-7.)

1. The method of manufacture of phosphate fertilizer which consists in sifting ground phosphate rock and ground acid sulfate in the presence of a quantity of finely divided water limited to approximately sufficient to hydrate the calcium sulfate.

1,310,081. SYSTEM AND APPARATUS FOR THE CONTROL OF ELECTRIC-CIRCUIT BREAKERS. WILLIAM H. HOLLOWAY, Denver, Colo. Filed Dec. 7, 1919. Serial No. 135,597. 9 Claims. (Cl. 175-294.)



3. In combination, a succession of circuit-breakers, circuits separate from those controlled by said circuit-breakers, cooperative actuating and actuated elements in said circuits to effect an opening-movement of any one of said circuit-breakers and to effect an opening-movement of any circuit-breaker by the opening-movement of the im-

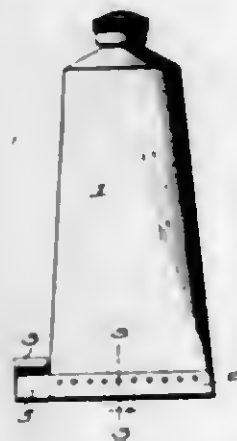
mediately preceding one, and switches connected in one of said circuits so as to actuate any actual element separate from the others.

1,310,082. BUTT-END COMPOSITION SHINGLE FOR ROOFING AND THE LIKE. HENRY GOWER HOSZ, Brooklyn, N. Y. Filed Oct. 3, 1917. Serial No. 194,500. 1 Claim. (Cl. 108—7.)



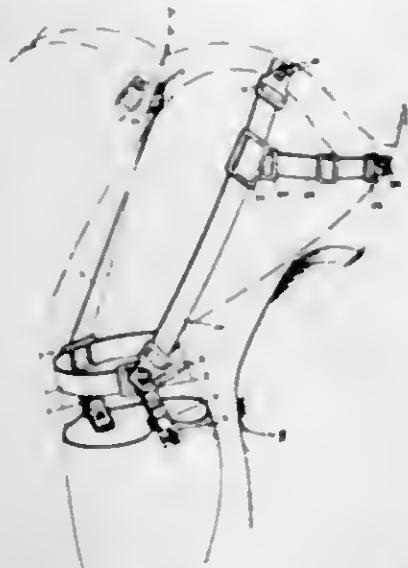
A butt-end composition shingle comprising an intermediate layer of felt, an upper layer of asphalt adhering to said felt layer and having embedded therein a layer of chipped slate, and an under layer of moldable material adhering to the undersurface of said layer of felt, said layer of moldable material being thick at its lower end and forming the butt-end of the shingle and tapered upward therefrom in thickness, the moldable material of said under layer being adapted to unite with the chipped slate surface of an underlying shingle to form a one-piece roof.

1,310,083. COLLAPSIBLE TUBE. WILLIAM C. HUTTON, Providence, R. I. Filed Mar. 26, 1919. Serial No. 285,257. 1 Claim. (Cl. 221—60.)



A collapsible tube having a binding clip of U-section embracing its bottom edge to close the same, said clip extended beyond the tube to form a handle, one side of the U-sectioned handle having an upward extension rolled over the opposite side thereof.

1,310,084. GARMENT SUPPORTER. EDWIN C. JONES, Toronto, Ontario, Canada. Filed May 6, 1918. Serial No. 232,836. 4 Claims. (Cl. 241—1.)



1. A hose supporter, comprising, a leg band adapted to encircle the leg below the knee, a rigid pivot extending

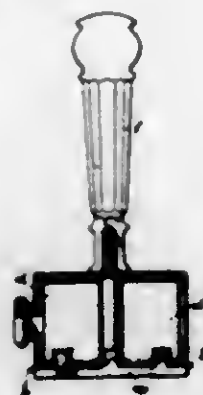
from said band and a strap of elastic material pivotally connected to said rigid pivot and adapted to be secured to the corset.

1,310,085. AIR-MOISTENING MEANS FOR FURNACES. JOHN M. KELLEY and WARD E. PRATT, Rochester, N. Y. Filed July 27, 1918. Serial No. 247,001. 7 Claims. (Cl. 137—104.)



4. A float valve comprising a valve seat, a valve member having a screw threaded stem by which the valve is moved toward and from its seat, a cross piece on the stem, and a float having a stem pivoted to the cross piece on one side of the turning axis of the valve stem and having a pin and slot connection with the cross piece on the opposite side of said turning axis.

1,310,086. RAZOR. IGUMA MORI, Nishinari-Gun, Osaka-Fu, Japan. Filed Oct. 20, 1917. Serial No. 197,722. 4 Claims. (Cl. 30—12.)



1. A razor comprising the combination of a razor blade, and means carried by the razor and associated with said blade for transmitting heat directly to the blade.

1,310,087. PROCESS OF PRODUCING PHENOLIC CONDENSATION PRODUCTS. LAWRENCE V. REDMAN, Evanston, and ARCHIE J. WEITH and FRANK P. BROCK, Chicago, Ill., assignors to Redmanol Chemical Products Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 16, 1918. Serial No. 254,368. 7 Claims. (Cl. 106—22.)

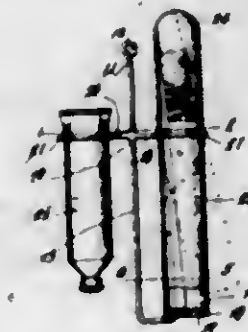
1. The process of producing a phenolic condensation product, without the use of a condensing agent, which comprises: boiling together a solution of formaldehyde and a phenolic body taken largely in excess of the formaldehyde, until the formaldehyde is substantially eliminated from the supernatant aqueous layer which forms and a viscous gummy lower layer is produced; discarding the aqueous layer; mixing with the gummy mass a solution of formaldehyde in lesser proportion than in the first step and concentrating by application of heat; pouring the mass into molds and setting at a temperature below 100° C.; and removing the material from the molds and hardening at a temperature below 100° C.

1,310,088. PROCESS OF PRODUCING PHENOLIC CONDENSATION PRODUCTS. LAWRENCE V. REDMAN, Evanston, and ARCHIE J. WEITH and FRANK P. BROCK, Chicago, Ill., assignors to Redmanol Chemical Products Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 16, 1918. Serial No. 254,371. 5 Claims. (Cl. 106—22.)

1. The process of producing a phenolic condensation product, which comprises: producing a hard and substantially insoluble and anhydrous condensation product

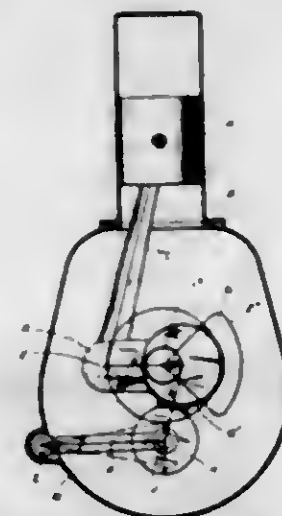
by causing reacting between materials comprising a phenolic body and an active methylene body and hardening the same by prolonged heat treatment at a temperature below 100° C. until there is obtained a hard and substantially insoluble, anhydrous product throughout; and then subjecting the preparatorily formed product to heat treatment at a temperature exceeding 100° C. for a relatively short period.

1,310,089. TOOTH-BRUSH AND TOOTH-PASTE HOLDER. GEORGE W. RHODES, Scappoose, Oreg. Filed Oct. 15, 1918. Serial No. 258,131. 1 Claim. (Cl. 245—63.)



A holder of the type described comprising an upright frame having at its upper end a supporting eye, between its ends a laterally extending arm terminating in a ring standing in a horizontal plane, and its lower end extended laterally beneath the ring, a disk carried upon said lower end and having a dropped edge provided with an outwardly projecting flange, and a tubular casing whose upper end is closed, whose body fits slidably within said ring, and whose lower end rests upon the flange around said shoulder, whereby a tooth brush may be housed within said casing and will rest upon said disk.

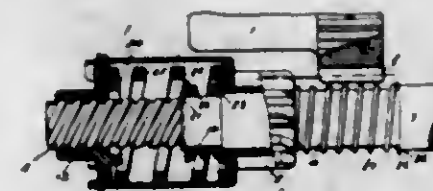
1,310,090. BALANCING OF RECIPROCATING ENGINES. HARRY RALPH RICARDO, London, England. Filed Mar. 4, 1919. Serial No. 250,638. 3 Claims. (Cl. 74—5.)



1. In an internal combustion engine the combination with a crank shaft having a single throw crank, a piston reciprocating in a cylinder and connected to the crank, two masses which are mounted so that they can reciprocate substantially radially with relation to the crank shaft axis these masses being disposed one on either side of the crank in the axial direction and at the side of the shaft remote from the cylinder, and two crank members mounted on the crank shaft adjacent to the two crank webs and connected respectively to the two masses these crank members being operative solely to reciprocate the two masses in opposite phase to the piston which acts on the main crank, the ratio between the weights of the piston and other masses which are thus reciprocated on the op-

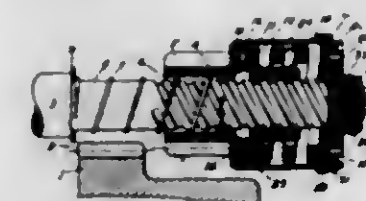
posite sides of the crank shaft being inversely proportional to the strokes through which they reciprocate as set forth.

1,310,091. ENGINE STARTING DEVICE. JULIUS H. RICHARDS, Newark, N. J. Filed Mar. 16, 1918. Serial No. 222,979. 17 Claims. (Cl. 74—7.)



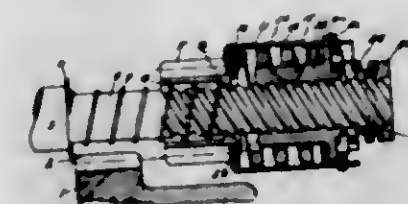
1. In a starting device the combination of, an engine driven member having gear teeth thereon, a driving shaft having screw threads, a pinion guidingly supported on the shaft, for engagement with the gear teeth of the engine driven member, a nut carried by the screw threads, a drum operatively connected with the pinion and having spaced projections at one end, said nut having projections extending between the drum projections and beyond the outer surface of the drum, means to hold the projections in assembled relation comprising a flat annular washer fitting about the drum projections and behind the nut projections and a snap ring coöperating with the drum projections and holding the washer in place.

1,310,092. ENGINE STARTING DEVICE. JULIUS H. RICHARDS, Springfield, Mass. Filed Nov. 25, 1918. Serial No. 264,102. 21 Claims. (Cl. 74—7.)



1. A drive for engine starters comprising a rotatable shaft, a driving member mounted thereon for both longitudinal and rotary movement thereof and adapted to coöperate with and drive a member of the engine to be started, a control member mounted on said shaft for longitudinal and rotary movement thereof and adapted to coöperate with, driving means connecting between the driving member and the control member, consisting of a friction clutch plate carried directly on the driving member and engaged by the control member and means for holding the control member in position relative to the friction clutch plate.

1,310,093. ENGINE STARTING DEVICE. JULIUS H. RICHARDS, Springfield, Mass. Filed Dec. 21, 1918. Serial No. 267,838. 15 Claims. (Cl. 74—7.)



1. A drive for engine starters comprising a rotatable shaft, a driving member mounted thereon for both longitudinal and rotary movement thereof and adapted to coöperate with and drive a member of the engine to be started, a control member mounted on said shaft for longitudinal and rotary movement thereof and adapted to coöperate with, means con-

necting the driving and control members for causing the driving member to engage the member on the engine to be started and a driving connection formed after such engagement is made by the control member traveling longitudinally forward into engagement with the driving member.

1,310,094. BRAKING-VALVE FOR INTERNAL-COMBUSTION ENGINES. WILLIAM I. SMITH, Oil City, Pa. Filed Dec. 23, 1918. Serial No. 263,023. 6 Claims. (Cl. 251-73.)



1. A braking valve for internal combustion engines including a valve casing adapted to be interposed between an engine intake manifold and carburetor to communicate therewith, a valve plug reciprocable through the casing, means for establishing uninterrupted flow through the valve casing in one position of the plug, means for cutting off said flow and establishing flow through the casing from the outer air in another position of the plug, and means for cutting off all flow through the casing in a third position of the plug.

1,310,095. CULTIVATOR. DE WITT W. STRICKLAND, Tylertown, Miss. Filed July 11, 1918. Serial No. 244,437. 3 Claims. (Cl. 97-10.)

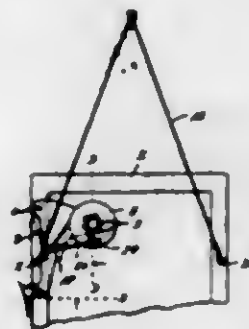


2. An agricultural implement comprising a draft beam, a plurality of brackets secured rigidly to said beam and having their ends disposed laterally beyond the beam and provided with hinge eyes, arcuate supporting bars hinged at their ends to said eyes on the foremost and rearmost brackets, lugs hinged to the eyes on the inner brackets for movement in a vertical plane, arcuate braces hinged at their outer ends to the arcuate supporting bars at the centers of the same and extending inwardly over the draft beam and having their ends disposed in overlapped relation, means for adjustably securing the inner overlapped ends of said braces together, links pivoted at their inner ends to the rearmost of said pivoted lugs, cultivator beams pivoted at their inner ends to the foremost of said pivoted lugs, other cultivator beams pivoted at their inner ends to the outer rear ends of said links, link connections between the outer ends of said beams, and cultivator teeth carried by said cultivator beams.

1,310,096. PICTURE-HANGER. CLARA A. TRAP, Minneapolis, Minn. Filed Jan. 31, 1919. Serial No. 274,202. 7 Claims. (Cl. 40-145.1.)

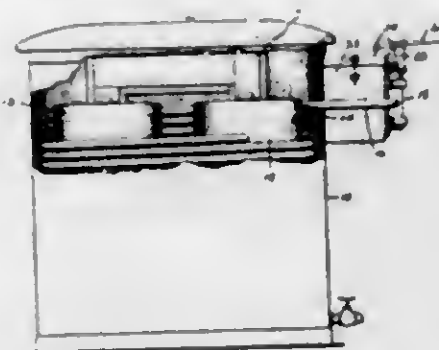
1. A picture hanger comprising a plate having means for securing it to a picture frame, a hub projecting outwardly from said plate, a barrel mounted on said hub

for revolution thereon, a link mounted on said barrel for revolving said barrel on said hub, and a lug formed on



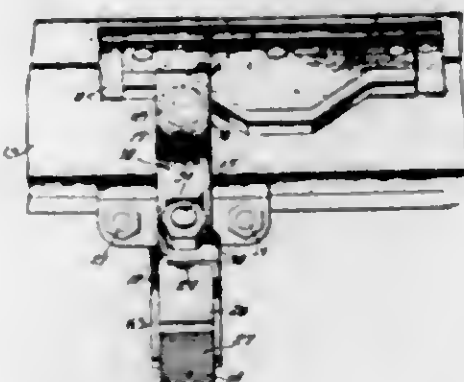
said plate and engaging said link for locking said barrel against revolution in either direction.

1,310,007. WATER-COOLED TRANSFORMER. EDWARD D. TREANOR, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 13, 1918. Serial No. 253,997. 9 Claims. (Cl. 175-301.)



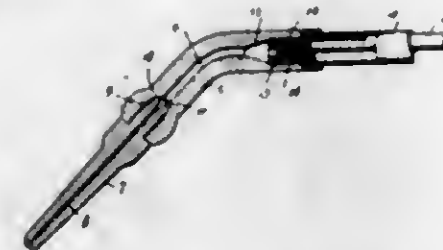
1. The combination with an electrical apparatus provided with a casing containing a cooling and insulating medium for the windings of said apparatus, of an auxiliary cooling system for said cooling and insulating medium, and means responsive to the heat generated in said windings for controlling said auxiliary system to maintain said medium at a plurality of temperatures corresponding to a plurality of different ratings of said apparatus.

1,310,098. ADJUSTABLE RAIL-CLIP FOR RAILWAY DETECTOR-BARS. CHRISTIAN VOLZ, St. Paul, Minn. Filed Nov. 12, 1917. Serial No. 201,536. 20 Claims. (Cl. 246-151.)



1. A supporting device for a railway detector bar adapted to have a fixed position with respect to a rail provided with means whereby the normal position of the bar may be varied both vertically and laterally, in respect to the rail, by adjustments which are independent of each other.

1,310,099. BLOWPIPE. GEORGE L. WALKER, New York, N. Y., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Mar. 19, 1919. Serial No. 283,588. 6 Claims. (Cl. 158-27.4.)



6. In the operation of blowpipes employed in heating, welding, cutting and like operations, and burning mixtures of combustible and oxidizing gases, the method which comprises, introducing combustible gas to the blowpipe at a pressure exceeding the pressure at which the oxidizing gas is introduced, causing the gases to combine, and discharging the mixture.

1,310,100. BLOWPIPE. GEORGE H. ZOUEK, Orange, N. J., assignor to Air Reduction Company, Incorporated, a Corporation of New York. Filed Oct. 28, 1918. Serial No. 259,893. 15 Claims. (Cl. 158-27.4.)



1. A device of the character described comprising a head having passages for oxidizing and combustible gases and a seat having a projecting conical surface surrounding the ends of both of said passages, a tip having a discharge passage, and a recess at its inner end provided with a conical surface conforming to the surface of said seat and forming therewith a gas tight joint, one of said conical surfaces having a groove therein, forming a path whereby the gas from one of the passages in said head is delivered to and mixed with the gas issuing from the other passage and means for holding said tip in assembled relation with said head.

1,310,101. CUTTING-BLOWPIPE. GEORGE H. ZOUEK, Orange, N. J., assignor to Air Reduction Company, Incorporated, a Corporation of New York. Filed Oct. 28, 1918. Serial No. 259,892. 12 Claims. (Cl. 158-27.4.)



3. In a device of the character described, the combination of a head having two passages for oxygen, one for combustible gas and a projecting conical seat, a tip having a conical recess at its inner end conforming to said seat and forming therewith a gas-tight joint, a cutting jet discharge passage communicating directly with one of the passages in said head, a plurality of heating jet

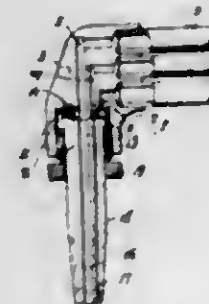
discharge passages and grooves or recesses in the face of said depressions whereby combustible gas is conveyed to and mixed with oxygen before entering said heating jet discharge passages and means for holding said tip in assembled relation with said head.

1,310,102. BLOWPIPE. GEORGE L. WALKER, New York, N. Y., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Feb. 5, 1919. Serial No. 275,193. 11 Claims. (Cl. 158-27.4.)



1. In a blowpipe the combination of a head having a seat and oxidizing and combustible gas passages terminating therein, and a tip having a discharge passage and a surface cooperating with said seat to form a gas-tight joint surrounding the ends of the oxidizing and combustible gas passages, said surface being countersunk within said joint and thereby spaced from said seat whereby gas from one of the passages in said head is permitted to flow to and mix with the gas issuing from the other passage in said head at the inlet to said discharge passage.

1,310,103. CUTTING-BLOWPIPE. GEORGE L. WALKER, New York, N. Y., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Feb. 5, 1919. Serial No. 275,192. 8 Claims. (Cl. 158-27.4.)



1. In a device of the character described, the combination of a head having two passages for oxygen, one for combustible gas, and a projecting conical seat, a tip having a conical recess at its inner end conforming to said seat and forming therewith inner and outer gas-tight joints, a cutting jet discharge passage disposed in alignment with one of the oxygen passages in said head, and a heating jet discharge passage communicating with the other oxygen passage in said head, said conical recess being countersunk between the inner and outer joints whereby combustible gas is conveyed to and mixed with the oxygen issuing from the last mentioned oxygen passage.

1,310,104. BLOWPIPE. GEORGE H. ZOUEK, Orange, N. J., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Dec. 4, 1918. Serial No. 265,195. 7 Claims. (Cl. 158-27.4.)

1. A blowpipe comprising a head and a separable tip, said head and tip having cooperating surfaces forming a gas tight joint, passages in said head for oxidizing and combustible gases, a discharge passage in said tip communicating with the oxidizing gas passage in said head and means for delivering combustible gas from the passage therefor in said head to said oxidizing gas passage

whereby the gases are mixed within said head, including means in the tip and removable therewith to regulate the



proportion of combustible gas delivered to said oxidizing gas passage.

1,310,105. BLOWPIPE. GEORGE H. ZOUEK, Orange, N. J., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Mar. 1, 1919. Serial No. 279,909. 6 Claims. (Cl. 158-27.4.)



6. In a blowpipe, the combination with a head having a conical seat, oxidizing and combustible gas passages, and a nozzle at the apex of said seat forming the outlet from one of said passages, of a tip having a surface cooperating with said seat to form a gas tight joint surrounding the ends of said passages, a recess to receive said nozzle, and grooves or depressions connecting the other passage in said head to said recess.

1,310,106. BLOWPIPE. RICHARD F. RUSSELL, Jersey City, N. J., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Mar. 18, 1919. Serial No. 283,367. 10 Claims. (Cl. 158-27.4.)

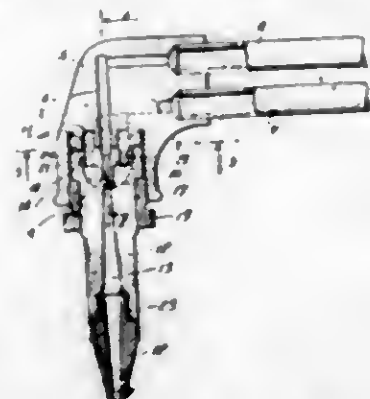


1. In a blowpipe, the combination of a head having a chamber, a filler in said chamber having a projecting conical seat, a tip having a discharge passage and a surface cooperating with said seat to form a gas tight joint and means for conveying gases separately to said tip, the gases being mixed at the inlet to said discharge passage.

1,310,107. BLOWPIPE. GEORGE H. ZOUEK, Orange, N. J., assignor to Air Reduction Company, Inc., a Corporation of New York. Filed Jan. 8, 1919. Serial No. 270,118. 2 Claims. (Cl. 158-27.4.)

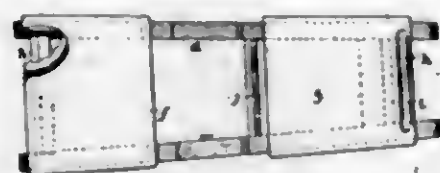
1. In a device of the character described the combination with a solid head having passages therein for oxidizing and combustible gases, a projecting conical seat and a wall integral with said head and extending beyond said

seat, of a tip having a discharge passage, a chamber communicating therewith and a filler at the rear of said chamber, and provided with inlets for the two kinds of gases communicating with the passages in said head,



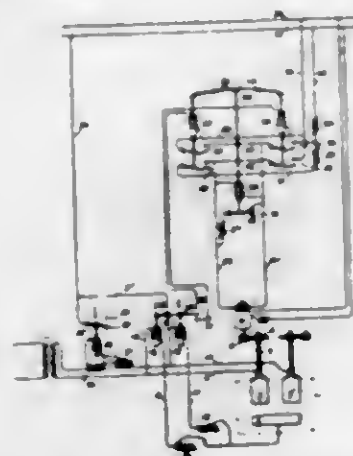
said filler having a conical recess cooperating with said seat to prevent premature mixing or escape of said gases and a nut engaging said wall and tip to hold the latter in assembled relation with said head.

1,310,108. FITTING-STOOL. ALBERT WAXNER, Jr., New York, N. Y. Filed Sept. 21, 1916. Serial No. 121,412. 1 Claim. (Cl. 155-22.)



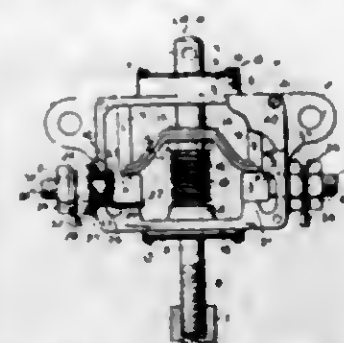
An article of manufacture of the class described consisting of two substantially counterpart upright side elements each composed of laminated sheet material having its layers arranged in vertical planes and each including an arched portion shaped to substantially the form of the curve of a cone section and having one side of its arch arranged at a gradual incline and the other more precipitate, in combination with a foot-rest member and a seat member connecting said elements and arranged respectively over the gradual-incline and high parts of their arched portions.

1,310,109. ELECTRIC-FURNACE-CONTROL APPARATUS. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1919. Serial No. 269,309. 4 Claims. (Cl. 204-64.)



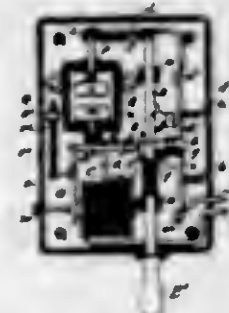
1. A regulator for a plurality of arcing electrodes, comprising means for regulating the arcing relation of one of said electrodes and means for regulating the arcing relation of a second electrode in response to predetermined relation between the voltage drop across the respective arcs terminating in said electrodes.

1,310,110. ELECTRICAL CUT-OUT. LIONEL M. WOLFSON, Hoboken, N. J., assignor, by mesne assignments, to Bijur Motor Appliance Company, a Corporation of Delaware. Filed July 15, 1916. Serial No. 109,439. 14 Claims. (Cl. 175-283.)



1. In a device of the class described, in combination, a casing, means adapted to hold said casing in position, a pair of contacts mounted in said casing, a rod extending through a wall of said casing and slidably mounted therein, a bridge contact carried by said rod in position to be brought into bridging relation to said first contacts as said rod is slid within the wall of said casing and means integral with the inner surface of said casing to maintain said bridge contact in alignment with said pair of contacts.

1,310,111. CIRCUIT-BREAKER OR CUT-OUT. RUSSELL ANCOTT, West Springfield, and PASQUALE G. MARTONE, Springfield, Mass. Filed Feb. 28, 1917. Serial No. 151,613. 2 Claims. (Cl. 175-268.)

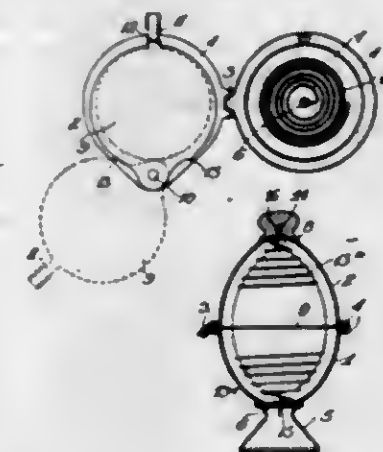


1. An overload circuit breaker consisting of a closed box having its interior faces insulated, a fixed sparking member mounted in said box, a movable sparking member in said box adapted to engage a fixed sparking member, a rod connected with said movable sparking member and extending through and insulated from the box, means for holding said movable sparking member normally engaged with the fixed sparking member, an overload magnet electrically connected with the fixed sparking member, an armature for said magnet, a rod connected with the first rod and adapted to separate the movable sparking member from the fixed sparking member, means for moving said rod to separate said contact members, a latch connected with said armature for holding said second named rod against movement, a pair of spaced contact members one of which is connected with said movable contact member and means carried by said second named rod for establishing electrical connection between said contact members when said second named rod is in normal position and adapted to break contact between the contact members when the armature has been attracted by said magnet.

1,310,112. EGG-CUP. CARL F. BIRABACH, Rochester, N. Y., assignor of one-half to Ottilla Gieve, Rochester, N. Y. Filed Apr. 21, 1919. Serial No. 291,612. 3 Claims. (Cl. 65-22.)

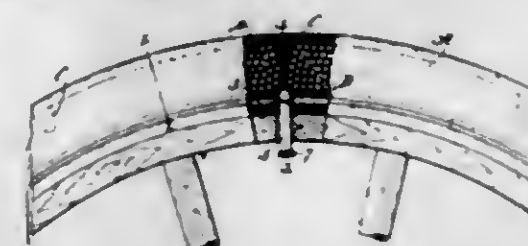
1. An egg cup comprising a pair of cup shaped members hinged together to permit their cupped sides to become opposed, and a disk shaped cover and severer pivotally connected to one of said members to operate between the members when their cupped sides are opposed,

said disk shaped member acting when in one position to completely close the cupped side of the member to which it is pivoted and an overhanging tongue on the member to which the cover and severer is pivoted, said tongue



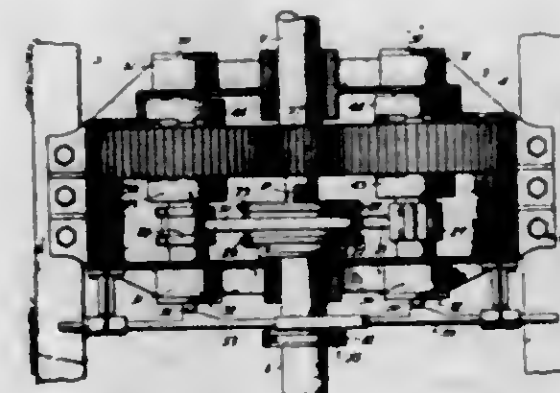
being adapted to receive a portion of the cover and severer thereunder as the latter reaches its closed position to secure said cover and severer to the member to which it is pivoted.

1,310,113. NON-PUNCTURABLE TIRE. HARRY H. CULMER, Chicago, Ill. Filed Oct. 9, 1917. Serial No. 195,529. 1 Claim. (Cl. 152-5.)



A wheel tire, consisting of an outer casing, an inner core in said casing composed of a large number of relatively small resilient objects packed tightly together, and transversely-disposed baffles arranged inside of said casing and integrally connected to same, for the purpose described.

1,310,114. POWER-TRANSMITTING MECHANISM. JOSEPH DE MARTINO, Chicago, Ill., assignor to Mechanical Improvement Company, Chicago, Ill., a Corporation of Illinois. Filed June 24, 1915. Serial No. 36,017. 11 Claims. (Cl. 74-53.)

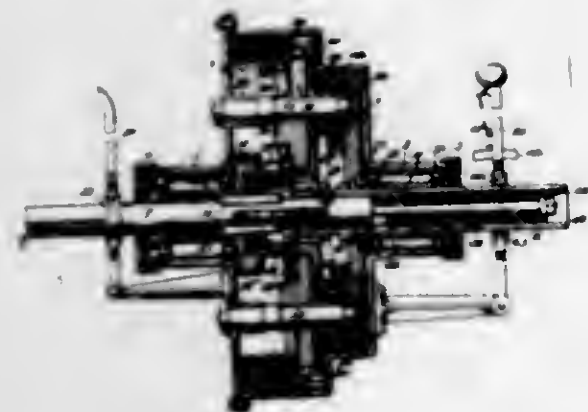


2. The combination of a hollow driving shaft, an eccentric member mounted for transverse movement relatively to said driving shaft, a slidable member located within said hollow driving shaft and provided with mechanism whereby the longitudinal adjustment of said slidable member will vary the eccentricity of said eccentric member, a driven shaft in alignment with said driving shaft, said driven shaft having a socket adapted to receive the end portion of said slidable member, and trans-

mitting mechanism between said eccentric member and said driven shaft.

3. The combination of a rotary driving shaft provided with a transversely adjustable eccentric and transmission mechanism driven by said eccentric and comprising an arm oscillated by said eccentric, an oscillatory shaft actuated by said arm, a pair of oppositely-acting clutch-disks mounted on said oscillatory shaft, means for positively coupling either one of said clutch-disks to oscillate with said oscillatory shaft, a transmitting gear, and clutch-rollers interposed between said gear and clutch-disks, whereby said gear may be driven in either direction, depending upon which clutch-disk is coupled to said oscillatory shaft.

1,310,115. POWER-TRANSMITTING MECHANISM. JOSEPH DE MARTINO, Chicago, Ill., assignor to Mechanical Improvement Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1916. Serial No. 104,150. 54 Claims. (Cl. 74-53.)



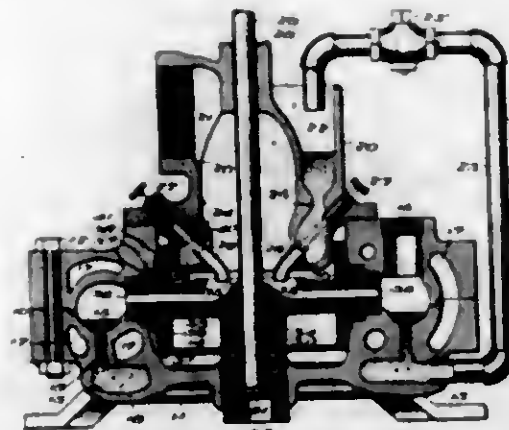
11. The combination with a driving shaft of an eccentric carried thereby, said shaft and eccentric being provided with means whereby a relative adjustment of said driving shaft and eccentric will cause a transverse shifting movement on the part of the eccentric, swinging members actuated by said eccentric, rotary members provided with ratchet mechanism forming a power transmitting connection, and a driven shaft driven by said rotary members, said driven shaft being longitudinally adjustable and provided with means for throwing it into and out of operative relation with said rotary members.

21. The combination of a longitudinally movable driving shaft, a spring tending to shift said shaft rearwardly, a foot lever adapted to oppose the action of said spring and control the position of said driving shaft, variable throw transmission mechanism, including an eccentric member mounted on and rotated through the medium of said driving shaft and eccentrically adjusted in the longitudinal movement of said driving shaft, and a driven shaft actuated by said transmission mechanism.

25. The combination of a longitudinally shiftable driving shaft, variable throw transmission mechanism, including an eccentric device adjustable by said driving shaft, a longitudinally adjustable driven shaft, forward and reverse gears journaled on said driven shaft and actuated by said transmission mechanism, and means on said driven shaft for coupling it to either the forward or the reverse gear.

44. The combination of a longitudinally movable driving shaft, a spring tending to shift said shaft in one direction, a foot lever adapted to oppose the shifting of said shaft by the action of the spring, and to control the position of said shaft, an eccentric mounted on said shaft, connections between said shaft and eccentric for shifting the eccentric from concentric position to extreme eccentric position and back to concentric position while said shaft is moving from one end of its traverse to the other end thereof, a driven shaft, and mechanism for transmitting power from said eccentric to said driven shaft.

1,310,116. CENTRIFUGAL PUMP FOR COMPRESSION AND VACUUM. EDWARD C. D'YARMETT, Muskogee, Okla. Filed Jan. 20, 1916. Serial No. 74,982. 11 Claims. (Cl. 230-14.)



7. In combination, a casing having a main chamber and a compression chamber, a rotary member within the main chamber having passages which discharge into the compression chamber, means for admitting a stream of active liquid to the passages and removable sealing rings attached to the rotary member and frictionally engaging the walls of the main chamber for preventing communication from the compression chamber to the main chamber.

1,310,117. MANUFACTURE OF PAPER BOTTLES. EDWIN T. GREENFIELD, Klamath, and JOHN GERTAR V. LANG, New York, N. Y., assignors to Greenfield Paper Bottle Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1915. Serial No. 53,085. 9 Claims. (Cl. 229-3.)

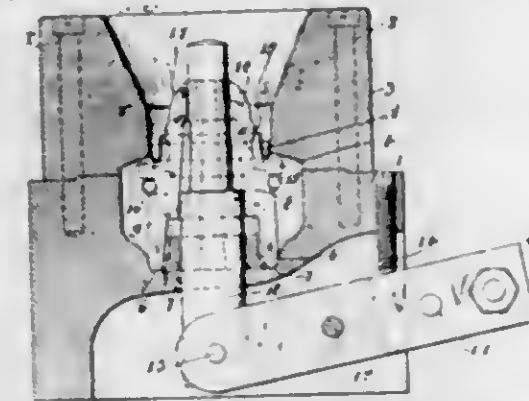


1. A bottle of the character herein described, comprising a body member formed from a tube of substantially uniform diameter and having one end formed into a neck or throat by plating the tube, a bottom member inserted in the opposite end of the tube and rigidly secured thereto by a metallic binding member, and a two-part metallic ring member encircling the inner and outer walls of the mouth of the bottle, said two-part ring being applied thereto under pressure whereby the neck plate is compressed between the ring elements, and one edge of one of the ring elements having a bend imparted therein forming a shoulder, and whereby the plated bottle neck has a corresponding bend and consequent change in diameter imparted thereto and forming a shoulder therein which projects over the other ring element and producing an interlocking union with said two-part ring member.

1,310,118. EXPANDING OF RINGS BY INTERNAL PRESSURE. EDWIN T. GREENFIELD, Klamath, and JOHN GERTAR V. LANG, New York, N. Y., assignors to Greenfield Paper Bottle Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1915. Serial No. 53,087. 7 Claims. (Cl. 153-1.)

1. A press of the class described comprising in combination a hollow anvil which is provided with means for

guiding a workpiece to an operating position relative to the anvil, a series of hammers or pressing members which extend into the anvil opening, and means for forcing the hammers or pressing members outwardly, each of said



hammers or pressing members having an outwardly and downwardly extending portion for guiding a workpiece to operating position and also having an outwardly projecting shoulder on its face.

1,310,119. STRAP-FASTENER. CHARLES L. HARPER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 4, 1918. Serial No. 226,577. 2 Claims. (Cl. 24-216.)



1. In a fastener, the combination, with the parts to be connected, one of which is a soft-rubber strap section, of a soft-rubber eyelet integrally formed on said strap section, and a button on the other part having a head larger than the normal size of the aperture in said eyelet, and a reduced neck.

1,310,120. MITTEN. ETHEL HOWDEN KRAMER, Wheeling, W. Va. Filed Dec. 19, 1917. Serial No. 207,835. 1 Claim. (Cl. 2-102.)



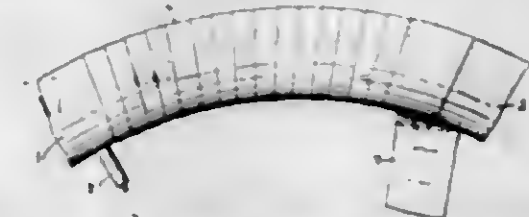
A mitten having palm and finger portions separated by a transverse orifice, said portions being prolonged past each other to form broadly overlapping transverse margins of which that of the palm portion permanently overlaps that of the finger portion, the extent of the overlap being substantially equal throughout the width of the mitten, said margins being united throughout their width along a longitudinally extending line at each of the opposite lateral edges of the mitten so that reversal of the recited relation of the margins is prevented.

1,310,121. INNER TUBE. GEORGE ALLEN LANE, Ferris, Calif. Filed Aug. 31, 1918. Serial No. 252,210. 1 Claim. (Cl. 152-13.)

As a new article of manufacture, an inner tube comprising an inner lamination of textile fabric, a coating

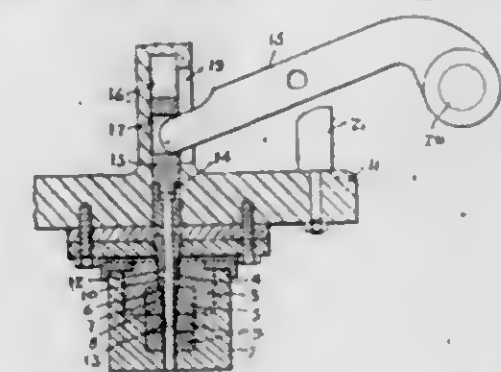
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carried by the inner face of said fabric to make the same impervious to air, a textile strip wrapped around said



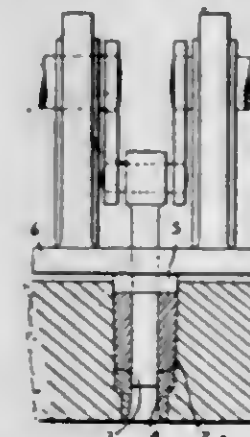
inner lamination, and a coating carried by the inner face of said strip to render the same impervious to air.

1,310,122. MEANS FOR FORMING TUBULAR ARTICLES BY EXTRUSION. JOHN W. LEIGHTON and OWEN J. P. CRICK, Toronto, Ontario, Canada, assignors to Pressed Metals, Limited, Toronto, Ontario, Canada, a Corporation. Filed Apr. 25, 1917. Serial No. 164,535. 7 Claims. (Cl. 207-3.)



2. Means for forming tubular articles by extrusion, comprising a die, a plunger adapted to enter the die, and a mandrel arranged in the plunger and adapted to be operated to extend into the die in advance of the plunger and to move with said plunger in the extruding operation and to be withdrawn with said plunger with an accelerating movement faster than the plunger.

1,310,123. METHOD OF FORMING BILLETS OR BLOOMS FOR FORMING TUBES BY EXTRUSION. JOHN WYCLIFFE LEIGHTON, Toronto, Ontario, Canada, assignor to Pressed Metals, Limited, Toronto, Ontario, Canada, a Corporation. Filed Apr. 25, 1917. Serial No. 164,530. 2 Claims. (Cl. 29-148.)



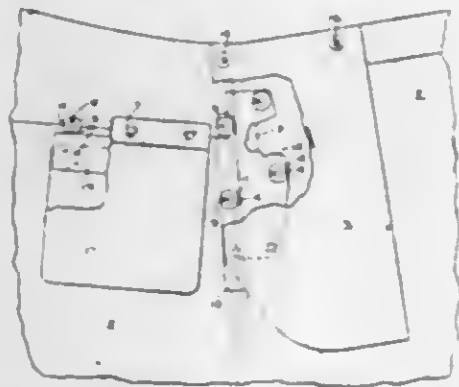
1. A method of forming billets or blooms for making tubes by extrusion consisting in first forming the rough billet of much greater length than the diameter of hole to be formed therein, then confining the billet within a closed die of fixed dimensions, then forcing a punch of much lesser diameter than the length of the billet lengthwise into the metal causing it to flow as the punch is advanced thereto and unify the density of the entire body of metal, the surplus metal being extruded through an opening at the end of the die opposite to that at which the punch enters.

1,310,124. FLY-SWATTER. RAYMOND O. W. LUDKE, Coplay, Pa. Filed May 5, 1917. Serial No. 166,057. Renewed Dec. 23, 1918. Serial No. 268,060. 1 Claim. (Cl. 43-1.)



An insect-destroying missile, comprising a resilient stopper to be fitted within the muzzle of a pneumatic gun, a helical spring comprising an end portion having its coils of uniform diameter and embracing an end of the resilient stopper and embedded therein, and having the remaining end of conical form and a swatter element at the outer end of the conical end.

1,310,125. DETACHABLE POCKET. OLAV LUNDENBERG and JAMES O. HARRIS, Kellher, Minn. Filed July 17, 1917. Serial No. 180,969. 2 Claims. (Cl. 2-15.)



1. A garment having a pocket opening, a flap on the wall of the garment at one side of said opening and extending on the inside of the garment, a pocket having means for temporary attachment to the waist band above said opening and an edge for insertion between the wall of the garment and said flap and concealed by the latter, and interlocking members comprising buttons secured to said flap and said edge of the pocket for detachably fastening the pocket in the garment.

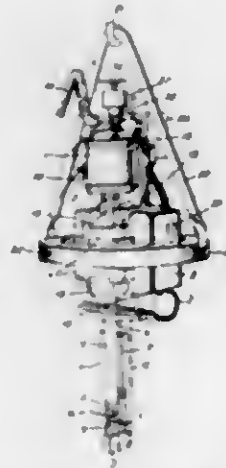
1,310,126. CUSHION-TIRE. DAVID S. McFERRIN, Quenemo, Kans. Filed Sept. 30, 1916. Serial No. 123,050. 1 Claim. (Cl. 152-2.)



In combination, a rim having a pair of peripheral flanges, said flanges having recesses in their outer edges, a tread element mounted in said rim and provided with a plurality of grooves extending transversely thereof, U-shaped elements disposed in the grooves of said tread

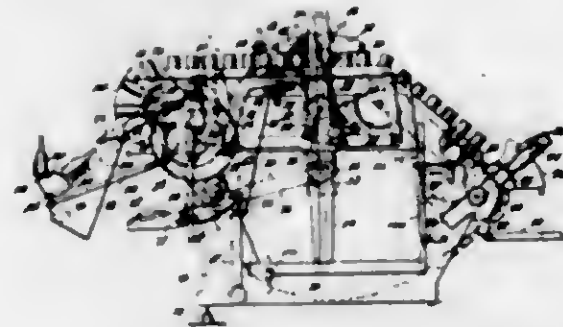
element and projecting beyond the same, the recesses of said flanges aligning with said U-shaped elements whereby dirt collected in said U-shaped elements is discharged through said recesses.

1,310,127. WELDING APPARATUS. WILSON L. MARSHALL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 31, 1910. Serial No. 274,309. 11 Claims. (Cl. 219-4.)



7. An electric welding apparatus comprising a transformer, an outwardly projecting frame attached to and extending through the core of said transformer, a welding electrode mounted on said frame remote from said transformer, a rod reciprocable with respect to said transformer passing through said core, a welding electrode mounted on said bar co-operating with said fixed electrode, and a fluid-pressure motor mounted on said frame for reciprocating said rod.

1,310,128. BOTTLE-WASHING MACHINE. GEORGE J. MAYES, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 22, 1915. Serial No. 62,706. 8 Claims. (Cl. 141-7.)



6. In a bottle washing machine, a bottle conveyor adapted to carry bottles in an inverted position, upper and lower bottle clamping means engaging and clamping the bottles between them while held by the conveyor, brush spindles adapted to be projected from the lower clamping means into the interior of the bottles, swinging bottle gage frames on the upper clamping member engaging the upper ends of the bottles, spring pressed clamping jaws thereon, and a rod engaged by the clamping jaws permitting the gage frames to yield under abnormal pressure.

1,310,129. ELONGATED PROJECTILE-SHELL FOR SMOOTH-BORE GUNS. THOMAS E. MURRAY, Jr., and JOSEPH H. MURRAY, Brooklyn, N. Y. Filed Oct. 25, 1918. Serial No. 250,622. 2 Claims. (Cl. 102-29.)

2. An elongated projectile shell for a smooth bore gun consisting of two longitudinal interchangeable sections struck up from sheet metal and electrically welded at

their registering edges, the said sections each including an integral semi-circular half rib, which ribs unitedly



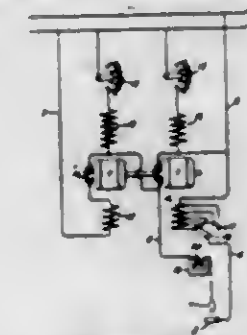
form a circular rib surrounding said projectile and adapted to fit the bore of said gun.

1,310,130. METHOD OF PRODUCING METAL TUBES. THOMAS E. MURRAY, Jr., Brooklyn, N. Y. Filed Feb. 6, 1919. Serial No. 275,288. 4 Claims. (Cl. 219-6.)



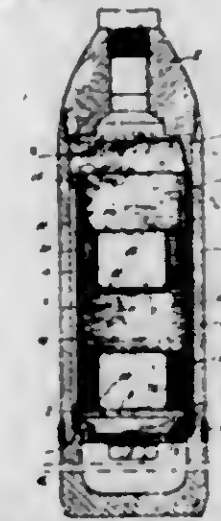
4. The method of making a tube having its circumferential wall of tapering thickness from end to end of said tube, which consists in first forming two similar plates of gradually diminishing thickness longitudinally, second, bending said plates transversely into semi-cylindrical shape, third, placing said bent plates with their longitudinal edges in registering contact, and fourth, electrically welding said registering edges together.

1,310,131. ELECTRIC WELDING. PAUL O. NOBLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 6, 1918. Serial No. 232,743. 7 Claims. (Cl. 219-15.)



7. An electric arc welding apparatus comprising a welding circuit, a source of electric energy of constant character, connected to deliver energy to said circuit, and electro-dynamic means connected in series with said source to modify energy derived from said source to maintain the amperage and voltage of current in said welding circuit in substantially constant energy relation.

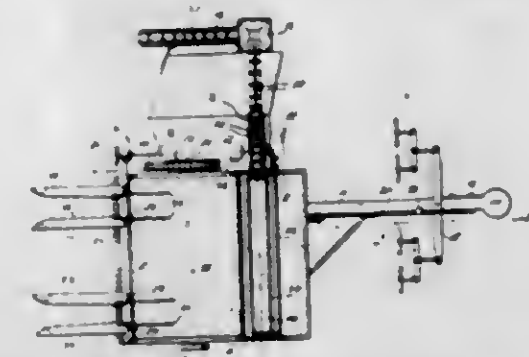
1,310,132. PROJECTILE, SHELL, AND THE LIKE. STÉPHANE FRANÇOIS MARIE PASSET, Boulogne-sur-Seine, France. Filed Feb. 6, 1919. Serial No. 275,380. 5 Claims. (Cl. 102-29.)



1. In a shell, the combination with the body of the shell of reels of metallic wire and parachutes connected

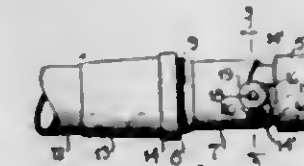
thereto, and means for expelling the reels and the parachutes from the shell to form an aerial barrage against aircraft.

1,310,133. CORN-HARVESTER. SAMUEL O. PATTON, Rosedale, Kans. Filed Dec. 13, 1916. Serial No. 136,711. 1 Claim. (Cl. 56-66.)



A corn harvester, comprising a wheeled frame having a transverse trough at its rear, cutting mechanism at the front end of the frame, an endless conveyor between the cutting mechanism and trough having its upper portion movable rearwardly, an endless conveyor operable in the trough, snapping rolls in the rear of the trough, an elevated platform at one side of the frame, husking rolls on the platform, an elevator for delivering the ears of corn on the platform and between the husking rolls, a hopper at the outer end of the husking rolls, and a conveyor for delivering the husked ears of corn from the hopper to the desired point of delivery.

1,310,134. HOSE-COUPLING. EMORY E. POSTON, Campbell, Calif. Filed Mar. 29, 1910. Serial No. 87,541. Renewed Jan. 15, 1910. Serial No. 271,341. 1 Claim. (Cl. 285-175.)

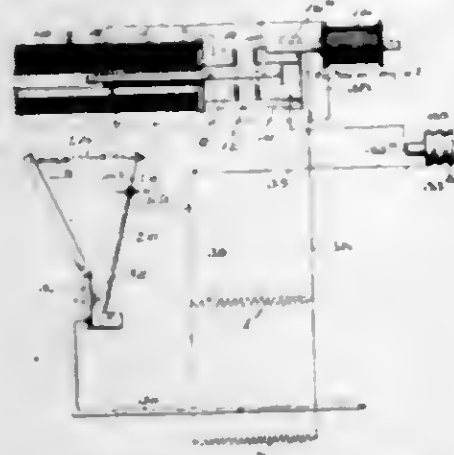


In a coupling, male and female coupling members, said female member having its outer end obliquely cut and provided with an outwardly directed tongue at the low point of said oblique cut, the outer end of said tongue having oppositely directed lateral and circumferentially directed arms, said arms coacting with the oblique edge of the female member at opposite sides of the tongue to afford slots, the inner walls of said slots being in continuity, a stud carried by the male coupling member and adapted to be received in one of said slots by a turning movement of said coupling members in either direction and being engageable with the oblique edge of the female member whereby relative separating movement is imparted to the male and female member when the stud is adjusted out of a slot, and a member threaded upon said stud and adapted to be adjusted into binding engagement with the female member, said last named member also serving as a handle for assembling the coupling, said female member at the inner end of each of the slots being provided on its outer face with a recess to receive the inner end portion of the last named member.

1,310,135. ELECTRIC-SWITCH MECHANISM. WALTER RICHMOND, Memphis, Tenn., assignor to John Elliott Jenkins, Chicago, Ill. Filed Oct. 24, 1911. Serial No. 656,430. Renewed Oct. 12, 1916. Serial No. 125,324. 2 Claims. (Cl. 175-21.)

1. An electro-magnetic apparatus adapted to operate upon either alternating or direct current circuits of the same voltage, comprising an energizing coil and a mag-

netizable core, the energizing winding of said coil having the requisite ohmic resistance to operate upon a direct current of a certain voltage, and the winding being so correlated to the magnetic body of the core that the re-



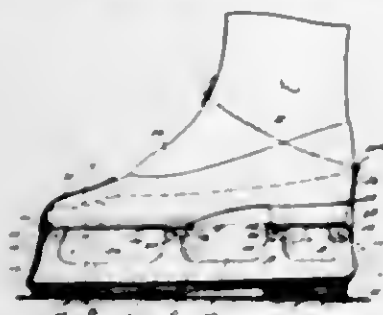
sistance of the coil to alternating currents of commercial frequencies and the same voltage will cause the coil to operate upon the core with substantially the same effort as upon direct currents.

1,310,136. COUNTERBALANCE FOR LOCOMOTIVE DRIVING WHEELS. KENNETH RUSHTON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1910. Serial No. 288,730. 3 Claims. (Cl. 295-6.)



1. A driving wheel for a locomotive having a removable tire and having a detachable counterbalance extending beyond the periphery of the body portion of the wheel and overlapping the tire so that on the removal of the counterbalance the tire can be detached from the wheel.

1,310,137. ICE-SKATE ATTACHMENT. NATHAN SAROWSKY, New York, N. Y., assignor of one-half to Samuel Grossman, New York, N. Y. Filed Apr. 2, 1918. Serial No. 226,163. 2 Claims. (Cl. 46-53.)



1. A skate shoe comprising a protective block having a longitudinal slot adapted to receive the skate blade and a

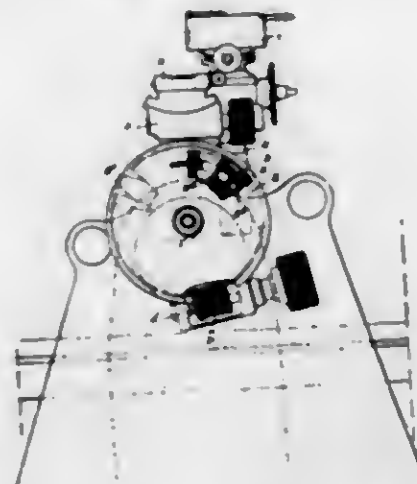
shoe member inclosing said block and provided with a stiffened front adapted to engage the prow of said blade and a toe-piece adapted to overlap the toe of the shoe to which the skate is secured, said shoe member having an open slit at the back to permit the projection of the skate blade, and a fastening device secured to the rear flaps of said shoe member adjacent to said opening.

1,310,138. LOCKING-PLUG FOR RECEPTACLES AND THE LIKE. HOWARD R. SARGENT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 6, 1917. Serial No. 205,884. 5 Claims. (Cl. 173-356.)



3. The combination with a receptacle having service terminals and a conducting shell therein, of a plug provided with a cooperating shell and a cap thereon for maintaining a desired relation between said terminals, a serrated arm pivoted in said plug, a spring arranged to hold said arm in engagement with the first mentioned shell; said plug being formed with a slot to receive a key for moving said arm out of engagement with the first mentioned shell.

1,310,139. APPARATUS FOR AIMING GUNS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed July 30, 1917. Serial No. 183,596. 2 Claims. (Cl. 235-88.)

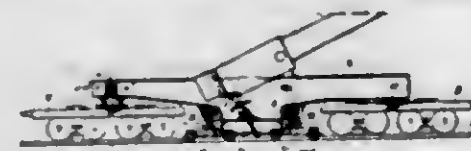


1. For use with combined apparatus for sighting and elevating guns, the combination with the usual drum bearing a scale of elevations, of a disk mounted so as to be freely movable around the axis of said drum, bearing a continuous scale of ranges and also provided, opposite to said scale of ranges, with a series of consecutive sectors corresponding each to one kind of propelling charge, each of said series bearing a scale of elevations corresponding to each type of the various projectiles which are to be fired from the gun, whereby the gun-layer, without consulting firing tables, can, from a direct reading of the disk, ascertain the propelling charge and the gun elevation required to project to any desired range any desired one of the various types of projectiles for which the said disk is divided.

1,310,140. APPARATUS FOR EFFECTING THE ADJUSTMENT OF THE TRAINING MOVEMENT OF GUN-CARRIAGES MOUNTED ON RAILWAY-TRUCKS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Sept. 6, 1917. Serial No. 189,948. 7 Claims. (Cl. 89-40.)

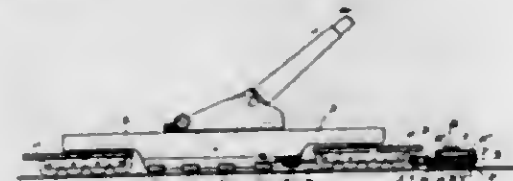
1. In an apparatus of the character described, the combination of a plurality of railway truck groups, and a

girder-like gun carriage mounted to turn thereon on vertical pivots, with means for moving said carriage around



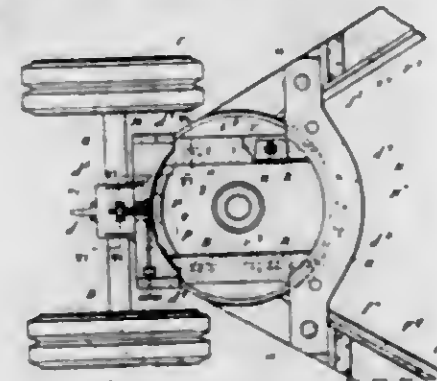
one of its pivotal points independently of said truck-groups or other support.

1,310,141. APPARATUS FOR DIMINISHING THE RECOIL OF GUN-CARRIAGES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,180. 4 Claims. (Cl. 89-43.)



1. In combination with a gun carriage truck designed to enable the gun to be fired from a railroad track, an apparatus for diminishing the recoil and returning the gun automatically into position for firing, comprising a support located in front of the gun carriage truck but separate from same, a brake and a recuperator located on said support, means for securing said support on the railroad track, and a pivotal connection connecting the movable elements of said brake and said recuperator to the gun carriage truck.

1,310,142. WHEELED GUN-CARRIAGE WITH DIVERGIBLE TRAILS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,190. 5 Claims. (Cl. 89-40.)



1. In a wheeled gun carriage having divergible trails, the combination of a fore wheeled axle, a gun carriage proper, and a gun carriage support movable about a vertical axis, with a longitudinal pivot pin between said axle and said support, a pair of trails each mounted to turn about an axis on said support, and a rear wheeled axle, whereby said fore wheeled axle and the carriage support to which it is pivoted may turn horizontally with relation to said trails, and whereby the said fore wheeled axle serves as a horizontally rotatable fore carriage for transport.

1,310,143. HAND-OPERATED APPARATUS FOR LOADING LARGE GUNS. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,191. 4 Claims. (Cl. 89-45.)

1. In a hand-operated apparatus for loading large guns, the combination with the gun carriage, of a vertical foot-

step bearing fixed to the gun carriage, a pivot revolvably mounted in said bearing, a bracket fixed to said pivot, a horizontal pivot pin in said bracket, an arm for carrying a loading scoop mounted so as to rock on said pivot pin,



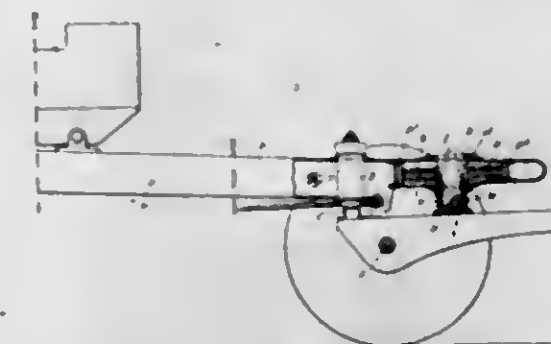
and a rope attached at one end to said arm and at its other end to said bearing, whereby a rotational movement of said arm will produce automatically its elevation by turning on said horizontal pivot pin by reason of said rope becoming wound around said bearing.

1,310,144. GUN-SUPPORTING PLATFORM. EUGENE SCHNEIDER, Paris, France. Filed Aug. 8, 1918. Serial No. 248,995. 3 Claims. (Cl. 89-40.)



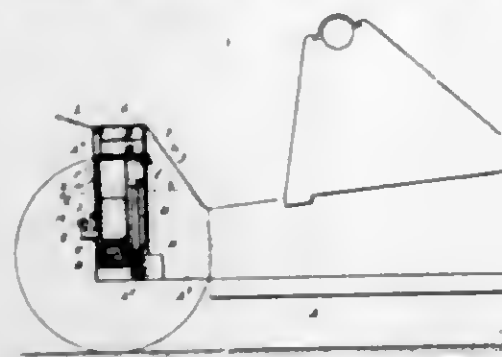
1. In a gun mount, the combination of gun supports, a plurality of wheeled trucks therefor having elevating and depressing connections therewith and a firing platform transportable with and revolvably connected to said supports for turning into firing direction when the latter are elevated into travelling position and adapted to revolvably support said gun supports when the wheeled trucks are elevated from the ground.

1,310,145. APPARATUS FOR CONNECTING GUN-CARRIAGES TO LIMBERS OR FORE-CARRIAGES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,861. 10 Claims. (Cl. 89-40.)



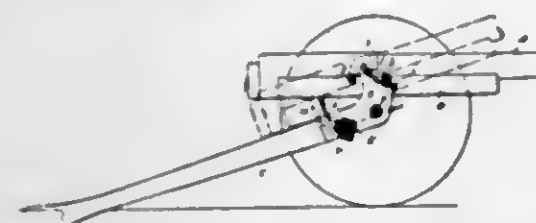
1. In an apparatus for connecting a trail to a limber or fore-carriage, the combination with the trail, the fore-carriage, the pivot pin on the fore-carriage and the yoke-eye of the trail, of an elastic supporting device between said yoke-eye and the fore-carriage comprising a member on said pivot pin with which said yoke-eye is adapted to engage, and a spring between said member and the fore-carriage.

1,310,146. SUSPENSION APPARATUS FOR GUN-CARRIAGES AND THE LIKE. EDOUARD SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,863. 17 Claims. (Cl. 89-40.)



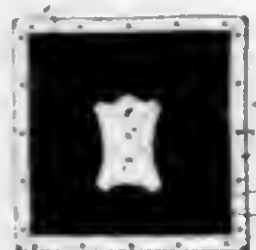
17. In suspension apparatus for gun carriage frames and the like, the combination with the carriage frame and a wheel axle thereof, of a hydro-pneumatic recuperator comprising a cylinder and a piston working therein, and connections between said recuperator elements and said frame and axle.

1,310,147. APPARATUS FOR EXTENDING THE LIMITS OF ELEVATION OF WHEELED GUNS. EDOUARD SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Sept. 13, 1918. Serial No. 253,989. 10 Claims. (Cl. 89-40.)



1. An apparatus for extending the limits of elevation of wheeled guns, consisting of a trail head comprising two pairs of bearings at different levels for the trunnions of the gun cradle, the axes of said bearings being situated in one and the same arc of a circle having its center in the axis of the actuating pinion or pinions of the elevating sector or sectors, the said cradle trunnions being then capable of being shifted into one or the other pair of bearings for firing at low or high angles of elevation by simply raising the cradle and the gun barrel as a whole, without affecting in any way the parts of the gun or its elevating mechanisms.

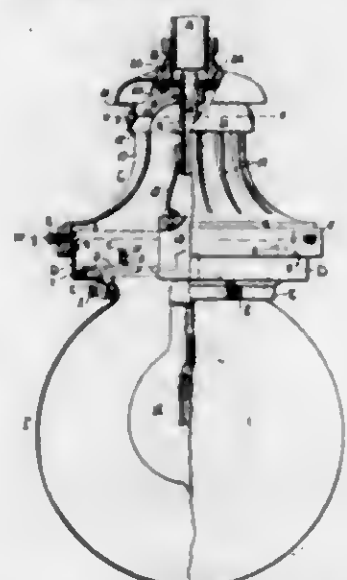
1,310,148. APPARATUS FOR STRETCHING AND DRYING LEATHER. MAX STEINHARTER, Philadelphia, Pa. Filed Feb. 18, 1915. Serial No. 9,171. 3 Claims. (Cl. 140-21.)



2. A stretching apparatus, which comprises a netting the surface of which is dished, a frame provided with curved braces for holding and supporting said netting, and a plurality of clamping devices which clamp the

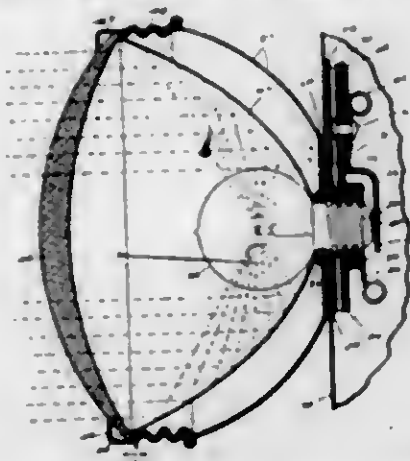
edges of the article to be stretched and are each provided with a depending member adapted to be hooked into a mesh of the netting.

1,310,149. LIGHTING-FIXTURE. ROBERT C. STEPHENS, St. Louis, Mo. Filed Oct. 11, 1915. Serial No. 55,191. 10 Claims. (Cl. 240-78.)



6. In a lighting fixture, a dome, a lamp-receiving globe, a ventilator ring surrounding said globe at a point near the lower portion of the dome, said ventilator ring having openings for the admission of air to the interior of said dome, the outer face of said dome being provided with radiating fins forming passageways for conducting air to the upper portion of the dome, the upper portion of said dome being open to permit the discharge of air from the interior of the dome.

1,310,150. LANTERN. HOMER A. WOODS, Indianapolis, Ind. Original application filed Nov. 29, 1913. Serial No. 63,931. Patent No. 1,232,642, dated July 10, 1917. Divided and this application filed July 9, 1917. Serial No. 179,317. 11 Claims. (Cl. 240-8.5.)



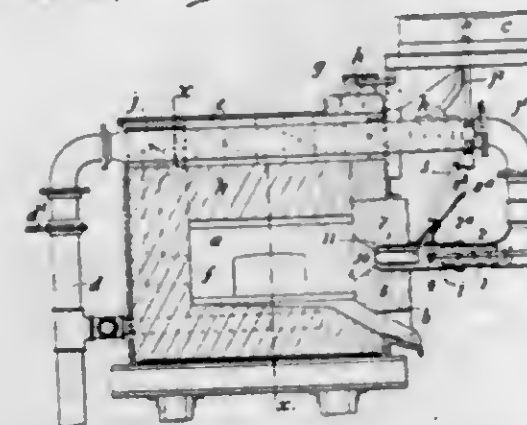
1. In a lantern, the combination of a casing, a reflector housing, an insulating washer between the reflector housing and the casing, and a bulb-receiving sleeve which projects through said washer, housing, and casing, said housing and casing being provided with registering projections and depressions for preventing relative movement between them around the axis of said sleeve, and said washer being deformed to correspond with said registering projections and depressions.

1,310,151. METHOD OF MAKING SOLUBLE SULFIDS. RAYMOND F. BACON, Pittsburgh, Pa., assignor to Metals Research Company, New York, N. Y., a Corporation of Maine. Filed Nov. 10, 1915. Serial No. 60,699. 2 Claims. (Cl. 23-13.)

1. The method of making soluble sulfids from insoluble metal sulfids, such as sulfid ores and concentrates, which

comprises preliminarily heating a mixture of such sulfids and alkaline material in a finely divided and intimately commingled condition, to a temperature sufficient to substantially expel the moisture and water of hydration therefrom, maintaining such temperature until all moisture and water of hydration is expelled, removing the water vapor, and subsequently raising the temperature sufficiently to cause materials to react to form a water soluble sulfid.

1,310,152. LIQUID-FUEL FURNACE. WILLIAM M. BURDON and MATTHEW M. BURDON, Bellshill, Scotland, assignors to Burdon's Limited, Bellshill, Scotland. Filed Aug. 3, 1918. Serial No. 248,120. 12 Claims. (Cl. 158-4.)



1. A method of burning heavy oils for heating purposes in which air is heated to a temperature above the flash point of the oil and is then caused to gyrate and while in a state of gyration is caused to atomize and vaporize oil delivered to the interior of a hollow member through which and also outside of which the gyrating air passes, whereby the oil in a finely divided state will be disposed between an inner and outer stream of air.

1,310,153. SLITTING AND REWINDING MACHINE. JAMES A. CAMERON and GUSTAV BISCHER BIRCH, Brooklyn, N. Y., assignors to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed July 25, 1916. Serial No. 111,108. 2 Claims. (Cl. 164-65.)

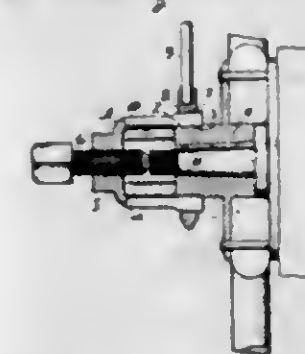


1. A slitting and rewinding machine comprising: means for slitting a web longitudinally, means for transversely perforating the slitted sections, said last mentioned means arranged to operate on the web after the slitting means, and rewinding means for drawing the web past the slitting and perforating means and for rewinding the slitted and perforated sections.

1,310,154. WHEEL-PULLER. EDWIN B. CANTRELL and GEORGE E. MILLER, San Francisco, Calif. Filed Oct. 9, 1917. Serial No. 195,531. 1 Claim. (Cl. 29-85.)

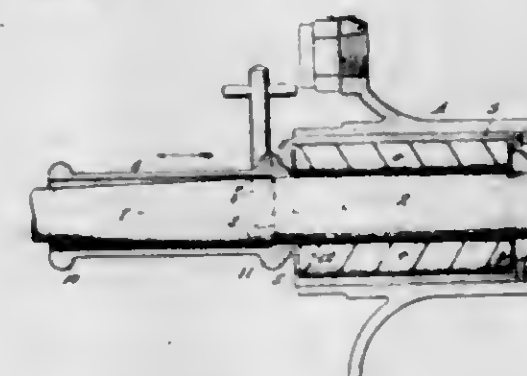
A wheel puller comprising a cap-shaped casing, one end of which is split into a plurality of sections and exter-

nally and internally threaded, a nut adapted to be received by the external threads, and a screw received by



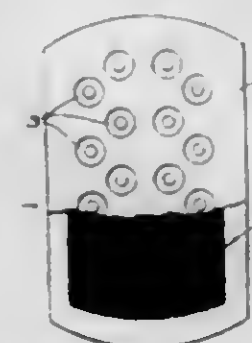
the opposite end of the casing and extending longitudinally therethrough.

1,310,155. ROLLER-BEARING REMOVER. EDWIN B. CANTRELL and GEORGE E. MILLER, San Francisco, Calif. Filed Dec. 3, 1918. Serial No. 265,132. 4 Claims. (Cl. 29-84.)



1. A tool for removing roller bearings comprising a holder and means on said holder for gripping one end of the roller bearing to permit an endwise pull to be exerted when the bearing is to be removed.

1,310,156. BLOW-OUT PATCH. LESTER P. CLARE, Fairwood, N. J., assignor of one-half to Anthony L. Stebor, Jr., Plainfield, N. J. Filed Apr. 13, 1918. Serial No. 228,447. 2 Claims. (Cl. 152-24.)

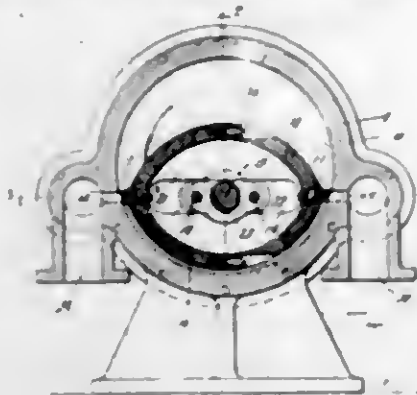


1. A blow-out patch, comprising a reinforcing wire fabric, coated on both sides with rubber to form a body of substantially even thickness throughout its main body portion, and having on its outer surface vacuum cups; whereby the patch may be placed and held without additional holding devices in any position within a casing.

1,310,157. ROTARY ENGINE. MANUEL DE CAMPO, Mexico, Mexico. Filed Jan. 7, 1918. Serial No. 210,716. 1 Claim. (Cl. 121-47.)

An engine comprising a cylinder; a rotary piston, the sides whereof are curved in correspondence with the wall of said cylinder, said piston having a long and a short diameter in cross section, the long diameter corresponding approximately with the diameter of said cylinder and

the length of said piston corresponding approximately with the length of said cylinder; a plurality of packing members mounted on said piston at the opposite ends of the longer diameter thereof and at the opposite ends thereof; a driving shaft extended lengthwise of said cylinder, the axis of said shaft being eccentric to the axis of said cylinder; and means movably connecting said pis-



ton and said shaft for permitting the movement of said piston on said shaft in a plane coincident with the longer diameter of said piston, said means embodying a plurality of ribs internally extended within said piston in parallel relation, and rollers mounted in bearings formed in bracketed supports.

1,310,158. PROCESS FOR PURIFYING WATERPROOFING COMPOSITIONS. OTTO EINAR GELETSSEN, Westfield, N. J., assignor to Greenfield Paper Bottle Company, New York, N. Y., a Corporation of New Jersey. Filed June 5, 1916. Serial No. 101,818. 8 Claims. (Cl. 134-20.)

5. In the purifying of a waterproofing composition comprising resin, hydrocarbon wax or oils, the method which comprises subjecting the waterproofing composition to the action of heated air in the presence of a catalytic agent, such as chromium, manganese or iron, or a compound or compounds thereof, until the impurities, or compounds thereof, which are volatile have passed from the waterproofing mixture to be purified, and separating the waterproofing composition from such impurities, or compounds thereof, as are not soluble in the waterproofing mixture.

1,310,159. STEERING-GEAR ATTACHMENT. WILLIAM GEMMERSON, Los Angeles, Calif. Filed June 4, 1918. Serial No. 238,216. 4 Claims. (Cl. 21-200.)

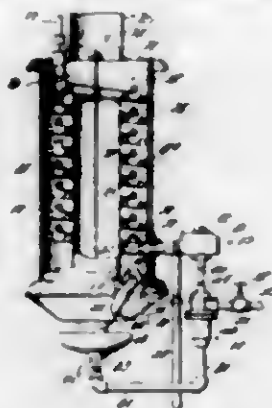


1. A steering gear attachment adapted to be secured to the front axle of an automobile and to put a spring tension upon the equalizing rod of said automobile, comprising a flat spring member secured at its ends to the front axle, a slotted arm extending rearwardly from said spring, a head formed on said arm seated against said spring, means on said spring for preventing longitudinal movement of the head on said spring, a U bolt having its closed end extending through the slot in said arm, means for clamping said U bolt over said axle, and means on said equalizing rod for engaging said arm.

1,310,160. AUTOMATIC WATER-HEATER. ERNA S. HOYT, Los Angeles, Calif. Filed Aug. 27, 1914. Serial No. 858,954. 1 Claim. (Cl. 236-25.)

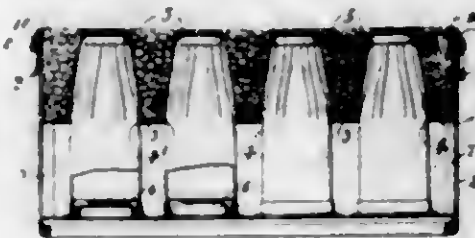
An automatic water heater comprising a water control valve provided with a valve casing constructed with a cylinder, having a water inlet chamber, a passage be-

tween the water inlet chamber and the upper part of the cylinder, an arm on the cylinder having an opening, an opening in the lower part of the cylinder, connecting with the opening in the arm and an opening between the water inlet chamber and the opening in the arm extending substantially at right angles thereto, a piston in the cylinder dividing it into an upper pressure chamber and a lower pressure chamber, a valve stem extending across



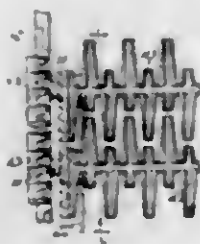
the opening in the arm and formed with a tapering valve adapted to partly close the opening from the water inlet chamber, a gas valve casing constructed with a gas chamber, and an opening from the gas chamber, a valve for said opening, means whereby the water control valve casing is connected with the gas valve casing, a piston rod extending from the piston and connected to the gas valve, and a spring for seating the valve against the opening from the gas chamber.

1,310,161. TRANSPORTATION CASE. EDWARD H. JOHNSON, New York, N. Y. Filed Sept. 28, 1915. Serial No. 53,012. 5 Claims. (Cl. 220-21.)



2. A transportation case comprising in combination a lower section or box having therein means for holding bottles in spaced relation, and an upper section which fits into the lower section, said upper section being in the form of a pan and having in its bottom portion openings which correspond to the spacings provided for in the lower section, said upper section also having a cap which covers each of said openings and the upper section being shaped so that the spaces between the caps themselves and between the outer caps and the sidewalls of the upper section can be filled with ice.

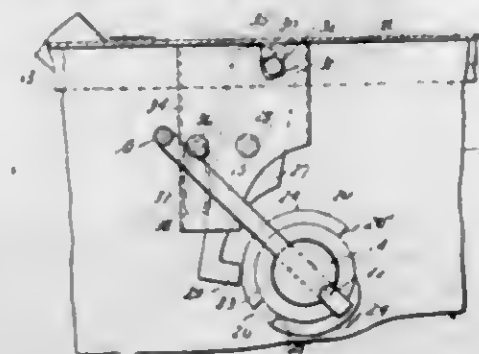
1,310,162. FURNACE-GRATE. GEORGE A. KOHOUT, Chicago, Ill., assignor to Shear-Klean Grate Company, Chicago, Ill., a Corporation of Illinois. Original application filed Oct. 21, 1914, Serial No. 867,810. Divided and this application filed July 2, 1917. Serial No. 178,066. 6 Claims. (Cl. 126-176.)



1. A furnace structure having side frames and tiltable grate bars, each of said grate bars having projecting

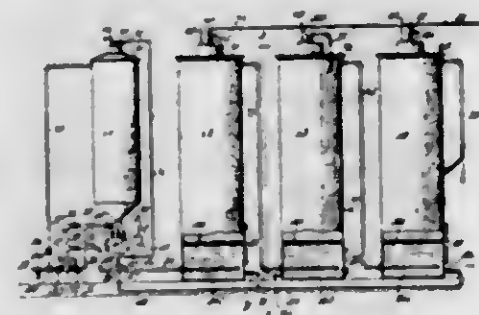
shafts at its sides, bearing elements for said shafts, and means whereby said bearing elements may be removably mounted in said side frames, said bearing elements having inwardly projecting fingers for cooperating with said grate bars.

1,310,163. INCLOSED SWITCH. ERNEST KNEBORN, Plainville, Conn., assignor to The Trumbull Electric Mfg. Co., Plainville, Conn., a Corporation of Connecticut. Filed Aug. 22, 1918. Serial No. 250,969. 7 Claims. (Cl. 175-282.)



7. In combination, a switch casing provided with a movable cover, a double-throw switch mounted in said casing, an operating handle for said double-throw switch, a locking disk carried by said handle having a track provided with a notch therein, a locking element carried by the cover, a pivoted locking lever having a hook portion for engagement with said cover-carried locking element and a hook adapted to bear on the track and to drop into the notch therein to lock the operating handle against movement in both directions, the dropping of said hook into said notch being adapted to free the lever from locking engagement with the cover-carried element.

1,310,164. METHOD AND APPARATUS FOR USING REAGENTS IN THE REFINING OF PETROLEUM OILS. EUGENE H. LESLIE, Los Angeles, Calif., assignor to General Petroleum Corporation, a Corporation of California. Filed Sept. 25, 1917. Serial No. 193,199. 3 Claims. (Cl. 196-26.)



1. A method of using reagents in the treating of an oil which is lighter than the reagents, comprising the following steps: first, confining the oil to be treated in a closed vessel; second, passing the reagent downwardly through the oil in said vessel; third, collecting the reagent and the sludge formed by the reagent in the bottom of the vessel; fourth, passing the material so collected through the oil so confined; and, fifth, continuously withdrawing oil from the top of said vessel and injecting it into the bottom thereof.

1,310,165. SASH-WEIGHT. MILO E. MATHER, Los Angeles, Calif. Filed Nov. 21, 1918. Serial No. 263,489. 1 Claim. (Cl. 10-20.)

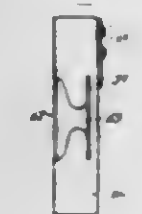
In a sash weight a body formed of plastic material; a reinforcing member for said body extending longitudinally and centrally thereof and embedded therein, said rein-

forcing member being formed of a plurality of wires bent centrally of their length to form an eye to project from one end of said body and then being twisted around each other along their entire length and having a plurality of



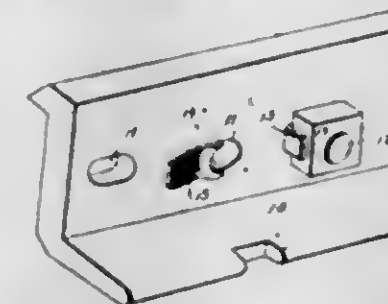
equispaced eyes formed along their length; the lower free ends of said wires extending downwardly and angularly, one to each corner of said body member at the lower end thereof.

1,310,166. CORNER-POST FASTENER FOR BEDS. MORRIS B. OKUN, Chicago, Ill. Filed May 20, 1918. Serial No. 235,590. 4 Claims. (Cl. 5-35.)



1. A side rail structure for beds comprising an angular metallic side rail, the extremities of said side rail being bent downwardly at right angles to the body portion of said side rail, and a pair of oppositely extending fingers punched out of the material of said downwardly extending extremities whereby said side rail structure may be reversibly mounted in place.

1,310,167. NUT-FASTENER. JOHN F. SCHUMAX, Reading, Pa. Filed Feb. 25, 1919. Serial No. 279,049. 1 Claim. (Cl. 151-53.)



The combination of a bolt, a nut, a fish plate having a bolt hole that is elongated to provide a space at the side of the bolt of uniform or substantially uniform width throughout the thickness of the fish plate, and a nut fastener comprising a head in said space with a bolt-engaging side and an inclined side that engages the edge of the hole wall, whereby said head is crowded against the bolt.

1,310,168. LOCKING-SWITCH. EDSON O. SESSIONS, Chicago, Ill. Filed Sept. 6, 1917. Serial No. 189,922. 5 Claims. (Cl. 175-282.)



1. In a locking switch, the combination of a pivot clip, a contact clip, a switch blade pivotally connected to said pivot clip and engaging said contact clip when the switch is closed, a housing carried by the end of said switch blade, and projecting laterally from the outer edge of the switch blade, a latch contained in said housing and pivotally mounted therein, said latch having a hook projecting from the inner edge of said housing, said housing having oblique openings through its opposite walls for receiving an operating tool, a fixed catch for engaging said hook when the switch blade is closed, and a lever contained in said housing for operating said latch, said lever overlapping said openings to be engaged and operated by said tool.

1,310,169. MAGNETIC FISHING-TOOL. ARTHUR W. WESTCOTT, Los Angeles, Calif. Filed May 15, 1918. Serial No. 234,641. 3 Claims. (Cl. 57-9.)

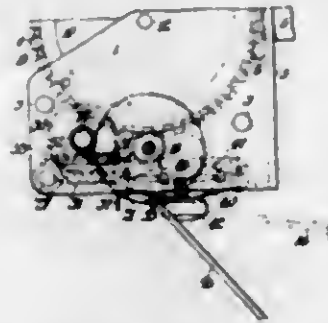


1. A magnetic fishing tool comprising a head; a magnet slidably mounted at one end in the lower end of said head to slide vertically; a plurality of flexible fingers secured at one end to said head to extend parallel with said magnet but spaced therefrom, the lower ends of said fingers being bent inwardly and upwardly to form hooks; a connection from the upper end of said magnet to a source of energy; and means extending upwardly from said head adapted for connection to a carrying means.

1,310,170. GOVERNOR MECHANISM. THEO CLIFFORD WHITING, Philadelphia, Pa. Filed July 5, 1916. Serial No. 107,717. 11 Claims. (Cl. 74-45.)

1. In a governor mechanism, the combination with a horizontal shaft; of a friction disk having a hub and axially movable on said shaft; means operatively connecting said shaft and disk, tending to axially shift said disk in accordance with the rate of rotation of said shaft, in-

cluding sheet metal springs detachably connected to said disk hub and to a collar fixed on said shaft, and weights carried by said springs; a slide frame formed of plane sheet metal arranged to reciprocate parallel with the axis of said shaft toward and away from said disk; a brake block, of resilient material, carried by said slide frame



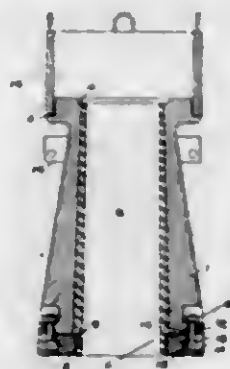
and arranged to bear against said disk; a stationary frame having rivet studs extending through said slide frame upholding said slide frame against the action of gravity and limiting its movement; a spring connecting said slide frame with said stationary frame; and an actuating connector, angularly adjustably connected with said slide frame; whereby said slide frame may be shifted in opposition to said spring.

1,310,171. FASTENING DEVICE FOR TIRE-CHAINS. FRED ALTEGOTT, JR., Kansas City, Mo. Filed Feb. 21, 1919. Serial No. 273,324. 2 Claims. (Cl. 24-241.)



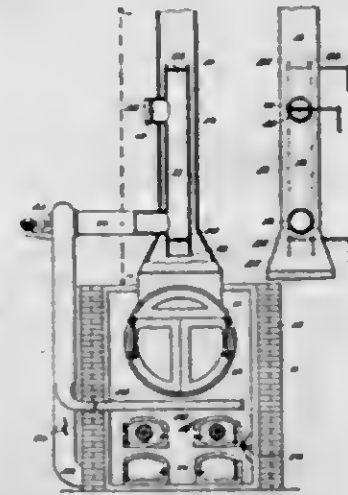
2. A chain fastening device for tire chains comprising in combination with the tire chain, a retaining element carried by one end portion of said chain and provided with a plurality of outwardly projecting teeth for detachable engagement with the other end portion of the chain, a keeper element carried by said retaining element and forming a closure for the spaces between said teeth and having inwardly projecting side portions embracing the opposite sides of said retaining element, and a spring element actuating said keeper element to normally force the same inward into closed position.

1,310,172. MOLD. BERNARD B. BRASZKOWSKI, Pittsburgh, Pa. Filed Sept. 12, 1918. Serial No. 233,810. 15 Claims. (Cl. 22-139.)



1. A mold for the purpose set forth comprising a hollow metallic body portion, a removable metallic jacket arranged within and of different material from the body portion, a collar connected with the body portion and supporting the lower end of the jacket, said body portion having its top formed with a laterally continuous flange formed with a ledge, and a hollow metallic head removably mounted on said ledge.

1,310,173. FUEL-ECONOMIZER MIXER AND CONTROLLER. JOSEPH C. CALLENT, Columbus, Ohio. Filed Oct. 16, 1917. Serial No. 196,886. 3 Claims. (Cl. 110-49.)



1. In a furnace provided with a flue and a grate, a combined heater and mixer longitudinally positioned within the flue having open ends therein, a conduit communicating with said heater and mixer and having branches discharging above and below the grate, a forced draft device arranged in said conduit, an air inlet pipe communicating with the heater and mixer spaced from said conduit, a damper within said inlet pipe and separate controlling dampers arranged in the heater and mixer at points adjacent the opposite open ends thereof within the flue.

1,310,174. HAME-FASTENER. OSCAR W. CARLSON, Litchfield, Minn. Filed Aug. 1, 1918. Serial No. 247,791. 2 Claims. (Cl. 54-26.)



1. A hame strap comprising two strap members and a dog-acting latch plate, one of said strap members having keepers for the other strap member, said other strap member having longitudinally spaced perforations and retaining fingers for the latch plate, said first noted strap further having a depressed lug affording a fulcrum for the latch plate, and a leaf spring applied to the first noted strap member and yieldingly acting on the latch plate to urge it into engagement with the perforations of said second noted strap.

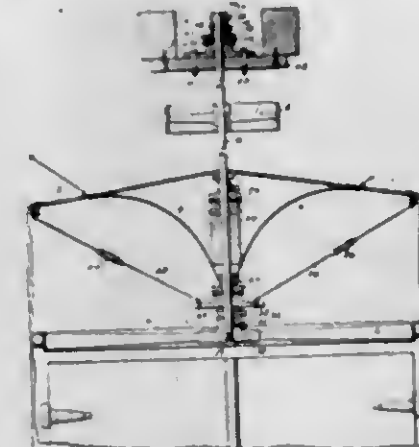
1,310,175. FUSE-PLUG. WENDALL L. CARLSON, Jamestown, N. Y. Filed Mar. 8, 1918. Serial No. 221,116. 7 Claims. (Cl. 175-277.)



1. A fuse plug comprising two portions having an L-shaped joint therebetween allowing sidewise separation, said portions shaped to form a chamber therewithin having a groove around its walls a spaced distance from the outer end thereof, a mica plate fitting within said groove to form a transparent closure for said chamber, the peripheries of said portions threaded, a threaded band to fit over said portions and hold them in contacting relation, one of said portions having holes therein one through the inner end and the other through the side thereof a

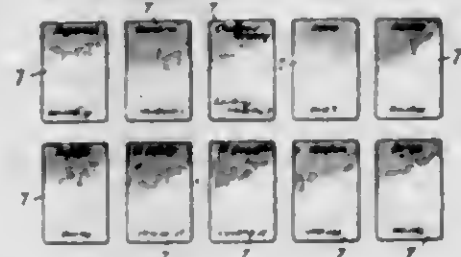
spaced distance from said inner end hole, a metallic pin terminal received in said hole in the inner end, and a fuse connecting said metallic pin terminal to said threaded band through said chamber and hole in the side.

1,310,176. MACARONI-DRIER. PRIMIANO CASALENA, Chicago, Ill., assignor of one-half to John V. Canepa, Chicago, Ill. Filed Nov. 4, 1918. Serial No. 260,933. 5 Claims. (Cl. 34-10.)



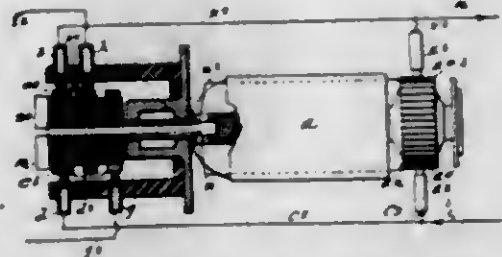
1. In a macaroni drier, the combination of a drying chamber having an opening in the top thereof, a shell inclosing said chamber and having its top spaced from the top of the chamber, a fan arranged horizontally in said opening, a perpendicular shaft for said fan extending up through the top of the shell, two bearings for said shaft located within the shell, one adjacent the fan and the other adjacent the top of the shell, and a bearing for the upper end of the shaft.

1,310,177. GAME. WALTER M. COLEMAN, Baltimore, Md. Filed Mar. 24, 1919. Serial No. 284,010. 4 Claims. (Cl. 40-25.)



1. A deck or pack of cards of which a plurality of the cards have each a predetermined score value, and the balance of the cards of the pack bear markings which enable them to be arranged in sets there being a sufficient number of said balance of cards to form as many sets as there are cards having score values.

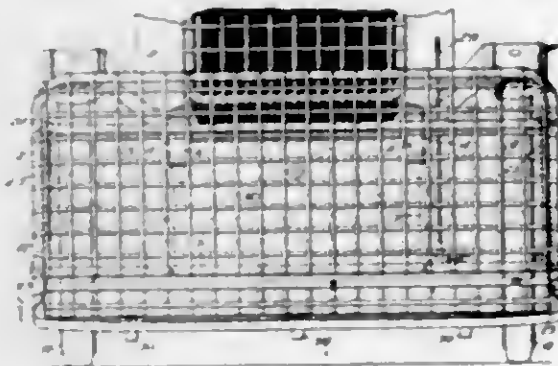
1,310,178. CONVERTER. FREDERICK D. COOLEY, Detroit, Mich. Filed July 15, 1918. Serial No. 244,901. 3 Claims. (Cl. 175-364.)



1. The combination of a source of direct current, a circuit adapted to be energized from said source, a motor adapted to be actuated by said direct current and provided with a commutator, a commutator interposed in

said circuit, the bars of the last named commutator being connected with the bars of the motor-commutator that are in contact with the motor brushes when the bars of said interposed commutator are passing out of circuit.

- 1,310,179. FENDER. NELSON DE LONG, Chicago, Ill., assignor, by direct and mesne assignments, to J. M. Laventhol, Chicago, Ill. Filed Feb. 11, 1918. Serial No. 216,467. 4 Claims. (Cl. 293-41.)



1. In a fender for a vehicle, a vertically supported buffer, a platform normally supported in a substantially horizontal position, a pivot upon which said platform vibrates and upon which it may be turned for folding purposes, said pivot being supported on said buffer and located back of the rear face thereof, and manually operated means for turning said platform on its pivot to fold it, said platform being so constructed that when folded it lies against that face of the buffer which is opposite the face where the pivot is located.

- 1,310,180. PLASTIC COMPOSITION AND PROCESS OF MAKING SAME. GEORGE BARZA DUNBAR, Detroit, Mich. Filed Jan. 20, 1919. Serial No. 271,952. 3 Claims. (Cl. 106-31.)

2. A plastic composition, comprising 60% resin, 5% carbon, 25% asbestos fiber, and 10% calcium oxid.

- 1,310,181. SHIP CONSTRUCTION. JOHN ELMIFF, Kansas City, Mo. Filed Nov. 14, 1918. Serial No. 262,454. 5 Claims. (Cl. 111-63.)



1. A ship substantially rectangular in cross-section from the waist to the stern, the immersed portion of the stern slanting upwardly and forwardly from the rear end of the bottom to about the water level.

- 1,310,182. FUSE-PLUG. CHARLES L. EIDLITZ, New York, N. Y. Filed Apr. 9, 1918. Serial No. 227,422. 1 Claim. (Cl. 175-277.)



A fuse plug comprising an insulating body having a cavity in one face, an insulating fin projecting from the bottom of said cavity and transversely from one side wall thereof, a cover for said cavity comprising a mica disk resting against the outer edge of the fin, two electrical terminals located in the cavity on opposite sides of

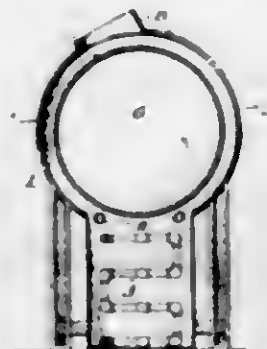
the fin, and a fusible conductor detachably connected with both of said terminals and leading therefrom around the free end of the fin.

- 1,310,183. CORN AND BUNION SCORER. CALYX FONTAINE, Boston, Mass. Filed Nov. 21, 1918. Serial No. 263,529. 1 Claim. (Cl. 125-305.)



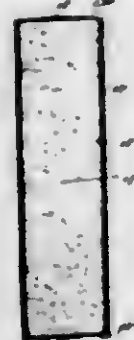
A corn and bunion scorer comprising a narrow elongated blade having a transverse cutting edge at its outer end, a shank attached to the inner end portion of the blade, an internally threaded sleeve having an apertured head at one end, a swivel connection between said head and the knife shank, and a tubular sheath externally threaded at its inner end portion to engage the internal thread of the sleeve, and having a flat-sided open guide at its outer end in which the outer end portion of the blade has a sliding fit, said sheath being longitudinally movable by rotation of the sleeve to cover and expose the knife edge, the outer end of the guide constituting a guard limiting the depth of a scoring cut made by said edge.

- 1,310,184. ANTI-EXPLOSIVE ATTACHMENT FOR DRY-CLEANING TUMBLERS. HARRY J. GELHAAR, Lincoln, Nebr., assignor of one-half to Loyd J. Selbert, Kansas City, Mo. Filed Dec. 7, 1918. Serial No. 265,802. 2 Claims. (Cl. 34-5.)



1. The combination with a dry cleaning tumbler comprising a body portion, a heating chamber underlying the same, and a rotatable drum within the body portion, of a steam supply pipe arranged in the tumbler below the said drum and provided with jet openings for discharging steam downwardly into said heating chamber; said body portion having a discharge arm above the drum for the escape of dry steam and gasoline fumes driven off by such steam from articles within said drum.

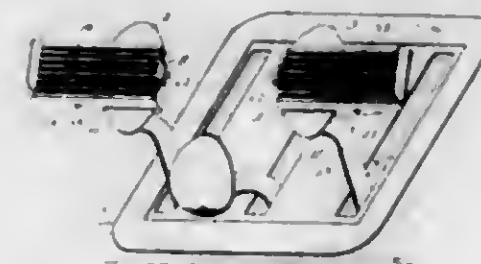
- 1,310,185. MERCHANDISE-PACKAGE AND METHOD OF MAKING THE SAME. BENJAMIN F. GORSON, Brookline, Mass. Filed Apr. 8, 1918. Serial No. 227,221. 2 Claims. (Cl. 206-46.)



1. As an article of manufacture, a merchandise package comprising a relatively stiff tube open at both ends,

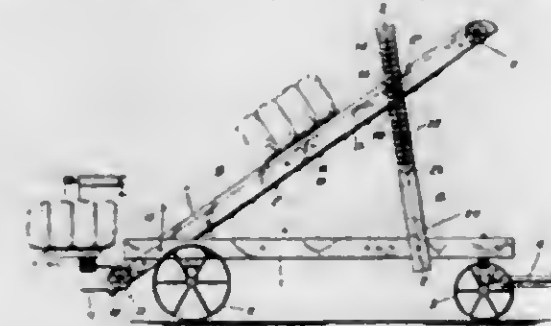
a flexible cover sheet wrapped about the tube and having its edges folded inwardly over the ends of the tube, whereby plaited head layers are provided having relatively thin rupturable portions coinciding with the end edges of said tube, reinforcing seals closing the joints between the plaited head layers, said seals being of less diameter than the cross sectional diameter of the tube, whereby the rupturable portions may be readily broken by pressure of the finger against the end edges of the tube, and a charge of pulverulent merchandise inserted in said tube and in contact with the heads formed by said layers and releasable by the rupture of either head.

- 1,310,186. ATTACHMENT FOR AUTOMOBILE-PEDALS. FREDERICK C. GRANT, Chicago, Ill. Filed June 8, 1918. Serial No. 238,940. 8 Claims. (Cl. 74-81.)



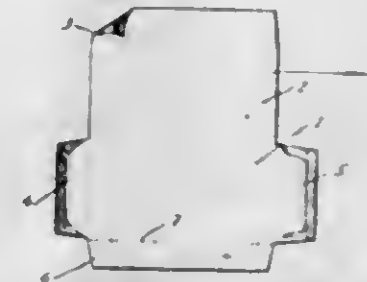
1. In a pedal attachment of the character described, the combination with a pedal, of a plate bent to engage one edge and a portion of the under side of the pedal on one side of its longitudinal center, and terminating in a vertical depending lip, abutments on said plate for engaging the other edge of the pedal, a member connected to the plate for engaging the under side of the pedal on the opposite side of its longitudinal center and terminating in a depending lip, and clamping means for drawing said lips toward each other.

- 1,310,187. HAY-LOADER. ARTHUR V. HODGSON, Cecil, Oreg. Filed Oct. 5, 1918. Serial No. 266,963. 1 Claim. (Cl. 192-18.)



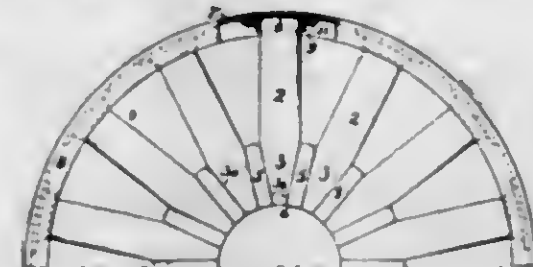
A loader for hay bales and the like comprising a rigid wheel mounted frame, an elevator frame pivotally mounted at the rear end of the first named frame, an endless driven conveyor in the elevator frame, uprights pivotally mounted to the rigid frame at the forward end thereof on either side of the elevator frame, said uprights being provided with longitudinal slots, bolts rigidly mounted on the elevator frame and projecting through the slots, notched members on the uprights provided with slots central of the notches in alignment with the first named slots, slidable T-shaped members on the bolts adapted to seat in the notches, and hand screws on the bolts whereby when the T-shaped members are seated in any of the notches to fix the slant or angle of elevation of the elevator frame the hand screws will bind the elevator frame and uprights together to form a rigid unit.

- 1,310,188. COUPON-ENVELOP. GEORGE FRANCIS HOGAN, Chicago, Ill. Filed Oct. 22, 1918. Serial No. 259,257. 1 Claim. (Cl. 229-70.)



An envelop consisting of a single blank of sheet material, comprising a front member, a rear member of the same size and shape folded against the front member, a gummed flap distinct from the rear member but integral therewith extending along the entire bottom edge thereof and folded inwardly between the two members and fastened against the inner face of the front member so as to secure said members together, end flaps at opposite ends of one of said members folded against the outer face of the other member, and a record coupon distinct from but integral with the front member and extending along the entire bottom edge of that member, said coupon being detachable from the front member, when desired, to serve as a permanent memorandum of the envelop and its contents; substantially as described.

- 1,310,189. WHEEL. RUSSELL HOOPER, West Chester, Pa. Filed Apr. 2, 1918. Serial No. 226,184. 2 Claims. (Cl. 21-69.)



1. In a wheel, a rim, combined with spokes fitted to the rim and having their hub ends tapered and arranged in a circle in the plane of the wheel, the adjacent tapered surfaces of adjacent spokes being approximately parallel, and keys of approximately the shape of the space between the tapered spoke ends driven radially outward between the said tapered surfaces of the adjacent spokes to position them and make a rigid hub body at the inner ends of the spokes.

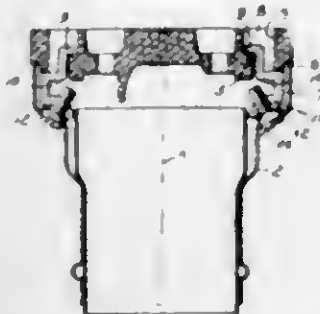
- 1,310,190. FASTENING DEVICE FOR CONDUITS AND THE LIKE. BARSON DEXTER HORTON, Detroit, Mich. Filed Feb. 23, 1916. Serial No. 79,561. 6 Claims. (Cl. 285-26.)



1. In combination with a metal casing provided with an aperture, a conduit of less diameter than said aperture, a pair of redorers provided with apertures of less diameter than the aperture of the casing and arranged on opposite sides of said casing, means formed integral with said re-

ducers for preventing lateral and relative movement thereof, and means carried by said conduit and cooperating with said reducers for clamping said conduit within the aperture of the casing.

1,310,191. ELECTRICAL FITTING. CECIL R. HUBBARD, Baden, and DAVID M. COOPER, Ambridge, Pa., assignors to National Metal Molding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 2, 1918. Serial No. 215,105. 4 Claims. (Cl. 173—362.)



2. In an electrical fitting, the combination of a base block of insulation, a cap inclosing the top thereof, said block being provided with a hole substantially parallel to the central axis of the block and cap, and further provided with a backwardly facing detent within said hole; a lug provided with a tongue engaging said detent, with a seat casting on the top of said block, and with an interiorly screw-threaded portion lying in a plane oblique to said central axis; and a screw extending through said cap and engaging the screw threaded portion of said lug for the attachment of said cap to said base.

1,310,192. NECKWEAR. WILLIAM A. KEYS, New York, N. Y. Filed May 19, 1915. Serial No. 29,044. 10 Claims. (Cl. 2—11.)



1. In a necktie provided with a neck band and a tying end, a cover for a tying end folded and having each of its edges united with a separate reinforcing strip so that two folded edges intermediate the longitudinal edges of the tie proper are presented which are parallel and adjacent, and a row of stitching uniting said folded edges to produce a durable and reinforced juncture between the edges of the cover.

1,310,193. AUTOMOBILE-SPRING. WILLIAM KRAFFT, Fall River, Mass., assignor to Capitol Motors Corporation, Fall River, Mass., a Corporation of Massachusetts. Filed June 6, 1918. Serial No. 238,419. 6 Claims. (Cl. 267—33.)

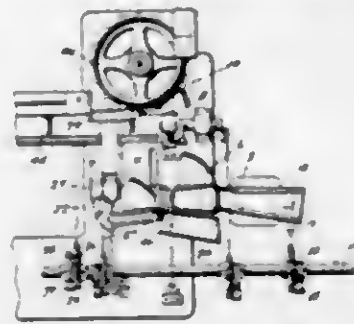


1. In a vehicle spring, a series of leaves, the topmost leaf having an integral lateral extension on each side thereof and in the place of and at about the transverse center of the leaf, said extensions being perforated to receive bolts and providing anchors for the latter.

1,310,194. APPARATUS FOR HANDLING GLASS-WARE. RICHARD LA FRANCE, Toledo, Ohio, assignor to The Owens Bottle Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 27, 1917. Serial No. 164,917. 5 Claims. (Cl. 214—91.)

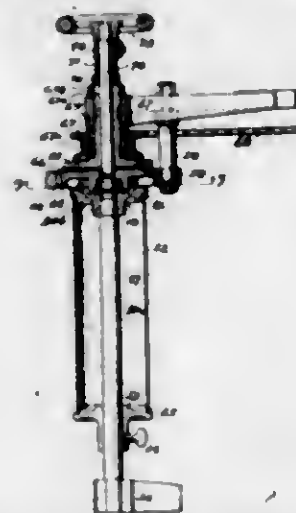
1. Bottle handling apparatus to which bottles are delivered *seriatim*, said apparatus comprising a switch,

cradles, a conveyer, means to operate the switch and cause it to direct the bottles alternately to the cradles,



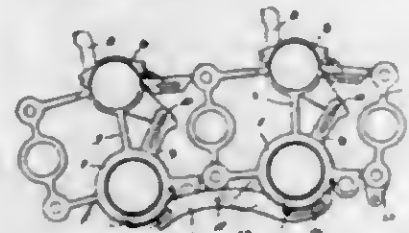
and means to actuate the cradles and cause them to deliver the bottles to the conveyer.

1,310,195. WINDING DEVICE FOR WIPING WEBS OF EMBOSSED PRINTING-MACHINES. EDWARD M. LOCKWOOD, Philadelphia, Pa., assignor to C. R. Carver Company, a Corporation of Pennsylvania. Filed June 26, 1917. Serial No. 170,991. 6 Claims. (Cl. 242—55.)



4. A mandrel comprising a slotted tube, combined with a shaft extending axially through the tube and having an annularly grooved head fixed thereon and in the groove of which one end of the tube is received and centered concentrically to the shaft, an adjustable head slidably mounted upon the shaft and also provided with an annular groove in which the other end of the tube is received and detachably clamped, a continuously rotating shaft in axial alignment with the mandrel shaft, and a disk frictionally driven by the continuously rotating shaft, said disk having a central bearing and engaging the annularly grooved head which is fixed to the mandrel shaft and also having projecting portions which engage the said head to detachably couple with the same and rotate it.

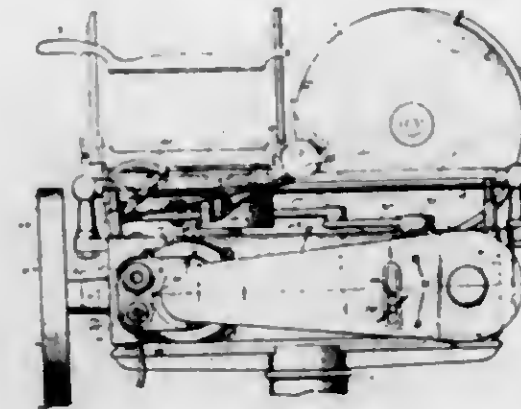
1,310,196. SECOND-CHOICE-VOTING MECHANISM. STEVEN LOE, Minneapolis, Minn., assignor, by direct and mesne assignments, to Loe Multiplier Voting Machine Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 24, 1917. Serial No. 170,727. 3 Claims. (Cl. 235—54.)



1. In a voting machine, the combination with several columns or rows of register actuators, said actuators including pivoted levers, of a selective lock lever interme-

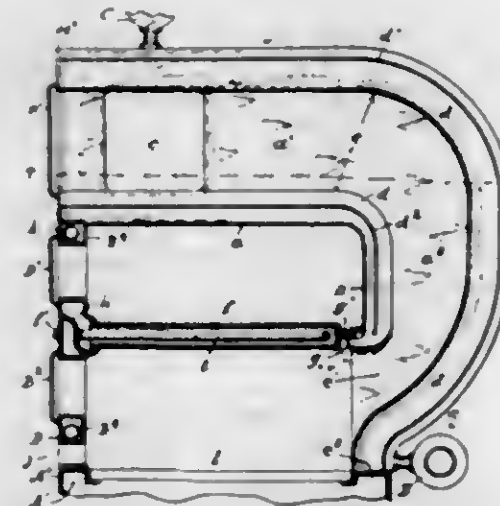
diately pivoted between said columns or rows and with its ends cam-connected to corresponding actuator levers of two adjacent columns, and serving to permit either one of said actuator levers to be moved by locking the other or second against movement.

1,310,197. SLICING-MACHINE. AUGUST R. LUSCHKA and JOSEPH FOLK, Laporte, Ind., assignors to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed June 7, 1918. Serial No. 238,632. 15 Claims. (Cl. 17—24.)



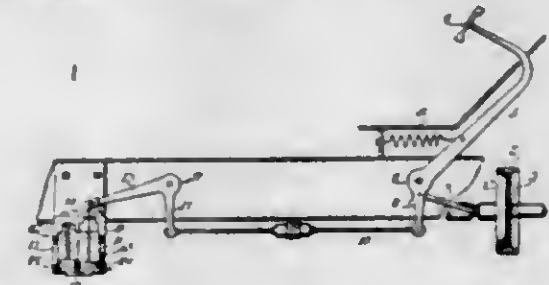
1. The combination with a slicing machine having a base frame, of a motor for driving said machine, an opening in said frame for receiving said motor, means for securing said motor in said opening, and a removable cover for said motor secured to said base frame.

1,310,198. SECTIONAL STEAM OR WATER BOILER WITH WATER-GRATE. WILLIAM M. MACHAY, East Orange, N. J. Filed July 23, 1917. Serial No. 182,102. 8 Claims. (Cl. 122—223.)



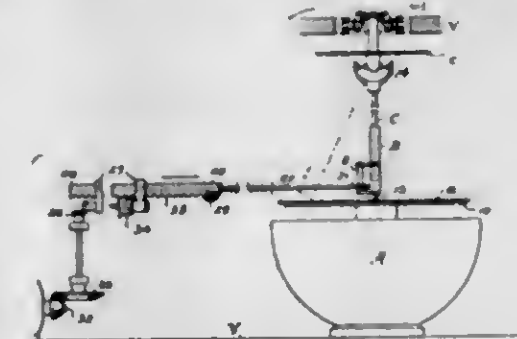
1. A vertical firebox section for a steam or water-boiler, comprising a water-plate of L-shape having a horizontal arm with substantially horizontal edges, and a vertical arm with its lower edges gradually sloped toward one another to its bottom end, the arms having enlarged hollow channels along the margin with opposite sloping walls forming joint-seats which extend along the outer margins of both arms and along the inner margin of the horizontal arm and part way down the inner margin of the vertical arm, the said enlarged hollow channels and joint-seats forming, when the sections are assembled, a flue extending between all parts of the arms and forming a smoke-outlet upon the inner side of the vertical arms at the lower end of the same.

1,310,199. CLUTCH-CONTROLLER. JAMES S. MANTON, Chicago, Ill. Filed Nov. 15, 1915. Serial No. 61,483. 14 Claims. (Cl. 102—1.)



13. In a friction clutch, the combination of a plurality of clutch elements, yieldable means for moving said elements into operative engagement, and means offering a continuously varying resistance to the action of said first named means to cause said first named means to have a minimum effect at the time of initial engagement of said clutch elements.

1,310,200. POSITION INDICATOR OR RECORDER. HUDSON MAXIM, Hopatcong borough, N. J. Filed Dec. 15, 1914. Serial No. 877,328. 18 Claims. (Cl. 234—26.5.)



2. In combination, a compass chart, a carrier for the same, a stylus bearing on said chart, means for moving the stylus over said chart including a coupling member releasable on change in direction of movement of said stylus, said member having a loose connection with said stylus.

1,310,201. POSITION INDICATOR OR RECORDER. HUDSON MAXIM, Hopatcong borough, N. J. Filed Dec. 29, 1914. Serial No. 879,466. 8 Claims. (Cl. 234—20.5.)



2. In a position indicator, a chart, means for maintaining the chart in fixed position with respect to points of the compass, a stylus supported by and magnetically held thereon against axial movement, a power-shaft, and means for moving the stylus over the chart operated by said power-shaft.

1,310,202. HOLDER FOR MENU-CARDS AND THE LIKE. MYRA MARRAS, Chicago, Ill. Filed Mar. 25, 1918. Serial No. 224,405. 7 Claims. (Cl. 40—11.)

1. A menu card holder embodying a supporting base, a clamp connected with and projecting above the base for a considerable distance, said clamp embodying cooperating spring members between which the card is yieldingly held, each of said members having extended areas for the reception of advertising matter, and a fastening means con-

ected with the members intermediate the base and ends of the members and spaced above the base, the said fastening means being disposed within the confines of the edges of the members and embodying a fastener supported by one of the members and extending through the other member with its extremity flanged against the face of



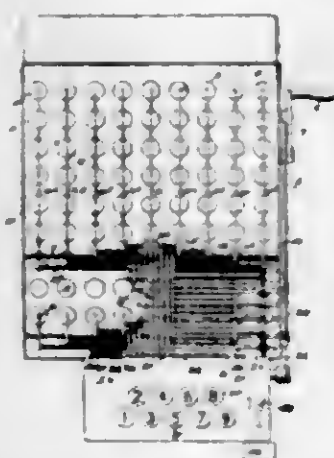
the last recited member, said fasteners operating to hold the adjacent portions of the clamp members in close proximity to each other and serving to reinforce the members and limit their separation, both of said members being adapted to be freely flexed toward and away from each other.

1,310,203. SPECTACLES. EMIL H. MEYROWITZ, New York, N. Y., assignor to E. H. Meyrowitz, Inc., a Corporation of New York. Filed July 6, 1917. Serial No. 178,972. 4 Claims. (Cl. 55-53.)



1. In a spectacle construction, a pivoted temple, a temple post, a resilient connection interposed between said pivoted temple and post, and a member carried by said temple engaging said connection for limiting the outward movement of said temple with respect to said connection.

1,310,204. CALCULATING-MACHINE. ARTHUR S. MILL-SOWSKI, Brockport, N. Y. Filed Oct. 10, 1914. Serial No. 865,987. 47 Claims. (Cl. 235-60.)



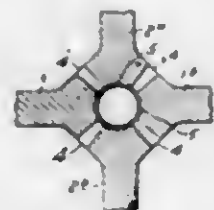
1. In a calculating machine, the combination of a series of actuators, a traveling support, a series of actuating devices movably mounted thereon, a stop carrier, a series of stops movable thereon for controlling the position of the actuating devices, and means for moving the stop carrier relatively to the actuating devices to engage and operate the actuators.

1,310,205. ANIMAL TOY. NATHAN MORGENSTERN, Brooklyn, N. Y. Filed Jan. 28, 1919. Serial No. 273,566. 3 Claims. (Cl. 46-40.)



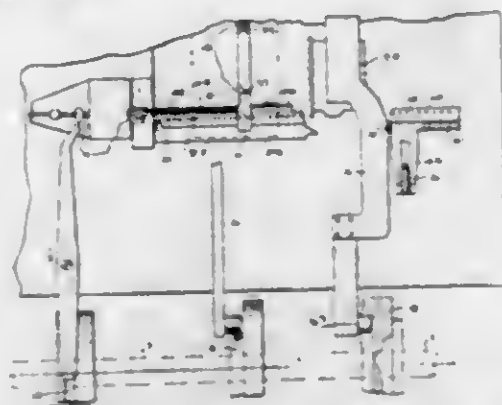
1. In an animal toy, in which there is a flexible covering, parts of which project as pocket members, at two points of said toy, two pneumatic sounding devices inserted in the said pocket members and against opposite walls of said members, so as to be underneath and within the flexible covering thereof and to hold the same distended, said pocket members with their contained pneumatic sounding devices being located at such a distance apart as to be simultaneously soundable, by means of the pressure of a single hand upon said flexible members.

1,310,206. ROLLING-MILL. OLIVER M. MOWAT, McKeesport, Pa. Filed July 3, 1917. Serial No. 178,702. Renewed Dec. 17, 1918. Serial No. 267,210. 6 Claims. (Cl. 80-35.)



1. A pair of metal-rolling rolls provided adjacent to their operating faces with discontinuous meeting edges adapted to interrupt the continuity of a fin formed upon a blank while being rolled.

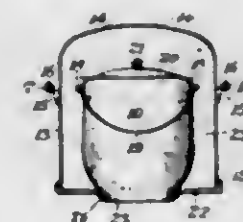
1,310,207. JUSTIFYING MEANS FOR TYPE CASTING AND COMPOSING MACHINES. WILLIAM NICHOLAS, New York, and WILLIAM ACKERMAN, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company, a Corporation of New York. Filed July 7, 1914. Serial No. 849,574. 3 Claims. (Cl. 199-95.)



3. In a type casting and composing machine, means for justifying standard lines in multiple sections, said justifying means comprising a cam actuated slide; means for advancing partially justified lines into the galley mechanism thereof; a line pusher for transferring com-

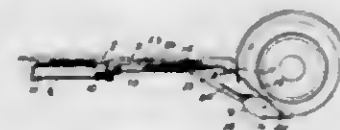
posed lines to the said galley, comprising clutching means for operably attaching said line pusher to said cam actuated slide; mechanism for actuating said clutching means comprising a yielding member, a clutch member, and a slide, said slide being adapted normally to hold said clutch member out of engagement; and means actuated by a fully justified line for removing said slide to permit said clutching mechanism to operate to permit the justifying means to push said line into the galley.

1,310,208. COOKING UTENSIL. MARY M. O'DONNELL, New York, N. Y. Filed Feb. 23, 1917. Serial No. 150,333. 2 Claims. (Cl. 53-8.)



1. In a cooking utensil, the combination of a disk having an upturned annular flange at its outer edge and a central circular opening surrounded below the horizontal portion by an inwardly inclined annular flange, a vessel seated within said opening and against said inclined flange, and a jacket seated upon said disk within said upturned flange at the outer edge.

1,310,209. NON-SKID DEVICE AND EMERGENCY-BRAKE. JUSTO RIVAS OSTOLAZA, Los Angeles, Calif. Filed Aug. 21, 1917. Serial No. 187,488. 4 Claims. (Cl. 188-3.)



1. The combination with a rear wheel and foot-board of an automobile, of a cylinder beneath the foot-board, a piston working within the cylinder, a crosshead guide, a crosshead working on the guide, a connecting rod between the crosshead and piston, a bar pivotally connected to the crosshead, a brake shoe pivotally connected to the bar, and arranged in proximity to the rear wheel, said brake shoe being provided with a curved and inclined tire-groove, a tongue depending from the foot-board and engaging with said groove to deflect the shoe upon initial movement to operative position, and means for admitting fluid pressure to the cylinder to actuate the piston herein.

1,310,210. TROUSERS SAFETY-POCKET. ADOLPHUS G. PEINE, Chicago, Ill., assignor to Alfred Decker & Cohn, Chicago, Ill., a Partnership composed of Alfred Decker, Abraham Cohn, and Adolphus G. Peine. Filed Apr. 1, 1918. Serial No. 226,167. 1 Claim. (Cl. 2-15.)

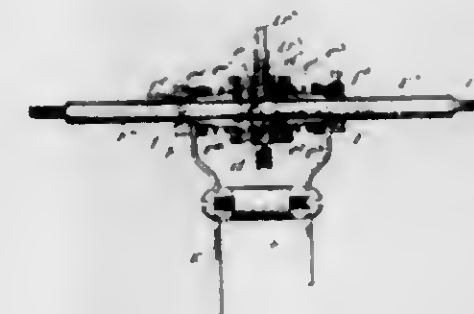


In trousers, a pocket (4) having the usual opening (3) therefor at the side of the trousers, a fastening (10)

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for securing the rear edge of the pocket to the side seam of the trousers at the lower end of said opening (3), the front edge of the pocket being free, and a fastening (9) below and spaced from said fastening (10) securing said rear edge to the in-turned cloth of said side seam (5), thereby to render it difficult for a pick-pocket to pull the pocket wrong side out.

1,310,211. PORTABLE PROJECTING-MACHINE. ALBERT D. PHILPOT, Chicago, Ill., assignor to Tomalpa Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed July 14, 1910. Serial No. 109,228. 9 Claims. (Cl. 88-17.)



1. In a portable projecting machine, the combination of a casing, a revoluble shaft supported therein, said shaft having a groove therein, a pulley mounted upon said shaft, a projection on said pulley moving in the aforesaid groove, a sleeve loosely mounted on said shaft on each side of said pulley, a film reel mounted on each of said sleeves, and clutch mechanism mounted in operative relation to each of said reels, substantially as described.

1,310,212. HEAD-CORE FOR PNEUMATIC TIRES. HARRY KING RAYMOND and JAVIN R. HENNER, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 11, 1917. Serial No. 174,062. 2 Claims. (Cl. 152-13.)



1. A pneumatic tire casing having a clencher-shaped head whose core comprises a series of parallel cords each consisting of smaller cords cabled together, each of said small cords including a number of interwisted strands of fibrous yarn, together with vulcanized rubber connecting the larger cords and of relatively small volume compared with that of said cords, the whole forming an extensible head.

1,310,213. SELF-LOCKING SCREW. OSCAR C. RIXRON, New Rochelle, N. Y. Filed Feb. 20, 1919. Serial No. 278,102. 4 Claims. (Cl. 151-32.)



1. A self locking screw having an expansible forward end and provided with a conical cavity in said end, a conical plug fitting said cavity and permanently located

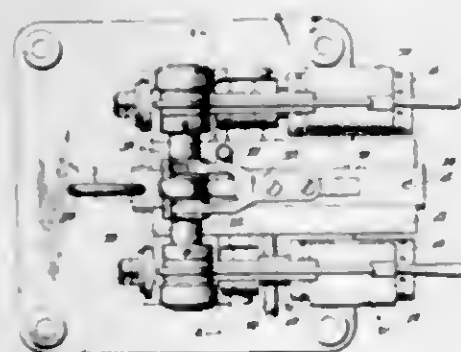
therein and having a limited movement therein in two directions with respect to the screw to expand and release respectively the forward end of the screw.

1,310,214. BELT-SHIFTING MECHANISM. WILLIAM L. SCHELLENBACH, Wyoming, Ohio. Filed Oct. 25, 1918. Serial No. 250,697. 13 Claims. (Cl. 64-4.)



1. Belt shifting apparatus comprising a stationary guide, a carriage provided with a belt shifter mounted upon and movable along said guide, a belt mounted upon a driving and a driven pulley carried by said guide to move said carriage along said guide, means to intermittently rotate said driving pulley to feed said carriage, and means to lock said belt and carriage at predetermined positions relative to said guide.

1,310,215. FILM-MENDING APPARATUS. EBERHARD SCHNEIDER, New York, N. Y.; Stanislaw Schneider administratrix of said Eberhard Schneider, deceased. Filed May 11, 1918. Serial No. 233,828. 6 Claims. (Cl. 154-42.)

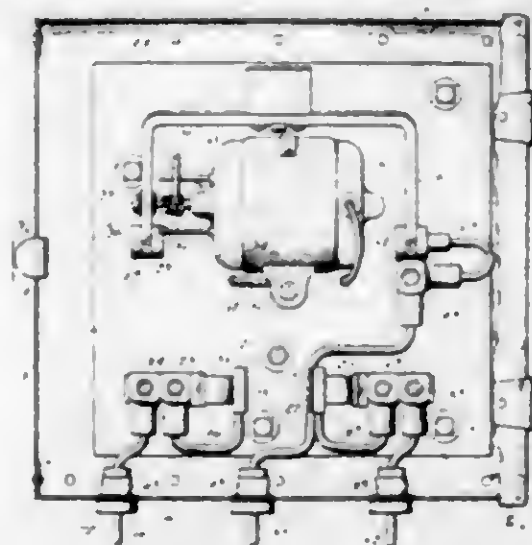


1. In film mending apparatus: means to receive and retain the overlapping ends of the film portions to be united; a table over which the said overlapping ends extend; a slide forming a portion of said table and removable from an active portion thereof to provide a free space to permit the cutting of the two film ends simultaneously after they are positioned on the table; and means to apply a film mending strip to the abutting portions of the cut ends.

1,310,216. REVERSE-PHASE RELAY. EDMUND O. SCHWARTZ, Chicago, Ill. Filed Nov. 3, 1913. Serial No. 798,557. 12 Claims. (Cl. 175-294.)

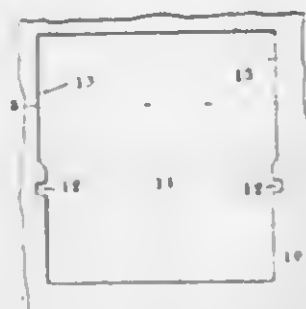
4. A device of the class specified comprising in combination, a rotary member, a pivotally mounted vertically swinging knife switch, a friction cam device rotating

with said rotary member, and means on said switch co-operating with said cam device for holding said switch



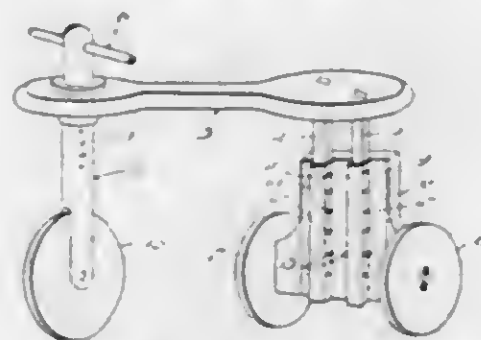
normally in an elevated position, but releasing the same to permit the switch to fall upon a reversal of the direction of rotation of said rotary member.

1,310,217. DOOR. LOYN SCRUGGS and THOMAS L. JONES, St. Louis, Mo., assignors to Copper-Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Aug. 22, 1918. Serial No. 251,028. 6 Claims. (Cl. 126-194.)



5. The combination with a door frame provided with an opening, of a door, a door lining, a pair of flanged hinge members integral with said lining and engaging with the door frame to hinge the door, and means for securing said lining and thereby said hinge members to the door.

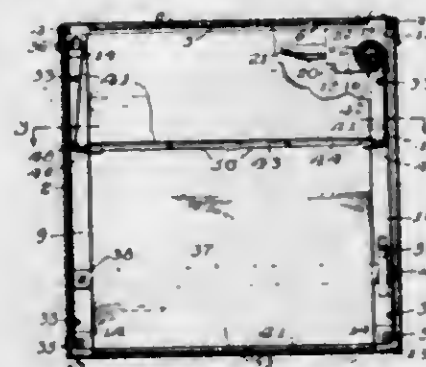
1,310,218. CHILD'S VEHICLE. BENNETT COLEMAN SILVER, Chicago, Ill. Filed May 11, 1918. Serial No. 233,842. 2 Claims. (Cl. 208-105.)



1. A child's vehicle comprising, in combination, a platform, a pair of downwardly extending vertical posts immovably secured to its rear portion, a truck block, wheels journaled to the lower portion thereof, a channel plate secured to one face of the truck block and having channels suitably spaced and sized to accommodate the posts

aforesaid, there being perforations in the channels and in the posts for the accommodation of pins for the purpose specified, a steering post in the front portion of the device, a front wheel journaled therein, means for turning said steering post, and means permitting vertical adjustment of the front portion of the platform with respect to the front wheel, substantially as described.

1,310,219. CONTENTS-LIFTER FOR DISPLAY-CANS. HENRY C. SMITH, Philadelphia, Pa. Filed July 27, 1916. Serial No. 111,027. 4 Claims. (Cl. 220-82.)



1. In a device of the character stated a frame comprising two side members, each side member consisting of two angled uprights or supports, stay-rods connecting the two uprights or supports, of each side member, integral projections formed with the lower ends of all of said uprights, extensions formed with said projections and extending at right angles to said projections, parallel with the supports, similar projections and extensions formed with the upper ends of three of said supports, a plate secured to the upper end of the remaining support, a reel journaled in said plate and one of the extensions, guide rollers journaled in the other extensions, latches for fastening the side members within a receptacle, a strip of paper passing over the guide rollers with its ends attached to the reel, and a segmental bottom movably mounted upon said strip of paper, whereby said bottom may be raised when the paper is wound upon the reel.

1,310,220. HOLLOW BUILDING-TILE. JAMES T. TAYLOR, Fort Worth, Tex. Filed Feb. 1, 1910. Serial No. 75,569. 1 Claim. (Cl. 72-41.)

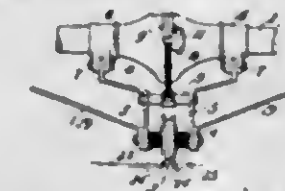


A hollow building tile consisting of a body of rectangular form in cross section having three passages extending therethrough from end to end, the middle one of said passages being separated from opposite faces of the tile by walls of substantially the same thickness as those between the several passages, and the other two passages being of smaller area than the middle passage and each separated from one face of the tile by a wall of approximately the same thickness as those between said passages and separated from the opposite face of the tile by a much thicker wall, said thicker walls being respectively on opposite sides of the tile and each having formed in its outer face an undecent groove extending throughout the length of the tile to receive a nailing strip.

1,310,221. ANTISKID DEVICE. WALTER J. TIND, Springfield, Mass. Filed Apr. 27, 1918. Serial No. 231,056. 4 Claims. (Cl. 21-8.)

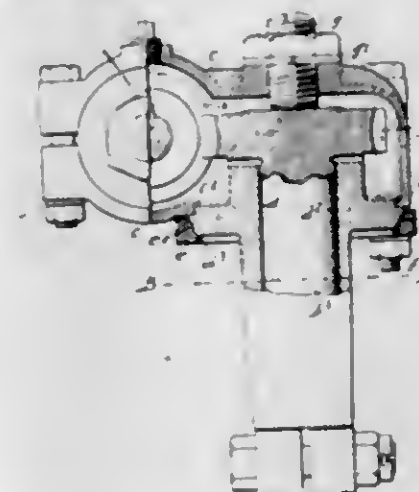
1. In a device of the kind described, the combination with the housing of the rear axle of a motor vehicle

having a projection, of depending braces pivotally connected to the housing of the rear axle and lying in a plane parallel to the axle housing, so as to swing transversely of said axle housing, a spring device for normally retaining the depending braces in an elevated position away from the roadway, a roller supported at the lower end of the braces for engagement with the roadway and means for moving the device with the roller in a forward direction toward the roadway, said spring device being located between the depending braces and said projection on the housing of the rear axle housing.



4. An anti skidding device for motor vehicles comprising, in combination with the housing of the rear axle, of two sets of braces pivotally connected to the housing, a shaft connecting the lower ends of the braces together, a wheel mounted on the shaft, compression springs on the shaft and located at the opposite sides of the wheel for absorbing the lateral stresses and shocks, means for retaining the braces and wheel in an elevated position and means for moving the braces and wheel downward.

1,310,222. STEERING-GEAR. GLENN A. TOAZ, WALLACE E. WILSON, and HOWARD E. MAYNARD, Detroit, Mich. Filed Oct. 26, 1918. Serial No. 250,738. 3 Claims. (Cl. 64-79.)



1. In a train of gearing, the combination of a gear wheel, a bearing-piece, said gear wheel having an arbor engaging eccentrically in said bearing-piece, said bearing-piece engaging in an aperture coaxial therewith, and means acting in a direction substantially parallel to the axis of said bearing-piece for frictionally engaging the latter to hold it from rotation.

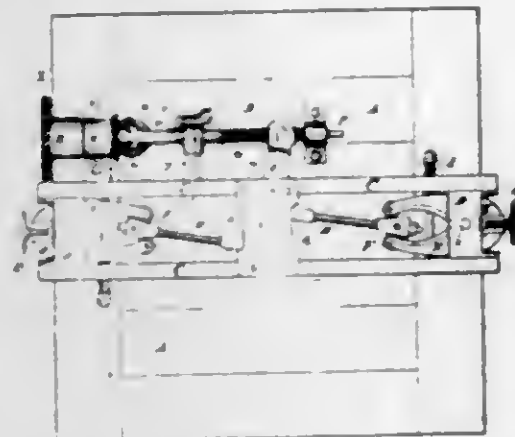
1,310,223. WILLOW-BARK REMOVER. GEORGE WALTER, Shelby township, Ripley county, Indiana. Filed Apr. 12, 1918. Serial No. 228,172. 11 Claims. (Cl. 144-207.)



1. A willow bark remover including a pair of stripper heads, a separate feed-guide provided with a movable

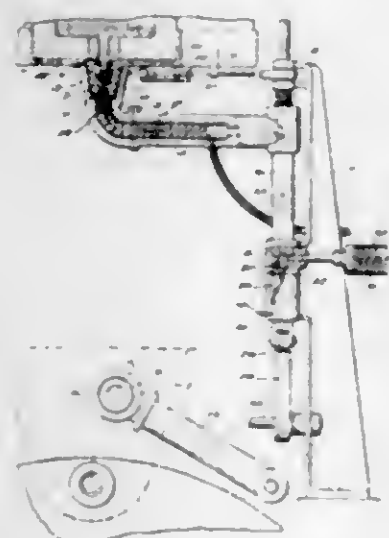
stop gate, a carrier belt to operate between the feed-guide and the stripper heads, and grippers mounted on the carrier belt to be carried past the feed-guide and to engage and move the stop gate from normal position.

1,310,224. AUTOMATIC ELEVATOR SAFETY DEVICE. CLARENCE W. WHEELER, Chicago, Ill. Filed Apr. 21, 1917. Serial No. 143,627. 9 Claims. (Cl. 187-91.)



1. In combination with an elevator-car and its guides, a frame on the car, a pair of jaws in the frame adapted to clamp the guides, a pair of wedges adapted to operate the jaws, a lever to operate the wedges, a screw to operate the lever, a nut to connect and cooperate with the lever and screw, a sheave to operate the screw, a cable to operate the sheave, an idler to aid in operating the cable, a tension sheave to aid in operating the cable and keep it taut, and a governor to aid in operating the cable and to jam it and cause it to operate the sheave when the car descends at a speed above normal.

1,310,225. FLOWING MOLTEN GLASS. JAMES WHITTE-MORE, Detroit, Mich., assignor to The Owens Bottle Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 26, 1918. Serial No. 268,256. 17 Claims. (Cl. 49-55.)

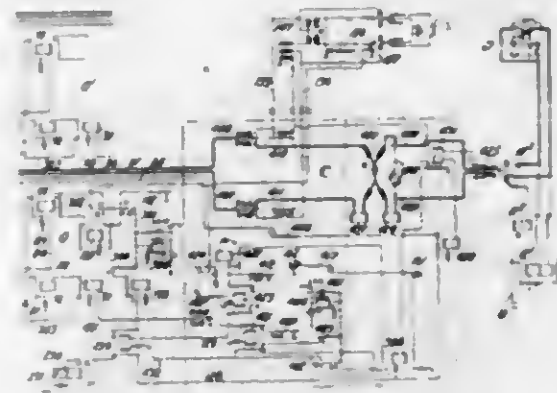


17. The method which consists in flowing molten glass, periodically severing the glass by a mechanical shear, and remelting the chilled surface by radiant heat from a solid substance out of contact with the glass.

1,310,226. CALL-DISTRIBUTING SYSTEM. SAMUEL B. WILLIAMS, Jr., Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1917. Serial No. 180,633. 25 Claims. (Cl. 170-27.)

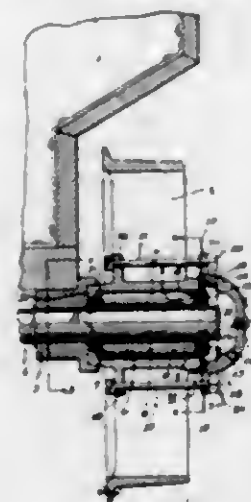
1. The combination with a plurality of telephone lines, of means associated with each line for altering its elec-

trical condition to calling, a finder circuit for making connection with a calling line, means for restoring the normal electrical condition of a calling line in establishing connection therewith, operator selecting apparatus



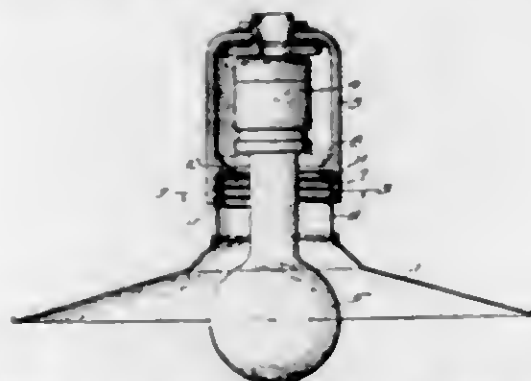
associated with said finder circuit, a test magnet responsive to the altered electrical condition of a connected telephone line, and means controlled in the response of said test magnet for rendering said operator selecting apparatus inoperative.

1,310,227. CAR-WHEEL CONSTRUCTION. JAMES S. WOODCOCK, New Lexington, Ohio. Filed July 26, 1916. Serial No. 111,357. 2 Claims. (Cl. 64-62.)



1. The combination with a car wheel and radially projecting ears carried by said wheel, of an axle therefor, an anti-friction bearing within said wheel, an apertured dished cap for the wheel hub to cover same, radially projecting ears carried by said cap, bolts passing through said ears for securing said cap to the wheel, and a removable plug for the aperture in said cap, said wheel and said cap carrying means for locking the cap against relative rotative movement with respect to the wheel.

1,310,228. SHADE-HOLDER. DANIEL WOODHEAD, Evanston, Ill. Filed Feb. 21, 1918. Serial No. 218,388. 1 Claim. (Cl. 240-115.)



A shade holder comprising a hollow supporting member having an interior flange spaced from its lower end, a

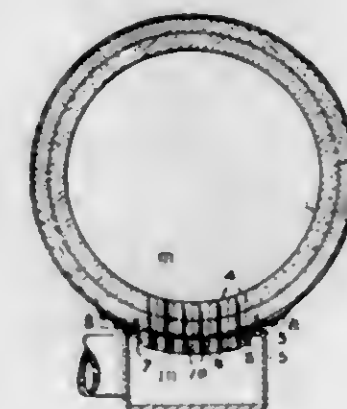
shade holding member threaded in the lower end of the supporting member and movable into abutting relation to the flange, and cooperating locking elements on the flange and the adjacent end of the shade holding member yieldingly holding said members against relative rotation.

1,310,229. SELF-OILING TRUCK-WHEEL. GEORGE T. WRIGHT, Marietta, Ill. Filed Nov. 5, 1918. Serial No. 261,173. 4 Claims. (Cl. 64-26.)



1. A self-oiling truck wheel cast in two parts and adapted to be pressed one within the other and held together by friction only, each part being provided with an axle bore and with a recess adapted to form an oil tight chamber when the parts are pressed together, except adjacent said bores, and a ring of absorbent material clamped between said parts, said ring projecting into the oil chamber formed by the parts and performing the function of conducting the oil from said chamber to the axle bores.

1,310,230. ATTACHMENT FOR CONVERTERS. MICHAEL ZIPFLER, Pittsburgh, Pa. Filed Feb. 28, 1919. Serial No. 279,914. 5 Claims. (Cl. 266-43.)

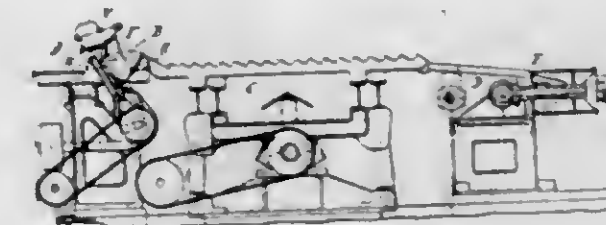


1. An attachment for forming twyer openings in the gasket of a converter comprising an apertured holder adapted to be arranged in the wind box of a converter and provided with openings registering with the twyer openings in the converter shell, and rods extended through and secured in said holder and further extended through the twyer openings in the shell whereby the gasket can be packed around the inner end of the rods to form a continuation of the twyer openings in the shell when the rods are withdrawn.

1,310,231. HOTBED AND RUN-OUT TABLE MECHANISM. WILLIAM ARLEN and KARL H. CEDERLUND, Duquesne, Pa. Filed May 25, 1915. Serial No. 30,476. 13 Claims. (Cl. 193-60.)

3. In an apparatus of the class described, in combination, a kick off motor, automatic means for starting said motor and means for causing said motor to make a complete cycle of operations independently of the position of said automatic means after said motor is started, a hot bed motor, automatic means for starting said hot bed

motor when said kick off motor has advanced to a determined point and means for causing said hot bed motor



to make a complete cycle of operations independently of the position of its automatic starting means after said hot bed motor is started.

1,310,232. PISTON-RING COMPRESSOR. LOUIS ALBAUM, Everett, Mass. Filed Jan. 22, 1919. Serial No. 272,531. 3 Claims. (Cl. 81-3.)



1. A pistonring compressor comprising a flexible piston-ring-compressing element adapted to encircle a piston ring and a tong-like element having two jaws, one of which is provided with a laterally-extending apertured flange through which one end of the flexible member extends and the other of which is provided with a supporting flange, a clamp for clamping the other end of said flexible member thereto, and a guiding slot through which the flexible member extends.

1,310,233. UNSINKABLE SHIP. JOHN A. ARMSTRONG, Westcombe Park, London, England. Filed Apr. 28, 1919. Serial No. 293,307. 2 Claims. (Cl. 114-68.)

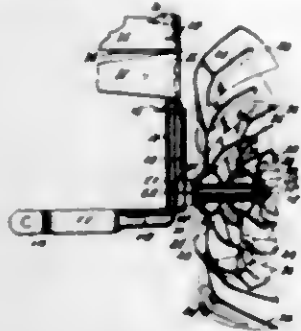


1. In a navigable vessel the combination with the outer skin, of a system of vertical diagonal bulkheads forming with the wall of the hull triangular compartments, and a second system of inclined bulkheads forming with the ship's bottom pyramidal compartments.

1,310,234. ORNAMENTAL WIND-WHEEL. PATRICK FRANCIS DENNING, Cleveland, Ohio. Filed May 23, 1917. Serial No. 170,573. 15 Claims. (Cl. 46-14.)

1. In a device of the character described, the combination with a suitable support having a horizontal bearing

pin, of a rotary member mounted on said pin and comprising a wind wheel and a tubular hub therefor, said



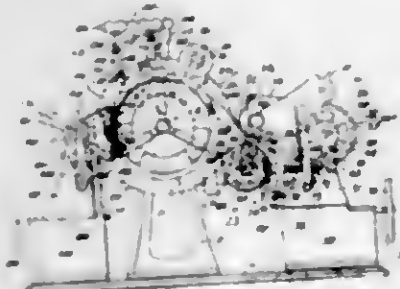
tubular hub secured to the wind wheel by means of lugs on the end of the hub bending transversely of the wheel

1,310,235. CAP-CLIP FOR FOUNTAIN-PENS. WILLIAM T. FITZPATRICK, Waterloo, Iowa, assignor to The Evans Dollar Pen Company, Waterloo, Iowa, a Corporation of Iowa. Filed July 22, 1918. Serial No. 245,974. 7 Claims. (Cl. 24—11.)



1. The combination with the tubular cap of a fountain pen or the like having a lateral orifice, of a single piece J-shaped elastic clip having a member extending exteriorly longitudinally of the cap, the middle part of the clip being passed through said orifice, and the hooked opposite member of the clip within the hollow of the cap engaging the inner wall of the cap elastically to lock the clip in said orifice.

1,310,236. MACHINE FOR MAKING TIRES. JOHN R. GAMMETER, Akron, Ohio, assignor, by mesne assignments, to The H. F. Goswami Company, a Corporation of New York. Filed Dec. 2, 1909. Serial No. 531,045. 68 Claims. (Cl. 151—10.)



1. In a tire making machine, a tire forming core, and a fabric smoothing roller mounted adjacent to one side thereof and acting to lay fabric thereon, said roller comprising a driving portion driven by the core or the fabric thereon, and a fabric laying portion driven by said driving portion at a greater peripheral speed than that of the portion of the tire upon which it acts.

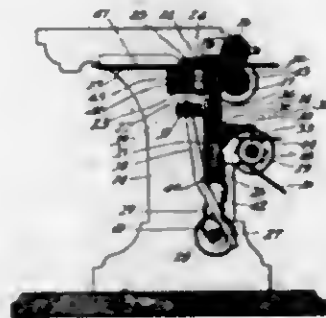
1,310,237. ARTIFICIAL TOOTH. ELIAS T. GOLDBERG, Bridgeport, Conn. Filed Oct. 16, 1918. Serial No. 258,362. 3 Claims. (Cl. 32—9.)



1. An artificial tooth comprising a porcelain facing formed in its back face with a substantially dovetailed

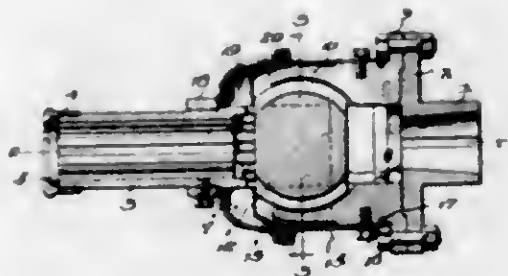
groove, and a lock plate bent from sheet metal and having its side edges returned to engage beneath the undercut walls of the groove and its inner end abutting the end wall of the groove, the outer end of said lock plate being formed with a slot narrower than the space between the outer edges of the groove.

1,310,238. PERFORATED SHEET. JOHN A. FISHER, Chicago, Ill., assignor to Imperial Paper Roll Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1915. Serial No. 18,671. 15 Claims. (Cl. 164—125.)



1. A method of making note-sheets provided with note-perforations, and also provided with legible configuration-indicia, which method comprises providing a master-sheet with menas which, when said master-sheet is placed in position to control the operation of an automatic machine for operating on sheets, will cause the sheets operated on to show predetermined legible configuration-indicia, and also to have predetermined note-perforations.

1,310,239. UNIVERSAL JOINT. CARL EDWARD JOHNSON, St. Paul, Minn. Filed May 7, 1918. Serial No. 233,079. 4 Claims. (Cl. 64—102.)

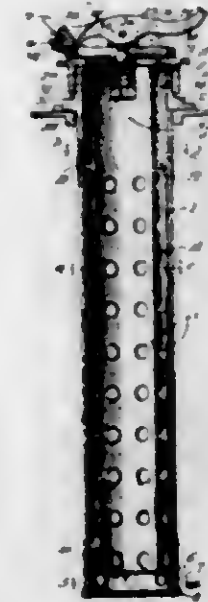


1. A joint of the kind described comprising shafts or shaft fittings having yokes supported thereby and adapted to lie at right angles to each other, beveled keys formed on said yokes, said keys all being on one arc having a common center, a universal joint member having two oppositely arranged sets of beveled keys also struck from the same common center and adapted to engage respectively with the yoke keys, and means for holding a lubricant within and excluding dust from said joint.

1,310,240. FILLING-TUBE FOR EXPLOSIVE-LIQUID RECEPTACLES. LOUIS KEASLER, Chicago, Ill., assignor to Non-Explosive Can and Tube Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1916. Serial No. 105,389. 5 Claims. (Cl. 220—86.)

3. In a device of the kind described, the combination of inner and outer tubes spaced from each other, with a partition extending between the tubes between the ends thereof, the outer tube formed with screened openings in its wall above said partition, and with a screened opening adjacent its lower end, the inner tube of a length to

project adjacent the lower end of the outer tube and closed to protect the lower screened opening of the same.



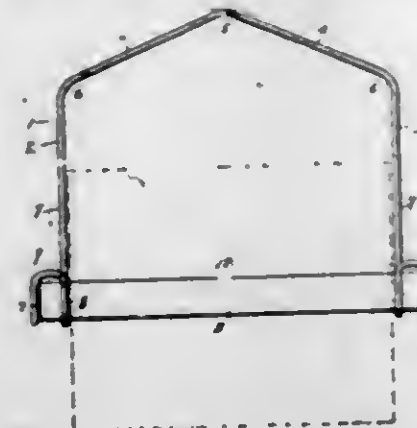
and with openings through its wall below said partition substantially as described.

1,310,241. DEVICE FOR PREVENTING BACK-FIRING INTO GASOLINE-RECEPTACLES OR THE LIKE. LOUIS KEASLER, Chicago, Ill., assignor to Non-Explosive Can and Tube Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1916. Serial No. 105,392. 5 Claims. (Cl. 220—88.)



4. In a device of the kind described, a partition member provided with outwardly extending brace legs, and formed with openings about its periphery in combination with a screen arranged on the side opposite to the legs covering said openings, said screen being connected to the partition.

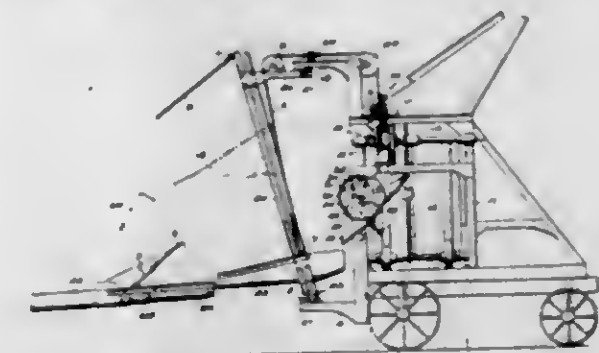
1,310,242. PAPER-HOLDER. WILLIAM L. LEE, Helena, Mont. Filed Apr. 11, 1919. Serial No. 289,355. 2 Claims. (Cl. 211—31.)



1. A holder for a roll of toilet paper, comprising a roller, a frame having arms inclined downward from a central point, then extending vertically and approximately

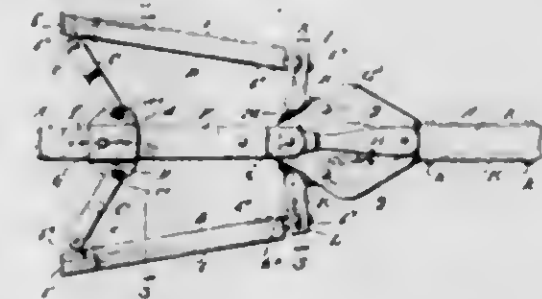
parallel, their lower portions bent upward to form hooks in which the roller is adapted to be mounted, then curved laterally outward and finally downward at an angle forming an abutment for the ends of the said roller.

1,310,243. APPARATUS FOR DELIVERING AND DISTRIBUTING MATERIAL. CHRISTOPHER W. LEVALLEY, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 1, 1910. Serial No. 101,096. 2 Claims. (Cl. 214—148.)



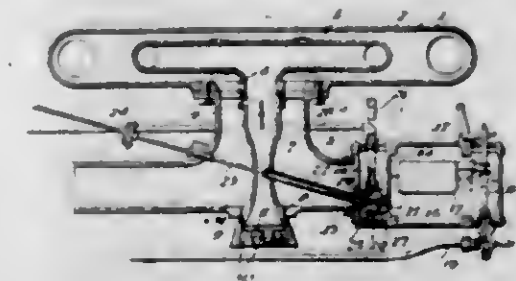
1. The combination with a receptacle for material and a chute delivering therefrom, of a spout for delivering the material, the inner end of which is located below the chute to receive material delivered from the said receptacle, and guides for the lower end of the spout arranged to cause it to move bodily away from the said receptacle and from beneath the chute as the said inner end is elevated, and means for elevating the lower end of the spout.

1,310,244. WAGON-TONGUE. VACLAV MIKULECKY, Verdigris, Nebr. Filed Sept. 24, 1918. Serial No. 255,460. 3 Claims. (Cl. 21—36.)



1. The combination with a wagon tongue of tongue hounds, means for adjustably connecting the front ends of said hounds to the tongue, said means comprising upper bracket members and lower link members, said link members having a laterally adjustable connection to the tongue, and said bracket members having adjustable connections to the hounds.

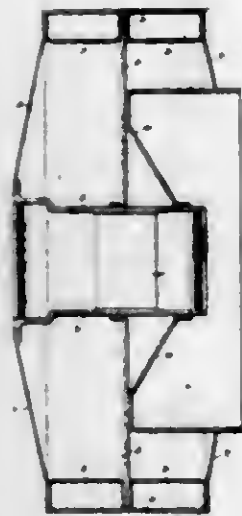
1,310,245. MEANS FOR VAPORIZING LIQUID FUEL. JAMES M. MILLER, Washington, D. C. Filed July 3, 1917. Serial No. 178,469. 5 Claims. (Cl. 48—102.)



1. A gas generator for internal combustion engines, comprising an elongate casing adapted to be secured along the side of an engine, a chamber depending from

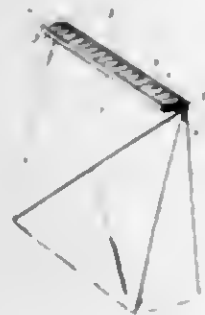
and in open communication with the casing, said chamber being extended laterally, a Venturi tube arranged in said chamber and opening to the atmosphere beyond the same, and a fuel duct inclining upwardly from a source of fuel supply and opening into the Venturi tube, said fuel duct being arranged within the lateral extension of the chamber.

1,310,240. METHOD OF MAKING TENSION WHEELS. WILLIAM J. P. MOORE, New York, N. Y. Filed May 11, 1917. Serial No. 107,865. 7 Claims. (Cl. 29—159.)



1. A method of making a tension wheel, consisting in attaching annular disks to a central wheel member, heating said disks to expand them, then securing the expanded disks while hot to an outer circular rigid member so that when the disks cool they will be placed under tension.

1,310,247. SEALED RECEPTACLE. ANDREW S. NICO, Le Roy, N. Y., assignor to The Genesee Pure Food Company, Le Roy, N. Y., a Corporation of New York. Filed July 17, 1916. Serial No. 169,728. 1 Claim. (Cl. 229—65.)

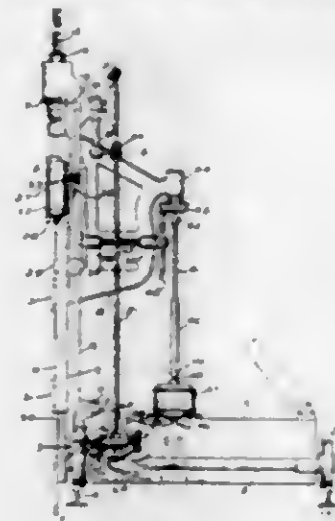


A paper receptacle having the material at the mouth thereof lapped and bent laterally at a sharp angle to form a sealing corner, and a clip of rigid material fitted over the free edge of the lapped laterally bent portions of the material, said lapped portions of the material and the clip having corresponding and registering corrugations, the corrugations in the rigid material of the clip serving to permanently maintain the corrugations in the lapped portions of the paper receptacle to prevent relative slipping of the piles of said lapped portions.

1,310,248. STONWORKING MACHINE. THOMAS ORRICK and HENRY H. MEACUM, Claremont, N. H., assignors to Sullivan Machinery Company, Claremont, N. H., a Corporation of Massachusetts. Original application filed Jan. 2, 1908, Serial No. 408,165. Divided in part and this application filed Mar. 24, 1916. Serial No. 86,508. 28 Claims. (Cl. 262—18.)

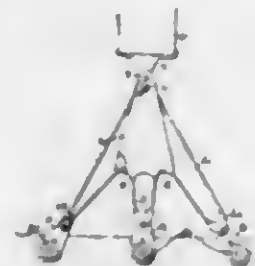
1. In a stone working machine, a truck, an angularly adjustable standard thereon bodily movable longitudinally

thereof, tool actuating mechanism including a plurality of reciprocable members on said standard, a motor on



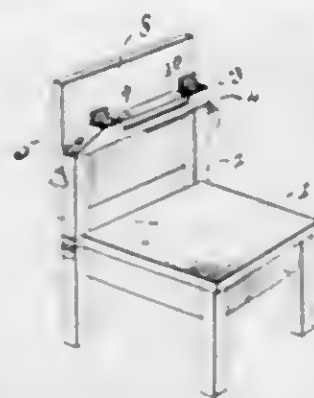
said truck, and a constantly operative driving connection between said tool actuating mechanism and said motor.

1,310,249. SUSPENDERS. WILLIAM C. REINMUTH, Los Angeles, Calif. Filed July 9, 1917. Serial No. 179,428. 1 Claim. (Cl. 241—23.)



In a suspender attachment, the combination with a web and a hanger bar, of a slide support connected to the hanger bar, three slides carried by the slide support, a cord slidable freely through all three of said slides, three tabs, and two slides carried by two of said tabs, said cord being freely slidable through said tab slides and having its ends attached to the third tab.

1,310,250. COMBINATION CHAIR. YERNE WILLIAM ROGERS, St. Louis, Mo. Filed Nov. 7, 1918. Serial No. 261,576. 1 Claim. (Cl. 155—20.)



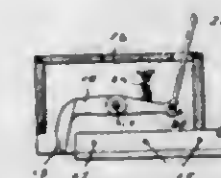
A combination chair comprising a seat having a support rigidly fixed near one of its upper corners, a horizontal bar having one of its ends pivotally fixed near the upper end of said support; the free end of said horizontal bar cooperating with the free end of a hinged support which is secured to an opposite corresponding corner of said seat; a back having a flat surface pivotally connected with said horizontal bar, and suitable means for holding said back in a table top position, substantially as described.

1,310,251. RADIATOR. JOSEPH J. RUSSELL, Toledo, Ohio. Filed June 26, 1917. Serial No. 177,095. 3 Claims. (Cl. 257—125.)



1. In a radiator, a core comprising a vertical series of terminally connected substantially horizontal runs, each run embodying a top plate and a bottom plate having their front and rear portions arranged in contact with each other and united by a water tight joint, the intermediate portions of said top and bottom plates being of stepped formation and arranged in spaced relation to each other to provide a central substantially horizontal waterway and inclined waterways at the front and rear of said horizontal waterway.

1,310,252. SLEIGH. MARTIN WILHELM SEIFERT, East Bountiful, Utah. Filed Aug. 24, 1918. Serial No. 251,347. 2 Claims. (Cl. 21—46.)



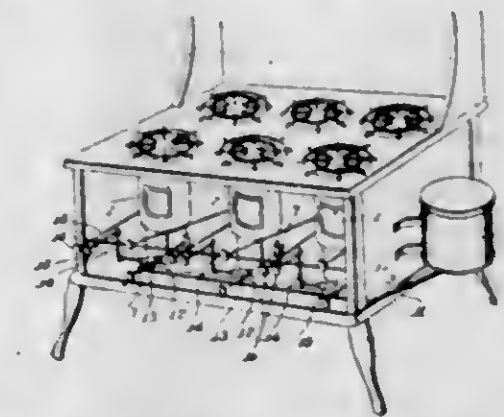
1. In combination with a sled, combined guiding and braking means comprising a housing secured in vertical position upon the rear end of each runner of the sled, an angular lever pivoted substantially centrally within each housing, a shoe on the rear end of each lever adapted to be projected from the bottom of the housing, a coil spring within each housing normally holding the lever with the shoe in retracted position entirely inclosed within the housing, and means connected with each lever and independently operable to project the corresponding brake shoe beyond its housing.

1,310,253. SUBMARINE AND METHOD OF OPERATING THE SAME. FRANK SHUMAN, Philadelphia, Pa.; Y. Josephine Shuman and Charles H. Dunker administrators of said Frank Shuman, deceased. Filed Feb. 25, 1910. Serial No. 80,477. 20 Claims. (Cl. 60—14.)



1. The combination of an explosive engine, a source of liquefied gas adapted to liberate oxygen, means to supply a hydrocarbon to the explosive engine, measuring means for supplying measured quantities of oxygen gas and exhaust products from the engine associated with the hydrocarbon to the engine, and means for permitting the escape of the surplus of the exhaust products.

1,310,254. OIL-BURNING STOVE. EMMA ALMA SMITH, Standish, Mich. Filed Nov. 10, 1917. Serial No. 201,316. 1 Claim. (Cl. 158—36.)



An oil burning stove including a plurality of burners arranged in series, a fuel tank, supply pipes leading therefrom to the front and rear series of burners, a valve for the oil inlet for each of the burners, the stem of each of the valves having an angle arm thereon, a rod connected with each of said arms and extending through and beyond the outer face of the stove and the ends of the said rods being headed, wick controlling means for each of the burners including rods extending through the outer face of the stove and having their ends headed, and the heads of the last mentioned rods being disposed in parallelism and away from the heads of the fuel controlling rods.

1,310,255. PHOTOGRAPHIC EXPOSURE-METER. GEORGE A. SMITH, Baltimore, Md. Filed Aug. 2, 1918. Serial No. 248,006. 4 Claims. (Cl. 88—23.)



1. In a device of the class described, a tubular casing, a tubular member rotatable therein, means for producing such rotation, a shutter controlled by said means, a telescoping eye piece for the tubular casing, a disk having a central aperture and a luminous surface mounted within the casing, and a disk located adjacent to the disk first named and serving to reduce the intensity of the light rays passing through the casing.

1,310,256. EXPOSURE-METER. GEORGE A. SMITH, Baltimore, Md. Filed Sept. 21, 1918. Serial No. 255,089. 6 Claims. (Cl. 88—23.)



6. A device of the character described comprising a casing, the bottom of said casing being provided with a hole and being further provided with a circumferential series of holes, a fixed disk within said casing, an enlarged portion on the lower side of said fixed disk provided with an opening having beveled sides coated with luminous material, said opening registering with said first named hole, a plate pivoted upon said fixed disk and movable to be disposed selectively over said opening or

in non-obstructing relation thereto, a rotatable disk within said casing between the bottom thereof and the lower edge of said enlargement, said rotatable disk being provided with a circumferential series of holes adapted to register with said first named hole and said opening, sheets of material of successively increasing density disposed over said last named series of circumferential holes, means for rotating said rotatable disk whereby said sheets may be successively brought into registration with said first named hole and said opening, the side of said rotatable disk adjacent said bottom being provided with a guide spot visible through said first named series of holes, a crystal disposed over said second disk and forming a closure for said casing, and a light excluding shield connected with said casing.

1,310,257. PEN AND PENCIL ATTACHMENT. OTHO W. STILES, Washington, D. C. Filed Jan. 9, 1919. Serial No. 270,403. 7 Claims. (Cl. 120—42.)



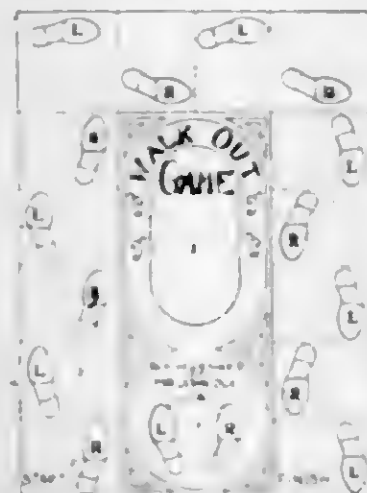
1. In a device of the class described, a tube having a longitudinal slot therein, a tool-holding plunger slidable in said tube, a spring rigidly connected through said slot with said plunger and adapted to ride on the exterior of said tube, and means operative by said spring for locking said plunger to said tube.

1,310,258. EYEGLASS-SUPPORT. JAMES A. TAYLOR, Waco, Ky. Filed Apr. 21, 1919. Serial No. 291,435. 3 Claims. (Cl. 58—51.)



1. In combination with the peak or brim of a cap or hat having a stud removably secured on the peak or brim sockets to the opposite sides of the stud, an eye glass mount, bendable supports therefor, each of said supports being pivotally secured in one of the sockets, said mount having a spring bridge piece which is centrally rounded and which is adapted to engage with the stud when the mount is swung against the peak or brim of the cap.

1,310,259. GAME APPARATUS. GUSTAV A. THOMAS, Sandusky, Ohio. Filed Aug. 19, 1918. Serial No. 250,525. 1 Claim. (Cl. 46—63.)



A game apparatus comprising a board, a pound imprinted on the board, a field connected with the opposite

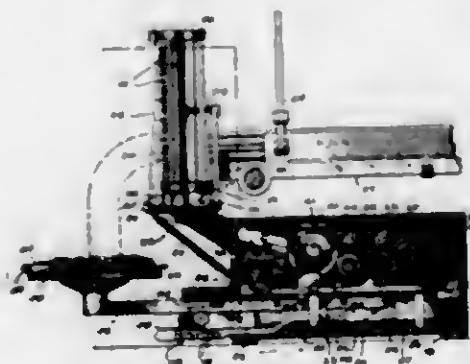
sides of the pound and extending around one end thereof, characterized prints impressed in the pound and along the field, correspondingly characterized pieces adapted to be positioned upon the prints and moved successively along the prints and a die having opposite blank sides, other opposite sides provided with characters corresponding with the characters of one piece and other opposite sides provided with characters corresponding with the character of the other piece.

1,310,260. PROPELLER-PENCIL. HARVEY H. TROXEL, Wooster, Ohio, assignor of one-half to Obed C. Billman, Cleveland, Ohio. Filed June 29, 1914. Serial No. 848,102. Renewed Apr. 13, 1918. Serial No. 228,502. 8 Claims. (Cl. 120—18.)



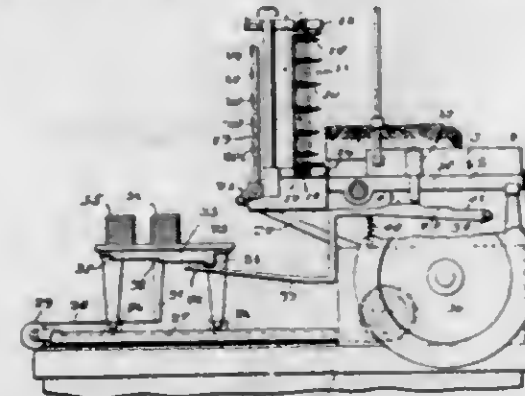
1. A pencil comprising a tubular body, an annular rib spaced from one end of the body forming a neck portion, a conical cap at the opposite end of the body, a helix within said body open at one end and terminating at said end outwardly of said neck portion, a finger piece having an expansion sleeve removably journaled upon said neck and rib, a tubular member secured at one end to said finger piece and having its other end extending within and in contact with the said cap, and a marker holder arranged within said tubular member in operative engagement with the said helix.

1,310,261. STACK-FORMER FOR SLICING-MACHINES. CORNELIUS F. M. VAN BEEKEL, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed June 28, 1917. Serial No. 177,402. 10 Claims. (Cl. 17—24.)



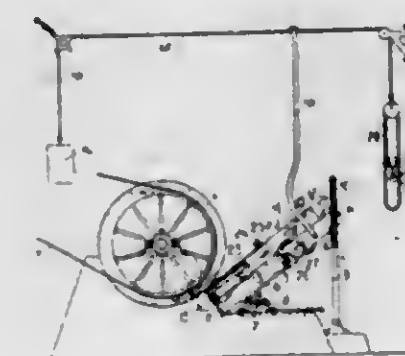
1. In combination, a slicing machine, and means for receiving the slices from said machine as they are formed thereby and for depositing said slices in a plurality of superimposed layers.

1,310,262. STACK-SPACER FOR SLICING-MACHINES. CORNELIUS F. M. VAN BEEKEL, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed Oct. 10, 1917. Serial No. 195,685. 19 Claims. (Cl. 17—24.)



1. In combination, a slicing machine, means for operating said machine, and mechanism operated by said machine operating means for arranging slices formed by said machine in a plurality of separate stacks.

1,310,263. APPARATUS FOR GRINDING FACETS OF A PREDETERMINED WIDTH ON GLASS PLATES. SYBRANDUS LAURENTIUS VAN DER MEULEN, Leeuwarden, Netherlands. Filed Mar. 31, 1910. Serial No. 286,405. 2 Claims. (Cl. 51—11.)



1. In an apparatus of the character described, the combination with a rotatable grinding roller and a frame mounted so it may be swung toward and from the roller, of a sledge shiftable on the frame, plate-glass supporting and clamping means on the sledge, levers pivotally connected to the opposite ends of the frame and operably associated with the sledge and having the upper ends connected together, means associated with the levers to cause shifting of the sledge toward and away from the roller, means on the frame for limiting outward movement of the sledge and coöperative stop means mounted on the sledge and frame for limiting the inward movement of the sledge and adjustable to vary the size of the facets ground by the roller.

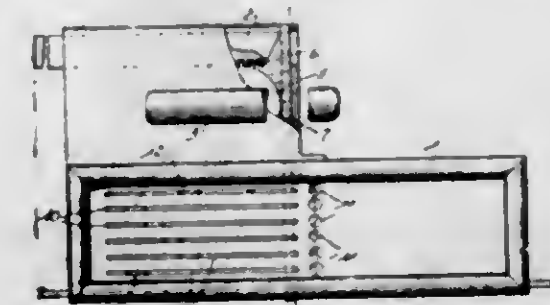
1,310,264. TOP-FRAME FOR AUTOMOBILES. JOSEPH VETTER, Toledo, Ohio. Filed Dec. 30, 1918. Serial No. 268,870. 3 Claims. (Cl. 21—62.)



1. A top frame of the class described having a rearwardly inclined rear bow, a rear intermediate bow pivoted for forward and rearward swinging movements relative to said rear bow, links pivotally projecting forward from

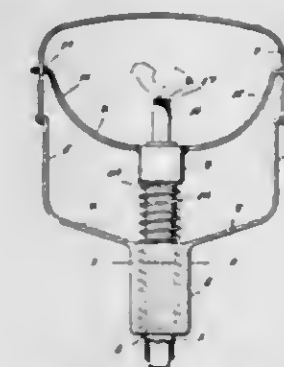
said intermediate bow, a front intermediate bow and a front bow pivotally projecting forward from said links, one in advance of the other and having parts which yieldingly releasably interengage transversely of the top to retain said front and rear intermediate bows and said front bow in set-up relation, said front bow and rear intermediate bow having parts which interengage to retain said bows in folded relation.

1,310,265. COMBINATION-LOCK. JOSÉ VIZCAINO, Guadalajara, Mexico. Filed Mar. 22, 1918. Serial No. 223,884. 3 Claims. (Cl. 70—60.)



2. A combination lock, comprising a sliding bolt, means for actuating said bolt, a plurality of slidable members, plugs removably fitted within said members to provide openings at predetermined intervals, a bolt controlling member operatively connected to said means, a plurality of prongs of various lengths formed on said member and slidable through the openings in said members.

1,310,266. BIRD-TRAP. WALTER E. WALKER, Gardena, Plain, Alberta, Canada. Filed Nov. 17, 1917. Serial No. 202,541. Renewed Dec. 18, 1918. Serial No. 207,408. 1 Claim. (Cl. 43—23.)

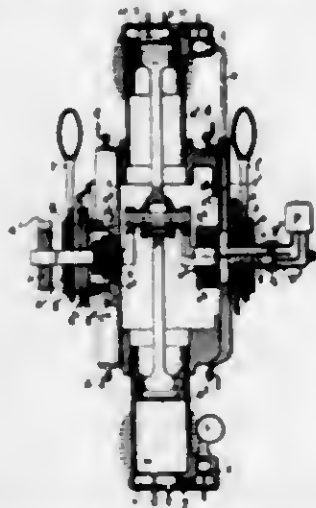


A bird trap comprising an upright member for attachment to the upper end of a pole or the like, a yoke having a sleeve slidable vertically on said member and also having a pair of upwardly diverging arms each provided with an opening, a pair of upwardly diverging arms carried by the said member, a pair of jaws having their ends pivotally connected to the upper ends of said arms, said jaws being so arranged as to pass through the openings of the yoke arms when the yoke is raised, a spring to move the yoke upwardly and raise the same to close the jaws, a third arm carried by said member and having a fork at its upper end, a trigger element pivotally connected to one side of the fork and provided with a detent lip, the said fork being adapted to receive one of the jaws when the jaws are open, and a dog pivotally connected at one end to the opposite side of the fork, the dog being adapted to pass over and engage said jaw and to also engage under the lip of the trigger element.

1,310,267. INTERNAL-COMBUSTION ENGINE. AMÉDEE WEIDENRECHT, Paris, France. Filed Oct. 3, 1917. Serial No. 194,586. 8 Claims. (Cl. 123—44.)

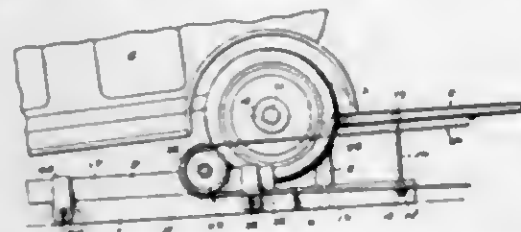
2. A motor vehicle wheel comprising an engine consisting of a plurality of radially disposed cylinders, a

crank shaft about which the cylinders rotate, a wheel journaled to said crank shaft, a clutch member on the crank shaft permitting the rotation of the crank with the



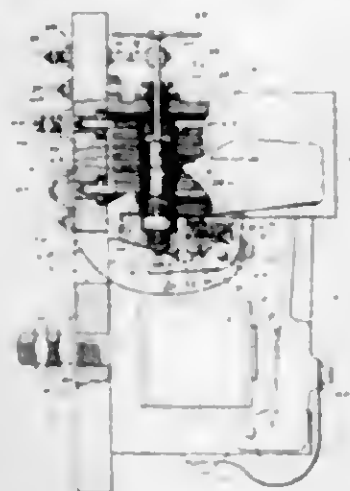
wheel and engine or to hold it stationary relative to said wheel and engine, and means connected directly to the wheel for rotating the same independently of the engine.

1,310,268. POWER-TRANSMISSION DEVICE FOR MOTOR-VEHICLES. JOHN E. WIATNER, Crewe, Va. Filed Apr. 27, 1918. Serial No. 231,189. 4 Claims. (Cl. 74-104.)



1. In a power transmission device for motor vehicles, the combination of a base, means connected with said base for raising one of the driving wheels of said motor vehicle clear of the ground, a bearing frame slidable upon and supported by said base, and a rotary transmission shaft journaled on said bearing frame and having a friction pulley adapted to be driven by frictional contact with the driving wheel of the motor vehicle and also having a belt pulley fast thereon, said bearing frame being freely slidable in order that said friction pulley may adjust itself in relation to said driving wheel of the vehicle.

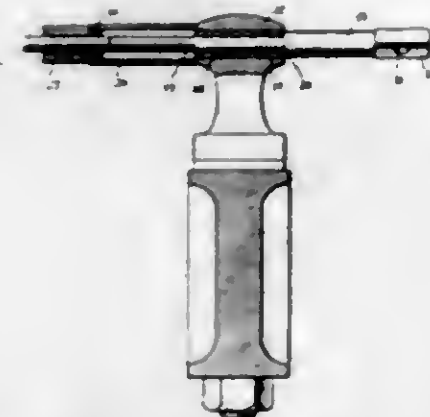
1,310,269. ELECTROMAGNETIC CONTACTOR. RUBEN I. WRIGHT, Wickliffe-on-the-Lake, Ohio, assignor, by mesne assignments, to The Electric Controller & Manufacturing Company, a Corporation of Ohio. Filed June 28, 1918. Serial No. 199,583. 11 Claims. (Cl. 175-281.)



1. In a switching device, a main contactor, an arc-extinguishing magnet therefor, and an electromagnetic con-

tactor normally in open position, the winding of the electromagnetic contactor being the energizing winding of the arc-extinguishing magnet.

1,310,270. BUSHING-PULLER. FRANK X. ATZBERGER, East Islip, N. Y. Filed Oct. 30, 1918. Serial No. 260,394. 4 Claims. (Cl. 29-88.2.)



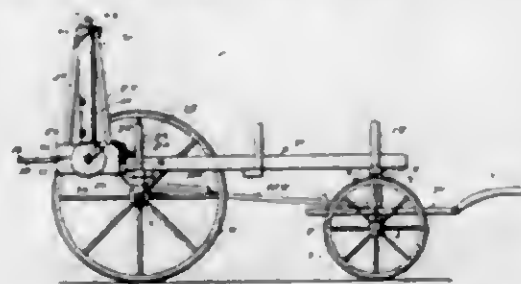
1. A bushing puller or bushing replacer, comprising a screw rod, a head on one end of the screw rod, an enlarged portion on the screw rod adjacent the head, a sleeve on the screw rod and adapted to fit over the enlarged portion, and a nut screwing on the said screw rod and adapted to engage the outer end of the said sleeve.

1,310,271. WOVEN GARTER-PAD. WILLIAM ACHTMETER, Middletown, Conn., assignor to The Russell Mfg. Co., Middletown, Conn., a Corporation of Connecticut. Original application filed Oct. 12, 1917, Serial No. 106,284. Patent No. 1,267,954, dated May 28, 1918. Divided and this application filed Apr. 25, 1918. Serial No. 230,741. 7 Claims. (Cl. 241-6.)



3. As an article of manufacture, a garter pad of a single woven piece, the end portions of which being closely woven and the portions from the ends to the middle of the piece being gradually less closely woven to gradually increase the width of the piece from the ends to the middle.

1,310,272. FENCE-POST DRIVER. WILLIAM R. BAKER, Vanzant, Mo. Filed Aug. 10, 1917. Serial No. 185,514. 2 Claims. (Cl. 61-74.)



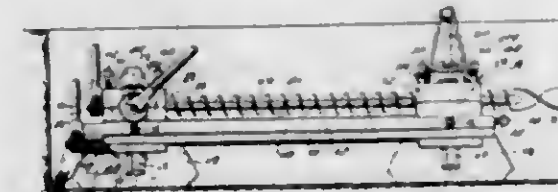
1. In a device of the character described, the combination with a supporting vehicle, of a U-shaped frame, means pivotally securing the right portion of the frame to the vehicle, a second frame pivotally carried by the U-shaped frame, means for adjustably holding the frames in relation to each other and to the vehicle body, a guide carried by the last mentioned frame, a weight reciprocally mounted in the guide, and means for operating the weight.

1,310,273. EYEGLASS-MOUNTING. FREDERICK R. BISHOP, North Attleboro, Mass., assignor to The Bishop Company, Inc., North Attleboro, Mass., a Corporation of Massachusetts. Filed July 8, 1918. Serial No. 243,899. 2 Claims. (Cl. 58-47.)



1. In an eye glass mounting, a shell rim having an internal channel, a metal lens holding ring in the channel of said shell rim, lateral lugs on the edges of said metal ring projecting into the edges of said shell rim, and a metal clip embracing the portion of said shell rim into which said lugs project, the edges of said clip being clenched around the edges of said shell rim and being clenched more deeply at opposite sides of said lugs than over them, whereby said lugs prevent the clip from slipping on the shell rim and the latter from creeping on the lens holding ring.

1,310,274. UNDERGROUND PORTABLE DRILL. WILLIE F. BRANNING, San Antonio, Tex. Filed Nov. 3, 1917. Serial No. 200,148. 15 Claims. (Cl. 253-20.)



1. A drilling machine comprising a support, a guide block carried thereby, a feed block, a drill worm, a drill bit carried by said worm and means including vertically movable elements for regulating the angle of the bore.

1,310,275. WINDING-DRUM. GEORGE W. BROWN, Fort Terry, N. Y. Filed Aug. 25, 1917. Serial No. 188,107. 2 Claims. (Cl. 242-117.)



2. In a winding drum, drum members, each comprising a gear wheel, spaced segmental sections fixed to the gear wheels and projecting therefrom parallel to the axis, the sections of one wheel lying in the spaces between the sections of the other wheel and having their edges in close contact therewith, the sections on one wheel having their ends abutting the gear of the opposite drum member, a journal shaft passing through said members and means carried thereby for holding the members in proper relation to form a completed drum.

1,310,276. THERMOMETER FOR RADIATORS. GLENN C. BROWN, Taylor Ridge, Ill. Filed Dec. 26, 1918. Serial No. 265,254. 2 Claims. (Cl. 72-52.)

1. A thermometer attachment for a radiator comprising the combination with the radiator cap, of a body

formed of a plate having an opening therein, a sectional housing surrounding said opening, the sections of the housing being disposed on opposite sides of said plate.



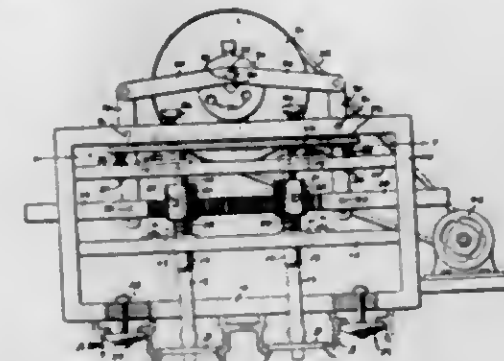
glass closures for the front and rear walls of said housing, a tubular member depending from said body and mounted in said radiator cap, and a thermometer extending through said tubular member and into said opening.

1,310,277. HEVERAGE. CYRIL VINCENT BROWNE, Mount Eden, Auckland, New Zealand. Filed Sept. 14, 1918. Serial No. 254,107. 2 Claims. (Cl. 49-11.)

1. The herein described process of producing a water soluble beverage constituent, which consists in arranging bran in a relatively thin flat mass having a substantial area, applying brown sugar in sufficient quantity to cover the top of the mass to a thickness of the bran and covering the latter, heating the mass thus arranged without the addition of water until the sugar boils whereby the sugar will gravitate into the mass of bran and become mixed therewith, allowing the mass to cool and harden, and grinding the hardened mass thus produced to provide a powder of suitable fineness.

2. The herein described process of producing a water soluble beverage constituent, which consists in arranging two parts of bran in a relatively thin flat mass having a substantial area, applying one part of brown sugar to the top of the mass of bran to cover the same, heating the mass thus arranged without the addition of water until the sugar boils whereby the sugar will gravitate into the mass of bran and become mixed therewith, allowing the mass to cool and harden, and grinding the hardened mass thus produced to provide a suitable powder.

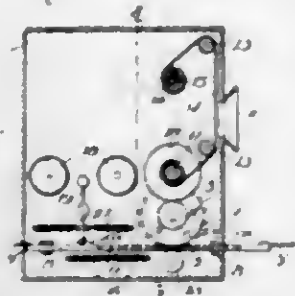
1,310,278. VALVE-GRINDING TOOL. CYRUS M. BRUCE, Ewing, Ky. Filed June 30, 1917. Serial No. 177,947. Renewed Apr. 10, 1919. Serial No. 289,133. 10 Claims. (Cl. 51-4.)



1. In a valve grinding machine, the combination of a frame, a plurality of valve engaging elements mounted in the frame, operating means connected to the valve engaging elements, means for normally urging the valve engaging elements upwardly in the frame, a pressure bar

mounted in the top of the frame for engagement with the upper ends of the valve engaging elements, means for urging the pressure bar upwardly in the frame, and adjusting means in the top of the frame for engagement with the pressure bar to urge the latter downwardly against said valve engaging elements and to advance the latter downwardly in the frame.

1,310,279. STREET INDICATOR. WILLIAM O. BUNNELL and QUINCY A. GATES, Wilkes-Barre, Pa. Filed Sept. 13, 1916. Serial No. 119,873. 1 Claim. (Cl. 40—57.)



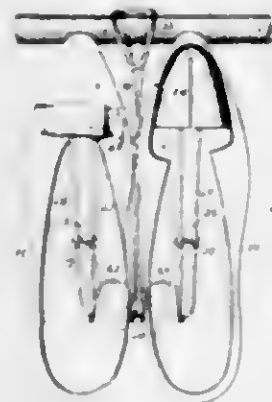
In combination with a changeable exhibitor having horizontally aligned ways in its lower portion, movable exhibiting means, an actuating bar passing through the casing and slidable in said ways connected to the exhibiting means for operating the same, said bar having a lug formed with a pocket on its upper side, bells arranged in the casing, a hammer pivoted in the casing having one end thereof engaged with the pocket in said lug and spring means connected to said hammer and said actuating bar for normally maintaining the same in neutral position whereby to permit actuation of the hammer upon sliding movement of the actuating bar in either direction.

1,310,280. DEVICE FOR MAKING VESSELS INVISIBLE. MARK CHADUCK, Plano, Tex. Filed Nov. 8, 1918. Serial No. 261,652. 2 Claims. (Cl. 114—15.)



1. A device for rendering objects invisible comprising a hollow body formed with a transparent concavo-convex front wall and a plane rear wall, the inner face of the rear wall being provided with a mirrored surface.

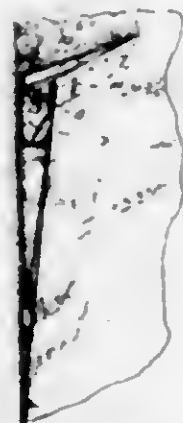
1,310,281. SHOE-HANGER. BERTHA CLARK, Brooklyn, N. Y. Filed Feb. 1, 1919. Serial No. 274,422. 8 Claims. (Cl. 12—128.)



1. A shoe hanger for supporting a pair of shoes, comprising upright shoe holding members spaced apart and adapted to pass separately into the shoes to support the latter side by side in an upright position and with the toes upward, the lower ends of the supporting arms having forwardly extending portions extending out of the shoes, and a shank intermediate the said shoe supporting

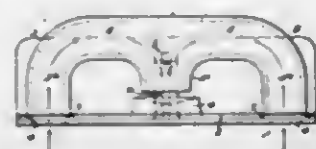
member and connected at one end with the ends of the said extended portions of the arms, the other end of the said shank having means for engagement with a support.

1,310,282. CLOSURE FOR POCKETS. JAMES H. CLARK, Washington, D. C., assignor of one-half to John F. Kleaver, Washington, D. C. Filed Mar. 10, 1919. Serial No. 281,777. 2 Claims. (Cl. 2—15.)



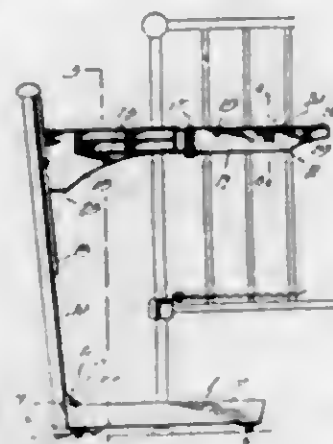
1. The combination of a pocket, a flexible flap secured at one end to one edge of the pocket within the latter, and provided at its other edge with a stiffening strip and a button hole, and a button secured to the opposite edge of the pocket and adapted to be entered in the button hole in the flap and support the latter in looped position within the pocket.

1,310,283. OIL-BURNER. WILLIAM R. COCHRAN, Delphos, Ohio, assignor of one-half to Albert Esterline and George W. Sherer, Fort Wayne, Ind. Filed Oct. 29, 1918. Serial No. 260,082. 3 Claims. (Cl. 158—91.)



1. An oil burner attachment for stores consisting of a base member having air openings through the same adjacent its ends, a burner member having upwardly extending air ducts at its ends which terminate centrally in a downwardly projecting burner member open at its lower end, an oil pipe projecting into the burner member over the burner opening therein, and a saucer shaped deflector below and in the vertical plane of the burner opening, the said deflector being of greater diameter than the burner opening.

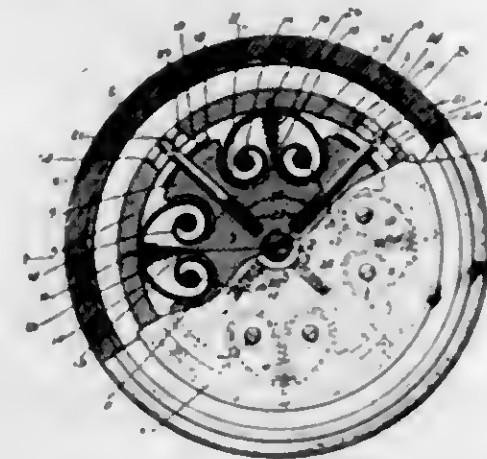
1,310,284. INVALID-TABLE. THOMAS W. DAVIS, San Jose, Calif. Filed Jan. 14, 1918. Serial No. 211,857. 2 Claims. (Cl. 45—111.)



1. An invalid's table comprising a base, a standard rising from said base and having along its upper portion

a pair of parallel guide ribs, a support having at one end a shoe slidable between said ribs, and a plate secured to the lower end of said shoe and having a tongue extending between said ribs, said tongue having a sharpened edge adapted to engage said standard to retain said support in adjusted position.

1,310,285. SPRING-WHEEL. BERNARD CHARLES FISHER, Jersey City Heights, N. J. Filed June 1, 1918. Serial No. 237,787. 1 Claim. (Cl. 152—28.)



In a resilient wheel, a hub, a tire carrying rim, side plates secured in fixed relation to the hub and receiving between them a portion of said rim, a saddle member interposed between the side plates and provided in its periphery with pairs of substantially semi-circular recesses defining therebetween radial arms, fastening members extending through said side plates and the recesses in said saddle member, a circular series of cardiac springs disposed in said recesses and each comprising a major convolution fastened at its center to the tire carrying rim and a plurality of minor convolutions at the ends of said major convolutions and terminating in eyes which engage about said fastening members, the outermost ones of said minor convolutions being normally spaced from the walls of said recesses in parallel relation therein, the radially extending arms on said saddle being disposed between each set of minor convolutions of said springs and coiled springs disposed between the ends of said arms and the centers of the major convolutions of said cardiac springs.

1,310,286. AUTOMOBILE-HOOD CLIP. EDWARD HOLTON, Calgary, Alberta, Canada. Filed July 10, 1918. Serial No. 244,310. 1 Claim. (Cl. 70—82.)



A substitute for the wing nuts of hinged, automobile clip bolts, comprising a clip having a gap between its upper and lower ends, and a vertical bore opening into both ends of the gap to receive the bolt, a coiled spring in said gap adapted to surround the bolt, and a nut adapted for threading on the bolt to compress said spring against the bottom wall of the gap.

1,310,287. CASTER-WHEEL. CHARLES W. MILLET, Johnstown, N. Y. Filed Dec. 31, 1917. Serial No. 209,694. 2 Claims. (Cl. 10—75.)

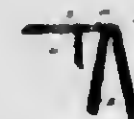
1. A caster wheel comprising a tubular one-piece hub having smooth exterior walls, an annular body of com-

pressible material surrounding the hub, and concavo-convex disks of substantially the same diameter as the body fitted upon the smooth exterior walls of the hub with their concave faces bearing directly against and compressing the material at the opposite sides of said



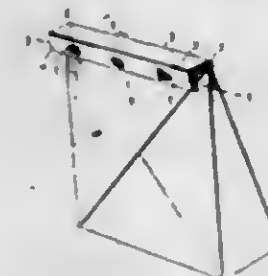
body whereby the body is compacted in gradually increasing degrees from its central portion to its tread, the peripheral portions of the disks being sunken into the said opposite sides of the body, and the peripheries of said disks being located inwardly of the tread of the wheel.

1,310,288. SEALED RECEPTACLE. ANDREW S. NICO, Le Roy, N. Y., assignor to The Genesee Pure Food Company, Le Roy, N. Y., a Corporation of New York. Filed Apr. 26, 1916. Serial No. 93,681. 5 Claims. (Cl. 229—62.)



1. A receptacle having its material at the mouth thereof lapped and bent laterally at approximately a right angle to form a relatively sharp sealing corner, a portion of said lapped material extending laterally from said corner, and means punched from the lapped material and serving as a lock to prevent relative slipping of the layers of such lapped material.

1,310,289. SEALED RECEPTACLE. ANDREW S. NICO, Le Roy, N. Y., assignor to The Genesee Pure Food Company, Le Roy, N. Y., a Corporation of New York. Filed July 8, 1916. Serial No. 108,200. 3 Claims. (Cl. 229—62.)

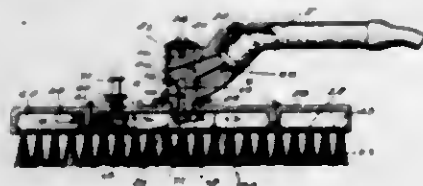


2. A receptacle having its material at the mouth thereof lapped and bent at approximately a right angle to form a relatively sharp sealing corner, a portion of said material extending laterally from said corner, and the material at the free edge of said laterally bent portion being bent at approximately a right angle to form a second relatively sharp corner, and means punched from the lapped material and serving as a lock to prevent slipping of the individual layers of the lapped material.

1,310,290. FOUNTAIN-BRUSH. TROTEL PICHOWITZ, Vauxhall, N. J. Filed May 24, 1918. Serial No. 236,353. 2 Claims. (Cl. 15—51.)

1. A fountain brush comprising a hollow head having a perforated wall, a valve provided with a plurality of independent passages, and mounted on said hollow head, one of said passages communicating with said hollow head, a casing for said valve provided with a plurality of passages adapted to register with the passages in said

valve to alternately supply water to the hollow head and project a stream of water laterally from the casing, and



means carried by the head and movable into the said communicating passages to control the flow of water to said hollow head.

1,310,291. ABRASIVE WHEEL. HENRY ROBERT POWER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 27, 1918. Serial No. 251,844. 3 Claims. (Cl. 51-1.)

1. An abrasive wheel comprising abrasive particles united by a silicate binder to form a porous structure, and having the voids thereof filled with the coal-tar distillate paracoumarone known chemically as polymerized benzofuran.

1,310,292. ABRASIVE WHEEL. HENRY ROBERT POWER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 27, 1918. Serial No. 251,845. 7 Claims. (Cl. 51-1.)

1. An abrasive wheel comprising abrasive particles united by a silicate binder to form a porous structure and having the voids thereof filled with a mixture of mineral wax and the coal-tar distillate paracoumarone known chemically as polymerized benzofuran.

1,310,293. EYES FOR DOLLS. DAVID PUBLIN, New York, N. Y. Filed Mar. 21, 1919. Serial No. 253,950. 8 Claims. (Cl. 46-40.)



1. The combination of a set of eyes with a connecting piece composed of channel bars relatively movable to each other and provided with terminal seats for the eyes, and means for fastening the eyes to said seats, the said connecting piece being bendable at the juncture of the seats with the bars.

1,310,294. POULTRY-DECAPITATOR. FRANK S. REE, Dallas, Tex., assignor of one-half to Edward H. Epperson, Dallas, Tex. Filed Sept. 25, 1918. Serial No. 255,646. 11 Claims. (Cl. 17-30.)



1. In a device of the class described, a stock formed of a single blank of sheet metal bent at its midlength into

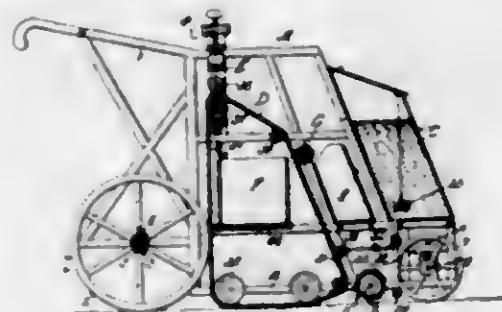
a looped head and below the same into spaced, flat side members provided along their rear edges with rightangular wings, the lower ends of said members and wings being bent outward in a single horizontal plane to produce a supporting base, said side stock having a transverse opening; combined with an element slidable vertically within said stock and having a member at its lower end movable across said opening.

1,310,295. LOCOMOTIVE-BRAKE-HOD SAFETY BRACKET-HANGER. FREDERICK JOSEPH ROBILLARD, St. Thomas, Ontario, Canada. Filed May 23, 1919. Serial No. 299,307. 3 Claims. (Cl. 188-70.)



1. In a safety hanger bracket for locomotive brake rods, a hanger bracket provided at its upper end with an offset portion adapted to rest upon the top of a bar portion of a locomotive frame and terminating in an upwardly offset portion, of means engaging the upwardly offset portion and the body of the hanger bracket for clamping it to the engine frame.

1,310,296. FLOOR SCRUBBING AND MOPPING MACHINE. EVERETT T. ROGERS and FRANK M. ROGERS, Bay Shore, N. Y. Filed Aug. 23, 1916. Serial No. 116,446. Renewed Dec. 17, 1918. Serial No. 267,211. 10 Claims. (Cl. 15-14.)

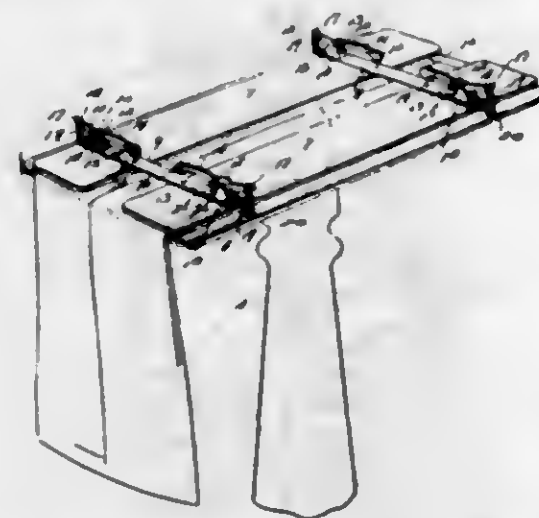


10. In a machine of the class described, the combination of a supporting frame, front and rear wheels for movably supporting the frame, and a mop mounted on the frame and having a portion in running contact with the periphery of the rear wheels.

1,310,297. PRESS FOR TROUSERS. CHARLES ROBIE, New York, N. Y. Filed June 29, 1918. Serial No. 242,578. 5 Claims. (Cl. 100-57.)

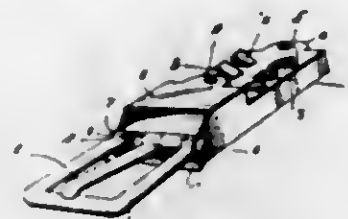
1. In a device of the class specified, a table, pressing members disposed on opposite sides of the table and connected for simultaneous operation and provided with means for always holding them in parallel relation to the table and rendering them uniformly movable throughout

their entire lengths equally toward and from the table, a lever clamping device at each extremity of each pressing



member, and resilient devices vertically disposed between the outer ends of the clamping devices and table.

1,310,298. HARNESS-BUCKLE. MYRON H. RUSS, Pine, Colo. Filed Aug. 12, 1918. Serial No. 249,532. 3 Claims. (Cl. 24-186.)



2. A buckle, comprising a frame having sleeves at one end of a wall thereof and having a portion partly cut from one of the sleeves to form a tongue, a loop and tongue having sleeves to match with the sleeves of the buckle frame, and a pin passing through the matching sleeves to pivotally connect the loop and tongue to the buckle frame, said pin having a portion reduced to receive the tongue forming a part of the sleeve of the buckle frame.

1,310,299. CORE FOR ELECTRICAL APPARATUS. IVAN HOA H. SCLATER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1918. Serial No. 263,612. 5 Claims. (Cl. 175-356.)

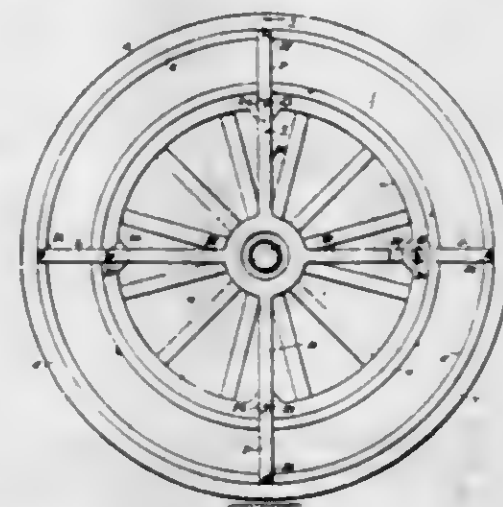


1. In an electrical apparatus, a core comprising a plurality of abutting sections arranged to form a central leg, each section having a window and composed of laminations of different widths assembled in stepped formation

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to provide radial supporting ledges offset from the window opening, and sectors arranged between said sections and supported in place by said ledges.

1,310,300. TIRE. HUGH H. SCHRAMM, New York, N. Y. Filed June 25, 1918. Serial No. 241,858. 2 Claims. (Cl. 152-33.)



1. A vehicle wheel, comprising a hub, spokes, a felly, a rim, a pneumatic cushion on the rim, spiders mounted on the hub on opposite sides of the wheel and having their arms extending on opposite sides of the cushion, an annular flanged tread carrying member resting on the cushion and to which the outer ends of the arms of the spiders are secured, and means for securing the said arms together and loosely to the felly of the wheel.

1,310,301. INTERNAL-COMBUSTION ENGINE. HARRY E. SHREMAN and CHESTER E. SHREMAN, Anoka, Minn., assignors to Z. H. Austin, trustee, Minneapolis, Minn. Filed Feb. 8, 1917. Serial No. 147,856. 7 Claims. (Cl. 123-80.)



1. An internal combustion engine comprising an explosion cylinder having a firing chamber extending concentrically from the end of said cylinder, a cap closing the outer end of said cylinder, a water-jacket surrounding the cylinder and the firing chamber and being formed with an inner bearing surface, said firing chamber and water-jacket being provided with an exhaust port and an inlet port, an outer casing, a sleeve valve mounted for rotation upon said bearing surface and within the casing, said sleeve valve having a suitably-positioned port therein for cooperating with said exhaust port and said inlet port, annular tongues on the valve entering grooves in said cylinder and cap, and means for continuously operating the sleeve valve in timed relation to the explosions of the engine.

1,310,302. AUXILIARY LEVER FOR OPERATING AND LOCKING CLUTCH-PEDAL LEVERS. MILTON L. SHREMAN, Sandusky, N. Y. Filed Jan. 3, 1919. Serial No. 269,397. 2 Claims. (Cl. 74-39.)

1. An auxiliary lever for use in connection with clutch levers of tractors, etc., comprising in combination with the clutch pedal, a stationary bracket member for at-

tachment to the tractor, a lever pivotally connected to said bracket member and having pivotal link connections with the clutch pedal, a projection upon said lever



adapted to frictionally engage one of the links of the connection between the lever and pedal to hold the latter down, said connections permitting the clutch pedal to operate independent of said lever.

1,310,303. AUTOMOBILE OR TRUCK WHEEL. HOWARD E. SIMMONS and PAUL R. SIMMONS, Huntington, Ind. Filed Oct. 2, 1918. Serial No. 256,623. 3 Claims. (Cl. 152-10.)

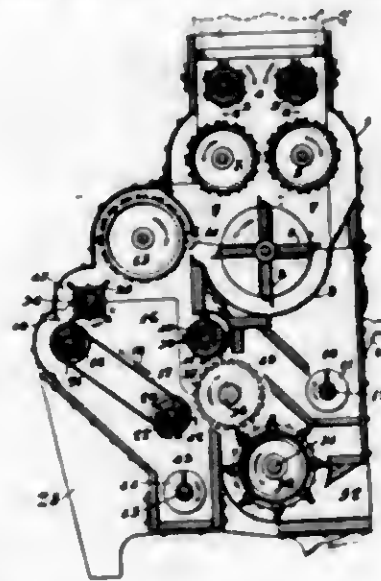


1. In a vehicle wheel, a body formed of two sections having opposing grooves forming an annular chamber and provided with portions extending beyond the chamber, said portions being formed with a plurality of spaced guideways, having inwardly extending flanges, means for securing the sections together inward of the chamber and between the guideways, a pneumatic cushion element in the chamber, and a tread formed of a plurality of sections, each having a shouldered follower working in a guideway.

1,310,304. BOLL-COTTON SEPARATOR AND CLEANER. OLIVER G. SIMMONS, San Antonio, Tex. Filed Aug. 13, 1918. Serial No. 249,632. 9 Claims. (Cl. 13-12.)

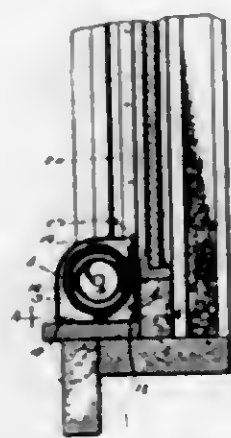
9. In a cotton separator and cleaner, a separating chamber, picker saws partially entering said chamber, a continuously moving belt to catch the cotton delivered to said chamber; said belt being mounted on adjustable rolls one of which is adapted to move the said belt; a lint brush adapted to rotate and remove said cotton from the said belt and impinge the said cotton against the picker saws; a kicker cylinder adapted to kick off hull segments adhering to said picker saws; a supplemental chamber adapted to receive heavy particles of

trash thrown off the said saws; and means to remove the cotton from the said picker saws and to discharge



same through a chute substantially as and for the purpose set forth.

1,310,305. SCREEN. CHARLES S. SMITH, Chicago, Ill. Filed Nov. 11, 1918. Serial No. 261,951. 3 Claims. (Cl. 156-39.)



1. In combination with a window sill and a sliding sash, a casing mounted on the sill, a spring roller rotatably mounted in the casing and carrying a flexible screen, the front edge of the casing normally resting in proximity to and extending parallel to the sash, a slit in the top of the casing, adjacent the front edge thereof, through which the screen extends, a downwardly facing channeled strip carried by the free edge of the screen and provided with a flange extending downwardly between the casing and sash and adapted to engage and overhang the top of the front edge of the casing, when the screen is in its inoperative position, and means on the sliding sash for engaging said strip when the sash is raised, substantially as described.

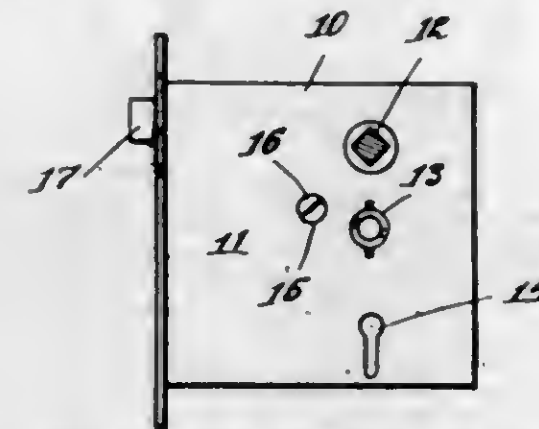
2. In combination with a window sill and a sliding sash, a casing mounted on the sill, a spring roller rotatably mounted in the casing and carrying a flexible screen, the front edge of the casing normally resting in proximity to and extending parallel to the sash, a slit in the top of the casing, adjacent the front edge thereof, through which the screen extends, a downwardly facing channeled strip carried by the free edge of the screen and provided with a flange extending downwardly between the casing and sash and adapted to engage and overhang the top of the front edge of the casing, when the screen is in its inoperative position, and means on the sliding sash for engaging said strip when the sash is raised, and for releasing said clip when the window is closed, and the clip contacts the top of the casing, substantially as described.

3. In combination with a window sill and a sliding sash, a casing mounted on the sill, a spring roller rotatably mounted in the casing and carrying a flexible screen, the front edge of the casing normally resting in proximity to and extending parallel to the sash, a slit in the top of the casing, adjacent the front edge thereof, through which the screen extends, a downwardly facing channeled strip carried by the free edge of the screen and provided with a flange extending downwardly between the casing and sash and adapted to engage and overhang the top of the front edge of the casing, when the screen is in its inoperative position, an aperture in the top of the strip, and a hook carried by the sliding sash and adapted to enter said aperture and raise the screen when the sash is elevated, substantially as described.

1,310,306. MANUFACTURE OF AMMONIUM SULFATE. FREDERICK W. SPERR, JR., Pittsburgh, Pa., assignor to H. Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 10, 1918. Serial No. 233,675. 4 Claims. (Cl. 23-21.)

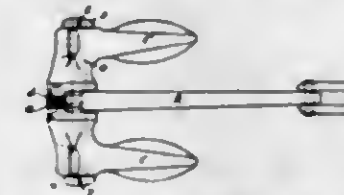
1. In the manufacture of ammonium sulfate, the method of preparing a neutralizing agent for treating ammonium sulfate crystals, which consists in withdrawing ammonia vapors from the fixed section of an ammonia still for the treatment of such crystals, substantially as described.

1,310,307. LOCK. JACOB N. STRICKLAND, Savannah, Ga. Filed Feb. 2, 1918. Serial No. 215,115. 1 Claim. (Cl. 70-8.)



In a device of the class described, a latch bolt, a latch rollback, a key operated bolt, a tumbler cooperating with and locking the key operated bolt, a key hole guard, a bolt throw rigidly mounting the guard, a bolt projected by the bolt throw into the path of the latch bolt when the key hole guard is moved to operative position, and means for operating the bolt throw.

1,310,308. SHIP'S ANCHOR. JOHN TAYLOR, East Boldon, England. Filed Nov. 22, 1918. Serial No. 263,749. 3 Claims. (Cl. 114-208.)



1. In an anchor the combination of two flukes; a spindle on which the flukes are supported; a recess and a projection on the adjacent ends of the bosses of the flukes; and a shank through the head of which the spindle passes.

1,310,309. ALLOY. HERMANN G. C. THORPE, New York, N. Y., assignor to Light Metals Co., Elizabeth, N. J. Filed Dec. 15, 1917. Serial No. 207,311. 2 Claims. (Cl. 75-1.)

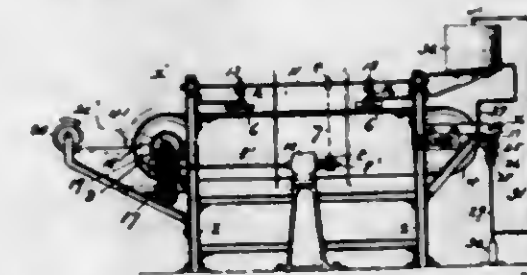
1. An alloy having great tensile strength and toughness and light in weight, composed of aluminum, mag-

nesium and uranium, the major portion of the alloy composed of aluminum and the magnesium and uranium being in relatively small proportions.

1,310,310. METHOD OF MAKING ALLOYS. HERMANN G. C. THORPE, New York, N. Y., assignor to Light Metals Co., Elizabeth, N. J. Filed Dec. 15, 1917. Serial No. 207,312. 3 Claims. (Cl. 75-1.)

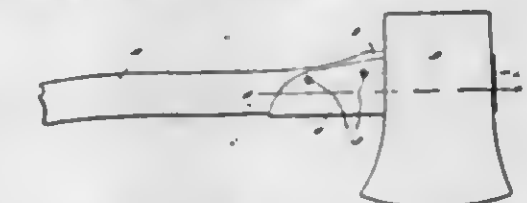
1. The herein described method, consisting in raising the temperature of uranium oxide to a bright red heat in a container, adding to said uranium oxide, aluminum and maintaining the temperature sufficiently high to render the aluminum molten, and then adding magnesium, and causing reactions which will reduce the uranium oxide to metal dissolved throughout the entire mass.

1,310,311. MACHINE FOR MANUFACTURING GELATIN SHEETS OR FILMS. ASHES C. TRAVIS, Del Ray, Va., assignor to Henry M. Conger, Washington, D. C. Filed Oct. 30, 1916. Serial No. 128,513. 5 Claims. (Cl. 18-15.)



1. In a machine of the character described, the combination with a movable member having a receiving surface for gelatinous material, of an open ended spreading device comprising a roll arranged to form a trough or pocket extending longitudinally between it and said surface, said roll being pivotally supported to adapt it to have a movement toward and from the receiving surface.

1,310,312. AX-HANDLE GUARD. HOMER NEFF TYSON, Telford, Wash. Filed Nov. 9, 1916. Serial No. 130,384. 1 Claim. (Cl. 287-36.)

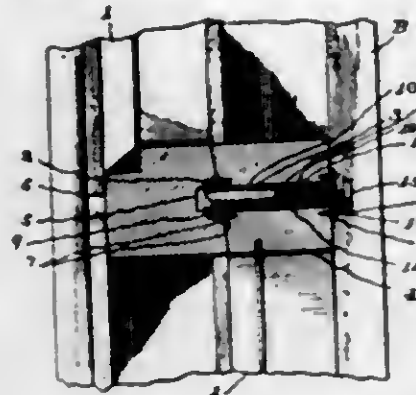


In a device of the character described, in combination, an ax handle, an ax head having an eye, and a guard formed from a single blank of sheet metal designed to be driven between the eye of the head and the tenon head of the handle, said blank consisting of a plate-like body the side edges of which taper from one end to the other end, the plate-like body being bent transversely to assume an arcuate form in cross section forming a sheave having medial portion and side walls, the medial portion of the sheave at the wide end being provided with a longitudinal V-shaped slot to provide opposed wings, the slot terminating short of the inner end of the eye, outwardly bent guard flanges formed at the terminals of the wings and contacting against the outer edge of the ax head for preventing displacement of the head and means for fastening the side walls of the sheave near the inner end to the ax handle.

1,310,313. SASH-FASTENER. JOSEPH CHARLES VERA, Buffalo, N. Y. Filed Apr. 18, 1918. Serial No. 229,482. 2 Claims. (Cl. 16-143.)

1. The combination with the meeting rails of upper and lower window sashes, the rail of one sash being provided with a transverse opening, while the rail of the other sash is provided with a corresponding socket, corresponding concave plates fitted over the openings in the

meeting faces of the two rails and provided with openings corresponding to the openings of the rails, said plates being let into the rails so that the outer edges thereof are flush with the rails, fastening members securing the edge portions of the plates to the rails, with



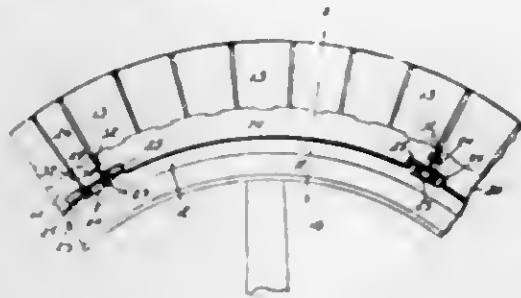
the concave faces of the plates facing each other so that they will not bulge and prevent a tight joint between the rails, and a locking bolt slidable through the opening of the first mentioned rail and adapted to engage the socket of the second mentioned rail.

1,310,314. FUSE-LINK. JACOB WASSERBERG, New York, N. Y. Filed Oct. 5, 1918. Serial No. 257,058. 4 Claims. (Cl. 169-26.)



1. In a fuse link, the combination of a slide member adapted to carry one end of a chain, inclosing members also adapted to carry the end of a chain and having inter-fitting flanges at their upper and lower edges to envelop the slide member, means on the slide member to engage the flanges and carry the stress of the chains, and a low melting binding agent.

1,310,315. TIRE-SHIELD. WESLEY E. WENNER, Stone Church, Pa. Filed Aug. 19, 1916. Serial No. 115,835. 2 Claims. (Cl. 152-14.)



1. The herein described tire shield made up of a series of pairs of tread plates bioged to each other end to end at the transverse center of the tread of the wheel and having tongues at their outer ends; two annular shield plates lying against the sides of the tire and each made up of a plurality of sections end to end with longitudinal wires connecting the sections at both edges, the ends of said tread plates being hingedly mounted on the wires along the outer edges of said shield plates.

1,310,316. DIRECTION-INDICATOR. WALTER WIEGAND, Baltimore, Md. Filed Feb. 9, 1918. Serial No. 216,247. 2 Claims. (Cl. 116-31.)

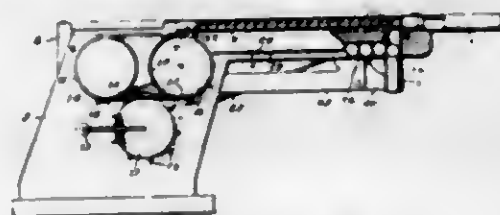
1. A direction indicator comprising brackets adapted for mounting on the bottom of a vehicle body, bearing

blocks formed with externally threaded arms passing slidably through the brackets, nuts carried by the arms abutting the top and bottom faces of the brackets whereby the bearing blocks may be adjusted vertically to properly align the same, a rod slidably mounted in the bearing blocks, an indicating pointer mounted on the vehicle body, means for imparting longitudinal movement to the



rod, and connections between the rod and the indicating pointer whereby the latter is operated when the rod is moved.

1,310,317. TOY GUN. WILLIAM LEROY ALLEN, Topeka, Kans. Filed Mar. 29, 1919. Serial No. 286,216. 2 Claims. (Cl. 124-13.)



1. A toy of the class described, comprising a base having an extension at its upper edge, having a groove therein, a barrel secured in said groove, a magazine formed in said extension, a vertically movable plunger for forcing the balls from the magazine into the barrel, a spring controlled plunger in the barrel, an endless belt, a pair of rollers for supporting said belt, projections on the belt for engaging a part of the spring plunger for retracting the same, a wheel, pins thereon engaging the belt for revolving the same, a crank handle for rotating the wheel and means connecting the handle with the vertically movable plunger to operate the same.

1,310,318. CONTROLLING DEVICE. ARTHUR T. ANDERSON, Champaign, Ill. Filed Mar. 25, 1919. Serial No. 284,999. 1 Claim. (Cl. 200-14.)



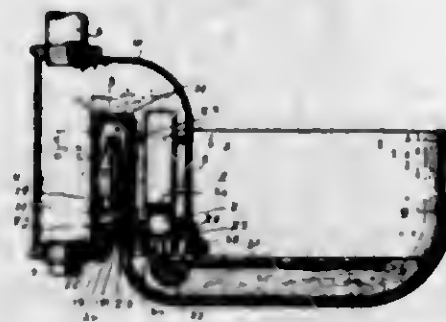
A device of the character described comprising in combination, a pivoted controller handle, a pivoted switch, a pivoted latch member engaging said handle, an arm connected with said switch, a slidable rod operatively connected with said arm, a pivoted lever connected with said rod, a train of slidable and pivoted links operatively connected with one another, a slidable bar connected with said lever and serving as a stop for one endmost sliding link of said train, and a weight carried by the other endmost one of said sliding links and disposed in position to engage said latch member.

1,310,319. TOOL FOR CORING GUN FORGINGS AND SHAFTING. LEOPOLD BAUMANN, Sr., and FREDERICK BAUMANN, Philadelphia, Pa., assignors of seven thirty-seconds to said Leopold Baumann, Sr., seven thirty-seconds to said Frederick Baumann, and seven thirty-seconds to Norman T. Whitaker and eleven thirty-seconds to Herbert J. Browne, Washington, D. C. Filed Oct. 24, 1918. Serial No. 259,550. 2 Claims. (Cl. 77-69.)



1. A coring tool comprising a segmental shell the inner curved surface of which constitutes an arc greater than 180°, said inner surface being flattened to permit a vibratory movement of the core, and a cutting element carried by said shell.

1,310,320. STOCK-WATERING BOWL. FRANK H. BOGDA, Burnett, Wis. Filed Mar. 1, 1917. Serial No. 151,694. 4 Claims. (Cl. 119-75.)



1. In a stock watering bowl, the combination of a supply pipe having a valve-controlled discharge portion, a bowl, the valve-controlled discharge portion of the supply pipe extending into the bowl close to the wall of said bowl, means within the bowl constructed, when operated, to open the valve mechanism, a freely engageable and disengageable holding means between the supply pipe and the bowl, said means releasably holding and supporting the bowl in a normal horizontal position, the engagement of the holding means being with that portion of the bowl which is close to the valve-controlled discharge portion of the supply pipe, said holding means permitting of the free movement of the bowl toward and to its normal horizontally supported position, but being free to be disengaged so as to permit of the complete bodily withdrawal of the bowl, and cooperating means between the bowl and the supply pipe for preventing lateral movement of the bowl while engaged by the holding means.

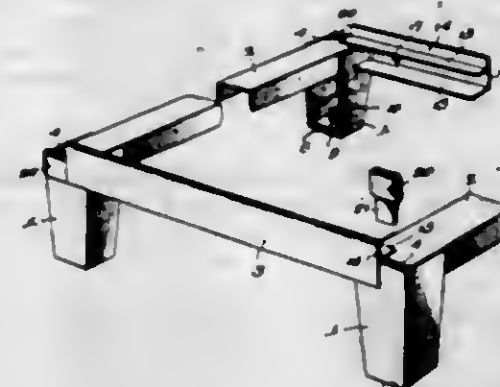
1,310,321. THERMOMETER FOR RADIATORS. GLENN C. HROWN, Taylor Ridge, Ill. Filed June 14, 1918. Serial No. 240,091. 2 Claims. (Cl. 240-2.)



1. The combination with the cap of an automobile radiator, of a frame supported on the top of the cap, a

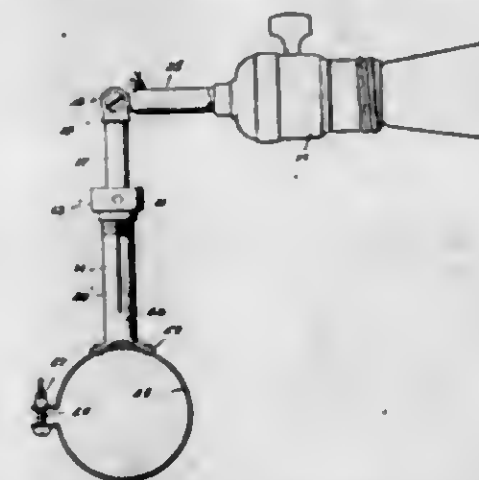
thermometer having marks thereon disposed within said frame, a lamp depending at the rear of said frame, a transparent glass panel in the forward portion of the frame, and in front of the said thermometer, and a translucent glass panel in the rearward portion of said frame, and in rear of said thermometer whereby the light of said lamp will be diffused through the translucent panel to readily permit a view of the thermometer.

1,310,322. BASE FOR FILING-CABINETS, FURNITURE, &c. RAYMOND G. BULLOCK and GEORGE ANDERSON, Jamestown, N. Y., assignors to The Art Metal Construction Company, Jamestown, N. Y., a Corporation of Massachusetts. Filed Dec. 17, 1917. Serial No. 207,528. 7 Claims. (Cl. 45-78.)



1. A base for filing cabinets and the like comprising side bars, cross bars and legs, each leg embracing one end of a side bar and having its outer side spaced from the end of the side bar to form a seat, and each cross bar being provided with depending projections detachably received in the seats.

1,310,323. ELECTRIC-LIGHT SUPPORT. GIUSEPPE A. CENTOLELLA, Clinton, N. Y. Filed Dec. 20, 1916. Serial No. 138,117. 1 Claim. (Cl. 248-20.)



A device of the class described comprising a clamping ring, a tubular member having its base secured to said ring, said member having its outer portion divided into quarters of longitudinal slots and having its outer end screw threaded, a nut engaging said screw threaded end and having an enlarged part having openings therein, a second tubular member having one end forked and its other end fitting in the first member and adapted to be clamped therein by the nut, a lamp socket, a tubular member connected therewith and having a forked end and a pin pivotally connecting the forked ends together.

1,310,324. CIRCULATOR. JOHN P. CLOUTY, Chicago, Ill. Filed May 20, 1918. Serial No. 235,721. 2 Claims. (Cl. 123-175.)

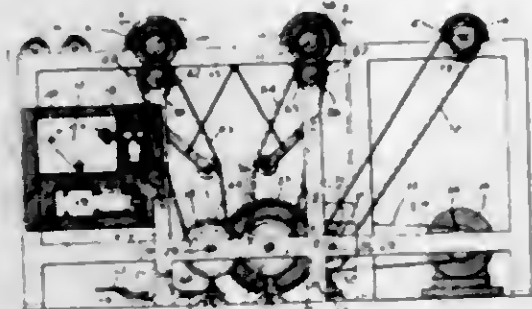
1. The combination with the fan shaft and cooling system of an internal combustion engine, said cooling system

comprising a water jacket, radiator and connections therebetween, of a shaft journaled in the wall of the connection between said water jacket and the top of the radiator, and above said fan shaft a fluid impelling de-



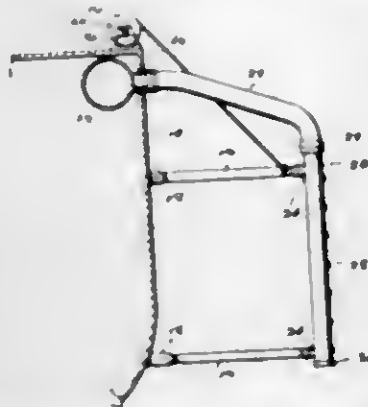
vice mounted on the inner end of said shaft, a pulley on the opposite end thereof, a belt for driving said pulley from said fan shaft, and means whereby a reversal of said pulley on its shaft shifts the driving engagement of said belt with the fan shaft.

1,310,325. SPONGING MACHINE. BARRIETA CONTRAS, New York, N. Y. Filed Sept. 6, 1918. Serial No. 252,945. 8 Claims. (Cl. 26-7.)



1. In a spinging machine, the combination with primary and secondary steam rolls, of power means to control the operation thereof, said power means comprising a pair of parallel shafts, means to rotate the shafts at the same speed in opposite directions, gear connections between the respective rolls and said shafts, and means to selectively operate either of said gear connections from a selected shaft, said gear connections providing for rotation of one of the rolls at a higher speed than the other.

1,310,326. SHIP-PROTECTING DEVICE. FRANK D. DIBBLE, Muskogee, Okla. Filed May 2, 1917. Serial No. 165,975. 7 Claims. (Cl. 114-240.)



6. Apparatus for protecting a vessel from torpedoes and the like including means for creating a wall of rearwardly flowing liquid alongside the vessel.

1,310,327. VENTILATOR. LAWRENCE J. DUTTON, Pueblo, Colo. Filed Feb. 13, 1918. Serial No. 217,015. 1 Claim. (Cl. 129-163.)

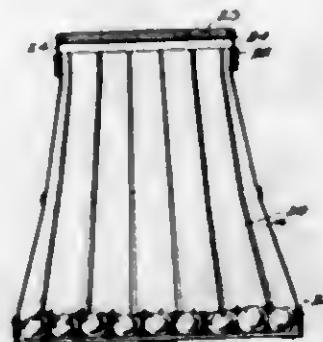
A ventilator for heating apparatus comprising a hollow frusto-conical member having an open bottom and

vertically extending rows of spaced openings therein, the openings being provided with beveled walls which gradually decrease the size of the openings from the inner to



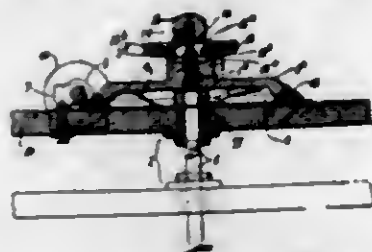
the outer peripheral wall of said member and crossed rods passing through certain of said openings and extending exteriorly of said member.

1,310,328. BASKET. JOHN F. EAST, Norfolk, Va. Filed Sept. 5, 1917. Serial No. 189,843. 1 Claim. (Cl. 217-122.)



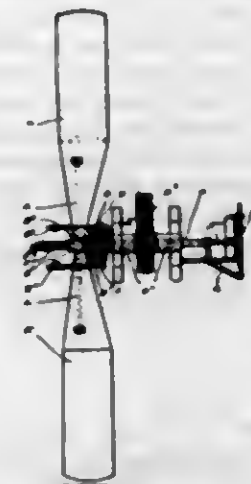
A splint basket adapted to be formed on a one-piece anvil having the usual open top and a cover therefor and having an open bottom end through which it is filled while in an inverted position, the ends of the splints at the bottom slightly outwardly flared, an exterior bottom hoop fitting the flared ends of the splints and with the bottom edge of which the splints are co-terminal to form a smooth flared mouth, said flare being slight enough to permit the temporary distortion of the splints and hoop to allow of the withdrawal of the anvil and a bottom piece flared complementarily to the bottom mouth to snugly fit thereto and lie substantially flush with the band and splint ends.

1,310,329. WORM-GEARING ADJUSTMENT APPLICABLE TO VARIABLE CONDENSERS FOR WIRELESS TELEGRAPHY AND TELEPHONY. WALTER H. EDWARDS, Woolwich, London, England, and ERNEST E. G. BOUTE, Havre, France. Filed Mar. 26, 1919. Serial No. 285,373. 5 Claims. (Cl. 74-36.)



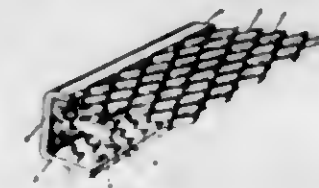
1. In apparatus of the character described, a main spindle adapted to be angularly adjusted, a member connected with the main spindle to turn it and having worm teeth, a drive spindle having a worm to normally engage the worm teeth, a handle connected with the main spindle to turn it and adapted to be shifted to one direction to effect the disengagement between the worm teeth and worm and subsequently turned to turn the main spindle, and means to hold the handle in the shifted position and permit of its turning movement.

1,310,330. PROPELLER PARTICULARLY FOR USE ON AEROPLANES AND OTHER AIRCRAFT. JAMES FARRIS, Surat, Queensland, Australia. Filed July 29, 1918. Serial No. 247,329. 5 Claims. (Cl. 170-163.)



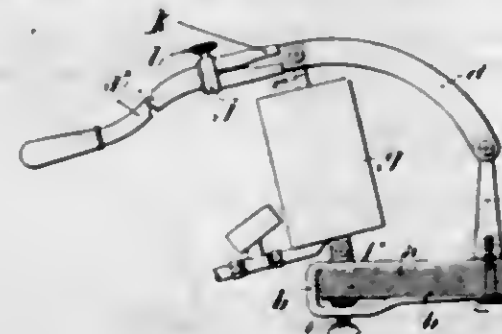
5. The combination with a stationary rod of a hollow shaft slidably mounted on said rod, a non-slidable hollow shaft mounted upon the slidable shaft, a cross-head fixed to the slidable shaft, a cross-head fixed to the non-slidable shaft, pivotally connected links carried by the cross-heads, blades pivotally mounted on the slidable shaft, links pivotally connecting the blades to the cross-head of the non-slidable shaft, a spring surrounding said rod and arranged between one end of the rod and the slidable shaft, and manually controlled means for moving the slidable shaft relative to the non-slidable shaft.

1,310,331. METALLIC EDGE-PROTECTOR AND THE LIKE. WILLIAM E. FICKLEN, Brooklyn, N. Y. Filed Nov. 27, 1912. Serial No. 733,860. Renewed Jan. 13, 1916. Serial No. 72,370. 14 Claims. (Cl. 72-96.)



1. A concrete protector and tread bent on a longitudinal line, one of the wings so formed being sheared into narrow vertical strips and expanded so as to form an open mesh adapted to form a part of the tread.

1,310,332. TIRE-PUMP FOR AUTOMOBILES. JOSEPH MARIE ETIENNE FRANCO, St. Vallier, France. Filed Feb. 10, 1918. Serial No. 217,640. 2 Claims. (Cl. 230-27.)



1. A tire pump for automobiles comprising a base plate adapted to be detachably attached to the running board of the vehicle; said base plate having a vertically disposed pillar on one end thereof and a substantially vertically disposed pump body pivotally mounted on said base plate adjacent but spaced from the pillar; a lever pivoted on said pillar and extending over and beyond the

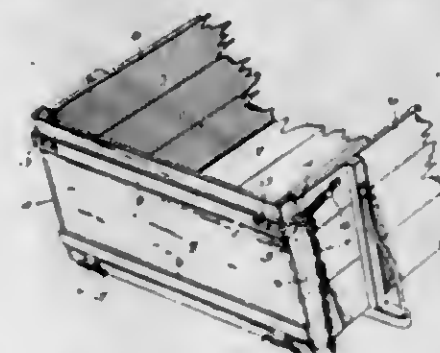
upper end of the pump body when the latter is in normal position; a pump pitman pivotally connected with said lever above the upper end of the pump body opposite the pivot, a screw connected with the plate adjacent the pillar to fasten the base plate on the support or running board, and means to prevent turning of the base plate when the pump lever is operated.

1,310,333. SAFETY-RAZOR. SAMUEL EARL GARD, Amlin, Ohio. Filed Aug. 29, 1918. Serial No. 251,975. 1 Claim. (Cl. 30-12.)



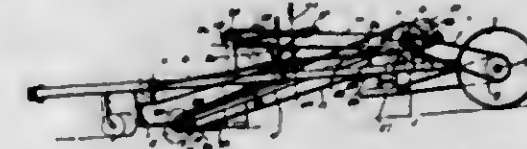
In a safety razor, the combination with a handle, a blade holder carried thereby and having a guard at its front, an upturned flange at its rear, and upturned sides, and a razor blade overlying said sides and guard; of a clamp comprising a jaw overlying the blade and legs projecting rearward therefrom and having intumed feet, pivots between said legs and the sides of the clamp, and a leaf spring secured at its center to said upturned flange and with its ends overlying said intumed feet, as described.

1,310,334. END-GATE FOR VEHICLE-BODIES. VINCENT H. GARDNER, Glendale, Ky. Filed Jan. 9, 1919. Serial No. 270,364. 2 Claims. (Cl. 21-21.)



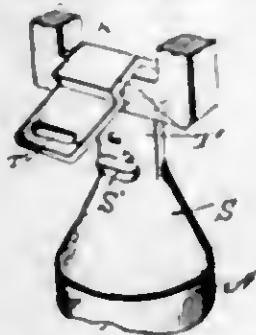
1. A device for holding the end gate of a vehicle body in a closed position, comprising a fastening element to be secured to the end gate, said fastening element being provided at its free end with a hook and rearwardly of the hook with a tightening shoulder, said tightening shoulder being spaced a substantial distance from the forward portion of the hook, said hook serving as guide means to cause a link of a chain arranged upon the hook to be passed upon the shoulder, and a chain connected with the body of the vehicle and adapted to receive in a selected link thereof the hook of the fastening element, said link adapted to be shifted upon the tightening shoulder to hold the end gate against movement.

1,310,335. BEET-HARVESTER. LOUIS A. GROJEAN, Camp Cody, N. Mex. Filed Aug. 20, 1918. Serial No. 251,471. 9 Claims. (Cl. 55-108.)



1. A beet harvester comprising a frame, a vertically adjustable plow supported by the frame, and a longitudinally adjustable gripping device disposed forwardly of the plow and adjustable toward and away from the said plow.

1,310,330. **TELESCOPING CLOTHES-PROP.** GEORGE SAMUEL HANKS, Atchison, Kans. Filed Nov. 16, 1918. Serial No. 262,875. 1 Claim. (Cl. 68—12.)



A prop for clothes lines having a tapering tip with an integral resilient strap extension, said strap having at points opposite angularly outlined portions and a transverse slot near the free end thereof, a button revolvably fastened to the strap at a location adjacent to its emergence into said tip and designed to engage said slot to hold said angular portions in gripping relation with a snap hook.

1,310,337. **APPARATUS FOR EXPOSING CINEMATOGRAPH POSITIVE FILMS.** CECIL MILTON HEPPWORTH, London, England. Filed June 5, 1918. Serial No. 238,373. 7 Claims. (Cl. 177—346.)



1. In apparatus for exposing cinematograph positive films, the combination of a rotatable electric circuit-selector to control the source of light for the exposure, means tending always to angularly advance the said selector, means operated by the movement of the negative film, to control the moment of advance of the selector, a stop to limit the angular movement of the selector, means for automatically advancing the said stop intermittently, and means for controlling the intermittent advance of said stop by the movement of the negative film, substantially as set forth.

1,310,338. **COMPRESSION STOP AND WASTE COCK.** OTTO G. HIRSCHECK, Erie, Pa., assignor to Hays Manufacturing Co., Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 1, 1918. Serial No. 214,841. 2 Claims. (Cl. 277—57.)



2. In a compression stop and waste cock, a casing formed with a transverse passage leading through the

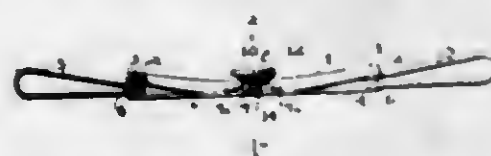
partition wall thereof, said passage comprising a smaller central bore communicating with the discharge side of said partition, and enlarged portions on each side of said bore internally screw-threaded, said smaller central portion at its ends forming valve seats, a screw plug adapted to be inserted in either of said screw-threaded portions so as to seat against and close its valve seat, and a waste tube also adapted to be inserted in either screw-threaded portion, said tube being closed at its inner end to close the valve seat of its threaded portion and being apertured in one side to provide communication between its interior and said transverse passage when its inner end is withdrawn from its valve seat.

1,310,339. **MOWER CUTTER-BAR.** CARRY B. HOLLOMON, Kenton, Tenn. Filed Apr. 4, 1916. Serial No. 88,853. 1 Claim. (Cl. 56—309.)



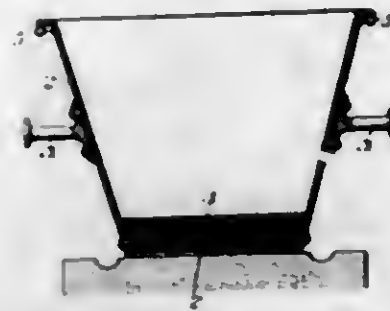
A cutter bar including a finger bar, a ledger bar, ledger plates carried by the ledger bar and having their rear ends terminating forwardly of the rear edge of the ledger bar, a sickle bar including teeth and upper and lower strips secured to the teeth at points spaced from their rear ends, said lower strips being mounted on the ledger bar and engaging the rear ends of said ledger plates, a shield secured to the finger bar and extending over said upper strip and said sickle teeth, and upper and lower wear plates secured to said finger bar, said lower plate having its forward edge portion disposed below and in engagement with the sickle teeth, said upper wear plate being disposed rearwardly of the teeth.

1,310,340. **ANIMAL-TRAP.** GRANT WELLINGTON HOWE, Hornepayne, Ontario, Canada. Filed May 24, 1919. Serial No. 299,545. 2 Claims. (Cl. 43—23.)



1. A spring support for the pans of steel animal traps, including a clamp formed with telescoping slides provided with jaws adapted to engage the edges of the pan, said clamp being adjusted to fit different sizes of pans, and a light spring carried by the clamp and interposed between the pan and the base of the trap.

1,310,341. **ELECTRIC FURNACE.** OTIS HUTCHINA, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Nov. 18, 1918. Serial No. 262,949. 3 Claims. (Cl. 204—64.)



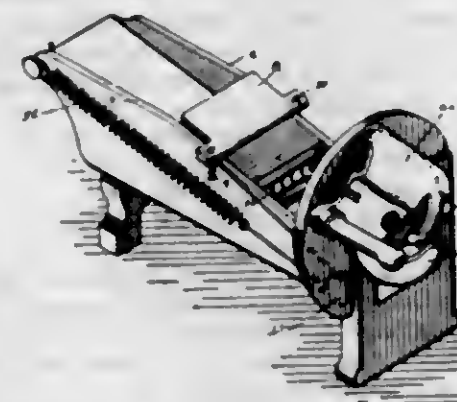
1. An electric pot furnace having a unitary base and sides and having a hearth which is smaller in area than

the top opening of the furnace, with means whereby water may be applied to and distributed over the outer surface of the furnace, substantially as described.

1,310,342. **PROCESS OF PURIFYING ALUMINOUS MATERIALS.** OTIS HUTCHINA, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Dec. 5, 1918. Serial No. 265,347. 3 Claims. (Cl. 204—63.)

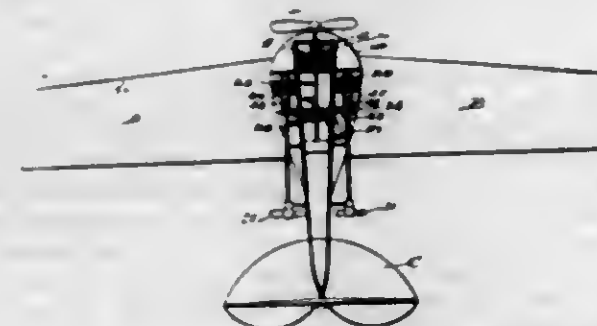
1. The process of purifying aluminous material, which consists in fusing the same in the presence of carbon in sufficient amount to reduce all the iron oxide, titanium oxide and silica contained therein, separating the aluminous product from the reduced impurities, and re-fusing said product in the presence of sufficient carbon to cause a further reduction of the iron oxide, titanium oxide and silica.

1,310,343. **MACHINE FOR CUTTING NOODLES.** ALPHONSE LITTA, Rochester, N. Y. Filed May 24, 1919. Serial No. 299,511. 2 Claims. (Cl. 107—20.)



1. In a machine for cutting noodles, the combination of an inclined trough, rollers mounted to rotate transversely in said trough, a feeding plate mounted to slide over said trough, a pair of guide pins projecting on either side of said feeding plate and straddling said trough, guide pins projecting down into said trough at the rear of said feed plate, teeth carried on said feed plate to engage the dough, and a rotary cutting knife mounted at the end of said trough.

1,310,344. **AEROPLANE.** HETSON A. JOHNSON, Brooklyn, N. Y. Filed July 27, 1917. Serial No. 183,109. 2 Claims. (Cl. 244—25.)

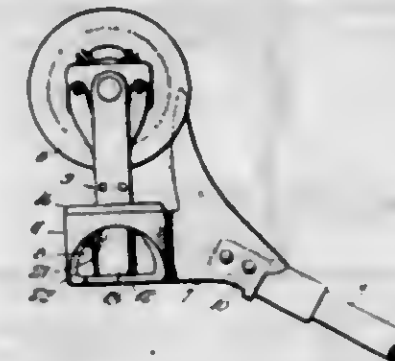


1. An aeroplane embodying a forward propeller, a starboard and a port propeller, each propeller being mounted on a shaft, a motor fixed to each shaft, means for disconnecting each motor from its propeller, and transmission mechanism whereby any propeller may be actuated from any motor.

1,310,345. **TROLLEY-SUPPORTING DEVICE.** CHARLES A. JONES, Hillaboro, N. H. Filed Apr. 7, 1919. Serial No. 288,108. 2 Claims. (Cl. 64—70.)

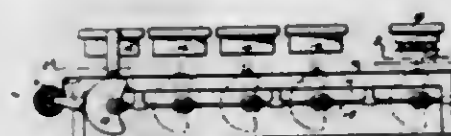
1. In a trolley supporting device, a trolley-harp comprising a base and a pivot extending down from the base,

a spring, and a trolley-head comprising a bottom, a bearing on and extending up from said bottom, a casing around said bearing, and a lug extending inward from the wall of said casing, said trolley-harp having its pivot seated in said bearing, said spring extending from



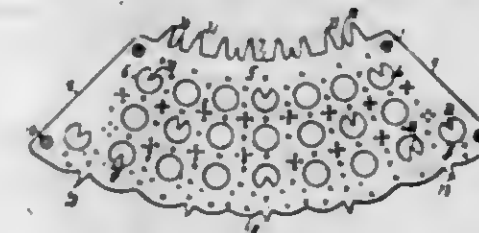
said bottom to said base and being connected thereto and effective to hold said trolley-harp in its normal position relative to the trolley-head, said lug being in position to limit the turning of the trolley-harp relative to the trolley-head.

1,310,346. **LINOLEUM-RUG MANUFACTURE.** WILLIAM JOULE KEARNEY, N. J., assignor to The Nairn Linoleum Company, Kearney, N. J., a Corporation of New Jersey. Filed Oct. 28, 1917. Serial No. 198,473. 2 Claims. (Cl. 101—198.)



1. In a linoleum printing machine, a series of intermittently operated printing blocks, a cutter block spaced therefrom longitudinally of the printing table, means for operating said cutter block simultaneously with the printing blocks, and arcuate knives on said block for slitting the web at the rug corners and leaving the separate printed rugs uncut between the points of slitting simultaneously with the printing of the web.

1,310,347. **LAMP-SHADE.** EDWARD KAPFOL, Brooklyn, N. Y. Filed Mar. 22, 1919. Serial No. 284,391. 4 Claims. (Cl. 240—109.)

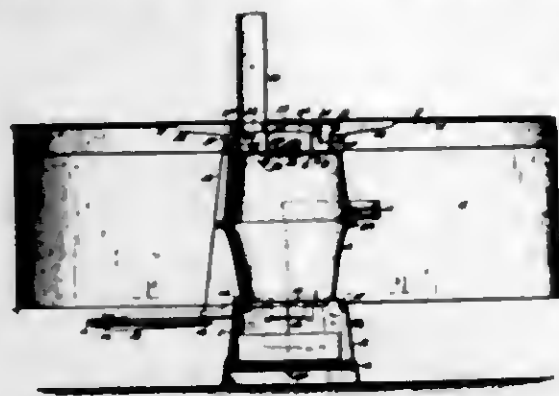


4. A lamp shade comprising a thin perforated metal blank, and prongs carried by the blank for securing a back.

1,310,348. **BROODER.** RUTGERS STAGO KASBON, Keeseville, N. Y. Filed Aug. 29, 1916. Serial No. 117,440. 8 Claims. (Cl. 237—3.)

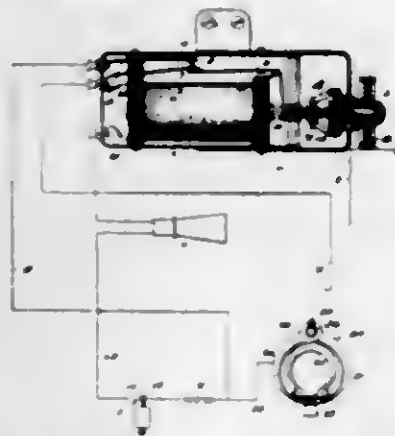
8. In a brooder, a stove body having a due at the top and a check draft in the due, a stove base having an ash door opening, and an ash door having no draft opening and forming when in place a complete closure of the said ash door opening, the said base having a constantly open, invariable, uncontrolled draft inlet independent of said ash door opening and of predetermined limited capacity; together with a thermostat controlling said check draft

without affecting the said draft inlet and without affecting communication between the stove and flue, said draft



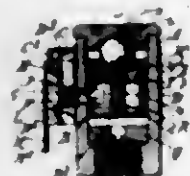
inlet being in free communication at all times with the interior of the boiler both when the check draft is open and when said draft is closed.

1,310,349. AUTOMOBILE OR TIRE THEFT ALARM. DANIEL THOMAS KEENAN and CATHERINE CELIA KEENAN, Philadelphia, Pa. Filed Nov. 22, 1917. Serial No. 203,343. 2 Claims. (Cl. 177-314.)



1. The herein described automatic actuating means for automobile theft alarm, the same comprising an electromagnet, a rigid member arranged in direct alignment with the axis of the magnet and slidable endwise toward the same, a lever pivoted adjacent to the magnet and having one arm thereof projecting into the space between the rigid member and the adjacent end of the magnet, a normally open switch one contact of which coöperates with the opposite end of the lever, said switch being electrically connected with the magnet, and means acting upon the rigid member to cause the endwise movement thereof toward the magnet and through the lever the closing of the switch when the automobile is moved.

1,310,350. FUSE FOR PROJECTILES. DAVID KENNEDY, South Norwood, London, England. Filed Oct. 31, 1918. Serial No. 260,393. 14 Claims. (Cl. 102-39.)



1. In retaining mechanism for the safety-member of a fuse, the combination with a support adapted to be mounted on the fuse, of a retaining plate which is mounted to rock about the support and is normally engaged thereby to retain the safety-member in its operative position, said plate being adapted to move under set-back clear of the part of the support normally engaging the same to become free to rock and thereby release the safety-member.

1,310,351. VISE. VICTOR R. KOONTZ, Waynesboro, Pa. Filed Feb. 6, 1918. Serial No. 215,644. 19 Claims. (Cl. 81-20.)



1. In a vise of the character set forth, the combination with jaw members relatively movable toward and from each other, of a beam between the members that permits their said relative movement, said members having sets of coating jaws on opposite sides of the beam, and a transverse pivotal connection between one member and the beam having its axis intersecting the main body of said beam and permitting the jaws of one set to relatively swing toward each other and of the other set to simultaneously swing away from each other.

2. In a vise of the character set forth, the combination with coating jaw members relatively movable toward and from each other, of means connecting the members for effecting said relative movement, said members having sets of coating jaws on opposite sides of the said means, and a transverse pivotal mounting for one jaw member having its axis intersecting the said means and permitting the jaws of one set to relatively swing toward each other and of the other set to simultaneously swing away from each other.

1,310,352. PACKING-CRATE. AUGUST W. KOOSA, Duluth, Minn. Filed May 31, 1918. Serial No. 237,355. 2 Claims. (Cl. 217-56.)

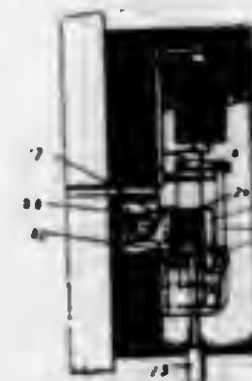


1. The combination with a crate having a cover of the character described including rigid means at one end for coöperative engagement with the crate when the cover is being used as a closure therefor and resilient means at the opposite end for like engagement with the crate, of means upon one end of the crate for engagement with the resilient means on the cover when the latter is placed on edge adjacent one side of the crate whereby storage space is provided for the reception of certain contents of the crate.

1,310,353. MAGNETIC STARTING-SWITCH. LOUIS KOVACH, Chicago, Ill., assignor of one-third to Charles Jasper, Chicago, Ill. Filed Sept. 10, 1917. Serial No. 190,463. 6 Claims. (Cl. 175-281.)

1. In combination, an electric switch, manually operable mechanical means for moving the switch from the first to the second of two normal positions, a latch for holding the switch in said second position, spring means for returning the switch to the first position, electrically controlled means for releasing the latch, and a casing housing

ing the aforesaid elements and exposing only a portion of the manually operable means so as to permit the manual actuating of the latter in one direction only, the



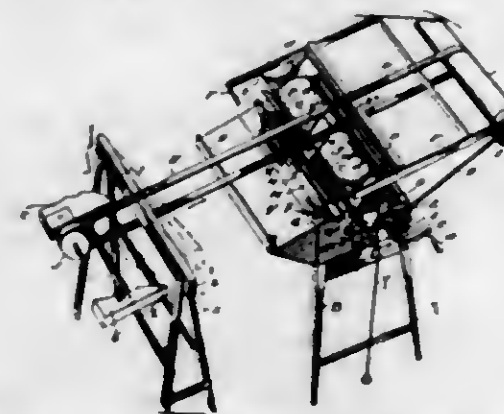
manually operable means including an element projecting beyond the surface of the casing only when the switch is in its first named position.

1,310,354. COMBINATION-SWITCH. LOUIS KOVACH, Chicago, Ill. Filed Jan. 21, 1918. Serial No. 212,930. 5 Claims. (Cl. 175-282.)



1. A secret switch including contact-making members rotatable about a common axis, and means for supporting and rotating the said contact members; said means comprising a pair of insulating washers each interlocked with one of the contact members, a spacer washer disposed between the aforesaid washers and serving to clamp the said contact members to the washers to which they are respectively interlocked, a tubular shaft having and angularly sectioned exterior interlocked with one of the first named washers, a second shaft extending through the tubular shaft and all three of the washers and having an angularly sectioned portion interlocked with the other of the first named washers; stationary contacts disposed for contacting respectively with the said contact members when the latter are in predetermined positions, and means connected respectively to the two shafts for indicating the positions of the said contact members.

1,310,355. WALL-PAPER-PASTING MACHINE. FREDERICK W. KRAFT, Berkeley, Calif. Filed July 19, 1915. Serial No. 40,784. 5 Claims. (Cl. 91-14.)



1. In an adhesive applying device, the combination with a container having an adhesive delivering roller

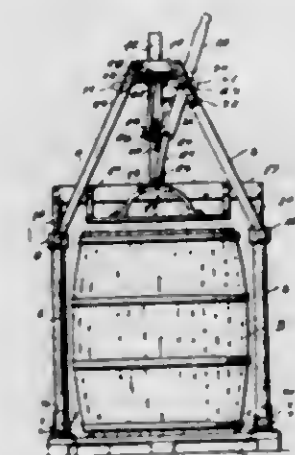
therein, of a frame hingedly mounted on said container, a second frame, a roll holder, a strip conveyer, and means for simultaneously imparting motion to said delivering roller and said conveyer to cause said strip to be drawn over said roller to receive an adhesive composition.

1,310,356. BASKET-HANDLE. ISADOR EARLE LOWENBERG, Converse, Ind. Filed Sept. 14, 1916. Serial No. 120,085. Renewed Apr. 7, 1919. Serial No. 288,220. 1 Claim. (Cl. 217-125.)



In combination with a basket, a handle attached to the rim thereof and consisting of a strap of flexible material bent into substantially U-shape to provide a grasping portion and two depending arms, said arms being passed downwardly between the rim hoops and provided with enlarged heads positioned below the latter, said heads being formed by bending said depending arms first outwardly and downwardly, then inwardly and upwardly to provide loops, and finally downwardly between the first mentioned downwardly and upwardly extending portions, the extremities of the last mentioned downwardly extending portions being spaced slightly above the interior sides of said loops, fillers extending through said heads being disposed in the spaces between the extremities of said arms and the interior sides of said loops, and stitching passing said heads.

1,310,357. BARREL-PRESS. EDGAR A. MCGILVER, Winchester, Va. Filed Sept. 4, 1918. Serial No. 252,597. 4 Claims. (Cl. 100-57.)



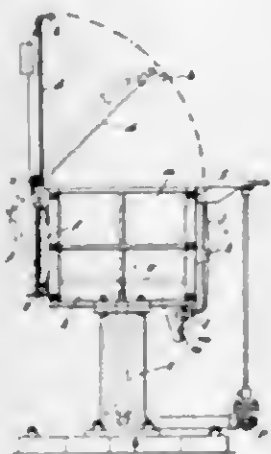
1. In a packing press, a supporting structure, standards pivotally secured adjacent their lower ends to said structure for rocking movement about a common axis extending transversely of said structure, said standards being of tubular construction, guide rods fitting snugly in said standards for vertical movement therein, a cross beam connecting the upper ends of said guide rods, a press head depending from said cross beam and rigidly secured thereto, and means carried by the standards and connected to said cross beam for exerting downward pressure upon the beam so as to force the press head into engagement with the head of a barrel placed beneath the same upon said supporting structure.

1,310,358. WOOD SANDAL. ROBERT JOSEPH MANDERFIELD, Hancock, Mich. Filed Dec. 13, 1918. Serial No. 266,608. 2 Claims. (Cl. 36-63.)



2. The combination of a single piece wood sandal, slip-page preventing metal plates attached to the bottom of the sole, moisture eliminating grooves on the upper surface of the sole, and means for securing the sandal to the foot of the wearer, substantially as set forth.

1,310,359. MACHINERY EMPLOYED IN THE MANUFACTURE OF CONCRETE AND THE LIKE WALL-BLOCKS. CHARLES JAMES MANNELL and ROBERT ROSE, Bournemouth, England. Filed Feb. 18, 1919. Serial No. 277,796. 4 Claims. (Cl. 25-84.)



1. In a mold, a movable bottom, a normally open hinged lid, a releasable latch for holding the lid closed, means for forcing the bottom upwardly, and means operable by a predetermined upward movement of the bottom to release the latch.

1,310,360. ABRASIVE WHEEL. HARRY C. MARTIN, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 27, 1918. Serial No. 251,646. 2 Claims. (Cl. 51-1.)

1. An abrasive wheel comprising abrasive particles united by a silicate binder to form a porous structure and having voids thereof filled with a synthetic material derived from the action of chlorine on naphthalene.

1,310,361. STATION-INDICATOR FOR RAILWAY-CARS. RAOU L. MAAS, Hawthorn, Melbourne, Victoria, Australia. Filed Apr. 11, 1917. Serial No. 161,332. 9 Claims. (Cl. 40-52.)

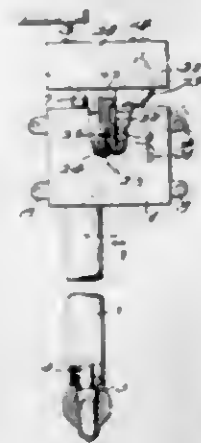
4. In indicating mechanism having electro-magnets, a rocking arm operated by said electro-magnets, and means for returning said arm to normal position; the combination of a member connected to the said arm, a driving wheel operated by said member, diverters arranged at

each side of said member whereby the rocking arm is returned to normal position independently of the driving



wheel, an indicator, and means for operating said indicator from the driving wheel.

1,310,362. AUTO-LOCK. WILLIAM C. MELTON, Sherman, Tex. Filed May 15, 1918. Serial No. 234,605. 1 Claim. (Cl. 251-6.)



A device of the kind set forth comprising a valve for insertion in the fuel supply pipe of an auto vehicle engine, an operating stem for said valve, a locking block having means for attachment to the front of the seat of an auto vehicle, the block having an aperture extending through from the top to the bottom near the edge in which aperture the stem loosely engages, an operating handle detachably secured to the upper end of the stem, a keeper designed for locking engagement with the block, the keeper having a recess to receive the said handle, and a centrally disposed bar on its lower surface and the block having an aperture therein to loosely receive said bar, a spring tending normally to raise the keeper from the block, and means to limit the said bar in its movement whereby the keeper is permitted to move a sufficient distance to effect its disengagement with the said operating handle.

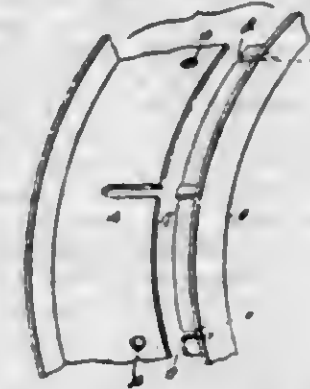
1,310,363. ALLOY. FOSTER MILLIKEN, Lawrence, N. Y. Filed Aug. 29, 1918. Serial No. 251,942. 1 Claim. (Cl. 75-1.)

An alloy formed from 56-64 per cent. copper, 13-17 per cent. nickel, 10-15 per cent. zinc, and 10-16 per cent. iron.

1,310,364. DEMOUNTABLE RIM FOR WHEELS. CHARLES DE CLINTON MOLL and GEORGE A. MOLL, Olathe, Kans. Filed June 18, 1918. Serial No. 240,599. 2 Claims. (Cl. 152-21.)

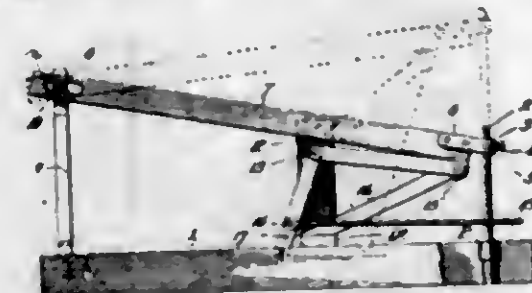
1. In a demountable rim for wheels, a wheel, a pneumatic tire casing, a ring encircled by and supporting the

casing and comprising a pair of members fitting telescopically together and provided in their overlapping portions with registering holes, one of the members having slots of less width than the diameter of the holes extending from said holes through one edge of said member,



rotatable bolts extending through the registering holes to secure the members together; said bolts being flattened so that when turned edgewise they can pass through said slots, and means for securing the casing-carrying ring upon the wheel.

1,310,365. PUMPING-JACK. BANTON MOORE, Cherryvale, Kans., and GARRETT O. STANBURY, Kansas City, Mo. Filed Apr. 14, 1919. Serial No. 289,998. 3 Claims. (Cl. 74-5.)



1. A pumping jack comprising a fulcrum, a lever beam slidably fulcrumed thereon and pivotally connected at its front end to the polish rod of an oil well pump, a lever fulcrumed below and at a point intermediate the length of said lever beam and having a rolling engagement with the underside of the latter, and means for rocking said lever to cause it on its upward movement to raise the lever beam and gradually shorten its leverage thereon during such movement.

1,310,366. NON-REFILLABLE BOTTLE. JAMES FRANCIS MORROW, Mount Vernon, N. Y. Filed Oct. 24, 1917. Serial No. 198,196. 1 Claim. (Cl. 215-69.)



In a bottle, the combination with a neck having a cylindrical mouth and a downwardly tapered interior sep-

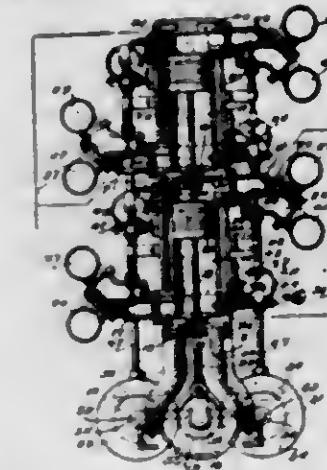
arated by a circumferential groove, of a ball playing loosely within the neck and adapted to fill the lower interior thereof, a plug having inwardly deflected perforations around its edges, a conical extension with a socket on its lower side and whose reduced base is within the perforations on that side of the plug and whose outer edge extends beyond the perforations, and a ring adapted to engage the plug and the dividing groove.

1,310,367. WINDOW-CLOSURE. JOSEPH F. O'BRIEN, New York, N. Y. Filed Apr. 11, 1919. Serial No. 289,215. 3 Claims. (Cl. 268-4.)



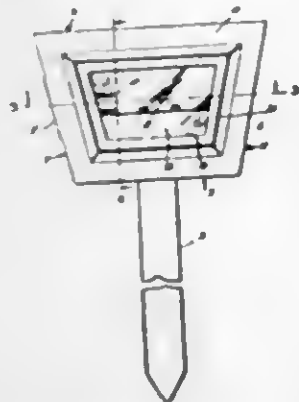
1. In a window closure the combination with a door of a vertical movable panel, a reciprocating element, means for connecting the reciprocating element with said panel including a receiver, a base secured to said receiver, said base having sliding engagement with said reciprocating element, a movable plate carried by said base for locking said base against movement with respect to said reciprocating element, means for retaining said movable plate in a locked position, and means for reciprocating said reciprocating element whereby said panel is moved.

1,310,368. INTERNAL-COMBUSTION ENGINE. EMMETT W. OVERSTREET, Murray, Utah. Filed Aug. 27, 1917. Serial No. 188,402. 7 Claims. (Cl. 123-57.)



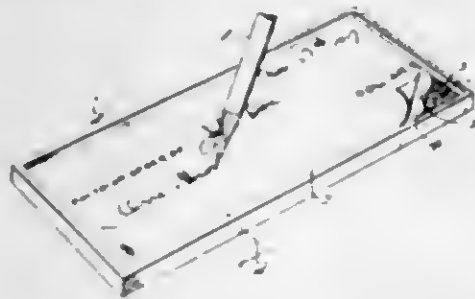
1. In an internal combustion engine, the combination of a pair of cylinders arranged in tandem, connected pistons therein, a laterally off-set head on the lower end of the lower cylinder, a detachable laterally off-set head closing the upper end of the upper cylinder, a connecting member arranged between the cylinders having a partition wall separating the same and provided with off-set heads at opposite sides of the partition wall communicating respectively with the lower end of the upper cylinder and the upper end of the lower cylinder.

1,310,369. MARKER. ROY C. PALMAS, Nevada, Mo. Filed Dec. 10, 1918. Serial No. 266,113. 1 Claim. (Cl. 40-10.)



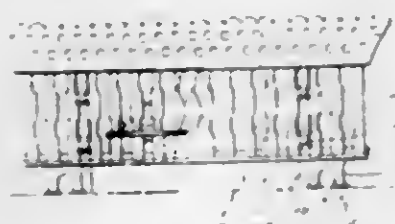
In a marker of the class described, a raising comprising a metallic sheet having its upper, lower and one side edge bent rearwardly and connected together to define grooves, said sheet having an enlarged central display opening and an outstruck portion surrounding said opening, a plate of similar contour as that of the sheet slidably fitted in said grooves from the remaining side of the sheet, and a bendable tongue carried by the latter mentioned side edge of the sheet and adapted to be arranged against the rear of said plate.

1,310,370. CHECK-PROTECTOR. LUKE W. PARRIS, Mountain View, Mo., assignor of one-half to M. L. Landrum, Mountain View, Mo. Filed Feb. 13, 1918. Serial No. 216,895. 1 Claim. (Cl. 282-28.)



A check protector comprising a work plate having one face formed with a plurality of serrations across each other at angles, and a marginal flange surrounding the plate and standing at right angles to the plane of the face of the plate, and an indelible carbon sheet resting upon the serrated face of the plate between the flanges thereof, whereby when a check is placed on the carbon and an inscription made thereon by a marking implement the teeth formed by the serrations will puncture the check and the carbon to reproduce on the back of the check a duplication of the characters inscribed on the face.

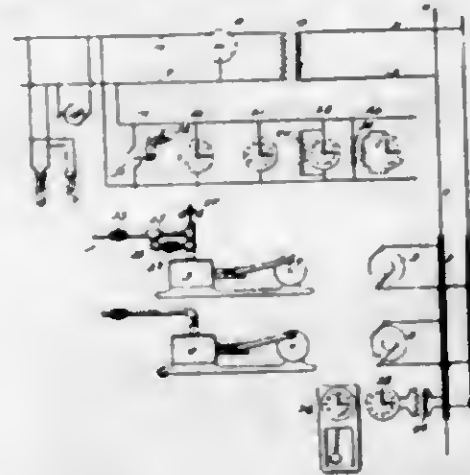
1,310,371. GRATE. WILLIAM ASCHER PRAXINA, Ridgeway, S. C. Filed Aug. 29, 1916. Serial No. 117,446. 1 Claim. (Cl. 120-164.)



The combination, in a device of the kind described, of a lattice-like frame composed of series of spaced parallel

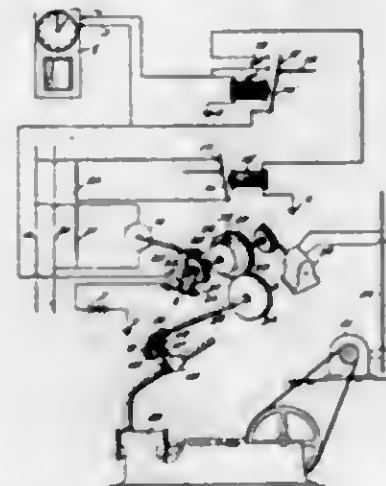
bars vertically disposed, the said bars being formed adjacent their upper and lower ends and in their edges with notches, so that the notches in adjacent bars are oppositely disposed with respect to each other, feet by means of which the lattice frame is supported, and a pair of fuel supports each of which consists of a horizontally disposed bar formed near one end with a depending leg and provided at the other end with a vertically disposed upright post, the vertical post and horizontally disposed bar of each fuel support being formed with a pair of locking heads adapted to pass through the spaces provided by the opposed notches in the bars of the lattice-like frame, the locking heads being formed on opposite sides with slots in which the facing edges of the bars of the lattice-like frame may engage, whereby the lattice-like frame may be supported in upstanding position and the fuel supports held in a position to retain fuel, as herein shown and specified.

1,310,372. ELECTRIC-CLOCK SYSTEM. ARTHUR F. POOLE, Chicago, Ill. Filed Sept. 12, 1914. Serial No. 861,360. 18 Claims. (Cl. 58-24.)



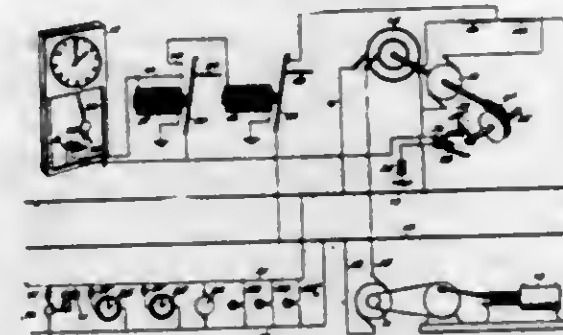
1. In a system of distribution, the combination with an alternating-current generator and translating device connected to the system, of a synchronous motor connected to the system, and clock hands connected to the motor to be continuously actuated thereby to indicate time, said generator being adapted to supply energy to the translating device and the motor clock.

1,310,373. ELECTRIC-CLOCK SYSTEM. ARTHUR F. POOLE, Chicago, Ill. Filed Feb. 15, 1915. Serial No. 8,196. 21 Claims. (Cl. 58-24.)



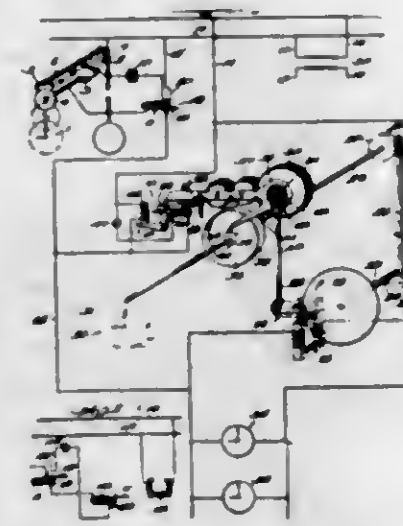
1. In an electric-clock system: a master clock; an alternating-current generator; means to send a series of currents periodically, said means being governed by said master clock; and means to synchronize said generator with said periodic currents.

1,310,374. ELECTRIC-CLOCK SYSTEM. ARTHUR F. POOLE, Chicago, Ill. Filed June 21, 1915. Serial No. 35,202. 14 Claims. (Cl. 58-24.)



1. In an electric clock system, the combination of a master clock, a pair of line conductors, means for impressing a uni-directional electromotive force thereon, means for impressing an alternating electromotive force simultaneously thereon, means for synchronizing said alternating electromotive force with said master clock and a secondary clock responsive to one of said currents but not responsive to the other.

1,310,375. CLOCK SYSTEM. ARTHUR F. POOLE, Chicago, Ill. Filed Oct. 24, 1917. Serial No. 108,332. 15 Claims. (Cl. 58-24.)



1. In a clock system, the combination of a master clock, a secondary clock, line wires connecting the two, a continuously running motor, means to close the circuit intermittently, and means in said secondary clock to bring said motor into synchronism with said intermittent currents.

1,310,376. WATERPROOF COMPOSITION AND PRODUCT AND THE LIKE AND PROCESS OF PRODUCING THE SAME. ARTHUR WILLIAM SCHROEDER, Madison, Wis. Filed May 6, 1918. Serial No. 232,921. 14 Claims. (Cl. 92-21.)

1. The method of making impregnated compositions and products, which comprises intimately incorporating fibrous materials and the residue remaining from the hydrolysis of wood with each other to form a composite product of improved absorptive properties, and subjecting the resulting product to an impregnating treatment.

1,310,377. POCKETED CARRIER. EUGENE A. STASON, Worcester, Mass., assignor, by mesne assignments, to Mills Woven Cartridge Belt Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 25, 1918. Serial No. 255,547. 2 Claims. (Cl. 224-23.)

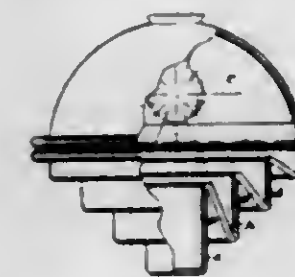
1. A woven pocketed carrier having woven upon the band or body-portion thereof one or more wide pockets of normal size, and one or more narrow vertically elon-

gated pockets corresponding vertically with the width of the said portion, adapted to contain the lower portion of a pistol magazine, and provided with a cover-flap for



the said pocket or pockets made with a long shank-portion equaling in length the exposed upper portion of the length of the said magazine.

1,310,378. LAMP-SHADE. ERNEST HUGO STRAUSS, Chicago, Ill. Filed Dec. 1, 1916. Serial No. 134,224. 2 Claims. (Cl. 240-98.)



1. A lamp-shade including a source of light, and comprising a reflector for reflecting and projecting all rays of said light impinging thereon in the general direction desired, and a diffuser for breaking up and scattering all direct rays of said light projected in the same direction and impinging thereon, the said diffuser being corrugated and having the sides of the corrugations facing the source of said light frosted or mat and approximately perpendicular to the general plane of the diffuser, while the sides of the corrugations facing the reflector are transparent or clear and so pitched that only reflected rays will impinge thereon.

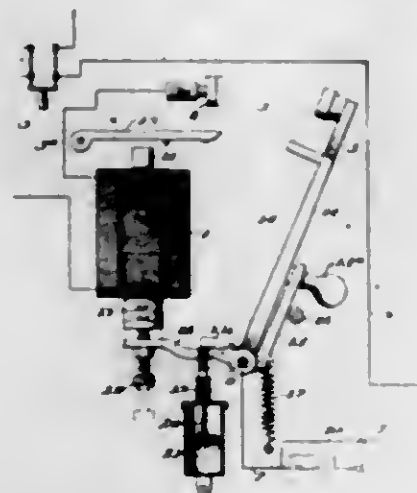
1,310,379. DEVICE FOR TURNING TRAYS. SAMUEL L. WALKER, Corcoran, Calif. Filed Mar. 13, 1910. Serial No. 282,318. 4 Claims. (Cl. 34-17.)



1. In a device of the character described, the combination of a frame having two depending supports a spaced distance apart, and a clamp consisting of duplicate jaws, one of which is pivoted near the end of each of said supports, each jaw consisting of a supporting

back with opposite ends bent to form a triangle, the apexes of the triangles being a spaced distance apart, substantially as described.

1,310,380. MULTIVALUE OVERLOAD-SWITCH. GEORGE HERBERT WHITTINGHAM, Bancroft Park, Md., assignor to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Filed June 17, 1918. Serial No. 240,342. 4 Claims. (Cl. 175-268.)



2. In a multi-value overload switch, a switch arm normally in open position, a latch for holding said arm in closed position, a solenoid for tripping said latch and comprising core and coil members, a support normally holding one of said members in a predetermined relation to the other member, a manually operable member adapted to move the switch arm to closed position and said support from normal position, said arm, support and manually operable member being independently movable to their normal positions, and means for retarding the movement of said support to its normal position.

1,310,381. UTILIZATION OF TIN-SCRAP. DANIEL A. WILCOX and STUNKY H. WILCOX, Garden City, N. Y. Filed Oct. 26, 1914. Serial No. 868,759. Renewed Dec. 2, 1918. Serial No. 265,055. 10 Claims. (Cl. 204-15.)

1. The method of utilizing tin scrap, which comprises subjecting the scrap to the action of chlorine at temperatures appropriate to the free conversion of the tin and iron into chlorides of those metals, and thereafter separating the resulting chlorides from each other, substantially as described.

2. The method of utilizing tin scrap, which comprises subjecting the scrap to the action of chlorine at temperatures appropriate to the free conversion of the tin and iron into chlorides of those metals, removing the chlorides thus formed by volatilization, and thereafter separating the chlorides from each other, substantially as described.

3. The method of utilizing tin scrap, which comprises subjecting the scrap to the action of chlorine at temperatures appropriate to the free conversion of the tin and iron into chlorides and to the volatilization of the tin and iron chlorides thus produced, and thereafter separating the volatilized chlorides, substantially as described.

4. The method of utilizing tin scrap, which comprises subjecting the scrap to the action of chlorine at temperatures appropriate to the free conversion of the tin and iron into chlorides of those metals, removing the chlorides thus formed by volatilization, and thereafter separating the chlorides from each other by fractional condensation, substantially as described.

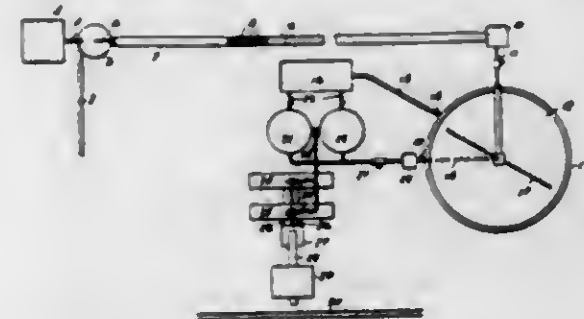
5. The method of utilizing tin scrap, which comprises subjecting the scrap to the action of chlorine at temperatures appropriate to the free conversion of the tin and iron into chlorides of those metals, recovering a major portion of the chlorine from the resulting chlorides in a

form suitable for re-use, and re-using the chlorine thus recovered in the conversion into tin and iron chlorides of a further quantity of tin scrap, substantially as described.

1,310,382. METHOD OF TREATING MINE-WATER. ELGIE C. AULD and JAMES R. CAMPBELL, Scottsdale, Pa. Filed May 8, 1910. Serial No. 96,232. 5 Claims. (Cl. 23-13.)

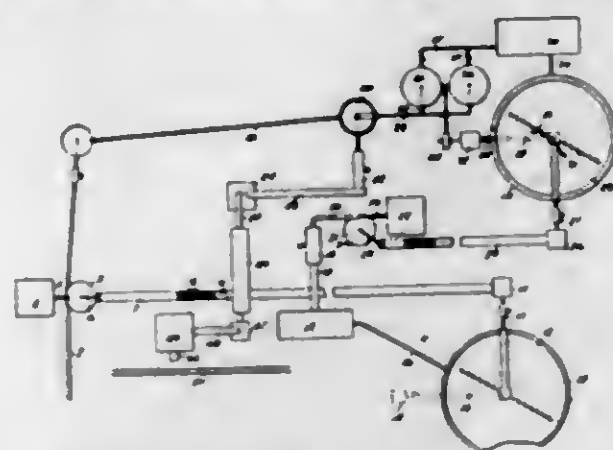
2. In the treatment of acid mine water, the steps consisting in mixing finely divided calcareous material with the water to thereby neutralize the water, adding an excess of calcareous material to precipitate calcium sulfate, then agitating and aerating the treated water to promote precipitation, then precipitating the sludge and separating the precipitate from the body of the water, and then drying the precipitated sludge.

1,310,383. PROCESS FOR TREATING ACID MINE-WATER. ELGIE C. AULD and JAMES R. CAMPBELL, Scottsdale, Pa. Filed May 8, 1916. Serial No. 96,230. Renewed Aug. 21, 1918. Serial No. 250,894. 4 Claims. (Cl. 23-13.)



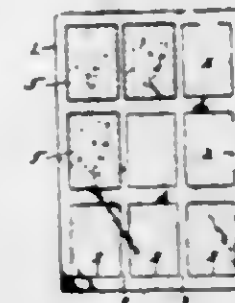
3. The process of treating acid mine water and recovering by-products therefrom, which consists in mixing powdered calcareous material with the water to neutralize the same, then precipitating the sludge in the neutralized water and drying the sludge, and varying the quantity of calcareous material used in neutralizing the water to suit the degree of acidity of the water to thereby prevent the addition of an excess thereof and resulting precipitation of calcium sulfate with the iron salts.

1,310,384. METHOD OF TREATING AND RECOVERING BY-PRODUCTS FROM ACID MINE-WATER. ELGIE C. AULD and JAMES R. CAMPBELL, Scottsdale, Pa. Filed May 8, 1916. Serial No. 96,231. Renewed Apr. 16, 1919. Serial No. 290,606. 6 Claims. (Cl. 23-13.)



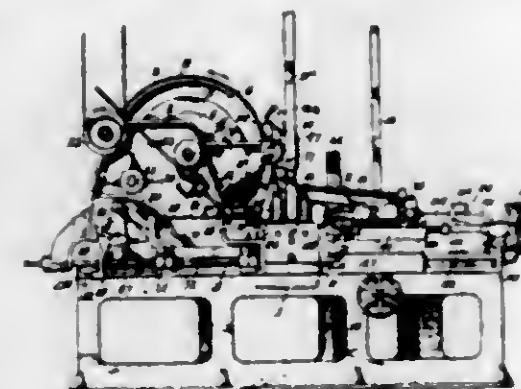
5. The method of treating acid mine-water which consists in neutralizing the mine-water, precipitating and separating the resulting sludge from the body of neutralized water, softening the separated water by additions of barium carbonate and thereby forming a second precipitate, separating the precipitate from the body of softened water and drying the precipitate.

1,310,385. METHOD OF PRODUCING PHOTO-ENGRAVINGS. GILBERT A. BETTA, Topeka, Kans. Filed Mar. 10, 1919. Serial No. 281,730. 3 Claims. (Cl. 95-5.7.)



1. The method of producing photoengravings, comprising marking a negative support with longitudinally and transversely aligned rows of rectangular figures of an area corresponding to the printing face of the completed engravings, then securing upon said support over said figures, photographic negatives which are oversize with respect to and overlap the said figures, then placing the flat thus produced with the faces of the negatives in contact with a sensitized metal plate and printing and etching of the same in the usual manner, and then producing beveled edges along the margins of the etchings.

1,310,386. ARTICLE-GROUNDING MACHINE. WILLIAM EMUL BOCK, Toledo, Ohio, assignor to The Bock Bearing Company, (Incorporated in Ohio in March, 1916.) Continuation of application Serial No. 64,447, filed Dec. 1, 1915. This application filed Mar. 19, 1917. Serial No. 155,959. 152 Claims. (Cl. 51-4.)



1. In a machine of the class described, a magazine having a passage therethrough for containing a plurality of articles and through which the articles are intended to feed by gravity, a pair of plungers carried for reciprocatory movements by said magazine and having stop fingers rigidly projecting therefrom into passage obstructing position and in spaced relation longitudinally of the passage, said fingers being relatively adjustable to vary their spacing, means operable to move said plungers in position for their fingers to stand in article obstructing position and means operable to successively and at predetermined intervals independently move said plungers to retract their fingers from article obstructing position, the plunger having the lowermost finger being first in order to be moved and being returned to article obstructing position before the article releasing movement of the other plunger.

1,310,387. HEADLIGHT-LAMP-ACTUATING MECHANISM. JOSEPH C. BONTRAGES, Wenatchee, Wash. Filed Mar. 17, 1919. Serial No. 283,071. 2 Claims. (Cl. 240-62.)

1. The combination with a motor vehicle having a transverse steering rod connecting the front wheels thereof and arranged parallel with and adjacent to the front axle, of curved members rigidly secured to said steering

rod and extending underneath said axle, a transverse bar supported by said curved members in front of said axle, headlight lamps, a shank rigid with each lamp and having a longitudinal socket, means supporting said shanks



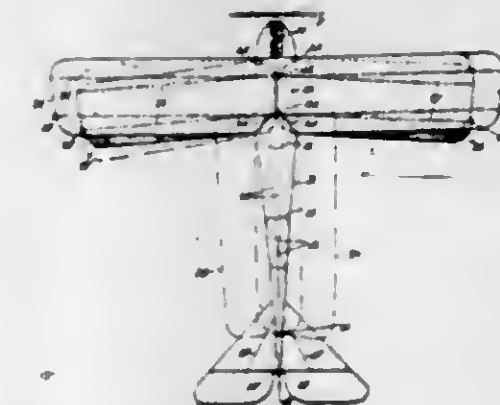
for rotation, a turning member movable lengthwise in the socket in each shank and arranged to turn the shank and a crank arm on the lower end of said turning member said crank arm being pivotally secured to said transverse bar.

1,310,388. GAGE. EARL S. BOYNTON, East Orange, N. J., and ABRAHAM SCHLACHAT, Brooklyn, N. Y., assignors to Slocum, Avram & Slocum Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed May 11, 1917. Serial No. 167,013. 2 Claims. (Cl. 33-163.)



1. A gage, comprising a stock, an anvil therein, an axially movable measuring plug in said stock recessed in one end, a screw-plug in said stock having a reduced and grooved end adapted to enter the recess in said measuring plug, and a washer adapted removably to engage said measuring plug and the groove in said screw-plug to retain the two together but permitting relative rotary motion.

1,310,389. AEROPLANE. FRANK A. CERRUTI, New York, N. Y. Filed May 17, 1917. Serial No. 169,177. 37 Claims. (Cl. 244-29.)

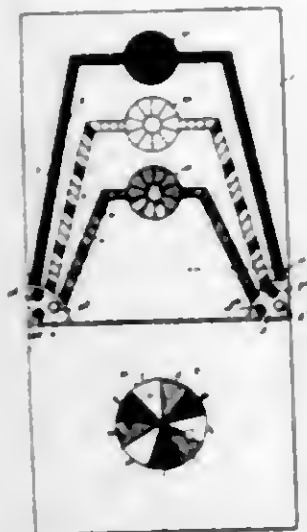


1. In an aeroplane the combination of a fuselage; superposed supporting planes; and means to secure the planes to the fuselage to extend laterally therefrom and adapted to be swung backward independently of each other to extend longitudinally of the fuselage in overlapped relation, substantially as and for the purpose specified.

12. In an aeroplane, the combination with a fuselage, of superposed planes to extend laterally from the fuselage; means to support the lower planes from the fuselage

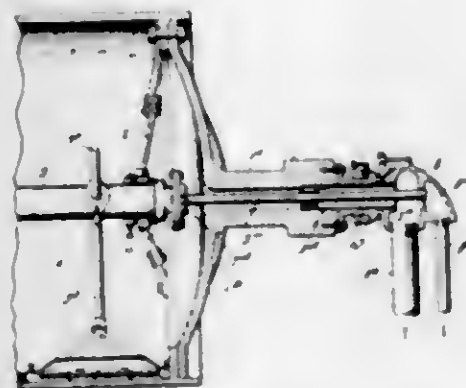
to move the lateral end of either of said planes forward and simultaneously move the lateral end of the other lower plane backward to increase and decrease the lifting efficiency at opposite sides of the aeroplane; and means to move the lower planes backward and forward for the purpose specified.

1,310,390. GAME. LESTER P. CLARK, FENWOOD, N. J., assignor of one-half to Anthony L. Stebor, Jr., Plainfield, N. J. Filed Dec. 2, 1918. Serial No. 265,019. 3 Claims. (Cl. 49—63.)



1. A game comprising a board having two homes, a plurality of paths each ending in the two homes and each having a different circular central path; movable pieces adapted to move over said paths and a chance device for controlling the movement of said pieces.

1,310,391. COUPLING FOR DRAIN-PIPES OF STEAM-HEATED DRYING CYLINDERS. OTIS W. DODGE, New York, N. Y., Charles W. Stevens, administrator of said Otis W. Dodge, deceased, assignor to Walter H. Howes Co., Port Chester, N. Y., a Corporation of New Jersey. Filed June 28, 1916. Serial No. 106,388. 10 Claims. (Cl. 285—22.)

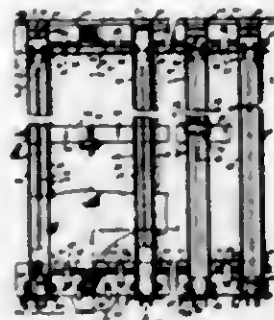


1. In combination with a drying cylinder having internal draining means, a discharge pipe extending outside the cylinder, and a compensating ball and socket connection within the cylinder between the internal draining means and the inner end of the discharge pipe.

1,310,392. EMBROIDERY FRAME. THEODORE D. EISEN, Woodhaven, N. Y., assignor to Martin Adolf Eisen, Woodhaven, Long Island, N. Y. Filed Apr. 7, 1917. Serial No. 160,378. 7 Claims. (Cl. 45—24.)

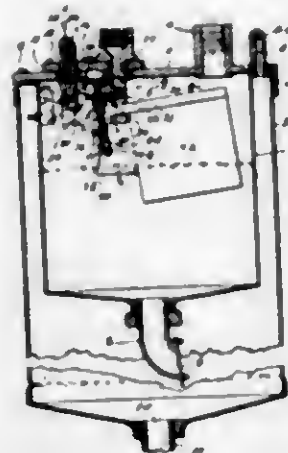
1. A frame for holding materials to be embroidered, comprising a pair of spaced longitudinal rails, channel bars permanently secured between the ends of said rails forming a permanent rectangular frame, a plurality of spaced channel bar receiving means on said rails intermediate said permanent channel bars, removable and temporary channel bars adapted to be placed to selectively

spaced relation between said permanently secured channel bars and adapted to be held in said receiving means



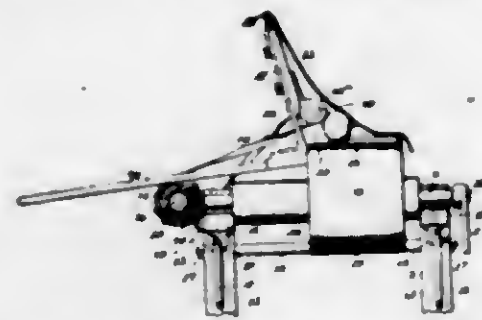
to form between said end channel bars rectangular spaces of variable width, and means for securing material to be embroidered within said channel bars.

1,310,393. VACUUM FEED MECHANISM. FLOYD GAWICK, Chicago, Ill. Filed Feb. 1, 1919. Serial No. 274,544. 5 Claims. (Cl. 158—36.)



1. A vacuum feed mechanism for internal combustion engines, comprising, in combination a vacuum tank, an engine, a fuel supply tank, said engine and fuel supply tank being below the level of said vacuum tank, an auxiliary container, disposed to receive liquid by gravity from said vacuum tank, vacuum controlled means for opening and closing a passage between them, a carburetor in communication with the intake manifold of the engine, a conduit for delivering fuel from said container to said carburetor, a vacuum passage leading from said vacuum tank to the intake manifold of said engine, an equalizing passage leading from said tank to the atmosphere, said passage having oppositely disposed valve-seats, a duplex valve adapted to close one and open the other of said passages, a lever for actuating said valve, an oscillatory reversing cam for shifting the position of said lever, and a float in said vacuum chamber for actuating said reversing cam.

1,310,394. FRUIT-GRADER. BEAT L. GIFFORD and EDGAR B. GIFFORD, Barker, N. Y., assignors to Gifford Manufacturing Company, Incorporated, Barker, N. Y., a Corporation of New York. Filed Apr. 20, 1917. Serial No. 163,433. 10 Claims. (Cl. 130—32.)



1. A fruit grader comprising a travelling carrier inclined laterally, means arranged at one side of said carrier

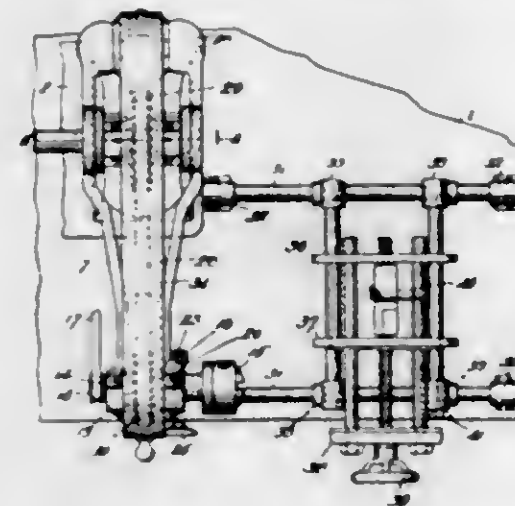
to which it is inclined providing passages of different sizes to permit fruit of different sizes to be delivered therethrough while caused to travel forwardly by said carrier, and means independent of said travelling carrier for keeping the fruit in contact with the means providing said passages.

1,310,395. SIX-WHEELED MOTOR-VEHICLE. CLAUDE FRANÇOIS GAOS, Puteaux, France. Filed Nov. 4, 1918. Serial No. 261,089. 3 Claims. (Cl. 21—191.)



1. A bogie chassis with balanced suspension for six wheel motor vehicles, characterized by the combination with a vehicle chassis, of a bogie truck arranged at the rear and underneath the same, plate springs interposed between the bogie and the chassis, inverted springs connected, one to the front axle of the chassis and the other to the front axle of a bogie, pins secured to the chassis and supporting the inverted springs, means for interconnecting the said inverted springs, and traction plates connecting the front axle to the front arms of the longitudinal members of the chassis, substantially as described and for the purpose set forth.

1,310,396. HOLDING AND DRIVING DEVICE FOR TESTING PURPOSES. BUTLER J. HASKINS, Kansas City, Mo., assignor to E. S. Cowie Electric Co., Kansas City, Mo., a Corporation of Missouri. Filed Apr. 17, 1919. Serial No. 290,750. 3 Claims. (Cl. 73—51.)

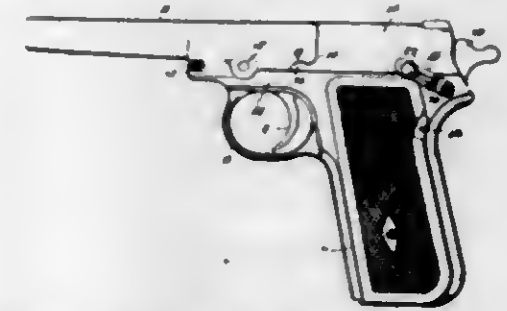


1. In holding and driving devices for testing automotive equipment, the combination of a swinging arm, a shaft journaled therein and provided at one end with a chuck, and yielding means for holding said arm against unlimited swinging movement, with a device embodying means for holding equipment to be tested, adapted for adjustment toward the said chuck and free to vibrate radially of the axis of said chuck.

1,310,397. FIREARM. CHARLES J. JOLIDON, Hartford, Conn. Filed July 9, 1914. Serial No. 840,965. 12 Claims. (Cl. 42—3.)

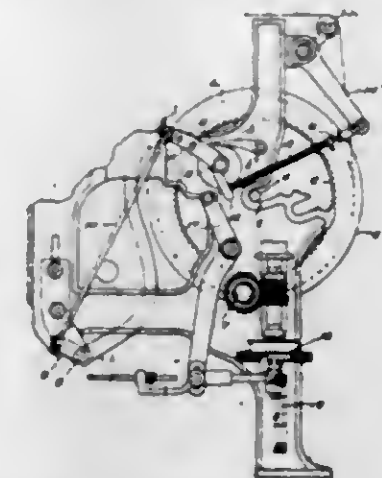
11. A firearm comprising a supporting frame, a firing case mounted on the supporting frame longitudinally slidable thereon and provided with a locking abutment transverse to its sliding action, a barrel mounted on the support movable transversely of the case and provided with a locking abutment engageable by such transverse action with the locking abutment of the case to lock the

parts in firing engagement, a hammer mounted on the frame movable in the plane of and by engagement with



the case, and an operating spring for actuating the hammer acting between the hammer and the case and compressible by the separating movement of the parts.

1,310,398. LET-OFF MECHANISM FOR LOOMS. ALBERT LAVIGNE, Brunswick, Me., assignor to The Stafford Company, Readville, Boston, Mass., a Corporation of New Jersey. Filed Aug. 21, 1916. Serial No. 115,943. 2 Claims. (Cl. 139—59.)



2. In a let-off mechanism for looms, the combination with a presser or follower making contact with the surface of the wound supply of warp-threads upon the warp-beam, a spring abutment connected with said presser or follower, and the whip-roll actuating spring acting through said abutment to press the presser or follower toward the axis of the warp-beam, of a dog or detent adapted to cooperate with said spring-abutment to detain the presser or follower in a stationary position.

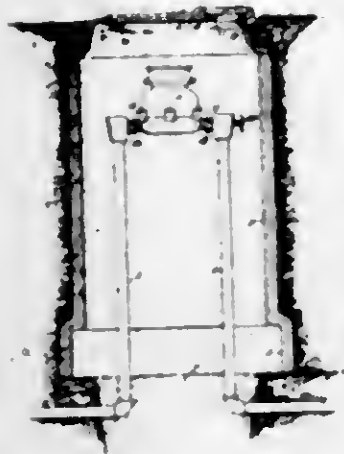
1,310,399. PARASOL. JOSEPH LEVIN, Baltimore, Md., assignor to Polan Katz & Co., Baltimore, Md., a firm composed of Jesse N. Polan, Charles Katz, and William L. Fox. Filed Sept. 20, 1917. Serial No. 192,250. 8 Claims. (Cl. 135—33.)



2. In a parasol, the combination with a rod having a movable handle, of ribs radiating from the rod; a cover; a bar extending crosswise of the end of the rod at the outer side of the cover; a band extending diametrically across the outer side of the cover and sustained at the center of the parasol by said bar,—said band having its

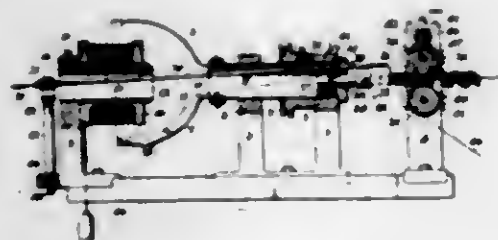
end secured adjacent to the diametrically-opposite edges of the cover, and means secured to the band-ends for carrying the same and the parasol when the latter is collapsed.

1,310,400. METER YOKE AND BOX. LEWIS MCNUTT, Brazil, Ind. Filed June 18, 1918. Serial No. 240,657. 3 Claims. (Cl. 285—3.)



3. In combination with a water meter, a pair of elbows each adapted to be connected to a corresponding lead or riser, each of said elbows having a supporting lip adapted to form the bearing for the tubular extension of the water meter, each of said elbows having a gasket seal in the rear of the lip, a cross-shaped yoke having sockets at the ends open at one side of the yoke, each of said sockets being adapted to receive an elbow, and a screw associated with one of the sockets for engaging the elbow therein whereby the two elbows may be drawn together to clamp the water meter between the elbows.

1,310,401. MACHINE FOR MAKING ORNAMENTAL ROPE OR CORD. FRANKLIN W. ORHULA, Philadelphia, Pa. Substitute renewal for application Serial No. 65,639, renewed Dec. 7, 1915. This application filed July 20, 1918. Serial No. 245,907. 8 Claims. (Cl. 139—40.)

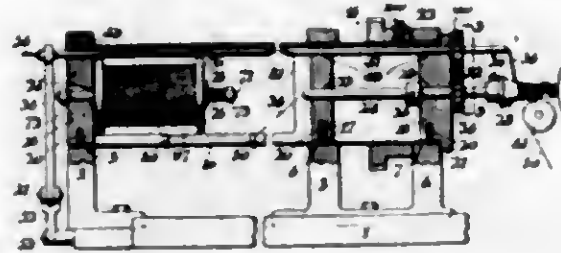


5. In a machine for making ornamental rope or cord, the combination of a revoluble member, a former supported thereon and in axial alignment therewith, means independent of the said revoluble member for holding the said former against rotation, and a thread or strand guiding member also supported upon the said revoluble member and being in operative relation to said former.

1,310,402. MACHINE FOR MAKING ORNAMENTAL ROPE OR CORD. FRANKLIN W. ORHULA, Philadelphia, Pa. Substitute renewal for application Serial No. 65,640, renewed Dec. 7, 1915. This application filed July 20, 1918. Serial No. 245,908. 11 Claims. (Cl. 139—40.)

1. In a machine for making ornamental rope or cord, the combination of means for supporting inner and outer

binding threads in operative relation to each other, revoluble means for colling loops of thread around said inner binding thread, the thread for forming the said loops being supported and guided by said revoluble means, a carrier for said inner binding thread which carrier is



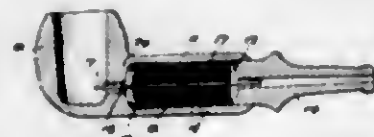
of less diameter than the cylinder of revolution of the thread of which the said loops are formed and which carrier is situated inside of such cylinder of revolution whereby the said thread for forming the loops is revolved around said carrier.

1,310,403. PIE-CARRIER. SIMON HURD, Fort Worth, Tex. Filed June 5, 1917. Serial No. 172,864. 7 Claims. (Cl. 229—6.)



1. An individual pie carrier comprising two members having perforations therethrough and one member surrounding the other and adjustable thereon for adapting the carrier to pies of different thickness.

1,310,404. SMOKING PIPE. JAMES A. IRYING, New York, N. Y. Filed Oct. 10, 1916. Serial No. 125,880. Renewed May 23, 1919. Serial No. 209,335. 1 Claim. (Cl. 131—12.)



In a smoking pipe having a bowl member with a chambered outlet for smoke, a percolator removably disposed in the chamber, composed of a block of the stem of a plant having spaced small ducts therethrough, said block being arranged whereby smoke when drawn from the bowl will pass through the ducts, and the block having a passage therethrough, a rod in the passage, and an apertured plate on the rod disposed in the chamber between the percolator and the bowl member.

1,310,405. POUR-OUT FOR BOTTLES. WILLIAM DARRMAN, New York, N. Y., assignor to S. S. Stafford, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 29, 1913. Serial No. 803,704. Renewed Feb. 24, 1919. Serial No. 278,931. 7 Claims. (Cl. 215—57.)

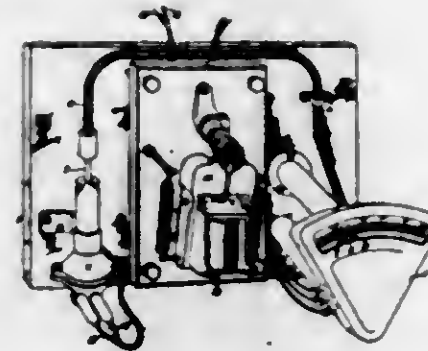


1. A pour-out for bottles comprising relatively rotatable lower and upper members having corresponding passages in a plane lateral to the axis of relative rotation, the

upper member having a discharge spout leading from its passage, and a ring secured to the bottle, directly engaging each of said members and holding the lower member rigid and confining the upper member in rotative relation to the lower member.

REISSUES.

14,685. TEMPERATURE-CONTROL SYSTEM. FRANK AHLBORG, San Francisco, Calif., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1919. Serial No. 281,204. Original No. 1,250,909, dated Feb. 19, 1918. Serial No. 59,581, filed Nov. 4, 1915. 8 Claims. (Cl. 219—20.)

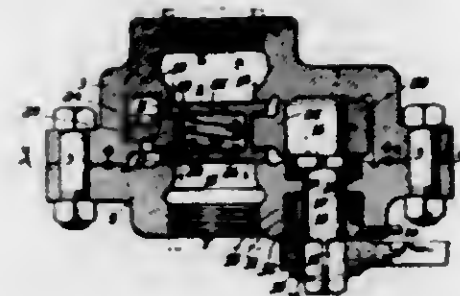


1. In a temperature control system, an electric heating element, a circuit connected to said element, a master heating element in said circuit out of thermal communication with said electric heating element, and means thrown into operation by variations in temperature of the master element for opening and closing said circuit.

14,686. FERTILIZER COMPOSITION AND PROCESS OF MAKING SAME. GEORGE H. EARP-THOMAS, Richmond, Va. Filed Apr. 4, 1917. Serial No. 159,759. Original No. 1,212,196, dated Jan. 10, 1917. Serial No. 871,291, filed Nov. 10, 1914. Renewed Oct. 28, 1916. Serial No. 128,315. 17 Claims. (Cl. 71—10.)

7. The process of treating mineral matter containing fertilizing values for the production of fertilizer material which comprises subjecting such mineral matter to the action of selected nitro-bacteria, beneficial to soil.

14,687. VALVE. RUDOLPH M. HUNTER, Philadelphia, Pa., assignor, by mesne assignments, to Everlasting Valve Co., a Corporation of New Jersey. Filed June 4, 1918. Serial No. 238,220. Original No. 1,189,950, dated July 4, 1916. Serial No. 866,921, filed Oct. 16, 1914. 10 Claims. (Cl. 251—18.)



4. In a valve, the combination of a body casing having an internal chamber formed with inlet and outlet ports, means to control the outlet port spring pressed thereon, a spindle extending through the casing and pro-

vided with a lateral arm for actuating said means said spindle restricted to rotate in a limited arc less than half a circle having an annular collar for making a tight joint on the inside of a casing, an arm secured to the outer end of the spindle for rotating it, a bushing surrounding the spindle and guided in an aperture in the outer surface of the casing, and a spring arranged in the said aperture and extending around the spindle for forcing the bushing outwardly to impart an outward spring action to the spindle for holding its collar tightly upon its seat.

14,688. DISPENSING-BOTTLE. LEAMAN A. MAIDEN, Duquellon, Fla. Filed Mar. 15, 1919. Serial No. 282,995. Original No. 1,289,218, dated Dec. 31, 1918. Serial No. 123,562, filed Oct. 3, 1916. Renewed May 15, 1918. Serial No. 234,754. 6 Claims. (Cl. 215—1.)



1. A container having an outwardly opening receiver extending therein, a detachable closure for said receiver, a receptacle adapted to be disposed within said receiver and having a perforated ear extending therefrom, and a pull member extending through said closure with an eye at the inner end engaging the perforated ear of the receptacle and a pull loop at the other end externally of the closure, whereby the receptacle may be repeatedly used.

14,689. DESIGN FOR AN ELECTRIC-SWITCH MEMBER. CLARENCE D. PLATT, Bridgeport, Conn. Filed Apr. 12, 1919. Serial No. 289,769. Term of patent 14 years. Original No. 51,868, dated Mar. 12, 1918. Serial No. 138,509, filed Dec. 22, 1916, for 3 1/2 years.



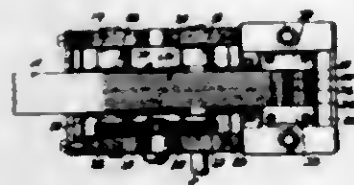
The design for an electric switch member substantially as shown.

14,690. DESIGN FOR AN ELECTRIC-SWITCH MEMBER. CLARENCE D. PLATT, Bridgeport, Conn. Filed Apr. 12, 1919. Serial No. 289,770. Term of patent 14 years. Original No. 51,869, dated Mar. 12, 1918. Serial No. 138,510, filed Dec. 22, 1916, for 3 1/2 years.



The design for an electric switch member substantially as shown.

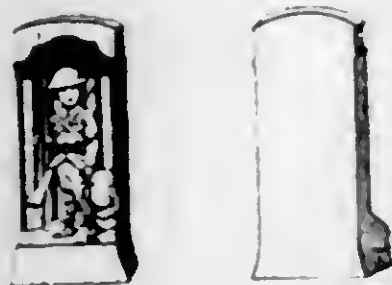
14,691. MECHANISM FOR MAKING STAY-TIPS. FREDERICK E. SMITH and FRANK W. CURRAN, Derby, Conn., assignors to Robert N. Bassett Company, Incorporated, Shelton, Conn., a Corporation of Connecticut. Filed May 1, 1919. Serial No. 294,070. Original No. 1,284,803, dated Nov. 12, 1918, Serial No. 235,153, filed May 17, 1918. 12 Claims. (Cl. 113-42.)



12. Is a double acting press a cooperating blanking punch and die adapted to operate on a plurality of sheet metal strips to form a plurality of blanks in combination with a plurality of drawing punches and cooperating dies for drawing said blanks into completed articles.

DESIGNS.

53,552. STATUETTE. EDWARD E. ALLEN, Rutland, Vt. Filed Dec. 2, 1918. Serial No. 265,099. Term of patent 3½ years.



The ornamental design for a statuette as shown.

53,553. ELASTIC VEHICLE-TIRE. GEORGE S. ANDERSON, Akron, Ohio. Filed Apr. 30, 1919. Serial No. 293,850. Term of patent 14 years.



The ornamental design for an elastic vehicle tire as shown.

53,554. PAPER-CLIP. WILLIAM H. AVERILL, Boston, Mass., assignor to Owl Supply Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 24, 1919. Serial No. 284,827. Term of patent 14 years.



The ornamental design for a paper clip, as shown.

53,555. RUBBER-TIRE CASING. COROL R. BAKER, Akron, Ohio. Filed Apr. 28, 1919. Serial No. 293,353. Term of patent 7 years.



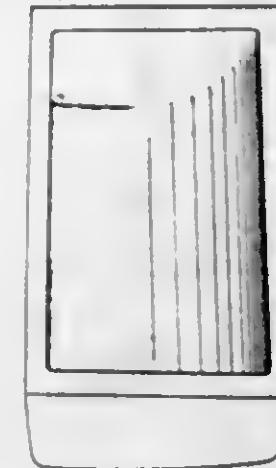
The ornamental design for a rubber tire casing, as shown.

53,556. WALL-RECEPTACLE FOR SOAP AND OTHER TOILET ARTICLES. STEPHEN D. BAKER, New York, N. Y. Filed Jan. 24, 1917. Serial No. 144,298. Term of patent 14 years.



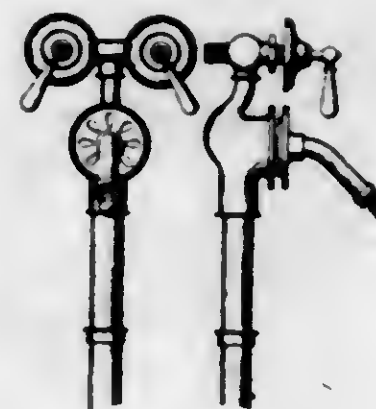
The ornamental design for a wall receptacle for soap and other toilet articles, substantially as shown.

53,557. WALL-RECEPTACLE FOR SOAP AND OTHER TOILET ARTICLES. STEPHEN D. BAKER, New York, N. Y. Filed Feb. 12, 1917. Serial No. 148,220. Term of patent 14 years.



The ornamental design for a wall receptacle for soap and other toilet articles, substantially as herein shown.

53,558. BATH-TUB AND BASIN FITTING. LEON BLOCH, Brooklyn, N. Y. Filed Mar. 21, 1919. Serial No. 284,209. Term of patent 7 years.



The ornamental design for a bath tub and basin fitting, as shown.

53,559. BROCADE. JAMES H. BUNTINO, Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,826. Term of patent 3½ years.



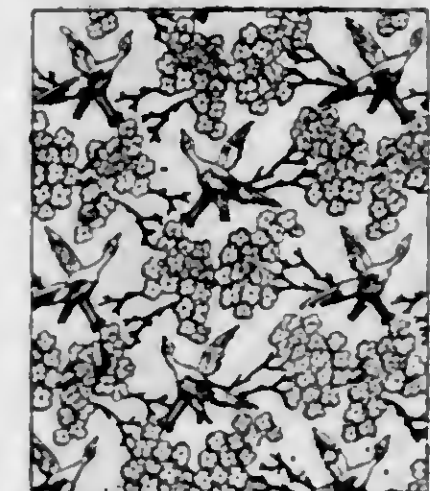
The ornamental design for a brocade as shown.

53,560. BROCADE. JAMES H. BUNTINO, Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,827. Term of patent 3½ years.



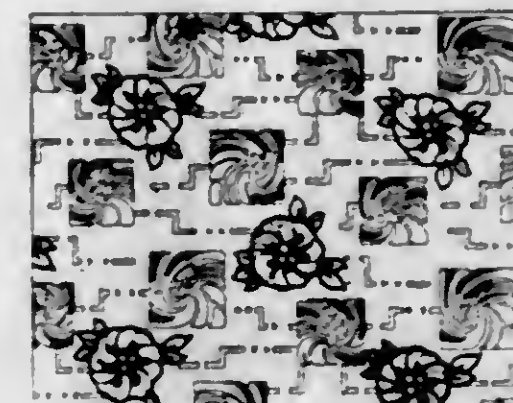
The ornamental design for a brocade as shown.

53,561. SILK FABRIC. JAMES H. BUNTINO, Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,828. Term of patent 3½ years.



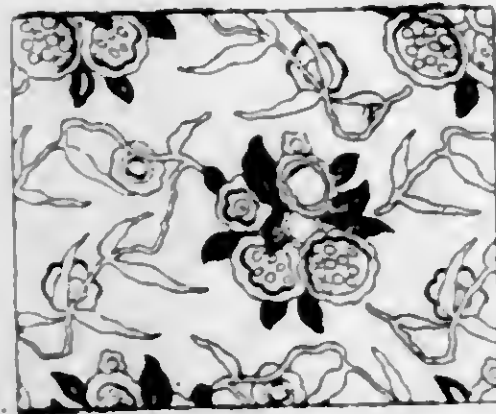
The ornamental design for a silk fabric as shown.

53,562. SILK FABRIC. JAMES H. BUNTINO, Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,829. Term of patent 3½ years.



The ornamental design for a silk fabric as shown.

53,563. SILK FABRIC. JAMES H. BUNTING, Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,530. Term of patent 3½ years.



The ornamental design for a silk fabric as shown.

53,564. PEDESTAL FOR FURNITURE OR SIMILAR ARTICLES. CHARLES CAMPBELL, Philadelphia, Pa. Filed Feb. 28, 1919. Serial No. 279,892. Term of patent 14 years.



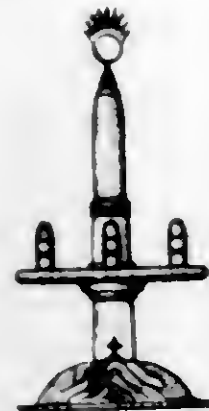
The ornamental design for a pedestal for furniture or similar articles, as shown.

53,565. PICTURE FRAME. CHARLES CAMPBELL and DUNCAN CAMPBELL, Philadelphia, Pa. Filed Apr. 4, 1919. Serial No. 287,624. Term of patent 14 years.



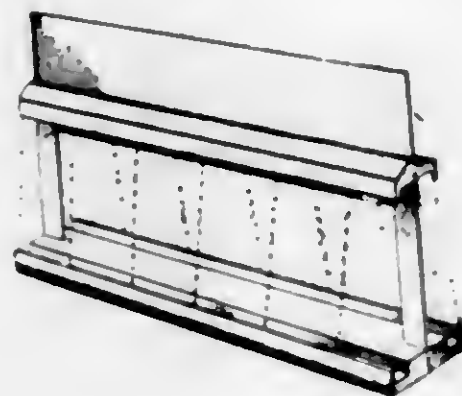
The ornamental design for a picture frame, as shown.

53,566. CASTER-STAND. CHARLES CAMPBELL, DUNCAN CAMPBELL, and MERLE N. MCGILL, Philadelphia, Pa. Filed Apr. 15, 1919. Serial No. 291,135. Term of patent 14 years.



The ornamental design for a caster stand, as shown.

53,567. DISPLAY-STAND. OSWALD B. CANNON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 26, 1916. Serial No. 127,954. Term of patents 3½ years.



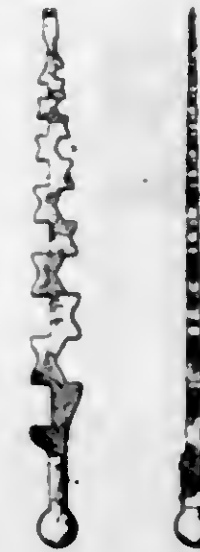
The ornamental design for a display stand as illustrated.

53,568. ELECTRIC LAMP. ARTHUR E. CASE, Marion, Ind., assignor to Delta-Electric Company, Marion Ind., a Corporation of Indiana. Filed Mar. 25, 1918. Serial No. 224,637. Term of patent 3½ years.



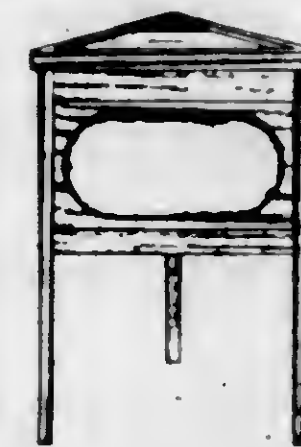
The ornamental design for an electric lamp as shown.

53,569. COMBINED WRENCH AND SCREW-DRIVER. THOMAS SCOTT COBB, Ormond, Fla. Filed Mar. 29, 1919. Serial No. 286,180. Term of patent 7 years.



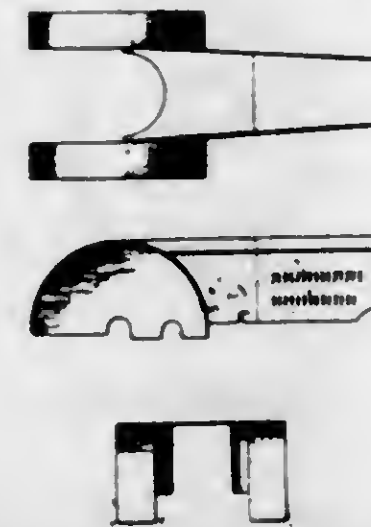
The ornamental design for a combined wrench and screw driver, as shown.

53,570. PHONOGRAPH-CABINET. MEXER DAVIS, Chicago, Ill. Filed Mar. 3, 1919. Serial No. 280,478. Term of patent 3½ years.



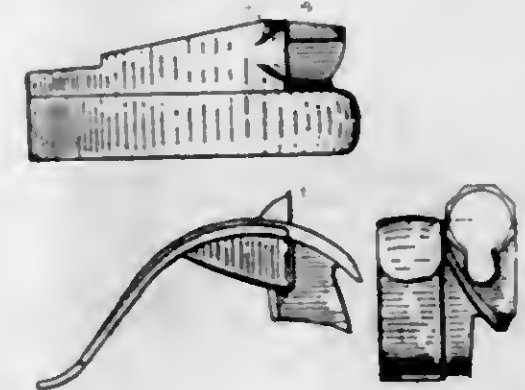
The ornamental design for a phonograph cabinet, as shown.

53,571. TRACTOR-HOOD. FRANCIS R. DENNIS and HARRY W. LEAVITT, Peoria, Ill. Filed Apr. 7, 1919. Serial No. 288,390. Term of patent 3½ years.



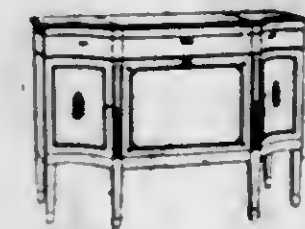
The ornamental design for a tractor hood as shown.

53,572. AUTOMOBILE FENDER AND LAMP. BERTICE M. DIVER, Indianapolis, Ind. Filed Mar. 24, 1919. Serial No. 284,882. Term of patent 14 years.



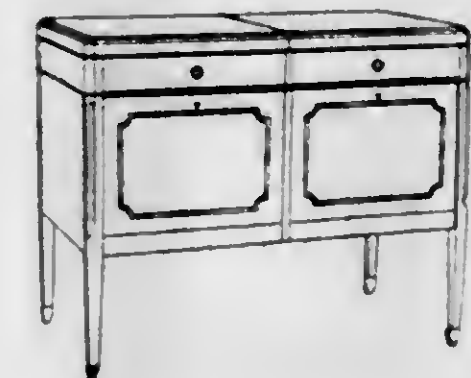
The ornamental design for an automobile fender and lamp as shown.

53,573. CASING FOR AUTOMATIC SOUND-PRODUCING INSTRUMENTS. WILLIAM H. EGGERBRECHT, Grand Rapids, Mich., assignor to Cheney Talking Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 27, 1918. Serial No. 242,304. Term of patent 7 years.



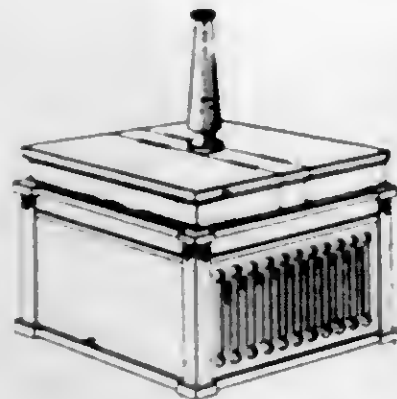
The ornamental design for a casing for automatic sound producing instruments, substantially as shown.

53,574. CASING FOR AUTOMATIC SOUND-PRODUCING INSTRUMENTS. WILLIAM H. EGGERBRECHT, Grand Rapids, Mich., assignor to Cheney Talking Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 27, 1918. Serial No. 242,305. Term of patent 7 years.



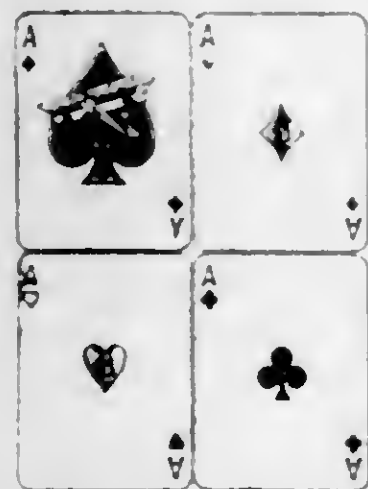
The ornamental design for a casing for automatic sound producing instruments, substantially as shown.

53,575. GRAPHOPHONE-CASE. WILLIAM H. FRIEDLINE, Myerstown, Pa. Filed May 17, 1919. Serial No. 297,969. Term of patent 14 years.



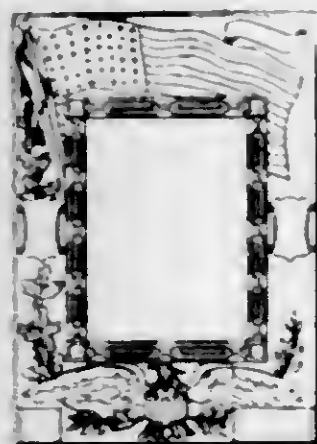
The ornamental design for a graphophone case, as shown.

53,576. SET OF PLAYING-CARDS. JAMES C. GAFFNEY, New York, N. Y. Filed Mar. 3, 1919. Serial No. 280,481. Term of patent 7 years.



The ornamental design for a set of playing cards, as shown.

53,577. FRAME OR PLAQUE. CLOVIS GAMACHE, JR., Nashua, N. H. Filed Jan. 4, 1919. Serial No. 210,391. Term of patent 3½ years.



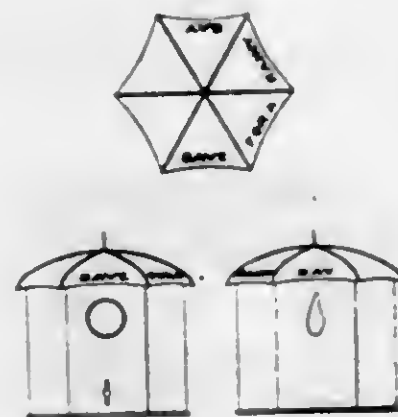
The ornamental design for a frame or plaque, as shown.

53,578. RING. GEORGE H. GOFFNEY, Los Angeles, Calif. Filed Apr. 5, 1919. Serial No. 287,840. Term of patent 14 years.



The ornamental design for a ring, as shown.

53,579. SAVINGS-BANK. ARK GOLDBERG, Chicago, Ill. Filed Dec. 31, 1918. Serial No. 269,155. Term of patent 14 years.



The ornamental design for a savings bank, as shown.

53,580. HANDLE FOR AN AUTOMOBILE-LOCK OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,882. Term of patent 3½ years.



The ornamental design for a handle for an automobile lock or a similar article of manufacture, substantially as shown.

53,581. CURTAIN-FIXTURE FOR AN AUTOMOBILE OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,883. Term of patent 3½ years.



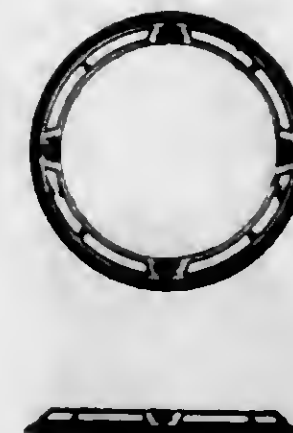
The ornamental design for a curtain fixture for an automobile or a similar article of manufacture, substantially as shown.

53,582. PLATE FOR AN AUTOMOBILE-LOCK OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,884. Term of patent 3½ years.



The ornamental design for a plate for an automobile lock or a similar article of manufacture, substantially as shown.

53,583. RIM FOR A SPEEDOMETER OR A DOME-LIGHT FOR AN AUTOMOBILE OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,885. Term of patent 3½ years.



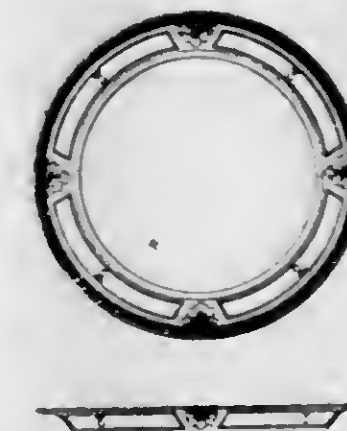
The ornamental design for a rim for a speedometer or a dome-light for an automobile or a similar article of manufacture, substantially as shown.

53,584. HANDLE FOR AN AUTOMOBILE-SEAT OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,886. Term of patent 3½ years.



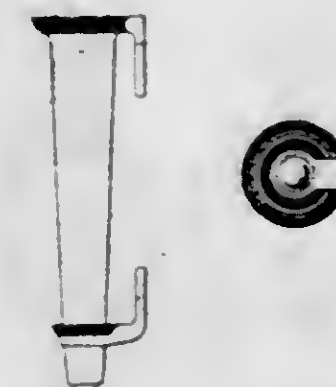
The ornamental design for a handle for an automobile seat or similar article of manufacture, substantially as shown.

53,585. RIM FOR A DOME-LIGHT OR A SPEEDOMETER FOR AN AUTOMOBILE OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,887. Term of patent 3½ years.



The ornamental design for a rim for a dome-light or a speedometer for an automobile or a similar article of manufacture, substantially as shown.

53,586. VASE FOR AN AUTOMOBILE OR A SIMILAR ARTICLE OF MANUFACTURE. FREDERICK E. GREENE, Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y., a Corporation of New York. Filed Apr. 9, 1919. Serial No. 288,888. Term of patent 3½ years.



The ornamental design for a vase for an automobile or a similar article of manufacture, substantially as shown.

53,587. SINGLE-SERVICE WOODEN SPOON. BONIFACE A. GRABBERGER, Richmond, Va. Filed Jan. 30, 1919. Serial No. 274,151. Term of patent 14 years.



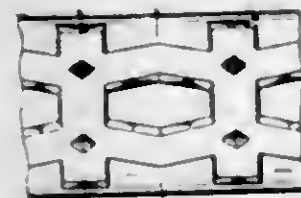
The ornamental design for a single service wooden spoon, as shown.

53,588. SINGLE-SERVICE WOODEN SPOON. BONIFACE A. GRABBERGER, Richmond, Va. Filed Jan. 30, 1919. Serial No. 274,152. Term of patent 14 years.



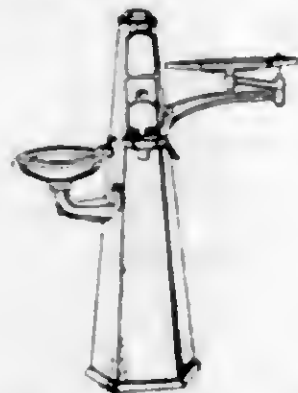
The ornamental design for a single service wooden spoon, as shown.

53,589. AUTOMOBILE-TIRE. BERNARD WM. HARTLEY, Halleybury, Ontario, Canada. Filed Mar. 3, 1919. Serial No. 280,482. Term of patent 7 years.



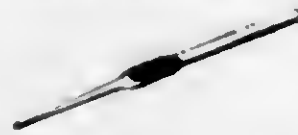
The ornamental design for an automobile tire, as shown.

53,590. DENTAL-EQUIPMENT PEDESTAL. WALTER H. HENDRICKSON, Chicago, Ill. Filed Mar. 28, 1919. Serial No. 285,933. Term of patent 14 years.



The ornamental design for a dental equipment pedestal, as shown.

53,591. CROCHET-NEEDLE. LYNN NELSON HITCHCOCK, Sioux City, Iowa. Filed Feb. 20, 1919. Serial No. 278,302. Term of patent 3½ years.



The ornamental design for a crochet needle, as shown.

53,592. BANANA-DISPLAY STAND. FRANCESCO IZZO, Toronto, Ontario, Canada. Filed Apr. 2, 1919. Serial No. 287,084. Term of patent 14 years.



The ornamental design for a banana display stand as shown.

53,593. DISPLAY-RACK. AXEL H. JOHNSON, Brooklyn, N. Y. Filed Apr. 28, 1917. Serial No. 165,282. Term of patent 7 years.



The ornamental design for a display rack, as shown.

53,594. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. WILLIAM F. KINGMAN, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 5, 1919. Serial No. 287,843. Term of patent 3½ years.



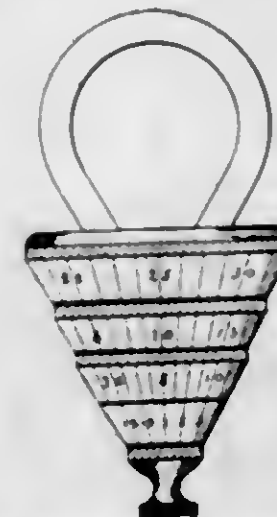
The ornamental design for a handle for spoons, forks, or similar articles, as shown.

53,595. SILK FABRIC. ELLA KEMPICKA, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,842. Term of patent 3½ years.



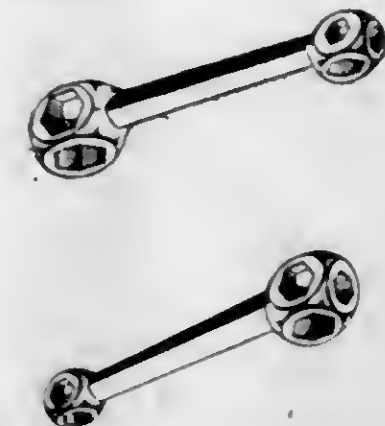
The ornamental design for a silk fabric as shown.

53,596. PERMUTATION-PADLOCK. PASQUALE LO CASTO, Brooklyn, N. Y. Filed Mar. 19, 1919. Serial No. 293,682. Term of patent 14 years.



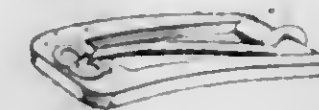
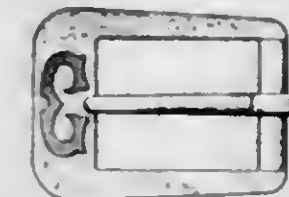
The ornamental design for a permutation padlock, as shown.

53,597. WRENCH. JACOB A. MARCMANN, Irvington, N. J. Filed Mar. 24, 1919. Serial No. 284,860. Term of patent 14 years.



The ornamental design for a wrench, as shown.

53,598. BELT-BUCKLE. ISAAC L. MARIENTHAL, Chicago, Ill., assignor to Modern Belt Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1919. Serial No. 278,969. Term of patent 3½ years.



The ornamental design for a belt buckle as shown.

53,599. OPTICIAN'S TOOL. GEORGE MAYERLE, San Francisco, Calif. Filed Feb. 12, 1919. Serial No. 276,661. Term of patent 3½ years.



The ornamental design for an optician's tool, as shown.

53,600. SETTING FOR PRECIOUS STONES. THOMAS MOUNTFORD, Newark, N. J. Filed Mar. 19, 1919. Serial No. 283,683. Term of patent 14 years.



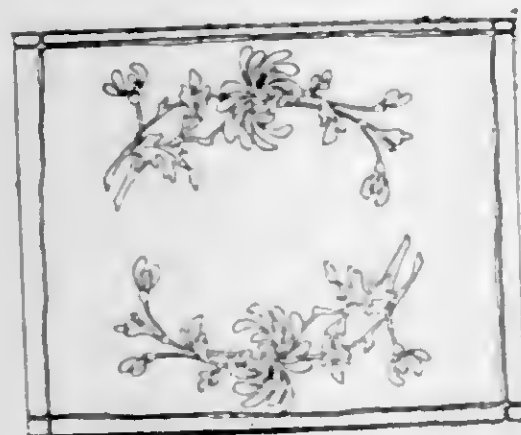
I claim the ornamental design for a setting for a setting for precious stones as shown.

53,601. BEDSPREAD. MAURICE OESTREICH, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,772. Term of patent 7 years.



The ornamental design for a bedspread, as shown.

53,602. ARTICLE OF MANUFACTURE. MAURICE OESTREICH, New York, N. Y. Filed Apr. 1, 1919. Serial No. 286,773. Term of patent 7 years.



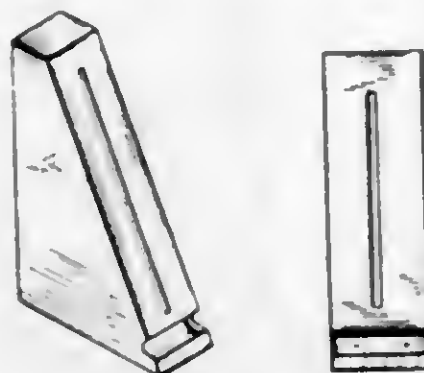
The ornamental design for an article of manufacture, as shown.

53,603. NAPKIN-HOLDER. GEORGE OHL, Meriden, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed Mar. 12, 1919. Serial No. 282,219. Term of patent 7 years.



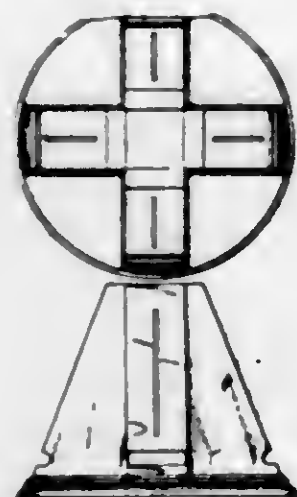
The ornamental design for a napkin holder, as shown.

53,604. DISPLAY-HOLDER. ROBERT D. PIKE, San Francisco, Calif., assignor to Charles W. Pike, San Francisco, Calif. Filed Apr. 17, 1919. Serial No. 290,872. Term of patent 14 years.



The ornamental design for a display holder, as shown.

53,605. MULTIPLE DISPLAY-HOLDER. ROBERT D. PIKE, San Francisco, Calif., assignor to Charles W. Pike, San Francisco, Calif. Filed Apr. 19, 1919. Serial No. 291,391. Term of patent 14 years.



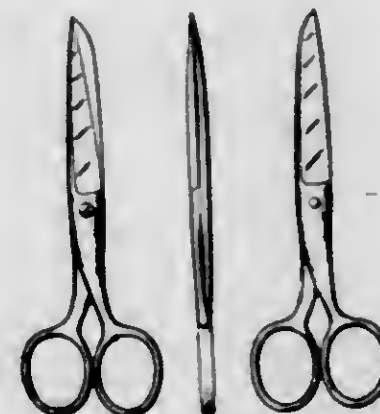
The ornamental design for a multiple display holder, as shown.

53,606. PAIR OF MANICURE-SCISSORS. FREDERIC H. RAUH, South Orange, N. J., assignor to J. Wiss & Sons Company, Newark, N. J., a Corporation of New Jersey. Filed Mar. 10, 1919. Serial No. 281,860. Term of patent 14 years.



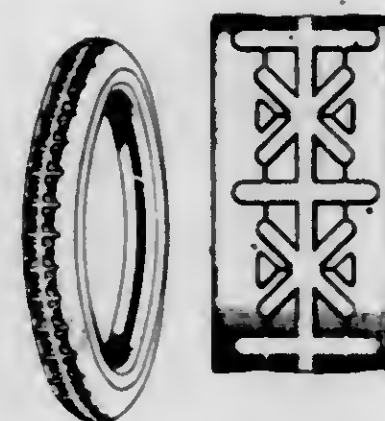
The ornamental design for a pair of manicure scissors as shown.

53,607. PAIR OF SCISSORS. FREDERIC H. RAUH, South Orange, N. J., assignor to J. Wiss & Sons Company, Newark, N. J., a Corporation of New Jersey. Filed Mar. 10, 1919. Serial No. 281,861. Term of patent 14 years.



The ornamental design for a pair of scissors, as shown.

53,608. AUTOMOBILE-TIRE. STEPHEN REELE, Houston, Tex. Filed Dec. 28, 1918. Serial No. 268,779. Term of patent 3 1/2 years.



The ornamental design for an automobile tire, as shown.

53,609. SILK FABRIC. WILLIAM G. REITH, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1919. Serial No. 287,846. Term of patent 3 1/2 years.



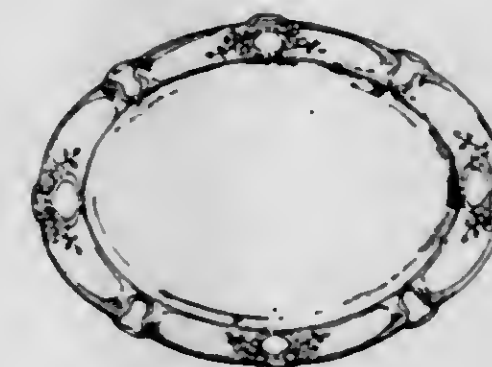
The ornamental design for a silk fabric as shown.

53,610. ARTIFICIAL BAIT. JAMES W. REYNOLDS, Chicago, Ill. Filed Mar. 3, 1919. Serial No. 280,477. Term of patent 7 years.



The ornamental design for artificial bait as shown.

53,611. PLATTER OR SIMILAR ARTICLE. JOHN H. RING, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 5, 1919. Serial No. 287,844. Term of patent 3 1/2 years.



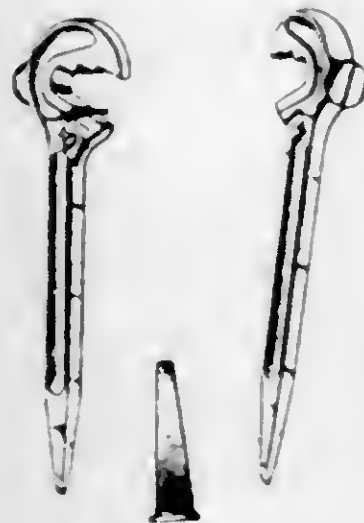
The ornamental design for a platter or similar article, as shown.

53,612. DISH OR SIMILAR ARTICLE. JOHN H. RING, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 5, 1919. Serial No. 287,845. Term of patent 3 1/2 years.



The ornamental design for a dish or similar article, as shown.

53,613. COMBINATION-TOOL. HERBERT O. ROCKWELL, New Britain, Conn., assignor to The B. & K. Manufacturing Co., New Britain, Conn., a Corporation of Connecticut. Filed Mar. 6, 1919. Serial No. 281,096. Term of patent 14 years.



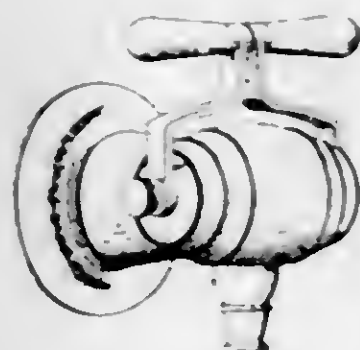
The ornamental design for a combination tool, substantially as shown.

53,614. POISON BOTTLE. FERDINAND RUSTANT, Manila, Philippine Islands. Filed Feb. 4, 1919. Serial No. 275,028. Term of patent 14 years.



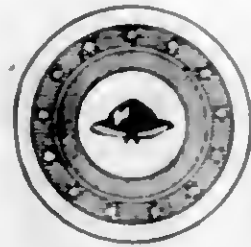
The ornamental design for a poison bottle, as shown.

53,615. FAUCET. GEORGE H. T. SCHMIDT, San Francisco, Calif. Filed Mar. 18, 1919. Serial No. 283,437. Term of patent 14 years.



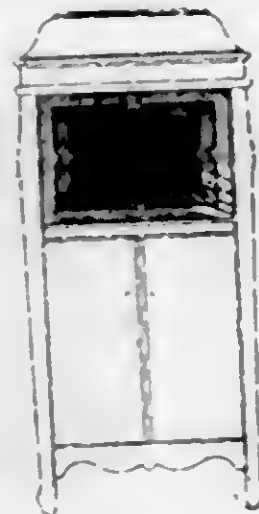
The ornamental design for a faucet, as shown.

53,616. EMBLEM, BUTTON, OR ARTICLE OF SIMILAR NATURE. EDWARD P. SMITH, Pittston, Pa. Filed Sept. 9, 1918. Serial No. 253,336. Term of patent 31 years.



The ornamental design for an emblem, button, or article of similar nature, as shown.

53,617. ARTICLE OF MANUFACTURE—NAMELY, A SCREEN FOR SOUND-OUTLETS OF GRAPHOPHONES. WILLIAM A. SOMMERHOF, Erie, Pa. Filed Nov. 19, 1918. Serial No. 263,226. Term of patent 14 years.



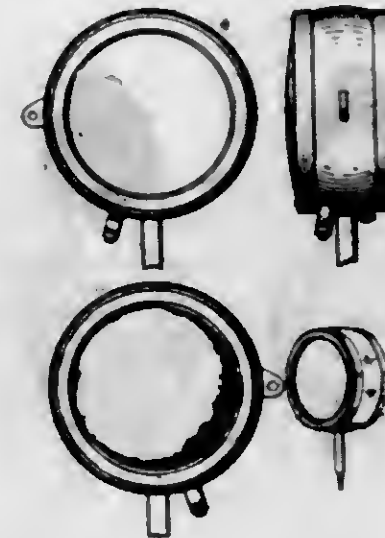
The ornamental design for an article of manufacture, namely a screen for sound outlets of graphophones, as shown.

53,618. BRAKE. NICASIO STANPA, Beaumont, Tex. Filed Sept. 27, 1918. Serial No. 255,981. Term of patent 14 years.



The ornamental design for a brake, as shown.

53,619. AUTOMOBILE-HEADLIGHT. HARRY C. STUTZ, Indianapolis, Ind. Filed Apr. 7, 1919. Serial No. 288,391. Term of patent 14 years.



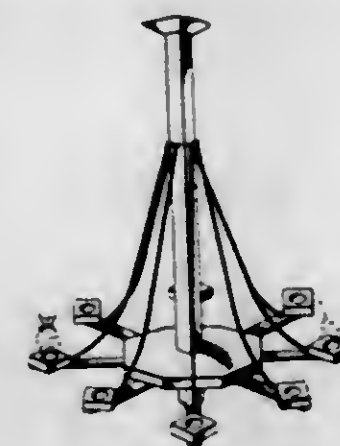
The ornamental design for an automobile headlight, as shown.

53,620. WRENCH. LUTHER L. WALTON, Richmond, Va. Filed Mar. 24, 1919. Serial No. 284,877. Term of patent 14 years.



The new, original and ornamental design for a wrench, substantially as shown.

53,621. CHANDELIER. GEORGE W. WHEATMAN, Gary, Ind. Filed Jan. 18, 1919. Serial No. 271,919. Term of patent 14 years.



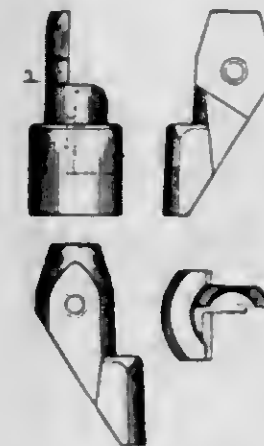
The ornamental design for a chandelier as shown.
264 O. G.—35

53,622. LAMP-SHADE-BRACKET PIECE. AUGUST WILLENBACHER, Hackensack, N. J., assignor to Royal Art Glass Company, New York, N. Y., a Corporation of New York. Filed Mar. 11, 1919. Serial No. 282,044. Term of patent 31 years.



The ornamental design for a lamp shade bracket piece, substantially as shown and described.

53,623. UNDERREAMER-CUTTER. ELMER C. WILSON and WILLIAM W. WILSON, Los Angeles, Calif., assignors to said William W. Wilson. Filed Sept. 27, 1916. Serial No. 122,578. Term of patent 14 years.



The ornamental design for an underreamer cutter, as shown.

53,624. POWDER-BOX. HENRY J. WOODWARD, Peoria, Ill.; Frederick F. Blossom and Elizabeth Greer Woodward executors of the will of said Henry J. Woodward, deceased. Filed June 18, 1915. Serial No. 34,944. Term of patent 14 years.



The ornamental design of a powder box as shown.

53,625. HEEL OR LIFT FOR BOOTS, SHOES, OR ARTICLES OF SIMILAR NATURE. CLARENCE WYJOYT, Racine, Wis., assignor to Racine Auto Tire Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1919. Serial No. 276,671. Term of patent 14 years.



The ornamental design for a heel or lift for boots, shoes, or articles of similar nature substantially as shown.

53,626. STATUETTE, DOLL, OR SIMILAR ARTICLE. ABRAHAM J. ZIV, Chicago, Ill., assignor to Tip Top Toy Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1919. Serial No. 290,879. Term of patent 7 years.



The ornamental design for a statuette, doll, or similar article substantially as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 15, 1919.

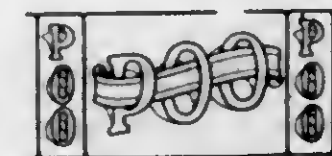
[PUBLISHED JULY 16, 1919.]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 103,057. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VIRGIL L. BRACCHAMP, Evanston, Ill. Filed Apr. 17, 1917.



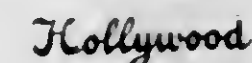
Particular description of goods.—Preparation for Cleansing the Hair.
Claims use since about Sept. 1, 1916.

Ser. No. 103,532. (CLASS 39. CLOTHING.) MARIE BRUCKNER MACDONALD, Toledo, Ohio. Filed May 5, 1917.



Particular description of goods.—Corsets.
Claims use since 1909.

Ser. No. 103,778. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOULD, WELLS & BLACKBURN CO., Madison, Wis. Filed May 14, 1917.



Particular description of goods.—Canned Goods—Namely, Tomatoes, Corn, Salmon, Succotash, Fruit, Shrimp, Asparagus, Beets, Wax-Beans, Peas, Pumpkin, Sauer-Kraut, and Spinach, Also Vanilla Extract, Peanut-Butter, Bottled Olives, Maple-Sugar, Maple-Syrup, Prepared Mustard, Olive-Oil, Seeded Raisins, Jelly, Fruit Preserves, and Catsup.
Claims use since Dec. 23, 1911.

Ser. No. 108,517. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WINIFRED V. LOVELAND, New York, N. Y. Filed Jan. 18, 1918.



Particular description of goods.—Face-Powders, Lip-Rouge, and Brow-Pencils.
Claims use since Dec. 1, 1916.

Ser. No. 111,259. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY BLEWETT & SON, INC., Somerville, Mass. Filed May 31, 1918.



The word "Thrifty."
Particular description of goods.—Bread.
Claims use since May 3, 1918.

Ser. No. 111,272. (CLASS 47. WINES.) ITALIAN VINEYARD COMPANY, Los Angeles, Calif. Filed May 31, 1918.



Particular description of goods.—Fermented Sweet Wines.
Claims use since May 16, 1918.

Ser. No. 111,323. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. T. WELTCH & CO. INC., San Francisco, Calif. Filed June 1, 1918.



The lining indicating shading only.
Particular description of goods.—Rice.
Claims use since 1905.

Ser. No. 111,720. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DRYING SYSTEMS, INCORPORATED, Chicago, Ill. Filed June 21, 1918.



Particular description of goods.—Dehydrated Food Products—Namely, the Following Dried Fruits and Vegetables: Apples, Apricots, Bananas, Blackberries, Blueberry, Sour Cherries, Sweet Cherries, Currants, Figs, Grapes, Huckleberries, Loganberries, Peaches, Peas, Plums, Prunes, Raisins, Black Raspberries, Red Raspberry, Strawberries, Green Beans, Lima Beans, Wax Beans, Beets, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Celery, Celery-Root, Corn, Cucumbers, Egg-Plant, Lask, Mushrooms, Okra, Onions, Parsley, Parsnips, Peas, Peppers, Potato Pancake-Flour, Sweet Potatoes, White Potatoes, Pumpkin, Rhubarb, Soup Mixture, Spinach, Squash, Tomatoes, Yellow Turnips, White Turnips.

Claims use since June 10, 1918.

Ser. No. 112,313. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ASSOCIATED MANUFACTURERS COMPANY, Waterloo, Iowa. Filed July 25, 1918.

ASSOCIATED

Particular description of goods.—Internal-Combustion Engines and Cream Separating Machines.

Claims use since Apr. 24, 1918.

Ser. No. 113,117. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOSEPH CHAMIN, Boston, Mass. Filed Sept. 11, 1918.



Particular description of goods.—An Edible Oil Composed of Cotton-Seed Oil Flavored with Olive Oil.

Claims use since July 1, 1918.

Ser. No. 113,230. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) ALASKA BEVERAGE COMPANY, Juneau, Territory of Alaska. Filed Sept. 10, 1918.

Juno

Particular description of goods.—Malt Beverages Containing Less Than One-Half Percentage, by Volume, of Alcohol.

Claims use since July 1, 1918.

Ser. No. 113,713. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) LEOPOLD ASCHAS, New York, N. Y. Filed Oct. 14, 1918.



Particular description of goods.—Stucco-Brushes, Paint-Brushes, Shaving-Brushes, Varnish-Brushes, Artist-Brushes, and Hair-Brushes.

Claims use since Oct. 7, 1918.

Ser. No. 114,013. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE WILLIAM SCHOLLHORN COMPANY, New Haven, Conn. Filed Nov. 1, 1918. Under ten-year proviso.

BERNARD

Particular description of goods.—Pliers, Nippers, Wire-Cutters, Punches for Punching Holes in Sheet Metal; Punches for Punching Holes in Fabric, Leather, and Similar Material; Button-Applying Tools; Staple-Setting Tools; Tools for Applying Fasteners to Leather, Fabric, or the Like; Bolt-Cutters, Tools for Setting Eyelets, Pruning-Shears, Embossing-Tools, Tinner's Snips, Combination Pliers and Wire-Cutters, Combination Punch and Cutter for Operating on Sheet Metal, Combination-Tools of the Lever-Handle Type for Applying and Removing Staples to and from Shoes, Tools of the Plier or Lever-Handle Type for Removing the Insulation from Electric Wire, Scissors, Shears, Fruit-Clippers, Rivet-Clenching Tools of the Plier or Lever-Handle Type, Metal-Bending Tools of the Plier or Lever-Handle Type, Twine-Cutters, Metal-Swaging Tools of the Plier or Lever-Handle Type, Bolt-Holders, Wrenches, Mechanics' Tweezers, Tong, Pipe and Rod Cutters, Metal-Crimping and Metal-Corrugating Tools of the Plier or Lever-Handle Type, Wire-Twisting Tools of the Plier or Lever-Handle Type, Combination Wire-Fence Tools of the Plier or Lever-Handle Type, and Shoe-Lace-Tipping Tools of the Plier or Lever-Handle Type.

Claims use since on or about Nov. 1, 1890.

[Vol. 264. No. 3.]

Ser. No. 114,204. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRED N. ARGO, Los Angeles, Calif. Filed Nov. 18, 1918.

MAPO

Particular description of goods.—Compound Table-Syrup, Compound Sugar, and Flavoring Compound for Foods.

Claims use since Oct. 19, 1908.

Ser. No. 114,782. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEO. R. GIBSON CO., New York, N. Y. Filed Dec. 23, 1918.

GIBSON

Particular description of goods.—Hair-Brushes, Nail-Brushes, Tooth-Brushes, Cloth-Brushes, Hat-Brushes, Bonnet-Brushes, Infant-Brushes, Shaving-Brushes, Bath-Brushes, and Military Brushes.

Claims use since Dec. 10, 1918.

Ser. No. 114,814. (CLASS 39. CLOTHING.) PECK & CO., New York, N. Y. Filed Dec. 24, 1918.

MISS AMERICA

Particular description of goods.—Ladies' Outer Garments—viz., Coats, Suits, Dresses, Skirts, Cloaks, Wulsts, and Blouses.

Claims use since January, 1917.

Ser. No. 115,217. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BOSTON-OKANOGAN APPLE CO., Okanogan, Wash., and Boston, Mass. Filed Jan. 16, 1919.



No claim being made to the exclusive use of the words "The Apple" and "Grown and Packed by Boston-Okanogan Apple Co." apart from the mark shown.

Particular description of goods.—Apples in Their Natural State.

Claims use since September, 1918.

[Vol. 264. No. 3.]

Ser. No. 115,354. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) MARTINI MFG. CO., Norfolk, Va. Filed Jan. 21, 1919.



The trade-mark consists of the word "Martini-E" arranged above the figure of a bird with spread wings, upon which the word "Martin" is arranged, and in the beak of the bird the letter "E," in script, is shown held.

Particular description of goods.—A Non-Alcoholic Maltless Beverage Not of a Cereal Nature Sold as a Soft Drink and the Syrup Used in the Manufacture of the Same.

Claims use since about Nov. 3, 1918.

Ser. No. 115,572. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE MOSGON DRUG COMPANY OF THE CITY OF BROOKLYN, Brooklyn, N. Y. Filed Feb. 1, 1919.

HAIR SUCCESS

Particular description of goods.—A Pomade Chemical Compound or Dressing for Application to or Upon the Hair.

Claims use since June 15, 1911.

Ser. No. 115,742. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) TRAFFIC MOTOR TRUCK CORPORATION, St. Louis, Mo. Filed Feb. 10, 1919.



Particular description of goods.—Motor-Trucks.

Claims use since July 7, 1917.

Ser. No. 115,980. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE GUTTA PERCHA & RUBBER MANUFACTURING COMPANY, New York, N. Y. Filed Feb. 19, 1919.

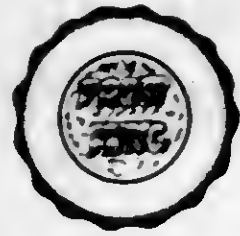


Consisting of a blue ribbon or band of even width throughout running along the surface of the belting parallel to and at some distance from the edges thereof, no claim being made to the representation of the belting shown in the drawing.

Particular description of goods.—Belting Made of Rubber and Fabric.

Claims use since 1906.

Ser. No. 116,149. (CLASS 39. CLOTHING.) THE DOMA BROTHERS COMPANY, Cincinnati, Ohio. Filed Feb. 26, 1919.



Particular description of goods.—Men's Hosiery.
Claims use since January, 1913.

Ser. No. 116,151. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOLDEN ROD ICE CREAM COMPANY, Fremont, Nebr. Filed Feb. 27, 1919.



The picture shown on the drawing is fanciful.
Particular description of goods.—Ice-Cream.
Claims use since Jan. 1, 1917.

Ser. No. 116,429. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPERRY FLOUR COMPANY, San Francisco, Vallejo, Stockton, Fresno, Paso Robles, and Los Angeles, Calif., and Tacoma, Creston, and Spokane, Wash. Filed Mar. 8, 1919.



Particular description of goods.—Pancake-Flour.
Claims use since about Aug. 14, 1885.

Ser. No. 116,597. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GENEVA CUTLERY CORPORATION, Geneva, N. Y. Filed Mar. 15, 1919.

SAFEGE

Particular description of goods.—Cutlery—Namely, Razors.
Claims use since December, 1913.

Ser. No. 116,658. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY JONES, Little Rock, Ark. Filed Mar. 17, 1919.



Particular description of goods.—A Medicine Used in the Treatment of Rheumatism.
Claims use since June 1, 1918.

Ser. No. 116,710. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed Mar. 19, 1919.

MORBREAD

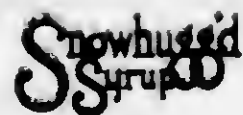
Particular description of goods.—Wheat-Flour.
Claims use since Feb. 3, 1919.

Ser. No. 116,871. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN CHICLE COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 25, 1919.

ADAMS TEMPTERS

Particular description of goods.—Mint Candy in Tablet Form.
Claims use since about May 1, 1918.

Ser. No. 116,952. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JAM. R. CARY, Los Angeles, Calif. Filed Mar. 27, 1919.



No claim is made to the word "Syrup" apart from the mark as shown.
Particular description of goods.—Maple-Blend Table-Syrup.
Claims use since about Dec. 1, 1918.

Ser. No. 116,976. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SERIAH STEVENS, Boston, Mass. Filed Mar. 27, 1919.

CASAFRU

The trade-mark consists of the word "Casafu."
Particular description of goods.—Pharmaceutical Preparations for Intestinal and Gastric Disorders.
Claims use since about July 1, 1913.

Ser. No. 116,989. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CASCO COMPANY, Canton, Ohio. Filed Mar. 28, 1919.

CASCO

Particular description of goods.—Laxative Tablets.
Claims use since January, 1913.

Ser. No. 117,034. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANNIE BURNAS, Atlanta, Ga. Filed Mar. 31, 1919.



Particular description of goods.—A Hair-Grower.
Claims use since Mar. 6, 1919.

Ser. No. 117,174. (CLASS 45. BEVERAGES NON-ALCOHOLIC.) COLLINA CANNING COMPANY, Lakeland, Fla. Filed Apr. 5, 1919.



Particular description of goods.—Unfermented Grape-Fruit Juice.
Claims use since May 1, 1917.

Ser. No. 117,357. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE SCHUSTER COMPANY, Cleveland, Ohio. Filed Apr. 10, 1919.

SEKTO

Particular description of goods.—A Non-Alcoholic Non-Cereal Maltless Beverage Sold as a Soft Drink and Syrup for Making the Same.
Claims use since Aug. 29, 1916.

Ser. No. 117,363. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGIANA M. WHITCOMB, New Rochelle and New York, N. Y. Filed Apr. 10, 1919.



The representation of the human head being that of Prof. Peeke, the founder of the business.
Particular description of goods.—A Medicinal Preparation for Epilepsy, Convulsions, and Spasms.
Claims use since 1890.

Ser. No. 117,387. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DOMINGO A. ORTEGA, Bernardo, N. Mex. Filed Apr. 11, 1919.



Particular description of goods.—A Medicine Used in the Treatment of Sciatics, Rheumatism, Cramps, Backache, Kidney and Liver Complaints, Paralysis, Chills, Coughs, Colds, Headache, Indigestion, Constipation, Piles, and Venereal Diseases.
Claims use since Jan. 1, 1919.

Ser. No. 117,457. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY, LTD., New Orleans, La. Filed Apr. 14, 1919.

AZURE

Particular description of goods.—Candy.
Claims use since Jan. 11, 1919.

Ser. No. 117,458. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY, LTD., New Orleans, La. Filed Apr. 14, 1919.

REVELATION

Particular description of goods.—Candy.
Claims use since Feb. 15, 1919.

Ser. No. 117,459. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY, LTD., New Orleans, La. Filed Apr. 14, 1919.

FLORABELLA

Particular description of goods.—Candy.
Claims use since Feb. 1, 1919.

Ser. No. 117,478. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) CALIFORNIA MEDICINAL SPRING CO., Deer Lick Springs, Calif. Filed Apr. 15, 1919.

DEER LICK SPRINGS



Particular description of goods.—A Natural Medicinal Water.
Claims use since Apr. 5, 1919.

Ser. No. 117,802. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) FARUNG BROS. & COMPANY, INC., New York, N. Y. Filed Apr. 24, 1919.

"Snugfold"

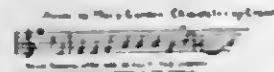
Particular description of goods.—Pocket-Books.
Claims use since the 29th day of March, 1919.

Ser. No. 117,830. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BARKER BAKING COMPANY, Denver, Colo. Filed Apr. 25, 1919.



No claim is made to the word "Barker," nor to the loaf of bread, nor to the words "His Masters Choice" apart from the mark shown in the drawing.
Particular description of goods.—Bread.
Claims use since about Mar. 29, 1919.

Ser. No. 117,868. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLARENCE A. CRANE, Cleveland, Ohio. Filed Apr. 26, 1919.



Mary Garden

The printed matter, with the exception of the words "Mary Garden," being disclaimed except in association with the mark as shown.
Particular description of goods.—Chocolates.
Claims use since Dec. 2, 1911.

Ser. No. 117,887. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE METRO CHOCOLATE CO., INC., Brooklyn, N. Y. Filed Apr. 26, 1919.

CRACKS

Particular description of goods.—Chocolate-Covered Molasses Bars.
Claims use since Jan. 23, 1919.

Ser. No. 117,992. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARVEY S. RHYNSBERGER, Oskaloosa, Iowa. Filed Apr. 29, 1919.



No claim being made for "Specialty, Fancy Milk Fed" and "The Poultry That Made Iowa Famous" except in connection with the mark as shown.

Particular description of goods.—Dressed Poultry.
Claims use since Aug. 15, 1916.

Ser. No. 118,048. (CLASS 39. CLOTHING.) MANGOLD H. ELLENBOGEN, Paterson, N. J. Filed May 1, 1919.

SOLAR

Consisting of the word "Solar."
Particular description of goods.—Dress, Negligée, Work Shirts, Pajamas, Flat Underwear in One and Two Piece Garments, Nightgowns, and Collars and Cuffs.
Claims use since Apr. 1, 1919.

Ser. No. 118,063. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) POLLY BROS., New York, N. Y. Filed May 1, 1919.

CEFFALONIA

Particular description of goods.—Cheese.
Claims use since 1914.

Ser. No. 118,091. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) PENINSULAR CHEMICAL CO., Detroit, Mich. Filed May 2, 1919.

VARSITY CLUB

Particular description of goods.—Shaving-Cream.
Claims use since Feb. 7, 1919.

Ser. No. 118,103. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) CREAM CITY BREWING CO., Milwaukee, Wis. Filed May 3, 1919.

Creamer

Particular description of goods.—Maltless Beverage Made of Corn and Containing Not More Than One-Half of One Per Cent. Alcohol.
Claims use since Apr. 17, 1919.

Ser. No. 118,105. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) CREAM CITY BREWING CO., Milwaukee, Wis. Filed May 3, 1919.

Besto

Particular description of goods.—Maltless Beverage Made of Corn and Containing Not More Than One-Half of One Per Cent. Alcohol.
Claims use since Apr. 17, 1919.

Ser. No. 118,162. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN MORRELL & COMPANY, Ottumwa, Iowa. Filed May 5, 1919.



Particular description of goods.—Vegetable Shortening.
Claims use since Oct. 2, 1918.

Ser. No. 118,167. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) NATIONAL GAGE & EQUIPMENT COMPANY, La Crosse, Wis. Filed May 5, 1919.

INDEPENDENT

Particular description of goods.—Pressure-Gage.
Claims use since Mar. 31, 1919.

Ser. No. 118,194. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE C. E. SLAUSON CO., Stamford, Conn. Filed May 5, 1919.

PONUS

Particular description of goods.—Canned Vegetables.
Claims use since Apr. 25, 1919.

Ser. No. 118,250. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BRILL BROTHERS, New York, N. Y. Filed May 8, 1919.

Blighty

Consisting of the word "Blighty."
Particular description of goods.—Tweeds.
Claims use since Apr. 22, 1919.

Ser. No. 118,255. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) G. CRAMER DRY PLATE COMPANY, St. Louis, Mo. Filed May 8, 1919.

SPEED-O-KROME

Particular description of goods.—Photographic Dry-Plates and Films.
Claims use since on or about the 25th day of April, 1919.

Ser. No. 118,263. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MARSHALL FIELD & COMPANY, Chicago, Ill. Filed May 8, 1919.

Kalonderma

Particular description of goods.—Toilet Soap.
Claims use since the year 1899.

Ser. No. 118,291. (CLASS 39. CLOTHING.) WESTERN GARMENT COMPANY, Chicago, Ill. Filed May 8, 1919.



Particular description of goods.—Lingerie and Petticoats.
Claims use since May 1, 1919.

Ser. No. 118,333. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN A. THORPE, Soda Springs, Idaho. Filed May 9, 1919.



BLACK JACK

Particular description of goods.—Healing-Powder.
Claims use since Apr. 1, 1919.

Ser. No. 118,396. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MAJOR-KELLER SOAP WORKS, Louisville, Ky. Filed May 12, 1919.

MAK

Particular description of goods.—Soaps.
Claims use since about the year 1870.

Ser. No. 118,437. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FAWLAND COMPANY, INC., Richmond, Va. Filed May 13, 1919.

DETHOL

Particular description of goods.—Insecticides, Disinfectants, and Germicides.
Claims use since May 1, 1919.

Ser. No. 118,453. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MAULICK F. SCHLESINGER, New York, N. Y. Filed May 13, 1919.

SPARX

Particular description of goods.—A Remedy to Relieve Constipation, Ordinary Derangement of Digestion, and for Relief of Dyspeptic Headache.
Claims use since Jan. 1, 1913.

Ser. No. 118,507. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHASE-A GRAY FRENCH Co., Great Kills, N. Y. Filed May 15, 1919.

CHASE-A-GRAY HENNA

The use of the word "Henna" is disclaimed except in combination with the other features of the trade-mark.
Particular description of goods.—Hair-Coloring Compounds.
Claims use since Apr. 17, 1919.

Ser. No. 118,531. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WARD BAKING COMPANY, New York, N. Y. Filed May 15, 1919.

BREKO

Particular description of goods.—Cakes.
Claims use since July 15, 1913.

Ser. No. 118,603. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) KANSAS CITY BROOM COMPANY, Kansas City, Mo. Filed May 17, 1919.

Kay-See

Particular description of goods.—Brooms.
Claims use since Jan. 1, 1919.

Ser. No. 118,607. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed May 17, 1919.

MANOR

Particular description of goods.—Biscuit.
Claims use since as early as Mar. 31, 1919.

Ser. No. 118,627. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SANATIVO Co., Gloucester City, N. J. Filed May 17, 1919.

PY=TEE=VO.

Particular description of goods.—A Germicidal Solution for the Teeth, Mouth, Nose, and Throat.
Claims use since May 13, 1919.

Ser. No. 118,673. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) IRVIN BRUSH COMPANY, Chicago, Ill. Filed May 19, 1919.

SENSATION

Particular description of goods.—Tooth-Brushes, Nail-Brushes, and Hair-Brushes.
Claims use since Jan. 1, 1919.

Ser. No. 118,701. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) A. J. PICARD AND Co., INC., New York, N. Y. Filed May 19, 1919.

ALJO

Particular description of goods.—Spark-Plugs, Electric Cables, Ignition Systems, Electric Wires, and Electric Terminals.
Claims use since about the month of November, 1917.

Ser. No. 118,754. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DOSTER-NORTHINGTON DRUG Co., Birmingham, Ala. Filed May 21, 1919.

BARBACALS

Particular description of goods.—Medicinal Tablets for Liver and Stomach Troubles.
Claims use since Mar. 27, 1919.

Ser. No. 118,815. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WIGHT COMPANY, Lamoni, Iowa. Filed May 22, 1919.

Egtone

Particular description of goods.—A Concentrated Tonic for Increasing the Production and Fertility of Eggs.
Claims use since Mar. 1, 1915.

Ser. No. 118,833. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS H. McMILLAN, Minneapolis, Minn. Filed May 23, 1919.

ASTHMANTAC

Particular description of goods.—A Preparation for the Treatment of Asthma.
Claims use since Apr. 29, 1919.

Ser. No. 118,907. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) DARWIN & MILNER, INC., New York, N. Y. Filed May 20, 1919.

FIREX

Particular description of goods.—Bar-Steel and Steel Castings.
Claims use since Apr. 1, 1919.

Ser. No. 118,950. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MADAM ANNIE WHITE, Cincinnati, Ohio. Filed May 26, 1919.



The portrait and signature shown being that of the applicant.

Particular description of goods.—Hair-Tonics.
Claims use since Oct. 1, 1917.

Ser. No. 118,955. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) W. A. BACH CO., INC., New York, N. Y. Filed May 27, 1919.

Baumanometer

Particular description of goods.—Sphygmomanometers.
Claims use since Jan. 29, 1917.

Ser. No. 118,974. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WALLACE & CULLEY, Houston, Tex. Filed May 27, 1919.

MOLE

Particular description of goods.—A Liquid Preparation for the Treatment of the Hair and Scalp.
Claims use since the 22d day of May, 1919.

Ser. No. 118,987. (CLASS 38. PRINTS AND PUBLICATIONS.) MACDONALD DA WITT, New York, N. Y., assignor to the News Syndicate Co., Inc., a Corporation of New York. Filed May 28, 1919.

Illustrated Daily News

Particular description of goods.—A Daily Publication.
Claims use since May 22, 1919.

Ser. No. 119,058. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGINA M. WHITCOMB, New York, N. Y. Filed May 29, 1919.

ELEPIZONE

Consisting of the word "Elepizone."
Particular description of goods.—A Medicinal Treatment for Epilepsy.
Claims use since 1880.

Ser. No. 119,118. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) H. BALDINGER & COMPANY, St. Paul, Minn. Filed June 2, 1919.

RAZAVA

Particular description of goods.—Irrad.
Claims use since May 1, 1919.

Ser. No. 119,124. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HERMAN BROS. COMPANY, Lock Haven, Pa. Filed June 2, 1919.

Be-Go

Particular description of goods.—Cough-Lozenges.
Claims use since July 6, 1917.

Ser. No. 119,160. (CLASS 0. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK HEMINGWAY, INC., New York, N. Y. Filed June 3, 1919.

Alliance

Particular description of goods.—Dyestuffs, Cattle-Dip, Sodium Arsenate, and Insecticides.
Claims use since during the month of October, 1918.

Ser. No. 119,162. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) HACKING MFG. CO., Providence, R. I. Filed June 3, 1919.

ELECTROL

Particular description of goods.—Storage Batteries.
Claims use since the 1st day of June, 1918.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 15, 1919.

- 125,924. TALCUM POWDER. THE AGRA COMPANY, Detroit, Mich.
Filed January 17, 1919. Serial No. 115,235. PUBLISHED MARCH 18, 1919.
- 125,925. POPPING-CORN. AMERICAN POP CORN COMPANY, Sioux City and Schaller, Iowa.
Filed February 10, 1919. Serial No. 115,714. PUBLISHED MARCH 25, 1919.
- 125,926. POPPING-CORN. AMERICAN POP CORN COMPANY, Sioux City and Schaller, Iowa.
Filed February 10, 1919. Serial No. 115,712. PUBLISHED MARCH 25, 1919.
- 125,927. POPPING-CORN. AMERICAN POP CORN COMPANY, Sioux City and Schaller, Iowa.
Filed February 10, 1919. Serial No. 115,709. PUBLISHED MARCH 25, 1919.
- 125,928. PERFUMERY, TOILET WATER, AND SACHET-POWDER. THE BALDWIN PERFUMERY COMPANY, Chicago, Ill.
Filed January 18, 1919. Serial No. 115,280. PUBLISHED MARCH 18, 1919.
- 125,929. PREPARATION FOR TREATMENT OF TAN, SUNBURN, FRECKLES, CHAPPED HANDS, AND ROUGHNESS OF THE SKIN. W. W. BEITENMAN, Eaglewood, Colo.
Filed April 16, 1918. Serial No. 110,232. PUBLISHED JULY 2, 1918.
- 125,930. FACE-POWDER. A. B. CEJOIS & CO., INC., New York, N. Y.
Filed October 5, 1918. Serial No. 113,586. PUBLISHED MARCH 18, 1919.
- 125,931. FRESH ORANGES. CHARLES D. BOYDSTON, Porterville, Calif.
Filed February 1, 1917. Serial No. 101,080. PUBLISHED MARCH 25, 1919.
- 125,932. FRESH ORANGES. CHARLES D. BOYDSTON, Porterville, Calif.
Filed February 1, 1917. Serial No. 101,081. PUBLISHED MARCH 25, 1919.
- 125,933. CANDY. ELMER CANDY COMPANY, INC., New Orleans, La.
Filed September 25, 1918. Serial No. 113,349. PUBLISHED MARCH 25, 1919.
- 125,934. PICKLES, APPLE-BUTTER, MINCE-MEAT, TOMATO CATSUP, JELLIES, AND FRUIT PRESERVES. FRANKLIN MACVEIGH & COMPANY, Chicago, Ill.
Filed November 5, 1915. Serial No. 90,438. PUBLISHED DECEMBER 5, 1916.
- 125,935. COFFEE. THE CHARLES E. HIRSH COMPANY, Philadelphia, Pa.
Filed January 6, 1919. Serial No. 115,009. PUBLISHED MARCH 25, 1919.
- 125,936. DUCK. INTERNATIONAL COTTON MILLS, Boston, Mass.
Filed January 25, 1919. Serial No. 115,390. PUBLISHED MARCH 18, 1919.
- 125,937. MEDICINE USED AS A BLOOD-PURIFIER. WILLIAM H. MEADOWS, Hoffman, Okla.
Filed December 31, 1918. Serial No. 114,917. PUBLISHED MARCH 18, 1919.
- 125,938. BISCUIT. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y.
Filed January 14, 1918. Serial No. 108,459. PUBLISHED MARCH 25, 1919.
- 125,939. MEDICINAL WADDING FOR TREATMENT OF RHEUMATISM. PHARMACEUTISCHE EN CHEMISCHE HANDELSVERENIGING "ROTTERDAM," Rotterdam, Netherlands.
Filed October 5, 1918. Serial No. 113,592. PUBLISHED MARCH 18, 1919.
- 125,940. FRESH ORANGES. REDLANDS MUTUAL ORANGE COMPANY, Redlands, Calif.
Filed April 24, 1917. Serial No. 103,267. PUBLISHED MARCH 25, 1919.
- 125,941. CANNED FRUITS AND CANNED VEGETABLES. JOHN SCOTT & CO., INC., Philadelphia, Pa.
Filed February 10, 1919. Serial No. 115,740. PUBLISHED MARCH 25, 1919.
- 125,942. CERTAIN COMPOSITION OF FATTY SUBSTANCES USED AS A BASE FOR TOILET CREAM. SAM SMITH, Tonbridge, England.
Filed November 7, 1918. Serial No. 114,080. PUBLISHED MARCH 18, 1919.
- 125,943. MEDICINAL COTTON. JOHN O. WALSER, Los Angeles, Calif.
Filed October 24, 1918. Serial No. 113,878. PUBLISHED DECEMBER 17, 1918.
- 125,944. JAM OR CONSERVE. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y.
Filed January 20, 1919. Serial No. 115,333. PUBLISHED MARCH 25, 1919.
- 125,945. WOMEN'S APPAREL: BLOUSES, SHIRT-WAISTS, SHIRTS FOR OUTER WEAR, COATS, SUITS, AND DRESSES. EDWIN E. WOLF, New York, N. Y.
Filed September 3, 1918. Serial No. 113,001. PUBLISHED MARCH 25, 1919.

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE PROUTY.

Decided June 9, 1919.

APPLICATION—RENEWAL—APPLICANT NOT BOUND BY
ELECTION IN ORIGINAL APPLICATION.

Held that "an applicant may ordinarily make a new election in a renewal application and prosecute claims to a species other than that originally elected, provided, of course, that such species is fully disclosed in the original application."

ON PETITION.

SPEED-INDICATING DEVICE.

Messrs. Sheridan, Sheridan & Smith for the applicant.

NEWTON, Commissioner:

This is a petition that applicant be allowed to prosecute, in a renewal application, claims to a specific form of the invention other than the species covered by the claims originally allowed in the application that became forfeited.

The question relates to the merits and should be determined on appeal; but in view of the fact that the petition has been filed and in order not to delay the matter, which does not appear to have been heretofore adjudicated, the petition will be considered.

Section 4897, Revised Statutes, referring to renewal applications, says:

Any person . . . shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application.

And Rule 175 reads:

When the patent has been withheld by reason of non-payment of the final fee, any person, whether inventor or assignee, who has an interest in the invention for which the patent was ordered to issue may file a renewal of the application for the same invention; but any renewal application must be made within two years after the allowance of the original application. Upon the hearing of the new application abandonment will be considered as a question of fact.

The expressions "such invention" and "same invention" in the statute and the rule apparently cannot be construed to mean the exact invention specified in the claims, as allowed, for in the re-issue statute (sec. 4916) this expression "same invention" is used in a similar sense, and it has been held proper to reissue with process claims original patents having only apparatus claims, as in *in re Heroult*, (127 O. G., 3217; 29 App. D. C., 42,) for illustration.

In *Boieers v. San Francisco Bridge Co.* (60 Fed. Rep., 640) it was held that the renewal application

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was not limited to what was allowed in the first application.

Renewal, divisional, substitute, and continuing applications are analogous in that they require a new fee. Applicant having paid a renewal fee is entitled to a new examination, and it is immaterial, so far as the work done by the Patent Office is concerned, whether the application is presented as a divisional, a substitute, or as a renewal application.

It must therefore be held that—
an applicant may ordinarily make a new election in a renewal application and prosecute claims to a species other than that originally elected, provided, of course, that such species is fully disclosed in the original application.

The petition is granted.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

Decisions per Curiam, March 31, 1919.

RUSSELL v. ROBERTSON.

(No. 1,191.)

This appeal is from the decision of the Commissioner of Patents awarding priority of invention to appellee Robertson. The Examiner of Interferences awarded priority to appellee. The Board of Examiners-in-Chief reversed the Examiner and awarded priority to appellant Russell.

The invention relates to isquered sheet-metal caps for bottles or jars having interfolded seams enveloping the raw cut edges of the metal to prevent oxidization caused by the cut edges coming in contact with the contents of the receptacle.

The case turns upon an issue of fact involving the question of originality. Without stopping to review the evidence, we agree with the Board of Examiners-in-Chief that Russell is entitled to the award of priority. The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.)

Court of Appeals of the District of Columbia.

IN RE MEYER.

(No. 1,206.)

The application for patent here in issue relates to a composition for furnace-lining capable of

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withstanding a high degree of heat without being chemically affected in the reduction of ores.

The three tribunals below were unanimous in holding that the invention is anticipated by a patent issued to applicant in 1915; hence, to allow the claims of the present application would amount to double patenting.

The ruling is clearly supported by the record, and the decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Court of Appeals of the District of Columbia.

ALASKA PACKERS ASSOCIATION v. GETZ BROS. & CO.

Decided May 5, 1919.

TRADE-MARKS—SIMILARITY—USE OF VARIOUS MARKS BY PRIOR USER.

Where it appeared that the opposer was organized by combining several minor companies, each of which had used as a trade mark a flag bearing a distinguishing letter, and after the merger these flags were continued to be used to designate different brands of salmon, *Held* that such use would not prevent the registration by another of the words "Our Flag" as a trade-mark for the same goods.

Mr. A. S. Stewart for the appellant.

Mr. E. T. Fenwick and Mr. L. L. Morrill for the appellee.

PER CURIAM:

Alaska Packers Association opposed the registration by Getz Bros. & Co. of the mark "Our Flag" for canned salmon and canned oysters. It appears that the opposer was organized in 1903 by combining several minor companies. Each of the merged companies had been accustomed to use a flag, bearing a distinguishing letter, as a mark and the opposer after the merger continued to use the flags of its constituent companies to designate different brands of salmon. In *Alaska Packers Association v. The Admiralty Trading Co.* (43 App. D. C., 198; 214 O. G., 1025) the Trading Company applied for registration of a flag "having a blue background," etc., with the red monogram "A. T. Co." to be used as a mark on canned salmon, and was opposed by the Packers Association, appellant herein, on the ground that the use of the flag by the Trading Company would be likely to produce confusion in trade. We ruled that since the Packing Association used several different flags in the sale of different brands of its goods it was hardly in a position—

to contend that the mark of the applicant will be likely to cause confusion in trade, since that mark differs from each of its marks as much as they differ from one another.

Applying this decision to the case at bar when it was before him the Commissioner said:

I do not see why this holding does not apply in the present case. It certainly decided that the Admiralty Trading Co. could not be stopped by the Alaska Packers Association, the present opposer, in its use of a flag as a trade-mark. If then the Admiralty Trading Co. can use its flag as a trade-mark, it is drawing pretty fine distinctions to say that the present applicant is not entitled to use the words "Our Flag" as its mark. The distinction is entirely too fine to be noticed by the purchasing public.

We believe that the Commissioner was right and for that reason his decision is affirmed.

Affirmed.

Court of Appeals of the District of Columbia.

GETZ BROS. & CO. v. ALASKA PACKERS ASSOCIATION.

Decided May 5, 1919.

TRADE-MARKS—SIMILARITY—"PREMIUM" AND "PREMIER."

The word "Premium" *Held* properly refused registration as a trade-mark for canned salmon in view of the prior use of the word "Premier" as a trade-mark for the same kind of goods.

Mr. E. T. Fenwick and Mr. L. L. Morrill for the appellant.

Mr. A. S. Stewart for the appellee.

PER CURIAM:

The appellant sought the registration of the word "Premium" as a trade-mark for canned salmon. This was opposed by the appellee who asserted that it was the prior user of the word "Premier" as a mark on the same kind of goods; that its mark was registered in the Patent Office in 1894; that the two words had much the same sound and appearance, and a similar meaning, and that the use of them by both parties upon the goods in question would be likely to produce confusion in trade. The opposition was sustained by the Examiner of Interferences and his action affirmed on appeal by the Commissioner.

We think the Patent Office was right, and we affirm the Commissioner's decision for the reasons given in his opinion, as well as upon the authority of *Thomas Manufacturing Company v. Acollon Company* (47 App. D. C., 376, 378) and cases there cited.

Affirmed.

Supreme Court of the United States.

ODELL v. F. C. FARNSWORTH COMPANY AND FARNSWORTH MANUFACTURING COMPANY.

Decided June 9, 1919.

1. PATENTS—JURISDICTION OF THE FEDERAL COURTS—CARES ARISING UNDER THE PATENT LAWS.

To constitute a suit under the patent laws, the plaintiff must set up some right, title, or interest under the patent laws or at least make it appear that some right or privilege will be defeated by one construction or sustained by an opposite construction of these laws.

2. SAME—SAME—SAME.

Where the bill of complaint alleged that the patent had been assigned by the plaintiff to the defendant, that the latter had agreed to pay certain royalties, and that they had not been paid and the prayer was for a discovery of the number of articles covered by the patent which the defendants had sold and for a decree that they account for and pay to the plaintiff the royalties thereon, *Held* that the case was not one arising under the laws, but merely a suit for royalties based on the contract.

APPEAL from the District Court of the United States for the Southern District of New York.

Mr. Samuel E. Darby for the appellant.

No appearance for the appellee.

Mr. Justice CLARKE delivered the opinion of the Court.

This is an appeal from a decree of the District Court for the Southern District of New York, dismissing plaintiff's, appellant, bill for want of jurisdiction.

The district court certifies: that the case was heard on the bill of complaint and a motion by the defendants to dismiss for want of jurisdiction; that the court ruled that the cause of action stated in the bill is an action on a contract and is not a suit arising under the patent laws of the United States, and that the bill was dismissed for want of jurisdiction, solely because it showed on its face that the matter in controversy is less than three thousand dollars.

The bill shows the requisite diversity of citizenship to give the court jurisdiction, but the amount claimed is only \$1,800 and therefore it did not have jurisdiction, (Judicial Code, sec. 24, 1st par.) unless the case is one arising under the patent laws of the United States.

The contention of the appellant is that the suit is one for infringement of a patent and arises under the patent laws and that therefore the court had jurisdiction regardless of the amount involved. (Judicial Code, sec. 24, 7th par.)

The allegations of the bill are: that the plaintiff was an inventor of a new and useful "steam trap," upon which he was granted Letters Patent No. 837,711; that on September 8th, 1914, he made a grant, in writing, to one of the defendants, to which the other defendant succeeded, of the—sole and exclusive right to manufacture and sell all apparatus covered by the patent, during the whole term of said patent.

and that on the same date the defendant, assignee of the patent, agreed in writing to pay plaintiff, in addition to the sum paid for the assignment,—\$100 within six months, and a royalty thereafter, of five dollars upon each "apparatus" sold until there should be received on account of such royalties the sum of \$1,800. It is further alleged that the defendants had sold a large number of patented "steam traps" but had accounted and paid for the sale of only five, and that they pretend that the others which they are manufacturing and selling are not covered by the Letters Patent granted to the plaintiff, and, finally, that the legal title to the patent involved is held by the defendants to use, and pay for the use of, the invention according to the terms of the written contract of September 8, 1914.

The prayer is for a discovery of the number of "steam traps" covered by the patent which the defendants have sold and for a decree that they—account for and pay over to your orator the amount of royalties thereon, which the defendants are required to do under the agreement herein referred to—and for the costs of suit.

Thus, neither the allegations nor the prayer of the bill aims at annulling or even modifying either the assignment of the patent or the contract on account of the breach of the latter, but on the contrary, plainly, the case intended to be stated, is one to enforce the contract and collect the royalties stipulated in it. Infringement of the patent is not alleged but, on the contrary, a completed grant and assignment of the legal title to it is pleaded, sufficient on its face, while unmodified, to disable the plaintiff from maintaining a suit for any infringement subsequent to the date of such assignment.

To constitute a suit under the patent laws the plaintiff must set up some right, title or interest under the patent laws, or at least make it appear that some right or privilege will be defeated by one construction, or sustained by an opposite construction, of these laws. (*Pratt v. Paris Gas Light & Coke Co.*, 168 U. S., 255, 259.)

The party who brings suit is "master to decide what law he will rely upon," and the allegations of his bill are the evidence, or the expression, of his decision, upon which the courts must act in determining the question of their jurisdiction. (*The Fair v. Kohler Die & Specialty Co.*, 228 U. S., 22; *Healy v. Sen Gull Specialty Co.*, 237 U. S., 479.)

It is too clear for discussion that the case stated in the bill, is a suit for royalties based on the contract, and not at all involving the construction of any law relating to patents. It has been often decided by this Court that such a suit is not one arising under the patent laws, and since less than the requisite jurisdictional amount is claimed the district court did not err in dismissing the bill. (*Wilson v. Sandford*, 10 How., 50; *Dale Tile Mfg. Co. v. Hyatt*, 125 U. S., 46; *Albright v. Tenz*, 106 U. S., 613; *Excelsior Wooden Pipe Co. v. Pacific Bridge Co.*, 185 U. S., 282; *Briggs v. United Shoe Machinery Co.*, 239 U. S., 48.)

The decree of the district court must be affirmed.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

Vol. 264—No. 4. TUESDAY, JULY 22, 1919. Price—\$5 per year.

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of July 22, 1919.	
Patents.....	745—No. 1,310,406 to No. 1,311,150, inclusive.
Designs.....	24—No. 53,627 to No. 53,650, inclusive.
Trade-Marks.....	172—No. 125,946 to No. 126,117, inclusive.
Reissues.....	5—No. 14,692 to No. 14,694, inclusive.
Total.....	944

There are two kinds of dollars—one that is never worth more than a hundred cents and one that grows in value. When you put your money in War Savings Stamps you change your hundred-cent dollars into the kind that grow.

Interference Notices.
DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

Jose Vila Fernandez, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Gilbert Jackson, of 1751 Amsterdam avenue, New York, N. Y., for patent and a patent granted January 29, 1918, No. 1,254,896, to Jose Vila Fernandez, of Central Dos Amigos, Camaguey, Oriente, Cuba, and a notice of such declaration sent by registered mail to said Jose Vila Fernandez at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Jose Vila Fernandez, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

A. B. Clark Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Anchor Leather Co., of 1001

West Division street, Chicago, Ill., for registration of a trade-mark and trade-mark registered May 29, 1906, No. 53,265, to A. B. Clark Co., of 29 Spruce street, New York, N. Y., and a notice of such declaration sent by registered mail to said A. B. Clark Co., at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said A. B. Clark Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 10, 1919.

Edward T. Willis and David B. Macdonald, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of S. Hirsch Distilling Co., of No. 417 Delaware street, Kansas City, Mo., for registration of a trade-mark and trade-mark registered March 25, 1890, No. 17,721, to Edward T. Willis and David B. Macdonald, and a notice of such declaration sent by registered mail to said Edward T. Willis and David B. Macdonald at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Edward T. Willis and David B. Macdonald, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Adverse Decisions in Interference.
PATENT No. 1,122,556.

On May 19, 1919, a decision was rendered that Frank H. J. Truby was not the first inventor of the subject-matter covered by claims 1, 2, 4, 5, 6, 7, 8, 9, 10, and 11, subject, "Automatic trucking system," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,233,188.

On June 13, 1919, a decision was rendered that Allan Coggeshall and Henry C. Schnake were not the first inventors of the subject-matter covered by claims 1, 2, and 3 of their Patent No. 1,233,188, subject, "Injection box," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,264,272.

On June 21, 1919, a decision was rendered that Lewis W. Chubb was not the first inventor of the subject-matter covered by claims 1, 2, 3, 4, and 5 of his Patent No. 1,264,272, subject, "Electrical apparatus," and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

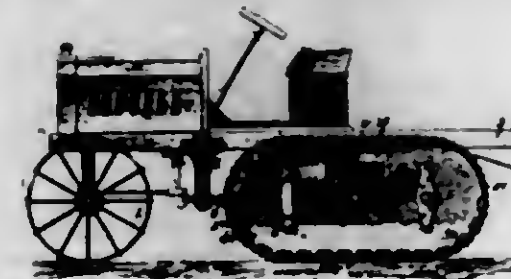
Condition at Close of Business July 18, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No of applications awaiting action.
		New.	Amended.	
314	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 17	May 17	304
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Films and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Feb. 26	Apr. 14	678
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 3	Dec. 17	200
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Feb. 24	June 7	482
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manufacturing; Music; Printed Matter; Tying Cords or Strands.	Mar. 31	Jan. 27	195
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Mar. 8	Apr. 7	396
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	May 3	June 12	315
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 25	June 5	206
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Feb. 18	Apr. 11	319
235	10. Carriages and Wagons; Motor Vehicles.	Mar. 1	May 20	834
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 14	June 5	295
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements.	Dec. 30	Jan. 4	1123
320	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Mailing; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 13	June 14	991
322	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structures; Wire-Working.	Mar. 24	May 3	251
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 13	May 12	651
112	16. Radiant Energy; Telegraphy; Telephony.	Feb. 13	Feb. 25	719
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Mar. 15	May 22	346
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 16	Apr. 3	485
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 24	Apr. 1	297
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	June 9	June 3	274
312	21. Brakes and Gine; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 8	Mar. 13	381
249	22. Aeronautics; Firearms; Ordnance.	May 2	June 11	288
317	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 22	May 19	391
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 9	Mar. 22	477
313	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 10	May 13	180
105	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Nov. 26	Feb. 10	651
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 24	May 19	438
225	28. Internal-Combustion Engines.	Feb. 6	May 3	592
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Engines; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Wood-working Tools.	Jan. 3	Apr. 5	696
153	30. Illuminating; Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 5	July 9	347
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 31	Mar. 22	430
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Feb. 4	May 16	167
76	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Paving; Roofs.	Feb. 11	Feb. 26	343
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 23	May 14	239
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	May 31	May 21	305
204	36. Drivers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	May 13	May 8	725
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Mar. 11	Apr. 8	714
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining; Quarrying, and Ice Harvesting; Stationery; Stone-Working; Wells.	June 9	June 6	223
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 11	Jan. 23	685
373	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 31	Mar. 34	419
125	41. Railway Draft Appliances; Railroad Tires and Wheels.	Mar. 13	Mar. 26	384
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electricity, Conducts; Electric Signaling.	Mar. 13	Mar. 17	500
263	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewage; Surgery; Water Purification.	Apr. 8	June 17	143
263	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	May 14	June 5	111
379	45. Crutches; Lubrication; Motors; Railway Brakes.	Mar. 14	Apr. 10	276
Oldest new case, Nov. 26; oldest amended, Jan. 4.				19,691
Total number of applications awaiting action.				
103	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:	May 20	July 2	1,080
	Trade-Marks.	May 8	June 17	865
	Designs.	July 3	July 14	66
	Labels and Prints.			

PATENTS

GRANTED JULY 22, 1919.

1,310,406. TRACTOR ATTACHMENT. MORTON L. ADAMS, Seattle, Wash., assignor to Adams Tractor Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 20, 1918. Serial No. 229,774. 21 Claims. (Cl. 180-9.)



1. In a tractor attachment, a movable tread, and relatively stationary means comprising side plates having means embodied therein for cooperating with the edges of the tread for agitating and working outwardly mud picked up by the tread.

4. A tractor attachment, comprising a tread having portions forming rails, tread driving sprockets directly engaging portions of the tread at both ends, and tread wheels coaxial with the tread driving sprockets at each side, running on the rails and carrying the tread at both ends thus relieving the tread driving sprockets of the weight of the tread.

1,310,407. CONTAINER FOR RAZOR-BLADES. FREDERICK HOWARD AULD, Columbus, Ohio. Filed Dec. 21, 1918. Serial No. 267,833. 5 Claims. (Cl. 206-10.)



5. A container for razor blades and the like comprising, in combination, a box-like structure and a movable bottom therefor secured at one end therein, said bottom consisting of a resilient body provided with a keeper at the end secured and a resilient tongue projecting upward from the resilient body and a second keeper between which and the resilient tongue the articles are placed.

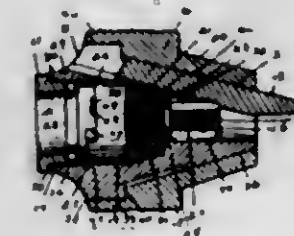
1,310,408. PILE DRIVER AND PULLER. CHARLES S. BOARDMAN, Buffalo, N. Y., assignor to Lackawanna Steel Company, Lackawanna, N. Y., a Corporation of New York. Filed Aug. 5, 1915. Serial No. 43,800. 13 Claims. (Cl. 61-76.)



1. A pile driver-puller comprising a suitable frame, one or more hammer-units suitably arranged on the frame, a

pair of jaws for gripping the sides of the pile adjacent one end of the frame and toggle supports for the jaws adapted to insure firm engagement of the jaws with the pile, when force is applied to the device in one direction, but to permit the jaws to loosen and the device to move along the pile when the force is applied in the opposite direction.

1,310,409. CHUCK. FRANK COREY, East Berlin, Conn. Filed May 14, 1915. Serial No. 28,170. 2 Claims. (Cl. 279-63.)



1. A chuck comprising a spindle member having a cylindrical body portion, a conical outer end portion provided with a screw thread, and a reduced extension at the inner end, a body member having a bore fitting over the said conical portion, and body portion, and extending over the said extension, a shell member, the said shell member and body member having means for operatively housing a set of jaws, a shoulder in the form of an end cam at the junction of the said body portion and extension, an end cam sleeve housed between the said body portion and extension and having an end cam surface cooperative with the said first cam surface, a nut secured to the said body member and fitting the end portion of the space between the said body portion and extension.

1,310,410. AUTOMOBILE-SIGNAL. CLEVELAND W. COLX, Spokane, Wash., assignor to Cole Duplex Auto Signal Company, Spokane, Wash., a Corporation. Filed Feb. 3, 1919. Serial No. 274,699. 3 Claims. (Cl. 40-130.)



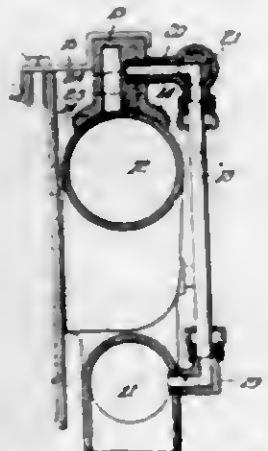
3. The combination in an automobile signal, of an upright, open end, intermediate, casing having a door and fashioned with upper and lower end seats, a pair of fixed lamp casings each having its side wall in a seat, and each lamp casing provided with a front and a rear lens and the lenses of the upper and lower casings differing in color, lamps in the end casings, supported in said side walls and provided with connecting terminals in the intermediate casing.

1,310,411. METHOD OF RAIL-BONDING. LAWRENCE P. CROCELIUS, Cleveland, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Continuation of application No. 105,051, filed May 3, 1916. This application filed Aug. 31, 1918. Serial No. 117,825. 9 Claims. (Cl. 219-10.)



1. The method of applying a rail bond to a rail which comprises heating the terminal of the bond by applying heat externally to the bond, and during the heating operation attaching the terminal to the rail and attaching together the parts of the terminal.

1,310,412. AIR-HEATER FOR INTERNAL-COMBUSTION ENGINES. FRANKLIN DICKEY, Indianapolis, Ind. Filed Mar. 12, 1917. Serial No. 154,352. 2 Claims. (Cl. 257-21.)

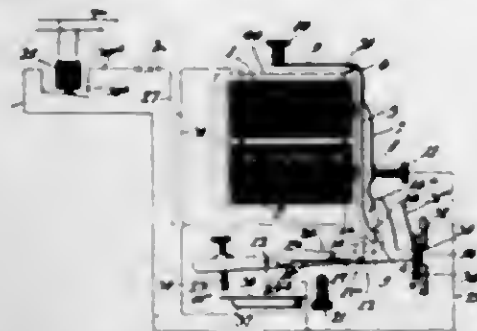


1. The combination with the exhaust pipe of an internal combustion engine, of an air heater comprising a U-shaped hollow metallic member closed at its top and ends and provided with a flanged open bottom adapted to seat on said exhaust pipe in heat conducting relation therewith, one of said flanges being provided with air-admission openings, said air heater being also provided with a relatively small air-discharging opening adjacent its top, and a pipe connecting said air-discharge opening with the intake pipe of the engine.

1,310,413. PROCESS OF TREATING SILICATES CONTAINING POTASSIUM AND ALUMINIUM. LOUIS A. ECKHART, New York, N. Y. Filed Dec. 7, 1918. Serial No. 265,749. 4 Claims. (Cl. 23-22.)

3. The method which consists in calcining a mixture of potassium aluminum silicate and calcium fluoride, then treating the resulting product with an acid, and subsequently extracting the soluble salts of aluminum and potassium.

1,310,414. ELECTRIC SIGNAL. WESLEY H. GRIGER, Wormleysburg, Pa. Continuation in part of application Serial No. 740,505, filed Jan. 6, 1913. (Forfeited.) This application filed Jan. 8, 1915. Serial No. 1,160. Renewed Oct. 15, 1918. Serial No. 238,312. 15 Claims. (Cl. 177-337.)



1. In a signaling device, the combination of an electromagnet, an armature therefor, a contact spring car-

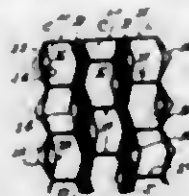
ried by said armature, a contact point for said spring, and a movable arm constructed to latch with said armature and having an extension which engages the contact spring and shifts the position of said spring relatively to its contact point when the movable arm is in latching relation with the armature.

1,310,415. GAME APPARATUS. HENRY INAGAO, Portland, Oreg. Filed July 6, 1918. Serial No. 243,544. 1 Claim. (Cl. 46-59.)



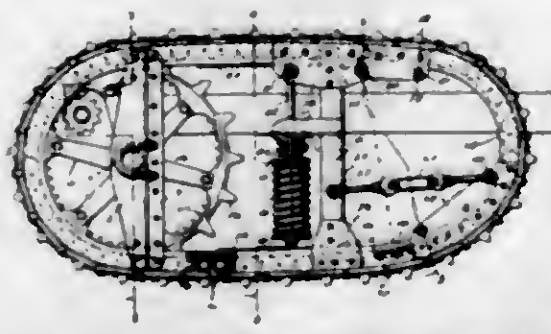
In game apparatus of the class described, a target board having movable target members, each movable target member having a point number, the said target board also having figures and said movable target members forming the heads of said figures and said board having openings adapted to be filled by said target members when the latter are in normal position.

1,310,416. RADIATOR FOR INTERNAL-COMBUSTION ENGINES. HARRY JAFFE, Chicago, Ill. Filed July 16, 1918. Serial No. 245,160. 3 Claims. (Cl. 257-130.)



1. A radiator of the nature described, including a casing, and a cellular core, said core comprising a series of vertically disposed water tubes, and a series of air spaces between adjacent water tubes, said water tubes having V-crippled walls, there being between adjacent water tubes an air space, and in each air space a single filler strip, said filler strip having crimped members contacting alternately with one wall, and then with the opposing wall of said water tubes, and horizontal members contacting with both walls thereof, there being in the filler strips marginal notches in the crimped portion thereof, said walls of the water tubes and the filler strip between adjacent water tubes affording the hexagonal, cellular, structure.

1,310,417. TRACTOR. FRED V. JOHNSON, Berkeley, Calif. Filed Apr. 22, 1918. Serial No. 237,149. 15 Claims. (Cl. 180-9.)



10. A track-laying unit for tractors comprising a track-way frame having opposed endless roller raceways, a plu-

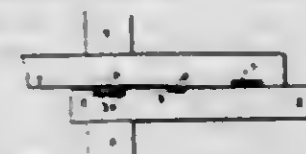
rality of track sections forming an endless flexible track, track sections composed of track shoes, abutting tread members attached to said shoes and having roller raceways adapted to cooperate with said opposed raceways, links pivotally attached to the ends of said tread members to connect said track sections, and cylindrical rollers adapted to travel in said raceways.

1,310,418. METHOD OF ELECTRIC WELDING. CHARLES H. KICKLIGHTER, Atlanta, Ga. Filed Sept. 21, 1918. Serial No. 255,030. 4 Claims. (Cl. 219-10.)



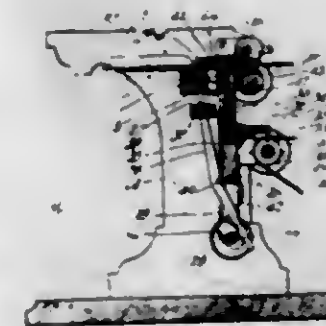
1. The method of fastening two thick plates of metal together face to face, which consists in forming a flat bottom depression in the face of one of the plates of less depth than the thickness of the plate in which it is formed, forming a register hole in the bottom of the depression, inserting in said depression a metallic body having parallel flat top and bottom faces with a register projection on one thereof and being of sufficient thickness to hold the opposing faces of the plates apart during the welding operation, registering said register projection with said register hole so as to hold the metallic body in a correct position, and by the application of pressure and heating electric current welding the opposed faces of said plates to the opposite parallel faces of said metallic body so that the surfaces of contact conform with one another and are of appreciable area, whereby the metallic body will readily soften and occupy the depression so that the two plates of metal may come into immediate facial contact.

1,310,419. METHOD OF ELECTRIC WELDING METAL PLATES. CHARLES H. KICKLIGHTER, Atlanta, Ga. Filed Nov. 27, 1918. Serial No. 264,475. 8 Claims. (Cl. 219-10.)



1. The method of fastening two metal plates together, face to face, which consists of forming flat bottom depressions in the faces of the plates near the edges thereof, of forming a groove in the face of one of the plates to one side of the depressions at a location where before being reached a portion of the stresses in said plate will have been transferred to the other plate, of introducing into the depressions substantially flat metallic bodies of sufficient thickness to hold the plates apart during the welding operation, of fusing the metallic bodies to the bottoms of the depressions at a point or points only sufficiently to hold them in place during the subsequent adjusting and welding operation, of bringing the plates into juxtaposition so that the depressions in the plates fall beyond each other relative to the major portions of the respective plates, and with a wire in the groove and the plate surfaces contacting with the projecting portions of the metallic bodies, of welding the metallic bodies and the wire to both of the plates by the application of pressure and heating electric current and of forcing the metallic bodies and the wire into the depressions and groove so as to allow the plates to come into immediate contact.

1,310,420. METHOD OF MARKING AND PERFORATING SHEETS. PAUL B. KLUUGH, Chicago, Ill., assignor to The Cable Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 10, 1915. Serial No. 13,516. 8 Claims. (Cl. 104-114.)



1. A method of making a master-sheet for use in an automatic step-feed perforating-machine, which method comprises marking on the master-sheet blank a record of a musical selection as it is being played on a musical instrument, and perforating said master-sheet blank in substantial correspondence with said marking but to conform to the step-feed of the perforating-machine.

1,310,421. SKATE. JOHN M. LEAKE, Worcester, Mass., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1919. Serial No. 276,678. 5 Claims. (Cl. 46-50.)



1. In a skate, a heel plate, having a stand or support, of bifurcated shape in cross section, at its rear end, and at its front end, for securing the plate to the runner, one of said stands made integral with said heel plate.

1,310,422. COLLAR-FASTENER AND NECKTIE-GUIDE. WALTER L. LINDSAY, Baltimore, Md. Filed Aug. 5, 1918. Serial No. 248,436. 3 Claims. (Cl. 24-62.)

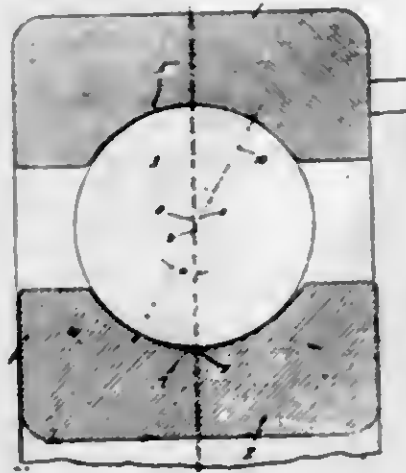


1. A device of the character described comprising a body portion, an offset hook member formed integrally upon the intermediate portion of said body member and insertible through the button hole of a collar, clamping tongues formed on said body at the sides of said hook member and cooperating therewith, and an inverted U-shaped guide yoke formed on the upper end of said body portion.

1,310,423. ANNULAR BALL-BEARING. OTTO A. J. R. LIPPERT-BRENNER, Chicago, Ill., assignor to U. S. Ball Bearing Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1917. Serial No. 180,098. 2 Claims. (Cl. 64-59.)

1. A ball bearing comprising inner and outer race-members provided with opposed raceway grooves, and a plurality of balls operating in said grooves, one of said raceway grooves having a transverse curvature less than

the curvature of the cooperating ball whereby the ball may bear upon the same at a single point and the other raceway groove having a curved configuration producing



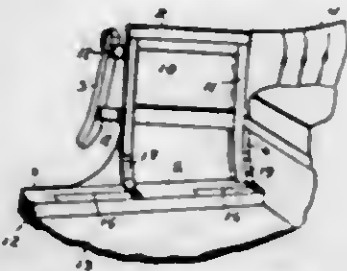
in effect a curvature which at its central portion only is greater than that of the ball, the ball bearing upon the same at two points under a simple radial load and at one point only under a thrust load.

1,310,424. LAUNDRY DRYING APPLIANCE. WARREN LOCCOFF, BRASS MINE, ONTARIO, CANADA. Filed Oct. 10, 1918. Serial No. 257,618. 3 Claims. (Cl. 68-34.)



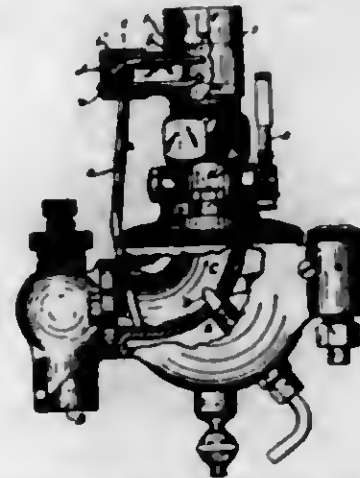
1. A laundry appliance adapted for attachment to a building having a window opening therein comprising a block secured to the outer wall of the building beneath said window, a strut hinged to said block, a pulley journaled in the outer end of said strut, a bracket secured inwardly of said window opening, a vertical post movably supported by said bracket, a pulley journaled in the upper end of said post, said post normally lying out of the plane of the window opening and adapted to be moved to position the pulley carried thereby in alignment with the strut pulley with a clothes line positioned thereon, and means controlled within the building for raising and lowering the strut arm.

1,310,425. AUTOMOBILE-BODY ATTACHMENT. WILLIAM H. MCINTYRE, CHICAGO, ILL. Filed Feb. 10, 1919. Serial No. 273,943. 2 Claims. (Cl. 21-7.)



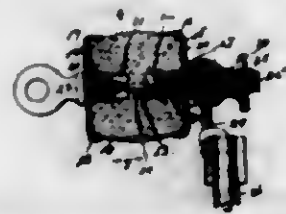
1. An automobile body having upon each side thereof an inserted section between the rear door and the back of the body and a corresponding insert applied in the adjacent sill.

1,310,426. CARBURETER. ELMER J. MANNING, JANESVILLE, WIS. Filed Dec. 26, 1914. Serial No. 878,993. 2 Claims. (Cl. 261-41.)



2. The combination with a carbureter, of a valved outlet duct adapted to communicate between the carbureter and the cylinder of an internal combustion engine, independent means for delivering liquid collecting in said outlet duct between the carbureter and the valve to a point in said duct beyond the valve, and means for atomizing the liquid so delivered, said atomizing means being also adapted to atomize liquid collecting in said duct on the side of the valve opposite that occupied by the carbureter.

1,310,427. SPARK-PLUG INTENSIFIER. GEORGE RICHARD MAINWYER, DEXTER, IOWA. Filed Apr. 29, 1918. Serial No. 231,497. 6 Claims. (Cl. 175-183.)



1. A spark plug intensifier, comprising an insulator formed with separate electrically connected spark chambers, caps at both ends of the insulator, said caps being formed with sockets extending within said spark chambers, and electrodes at both ends of the insulator, which electrodes are secured in said sockets.

1,310,428. PERPETUAL MONTHLY CALENDAR. FRANK X. MOORE, PHILADELPHIA, PA. Filed Apr. 30, 1918. Serial No. 231,574. 7 Claims. (Cl. 40-117.)

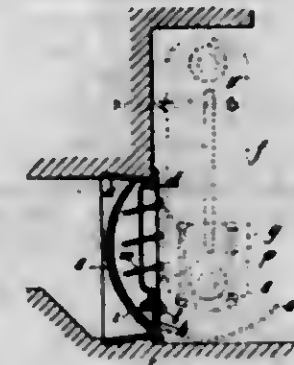


1. A calendar comprising a frame having openings for month names and for numerals representing the days of a month, a strip containing such numerals movable across one of said openings, a table of year numerals, and a strip containing month names movable across the other of said openings and containing also week day designations adapted to register with said year numerals.

1,310,429. VENTILATOR. WALTER WILLIAM NORRIS, LONDON, ENGLAND. Filed Oct. 1, 1915. Serial No. 33,593. 3 Claims. (Cl. 98-27.)

3. A ventilator comprising an air conduit having continuous side walls and an end closure, a curved air filter,

curved grooves or guides carried by said side walls for holding said air filter in position substantially transverse to said conduit, the lower portion of said air filter as held by said grooves or guides being nearer said end



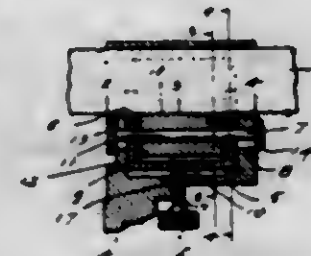
closure than the central position thereof and a door provided for an opening in said end closure at the bottom thereof, such opening being adjacent the ends of said grooves or guides and the lower portion of said air filter whereby said air filter may be removed and replaced.

1,310,430. SWITCH. CLYDE M. NYE, EMMETT, IDAHO, assignor to JOHN H. NYE, EMMETT, IDAHO. Filed June 20, 1918. Serial No. 241,029. 2 Claims. (Cl. 175-366.)



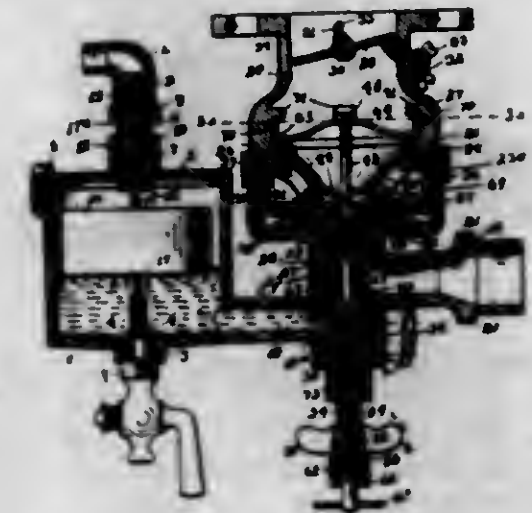
1. A switch, including a base plate, an arch secured to and rising from the base plate, a horizontally disposed bar secured to the arch, a lever fulcrumed at one end of the bar, a wedge block carried by the lever, resilient means for holding the lever in normal position, a support on the bar, terminals secured to and insulated from the support, and resilient members separated to contact and bridge the terminals when the wedge block is swung between the members by the rocking of the lever, and means for rocking the lever.

1,310,431. MICROMETER-CALIPERS. ADOLPH OLEVIN, DETROIT, MICH., assignor to MERIDIAN MACHINE PRODUCTS CORPORATION, DETROIT, MICH., a Corporation of Michigan. Filed May 1, 1918. Serial No. 231,927. 2 Claims. (Cl. 33-165.)



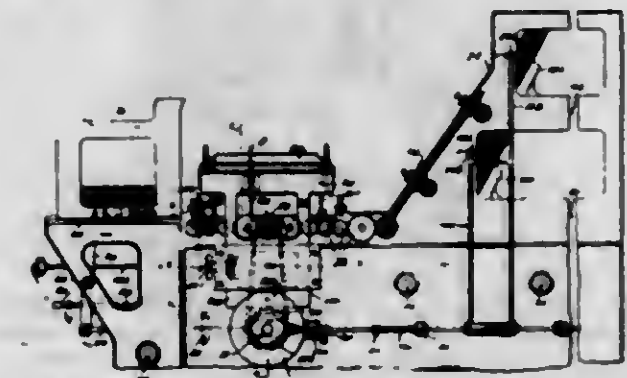
1. A device of the character described including, a shank having notches in one edge thereof, a rigid jaw carried by one end of the shank, a second jaw slidable on the shank, a frame slidably mounted in the movable jaw and having bifurcated end bars straddling said shank, a pin journaled through the frame and having its respective ends slidable in the second named jaw, a barrel carried by the pin and provided with threads cooperating with the notches in the shank, a graduated adjusting head carried by the pin for rotatably adjusting the barrel, and means for removably holding the threaded barrel in engagement with the threads on the shank.

1,310,432. CARBURETER. CHARLES J. PEMBROKE, ROCHESTER, N. Y. Filed June 15, 1914. Serial No. 845,259. 11 Claims. (Cl. 261-51.)



1. A carbureter comprising a mixing chamber having a spray nozzle therein, a movable baffle plate placed in said chamber on a fixed rest intermediate the ends thereof, said baffle plate being moved toward one end of said chamber by a heavy rush of air through said chamber and being undisturbed by a moderate flow of air, a small clearance being provided at the rest around said baffle, a larger clearance being provided around said baffle above said rest.

1,310,433. MULTISORTING MACHINE. JAMES POWERS, NEW YORK, N. Y., assignor to POWERS ACCOUNTING MACHINE COMPANY, NEW YORK, N. Y., a Corporation of Delaware. Filed Feb. 10, 1916. Serial No. 77,366. 37 Claims. (Cl. 88-92.)

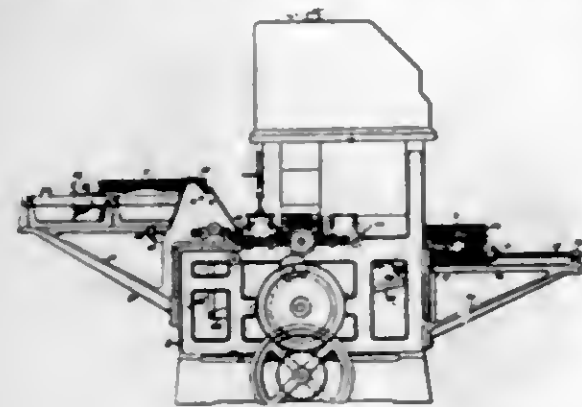


1. A method of sorting cards or similar objects, said method consisting in dividing the cards to be sorted into a plurality of batches; analysing the cards of each batch, and selecting from each batch all of the cards containing certain data; placing the selected and unselected cards from each batch in a sorted and an unsorted pile respectively; and replenishing the cards of any batch that may be exhausted from the unsorted piles derived from other batches.

1,310,434. METHOD OF FEEDING CARDS. JAMES POWERS, NEW YORK, N. Y., assignor to POWERS ACCOUNTING MACHINE COMPANY, NEW YORK, N. Y., a Corporation of Delaware. Original application filed Mar. 18, 1916. Serial No. 85,130. Divided and this application filed June 13, 1918. Serial No. 239,861. 1 Claim. (Cl. 271-4.)

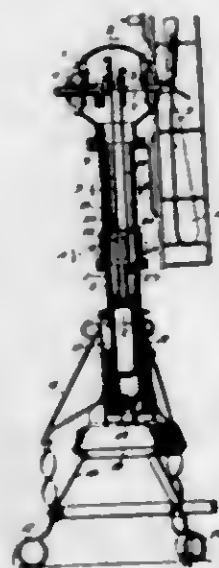
A method of analysing cards, said method consisting in vertically positioning the cards in an initial pack right side up with their faces forward; feeding the cards, one at a time, face forward; deflecting the fed cards to horizontal position; analysing the deflected cards; again deflecting the analyzed cards again to vertical position

with their faces forward; and discharging the again deflected card into a final pack right side up with their



faces forward and in vertical position, the cards having the same relative position and arrangement in the initial and final packs.

1,310,435. HEAT-MOTOR. FERDINAND A. RAFFEL, Chicago, Ill., assignor to William J. H. Strong, Chicago, Ill. Filed Nov. 8, 1917. Serial No. 200,987. 4 Claims. (Cl. 90—24.)



1. In a combined heat motor and fan, a shaft housing, a shaft mounted in bearings carried thereby, a fan secured on one outer end of said shaft, a working cylinder below the shaft housing, an elongated casing spacing the housing and working cylinder apart, said casing extending below said shaft approximately the radius of said fan whereby the working cylinder is below the direct draft of air flowing to the fan.

1,310,436. PROCESS OF MAKING TUBES FOR PNEUMATIC TIRES. FRED THOMAS ROBERTS, Cleveland, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 5, 1916. Serial No. 107,489. 31 Claims. (Cl. 154—14.)

2. The process of making hollow rubber articles consisting of placing sheets of rubber stock across the mouths of mold cavities, forming sections of the article in finished shape by pneumatically forcing the stock therefor against the walls of the cavities, bringing the mold members substantially together to press the edge portions of one sheet against the other, a nipple being interposed between the sheets, supplying compressed fluid to the interior of the article through such nipple whereby the article is effectively held against the walls of the mold cavities, vulcanizing the article without opening the mold and while the nipple is in place and internal fluid pressure is maintained.

1,310,437. PROCESS OF MAKING INFLATABLE RUBBER ARTICLES. FRED THOMAS ROBERTS, Cleveland, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 5, 1916. Serial No. 107,490. 23 Claims. (Cl. 18—56.)

1. The process of making inflatable rubber articles consisting of placing a rubber filling tube about a stem, pneumatically forming the body of the article causing such body to engage the tube, vulcanizing the body and tube together; and withdrawing the stem.

1,310,438. TUBE FOR PNEUMATIC TIRES. FRED THOMAS ROBERTS, Cleveland, Ohio. Filed July 5, 1916. Serial No. 107,491. 5 Claims. (Cl. 152—13.)



1. As a new article of manufacture, a soft rubber annular inner tube for a pneumatic tire, composed of a plurality of contiguous sheets of rubber with the grain extending in different directions.

1,310,439. METHOD AND APPARATUS FOR MAKING HOLLOW RUBBER ARTICLES. FRED THOMAS ROBERTS, Cleveland Heights, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 4, 1918. Serial No. 220,288. 28 Claims. (Cl. 18—19.)



1. The process of making a hollow rubber article consisting of pneumatically seating rubber stock in mold cavities, bringing two seated portions into conjunction with the edges in engagement and upon an interposed mandrel, severing parts of the stock against the mandrel and transferring the article with the mandrel to a vulcanizing mold, and vulcanizing it.

1,310,440. METHOD OF AND APPARATUS FOR MAKING HOLLOW RUBBER ARTICLES. FRED THOMAS ROBERTS, Cleveland, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 24, 1918. Serial No. 241,465. 26 Claims. (Cl. 18—56.)



3. The method of making hollow rubber articles, consisting of seating rubber stock in cavities in two mold members, bringing such rubber lined cavities into conjunction about a mandrel, severing the stock and automatically seaming it adjacent to edges of the cavities and also severing the stock transversely against the mandrel, and thereafter vulcanizing the formed article while on the mandrel.

19. An apparatus for making nursing nipples or similar articles, consisting of mold plates each having a plurality of cavities adapted to register when the plates are brought together, and a plurality of mandrels adapted to enter such cavities and carried on a support and spaced correspondingly to the cavities, the mold having passages whereby stock may be pneumatically seated.

1,310,441. METHOD OF AND APPARATUS FOR MAKING HOLLOW RUBBER ARTICLES. FRED THOMAS ROBERTS, Cleveland, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 24, 1918. Serial No. 241,466. 32 Claims. (Cl. 18—56.)



1. The method of manufacturing nipples consisting of making two nipples as a continuous closed structure with their bases end to end, vulcanizing them while providing an internal pressure and thereafter severing such structure.

1,310,442. PROCESS AND APPARATUS FOR MAKING HOLLOW RUBBER ARTICLES. FRED THOMAS ROBERTS, Cleveland, Ohio, assignor to The Paramount Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 24, 1918. Serial No. 241,467. 39 Claims. (Cl. 18—35.)

1. The method of making hollow rubber articles, comprising seating stock for the article in cavities in two cooperating molds, bringing two of such cavities when lined with rubber into coaction to inclose a mandrel, and embrace a portion thereof while another portion of the mandrel is out of contact with such lining, thereafter vulcanizing the article with the mandrel inclosed, then severing a portion of the article, and removing the mandrel through the opening thus provided.

1,310,443. INSTRUMENT FOR ASCERTAINING THE POINT OF RECALESCENCE OF STEEL. JOSEPH H. ROBINSON, Rochester, N. Y., assignor of one-half to Carl M. Weber, Rochester, N. Y. Filed Jan. 18, 1919. Serial No. 271,535. 5 Claims. (Cl. 175—183.)

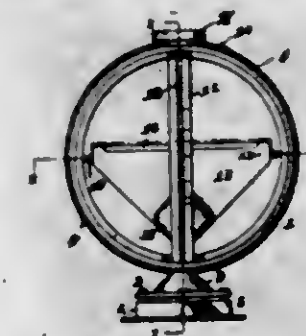


1. An instrument of the class described comprising a support, a magnet movably mounted thereon, and an abutment with which said magnet cooperates and from which it moves under the action of steel which has not reached the point of recalcence.

1,310,444. INDICATOR. GUSTAVE A. ROHM, Tarentum, Pa. Filed May 9, 1918. Serial No. 233,552. 7 Claims. (Cl. 32—215.)

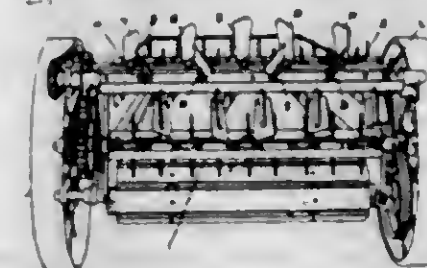
1. A level indicator comprising a base, a stationary ring member secured to said base, a second ring member

mounted on bearing balls within said first named ring, a third ring secured to said second ring and extending transversely thereof, a pendulum pivotally mounted in



said second ring at diametrically opposite points, and means on said pendulum for cooperating with said third ring to indicate the inclination of the device.

1,310,445. MANURE-SPREADER. JOHN F. RUDE, Liberty, Ind. Filed June 11, 1918. Serial No. 239,420. 15 Claims. (Cl. 275—3.)



1. A manure spreader provided with a beater and a deflector to the rear of the beater having greater distributing capacity at the center thereof than at the ends.

1,310,446. VARIABLE-DISPLACEMENT PISTON FOR INTERNAL-COMBUSTION ENGINES. JOSEPH SCHAEFFERS, Lakewood, Ohio. Filed Feb. 5, 1916. Serial No. 76,243. 4 Claims. (Cl. 123—78.)

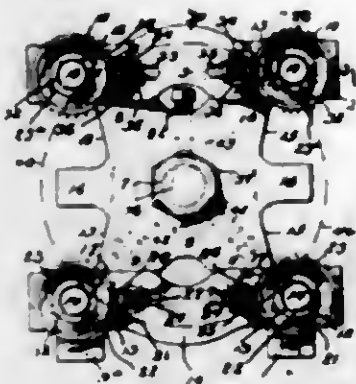


1. In an internal combustion engine, the combination of a cylinder, a main piston therein, a supplemental piston therein, a connecting rod attached to the main piston, an extensible connection between said pistons, and actuating means independent of the connecting rod and connected between said extensible connection and the engine shaft for the purpose described.

1,310,447. DEVICE FOR REMOVING ARTICLES FROM SHAFTS. GEORGE W. SCHILLING, Philadelphia, Pa. Filed Dec. 13, 1918. Serial No. 266,550. 8 Claims. (Cl. 20—85.)

1. A device, adapted to remove an article from a shaft, including a head adapted to engage the shaft; clamping

bolts having screw threaded portions; means carried by said bolts adapted to engage said article; gear wheels in



threaded engagement with the threaded portions of said bolts; and mechanical means for rotating said gear wheels; substantially as described.

1,310,448. STOPPER. MAXIMILIAN CHARLES SCHWEINERT, West Hoboken, N. J. Filed Aug. 21, 1915. Serial No. 40,594. 2 Claims. (Cl. 150—8.)



2. The combination with a stopper for rubber bath tubs or the like, of a socket member comprising a sheet metal body having its outermost end turned outwardly to form a flange adapted to engage the outer surface of, and lie substantially flush with, the bath tub or the like to which it is attached, and having its body portion bent to form an internal and external thread to receive the stopper, and its innermost end extended inwardly to form an internal seat for the base of the stopper, and a sheet metal screwthreaded sleeve adapted to screw on the outside of said socket member from its inner end outwardly, and to compress the edges of the bath tub or the like, against said socket flange at the outermost end, said screwthreaded sleeve having an outwardly-extending flange to cooperate with said socket flange, and a compressible packing gasket arranged between the flange on the sleeve and the inner side of the bath tub, and adapted to be pressed against the latter.

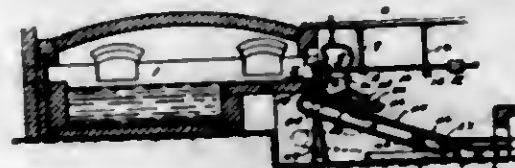
1,310,449. ELECTRODEPOSITION OF MAGNESIUM. GEORGE O. SEWARD, Jersey City, N. J., assignor to American Magnesium Corporation, a Corporation of New York. Filed Mar. 23, 1916. Serial No. 86,288. 16 Claims. (Cl. 204—19.)

1. The process of electrodepositing magnesium, which consists in passing an electric current through a molten bath including magnesium fluoride, said bath carrying magnesium in substantial excess of the proportion soluble therein.

1,310,450. PROCESS OF ELECTRODEPOSITING MAGNESIUM. GEORGE O. SEWARD, Niagara Falls, N. Y., assignor to American Magnesium Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Nov. 19, 1917. Serial No. 202,821. 6 Claims. (Cl. 204—19.)

3. A process of electrodepositing magnesium, which consists in passing an electric current through a molten bath including magnesium fluoride, said bath carrying magnesium oxide in substantial excess of the proportion soluble therein and being of sufficient density to prevent rapid subsidence of the undissolved portions, and withdrawing magnesium in the molten state from the upper portion of the bath.

1,310,451. COMBINED GLASS-MACHINE. GEORGE A. SHIMMUS, Columbus, Ohio, assignor to Cyrus H. Martin and Blanch A. Martin, Columbus, Ohio. Filed Apr. 11, 1918. Serial No. 227,978. 4 Claims. (Cl. 40—3.)



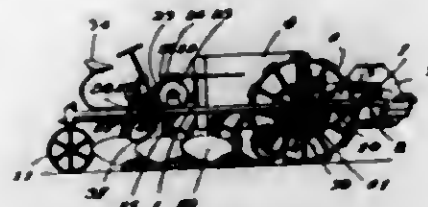
2. The combination with the supporting conveyor for sheet glass and spaced tappets on said conveyor, of a pivoted frame in the path of movement of the tappets, and a transversely arranged knife blade pivoted in said pivoted frame above the glass and adapted when in engagement with the sheet glass, to saw with the moving glass.

1,310,452. COMBINED FISHING-ROD AND CANE. STEPHEN SLEWINSKI, Cressona, Pa. Filed Apr. 5, 1919. Serial No. 287,747. 3 Claims. (Cl. 43—16.)



1. A device of the class described comprising a tubular shaft, a handle at one end thereof, telescoping sections adapted for threaded engagement with each other and with said shaft when the sections are projected, a rod within the central section adapted for threaded engagement with the outer end thereof when the rod is projected, a resiliently mounted disk within the inner end of the shaft with said sections and rod seated thereon when in cane formation, a cap threaded upon the outer end of said rod and into the outer end of the shaft when the device is folded with the outer ends of said sections seated upon said cap.

1,310,453. POWER-PLOW LIFT. WILLIAM L. WALTON, Bantry, N. D. Original application filed June 12, 1912. Serial No. 703,239. Divided and this application filed Dec. 24, 1913. Serial No. 808,619. 12 Claims. (Cl. 97—70.)



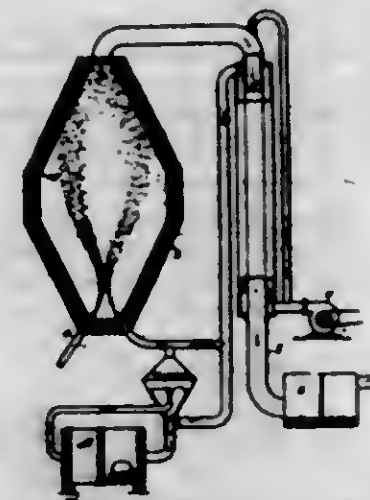
5. In a plow lifting mechanism, the combination with a plow beam, of a plow thereon, means for raising the rear end of the plow beam, and of means for turning the plow in one direction as it is being raised and turning it in the reverse direction as it is being lowered.

1,310,454. CONVEYER. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed June 3, 1918. Serial No. 237,880. 11 Claims. (Cl. 193—4.)



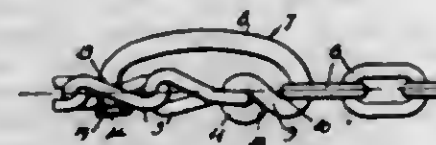
1. Apparatus for reclaiming and conveying material, comprising a main conveyor belt, a truck mounted to move parallel therewith, a boom conveyor mounted on the truck, means for conveying material from the main conveyor belt to said boom conveyor, means carried by the boom conveyor for gathering material, and means for conveying material from the boom conveyor to the main conveyor belt.

1,310,455. METHOD OF ROASTING ORES OR CONCENTRATES. ULYS C. TAINTON, Doornfontein, Johannesburg, Transvaal, South Africa. Filed Apr. 1, 1918. Serial No. 226,075. 4 Claims. (Cl. 75—17.)



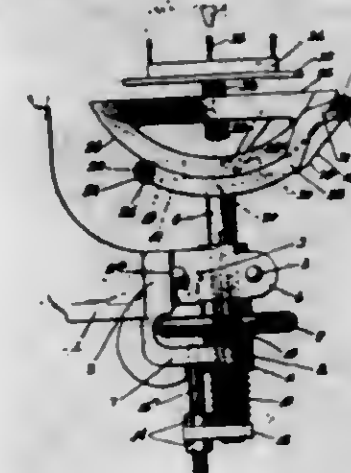
1. A method of roasting silic ores or concentrates containing iron, which consists in reducing the ore by milling or grinding to a comminuted mass, blowing said mass by means of an air blast through a roasting chamber to permit each silic and iron particle contained in the ore or concentrates to be roasted while suspended in said blast, cooling said particles after passage through the roasting chamber, and then separating said particles from the air by permitting them to settle in a collecting chamber.

1,310,456. CAM-LEVER COUPLING. RUFUS A. TAWNEY, Grand Junction, Colo. Filed Sept. 30, 1918. Serial No. 256,205. 3 Claims. (Cl. 24—68.)



3. A cam lever coupling embodying a bill having at one end a loop and a pivot portion, the other end of the bill being formed to provide a hook for preliminary connection and to pass through a slotted member, and a retaining member for said hook to bear against said member due to the pulling strain of members engaging said loop and pivot portion, said retaining member being manually operable to let the hook withdraw from said slotted member.

1,310,457. TABLE FOR BRUSH-FILLING MACHINES. LEONARD B. TSEHUNK, Newark, N. J., assignor to The Arlington Company, Arlington, N. J., a Corporation of New Jersey. Filed Dec. 15, 1916. Serial No. 137,138. 5 Claims. (Cl. 15—7.)



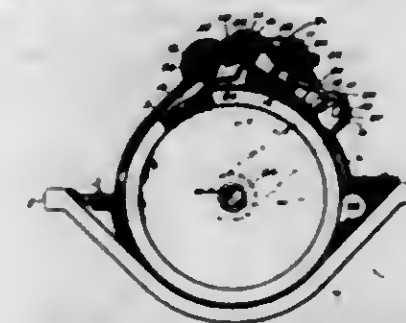
1. In combination, a table supporting rod, a fixed bracket slidably receiving the same, an adjusting wheel for said rod, a spring yieldingly supporting said rod and holding said wheel against said bracket.

1,310,458. ELECTRIC-MOTOR SYSTEM. CARL TRETTIN, Berlin, Germany, assignor to Siemens-Schuckert Werke, G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed June 5, 1913. Serial No. 771,964. Renewed Dec. 11, 1918. Serial No. 266,366. 3 Claims. (Cl. 172—170.)



1. A work system of the character described, comprising in combination a motor having a constantly excited field winding, a work member whose load increases at a greater rate than the speed, suitably connected with said motor, means for temporarily increasing the field strength of the motor at the moment of starting, and means for connecting said motor directly with a current source.

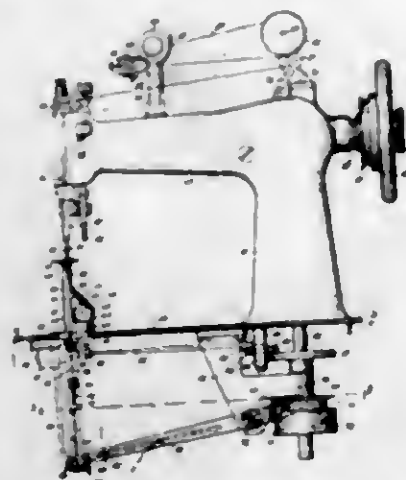
1,310,459. ROTARY GAS-ENGINE. MICHAEL WALKER, Detroit, Mich. Filed July 31, 1917. Serial No. 183,723. 1 Claim. (Cl. 60—41.)



In a rotary internal combustion engine, the combination of a rotor, a casing in which said rotor is mounted, a rotary shaft on which said rotor is mounted, a compressing cylinder having a fixed and substantially tangential relation to the rotor casing, a compressing piston operating in said cylinder, a crank shaft operatively geared in parallel relation to the rotor shaft and having said compressing piston coupled thereto and driven

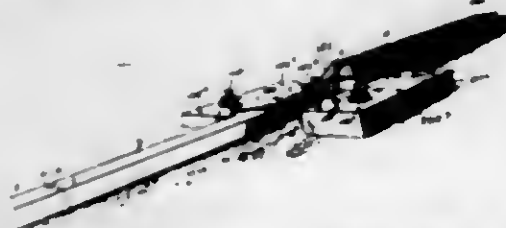
thereby, a combustion chamber arranged to receive the compressed charges from said cylinder, an expansion chamber arranged to receive the expanding mixture at the time of the ignition thereof in the combustion chamber, a positively driven rotary valve between the compression and combustion chambers, a positively driven rotary valve between the combustion and expansion chambers, and valve operating connections actuated by said crank shaft.

1,310,460. SEWING-MACHINE. FREDERIC S. WILLIAMS, Brooklyn, N. Y., assignor to Frederick Klein, trustee, New York, N. Y. Filed Apr. 11, 1918. Serial No. 227,872. 10 Claims. (Cl. 112-22.)



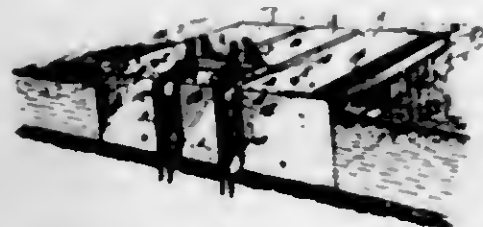
1. In a sewing machine, the combination of sewing mechanism arranged to form a thread loop, an independent shuttle over which said thread loop is passed, said shuttle being unrestrained in its normal position and being moved from said normal position entirely by tension imposed through the thread to permit the passage of said loop and mechanism arranged to engage said shuttle whereby the latter is positively returned to its normal position after the passage of said loop.

1,310,481. FLOATABLE CONCRETE CONSTRUCTION. JOSEPH STOKES WILLIAMS, Riverton, N. J. Filed Mar. 3, 1909. Serial No. 481,071. 18 Claims. (Cl. 61-3.)



10. In subaqueous concrete construction, a floatable and sinkable combined guide and mold.

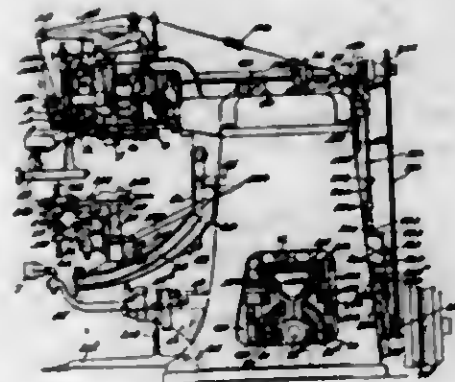
1,310,462. REINFORCED CONCRETE CONSTRUCTION AND METHOD OF CONSTRUCTING THE SAME. JOSEPH STOKES WILLIAMS, Riverton, N. J. Original application filed Mar. 3, 1909. Serial No. 481,070. Patent No. 1,051,043. Divided and this application filed Jan. 21, 1913. Serial No. 743,237. 13 Claims. (Cl. 72-77.)



1. The method of laying concrete, which consists in longitudinally moving in the earth bed of a waterway

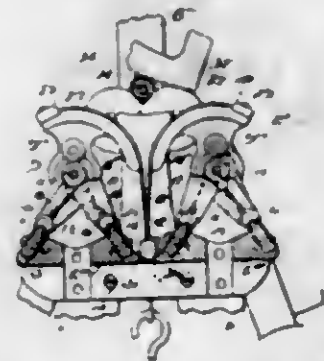
channel forming means and forming a channel in the earth bed, and excluding water from the channel in the rear of the channel forming means, by filling concrete from above the water level through a conducting channel into the channel in the earth bed.

1,310,463. AUTOMATIC SHOE-MACHINE. ERANTUS E. WINKLEY, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 1, 1912. Serial No. 712,702. Renewed Mar. 27, 1917. Serial No. 157,844. 50 Claims. (Cl. 12-2.)



42. A machine, having, in combination, operating means, mechanism for tipping the work, a feeler arranged to engage the work, and connections between the feeler and tipping mechanism to determine the movements imparted to the work by the tipping mechanism.

1,310,464. ROCKER-BEARING FOR MEASURING INSTRUMENTS. JOSEPH C. BARRETT, Brooklyn, N. Y. Filed Feb. 21, 1917. Serial No. 149,995. Renewed Dec. 17, 1918. Serial No. 267,208. 11 Claims. (Cl. 74-104.)



1. A measuring instrument comprising a lever having pivots, movable members adapted to support said pivots, means movably supporting said members, and tension-controlled means cooperative between said pivots and members to cause said members to automatically return to correct relation to the corresponding pivots in case said members are displaced therefrom.

4. A measuring instrument comprising a lever having pivots, said pivots having teeth, movable members adapted to support said pivots, means movably supporting said members, said members having teeth supported movably with respect to the members and in mesh with the first named teeth, and spring-acting means interposed between said members and their teeth to cause the members to retain or seek their correct positions with respect to the pivots.

7. A measuring instrument comprising a lever having pivots provided with bearing portions and with teeth, movable members having bearing surfaces to coact with the bearing portions of said pivots, means movably supporting said members, teeth movable independently of said members and cooperative with the teeth of the corresponding pivots, and spring-acting means between the members and their corresponding teeth tending to retain

said teeth in correct relation to the corresponding members.

10. A measuring instrument comprising a lever having pivots provided with spaced bearing portions and having teeth between said bearing portions, movable members having bearing surfaces adapted to support the bearing portions of the pivots, toothed racks located adjacent to the bearing portions of the members, means movably supporting the racks upon said members in mesh with the teeth of the corresponding pivot including spring acting means between the racks and corresponding members tending to retain the racks in correct relation to the members.

1,310,465. MANUFACTURE OF CALCIUM CARBIDE. FREDERICK MARK BECKETT, Niagara Falls, N. Y., assignor to Union Carbide Company, New York, N. Y., a Corporation of Virginia. Filed Aug. 15, 1917. Serial No. 156,391. 8 Claims. (Cl. 204-62.)

1. In the manufacture of calcium carbide, a process of preparing aggregates suitable for furnacing, comprising compressing a plastic mixture consisting substantially of hydrated lime and non-caking carbon, the lime and carbon being in proper carbide-forming proportions, and subjecting the resulting aggregates to a hardening process.

1,310,466. EXPLOSIVE. FREDERICK M. BECKETT, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, Niagara Falls, N. Y., a Corporation of West Virginia. Filed June 7, 1918. Serial No. 238,725. 4 Claims. (Cl. 52-6.)

1. An explosive containing an oxidizing agent and a magnesium-silicon alloy.

1,310,467. PARACHUTE. FREDERICK AUGUST HENG, Chicago, Ill. Filed Feb. 19, 1918. Serial No. 218,050. 6 Claims. (Cl. 244-21.)



4. A parachute comprising a central staff; a plurality of collapsible sustaining elements arranged in superposed relation on said staff and collapsible stay members each connected with said sustaining elements, substantially as described.

1,310,468. CARD FOR INDEXING. JOHN ACSTIN BEAT, Augusta, Ga. Filed Sept. 20, 1916. Serial No. 121,195. 6 Claims. (Cl. 129-16.7.)

1. A card for indexes having elongated integral extensions projecting therefrom along opposite edges thereof, each of which extensions is adapted to support the card in operative position, and is provided with indexing indicia.

5. A reversible card for indexing devices, having a plurality of series of angular slits, each series of slits



being arranged to support a series of index cards when said reversible card is in one of its operative positions.

1,310,469. CURTAIN-ROD. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1917. Serial No. 197,403. 5 Claims. (Cl. 156-19.)



1. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped with their wire loop extensions in overlapping relation within said coupling section.

3. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped, said coupling section having integral means adapted to interlock with said wire loop extensions to prevent withdrawal of said end sections from said coupling section.

5. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions and adjacent to their proximate ends with stop members, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped, said coupling section having stops so located as to cooperate with the stops of said end sections when the latter have entered the coupling section with their wire loop extensions in overlapping relation, and an integral tongue on said coupling section adapted to be bent between and through said wire loop extensions to lock said end sections against withdrawal.

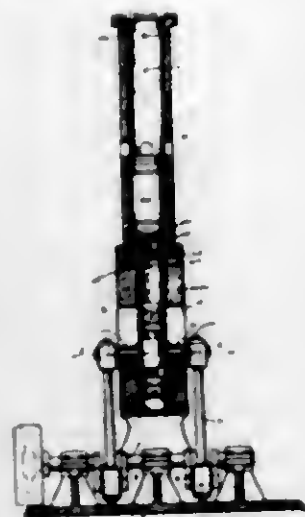
1,310,470. CHIMNEY COWL OR TOP. WILLIAM JOHNSON CALDER, Edinburgh, Scotland. Filed Jan. 14, 1919. Serial No. 271,167. 2 Claims. (Cl. 98-4.)



2. In the herein described chimney top, the combination, with three superimposed parts having air escape apertures, of which the two top parts are of combined

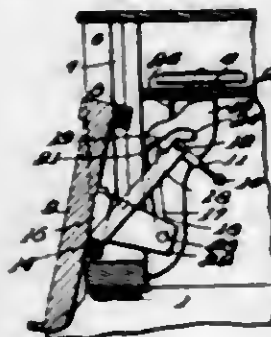
bulbous and conic formation and the bottom part formed into a globular body terminating in a tube which fits into the chimney vent, and all the parts being open at the top and bottom to form passageways, of a top of truncated conic shape and surmounting the upper of the said three parts, an ordinary cowl fitted on said top, flanged and holed rings mounted in said passageways and supporting the superimposed parts, and means to support the whole structure on the chimney and stiffen said structure, all substantially as and for the purpose set forth.

1,310,471. AIR-COMPRESSOR. JOHN C. FREDRICKSEN, Miller, Ind., assignor of one-third to Alfred T. Thompson, Hammond, Ind. Filed Dec. 20, 1916. Serial No. 138,993. 4 Claims. (Cl. 230-27.)



1. An air compressor comprising a vertically arranged cylinder having an inlet port; a weighted piston freely operating in said cylinder, there being piston controlled outlet ports in said cylinder; check valves controlling said ports; and pressure operating means for periodically elevating said piston, substantially as described.

1,310,472. MUSIC-DESK FOR PIANOS. JACOB J. FROESSA, Erie, Pa. Filed Oct. 31, 1917. Serial No. 159,450. 3 Claims. (Cl. 84-193.)

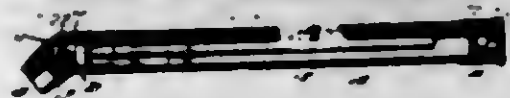


2. The combination with a piano case having its sides provided with interior grooves, of a panel having laterally projecting pins which pivotally and slidably engage said grooves, a rock shaft mounted in the piano case and having arms, links connecting said arms and the panel, slotted brackets located in the piano case, brackets secured to the rear of the panel and having pins which engage the slots of the slotted brackets, and springs secured to said panel and to a stationary portion of the piano case.

1,310,473. ANGULAR-SOCKET WRENCH. GEORGE RICK FULLERWIDER, Fairfield, Mont. Filed Sept. 10, 1918. Serial No. 253,430. 8 Claims. (Cl. 81-177.)

1. A device of the character described comprising a continuous hollow barrel or casing having an angular extension at one end integral and rigid therewith, a socket member rotatably interfitting the said angular portion, a

hollow shaft within the said barrel or casing having an enlarged head at its outer end abutting the adjacent end



of the barrel casing, and a universal connection between the inner end of the said hollow shaft and the adjacent end of the said socket member.

1,310,474. ELECTRIC SWITCH. ALEXANDRE GOURJU, Villeurbanne, France, assignor to La Société A. Le-compte et Cie., Lyon, France. Filed Jan. 14, 1919. Serial No. 271,116. 3 Claims. (Cl. 175-282.)



2. An electric switch comprising a base constructed of an insulating material, a screw-threaded collar provided with recesses for the reception of the line wires integral with said base, metal contact members inserted in said recesses in contact with said line wires, a rotatable cover screwed on said collar, a cross bar within said cover and rotatable therewith to make or break contact with said contact members to open or close the circuit, and means for limiting the rotation of the cover while allowing complete unscrewing of same when required.

1,310,475. WINDOW-VENTILATOR. JOSEPH GAURAC, Milwaukee, Wis. Filed Apr. 9, 1919. Serial No. 288,663. 3 Claims. (Cl. 98-31.)



3. The combination with a storm window having a longitudinal opening therein, a door hinged to the storm window and adapted to close the opening, a flexible element having one end attached to the door and its opposite end operatively connected with a vertically movable window whereby moving the window in one direction the window will open the door, and a coil spring mounted adjacent the door having one end laterally extended to bear against the door to normally urge the same to closed position.

1,310,476. ILLUMINATED WRITING INSTRUMENT. LOUIS F. HART, Groton, N. Y. Filed Oct. 10, 1917. Serial No. 195,791. 4 Claims. (Cl. 240-8.4.)



1. An illuminated writing instrument including a casing, a lamp socket positioned within the casing adjacent

one end of the same, spring arms connected to the lamp socket engaging the casing and retaining the socket in centered position therein, and a writing means carried by said arms.

1,310,477. SHOULDER-PAD. THOMAS J. HARTMAN, Chicago, Ill. Filed Apr. 17, 1918. Serial No. 229,048. 4 Claims. (Cl. 2-190.)



1. A shoulder pad comprising shoulder pieces; shoulder caps, flexibly connected with said pieces; straps connected with the front and rear portions of said shoulder pieces and arranged to pass under the arms of the wearer; and connections between the front and rear of said shoulder caps and corresponding straps, substantially as described.

1,310,478. PROCESS OF RECOVERING FIXED NITROGEN. EDWARD W. HASLUP, New York, N. Y., assignor to Robert Glielchrist, New York, N. Y. Filed Apr. 8, 1918. Serial No. 227,310. 5 Claims. (Cl. 23-13.)

1. The process of producing a volatile carbo-nitrid which consists in preparing a mixture of an oxid bearing material and carbon; subjecting said mixture in a fuel fed furnace and in an atmosphere of producer gas to a temperature sufficient to produce said carbo-nitrid; tapping out said carbo-nitrid and said producer gas from a region of said furnace too hot to permit said carbo-nitrid to condense; and separating out said carbo-nitrid from the other gases thus recovered, substantially as described.

1,310,479. PROCESS OF MAKING AMMONIA FROM ATMOSPHERIC NITROGEN. EDWARD W. HASLUP, Bronxville, N. Y., assignor to Robert Glielchrist, New York, N. Y. Filed June 20, 1918. Serial No. 241,019. 7 Claims. (Cl. 23-21.)

1. The process of producing ammonia which consists in preparing a mixture containing carbon, and an oxid capable of forming a salt with an acid; subjecting said mixture in a fuel fed furnace and in an atmosphere of producer gas to a temperature sufficient to produce a carbo-nitrid; tapping out said carbo-nitrid and said producer gas from a region of said furnace too hot to permit said carbo-nitrid to condense; treating the hot gases with water to form ammonia from the carbo-nitrid present; and separating out said ammonia from the other gases present, substantially as described.

1,310,480. PROCESS OF RECOVERING COMBINED NITROGEN FROM BLAST-FURNACES. EDWARD W. HASLUP, Bronxville, N. Y., assignor to Robert Glielchrist, New York, N. Y. Filed June 25, 1918. Serial No. 241,753. 3 Claims. (Cl. 23-21.)

1. The process of recovering combined nitrogen from a blast furnace which consists in treating the furnace fumes with water to extract their soluble constituents; subjecting the solution thus produced to the action of an autoclave to convert any cyanamids present into ammonia and into carbonates; freeing the solution of any solids present; separating out any insoluble compounds that may be present after the solids are removed; and separating out the nitrogen compounds remaining in said solution, substantially as described.

1,310,481. UMBRELLA. ORVILLE JAY HIMES, Oswego, N. Y. Filed Feb. 8, 1917. Serial No. 147,442. Renewed Nov. 13, 1918. Serial No. 262,401. 6 Claims. (Cl. 135-26.)



1. An umbrella comprising a staff, a cup provided with a sleeve slidably mounted upon the staff, a notch slidably mounted upon the sleeve of said cup, a cam plate slidably mounted upon the sleeve, ribs having inner sections pivotally connected with the notch and outer sections slidably connected with the inner sections, spreaders pivotally connected with the notch and extending in operative relation to the inner sections of the ribs for engaging a cover, cam lugs extending from the spreaders for engagement by the cam plate to move the spreaders outwardly, a slide mounted upon the staff, and stretchers pivotally connected with the slide and with the inner end portions of the outer sections of said ribs.

3. An umbrella comprising a staff, a notch, a slide, ribs pivotally connected with the notch, spreader pivotally connected with the notch and provided with cam lugs, a plate for engagement with the cam lugs for moving the spreaders outwardly when the cam lugs and plate are in engagement, and stretchers pivotally connected with the slide and ribs.

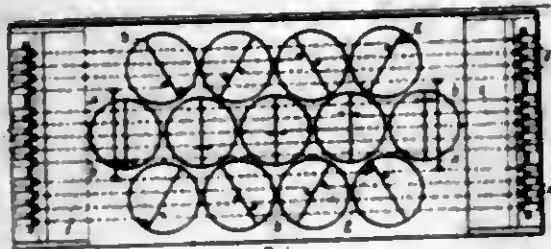
4. An umbrella comprising a staff, a notch, ribs having inner and outer sections, the inner sections being pivotally connected with the notch and the outer sections slidably connected with the inner sections, a slide, stretchers pivotally connected with the slide and with the inner end portions of the outer sections of said ribs, and a ring carried by said slide and movable upon the stretchers for releasably holding the stretchers substantially parallel to the staff when moving the outer sections of the ribs longitudinally of the inner sections of the ribs.

6. An umbrella comprising a staff, a notch carried by the staff, ribs including inner sections pivotally connected with the staff, outer sections, a hinge bracket rigidly mounted upon the inner end portion of the outer section of a rib and slidably engaging the inner section of the rib, a bearing bracket rigidly mounted upon the outer end portion of the inner section of a rib and slidably engaging the outer section thereof and engaging the hinge bracket to limit the sliding movement of the sections, a slide mounted upon the staff, and stretchers pivotally connected with the slide and pivotally connected with the hinge brackets of said ribs.

1,310,482. APPARATUS FOR PLAYING TABLE AND LIKE GAMES. ALBERT SAMUEL ILES, Birmingham, England. Filed Apr. 10, 1919. Serial No. 288,966. 2 Claims. (Cl. 46-21.)

1. In playing apparatus for table and like ball games, the combination comprising a playing surface, pairs of ball propelling and arresting flaps hinged along adjacent edges and movable in opposite directions, projections

from the undersides of the flaps, operating levers arranged in two groups, and tension members connecting



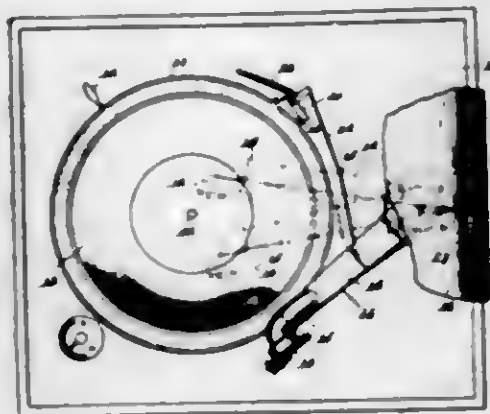
the flap projections to the operating levers, substantially as described.

1,310,483. GAME APPARATUS. PAUL V. KORTH, Detroit, Mich. Filed Apr. 21, 1917. Serial No. 163,660. 1 Claim. (Cl. 46—21.)

1A	1K	1H	1J	10	19	18	17	16	15	14	13	12
2A	2K	2H	2J	20	29	28	27	26	25	24	23	22
3A	3K	3H	3J	30	39	38	37	36	35	34	33	32
4A	4K	4H	4J	40	49	48	47	46	45	44	43	42

Game apparatus, comprising a main card of oblong rectangular form and subdivided by intersecting longitudinal and transverse lines into a plurality of vertical and horizontal rows of squares, the vertical rows bearing numbers in consecutive order and the horizontal rows bearing like numbers, a group of vertical rows at the left end of the card bearing letters in addition to the numbers, the letters in the respective vertical rows being light and different to the several rows, the remaining vertical rows bearing different additional numbers but the additional numbers in the respective rows being alike, and two sets of playing cards to cover the squares of the main card and provided with numbers and additional letters and numbers to correspond with the value indications of the main card, one set of playing cards bearing numbers and designating letters and the other set of playing cards bearing numbers and additional designating numbers.

1,310,484. PHONOGRAPH-STOP. RICHARD KUENSTLER, Chicago, Ill. Filed Dec. 9, 1918. Serial No. 265,894. 5 Claims. (Cl. 74—46.)



5. The combination with a phonograph having a rotary record support; a pivotally mounted tone arm; a movable cover, of means for automatically stopping operation of the phonograph upon rendition of a record, comprising an operative connection between said tone arm and said cover whereby, upon opening movement of said cover, said arm will be raised from engagement with the record; a brake cooperating with said record support; and operative connection between said brake and tone arm whereby, upon return swinging of said tone arm, said brake will be ap-

plied; and an operative connection between said tone arm and said cover whereby, upon opening movement of said cover, said tone arm will be positively returned to starting position, substantially as described.

1,310,485. TIMER FOR INTERNAL-COMBUSTION ENGINES. JOHN J. LAMB, Detroit, Mich. Filed Oct. 8, 1917. Serial No. 195,450. 2 Claims. (Cl. 123—167.)



1. In timing distributors for internal combustion motors, a rotatable unit removably carried by a shaft of the motor, and an oscillatory unit having its axis of oscillation coincident with the shaft axis and forming a casing for the rotatable unit, said oscillatory unit including a plurality of spaced contacts having their faces located on a plane extending diametrically through the shaft, said rotatable unit having a body portion detachably secured on and rotatable with the shaft and carrying a plurality of radially-extending projecting portions of substantially equal projected length and corresponding in number and spacing to said contacts and being angularly-displaced relative to one another, each projection having a bore with a substantially-radial axis, and a yieldable contact element carried by each projection and extending into its bore, whereby the spacing of the body-portion of the rotatable unit and the contacts of the oscillating unit will provide an air space through which the projecting portions sweep.

2. The combination with a shaft of an internal combustion engine having a reduced screw-threaded end portion, of a cylindrical oscillating casing in axial alignment with the shaft which extends through the end wall of the engine casing, a stub shaft counterbored at one end and secured to the screw-threaded portion of said engine shaft, a plurality of radial bushings spaced equidistant along and around the shaft each secured to the counterbored shaft and provided with an inner annular flange at the outer end, a spring in each bushing, wiper points having spherical outer beads, each disposed in a bushing and having a shoulder projected by a spring in the bushing outwardly against the annular flange thereof, and a series of contact segments secured in alignment in the wall of the casing in insulated relation, and the segments lying each in the path of revolution of a wiping point.

1,310,486. SEED-CORN RACK. WILLIAM LANE, McLean, Ill. Filed Sept. 27, 1917. Serial No. 193,563. Renewed Jan. 10, 1919. Serial No. 270,588. 6 Claims. (Cl. 34—26.)

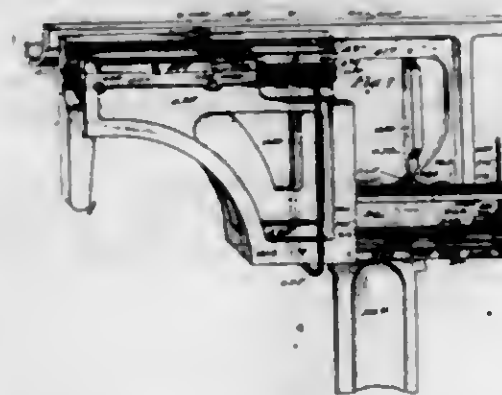


1. A seed corn rack including a supporting frame structure made up of uprights and cross bars, cross supporting

members mounted transversely at the top and bottom of said supporting frame, rods connected with the upper and lower cross supporting bars to thus be disposed in upright and parallel relation, and spikes carried by said rods to have ears of seed corn impaled thereon.

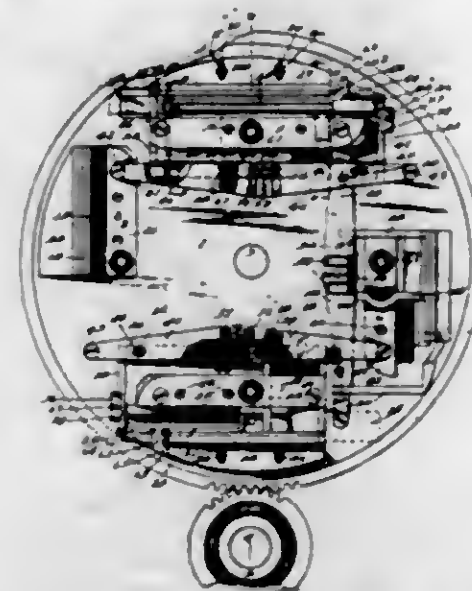
2. A seed corn rack including a supporting frame structure made up of uprights and cross bars, cross supporting members mounted transversely at the top and bottom of said supporting frame, rods connected with the upper and lower cross supporting bars to thus be disposed in upright and parallel relation, spikes carried by said rods to have ears of seed corn impaled thereon, and a protective netting covering for the supporting frame structure.

1,310,487. LINOTYPE-MACHINE. GEORGE E. MARLATT, Pasadena, Calif. Filed Sept. 21, 1915. Serial No. 32,953. 20 Claims. (Cl. 199—18.)



7. In a typographical machine, the combination of means for assembling, transferring and casting from matrices held at two or more levels; spacebands having supporting lugs thereon; the first elevator, the first elevator jaw for holding the matrices and spacebands in the elevator, rails contained within said jaw for supporting the matrices and spacebands, and means for moving the matrix-supporting rails and the spaceband supporting rails in opposite directions for the purpose of vertically separating the matrix ears from the spaceband ears to permit the transfer to different destinations of the matrices and the spacebands.

1,310,488. LINOTYPE-MACHINE. GEORGE E. MARLATT, Pasadena, Calif. Filed Sept. 21, 1915. Serial No. 32,956. 11 Claims. (Cl. 199—47.)



1. In a linotype machine, the combination with a mold disk, of a mold base; a mold cap; co-acting sector means connected with and adapted to laterally adjust the position of said cap on said mold for regulating the width of

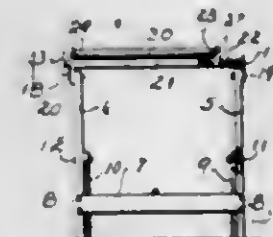
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the casting slot thereby; an intermediate portion slidable lengthwise on said base and forming one side of said slot; a rack on the lower side thereof; a cubical block seated in said base and having a plurality of teeth on each side thereof adapted to engage said rack for adjusting the longitudinal position of said intermediate portion and thereby regulating the length of said slot; and means for resiliently holding said block in engagement with said rack.

1,310,489. EXPLOSIVE. WILLIAM RINTOUL and DONALD CROSS, Stevenston, Scotland, assignors to Nobel's Explosives Company, Limited, Stevenston, Scotland. Filed Dec. 4, 1917. Serial No. 205,408. 8 Claims. (Cl. 52—3.)

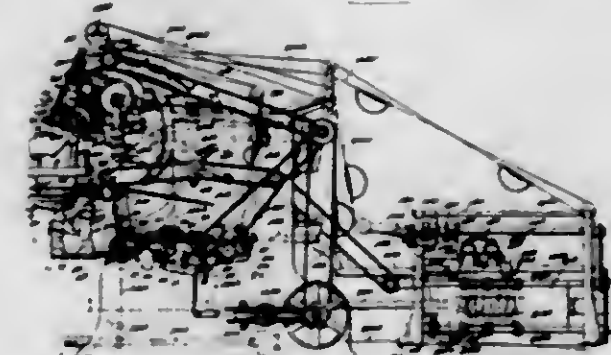
3. In the manufacture of blasting explosives, as claimed in claims 1 and 2, the utilization of an organic accelerant for the gelatinization which possesses also stabilizing properties.

1,310,490. FOLDABLE IRONING-BOARD STAND. JOHN H. WHITAKER, Dennisville, N. J. Filed May 9, 1918. Serial No. 233,508. 2 Claims. (Cl. 68—10.)



1. An ironing board comprising a pair of spaced supporting legs, a plate secured to the top of each leg, one of the plates forming a stationary jaw, a transverse bar mounted between the plates, said transverse bar having a central bore, and being slotted from one end to a point adjacent the center thereof, a threaded rod mounted in the plates and extending through the central bore, and a movable jaw operating on the threaded rod and in the slotted end of the transverse bar.

1,310,491. AUTOMATICALLY-CONTROLLED SHOE-MACHINE. ERASTUS E. WINKLEY, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 25, 1916. Serial No. 99,751. 31 Claims. (Cl. 12—17.)



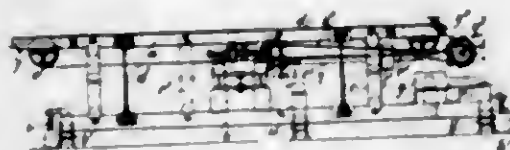
1. An automatic machine, having, in combination, operating means and a work support relatively movable to transfer the point of operation along the work, mechanism for relatively tipping the operating means and work both longitudinally and transversely and for relatively swinging the operating means and work, and feeders for engaging the work and controlling said mechanisms.

19. An automatic shoe sewing machine, having, in combination, shoe sewing mechanism including a chan-

nel guide and feeding device, a shoe supporting jack, mechanisms for swinging the jack and tipping the sewing mechanism about two axes to maintain the sewing mechanism and shoe sole in proper relation at the sewing point, and feelers arranged to engage the channel and the surface of the sole within the channel for controlling the swing of the jack and the tip of the sewing mechanism.

28. An automatic machine, having, in combination, a movable head, a form carrier, a feeler arranged to engage a form on the carrier, a controller positioned by the feeler, a second controller, intermittently acting mechanism cooperating with the first controller through which the second controller is also positioned by the feeler, a rotary drum, a roll engaging the drum, a roll carriage connected to move the head, and mechanism cooperating with the second controller for turning the roll at an angle to the drum upon a change in the position of the controller.

1,310,492. ORE-CONCENTRATING APPARATUS. JACOB DAVID WOLF, London, England. Filed Aug. 10, 1914. Serial No. 536,119. 3 Claims. (Cl. 83-85.)



1. In an ore concentrating apparatus, a values collecting element composed of "woven hard" duck soaked in an oil, and then thinly dressed with another oil, one of said oils being a mineral oil and the other a vegetable drying oil.

1,310,493. [WITHDRAWN.]

1,310,494. SHACKLE AND BAG SEAL. WINFRED MIDGE BROOKS, West Orange, N. J. Filed May 15, 1919. Serial No. 297,269. 3 Claims. (Cl. 24-30.5.)



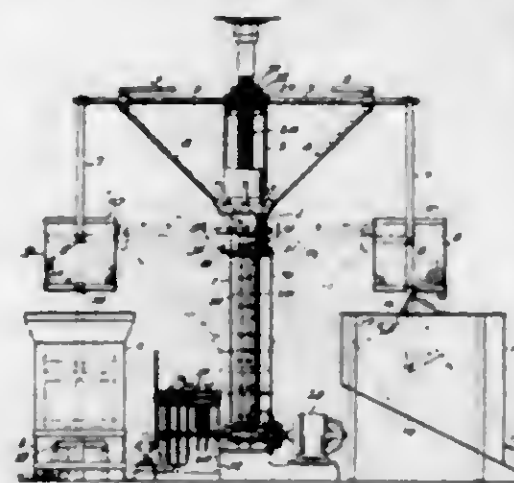
3. A shackle or bag seal comprising: two blanks of sheet material, at least one of which has a definite bending line, superposed in spaced relation to receive shackles or the like between them and having slidably engaged portions, said blanks being doubled up by bending along said bending line to cause a sliding movement of their engaging portions into locked relation thereby clamping the shackles firmly and producing a weakened zone along the line of bending that causes fracture of the material when the blanks are unbent.

1,310,495. AUTOMATIC COOKER. CHARLES FREDERICK FORD, Chicago, Ill. Filed Mar. 1, 1919. Serial No. 280,154. 24 Claims. (Cl. 99-2.)

1. An automatic cooker comprising a plurality of kettles, a plurality of receptacles containing the material to be cooked, and means for automatically lowering the receptacles into the kettles, raising the receptacles from the kettles and advancing them to and lowering them in the next adjacent kettle.

24. In an automatic cooker, an intermittently rotatable carrier, a plurality of receptacles on the carrier to receive the material, a supply hopper having a discharge spout, a shaft, a valve disk on said shaft and having an opening therein, a chute leading from said spout, an arm

on said shaft adapted to be engaged by the carrier to rock the shaft and register the opening in the disk with



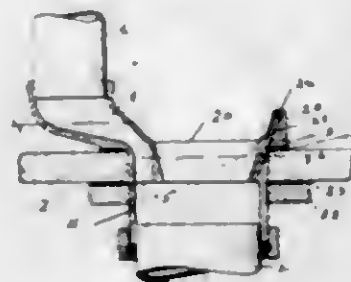
the spout to permit the discharge of material from the hopper into a receptacle, and means for restoring the parts to normal position.

1,310,496. MAIL-BOX. BENNETT HACK, Detroit, Mich. Filed Apr. 18, 1917. Serial No. 163,058. 1 Claim. (Cl. 177-339.)



The combination with a mail-box, of a door therefor, a cover-plate for the door and automatic signaling mechanism positioned in the chamber formed by the cover and cover-plate.

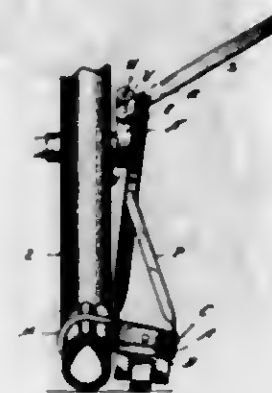
1,310,497. VALVE. JOHN F. KEENAN, Providence, R. I. Filed Apr. 10, 1919. Serial No. 288,904. 1 Claim. (Cl. 4-5.)



In a flushing tank, a valve structure having a circular, tubular body adapted to extend through the bottom of the tank, said body having a thin annular flange seated against the inner surface of the bottom of the tank, said body being provided with an overflow discharge opening located entirely within its circular body, a valve seat formed within said body offset from the center thereof, and an upwardly projecting leverage lug on said flange located at a point substantially opposite the overflow

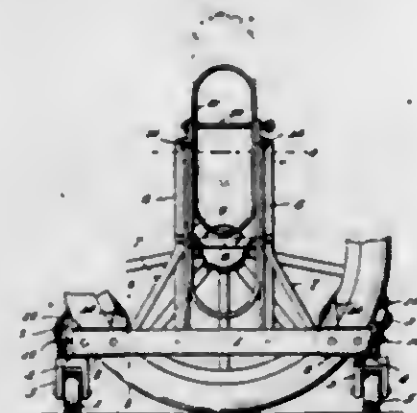
inlet, said lug being provided with a channel through it leading into the discharge pipe at a point below the valve seat, said channel being adapted to receive an after-all tube in its upper end.

1,310,498. LIFTING-JACK. EDWARD J. LEMAN, Morton, Ill. Filed May 1, 1917. Serial No. 165,694. 4 Claims. (Cl. 21-120.)



1. A jack for engaging in the wheel of an automobile comprising a wheeled platform, a hook pivoted at one end thereof and adapted at its hooked end to pass through the wheel and engage over its rim for holding the same against the said platform, a standard supported upon the platform, and a lifting part thereon to engage and lift the wheel, the relation of the lifting part both to the portion of the wheel which it engages and to the said hook being such that the higher the wheel is lifted toward its limit of raising movement the more firmly it is forced up into the hook and the more firmly the rim is held against said platform by said hook.

1,310,499. JACK. EDWARD J. LEMAN, Morton, Ill. Filed Jan. 29, 1918. Serial No. 214,269. 3 Claims. (Cl. 21-120.)



1. A jack including in its construction, a base, a stand and uprising therefrom rigid with respect thereto, a lever pivoted between its ends to said standard, and a member having the form of a loop adapted to receive into it at either end the object to be lifted, said member being pivoted between its ends to said lever, adapted to be inverted, its pivot point lying nearer one end than the other whereby by inversion it will engage objects of two different elevations.

1,310,500. SLOW-ACTING DEVICE. WALTER P. NEUBERT, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 14, 1918. Serial No. 234,565. 7 Claims. (Cl. 74-69.)

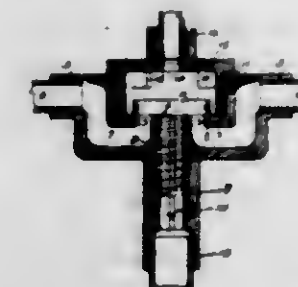
1. A slow-acting device comprising outer and inner fluid containers, a plunger within the inner container, fluid in said containers of sufficient specific gravity to float said plunger, said containers communicating with

each other above the highest level of the fluid in the outer container, an opening through the inner container below the lowest level of the fluid in the outer container, a



valve cooperating with said opening to vary the effective area thereof, and means extending through the outer container for moving said valve.

1,310,501. DRAIN-VALVE. CHARLES W. NEWCOMBE, Tacoma, Wash. Filed May 14, 1917. Serial No. 168,356. 1 Claim. (Cl. 137-103.)

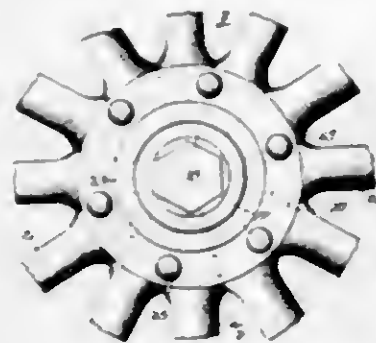


A drain valve, including a casing having a substantially cylindrical head, provided with an interiorly threaded open top valve chamber, and having at opposite sides thereof tubular extensions adapted to receive pipe connections, said casing being provided at the bottom of the valve chamber with a central outlet and having side passages extending from the tubular extensions to the bottom of the valve chamber, and provided at their inner ends with enlarged terminals arranged concentric with the said outlet and extending nearly around the same and constituting low pressure ports, a valve body operating within the valve chamber and covering, when closed, both the outlet and the enlarged terminals of the side passages, a substantially cylindrical closure threaded into the valve chamber and provided at the top with a high pressure inlet and having interior lugs to space the valve body from the high pressure inlet, said closure being removable to afford access to the valve body without disturbing the pipe connections of the tubular extensions, and a spring for urging the valve body in opposition to the high pressure within the valve chamber, said valve body when raised by the spring establishing communication of the outlet with both the low pressure ports and the high pressure inlet.

1,310,502. DEMOUNTABLE WHEEL. THOMAS F. O'CONNOR, Chicago, Ill. Filed June 16, 1917. Serial No. 175,057. 1 Claim. (Cl. 21-31.)

In a demountable wheel, the combination of a hub having a flange, a sleeve fitting the cylindrical portion of said hub and provided with a flange engaging the flange of said hub, fastening devices securing the said flanges together, a spoke structure mounted on the outer surface of said sleeve and resting against the flange thereof, a

retaining disk surrounding said sleeve and engaging the opposite side of said spoke structure, a clamping nut threaded on the end of said sleeve for engaging said re-



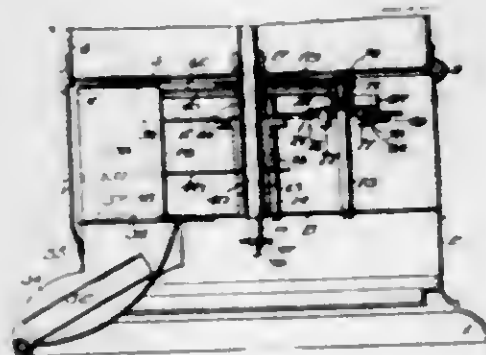
taining disk, and studs secured to said retaining disk and projecting therefrom through said spoke structure into apertures formed therefor in the flange of said sleeve.

1,310,503. PRESSURE-OPERATED PUMP-CONTROLLING MECHANISM. ADOLPH RYDQUIST, Rochester, N. Y. Filed Dec. 29, 1914. Serial No. 879,054. 4 Claims. (Cl. 175-308.)



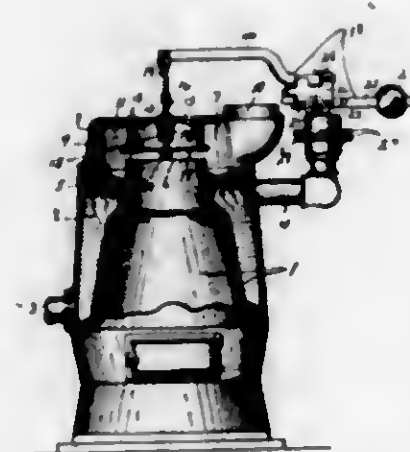
3. In an electric circuit closer, the combination of a stationary contact, a movable contact cooperating therewith, a retaining device for controlling the movements of said movable contact, a pressure operated lever for actuating said retaining device and rotatable means for adjusting the fulcrum of said lever to change the relative length of its arms.

1,310,504. CHECK-CONTROLLED VENDING-MACHINE. ADOLPH RYDQUIST, Rochester, N. Y. Filed Jan. 31, 1916. Serial No. 75,220. 7 Claims. (Cl. 211-8.)



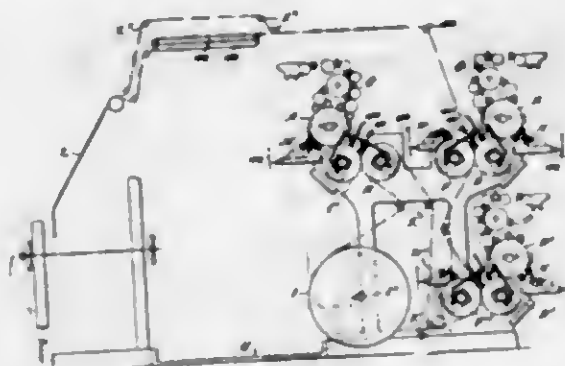
4. In a vending machine, the combination with an actuator, a package holder comprising inner and outer receptacles arranged circumferentially with their shorter axes at substantially right angles to each other, open at their lower ends, a package supporting table having an opening with which said receptacles are adapted to register, a package receiving platform spaced from said opening, and a delivering member for moving the packages upon the platform.

1,310,505. DRAFT-REGULATOR FOR HEATERS. WILLIAM A. SCHLART, Syracuse, N. Y. Filed Aug. 20, 1915. Serial No. 46,443. 11 Claims. (Cl. 236-10.)



4. In a heater, a draft port, a lid having a substantially tubular depending portion aligned with the draft port and adapted to form a check port, and a valve controlling both of said ports.

1,310,506. OFFSET PERFECTING-PRESS. DAVID JOHN SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed Sept. 29, 1916. Serial No. 122,833. 11 Claims. (Cl. 270-5.)



1. A rotary offset web perfecting machine comprising: a plurality of units printing from positive forms on opposite sides of impression receiving material, each unit including a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged one above the other and the impression cylinder out of line with the other cylinders to form an exposed operating side, the units being grouped with their operating sides outermost, and web associating and folding means located to afford unobstructed access to the operating side of the units, said means including a folder, and means for slitting the printed web and for leading the slitted sections in superposed relation to the folder.

1,310,507. STEAM-TRAP. WILLIAM SCOTT, Glasgow, Scotland. Filed Oct. 30, 1918. Serial No. 260,300. 5 Claims. (Cl. 236-60.)

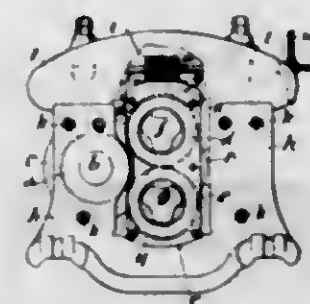
1. A steam trap, operated thermostatically, comprising an outer member, an inner member capable of movement relatively to the outer member, a valve on the end of the inner member and movable therewith and a seat for said

valve on the outer member, the valve having a hollow extension located between the inner and outer members and



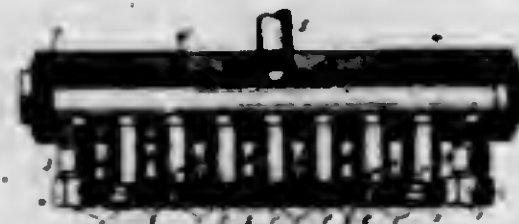
means whereby steam can pass through the inner member into the hollow extension and thereafter into the outer member.

1,310,508. ROLLING-MILL. BERNARD JOSEPH SHILLITO, Manchester, England. Filed Feb. 18, 1918. Serial No. 217,800. 2 Claims. (Cl. 74-58.)



1. In a rolling mill reversing-gear, a housing having a gap, a driving pinion always running in one direction mounted stationary in said housing at the side of said gap, a member located in said gap and two driven pinions mounted in said member constantly in gear with each other and adapted to be alternately brought in and out of gear with said driving pinions and to simultaneously drive and reverse said pinions.

1,310,509. APPARATUS FOR MAKING FILAMENT FROM VISCID OR VISCOUS SUBSTANCE. HARRY MORTIMER SPECHT, New York, N. Y. Filed Jan. 12, 1918. Serial No. 211,350. 2 Claims. (Cl. 18-8.)



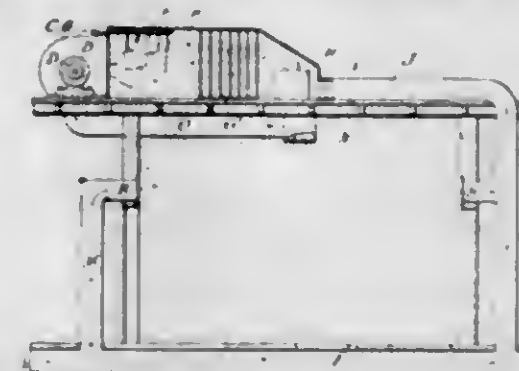
1. In a device of the character described, a holder having a tapered opening therethrough in combination with a spinneret having a tapered body fitted in said opening and an enlarged head seated against the inner face of the holder.

1,310,510. SCREW-EXTRACTOR. CHARLES A. SPEISS, The Dargle, Natal, South Africa. Filed Mar. 27, 1918. Serial No. 225,116. 3 Claims. (Cl. 81-3.)



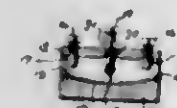
1. A screw extractor comprising a pair of pivoted jaws formed with recessed portions to receive a screw head, and ribs formed on said jaws for insertion within the slot of a screw head.

1,310,511. PROCESS FOR VENTILATING AND COOLING. LELAND L. SUMMERS, Chicago, Ill. Filed Oct. 20, 1913. Serial No. 790,257. 6 Claims. (Cl. 98-33.)



5. In a process of ventilation maintaining a zone of quiescent air in the lower portion of the compartment affected, withdrawing air from the upper portion of said compartment, cooling said air, returning the cooled air to the upper portion of the compartment and controlling the admixture with the other air of the compartment by means of the difference in specific gravities.

1,310,512. CROSSHEAD-GUIDE FOR ENGINES. JAMES E. SUNDEN, Hope, N. D. Original application filed Mar. 23, 1916, Serial No. 224,272. Divided and this application filed Aug. 5, 1918. Serial No. 248,313. 1 Claim. (Cl. 74-84.)

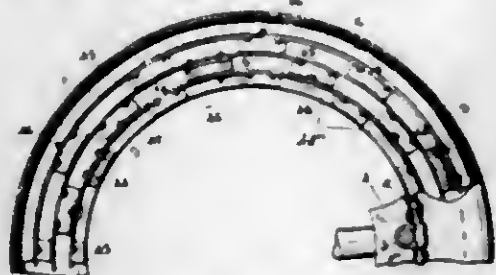


In an engine, a frame having parallel longitudinal bars, a cross head arranged between said longitudinal bars, wear plates interposed between the cross heads and the longitudinal bars, each end portion of the wear plates being provided with a series of substantially transversely aligned sockets, an intermediate socket of each series being internally threaded, bolts in engagement with the threaded sockets of the wear plates and extending through the cross head, lock nuts engaged with said bolts and coacting with the cross head, and adjacent screws threaded in the cross heads and extending within the remaining sockets of the wear plates.

1,310,513. VEHICLE-TIRE. ELI J. TAYLOR, Edmonton, Alberta, Canada. Filed Apr. 18, 1918. Serial No. 229,288. 5 Claims. (Cl. 152-8.)

4. In a device of the class described, in combination, a resilient tubular tire cover, an elastic filler fitting within

the tread portion of said cover, a cellular filler for the body of said cover, said cellular filler comprising a plurality of concentric resilient bands, of varying diameters, and resilient spacing blocks between adjacent bands, the lateral surfaces of said blocks shaped to conform with the



shape of the inner walls of the body of said tire cover, and means to effect perpendicular compression of said resilient blocks between said bands, whereby said blocks will tend to expand laterally against the walls of the body of said tire cover.

1,310,514. ELECTRIC-SWITCH LOCK. SVEN TIDEMAN and JOHN W. ANDERSON, Columbus, Ohio. Filed July 12, 1918. Serial No. 244,608. 5 Claims. (Cl. 70-14.)



2. In mechanism of the class described, the combination with a circuit controlling structure and its spaced slidable actuating members, of means for operating and locking said members, comprising a pair of supporting elements protruding from said structure, a casing having an open side arranged to fit over and to be supported by said elements so as to enhouse said members, a lock structure pivotally mounted within said casing and having its operating extremity located within an opening formed in the front of said casing, the fulcrum of said lock structure being substantially situated between and at a right angle to the axes of said members, whereby upon the oscillation of said lock structure said members may be selectively actuated to open or close their associated circuit, and means for locking said lock structure in a circuit opening position and to simultaneously lock the casing to secured relation, when in said latter position, with its supporting arms.

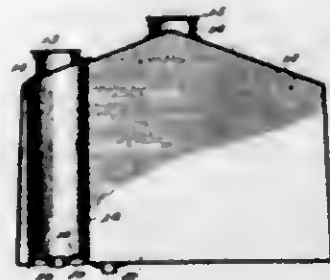
1,310,515. CONSTRUCTION OF REINFORCED-CONCRETE FLOORS, DECKS, SUCH AS DECKS OF SHIPS, DECK-FLOORS FOR BRIDGES, AND THE LIKE. EVAN OWEN WILLIAMS, Hamworthy, near Poole, England, assignor to Williams Foreign Patents, Limited, London, England. Original application filed May 15, 1918, Serial No. 234,764. Divided and this application filed Feb. 8, 1919. Serial No. 275,562. 5 Claims. (Cl. 23-131.3.)



2. In apparatus for building concrete structures, molds having downwardly extending walls spaced apart, joists

located in the spaces between the walls to support the ribs of the slab, rotatable supports mounted on the joists and in one position supporting the molds and in another position clearing from beneath the molds to allow their downward removal, substantially as described.

1,310,516. COMPARTMENT-TANK. CHARLES A. NARDELL, Utica, N. Y. Filed Jan. 9, 1919. Serial No. 270,312. 3 Claims. (Cl. 220-20.)



1. A double compartment or combination tank having a bottom joint, between the compartments, consisting of a downturned flange on the bottom plate of the auxiliary tank or compartment, an intumed hooked portion at the bottom of the side wall of said auxiliary tank or compartment and in which hooked portion said flange is entered, and an upturned flange at the bottom of the main tank or compartment and against which upturned flange said intumed hooked portion closely fits.

1,310,517. TANK. CHARLES A. NARDELL, Utica, N. Y. Filed Mar. 24, 1919. Serial No. 284,766. 2 Claims. (Cl. 220-22.)



1. A closed tank, for holding gasoline or other liquid, provided with an interior baffle or splash plate disposed crosswise of said tank near the middle portion thereof, and fitting loosely between the side walls thereof, said baffle or splash plate comprising two slanting walls or parts secured at their lower ends to the bottom of said tank.

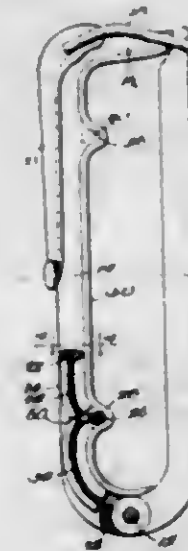
1,310,518. DYING COMPOSITION. WILLIAM A. MINGWORTH, Grand Rapids, Mich., assignor of one-half to Carl N. Mather, Grand Rapids, Mich. Filed Apr. 15, 1918, Serial No. 228,792. Renewed Jan. 30, 1919. Serial No. 274,106. 1 Claim. (Cl. 8-6.)

A composition of matter comprised of dye, glycerin, and alcohol in substantially the following proportions: three ounces powdered dye, thoroughly incorporated with five pints of glycerin and then diluted with six gallons of alcohol, substantially as described.

1,310,519. VEHICLE-BOW-TOP HOLDER. CLARENCE L. RATA, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif., a Corporation of California. Filed Jan. 28, 1918. Serial No. 214,063. 4 Claims. (Cl. 21-61.)

4. In a device of the class described, a member having irregular portions on a surface thereof to be cushioned, and further having perforations between said irregular

surface portions forming cross members, and a strip of cushion material having portions thereof entering the perforations, the sides of said portions of cushion material locking on the sides of the perforations, and the adjacent ends of said portions of cushion material being

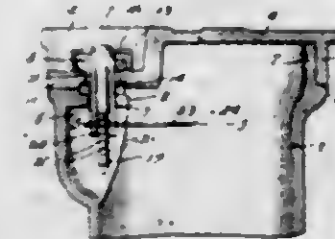


forced toward each other and toward the adjacent cross members by the conformation of the strip to the said surface irregularities of the member.

1,310,520. CEMENT COMPOSITION. ALFRED A. BENNETT, Toledo, Ohio, assignor to The Copperstone Products Company, Toledo, Ohio, a Corporation of Ohio. Filed May 6, 1918. Serial No. 232,734. 4 Claims. (Cl. 106-24.)

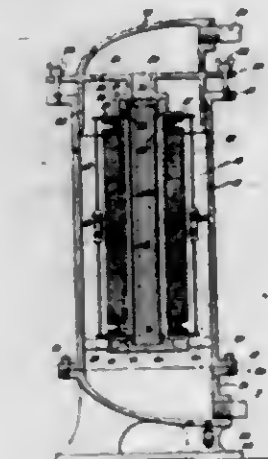
1. A hardened composition formed of Portland cement and conglomerate copper stamp sand substantially as described.

1,310,521. STOP-VALVE BOX. PRENTISS R. CHALL, Columbus, Ohio. Filed Mar. 1, 1919. Serial No. 280,037. 9 Claims. (Cl. 137-18.)



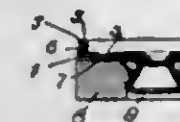
1. In a stop valve box for fluid mains, the combination with the upper end of said box and a separable top plate therefor, of means for effecting a connection therebetween, comprising a threaded member protruding upwardly from the top of said box and capable of extending through and above an opening therefor formed in said top plate, adjustable means cooperative with said member to govern the distance between the upper end of said member and the correlated upper surface of said top plate, and a nut threaded upon the upper end of said member and operating to bear upon said top plate to hold the latter in clamped relation with said box.

1,310,522. FIBER-TREATING DEVICE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed July 19, 1918. Serial No. 245,633. 11 Claims. (Cl. 8-18.)



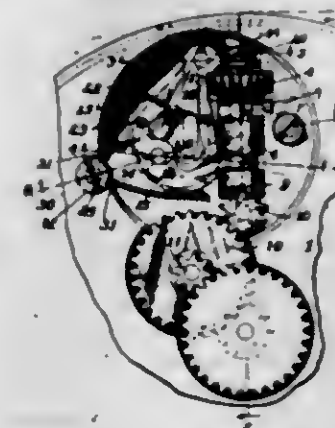
1. In a fiber treating device, in combination, a spindle comprising a series of spiral springs each carrying a series of spaced members capable of having fiber wound thereon.

1,310,523. DIAL AND DIAL-HOLDER FOR WATCHES AND THE LIKE. GEORGE F. EBERHARD, Trenton, N. J., assignor to Robt. H. Ingersoll & Bro., a Joint-Stock Association. Filed Mar. 21, 1914. Serial No. 826,345. 1 Claim. (Cl. 58-127.)



In combination with a dial and its copper, a dial holder of sheet metal having an upstanding rim and having cup-shaped feet struck out of its base portion and extending downwardly to engage the movement plate, said dial copper having centering projections entering the open top portions of the cup-shaped feet, substantially as described.

1,310,524. STEM-WINDING AND STEM-SETTING MECHANISM FOR WATCHES. GEORGE F. EBERHARD and WILLIAM T. MALONEY, Trenton, N. J., and FREDERICK W. BOLD, Thomaston, Conn., assignors to Robt. H. Ingersoll & Bro., a Joint-Stock Association of New York. Filed Nov. 13, 1917. Serial No. 201,561. 5 Claims. (Cl. 58-68.)



1. In combination in a watch, a winding lever, a clutch lever, a dial plate having a recess, in which said levers are pivoted, said recess having a lateral exten-

ation, a one piece spring having two arms and having an eye fitted in the lateral extension of the recess and with its arms bearing upon the two levers, a cover plate, and a screw for holding the cover plate in place, said screw passing through the eye of the spring and bearing on the inner side of said eye to hold it against the wall of the lateral recess, said lateral recess having a contracted mouth communicating with the main recess, said spring arm being bent sharply at the point where they emerge from the lateral recess, substantially as described.

1,310,525. STOVEPIPE-CLEANER. LEE FRARIES, Frederick, Okla. Filed Jan. 11, 1918. Serial No. 211,379. 3 Claims. (Cl. 15-41.)



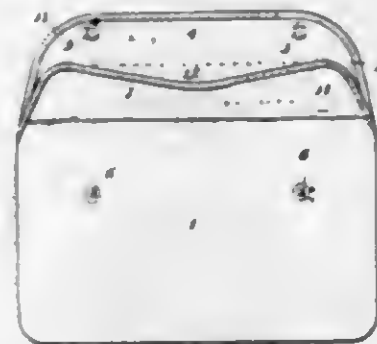
1. A stove pipe cleaner including a handle provided with a spring member engaging the inner wall of a pipe at one point on its periphery, and a scraping element carried by said spring member and retained in close engagement with the interior wall of the pipe by said spring member engaging the opposite side of the pipe.

1,310,526. MACHINE FOR MAKING BRONZE-POWDER. MAXIMILIAN J. FRICH, Stamford, Conn. Filed Mar. 16, 1917. Serial No. 155,194. 1 Claim. (Cl. 83-57.)



In a bronze powder machine, a motor having a relatively large opening of an area to embrace the entire floating range of all metals in a slide thereof, a slide covering said opening so as to form a part of the mortar side, said slide having an opening of less width than that of the mortar opening but of substantially the same length as the length of the mortar opening, and means to allow of vertical adjustments of the slide so as to vary the relation of the slide opening with respect to the top and bottom of the mortar opening while maintaining a constant aligned relation of the ends of the slide opening with respect to the ends of the mortar opening.

1,310,527. TOBACCO-POUCH. VICTOR GUINZBURG, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1918. Serial No. 283,354. 4 Claims. (Cl. 131-30.)



1. An article of the class described, comprising a pouch having a closure flap with absorbent moisture retaining means on its inner face, and a supplemental flap adapted to fold over and lie co-extensive with said closure flap.

1,310,528. MANUFACTURE OF MANGANESE STEEL. ROBERT ABBOTT HADFIELD, Westminister, England. Filed Aug. 10, 1917. Serial No. 185,521. 10 Claims. (Cl. 75-1.)

6. As a new article of manufacture, wrought manganese steel possessing great toughness and resistance to perforation and containing iron with from about decimal seven of one per cent. to one decimal five per cent. of carbon, from about ten to seventeen per cent. of manganese and from about decimal six of one per cent. to about two decimal five per cent. of silicon.

1,310,529. ACETYLENE-LAMP. ARVID L. HANSEN, Evanston, Ill. Filed May 9, 1918. Serial No. 232,774. 7 Claims. (Cl. 48-4.)

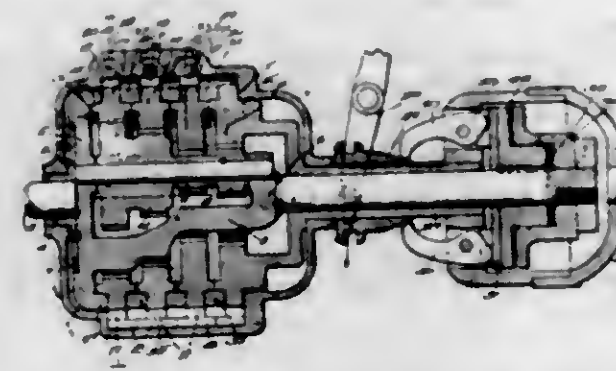


1. In an acetylene lamp, the combination with a carbide chamber and a water reservoir, of a sleeve or apron in the carbide chamber and engaging the same and forming an annular contracted water passage extending well within the carbide chamber, a connection between said sleeve or apron and the water reservoir by which the carbide chamber and water reservoir will be securely held together and a water conduit leading from the reservoir to said contracted annular passage, substantially as and for the purposes set forth.

1,310,530. POWER-TRANSMISSION MECHANISM. EMIL G. JOHANSON, Chicago, Ill. Filed Nov. 9, 1917. Serial No. 201,045. 16 Claims. (Cl. 74-35.)

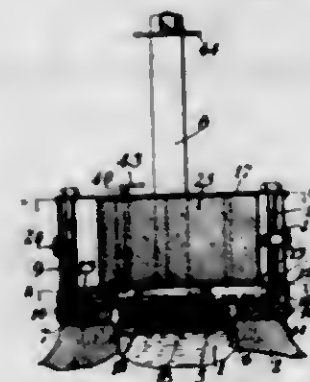
1. Power transmission mechanism including an internal gear mechanically coupled with the load; a second internal gear adapted to rotate idly; mechanically coupled pinions one in mesh with each internal gear; a stationary casing inclosing said gear elements; means, cooperating with said casing, for checking the rotation of the second internal gear; a shaft structure surrounded by the internal gears and passing between these internal gears and

the pinions, said shaft structure including two aligned sections and an intervening yoke section upon which yoke section the aforesaid pinions are mounted eccen-



trically with respect to the aligned shaft sections; and a load driving quill shaft surrounding one of the aforesaid aligned shaft sections and mechanically connected with the first internal gear.

1,310,531. LUBRICATING DEVICE FOR LOCOMOTIVE-ROD-PIN CONNECTIONS. DEYO JONES, Detroit, Mich. Filed Jan. 12, 1918. Serial No. 211,514. 5 Claims. (Cl. 184-44.)

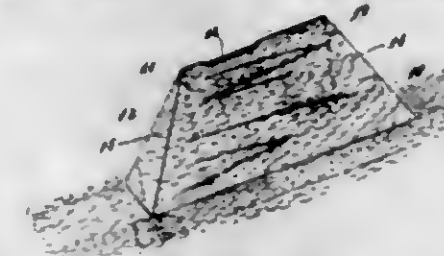


4. A lubricating device for locomotive rod pin connections comprising the combination with the rod and pin therefor, of a grease cup formed in the rod, the cup being counter-bored providing an upper end of greater diameter than the body, the body below the counter-bore being threaded, a threaded plunger for engagement therewith, the length of the plunger being slightly less than the depth of the counter bore whereby the plunger may be withdrawn from the threaded walls into the said counter bore, a feeding mechanism for the plunger, and a case for the mechanism, said mechanism including a block reciprocated by the throw of the rod, and means connected therewith for turning the plunger, the case being adapted to expose the open end of the cup when the plunger has been withdrawn from threaded relation therewith.

1,310,532. BROWN DYE-STUFF. WHITNEY B. JONES, Newark, N. J., assignor to Butterworth-Judson Corporation, a Corporation of New York. Filed Feb. 26, 1918. Serial No. 219,231. 2 Claims. (Cl. 8-1.)

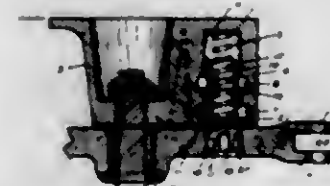
1. The dye stuff or coloring matter hereinbefore described which is produced by the combination of the diazo compound of picramic acid with alphanaphthylamine, again diazotizing the amidoazo compound obtained and recombining the diazo compound obtained with salicylic acid and which has the following characteristics: dark brown paste or black-brown powder, slightly soluble to cold, very soluble in hot water, and is precipitated from solutions by mineral acids substantially as described.

1,310,533. MEANS FOR SCREENING OR OBSCURING SHIPS. ISIDOR KARTON, Brooklyn, N. Y. Filed Oct. 18, 1917. Serial No. 197,220. 1 Claim. (Cl. 114-15.)



A ship screen comprising a pair of flat plates arranged at the sides of the ship and converging upwardly and inwardly toward one another and entirely inclosing the ship's superstructure, a space being left between the upper edges of said plates adjacent the smoke stack of the vessel, said plates being painted in colors representing the water surface.

1,310,534. DEVICE FOR LOCKING LEVERS. JOHN KIRBY, Jr., Dayton, Ohio, assignor to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 3, 1918. Serial No. 250,651. 6 Claims. (Cl. 70-128.)



6. A new article of manufacture comprising a bracket adapted to be secured to a support, an operating lever pivoted on said bracket at a point substantially midway of its longitudinal limits, an opening in said lever adjacent its pivotal connection with said bracket, a rotatively and longitudinally movable spring actuated locking bolt carried by said bracket adapted to engage said opening, and a stop-lug formed on said lever to cooperate with said bracket in limiting the movement of the lever on its pivot.

1,310,535. HEAT ELEMENT FOR ENGINE-MANIFOLDS. WILLIAM KAIMLING, Chicago, Ill., assignor to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1913. Serial No. 774,552. 2 Claims. (Cl. 219-38.)



1. A heating device of the character described for the manifold or other gas-carrying chamber of an automobile, including a screw-threaded element provided with a cylindrical cup-shaped opening, an elongated metallic post extending through said cylindrical opening, one end of said post being insulatingly secured to said screw-threaded element and the other end of said post being free to extend into said chamber, a heating member consisting of a substantially non-vibratile helical coil encircling said post and having one of its ends electrically attached to the free extremity of said post and its other end electrically connected to the said screw-threaded element whereby said screw-threaded element and said post form terminals for the heating device, said helical coil extending from the free extremity of said post up into said cup-

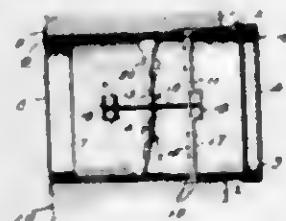
shaped cylindrical opening, the space between the coil and the post being free of insulating material so as to permit free contact of the gases with the foil outside surface of the coil and of the post.

- 1,310,536. ANTISKID DEVICE FOR VEHICLES. WILLIAM H. KAGO, Oshkosh, Wis. Filed Jan. 31, 1919. Serial No. 274,162. 4 Claims. (Cl. 24-73.)



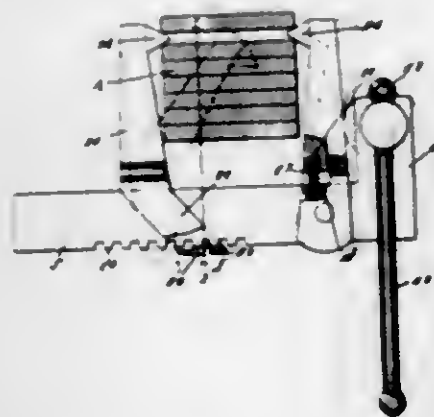
3. Means for securing one end of an antiskid chain to a wheel comprising a clamping bar having a slot extending therethrough and longitudinally thereof, a reinforcing rib extending longitudinally of said bar, and on one side of said slot, a bolt extending through said slot, a nut for said bolt, and yielding means co-acting with said rib to lock said nut against rotation and to prevent said bolt from being displaced longitudinally of said slot.

- 1,310,537. VENTILATOR. JOHN MENKAL, Robinson, N. D. Filed July 18, 1918. Serial No. 245,543. 1 Claim. (Cl. 98-27.)



In a device of the class described, the combination with a drum, of a pair of sheet metal brackets positioned in said drum, each bracket comprising an inner and an outer strip, the inner strip being apertured at its center, the outer strip provided with a pocket at its center positioned over the aperture of the inner strip, a shaft extending through the apertures of the inner strips of the brackets and having its ends bearing against portions of the pockets formed on the outer strips, and a fan mounted upon said shaft.

- 1,310,538. PRYING DEVICE. VICTOR W. MOORE, Athens, Ga. Filed Mar. 10, 1917. Serial No. 153,970. Renewed Feb. 25, 1919. Serial No. 279,180. 3 Claims. (Cl. 81-2.)

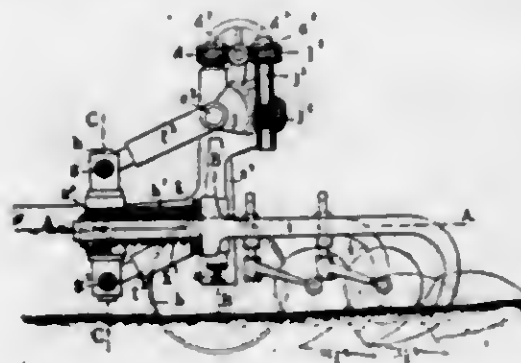


1. A device as described, comprising a toothed bar, an arm pivotally secured thereto, a rotatable eccentric sup-

ported by said bar and engaging said arm, a spring engaging said arm to hold the same against said eccentric, a second arm provided at its lower end with an opening to receive said bar, a locking rib extending across the bottom wall of said opening and engageable with the teeth formed in said bar, and wedge members carried by said arms.

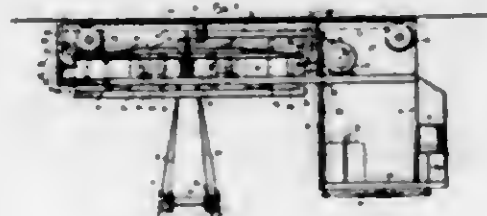
3. A device of the character described, comprising a bar, a jaw member having its lower end slotted to accommodate said bar and provided with a socket opening into the upper wall of said slot, a pin forming a pivotal connection between the side walls of said slot and said bar, a spring disposed in said socket and engaging said bar upon one side of said pin, means for moving said jaw against the tension of said spring, and a second jaw slidably mounted on said bar and opposing said pivoted jaw.

- 1,310,539. MULTIPLE PLOW. CHARLES MARCUS MOTTE, Paris, France. Filed May 25, 1918. Serial No. 236,635. 3 Claims. (Cl. 97-36.)



1. A multiple plow comprising a supporting axle for the plow bodies, wheels supporting the said axle, plow bodies each connected to the supporting axle by pivots for enabling the body to move laterally independently of the position of the axle, a device including a hand wheel for controlling the grounding and lifting of the plow bodies and the vertical displacement of the wheel traveling in the furrow, and a damping spring connecting each plow body to its support for allowing the longitudinal displacement of this body independently of the others.

- 1,310,540. TRANSPORTER WEIGHING CRANE. THOMAS ST. J. B. PARNALL, Smethwick, near Birmingham, and FREDERICK G. MITCHELL, Hyde Park, London, England. Filed Mar. 22, 1917. Serial No. 284,489. 4 Claims. (Cl. 265-5.)



1. A transporter weighing crane embodying a traveling trolley formed in two sections, a fixed section and a free section; said fixed section being supported upon wheels adapted to be mounted upon a transporter track, weighing levers and linkage interposed between said fixed and said free sections, said free section being suspended by means of said interposed weighing levers and linkage from said fixed section, grab operating gear mounted on said free section, electric motors and other mechanism connected with the grab operating gear, carried by said free section, flexible control connection for said motors extending from said motors to grab operating housing, said housing being

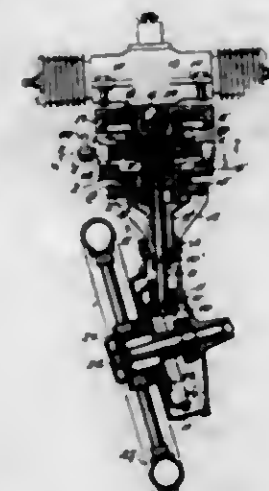
mounted upon the fixed section, an automatic weighing apparatus having its indicating or recording mechanism located in the grab operating housing, said interposed levers and linkage being in turn connected to said automatic indicating or recording mechanism.

- 1,310,541. RAKE-CLEANER. GEORGE F. PATTERSON, Edgerton, Minn. Filed Feb. 10, 1919. Serial No. 276,007. 1 Claim. (Cl. 53-146.)



In a rake cleaner, the combination with a rake head having a plurality of teeth, of a handle fixed to the head, a ferrule fixed to the handle adjacent the head, a split clamp in surrounding relation and clamped to the ferrule, said clamp being constructed from a single piece of sheet metal and comprising pairs of arms from the opposite ends of the clamp, certain corresponding arms of both pairs fitting about the ferrule and provided with means to secure them together, to hold the clamp to the ferrule, certain other corresponding arms extending laterally in parallelism and tangentially to the periphery of the ferrule and being spaced, a pivot bolt extending through the ends of the latter arms, a U-shaped lever straddling the clamp and having its arms pivotally mounted upon the pivot bolt, a rod projecting at right angles from the arched portion of the lever, and toward the teeth of the rake head, a transversely extending bar carried by the extremity of the rod and provided with perforated ears through which the rake teeth pass, a contracting spring connecting said rod and a part of the extremity of the handle, the tension of which holds the bar and the ears in normal positions, and a hand lever pivotally attached to the handle and having an operative connection passing through the handle and connected to the U-shaped lever.

- 1,310,542. MONOWHEEL DRIVE MECHANISM. CLARENCE H. PRATT, Milwaukee, Wis. Filed Aug. 10, 1918. Serial No. 250,244. 5 Claims. (Cl. 180-26.)

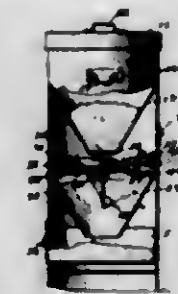


1. A mono-drive wheel for vehicles comprising a drive shaft, a jack shaft, a clutch controlled connection with the drive shaft, a fixed journal for the jack shaft, a housing revolvably mounted about the jack shaft, a driving wheel journally supported by the housing, a driving gear connection between the jack shaft and driving wheel, and means for swiveling the housing.

- 1,310,543. FLOUR-SIFTER. GABOR RACT, Bridgeport, Conn. Filed Sept. 10, 1918. Serial No. 253,379. 1 Claim. (Cl. 83-60.)

In a flour sifter and bin of the character described, comprising a casing, a hopper within said casing, a tiltable bottom for the said hopper, a sieve disposed in said casing for reciprocating shaking motion, bearings secured to the bottom on the outside of said sieve, means secured

in said bearings, for reciprocating said sieve, springs secured to the inner walls of said casing on opposite points and to the outer walls of said sieve, adapted to transform the reciprocating motion of the sieve into a shaking motion, a square frame within said sieve to the upper bar



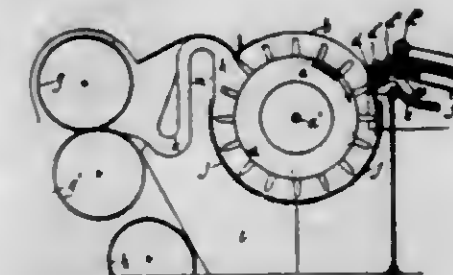
of which said tiltable bottom is secured, and an operating rod secured to the lower bar of said frame and to the lower wall of said sieve, for tilting said bottom upon the operation of said sieve reciprocating means, substantially as described and for the purpose set forth.

- 1,310,544. OIL-LEVEL INDICATOR AND SIGNALING DEVICE. ARTHUR JOSEPH ROXTON, Prairie Depot, Ohio, assignor of two-thirds to James H. Henderson and Herbert A. Werner, Prairie Depot, Ohio. Filed Apr. 27, 1918. Serial No. 231,155. 2 Claims. (Cl. 200-34.)



1. In a device of the described character, a metal container adapted and arranged at its lower end for connection with an adjacent crank-chamber, a cap for the container, a glass tube mounted upon said cap, for the glass tube a metal sleeve having therethrough a sight-aperture, a closure for the top of the metal sleeve, a float in the chamber of the container, a vertical rod carried by the float and passing through and contacting with said cap, a binding-post upon said closure and insulated from said sleeve, a metal strip connected with said binding-post and extending downwardly in the glass tube and being bent at an angle at its lower end, a contact-piece carried by the vertical rod near its upper end, the arrangement being such that the descent of the float brings the metal strip and the contact piece together.

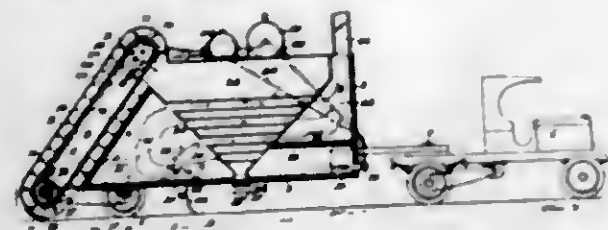
- 1,310,545. MACHINE FOR OPENING, SCUTCHING, AND SIMILARLY TREATING COTTON AND OTHER FIBROUS MATERIALS. JAMES LEVES REANTON, Bolton, England. Filed Feb. 1, 1918. Serial No. 214,837. 1 Claim. (Cl. 19-9.)



A machine of the class described comprising a rotating heating element, a casing having an inlet and outlet dis-

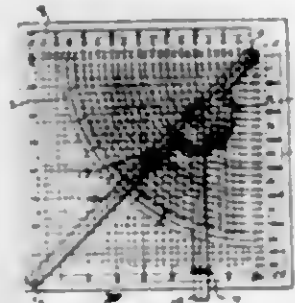
posed above the axis of said element, and beater bars constituting the lower part of said casing and extending from the inlet to the outlet thereof, and an outlet of approximately 8 form through which the fibers delivered from the beating elements pass first upward and then downward to the cages.

1,310,546. SNOW-REMOVING MACHINE. JOHN J. REAN, Bayonne, N. J. Filed Jan. 28, 1919. Serial No. 273,612. 9 Claims. (Cl. 37-61.)



1. A snow removing machine, comprising a tank vehicle, an elevator in two sections at one end of the tank body, rear supporting wheels at the sides of the machine and independent driving means connecting each section of the elevator to the wheel located at the same side of the machine, whereby the operating speed of each section of the elevator is in accordance with its rate of travel over the ground.

1,310,547. MATHEMATICAL INSTRUMENT. RALPH C. SANBORN, Briarcliff Manor, N. Y., assignor of fifty per cent. to Peter J. McKenna, Briarcliff Manor, N. Y. Filed Nov. 14, 1918. Serial No. 202,470. 7 Claims. (Cl. 33-98.)



1. In an instrument of the character described, a chart having scales thereon extending at right angles to each other from a common junction, a transparent hypotenuse arm pivotedly mounted upon the chart adjacent said common junction and having a hair line thereon, the graduations of said scales being extended across the surface of the chart in intersecting relation to each other, and a transparent slide member on said arm having a hair line disposed at right angles to the hair line on the arm and adjustable to register with the intersecting graduation lines, and a protractor connecting the remote portions of said scales, with which the hypotenuse arm cooperates.

1,310,548. SNAP-HOOK. JOHN SANDSTROM, Adams, N. D. Filed Oct. 31, 1918. Serial No. 260,491. 4 Claims. (Cl. 24-242.)



3. A snap hook comprising a hook member having an approximately triangular opening in its end opposite its hook, the apex of said opening being directed toward the hook, the end of which is inclined and provided with a groove and a two-armed snap pivoted in said hook member at a point adjacent to said opening so that one of its

arms will normally extend along one side of said opening and parallel therewith, the other of said arms being curved and provided with a tongue for engagement with the groove in said hook.

1,310,549. CHECK OR COIN CONTROL APPARATUS. CRAIG C. SHIGLEY, Grand Rapids, Mich. Original application filed Nov. 10, 1916, Serial No. 130,620. Divided and this application filed Nov. 26, 1917. Serial No. 203,993. 3 Claims. (Cl. 194-6.)



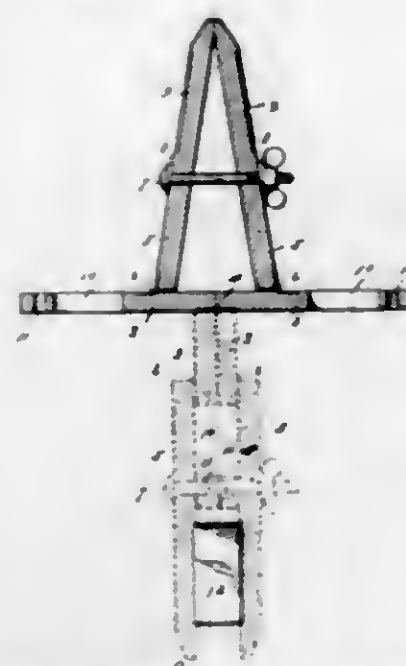
3. In a structure of the class described, the combination with a check chute, of a pivoted contact member adapted to support a check in two positions, an actuating rock shaft, an arm on said rock shaft, a spring comprising a pair of arms, one of which is connected to said pivoted contact member and the other to said rock shaft so that on the swinging of the arm the spring is placed under tension until its dead center is reached thereby securing a snap action for said contact member, and means for actuating said rock shaft.

1,310,550. COLLAR. JOHN EDGAR SIFFERTY, Troy, N. Y., assignor, by mesne assignments, to William Arthur Tooke, Montreal, Quebec, Canada. Filed Oct. 14, 1918. Serial No. 55,816. 3 Claims. (Cl. 2-60.)



1. A soft collar comprising a band and fold-over top, a textile strap free relatively to the said band and connected at one end to the under side of the fold-over top at a distance from that free end of the fold-over top and connected at its opposite end to the under side of the other end of the fold-over top at a distance from its free end whereby the connecting means for both ends of the strap are concealed from view by the said fold-over top.

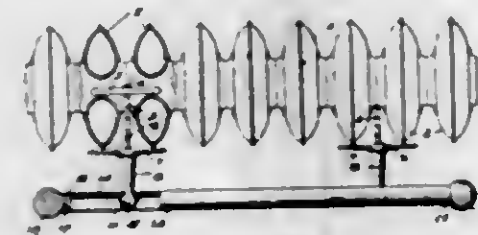
1,310,551. FOLDING CLAMP. LOUIS J. SOLBERG, Malta, Mont. Filed May 17, 1918. Serial No. 235,151. 7 Claims. (Cl. 69-19.)



2. A folding clamp comprising a pair of hinge-connected base members adapted to be folded, one upon the

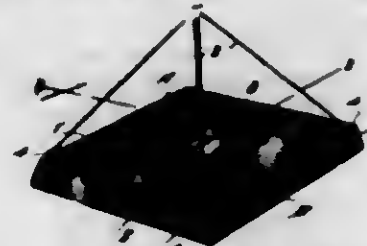
other, a pair of cooperating jaws hinged, one to each of the base members and adapted to be folded onto the respective base members, and a draw bolt connecting the jaws, each of said base members having a transverse opening, said openings arranged to be brought into alignment, when the base members are folded one upon the other, to afford a receptacle that is closed by the jaws when folded onto the respective base members.

1,310,552. RADIATOR FOOT-REST. HERAY A. TREXTON, Minneapolis, Minn., assignor of one-half to E. H. Day, Minneapolis, Minn. Filed June 16, 1916. Serial No. 103,022. 3 Claims. (Cl. 135-9.)



1. A radiator foot rest comprising bolts having shanks and heads at the inner ends thereof, bars loosely mounted on said inner ends to bear on the inner faces of the radiator sections and free to slide and tilt thereon to fit the inequalities of the radiator sections, said bolts projecting outwardly between the radiator sections and having threaded outer ends, plates loosely mounted on said bolts to bear on the outer faces of said sections and shanks interiorly threaded to receive the threaded ends of said bolts for clamping said plates and bars against the inner and outer faces of said sections, and a foot rail carried by said shanks.

1,310,553. FISH-NET. FRED WARREN ARNOLD, Cambridge, Ohio. Filed Sept. 24, 1917. Serial No. 193,009. 1 Claim. (Cl. 43-9.)



A net of the character specified comprising upper and lower substantially rectangular frames, the upper frame being of smaller size than the lower frame to nest within the same, a covering of reticulated material for the lower frame and the adjacent sides of the frames, balls of flexible material connected with the corners of the upper frame, said upper frame having eyes near its corners to which the balls are connected, and the said balls being extended loosely to connect with the lower frame.

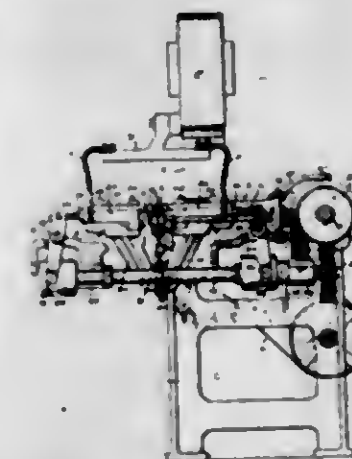
1,310,554. ELECTRIC WELDING-MACHINE. GEORGE J. ARMSTRONG, Buffalo, N. Y., assignor, by mesne assignments, to The Columbus McKinnon Chain Co., Columbus, Ohio. Filed May 16, 1916, Serial No. 97,803. Renewed Dec. 19, 1917. Serial No. 207,890. 10 Claims. (Cl. 219-5.)



1. In an electric chain welding machine, the combination of oppositely disposed pairs of welding electrodes

movable toward and from each other into and out of contact with opposite faces of a chain link at opposite sides of the joint to be welded, and means movable substantially at right angles to the direction of movement of the electrodes and substantially parallel with the plane of movement thereof for pressing together the ends of the link.

1,310,555. ELECTRIC WELDING-MACHINE. GEORGE J. ARMSTRONG, Buffalo, N. Y., assignor to The Columbus McKinnon Chain Co., Inc., Columbus, Ohio, a Corporation of Ohio. Filed May 1, 1919. Serial No. 294,022. 10 Claims. (Cl. 219-5.)



1. In an automatic electric chain welding machine, the combination of means for feeding a chain the links of which are to be electrically welded, a plurality of pairs of welding electrodes, the two electrodes of each pair being of opposite polarity to cause the currents between the electrodes of each pair to flow through the link joint in the same direction, means for supporting the electrodes for swinging movement into and out of contact with a link of the chain to engage the electrodes of each pair at opposite sides of the link joint and remove them from such engagement, and means for pressing together the ends of the link.

1,310,556. SIDE BEARING FOR CARS. FRANKLIN L. BARBER and Edwin W. Wynn, Chicago, Ill., assignors to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 9, 1918. Serial No. 265,830. 3 Claims. (Cl. 64-64.)



1. In an anti-friction side bearing, the combination with upper and lower bearing plates, of a housing secured in respect to the upper bearing plate and having self-centering wheel seals, an interposed rocker normally supporting the upper bearing plate from the lower bearing plate and having an axial opening, a carrier pin extending through the axial opening in the rocker, said rocker and carrier pin having normally separated fulcrum surfaces, the fulcrum surface of the rocker being located above the center of gravity thereof, and wheels supporting the carrier pin from the wheel seal.

1,310,557. HAIR-CURLER. BLANCH E. BRADLE, Springfield, Mass. Filed Mar. 29, 1917. Serial No. 158,394. 3 Claims. (Cl. 132-18.)

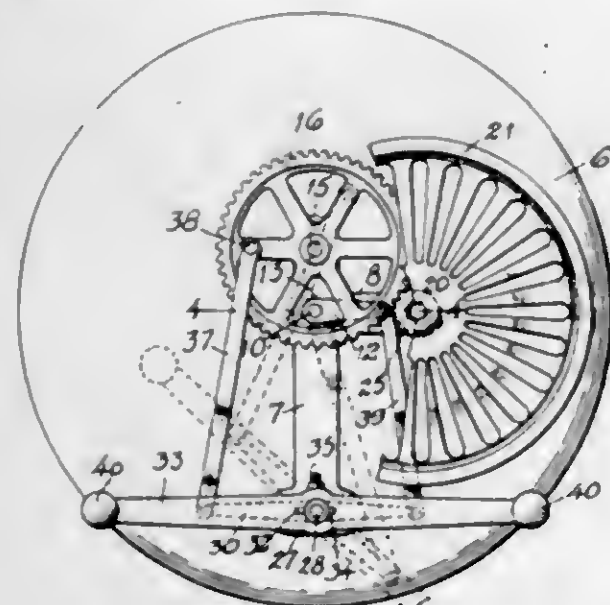
2. A hair curler consisting of an arched member of yielding material having its opposite ends curved toward

each other to provide yielding terminal hair retaining elements adapted to exert tension toward the side of the member, said elements being longitudinally spaced from



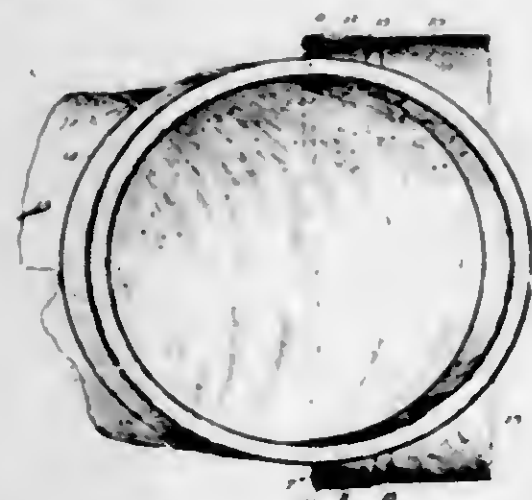
each other and being disposed in parallel relation to the member, the terminal portions of said clamps being deflected outwardly and projecting toward each other.

1,310,558. WASHING-MACHINE MECHANISM. ALFRED BOHR, Albin, Iowa. Filed May 8, 1918. Serial No. 233,299. 3 Claims. (Cl. 74-7.)



1. In combination with a receptacle having a removable top and a shaft rotatably mounted in said top, operating gearlog for said shaft including a rotatably mounted power transmitting member, an arm fixed to the shaft, a gear element having its axis spaced from said shaft, operating connections for the gear element and said arm connected to said power transmitting member at points equidistant from its axis and on relatively opposite sides thereof, and a fly wheel geared to said gear element.

1,310,559. HOSE-COUPLING. NORMAN RUTH BRALY, Butte, Mont. Filed July 5, 1918. Serial No. 243,337. Renewed June 9, 1919. Serial No. 303,003. 6 Claims. (Cl. 285-71.)



1. A coupling of the character set forth, comprising detachably cooperating coupling rings relatively deform-

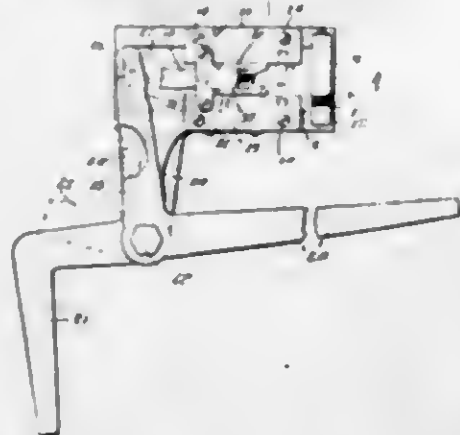
able to permit one to be disposed at an angle to and passed through the other and to assume a substantially parallel relation to said other and bear against the same, one of said rings furthermore being variable in diameter, and means for limiting the range of variation in diameter of the said ring to a degree to prevent one of the rings passing through the other when in said substantially parallel relation.

1,310,560. FLOAT-VALVE. DR LOYD K. COOK, Maquoketa, Iowa. Filed Mar. 8, 1919. Serial No. 281,406. 1 Claim. (Cl. 137-104.)



As an article of manufacture, a float valve structure comprising a casing internally threaded at its lower end and having a valve seat within its upper end, a stem extending entirely through and above the casing and threaded at both ends, a pair of nuts on the upper thread, a float adjustably held between them, a pair of nuts on the lower thread, a ball valve adjustably held between them and loose within the casing, and a baffle comprising a disk split radially and distorted to make its edge spiral and adapted to fit the threads within the casing below said valve, the body of the disk being perforated for the passage of water and having a central opening for guiding said stem.

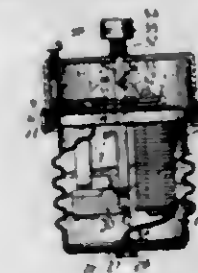
1,310,561. MOTION-TRANSMITTING-CONTROLLING MEANS. WILLIAM C. LIPE, Syracuse, and JOHN W. CONNOR, deceased, Syracuse, N. Y., by Stella S. Connelly, administratrix, Syracuse, N. Y. Original application filed Nov. 16, 1906, Serial No. 343,702. Divided and this application filed Mar. 23, 1915. Serial No. 16,483. 20 Claims. (Cl. 74-14.)



1. The combination of driving and driven elements each including a clutch member, one clutch member being shiftable into and out of engagement with the other clutch member and being normally out of engagement therewith, means tending to move the shiftable clutch member into position to coast with other clutch member, means for holding the shiftable clutch member disengaged from the other clutch member, the last mentioned means being shiftable into and out of operative position relatively to the shiftable clutch member and including a shiftable part, and a plurality of independently movable starting members, one starting member being arranged to shift said shiftable part into position to coast with the

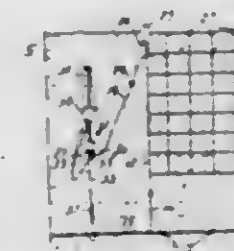
other starting member whereby when the latter is operated said holding means is shifted relatively to the shiftable clutch member, substantially as and for the purpose described.

1,310,562. CIRCUIT-BREAKER. GWYN OSCAR OWEN DAVIES, Cle Elum, Wash. Filed Feb. 11, 1919. Serial No. 276,353. 1 Claim. (Cl. 175-208.)



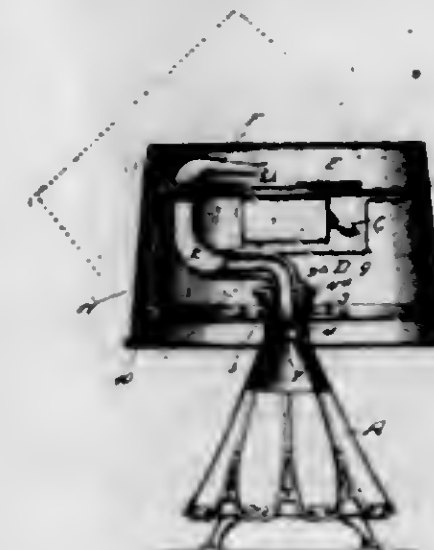
In a circuit breaker adaptable to plug fuse receptacles, the combination of an insulating supporting disk to the under side of which are secured a screw plug having attached thereto two insulating disks through which a brass contact is riveted, a core U-shaped and composed of soft iron upon which are mounted two electromagnet coils, and to the upper side of said supporting disk are secured a cap, an upright having pivotally mounted thereon a lever consisting of a pawl and an armature and carrying a flat steel spring in the free end of which is a hole, a screw passing through threaded hole in aforementioned cap and extending into hole in above-mentioned flat spring, a plunger slidably supported in square hole in cap and square hole in disk both above-mentioned said plunger having cut transversely thereof a slot to be engaged by aforementioned pawl, an insulating blade secured to the lower end of said plunger and insulating knob secured to the upper end of same, and said plunger carrying a pin for the purpose of limiting its upward motion, a wire connecting one of the aforementioned spring contacts with above-mentioned screw plug, the insulated wire constituting the above-mentioned coils connected as shown in the accompanying drawings and as herein described, a shunt when desired substantially as shown and described, a spiral spring to propel plunger upward.

1,310,563. APPARATUS FOR DETECTING AND INDICATING THE PRESENCE OF SUBMARINE BOATS. GIOVANNI EMANUELE ELIA, Rome, Italy. Original application filed Apr. 27, 1917, Serial No. 164,850. Divided and this application filed Dec. 13, 1918. Serial No. 266,561. 10 Claims. (Cl. 114-240.)



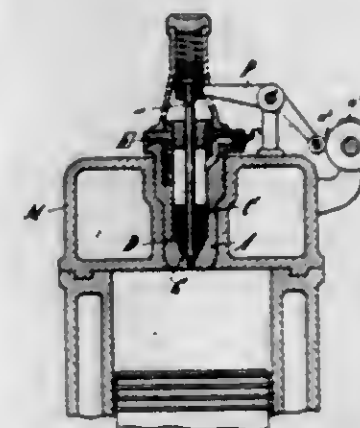
1. Apparatus for detecting and indicating the presence of submarine boats comprising the combination of a net adapted to be submerged in the sea, a buoyant signaling device, means for holding the signaling device submerged, a connection from the net to the signaling device and means operated by movement of the net through the water for releasing the buoyant signaling device from its holding means to permit it to rise to the surface and for causing operation of the signaling device to send its signal.

1,310,564. PHONOGRAPH-LAMP. FRANK H. FERAUD, Granite City, Ill. Filed Oct. 21, 1918. Serial No. 258,938. 10 Claims. (Cl. 240-2.)



1. A device of the character referred to, consisting of a lamp provided with a shade and a standard, and a sound reproducing machine comprising a motor and reproducer arm arranged inside of the shade of the lamp and revolvably mounted on the standard of the lamp.

1,310,565. FUEL-INJECTING DEVICE FOR INTERNAL-COMBUSTION ENGINES. CARL GRUNWALD, Hredeney, Germany. Filed July 24, 1912. Serial No. 711,377. Renewed Dec. 4, 1918. Serial No. 265,318. 6 Claims. (Cl. 123-32.)

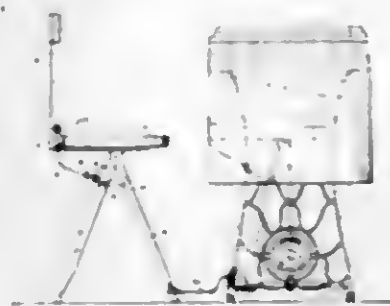


4. In a fuel injecting device for internal combustion engines, using slowly igniting fuel; the combination with a working cylinder, a fuel valve for the cylinder, and a seat for said valve, of an annular space behind said seat, means for actuating said valve, comprising a two-armed lever, a revolving shaft and a cam disk thereon for oscillating said lever at certain intervals, said cam disk having a wide cam tooth and a plurality of narrow cam teeth of different heights and arranged in alignment and parallel to the axis of said disk, said narrow cam teeth being so mounted on said disk, that they can actuate the valve, for connecting said space with said working cylinder, in advance of the action of said wide cam tooth to open the valve for admitting fuel into the cylinder.

1,310,566. FOLDABLE STOOL. FREDERICK HAYES HAZEN, Houston, Tex. Filed Feb. 6, 1918. Serial No. 215,576. 3 Claims. (Cl. 155-22.)

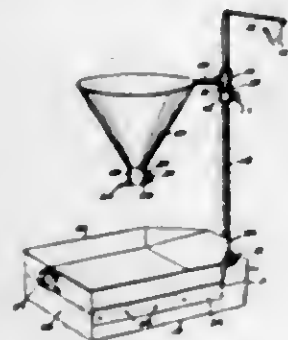
1. A device of the character described including a stool bottom, supporting legs therefor, the upper ends

of which are pivoted to the stool bottom, means for locking said pivoted legs in fixed position, a back hinged to



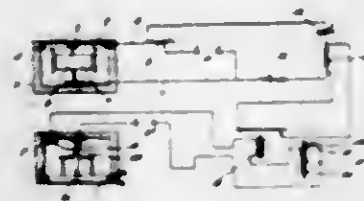
the bottom and a mechanism actuated by said back and operating to release said locking means when the back is folded down to the said bottom.

1,310,567. GRAIN-TESTING DEVICE. ROLLA C. HANBORN, Spokane, Wash. Filed Oct. 3, 1918. Serial No. 250,747. 1 Claim. (Cl. 226-33.)



A grain testing device comprising a platform, a pan in connection with said platform, a vertically arranged shaft mounted on said platform, a slidable and rotatable member mounted on said shaft, a funnel supported by said slidable and rotatable member adapted for positioning said funnel over the said platform and pan, and a gate in said funnel.

1,310,568. ACOUSTICALLY-OPERATED ELECTRIC-CONTACT-ACTUATING MECHANISM AND SYSTEM EMPLOYING THE SAME. ARTHUR CECIL HEAP, Woking, England, and ALLAN BERTRAM FIELD, Marple, England. Filed Apr. 3, 1919. Serial No. 287,349. 5 Claims. (Cl. 177-352.)



3. In apparatus for the detection of sound waves, pulses or vibrations of a predetermined strength or character, the combination of an electrical contact controlling an electric circuit adapted to be actuated by said sounds, pulses or vibrations, with a second electrical contact controlling a second electric circuit adapted to be actuated by sound waves, pulses or vibrations of a different strength or character from said predetermined sounds, pulses or vibrations to prevent said first contact from controlling said first circuit.

1,310,569. ROOT-CUTTING IMPLEMENT. HOWARD HOLSFORTH, Huron, S. D. Filed Jan. 11, 1919. Serial No. 270,730. 3 Claims. (Cl. 55-69.)

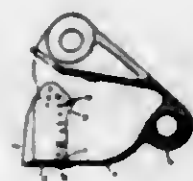
1. A root-cutting implement, comprising, in combination with an attenuated vertical plate having its front

end curved upwardly and forwardly and provided at its lower edge with horizontal blades, each blade having a flat, upwardly projecting wing, means above the plate



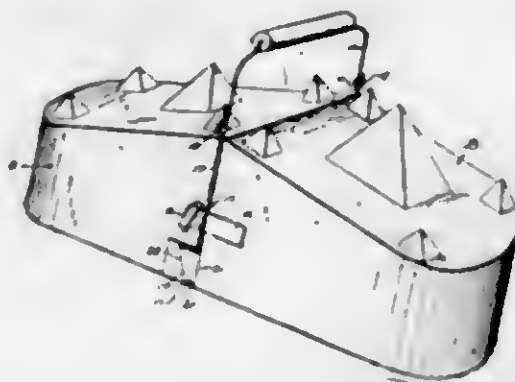
for pressing the implement toward the ground, one of the edges of each blade, each wing, and said plate being provided with sharpened edges, each wing being provided with a horizontal flange having a sharpened edge.

1,310,570. DREDGE-BUCKET LIP. LEWIS D. HOPFIELD, Natoma, Calif., assignor of one-half to George E. Sibbett, San Francisco, Calif. Filed Aug. 20, 1918. Serial No. 250,760. 3 Claims. (Cl. 37-23.)



1. A dredge bucket lip having three flanges for attaching the lip to the dredge bucket, two of said flanges being at the edges of the ends of the lip and attached to the sides of the bucket within the same, and the other flange being at the center of the lip and outside the bucket.

1,310,571. FOOD-CONTAINER OR LUNCH-BOX. WALLACE J. HITCHKINS, Alpena, S. D. Filed Mar. 8, 1919. Serial No. 281,391. 7 Claims. (Cl. 220-20.)

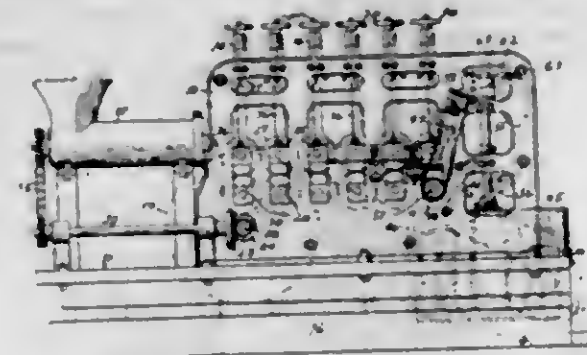


1. A lunch box of the character described comprising two sections hinged to each other at one side, the sections being open at their adjacent ends, drawer-like receptacles disposed within each section and held within their respective sections by shutting against each other when the sections are closed, and a latch member carried upon the free side of one of the sections, a keeper on the other section with which the latch member engages, and a latch device on the last named section engaging with the latch member on the first named section.

1,310,572. MEAT-GRINDING MACHINE. DOUGLAS JUNZO IYATA, Los Angeles, Calif. Filed June 18, 1918. Serial No. 240,611. 6 Claims. (Cl. 146-9.)

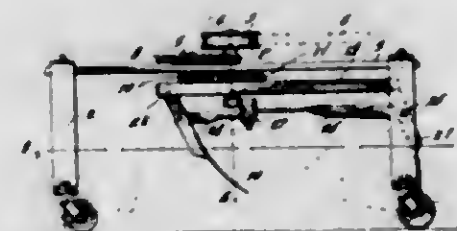
1. In a machine of the character described, the combination with cutting and grinding means, of mixing

means in cooperative relation with the cutting and grinding means, scraping means for transmitting the ground



material to the mixing means, and flavor distributors in cooperative relation with the mixing means, all arranged for simultaneous action.

1,310,573. HAY-COCKING MACHINE. WILLIAM F. KOCH, Hillside, Colo. Filed Jan. 3, 1919. Serial No. 269,438. 7 Claims. (Cl. 56-375.)



4.-In a hay cocker, the combination with a horizontal supporting beam, an upright main shaft mounted through its center and having a crank at its lower end, and a driving pulley on the upper end of the shaft; of a rake head consisting of a second beam loosely mounted on the shaft above its crank, rakes comprising standards hinged at their upper ends to the extremities of said rake head and having lines at their lower ends, links loosely connecting said standards with the crank, a pinion fast on the main shaft above said beam, a gear fast on the rake head below said beam, a counter-shaft journaled through said beam on one side of the main shaft, and a gear on the upper end thereof connecting with said pinion and a pinion on the lower end connecting with said gear, for the purpose set forth.

1,310,574. AUTOMATIC HAMMER. GEORGE L. KOLLOCK and ROBERT P. MARTIN, Seattle, Wash., assignors to Universal Hammer Company, Seattle, Wash., a Corporation of Washington. Filed Oct. 5, 1917. Serial No. 194,840. 16 Claims. (Cl. 78-38.)



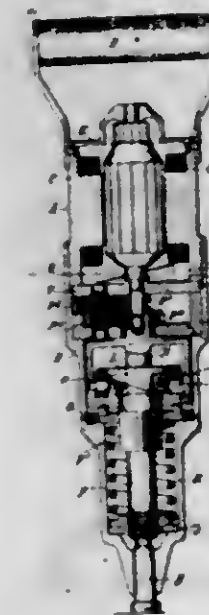
1. An automatic hammer comprising a striker, an actuating spring therefor, an electric motor, an annular lifting cam surrounding the hammer and engaging the spring, extensions on the hammer engaging said cam and a driving connection between the motor and the cam passing outside of said extensions.

1,310,575. AUTOMATIC HAMMER. GEORGE L. KOLLOCK and ROBERT P. MARTIN, Seattle, Wash., assignors to Universal Hammer Company, Seattle, Wash., a Corporation of Washington. Filed Nov. 9, 1917. Serial No. 201,148. 9 Claims. (Cl. 78-27.)

1. An automatic hammer comprising a reciprocating striker, an actuating spring therefor, an annular ram for

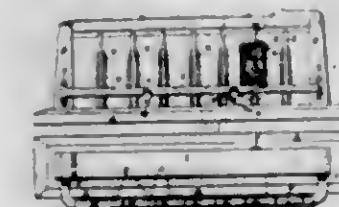
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the striker, a cam-operating member engaging the cam, said cam and said operating member being concentric to



said striker, and an electric motor for driving the said member.

1,310,576. SPOOL-HOLDER. GLOSSIE T. R. LEACH, Pittsburgh, Pa. Filed Feb. 4, 1919. Serial No. 274,831. 4 Claims. (Cl. 212-134.)



1. In combination with a spool holder in which spools of thread are rotatably mounted in an upright position, a thread guide bar mounted horizontally in front of the spools, said guide bar being provided with pairs of aligned guide slots for the passage of the thread ends, and means positioned between said slots for holding the thread down on said bar and prevent its jumping from said slots, substantially as and for the purposes described.

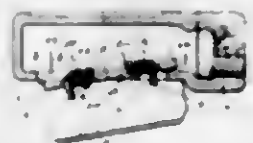
1,310,577. SAFETY LOCKING DEVICE. EMIL W. PARKER, Malden, Mass. Filed Apr. 11, 1919. Serial No. 289,292. 3 Claims. (Cl. 70-128.)



1. A safety locking device of the character stated, comprising a lever, a locking dog pivoted to the inner end

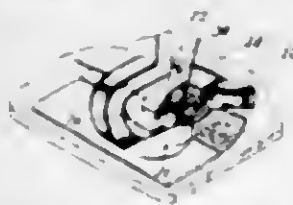
portion of the lever and adapted to engage a toothed bar, a handle member fulcrumed on the outer end portion of the lever and projecting from one side thereof, a rod connecting said dog and handle member, and provided between its ends with a bolt-receiving socket, said rod extending lengthwise of the lever and at one side thereof, and a safety attachment including a lock holder having a portion bearing on and attached to the lever, and a portion projecting laterally from the lever beside said rod, a lock casing attached to the projecting portion of said holder, and a bolt movable in said casing in position to enter the rod socket.

1,310,578. MEANS FOR ATTACHING ELECTRICAL APPLIANCES TO CONDUIT OUTLET BOXES. JOHN E. PARKER and DANIEL H. WINTER, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed July 30, 1915. Serial No. 42,720. 8 Claims. (Cl. 247-6.)



1. The combination with a conduit outlet box having an opening, and an electrical appliance mounted on the box and covering said opening, of means for connecting electrical appliances to the box comprising a bar of greater length than the diameter of the opening and having its ends arranged to engage the inner face of the margin of the wall around said opening, said bar having adjustable means for receiving the fastening screws of the electrical appliances, and means for holding the former means in its adjusted position, substantially as and for the purpose described.

1,310,579. MACHINE FOR FINISHING THE EDGES OF FLEXIBLE MATERIAL. LLOYD T. REMICK, Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 13, 1914. Serial No. 831,011. 31 Claims. (Cl. 12-51.)

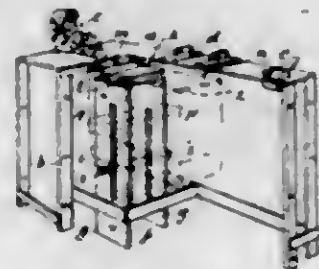


1. In an upper folding machine the combination of a folding finger, a cooperating creaser for determining the line of the fold, means for completing the fold, and means for introducing between the creaser and the folded material a filament of reinforcing material.

1,310,580. WORK HOLDER FOR THE SEALING OF CARTONS. ARTHUR E. RIBBOUT, Chicago, Ill., assignor to National Binding Machine Company, a Corporation of New York. Filed June 10, 1914. Serial No. 844,137. Renewed Dec. 17, 1918. Serial No. 267,212. 2 Claims. (Cl. 93-56.)

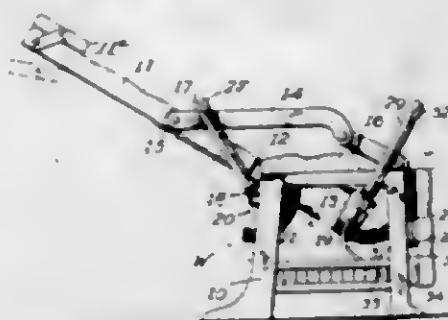
1. A device for holding and sealing cartons, combining a stand adapted to support a carton to be sealed, a bench adjacent one side of said stand for supporting a tape-holder, carton-positioning means fixed on said stand, a set of members for supporting cartons of different sizes, and means on each member cooperating with said carton-positioning means and so located that all of the cartons are supported at the same distance from said tape-holder, the distance between carton and tape-holder serving as a measure of the length of tape needed including overlap.

2. A device for holding and sealing cartons, combining a stand adapted to support a carton to be sealed, a bench comprising a portion adjacent one side of said stand for supporting a tape-holder, cleats on said stand, a set of plates for supporting cartons of different sizes, cleats on each plate cooperating with said first-named cleats and



so located that all of the cartons are supported at the same distance from said tape-holder, whereby the cartons may be held in pre-determined tape-affixing relation to said bench, the distance between carton and tape-holder being equal to twice the overlap of the tape, and the stand being at substantially the height of the top of the carton.

1,310,581. RECLINING-CHAIR. ANDREW RUNSO, Fitchburg, Mass. Filed Mar. 29, 1919. Serial No. 285,335. 7 Claims. (Cl. 135-16.)



1. A reclining chair having a seat fixed in position, a footrest directly adjacent said seat, means to angularly adjust said footrest relative to said seat, and means to raise said footrest bodily relative to said seat above normal raised position.

1,310,582. HARROW. CHARLES N. SHARP, Auburn, N. Y., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Aug. 29, 1913. Serial No. 787,367. Renewed Jan. 24, 1919. Serial No. 272,973. 4 Claims. (Cl. 55-104.)

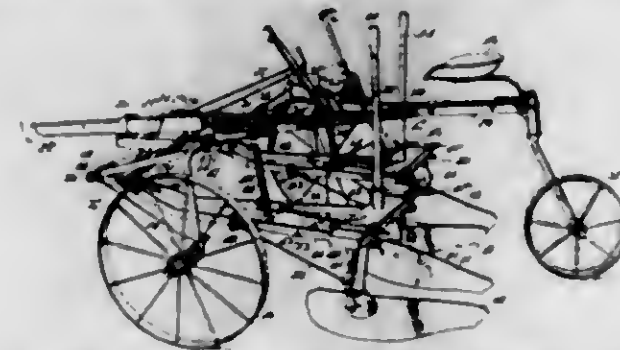


1. In combination, a harrow frame having laterally disposed downwardly extending arms and rearwardly disposed side members, harrow teeth carried on said frame at points outside of said rearwardly extending side members and inside and rearwardly of said laterally extending arms, and means for attaching transport wheels to either said rearwardly or laterally extending elements.

1,310,583. CULTIVATOR. ERNEST C. SMITH, Hoosick Falls, N. Y., assignor to Walter A. Wood Mowing & Reaping Machine Co., Hoosick Falls, N. Y., a Corporation of New York. Filed Sept. 10, 1918. Serial No. 253,374. 5 Claims. (Cl. 97-35.)

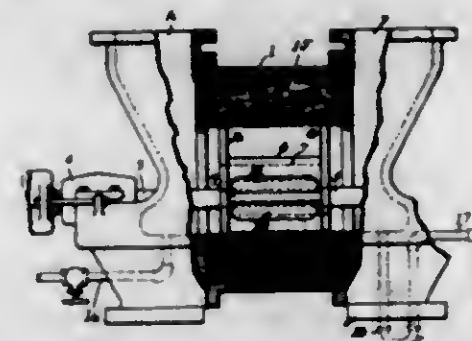
1. In a cultivator, in combination, an arching axle having a relatively long intermediate elevated portion, main

carrying wheels mounted upon the opposite ends of the axle, a seat carrying frame pivotally connected with the said intermediate portion of the axle and extending rearwardly therefrom, a caster wheel supporting the seat carrying frame at its rear end, a transverse frame member in front of the axle and rigidly connected thereto, a shovel carrying frame having a universal joint connec-



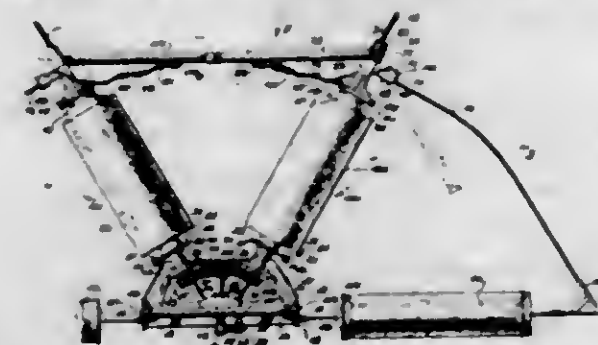
tion with the said transverse frame member adjacent each end of the same and extending rearwardly therefrom under the axle, elevating means mounted upon the said intermediate portion of the axle at each side of the seat carrying frame and extending to the corresponding shovel carrying frame and operating means for each of the said elevating means mounted on the seat carrying frame.

1,310,584. ROTARY PUMP. HARRY F. SMITH, Lexington, Ohio, assignor to The Smith Gas Engineering Company, a Corporation of Ohio. Filed Aug. 25, 1917. Serial No. 188,233. 9 Claims. (Cl. 230-22.)



1. In a pump, the combination of a casing having valveless inlet and outlet ports therein, said casing being adapted to contain a quantity of liquid which during operation of the pump is caused to assume the form of a revolving liquid cylinder; a rotor in said casing and free from contact therewith; and passages in said rotor connecting the inlet and outlet ports; said rotor during operation of the pump cooperating with the revolving liquid cylinder to force fluid through the passages.

1,310,585. HIGH-POTENTIAL SWITCH. GEORGE T. SOUTHGATE, Brooklyn, N. Y. Filed Oct. 6, 1917. Serial No. 195,027. 11 Claims. (Cl. 175-282.)



1. In an electric switch, the combination with a pair of arms, of a contact mounted on one end of each arm,

and located to mutually contact an axially rotatable insulator supporting the other end of each arm and means for rotating said arms.

1,310,586. BOMB OR SUBMARINE MINE. OSCAR L. STEAUR and MEADE WILDRICK, U. S. Army. Filed Sept. 19, 1918. Serial No. 254,804. 7 Claims. (Cl. 102-2.)



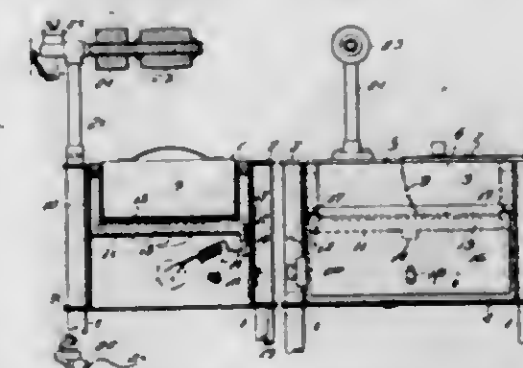
1. The combination with a bomb containing high explosive, of a tube carrying a detonating charge mounted in said bomb, a normally inactive electric battery adapted to be rendered active by the addition of water and an electric circuit containing an electric primer for igniting said detonating charge mounted in said tube, and a pressure controlled piston, with means controlled thereby for admitting water to said battery when the bomb reaches a predetermined depth thereby completing said electric circuit and generating a current, substantially as described.

1,310,587. PAPER-CLIP. ALANO E. SUMMERVILLE, San Juan, Porto Rico. Filed Jan. 16, 1919. Serial No. 271,485. 2 Claims. (Cl. 24-66.)



2. A paper clip formed of a section of suitably stiff and resilient wire having an approximately U-shaped body portion provided with arms, retractile coil-springs carried by the free end of the arms and having their axes substantially perpendicular to the plane of the paper held by the clip, and arms carried by the springs and arranged opposite the body portion.

1,310,588. SHOE-BOTTOM-FILLING MACHINE. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Maine. Filed June 11, 1913. Serial No. 772,979. 10 Claims. (Cl. 18-1.)



1. A shoe-bottom filling machine, comprising a heated filler receptacle for shoe filler, a heated unifying and spreading member in close, fixed and rigid relation to

said receptacle for the quick filling of a shoe with the hot filler and the immediate superheating, unifying and spreading of said filler by the heated member, separate heating means for said receptacle and said spreading member, and regulating devices for independently varying the heat in said receptacle and said spreading member.

1,310,589. ARTIFICIAL HAND. RAY TRAUTMAN, Minneapolis, Minn. Filed Sept. 21, 1918. Serial No. 253,136. 8 Claims. (Cl. 3-12.)



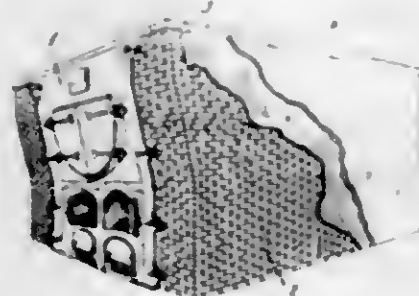
1. An artificial hand of the hook type comprising a main finger member, a movable finger member pivoted to said main finger member, and retracting means acting directly upon the portions of said finger members which are on the opposite side of the pivot from the free grasping ends of said finger members whereby said grasping ends are normally urged toward each other.

1,310,590. TACKING-MACHINE. CLARENCE F. WARNER, Toledo, Ohio. Filed Apr. 27, 1918. Serial No. 231,081. 5 Claims. (Cl. 1-45.)



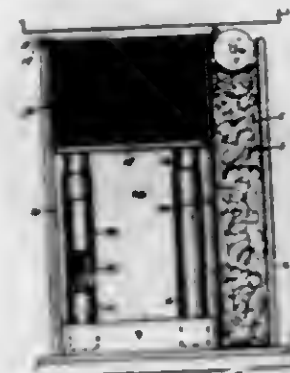
4. In a tacking tool, a handle for manipulating the tool having a Y passageway, a cylinder connected to the end of the handle and with the passageway of the handle, a reservoir for tacks mounted on one end of the cylinder, a chute connected to the reservoir and extending to the lower end of the cylinder, a pneumatic hammer located in the cylinder, a means for directing tacks sequentially beneath the hammer and a valve member extending through the handle for controlling the passageways of the hammer.

1,310,591. COATING FOR ROILER-SETTINGS AND THE LIKE. JACOB M. AARONS, Cleveland, Ohio, assignor to The Excels Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 4, 1916. Serial No. 76,169. 1 Claim. (Cl. 72-123.)



A boiler setting structure comprising courses of brick and mortar, a primer coat applied thereto to fill the pores, said primer coat containing a non-drying substance, and an outer seal applied to the primer coat and sealing the entire setting against air leakage.

1,310,592. LABEL-VENDING MACHINE. HARRY ALEXANDER ADAMS, New York, N. Y., assignor to Serviceable Inventions Corporation, New York, N. Y., a Corporation of New York. Filed June 9, 1917. Serial No. 173,839. 3 Claims. (Cl. 91-51.)



1. A label vending machine comprising a moistening means and in combination therewith a magazine having a movable platform, a plurality of cylinders arranged in pairs telescoping into each other, and a spring within one cylinder of each pair and adapted to urge said cylinders away from each other to elevate said platform and retain said labels under spring tension.

1,310,593. LUGGAGE-CARRIER FOR AUTOMOBILES. ANDREW BARK, Seattle, Wash. Filed Mar. 17, 1919. Serial No. 288,265. 5 Claims. (Cl. 224-29.)

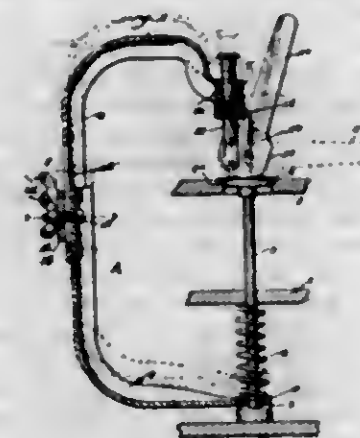


1. An automobile luggage carrier in combination with a mud guard of an automobile, comprising a gate retaining and article holding member in form substantially an inverted U, means for fastening articles thereto, an integral part thereof, a longitudinally extending section in equally spaced relation with the sides of said member and in the plane thereof, said section being slightly shorter in length than said member, the ends of said section and said member carrying arms the ends of which lie in a plane substantially at right angles thereto, a bight being made in each arm to conform substantially to the outer flange of the mud guard, the free ends of said arms adapted to extend underneath said guard and to engage the lower periphery thereof for the greater portion of its width, an L shaped member slidably connected with the inner surface of said section, adapted to afford support and adjustment to clamping means, means for bracing said L shaped member, means for holding it in adjusted position, a winged bolt operating through said brace and said L shaped member, carrying on its lower end a clamping member adapted to engage the upper periphery of said guard.

1,310,594. LIFTER. EDNA L. BRADLEY, Columbus, Ohio. Filed Feb. 11, 1918. Serial No. 216,563. 1 Claim. (Cl. 29-87.1.)

A valve lifter for explosive engines, comprising a substantially L shaped frame member, a lower frame member adjustably and detachably carried by said former member and provided with a slotted valve stem embracing portion, means for elevating and lowering said extremity, comprising a threaded rod slidably mounted in an opening formed in the free end of said L shaped member, a nut threaded upon said rod, and a cam lever pivotally mounted in a slot formed in the lower end of said bolt and operable when oscillated in one direction to

force said nut in engagement with the free end of said L shaped member so as to effect the elevation of said



valve stem engaging extremity, and when oscillated in a reverse direction to permit of the lowering of said extremity.

1,310,595. TELEGRAPH SYSTEM. JOHN H. BELL, South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 22, 1917. Serial No. 203,354. 7 Claims. (Cl. 178-71.)



1. In a telegraph system, a first line section, a second line section, sources of current employed with equipment comprising a line relay, a control relay operated by said line relay to repeat messages in one direction between said line circuits, and a self-aiding relay rendered operative jointly by said line and said control relay for repeating telegraphic messages between said lines in the other direction.

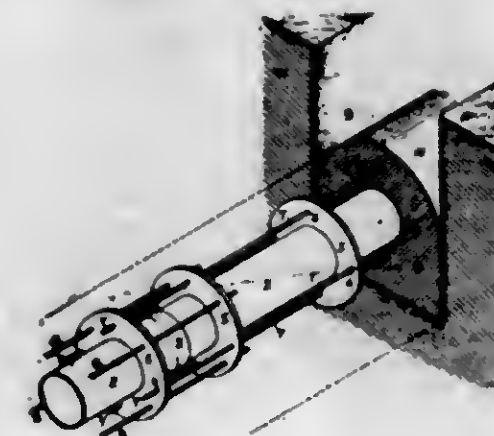
1,310,596. DRAFTING APPARATUS. NICHOLAS J. BLAKE, Columbus, Ohio. Filed May 29, 1918. Serial No. 237,314. 7 Claims. (Cl. 33-80.)



1. In mechanism of the class described, the combination with a drawing board having a plurality of brackets mounted upon the corner edges thereof, of a ruling member movable over said board, a single cord secured to cer-

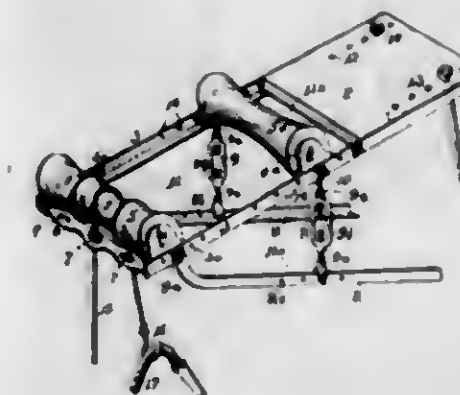
tain of said brackets and trained over guides carried by the remaining brackets and ruling member, and indicating means cooperative with said cord and ruling member for determining the extent of movement of the latter across said board.

1,310,597. REINFORCED-CONCRETE CONDUIT. JACOB B. BLAW, Atlantic City, N. J. Filed Oct. 18, 1917. Serial No. 197,230. 9 Claims. (Cl. 72-53.)



1. A conduit structure comprising a plurality of sheet metal tubular lining sections jointly connected, combined with a plurality of surrounding metal annular portions sleeved upon the tubular lining sections and spaced apart along their length, longitudinal rods extending through the annular portions and supported thereby at a distance from the tubular lining sections and in which the rods surrounding said sections project far across the jointed portions of the tubular lining sections so as to each extend partly along a plurality of sections and the rods of each section overlap each other and engage at least one annular metal portion of each of two sections.

1,310,598. PORTABLE HOISTING APPARATUS. JACOB B. BLAW, Atlantic City, N. J. Filed Sept. 30, 1918. Serial No. 256,190. 10 Claims. (Cl. 254-142.)



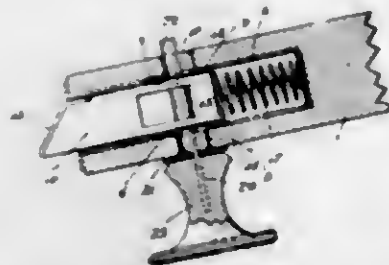
1. A portable hoisting apparatus for elevating a fire hose or other articles, to upper floors of a building, comprising a detachable jack adapted to be adjusted quickly to a window sill and wall adjacent thereto, said jack having an open space between its sides and outer and inner ends, a grooved roller journaled at the outer end of the jack, a cable extending over the grooved roller and having one end extending down through the open space for elevating fire hose, or other article, and a guide for the other end of the cable arranged upon the jack at its outer end beyond the roller, the cable being provided with means which prevent it passing through and out of guide when it is lowered through said guide.

1,310,509. VARIABLE-RESISTANCE REGULATOR FOR ELECTRIC CIRCUITS. WILLIAM L. BLISS, Niagara Falls, N. Y., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Apr. 17, 1914. Serial No. 832,469. 1 Claim. (Cl. 171-229.)



In a regulator, in combination, a vessel containing mercury or the like, a conical electrode buoyed up by said mercury, spring means biasing said conical electrode to a deeper position in said mercury, and electromagnetic means for governing the position of said electrode.

1,310,600. DOOR-LATCH. HAROLD BLISS, Grand Rapids, Mich., assignor to National Brass Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Nov. 13, 1918. Serial No. 262,379. 3 Claims. (Cl. 70-42.)



1. A door latch comprising an elongated housing open at one end, and having opposed openings through the front and rear sides thereof with a tongue extending into one of said openings at one side thereof, a latch bolt located in the housing having one end normally projecting beyond the open end of the housing, said bolt also having openings in the front and rear sides thereof, a spring located in the housing and bearing against the inner end of the bolt, a curved operating member passing through the openings in the housing and bolt and adapted to be turned in either direction about a horizontal axis to operate on the bolt to move the bolt against the spring, said tongue acting as a stop to limit the rotative movement of said member, and an operating knob secured to said operating member.

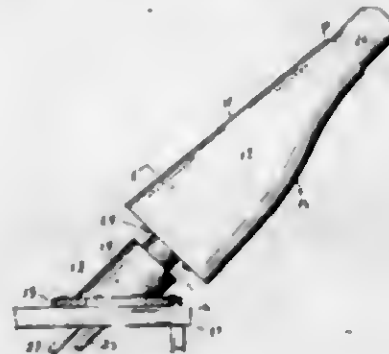
1,310,601. VENDING-MACHINE. EMBERT A. BOLEN, Morris, Ill. Filed Oct. 25, 1916. Serial No. 127,591. 9 Claims. (Cl. 211-8.)



1. A mechanism of the character described including in combination a frame forming a lower compartment, a plurality of storage compartments above said lower compartment, said storage compartments having openings at their bottom into said lower compartment, delivery mechanism for delivering packages in turn from said storage

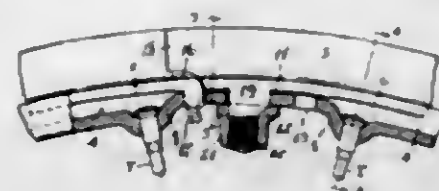
compartments to said lower compartment including a support having a passage at each side into said lower compartment, a delivery slide movable on said support and having an intermediate solid portion with an opening on each side thereof, said support being located at a distance from said opening of said storage compartment slightly greater than the vertical depth of the packages to be distributed, the intermediate solid parts of the slide being adapted to align with one storage compartment and one of the openings therein aligns with the lower end of another storage compartment, means for moving said delivery slide to receive packages in alternation from said storage compartment, the package from one compartment resting upon the intermediate solid portion of the slide while the package from the other compartment is positioned in the opening in the slide and rests upon said support, a further movement of said slide causing the package in the opening to move to one of the passages at the side of said support and drop into said lower compartment, this action taking place in alternation.

1,310,602. GARMENT-FORMER. CECIL H. BOYLS, Louisville, Ky., assignor of one-fourth to Adolph A. Myers and one-fourth to Milton A. Myers, Louisville, Ky. Filed Aug. 6, 1918. Serial No. 248,513. 2 Claims. (Cl. 223-17.)



1. A device as characterized comprising a pedestal, a stem positioned therein, a closed hollow form contoured to resemble a sleeve having a straight upper edge and a curved lower edge, there being an offset in the edges a spaced distance from the forward end, said form being adjustably fitted on said stem and the stem having inlet and exhaust passages therethrough.

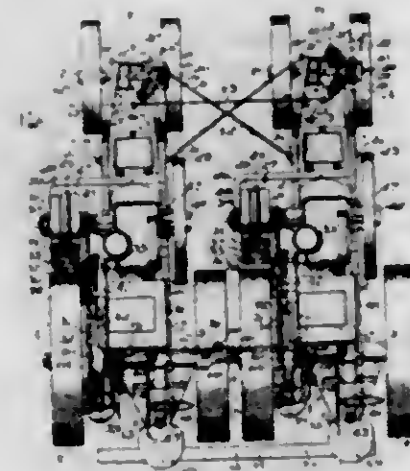
1,310,603. RIM FOR VEHICLE-WHEELS. RICHARD S. BAYANT, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Oct. 14, 1913, Serial No. 795,076. Divided and this application filed July 22, 1915. Serial No. 41,263. 4 Claims. (Cl. 152-21.)



1. The combination with a tire-supporting rim having a groove along its one edge, said rim being formed with a lateral notch intersecting such groove and with an aperture in such groove adjacent such notch; of a split ring adapted to seat in such groove; a projection on one end of said ring, said projection terminating in an inwardly directed lug adapted to engage such aperture; a projection on the other end of said ring adapted to overlap said first projection, and an inwardly directed lug on

such other ring-end adapted to engage such notch, the end of such notch farthest removed from such aperture being formed with a transverse lug-engaging portion and with an outwardly beveled portion to facilitate such engagement.

1,310,604. TRACTION-ENGINE. EDWARD W. BRUGES, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Dec. 8, 1915. Serial No. 65,695. 12 Claims. (Cl. 180-14.)



9. A plurality of tractor units having, in combination, separate truck frames, axles and draft members, and means for flexibly and detachably coupling said truck frames together with said axles substantially in alignment to propel a load in common through said draft members.

1,310,605. PERMUTATION ELECTRIC SWITCH. THOMAS CAPARELLA, New York, N. Y. Filed Feb. 6, 1919. Serial No. 275,350. 2 Claims. (Cl. 175-282.)

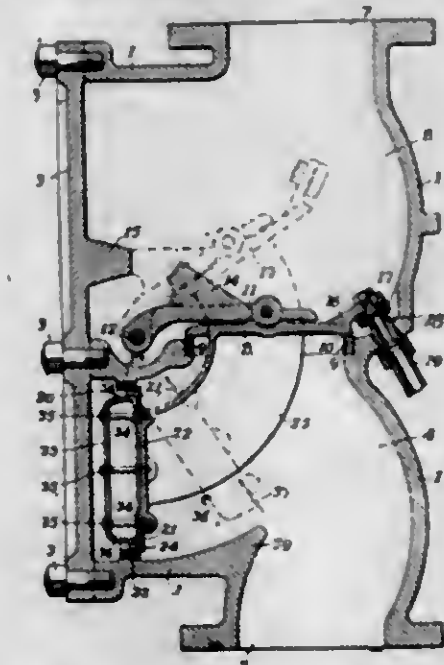


1. In a permutation electric switch, the combination with a plurality of disks of insulating material co-axially arranged and spaced apart each having radial grooves in one of its lateral faces, of connectors extending through said disks respectively from one lateral face to the other and arranged at the bases of one of the grooves in each disk, and contact arms extending between said spaced disks and engaging each lateral face of each disk for completing a circuit through said connectors when the disks are arranged to bring them in contact with said arms, the arms which engage the notched faces of the disks having offset portions to cooperate with said notches to retain said disks in step by step positions.

1,310,606. CHECK-VALVE FOR AUTOMATIC SPRINKLER SYSTEMS. HJALMAR G. CARLSON, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, a Corporation of Massachusetts. Filed Feb. 24, 1916. Serial No. 80,291. 9 Claims. (Cl. 169-23.)

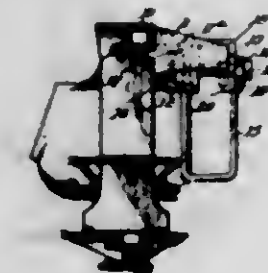
1. In a sprinkler system of the class described, a valve casing having a water passage therethrough leading from

a source of water supply under pressure to a sprinkler head, a check valve dividing said water passage into inlet and outlet chambers, a supplemental chamber opening into the inlet chamber, a counterbalancing valve closing said supplemental chamber, subjected to the pressure of the water in the inlet chamber at an angle to the plane of the check valve, and a connection between said valves, whereby the closing of the counterbalancing valve will close the check valve and the opening of the check valve will open the counterbalancing valve, said check valve and said counterbalancing valve having restricted water passages normally open.



6. In a sprinkler system of the class described a passage leading from a source of water supply under pressure to a sprinkler head, a check valve closing said passage, a counterbalancing valve rigidly connected with said check valve, and a projection serving as a baffle to divert the current of water from said supplemental valve.

1,310,607. REPLACEABLE BEARING FOR BRAKE-HANGERS. EDWIN G. CHENOWETH and WILLIAM J. TOLLESTON, Chicago, Ill. Filed Mar. 4, 1918. Serial No. 220,232. 17 Claims. (Cl. 188-70.)

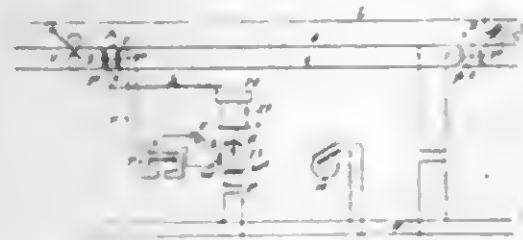


1. A replaceable bearing for brake hangers comprising a supporting element adapted to engage the brake hanger casting of a railway truck side frame, and an apertured member depending from said supporting element and adapted to receive and support the hanger pivot pin.

1,310,608. RAILWAY SIGNALING. ELMER R. COE, Wilkesburg, and ROBERT M. GILSON, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 7, 1916. Serial No. 113,438. 7 Claims. (Cl. 175-281.)

1. In combination, a relay comprising an energizing winding, a transformer having an open magnetic circuit, and a secondary circuit for said transformer including said relay winding, whereby when the primary of said

transformer is supplied with equal alternating currents differing in frequency said relay winding receives con-



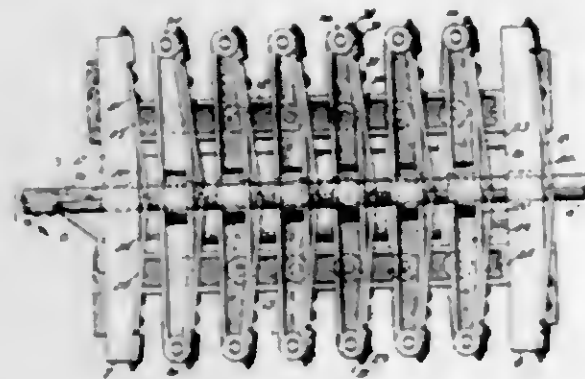
siderably more current of the higher frequency than of the lower frequency.

1,310,000. POWDER CONTAINER. ALFRED W. DE WITT, Rochester, N. Y. Filed Mar. 11, 1910, Serial No. 83,612. Renewed Apr. 28, 1910. Serial No. 293,373. 8 Claims. (Cl. 221-61.)



1. A powder container comprising two cup-shaped members, one of which fits within the other and is provided with a discharge opening in its side wall, said side wall also having a surrounding bead provided with a de-flected portion partially surrounding the discharge opening.

1,310,610. SEAM-WELDING MACHINE. ALEXANDER D. ELLIOTT, Viola, Ill. Filed Nov. 13, 1917. Serial No. 202,190. 10 Claims. (Cl. 78-83.)

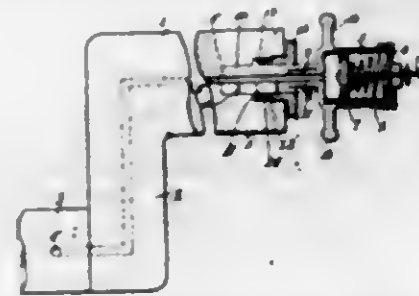


1. A seam welding machine comprising means for heating a tube and a series of independently movable reciprocating clamps adapted to clamp the tube at short intervals and to move forward therewith, and return for a fresh grip thereon and means for reciprocating the clamps.

1,310,611. SHAFT OILER OR LUBRICATOR. FRANK ENGLISH, Fresno, Calif. Filed July 20, 1918. Serial No. 245,924. 9 Claims. (Cl. 184-38.)

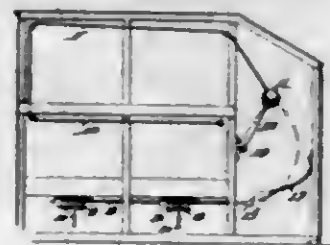
7. In combination with a rotatable shaft having an axial duct and a grease-cup, having its axis common with that of the shaft, a tubular plug carrying at one end

the grease-cup and journaled at its other end for rotation in the axis of the shaft, and a handle member on the



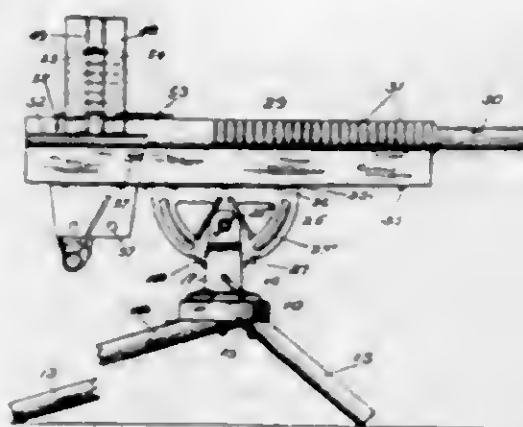
grease-cup, whereby the rotation of the cup and plug may be stopped to permit the cup to be replenished.

1,310,612. FIRE-OPERATED STOCK-RELEASING DEVICE. ERNO ECKELIN, Worcester, Mass. Filed Dec. 30, 1918. Serial No. 209,005. 5 Claims. (Cl. 189-49.)



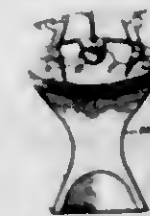
1. In a device of the character described, the combination with a flexible connection destructible by fire and a pivoted headed hammer connected therewith and normally held up thereby above the pivot in inclined position and adapted to be released so as to swing down about the pivot when the connection parts, of a horizontal slidable rod having a head on the end located below the pivot at a distance therefrom equal to the length of the hammer in position to be moved horizontally in a direction perpendicular to the axis of the hammer pivot by the direct horizontal impact of the hammer-head on the end thereof when it falls, and releasing devices arranged to be actuated by such movement of the rod.

1,310,613. TOY GUN. ALFRED C. GILBERT, New Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Connecticut. Filed May 25, 1918. Serial No. 224,553. 17 Claims. (Cl. 124-15.)



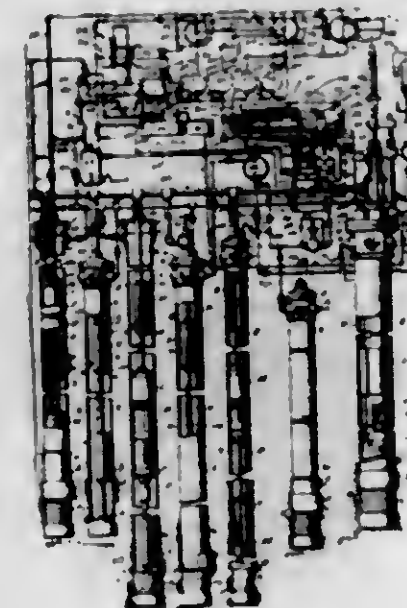
1. In combination with a toy gun, a gun barrel, manually operable means for propelling bullets out of said barrel, and range elevating mechanism for adjustably supporting said gun barrel, comprising a support, a barrel supporting bracket pivotally mounted on said support to swing in a vertical plane, and a pinion cooperating with said bracket to swing the same about its pivot.

1,310,614.HEEL. SAMUEL GOLDMAN, Chicago, Ill. Filed May 3, 1919. Serial No. 294,757. 3 Claims. (Cl. 36-40.)



2. A metallic heel having a plurality of ledges arranged within its upper edge and sockets in said ledges below the plane of said edge of the heel, and prongs screw threaded in said sockets.

1,310,615. METHOD OF AND SYSTEM FOR PUMPING. WARREN R. GREENLEE, Pasadena, Calif. Filed Oct. 28, 1915. Serial No. 38,337. 60 Claims. (Cl. 163-79.)



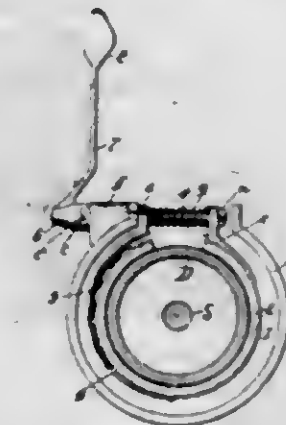
1. The method of pumping wells, which method consists in discharging fluid under lower pressure into the liquid in the pump tubing at a higher level to displace the liquid above said level, and then discharging fluid under higher pressure at a lower level to displace the liquid above said lower level.

1,310,616. MOWING-MACHINE. ALBERT GRIEVES, Springfield, Ohio, assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Dec. 7, 1911. Serial No. 664,340. Renewed Sept. 4, 1913. Serial No. 788,158. 34 Claims. (Cl. 56-285.)



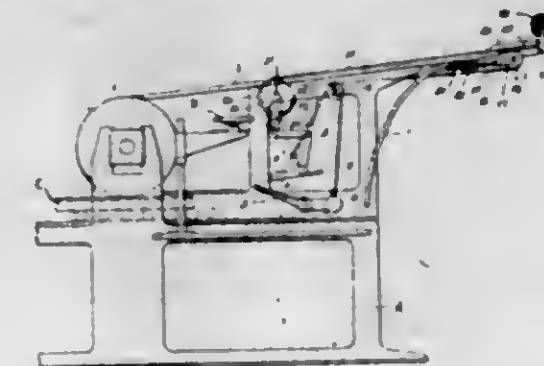
1. In a mowing machine, a main frame, a coupling frame adjustably mounted thereon, means for adjusting said coupling frame, and toggle mechanism for holding said coupling frame in its adjusted position.

1,310,617. BRAKE-BAND. EDWARD P. HAFNER and JOHN T. ROBERTS, St. Louis, Mo. Filed June 14, 1918. Serial No. 240,052. 3 Claims. (Cl. 74-37.)



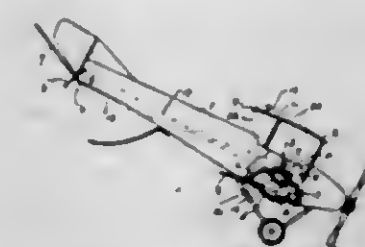
1. A brake-band comprising a main band having its ends free, a supplemental band secured at one end to the main band and disposed adjacent thereto, the opposite end of the supplemental band being free and cooperating with the opposite free end of the main band, and a cushioning member having one end fixed to one of the bands at a point between the fixed end of the supplemental band and the free ends of the bands, said member being confined between the supplemental band and the main band.

1,310,618. SHEET-CARRYING MECHANISM. JAMES G. HAASIE, Canton, N. Y. Filed Mar. 20, 1918. Serial No. 225,395. 5 Claims. (Cl. 271-8.)



1. In a printing press having an impression cylinder and a reciprocating type-bed, the combination therewith of a feed-table mounted thereon, a main shaft journaled near the front end of said table, pulleys mounted upon said shaft, pulleys mounted near the rear end of said table, belts passing around said table and upon said pulleys, a depending arm pivotally mounted and normally in the pathway of the type-bed with means to move said arm out of the pathway of said type-bed, connections between said ratchet and the said depending arm.

1,310,619. FLYING-MACHINE. CHARLES M. HEIG, Omaha, Nebr. Filed Feb. 13, 1919. Serial No. 276,707. 9 Claims. (Cl. 244-29.)



1. An improvement in a flying machine having an elongated body provided transversely with a stationary plane having a pair of wings pivotally mounted thereon.

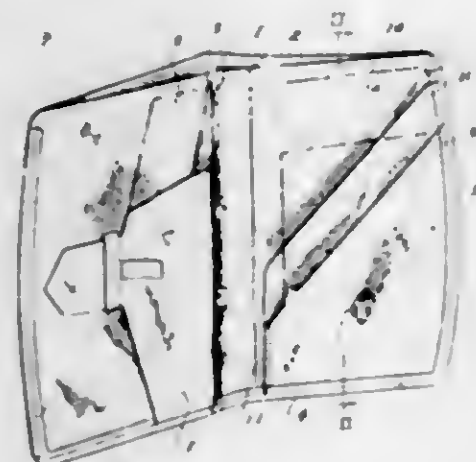
and also provided transversely with a pivotally mounted plane rearwardly of said stationary plane, a pendulum provided at its distal end with a hood, said pendulum being mounted between its ends within and adapted to swing transversely or longitudinally from the medial plane of said body, an annular, concave bearing plate below the mounting of the pendulum, a ball on said bearing-plate within the hood, means connected with the pendulum and wings of the stationary plane whereby said wings will be moved by a swinging movement of the pendulum transversely of said body, and means connected with the pendulum and pivotally mounted plane whereby said last named plane will be moved by a swinging movement of the pendulum longitudinally of said body.

1,310,620. RATCHET DIE-STOCK. RCE S. HESTAND, Howe, Tex. Filed Feb. 10, 1919. Serial No. 273,981. 1 Claim. (Cl. 10—124.)



The combination with a socket-extended die stock and a bushing located therein, of a diametrical enlargement of the outward projecting end of the socket, having transversely disposed ratchet teeth surrounding the face thereof, a similar socket extending from the opposite side of the die holding portion of the stock, housings encircling the ratchet portions and connected with a handle, and a double-acting pawl pivotally mounted in each of the extended housing portions for engaging the ratchet teeth.

1,310,621. LETTER-CASE. FREDERICK W. HOLLAND, Brooklyn, N. Y., assignor to Herman Scheuer, Jacob H. Scheuer, and Alwin J. Scheuer, Copartners doing business under the firm-name of Herman Scheuer & Sons, New York, N. Y. Filed Apr. 21, 1916. Serial No. 92,504. 2 Claims. (Cl. 150—39.)



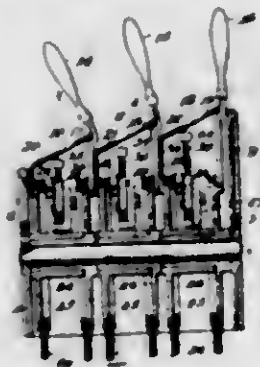
1. A pocket letter case comprising a main wall folded on its median diameter and forming two flat-lying oblong halves the length of which is parallel with the folding crease, and a plurality of superposed graduated gusset-shaped walls stitched flat to the inner face of one of the halves along the base and the upright free edge thereof, said gusset-shaped walls having long outer upright edges and short inner upright edges and inclined upper edges sloping in parallelism downward from said outer edges toward the folding crease forming letter stalls substantially open at the top and at the side toward the folding crease, the upwardly projecting portion of the lower gusset-shaped wall forming a diagonal guide.

1,310,622. ELECTRIC RELAY AND MOTOR FOR USE THEREIN. JOHN S. HOLLIDAY, Wilkesburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 31, 1916. Serial No. 112,222. 3 Claims. (Cl. 175—281.)



1. A relay comprising two windings connected in series, in which windings a plurality of currents differing in frequency may flow at different times, means shunted across one of said windings for affecting the phases of said currents in the other winding, said means comprising an open core transformer and a condenser connected to the secondary thereof, a member responsive to currents displaced in phase in said windings and a contact governed by said member.

1,310,623. SIGNALING APPARATUS. JOHN ARTHUR KEESKY, Brooklyn, N. Y., and ALFRED SHEDLOCK, Cantonale, Conn.; said Shedlock assignor to said Keesky. Filed Sept. 12, 1918. Serial No. 253,701. 8 Claims. (Cl. 116—31.)



4. A signaling apparatus, comprising a plurality of conical message indicators having a common axis and arranged in different vertical planes with gaps between their adjacent circular edges, and increasing in size from the front to the rear of the apparatus, a message sending device for each of the conical message indicators provided with an operating handle extending through a gap, a casing, and a shaft held in the casing co-axial with the conical message indicators on which the message sending devices rock.

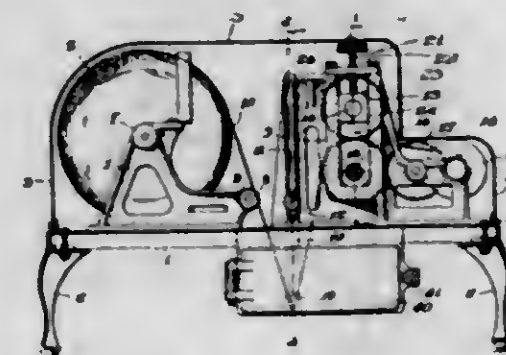
1,310,624. WATERPROOF SUBSTITUTE FOR LEATHER AND THE LIKE. HERBERT F. KENWORTHY, Stoughton, Mass., assignor to Kenworthy Brothers Company, Stoughton, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1916. Serial No. 122,307. Renewed Nov. 4, 1918. Serial No. 201,156. 15 Claims. (Cl. 91—68.)

11. A fibrous and filmy fabric having pores filled with a viscous lubricant having mixed with it a small proportion of hard drying wax, sufficient in quantity to produce an elastic film by oxidation when exposed at the surface.

1,310,625. RIBBON-INKING MACHINE. EDMUND KIRKBRIDE, Camden, N. J., assignor to Tybon Company, Wilmington, Del., a Corporation of Delaware. Filed May 7, 1918. Serial No. 233,070. 4 Claims. (Cl. 91—31.)

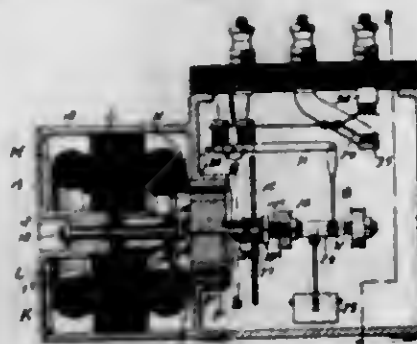
1. In a ribbon-inking machine, a reel for the web and ink squeezing rolls in combination with an ink container,

a yoke adapted to guide the web between the apool and rolls and means for securing the side arms of the yoke



at different heights to guide the web above or below the surface of the ink as desired.

1,310,626. RELAY. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1916. Serial No. 131,866. 11 Claims. (Cl. 175—281.)



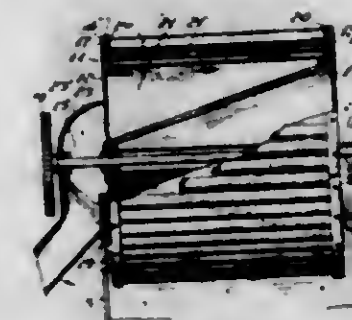
1. A relay comprising a motor, a magnet inductively associated with the rotor of said motor for movement therewith, means for preventing said magnet from moving with said rotor until the rotor has reached a predetermined speed, and a contact governed by said magnet.

1,310,627. LOCKING DEVICE. THOMAS FRANCIS McEVILLY, Wilmington, Del. Filed Sept. 30, 1918. Serial No. 266,187. 3 Claims. (Cl. 285—82.)



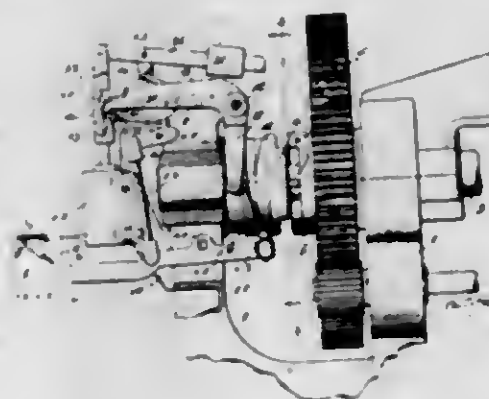
1. A device for locking a hose to a fixture, including a continuous piece of wire having an eyelet bent within its length, said eyelet having overlapping portions, and leg portions bent from said overlapping portions and spaced apart, said leg portions extending at an angle to a plane including said overlapping portions, said leg portions having free ends curved so as to embrace said fixture, said eyelet being of a normal diameter sufficient to embrace said hose but expandable, when said leg portions are moved together, to a diameter greater than that of the hose whereby the eyelet can be freely slid longitudinally off the hose; substantially as described.

1,310,628. HEATING-ENGINE. JAMES T. MURPHY and EDWARD J. RANNEY, Chicago, Ill., assignors of one-third to James L. Carey, Chicago, Ill. Filed Jan. 31, 1919. Serial No. 274,192. 18 Claims. (Cl. 92—23.)



9. The combination with a heating engine of means for removing the stock therefrom, comprising a cylinder mounted to rotate so that its periphery projects beneath the surface of the stock in said engine, the said cylinder comprising a plurality of parallel spaced members forming the periphery thereof, and extending parallel to the axis thereof, and means within said cylinder for discharging stock from said cylinder to a point outside of said engine.

1,310,629. CLUTCH MECHANISM. HORACE H. NEWCOM, Cleveland, Ohio, assignor to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 28, 1917. Serial No. 183,221. 4 Claims. (Cl. 192—9.)



2. In mechanism of the character set forth, the combination with a driven and a driving element, of a pair of clutch members operatively connected to said elements, and one of which is movable toward and from the other, a lever pivotally supported intermediate its ends and having one end operatively connected to the movable clutch member, an electro-magnetic device having a lost motion connection with the opposite end of the lever whereby said device is capable of initial movement without affecting said lever, the movable clutch member having a cam portion, a member having a part wherewith the cam portion of the movable clutch member is adapted to engage thereby to withdraw said member from engagement with the other clutch member, and operative connections between the electro-magnetic device and said member whereby the initial movement of said device will move the member to withdraw its cam engaging part from cam engaging position.

1,310,630. GREASE-CUP. GEORGE B. PICKOP, New Haven, Conn., assignor to The Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Nov. 2, 1917. Serial No. 109,843. 4 Claims. (Cl. 184—38.)

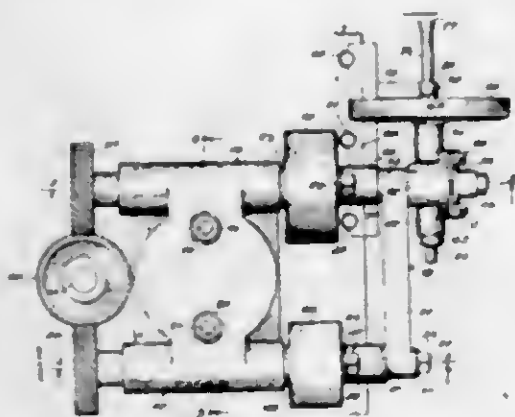
3. The combination with a part to be lubricated, of a grease cup applied thereto with its axis substantially horizontal and comprising a body portion and a cap in

threaded engagement with each other, the center of gravity of said cap being located eccentrically with re-



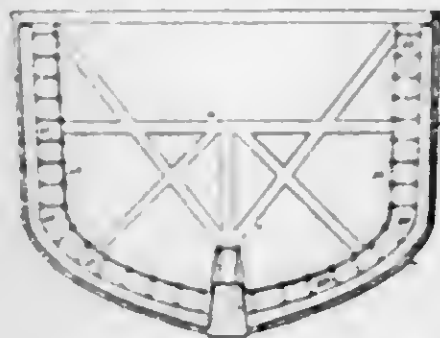
spect to the body-engaging threads, whereby the cap is prevented from turning in an unscrewing direction sufficiently to disengage it from the body.

1,310,631. CUT OFF MECHANISM FOR CIGARETTE MACHINES. SYDNEY I. PRESCOTT, New York, N. Y., assignor to American Machine & Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 22, 1917. Serial No. 192,637. 31 Claims. (Cl. 131-37.)



1. The combination with a cigarette rod guide, of a circular knife, a carrier for the knife, mechanism for producing a continuous movement of the carrier and knife in an orbital path about an axis at right angles to and offset from the guide, and means for rotating the knife including an operating member on said axis.

1,310,632. MOLD FOR PLASTIC MATERIAL. ROBERT E. REYNOLDS, Houston, Tex., assignor of one-half to T. H. Bass, Harris county, Tex. Filed Apr. 16, 1918. Serial No. 228,949. 1 Claim. (Cl. 25-130.)

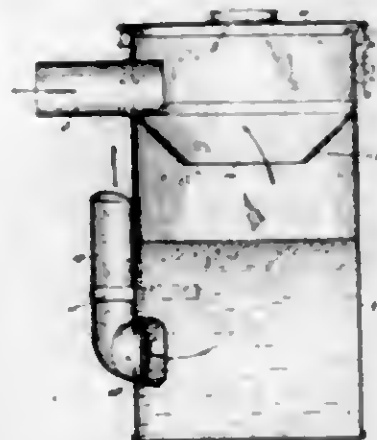


A mold for receiving concrete material, and forming the same into a structure, said mold being composed of outer and inner sectional forms, the inner forms being composed of perforated material, supporting means for said inner forms, hydraulic jacks for supporting said sections in position and assembling them into a mold, and means for adjusting the inner forms, relative to their supporting means, against the material in the mold.

1,310,633. POWDER-SEPARATOR. ARTHUR H. ROBERTS, Montreal, Quebec, Canada, assignor to International Arms and Fuse Company, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1918. Serial No. 219,545. 9 Claims. (Cl. 261-79.)

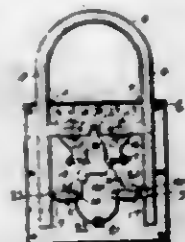
1. In a powder separator, the combination with means for supporting a powder solvent, of means for conducting

the powder to and for producing a swirling movement of the solvent and a heavy spray above said solvent to hold



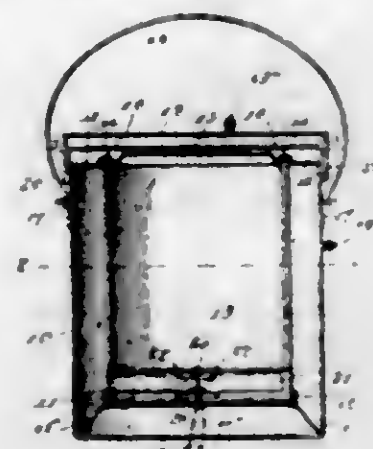
the powder submerged in the solvent until completely dissolved.

1,310,634. KEYLESS PADLOCK. FRANK C. BOZYCKI, Philadelphia, Pa. Filed Jan. 31, 1919. Serial No. 274,280. 7 Claims. (Cl. 70-108.)



6. In a device of the class described, the combination of a casing, a notched shackle insertible into said casing, aligned bolts slidably mounted within said casing, a U-shaped spring carried within said casing and engaging said bolt for normally forcing the same apart into engagement with said shackle, means for moving said bolts toward each other to cause their inner ends to abut and to cause the bolts to release said shackle, said bolts having upstanding heels adjacent their inner ends, and a latch body movable within said casing and having spaced apart feet adapted to engage about said heel to releasably hold the bolts in inoperative position.

1,310,635. FIRELESS COOKING UTENSIL. PARLEY H. RUSSELL, Van Huron, Ohio. Filed July 7, 1913. Serial No. 38,583. Renewed May 13, 1919. Serial No. 296,927. 1 Claim. (Cl. 220-15.)



A fireless cooking utensil comprising an outer shell formed with an open upper end, an inner shell shorter and of less diameter than the outer shell and centrally disposed within the same, said inner shell being open at its upper end and having an external horizontal flange at

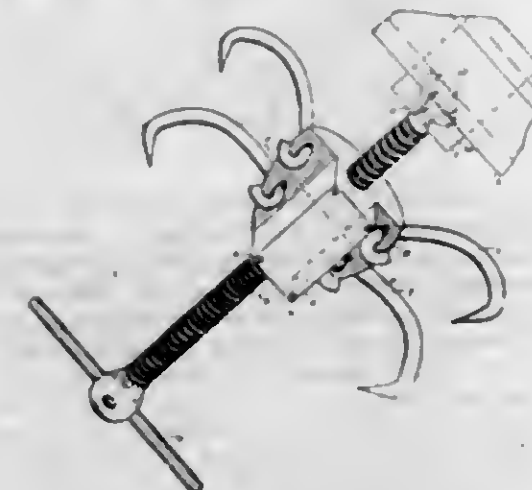
its mouth resting upon the mouth of the outer shell and sealed thereto to provide a vacuum chamber between said shells, and to partly support the inner shell, a shallow tray within the outer shell into which the bottom of the inner shell snugly fits, legs secured to said tray for supporting it a short distance above the bottom of the outer shell, heat insulating material inserted between the tray and the bottom of the inner shell, a removable food container snugly fitting the inner shell at the sides and spaced a short distance from the bottom thereof, said container having an exterior flange at its top adapted to rest on the flange connecting the inner and outer shells and forming the sole means of supporting the container within the utensil, a closure for the food container, and a cover fitting over the entire utensil.

1,310,636. HAME ATTACHMENT. GEORGE SIEGEN-THALER, Fremont, Ohio. Filed Apr. 23, 1918. Serial No. 230,297. 1 Claim. (Cl. 54-31.)



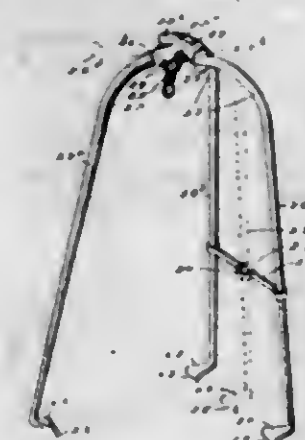
A device of the class described comprising a pair of hame-receiving loops and a bridge connecting the loops, the loops having outstanding lugs provided with grooves terminating at their ends within the lugs and opening laterally through the inner surfaces of the loops; a pin having its ends mounted in the grooves and insertible thereto from within the loops; and a ring through which the pin passes, the ring extending between the lugs at the rear of the pin.

1,310,637. JACK. JAMES D. SINGLETON, Houston, Tex. Filed Sept. 23, 1918. Serial No. 256,218. 3 Claims. (Cl. 254-13.)



1. A jack including a block having engaging tongs and provided with laterally extending wings, engaging members hinged to the wings and provided to engage with and secure the block to, a stationary support, said tongs engaging with said support, a drive shaft threaded through the block, means for rotating the shaft, a head block having a swiveling connection with one end of the shaft and being provided with tongs which engage with the object to be moved by said jack.

1,310,638. WEIGHING STAND FOR COTTON-PICKERS. PAUL J. SUMMERS, Mangum, Okla. Filed Feb. 24, 1917. Serial No. 150,657. Renewed Dec. 30, 1918. Serial No. 268,975. 4 Claims. (Cl. 248-41.)



1. In a device of the class described, a pair of divergent legs rigidly connected together at their upper ends, a third leg having its upper end pivoted to the upper end of said pair, a brace connecting the lower portions of the legs of said pair, and means on said brace for engaging the third leg.

1,310,639. MORTAR-JOINT MAKER AND FINISHER. THORWALD THORSON, Forest City, and FRED M. ELLER, Ames, Iowa. Filed Jan. 7, 1919. Serial No. 269,903. 2 Claims. (Cl. 72-138.)



1. A tool of the class described comprising a handle, and a bit carried by one end of the handle, the end of the bit converging toward the handle to define inner and outer cutting edges, the handle having an opening located adjacent to inner cutting edge.

1,310,640. VALVE-GRINDING TOOL. WALTER S. WADSWORTH, Eastend, Saskatchewan, Canada. Filed May 9, 1918. Serial No. 233,489. 4 Claims. (Cl. 51-4.)



1. A valve grinding tool including a stem formed of upper and lower sections, fork arms formed on the lower

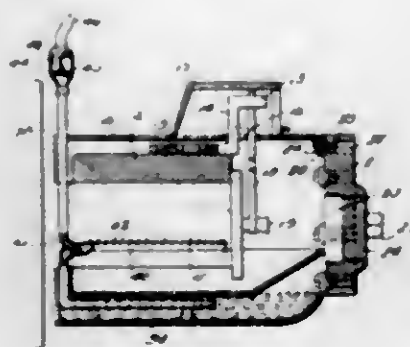
terminal of the upper section and adapted to pivotally support a bit therebetween, a socket formed on the upper terminal of the lower section and removably receiving said fork arms, means engaged with the socket and said arms and connecting the sections, a bit carried by the lower terminal of the lower section, and means for oscillating the stem, the bit being adapted for pivotal connection to the fork arms by said means when the sections are separated.

1,310,641. WRENCH. HERMAN A. WELCH, Coldwater, Kans. Filed Aug. 12, 1918. Serial No. 249,520. 2 Claims. (Cl. 81-119.)



2. A wrench comprising an elongated shank, having an extension projected at right angles from one end of the shank, a socket member carried by the said extension and forming a handle at one end of the said shank, the opposite end of the shank being longitudinally curved, a laterally projecting member carried by the end of the said curved portion of the shank and provided with a nut engaging terminal, the connected portions of the said curved end of the shank and the said nut engaging member having a twisted portion to give rigidity to the said curved portion and laterally projecting member at their juncture.

1,310,642. JOURNAL-BOX. THOMAS H. WHITE, South Chicago, Ill. Filed Feb. 28, 1918. Serial No. 219,632. 8 Claims. (Cl. 64-23.)



1. In a journal box having a threaded opening to permit the introduction of lubricant, a threaded plug inserted in said opening, and means in the plug operable subsequent to its insertion to prevent rotation of the plug.

1,310,643. TARGET. HENRY F. AUSTIN, New Orleans, La. Filed Dec. 17, 1918. Serial No. 267,158. 2 Claims. (Cl. 46-59.)

1. The combination with a target structure having a scenic representation thereon and an opening, of a movable member closing the opening, and means for supporting said member in "set" position across the opening to be dislodged by a projectile and gravitate to normal position, there being different representations of an object

on said member both of which harmonize with said scenic representation and which are adapted to be successively displayed through the opening before and after the member is dislodged.

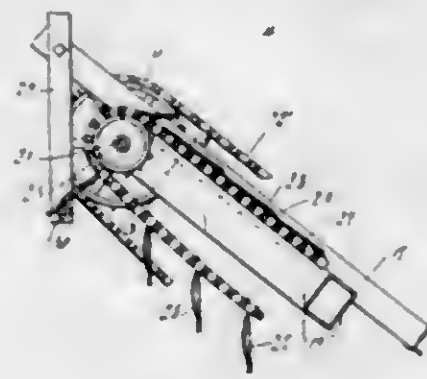


1,310,644. TOY GUN. HENRY F. AUSTIN, New Orleans, La. Filed Dec. 17, 1918. Serial No. 267,159. 3 Claims. (Cl. 124-13.)



1. A toy gun including a magazine, a barrel adapted to receive soft balls one at a time from the magazine, and trigger controlled, spring-operated means, for shifting the balls one at a time within the barrel and lodging them in the muzzle portion of the barrel.

1,310,645. GRAVEL-SCREEN. FITCH H. BEACH, Charlotte, Mich. Filed Apr. 6, 1918. Serial No. 227,095. 2 Claims. (Cl. 83-56.)

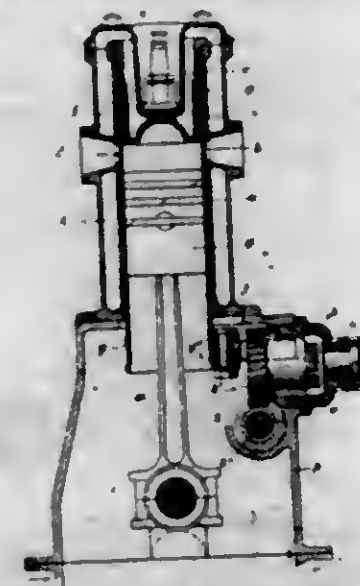


1. A screen including inclined side beams, endless chains supported adjacent thereto, and beyond the sides thereof, parallel rods connecting the chains and constituting pivotal connections between certain of the links thereof, screen plates each having a bearing mounted on one of the rods, said plates being extended laterally beyond the chains and over the beams and being adapted to lap when moving upwardly with the chains, each plate having slots therein extending longitudinally of the screen, and a bumper below the chains and adjacent the upper portions thereof, each plate being adapted to swing through approximately 270° into violent contact with the bumper.

1,310,646. INTERNAL-COMBUSTION ENGINE. PETER BRAT, Bothwell, Scotland, assignor of one-half to Argylls Limited, Alexandria, Scotland. Filed Aug. 3, 1910. Serial No. 575,254. 14 Claims. (Cl. 123-81.)

1. In an internal combustion engine the combination with the cylinder and piston of a ported cylindrical sleeve valve independent of the piston and contacting

with the surface of the cylinder and mechanism having a single driving connection with the said sleeve for imparting



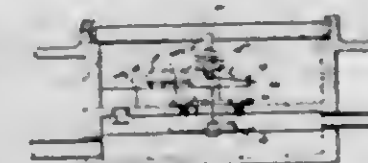
parting therein a combined reciprocatory and partial rotary motion relatively to the cylinder substantially as and for the purposes described.

1,310,647. AUTOMATIC CABINET-LID SUPPORT. FRANK L. CAMPER, Howe Cave, N. Y. Filed Feb. 20, 1919. Serial No. 278,135. 10 Claims. (Cl. 217-60.)



1. A support for a hinged mounted cabinet lid, comprising a pivoted lever having a straight end and a curved end, means attached to the straight end and to the lid for raising the lid when the lever is swung on its pivot, and a flexible element attached to and extended around the curved end of the lever to exert a tug on the same whereby either an upward or a downward pull is exerted on the said first mentioned means to maintain the said lid in either open or closed position.

1,310,648. INSTRUMENT FOR INDICATING THE VELOCITY OF THE WIND OR OF AIR-CURRENTS. FREDERIC HOLLOCOMBE CLIFT, BARNES, England, assignor to S. Smith & Sons Motor Accessories, Limited, St. Marylebone, London, England. Filed May 25, 1917. Serial No. 170,926. 4 Claims. (Cl. 73-110.)



1. In an instrument for indicating the velocity of the wind or of air currents of the type in which the velocity is measured by the resultant effect of pressure and suction created by the wind or air currents and acting on a flexible diaphragm, the combination with the diaphragm of an arbor carrying an indicating finger, a horizontally dis-

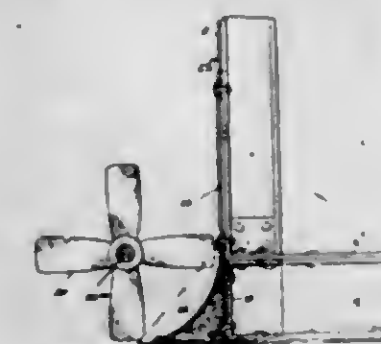
posed rocking lever, coupling means between said lever and said arbor whereby the rocking motion of said arm imparts rotary motion to said arbor, a spring finger, a rocking shaft carrying two arms one of which engages a slot in the rocking arm and the other of which is in positive engagement with the free end of the spring finger, and a pin mounted on the diaphragm and engaging the under side of the spring finger.

1,310,649. RAILROAD-TIE. URE A. CRANSMAN, Burnham, Pa. Filed Apr. 3, 1919. Serial No. 287,135. 4 Claims. (Cl. 238-69.)



1. In a railway tie a metallic base plate having abutments formed at its ends, said abutments having flanges, rail supporting blocks positioned within the flanges, a fastening bar positioned between the blocks and cooperating therewith for holding the blocks to the tie, and means for securing the fastening bar to the tie.

1,310,650. SHIP CONSTRUCTION. ROBERT WILLIAM DAVIS, Hiltonia, N. J. Filed July 23, 1918. Serial No. 246,302. 7 Claims. (Cl. 114-83.)



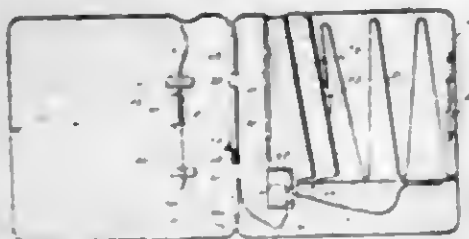
1. A ship's hull having the middle portions of its sides vertical and its end portions converging to the prow and stern, a flat bottom having extensions projecting outwardly beyond said converging sides, plates arranged along said converging sides and extending downwardly and outwardly therefrom to the outer edge portions of said extensions of the bottom, and a filling of reinforcing material behind said plates.

1,310,651. BABY-MOBILE. MARSHALL R. DE LONG, East Liverpool, Ohio. Filed Jan. 9, 1919. Serial No. 270,328. 1 Claim. (Cl. 21-12.)



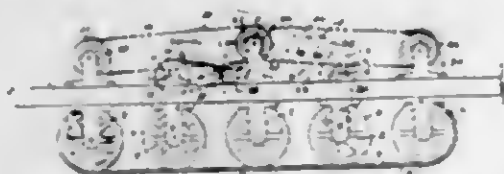
The combination with a vehicle including an axle and wheels, of stub axle cranks pivoted to the axle for mounting the wheels thereon, connections between the cranks for moving the wheels in unison for steering the vehicle, a rod mounted upon the vehicle for rocking movement and extending rearwardly beyond the vehicle, connections between the rod and the cranks for movement of the cranks to shift the wheels when the rod is rocked, and a lever connected with the rod rearwardly of the vehicle and operable manually to rock the rod.

1,310,652. CIGARETTE CASE. ALBERT S. DOMENICONI, San Anselmo, Calif. Filed Apr. 29, 1918. Serial No. 231,467. 5 Claims. (Cl. 131-59.)



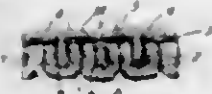
1. A combined cigarette case and lighter comprising a cigarette-end guide, a cigarette-end seat separate from said guide and movable into and out of alignment with said guide, said case having an opening in alignment with the path of movement of said seat, means for moving the cigarettes laterally along said guide to cause said seat to receive and support them one at a time in longitudinal alignment with said opening, ignition means, and a device operable to cause said cigarette-end seat to project the cigarettes individually through said opening, said device being cooperative with said ignition means to light the projected cigarette.

1,310,653. TRACTOR. GEY B. FISHER, Houston, Tex. Filed Apr. 2, 1919. Serial No. 286,943. 2 Claims. (Cl. 180-9.)



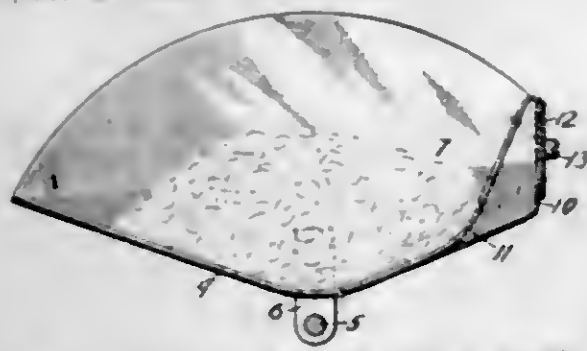
1. A tractor including a framework, traction caterpillars upon which said framework is mounted, a countershaft carried by the framework, and operatively connected with said caterpillars, whereby the same may be driven forwardly, at variable rates of speed, and through which the same may be driven rearwardly, a plurality of motors mounted on the framework, and means through which said motors may be independently connected to said countershaft.

1,310,654. ARTIFICIAL TEETH. GEORGE W. GRIMM, West Hoboken, N. J. Filed Jan. 31, 1919. Serial No. 274,229. 5 Claims. (Cl. 32-9.)



1. The combination with artificial teeth and a mount plate, of a reinforcing member embedded in said plate, and anchoring pins secured to the individual teeth and having split projecting stems interlocked with said reinforcing member.

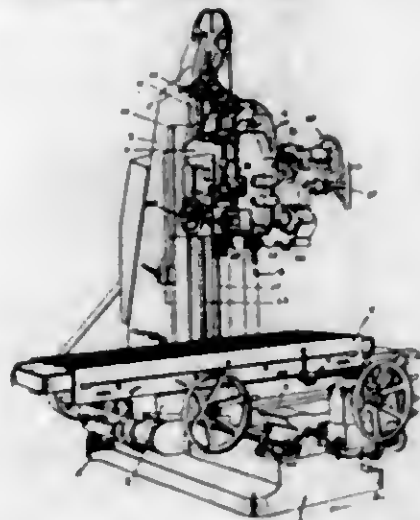
1,310,655. MEASURING PAN. GEORGE W. GWINN, Brooklyn, N. Y., assignor to Automatic Packing & Labeling Company, Durham, N. C., a Corporation of North Carolina. Filed Apr. 4, 1918. Serial No. 229,581. 8 Claims. (Cl. 65-36.)



1. A measuring pan provided with a flexible wiper normally resting upon the bottom of the pan, one end of

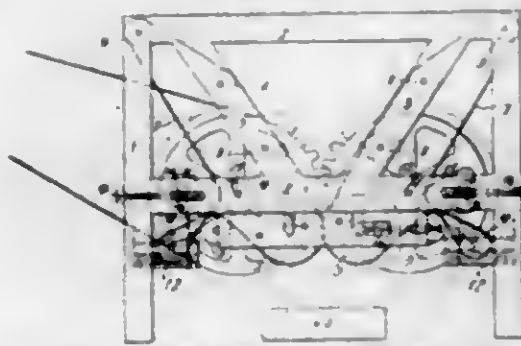
said wiper being fastened to the pan in position to cause a relative wiping action of the wiper and pan when the latter is tilted to empty the same.

1,310,656. DIE-SINKING MACHINE. EUGENE HIGGINS, Jackson, Mich., assignor to Jackson Machine Tool Co., Jackson, Mich. Filed Aug. 19, 1918. Serial No. 250,429. 21 Claims. (Cl. 90-11.)



1. The combination of a reciprocating tool holder carriage, a cutter, a holder for said cutter having segmental slides and an arm projecting upwardly above said slides, said carriage having segmental ways for said slides, a crank mounted above said carriage, a pitman connecting said crank to said carriage, an arm on said crank adjustably and releasably secured thereto, a rock shaft having arms thereon, a link connecting an arm on said rock shaft to said arm on said crank, an actuating spring connected to an arm on said rock shaft, a cam, an arm on said rock shaft provided with a roller traveling on said cam whereby the carriage is retracted, a pivoted arm provided with a longitudinal groove disposed at the side of said cam, a roller on said cam coacting with said groove whereby the arm is oscillated as the cam is rotated, and a link connecting said arm on said tool holder to said pivoted arm.

1,310,657. LAUNDRY MACHINE. FRANCIS A. HOLYSINGER, Ottumwa, Iowa. Filed Mar. 28, 1913. Serial No. 225,311. 4 Claims. (Cl. 69-7.)

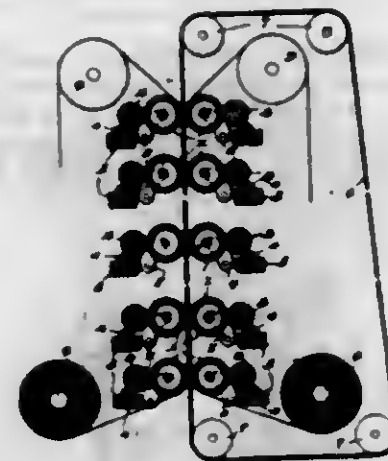


2. A laundry machine comprising a main frame, a pair of main rollers journaled thereon, spaced series of guide rolls extending upwardly from the rollers in divergent relation, and a pair of endless aprons passing about the rolls and rollers.

1,310,658. CLOTH OR PAPER PRINTING MACHINE. WILLIAM H. HORN, Providence, R. I. Filed Mar. 6, 1919. Serial No. 281,085. 5 Claims. (Cl. 101-180.)

1. In a cloth or paper printing machine, a series of pairs of opposed printing rolls arranged to have space therebetween in a vertical line, an endless apron having a flight coinciding with said line and disposed so as to

be engaged on its opposite side faces by said respective rolls of the pairs of rolls, and feeding rolls located on



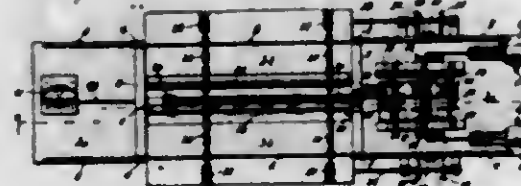
opposite sides of the lower end of said flight of the apron, one of said feeding rolls being encompassed by said endless apron.

1,310,659. PROCESS OF PREPARING ROLLS FOR CLOTH-PRINTING. WILLIAM H. HORN, Providence, R. I. Filed Mar. 6, 1919. Serial No. 281,086. 5 Claims. (Cl. 41-42.)



1. The process of preparing print rolls for cloth printing, consisting in coating the roll with varnish and cutting the outline and other fine lines of a design thereon, etching the lines thus cut, filling the etched lines with a resist, recoating the roll with varnish, cutting the ground of the design on the roll, etching the ground, and finally removing the resist from the outline and other fine lines by a somewhat solvent bath.

1,310,660. WOOD-SPLITTING MACHINE. EARL B. INMAN, Portland, Oreg. Filed June 26, 1918. Serial No. 241,922. 6 Claims. (Cl. 144-193.)



1. In a wood-splitting machine, the combination of a horizontal, elevated platform, a longitudinal slot in the center section, a vertical knife reciprocating within the slot, a source of power controlling means for said source of power, cable drums for advancing each end of the knife independently, and a separate cable drum for withdrawing said knife.

1,310,661. TERMINAL CONNECTOR. JOHN W. JOHAN, Philadelphia, Pa. Filed Oct. 4, 1918. Serial No. 256,511. 2 Claims. (Cl. 172-269.)

1. A terminal connector of the character described including a piece of flexible material having oppositely dis-

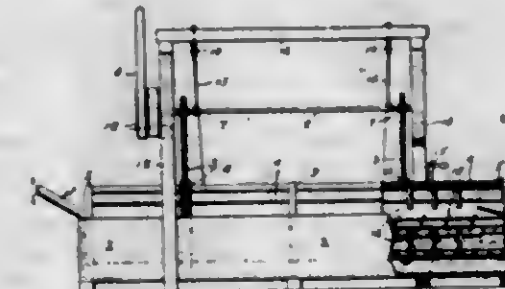
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posed slots formed entirely within its width and a binding bolt hole formed in the portion of said piece between



said slots whereby a wire can be freely inserted through said slots without the bending of said wire; substantially as described.

1,310,662. FISH SALTING AND DESLIMING MACHINE. JOHN KELLINGTON, New Westminster, British Columbia, Canada. Filed Sept. 28, 1918. Serial No. 256,068. 1 Claim. (Cl. 17-10.)



A means for salting and de-sliming fish comprising in combination with an elongated brine holding tank, an open ended drum or cylinder rotatably suspended within the tank, a supporting frame extending above the tank, cross bars vertically movably mounted in said frame, a driving shaft journaled in bearings in said cross bars, sprockets on said driving shaft, chain guides on said cylinder, chains taking around said sprockets and chain guides to suspend said cylinder in said tank and impart rotation thereto, means for delivering the fish to be treated within one end of said cylinder, means for progressing the fish along the cylinder to the other end, means at said other end of the cylinder for lifting the fish from the brine and an inclined chute onto which the fish are deposited when lifted from the brine for delivery from the tank, and means for raising and lowering the driving shaft and the rotatable cylinder as a unit to increase or diminish the dip of the cylinder into the brine of the tank substantially as shown and described.

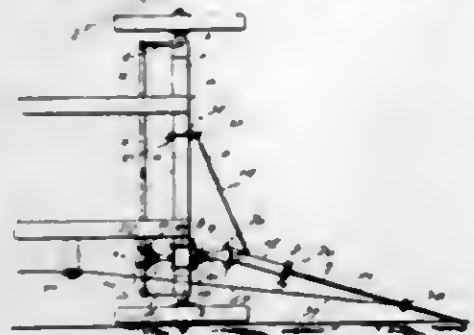
1,310,663. OILING DEVICE. CLELL S. KEPLER, Keosauqua, Iowa. Filed May 1, 1919. Serial No. 293,940. 6 Claims. (Cl. 91-46.)



1. In a device of the class described, a frame, a tank supported by the frame, a drain board adjacent the tank and adapted to discharge into the tank, a foraminous con-

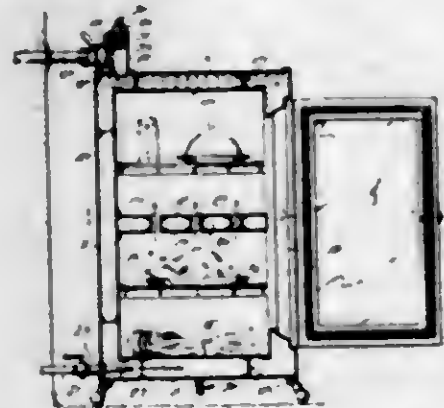
tainer adapted to be lowered into the tank, means for lowering the container into the tank and withdrawing the same therefrom, and means for swinging the container from the tank to the drain board.

1,310,664. GUIDING DEVICE. FRANK KLASSEN McPherson, Kans. Filed Aug. 26, 1918. Serial No. 251,459. 5 Claims. (Cl. 97-81.)



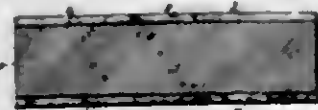
2. In an adjustable guiding attachment for automobiles a support attachable to and adjustable on the intermediate part of the front axle of the automobile, a member attachable to and adjustable on the steering link of the automobile, a spring-connection attachable to and adjustable on said axle, a jointed guiding device connected to said member and pivoted on said support and adapted to be guided by an extraneous guide and thereby to be swung horizontally on its pivot and transmit motion to said steering link through said member, and a retractile spring connected to said jointed guiding device and to said spring-connection.

1,310,665. WATER-COOLED REFRIGERATOR. PETER KLEINER, Oshkosh, Wis. Filed Sept. 25, 1918. Serial No. 255,656. 2 Claims. (Cl. 257-21.)



1. A refrigerator of the class described comprising an outer casing, an inner casing disposed in the outer casing and forming a refrigerating chamber, and a cooling fluid chamber in the refrigerating chamber, including a top and bottom secured to the inner and rear walls of the casing, openings in the side wall of the inner casing between said top and bottom of the fluid chamber, openings in said top and bottom between the first named openings, and partitions at the sides of the second named openings extending to the side walls of the inner casing at the ends of the openings of said side walls.

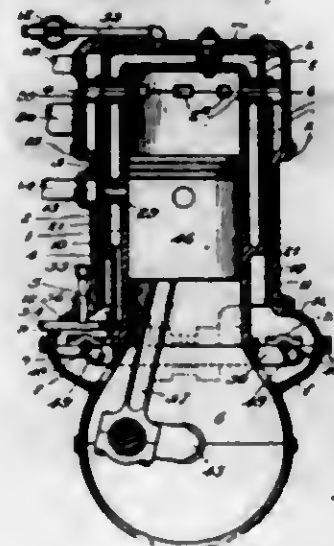
1,310,666. SAFETY-CARTRIDGE FOR MINING PURPOSES. EMMANUEL LEMAITRE, Mons, Belgium. Filed Dec. 20, 1916. Serial No. 139,066. 15 Claims. (Cl. 102-6.)



1. A safety cartridge ready for use comprising in combination a blasting cartridge, a tubular layer of exting-

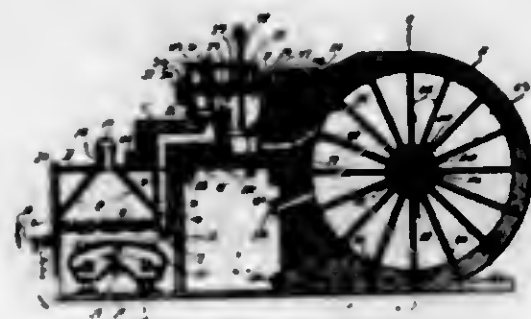
uishing material surrounding said blasting cartridge and leaving the ends of the latter uncovered and a permanent casing containing said extinguishing material.

1,310,667. INTERNAL-COMBUSTION ENGINE. JAMES HARRY KNIGHTLY McCOLLUM, Toronto, Ontario, Canada, assignor to George H. Gooderham, John Wycliffe Lowes Forster, and The Argylls Limited, Alexandria, Scotland. Filed Nov. 4, 1906. Serial No. 526,255. 11 Claims. (Cl. 123-81.)



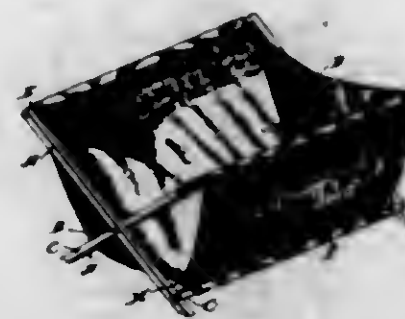
1. In an internal combustion engine, a cylinder having suitable inlet and exhaust ports, a cylindrical valve separate from and coaxial with the piston, a pair of crank members operating in unison, a connecting rod joining said crank members, and a pin member forming an operating connection between said valve and said connecting rod and adapted on rotation of said cranks to impart a substantially circular movement to said valve.

1,310,668. INTERNAL-COMBUSTION ENGINE. JOHN A. MILLER, Dow City, Iowa. Filed July 6, 1916. Serial No. 107,818. Renewed Nov. 2, 1918. Serial No. 260,918. 3 Claims. (Cl. 60-41.)



1. An internal combustion engine having a casing section, provided with a combustion chamber having a top opening, a closure member for said opening, means to supply fuel to the combustion chamber, a valve operable through pressure of the fuel for admission into the combustion chamber, a valve at the outlet end of the combustion chamber, operable solely by explosion and expansion of the gases and controlling the outlet of the products of combustion, said valves having stems extending across the combustion chamber and slidably mounted in said member, means on the exterior of said member engaging said valves to urge said valves in opposite directions to their seat, and means operable by the products of combustion.

1,310,669. FOLDING CLOTHES-BASKET. ALONZO W. MONROE, Perry, Iowa. Filed Mar. 22, 1919. Serial No. 284,337. 1 Claim. (Cl. 150-49.)



A folding clothes basket, consisting of intersecting bars pivoted together, cross pieces connecting the upper ends of the bars, and other cross pieces connecting the bars below the pivotal connection between said bars, a fabric receptacle connected at its ends to the cross pieces which are fastened to the upper ends of said bars, a sheet of fabric connected to the lower cross pieces and to which said receptacle is fastened its entire length, said sheet of fabric serving to hold the bottom of the receptacle down as the latter is opened.

1,310,670. SHOE-POLISHING DEVICE. EDWARD G. PETERSON, South Range, Wis. Filed Dec. 12, 1917. Serial No. 206,825. 1 Claim. (Cl. 15-46.)



A shoe polishing brush comprising a brush body, a removable receptacle mounted in the body, the latter being provided with a removable tube extending into and communicating with the said receptacle approximately intermediate its ends in order that the contents of the receptacle may be passed into the said tube, a valve transversely mounted in the body of the brush and adapted to extend into and close the passage-way in the said tube, a removable bristle carrying member mounted on the body and having an opening to receive the outer end of the said tube whereby the contents of the said receptacle may be received on the bristles when the said valve is moved to open position.

1,310,671. LOOM-SEAT. ALONZO E. RHODES, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 13, 1918. Serial No. 216,846. 2 Claims. (Cl. 155-22.)

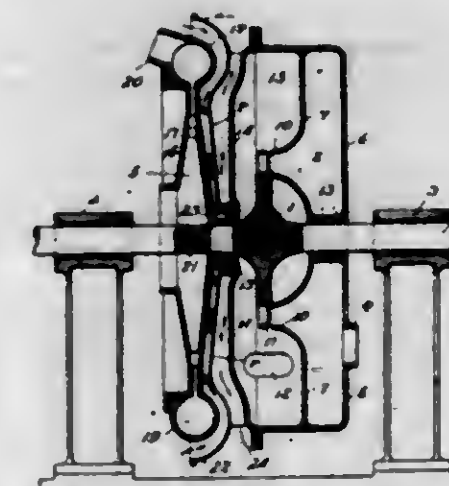
2. A folding seat for looms comprising a two-part bracket and means for clamping it to the edge of a loom frame, a seat plate, a compression member pivoted to said

seat plate and to the lower portion of said bracket, and a tension member pivoted to said seat plate and to the upper portion of said bracket, and a laterally projecting lug



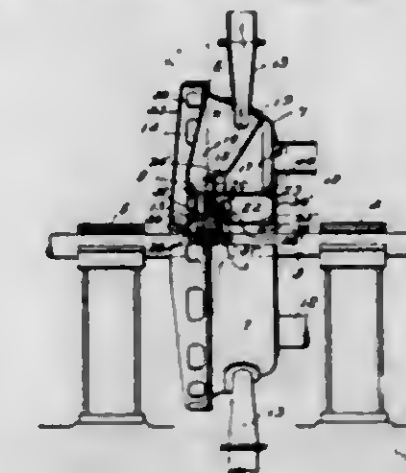
on the upper end of one of said members contacting with the bottom of said seat plate when in operative position and acting to position it horizontally.

1,310,672. COOLING AND INSULATING SYSTEM FOR TURBO-COMPRESSORS. EARL H. SHERBONDY, Cleveland, Ohio. Filed Mar. 23, 1918. Serial No. 224,857. 14 Claims. (Cl. 60-41.)



1. In a turbo-compressor, a fluid driven turbine wheel, a blower wheel and means to cause two distinct layers of air to circulate between the two wheels.

1,310,673. TURBINE-CASING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Mar. 26, 1918. Serial No. 224,892. 21 Claims. (Cl. 253-65.)



1. A turbine casing comprising a main casing element provided with inlet and exhaust ports, a back plate at-

tached thereto and a diaphragm associated with said casing element and said back plate arranged to divide the casing into inlet and exhaust chambers.

1,310,674. TURBINE-CASING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 2, 1918. Serial No. 226,289. 7 Claims. (Cl. 253-65.)



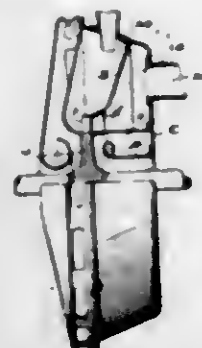
1. In a turbine casing, a main casing element and a diaphragm, the two said parts being stamped out of sheet metal to define an inlet chamber and to form a pipe, parts of said pipe being integral, respectively, with said main casing element and said diaphragm.

1,310,675. NOZZLE-RING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 8, 1918. Serial No. 227,331. 21 Claims. (Cl. 253-78.)



9. A turbine nozzle ring, comprising an annular portion and nozzle blades integral with said annular portion, said blades gradually decreasing in height from one part to the other, and a diaphragm seated on this last-mentioned part.

1,310,676. NOZZLE-RING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 8, 1918. Serial No. 227,334. 6 Claims. (Cl. 253-78.)



1. A turbine nozzle ring, comprising two annular elements, blades of different height at opposite ends positioned between said annular elements, the edges of said blades throughout their length being seated against each of said annular elements.

1,310,677. NOZZLE-RING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 8, 1918. Serial No. 227,335. 12 Claims. (Cl. 253-78.)



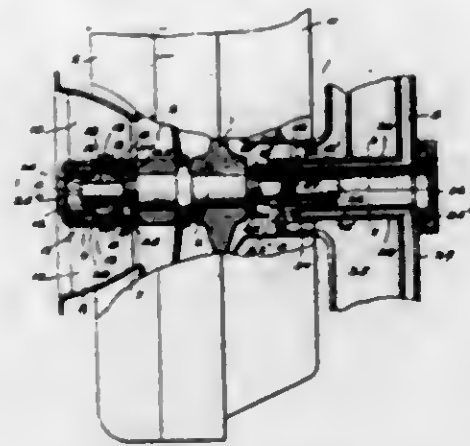
2. A turbine nozzle ring, comprising an annular element provided with spaced apart seats, and nozzles substantially U-shaped in cross-section, the height of the U of each nozzle being seated in its respective seat, the legs of said nozzle extending substantially radially with respect to the axis of said annular element.

1,310,678. TURBINE-CASING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 30, 1918. Serial No. 231,764. 6 Claims. (Cl. 253-65.)



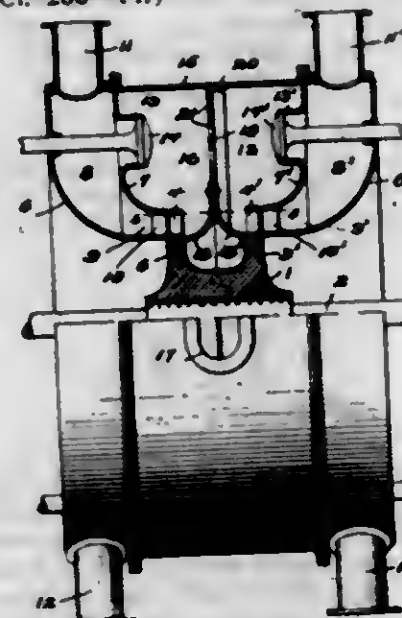
1. A turbine casing, comprising: an annular element forming the side wall, a front plate and a diaphragm clamped between said element and said front plate to define inlet and exhaust chambers.

1,310,679. BEARING-ASSEMBLY. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 30, 1918. Serial No. 231,766. 8 Claims. (Cl. 64-20.)



1. In a bearing assembly, a bearing, a housing therefor, a casing surrounding said housing, said casing and said housing being provided with interengaging means adapted to be brought into engagement upon relative longitudinal movement of said casing and said housing, and means engaging with the housing and with the casing to bring said interengaging means into engagement.

1,310,680. DOUBLE ROTOR FOR TURBINES AND CASING THEREFOR. EARL H. SHERBONDY, Cleveland, Ohio. Filed Apr. 30, 1918. Serial No. 231,769. 6 Claims. (Cl. 253-74.)



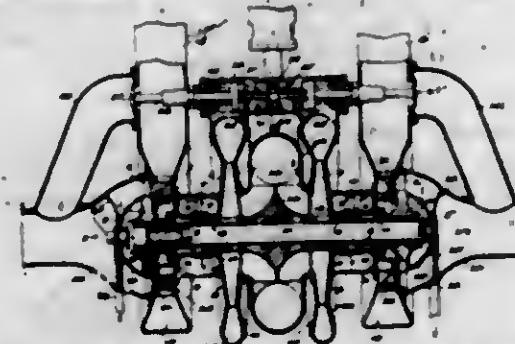
1. In a turbine, casing elements defining two inlet chambers having discharge openings facing toward one another and each adapted to discharge gas onto a set of turbine buckets, and means positioned between said discharge openings to deflect the gas as it leaves the said turbine buckets radially and outwardly.

1,310,681. TURBINE NOZZLE-RING. EARL H. SHERBONDY, Cleveland, Ohio. Filed May 14, 1918. Serial No. 234,553. 1 Claim. (Cl. 253-78.)



A turbine nozzle ring for an axial flow turbine, provided with a nozzle having a peripheral inlet and a side outlet, the nozzle passage presenting a gradual, arcuate curvature from inlet to outlet, said nozzle ring further being profiled on one side, and a profile ring seated on said profiled portion.

1,310,682. DUPLEX TURBO-COMPRESSOR. EARL H. SHERBONDY, Cleveland, Ohio. Filed May 14, 1918. Serial No. 234,555. 14 Claims. (Cl. 60-13.)

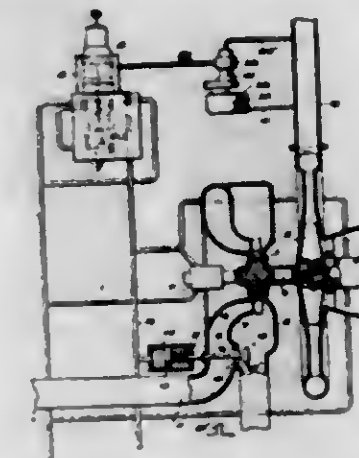


1. In combination with an internal combustion engine, two coaxial turbo-compressor units, and means to lead the exhaust gas from the engine to the turbines of the turbo-compressor units.

1,310,683. SUPERCHARGING DEVICE FOR TURBO-COMPRESSORS. EARL H. SHERBONDY, Cleveland, Ohio. Filed May 14, 1918. Serial No. 234,556. 5 Claims. (Cl. 168-61.)

2. In combination, an air compressor, means responsive to the delivery pressure thereof to control the de-

livery pressure of said compressor, and means responsive to the atmospheric pressure, to cause the compressor



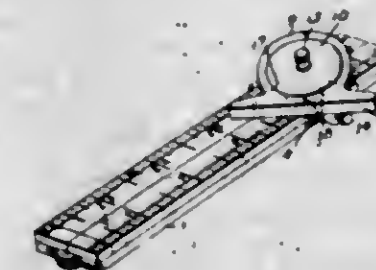
to supercharge, said last mentioned means being also responsive to the delivery pressure of said compressor to limit the supercharging action.

1,310,684. TURBO-COMPRESSOR BEARING. EARL H. SHERBONDY, Cleveland, Ohio. Filed Aug. 1, 1918. Serial No. 247,851. 5 Claims. (Cl. 64-10.)



1. In a bearing assembly, a fixed shaft, a rotatable bearing collar, a fixed bearing collar housing and means to clamp said bearing collar housing in place in a suitable standard.

1,310,685. ATTACHMENT FOR RULERS. KENELY ELLA-WORTH SMITH, Birmingham, Ala. Filed Mar. 24, 1919. Serial No. 284,580. 2 Claims. (Cl. 33-173.)

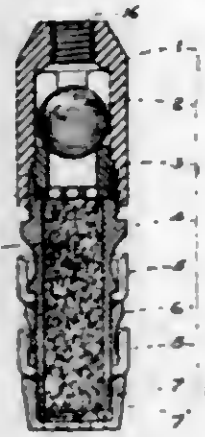


1. An attachment for rulers, comprising a slide having means for engaging the ruler to clamp the slide at any desired point in the length of the ruler, said slide including a disk arranged upon the ruler, a ring mounted to rotate on the disk, a second disk arranged above the ring, means in connection with the two disks for preventing angular movement of the disks with respect to each other, said ring having an extension with a straight edge, and means for clamping the two disks on the ring to hold the ring from angular movement, said ring and last named disk having cooperating means for varying the angle of the extension with respect to the ruler.

1,310,686. SAND-SCREEN FOR PUMPS. SAMUEL WOOD, Parkers Landing, Pa., assignor of one-third to The Franklin Valveless Engine Co., Franklin, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1919. Serial No. 279,576. 2 Claims. (Cl. 168-64.)

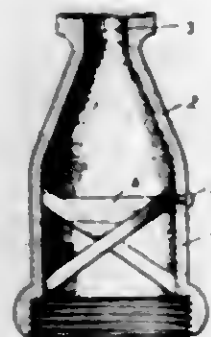
1. A sand screen for pumps comprising, in combination with a working barrel provided with an annular seat at

the lower end thereof, a tubular structure having a portion of its periphery formed to cooperate with said seat,



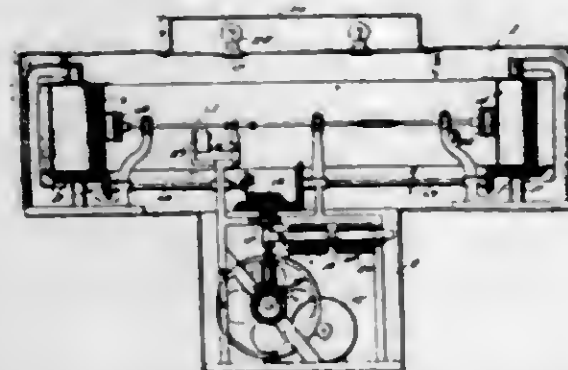
and to removably occupy the same, a perforated closure at each end of the chamber of said tubular structure, and a suitable straining medium within said chamber.

1,310,687. SPRAY-NOZZLE. HARRY D. BINKER, River Forest, Ill. Filed July 12, 1918. Serial No. 244,555. 14 Claims. (Cl. 137-86.)



1. In a spray nozzle, a housing; and a core housed thereby and comprising two vanes of substantially semi-elliptical contour symmetrically and obliquely disposed with respect to the axis of the housing and cooperating in tending to produce a hollow rotating stream; and means associated with the forward ends of the vanes for impeding the rotation of the central portion of the stream and thereby causing movements of liquid particles for preventing the production of a hollow stream.

1,310,688. ILLUMINATED SIGN. RALPH G. CARPENTER, Chicago, Ill. Filed Feb. 28, 1918. Serial No. 80,803. Renewed May 14, 1919. Serial No. 297,135. 4 Claims. (Cl. 40-31.)



1. In a luminous sign, a front having a plurality of translucent elements arranged thereon in standardized spacing, a source of light, an opaque member therebetween having perforations corresponding in spacing to certain of said elements, all of said perforations being

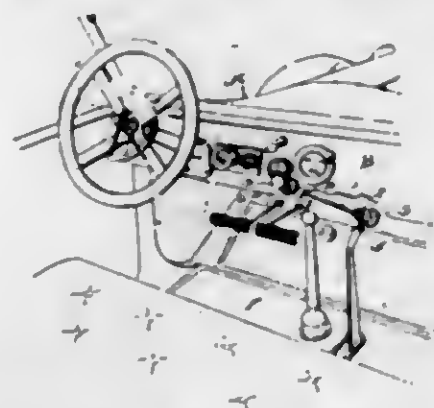
adapted to align simultaneously with translucent elements of the said front when the opaque member is in any one of a number of different positions spaced from each other by a distance equal to the standardized spacing between the said elements, and means for moving the opaque member with respect to said front.

1,310,689. SIGN MECHANISM. RALPH G. CARPENTER, Chicago, Ill., assignor to himself and Oscar Cederquist, Chicago, Ill., a Partnership. Filed Jan. 17, 1917. Serial No. 142,920. Renewed May 14, 1919. Serial No. 297,136. 3 Claims. (Cl. 40-31.)



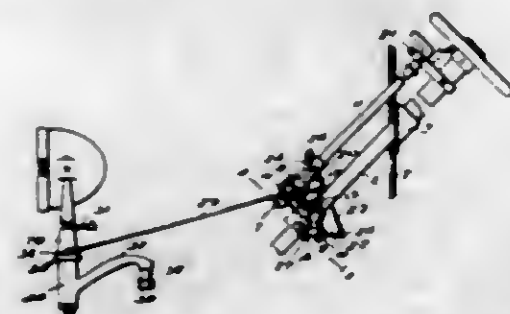
1. In an electric sign, a front having uniformly sized and spaced translucent portions, an opaque film having legends formed thereon by perforations smaller in size and more closely spaced than the said translucent portions of the sign front, and lighting means arranged for simultaneously projecting light through one of the said perforations and two adjacent translucent portions.

1,310,690. SELF-STARTER-SWITCH CONTROL. ROBERT M. CULVER, Girard, Ala. Filed Nov. 25, 1918. Serial No. 264,120. 1 Claim. (Cl. 180-90.)



The combination with an automobile instrument board and a self starter control button in the floor of the machine in advance of said instrument board; of a hand control rod passing slidably through said instrument board and having on its upper end an operating knob, an enlarged head on the lower end of said rod having a socket receiving said control button, and means for securing said button in said socket.

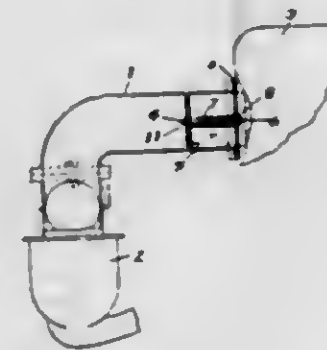
1,310,691. CONTROL MECHANISM FOR HEAD-LIGHTS. JAMES E. DEMPSEY, Manitowoc, Wis. Filed Feb. 17, 1917. Serial No. 149,303. 8 Claims. (Cl. 240-61.)



1. In a device of the class described, the combination with a steering post, of a headlight control shaft mount-

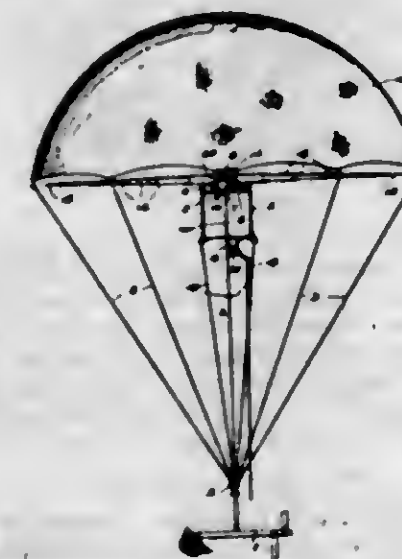
ed parallel to the steering post and capable of being shifted longitudinally relative to said post, means to communicate the rotary motion of the steering post to the headlight control shaft, means, including a rock shaft cooperating with the headlight control shaft, to convert the rotary motion of the headlight control shaft into oscillatory motion of the headlight, and means to place the headlight control shaft into and out of operative engagement with the steering post when the headlight control shaft is longitudinally shifted.

1,310,692. MIXER. JOHN H. DENNER, Detroit, Mich. Filed Feb. 18, 1919. Serial No. 277,733. 1 Claim. (Cl. 48-180.)



A device of the character specified comprising a mixer composed of a shaft adapted to be arranged at the axis of the manifold, a spirally wound coil connected with the shaft and extending between the same and the wall of the manifold and with its turns lying in the same plane and in a plane perpendicular to the shaft, said coil being of a diameter corresponding approximately to that of the cross section of the manifold, for the purpose specified.

1,310,693. PARACHUTE. CLARENCE E. DONNELLY, New York, N. Y. Filed Oct. 11, 1918. Serial No. 257,820. 4 Claims. (Cl. 244-21.)

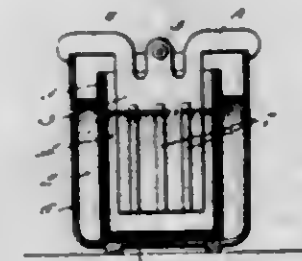


2. A collapsible parachute including an air tank, horizontally telescoping members radiating from said tank, said members comprising base sections and outer sections, the base sections being rigidly fixed to the air tank, a crown connected to said outer sections, supporting members attached to the base of said tank to maintain the center of gravity of the parachute and support the occupant of the same, and means to release the sections and distend the crown.

1,310,694. MANUFACTURE OF CELLULOSE. VANCE P. EDWARDS, Madison, Wis., assignor to The United States of America. Filed Jan. 18, 1919. Serial No. 271,801. 20 Claims. (Cl. 92-11.)

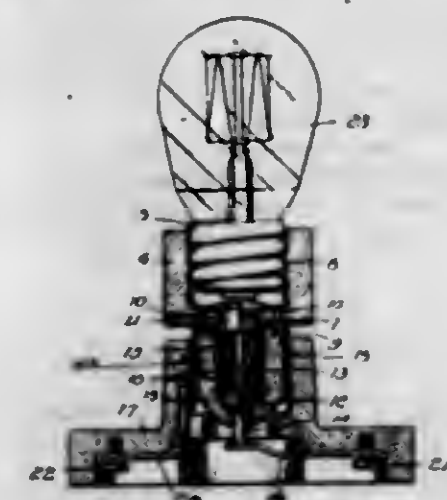
1. The process of producing cellulose which comprises treating fibrous vegetable material with acid sulfite liquor, separating the fibrous material from the liquor, treating the fibrous material with a solution of caustic soda, and subjecting it to a pressure of at least ten pounds and to a temperature of at least 115° C.

1,310,695. PRIMARY ELECTRIC CELL. HARRY E. EVANS, Buffalo, N. Y. Filed Feb. 21, 1918. Serial No. 218,571. 1 Claim. (Cl. 204-38.)



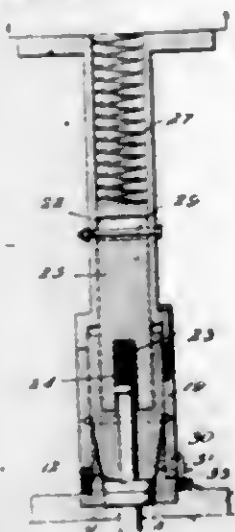
An electric primary cell comprising a glass jar, a carbon receptacle in said jar, resting on the bottom thereof, and forming a combined barrier and positive pole, a depolarizing fluid in said jar and surrounding said carbon receptacle, an electrolyte in said carbon receptacle, a negative pole in the form of a zinc plate in said carbon receptacle and immersed in said electrolyte, arms extending laterally from said negative pole over said carbon receptacle and resting on the upper edge of said glass jar, and binding posts on said carbon receptacle and said zinc plate.

1,310,696. RHEOSTAT. BENJAMIN FULTON GARDNER, Chicago, Ill., assignor of one-half to Seymour Stedman, Chicago, Ill. Filed Sept. 19, 1918. Serial No. 254,837. 6 Claims. (Cl. 210-50.)



1. In a rheostat of the class described, a combined socket, plug and receptacle comprising the female threaded electrode of the socket part directly connected to the male threaded electrode of the plug part and a cylindrical insulating part screwed into the electrode of said plug part, and means within said cylindrical insulating part of said plug part operable by said combined socket plug and receptacle to regulate and control an electric current for the purpose specified and substantially as described.

1,310,697. DIE. HERBERT M. HILL, New York, N. Y., assignor to Paper Utilities Corporation, a Corporation of New York. Filed Feb. 17, 1916. Serial No. 78,802. 1 Claim. (Cl. 93-36.)



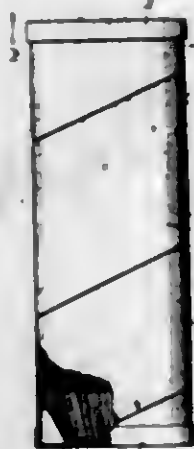
A means for forming a closed curved edge about the rim of a paper vessel which consists of male and female dies which hold the vessel firmly between them, and two external and movable collars provided with registering recesses which when brought together constitute a substantially circular groove, and means for forcing these collars first together and then inward the bottom of the vessel while so held so that the collars engage the expanded edge of the vessel and force it to form a closed curved edge.

1,310,698. PAPER OR SIMILAR CUP. HERBERT HILL, New York, N. Y., assignor to Paper Utilities Corporation, a Corporation of New York. Filed Nov. 19, 1918. Serial No. 263,237. 1 Claim. (Cl. 229-21.)



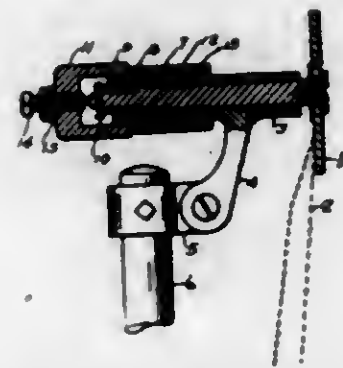
A substantially circular paper cup made from a single blank having a bottom, plaited sides with overlapping portions and a curled rim substantially circular in cross section for stiffening the same.

1,310,699. PAPER-VESSEL PACKAGE. WILLOUGHBY F. HILL, New York, N. Y., Filed Jan. 6, 1919. Serial No. 269,757. 1 Claim. (Cl. 206-36.)



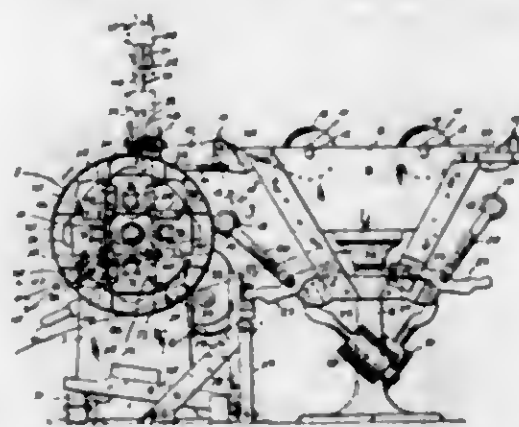
A package composed of a spiral tube with nested paper vessels fitting snug therein, said vessels at the time of packing, having a tendency to deform so that the vessels will set true in the container.

1,310,700. SHARPENER FOR SLICING-MACHINE KNIVES. EMMETT K. HOOD, Indianapolis, Ind., and Wallace B. Wolf, Chicago, Ill., assignors to The American Slicing Machine Co., Chicago, Ill., a Corporation of New York. Filed Mar. 1, 1919. Serial No. 280,000. 1 Claim. (Cl. 51-7.)



In a slicing machine sharpener the combination of a bearing; a shaft mounted therein; a wheel carried by said shaft adapted to contact with the edge of a knife; a spring mounted between the rear of the bearing and an anti-friction bearing carried by the shaft; and a barrel, mounted on the bearing, adapted to advance and recede; an adjusting screw carried by said barrel, adapted to contact with the end of the shaft, and means for locking it into position, substantially as and for the purpose set forth.

1,310,701. MACHINE FOR BUILDING PNEUMATIC-TIRE CASINGS. ERNEST HOPKINSON, New York, N. Y., Filed Apr. 24, 1918. Serial No. 230,547. 13 Claims. (Cl. 154-10.)



1. A machine for forming a multi-ply flat pulley band comprising a support having an outer contractible cylindrical wall for applying the material directly thereupon, said wall being formed flat transversely for a width sufficient to support the bead portions of the flat band upon its flat outer circumference, and means adapted to contract the cylindrical wall from its band building position while the band is supported thereon.

1,310,702. TIMING MECHANISM. FRIEDMAN R. JACOB, Oak Park, Ill. Original application filed June 14, 1918. Serial No. 239,915. Divided and this application filed Aug. 24, 1918. Serial No. 251,299. 1 Claim. (Cl. 161-1.)

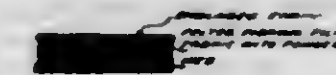
In a time-indicating appliance of the character described, the combination of a hollow shaft, a bearing for said shaft, means to rotate said shaft at a substantially-uniform speed, a notched-disk mounted on and revoluble with said shaft, a second shaft slidable in and adapted to be turned relatively to said hollow shaft, a knob mounted on said inner shaft by which the latter may be manipulated, an index mounted on and revoluble with inner shaft, a stationary scale graduated in intervals of

time with which said index cooperates, a lug on said index adapted to enter any of the notches of said disk and complete a driving connection between said shafts, said lug and notched disk constituting the sole driving



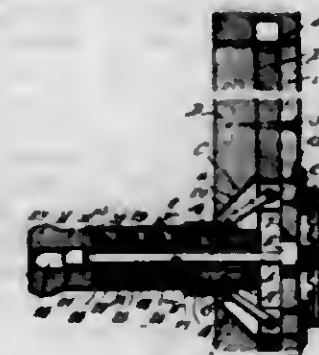
connection between said shafts, and a spring acting on said inner shaft yieldingly holding said lug in the notch, permitting withdrawal thereof and the manual return of the index to zero or substantially zero position, substantially as described.

1,310,703. POROUS SUBSTITUTE FOR LEATHER AND THE LIKE. HENRY F. KENWORTHY, Stoughton, Mass., assignor to Kenworthy Brothers Company, Stoughton, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1916. Serial No. 122,308. 14 Claims. (Cl. 61-68.)



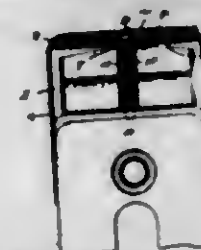
11. A slightly porous, thick fabric having a fibrous web with a body of fibrous material on each side of it, attached to it by felting, having pulverized solids in its midst, the whole being held together by a filmy product composed of oxidized drying oils extending throughout its body, surrounding and binding together its fibrous and pulverized parts.

1,310,704. PERMUTATION-LOCK. MARK KOSICH, Washington, D. C. Filed Jan. 13, 1919. Serial No. 270,895. 0 Claims. (Cl. 70-53.)



1. The combination with a closure and a bolt carried thereby; of a hollow handle extending from said closure and bodily slidable inwardly and outwardly, means actuated by the sliding action of said hollow handle for operating said bolt, and means in said handle for locking the latter against sliding.

1,310,705. HUMIDIFYING DEVICE. VICTOR ALBERT LARSON, Chicago, Ill. Filed Sept. 4, 1918. Serial No. 252,632. 3 Claims. (Cl. 237-78.)



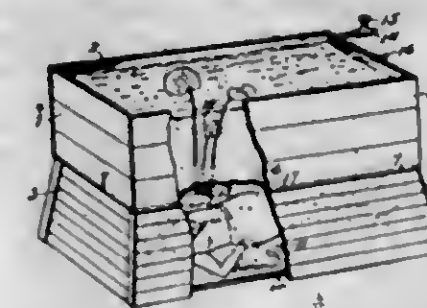
3. A device of the character specified, comprising a trough adapted to contain water and in seat upon the

top of a radiator, a casing for said trough comprising a body open at its bottom and having the sides of the body depending below the ends to permit said sides to extend down upon the sides of the radiator when the ends engage the top thereof, wick supports carried by the casing, and wicks on the supports depending into the trough.

1,310,706. WATERPROOF GLUE. ALFRED C. LINDAUER, Madison, Wis., assignor to The United States of America. Filed June 19, 1918. Serial No. 240,838. 4 Claims. (Cl. 87-17.)

1. A water proof glue comprising casein, lime, sodium hydroxide, less than one per cent, of a non-oxidizing hydrocarbon oil, and water.

1,310,707. ILLUSION APPARATUS. JOHN LIPINSKI, Leavenworth, Kans. Filed Jan. 28, 1919. Serial No. 273,634. 3 Claims. (Cl. 46-70.)



1. In an illusion apparatus, a casing having opaque side walls, and a transparent horizontal partition extending between said side walls and forming two chambers, one above the other, the upper chamber being adapted to contain water, and the lower chamber being adapted to receive a person, who, when in the lower chamber, is visible from above through the water and transparent partition, and two devices in said chambers respectively disposed in vertical alignment with their adjacent ends secured respectively to the upper and lower sides of said partition, said two devices jointly simulating the stem of a plant.

1,310,708. TRACER FOR PROJECTILES. ROY LEIGHTON LOWMAN, Washington, D. C., assignor to Harry C. Dodge, Boston, Mass. Filed Apr. 19, 1918. Serial No. 229,599. 5 Claims. (Cl. 102-29.)



1. A shell provided with a tracer attachment comprising a body or casing. A movable member in said casing containing the tracer composition and having a cap holder on its outer end, a firing pin positioned on a plug held in a fixed position in the outer end of said casing, and a fragile resistance device between the firing pin and the cap holder, substantially as set forth.

1,310,709. WATER-HEATER FOR OIL-STOVES. ALLAN E. MCCARTY, Richmond, Va. Filed May 5, 1917. Serial No. 166,700. Renewed May 3, 1919. Serial No. 294,566. 1 Claim. (Cl. 126-54.)

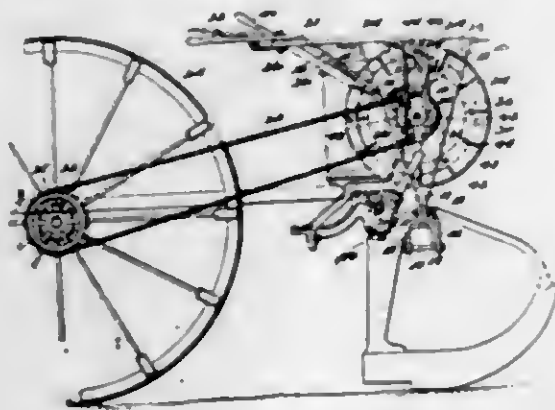
A water heating burner casing for oil stoves having a lower base piece adapted to rest on the burner of an oil stove and provided with an upper rim forming an inwardly presented annular groove, inner and outer walls provided with lower adjacent edges having abutting flanges projecting outwardly into said groove and clasped

within the rim of the said base piece, the inner wall tapering to form a water space between the same and the outer wall, said space gradually increasing in width



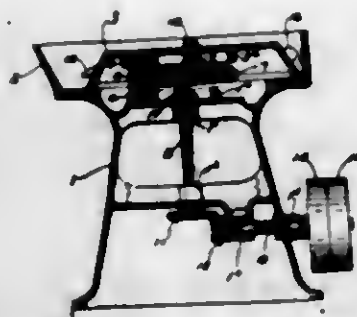
in an upward direction, and a top piece connecting the upper spaced ends of the inner and outer walls and closing the upper end of the water space, for the purpose described.

1,310,710. CHECK-ROW ATTACHMENT FOR PLANTERS. IAN R. PHIPPS, Mattoon, Ill. Filed Oct. 4, 1918. Serial No. 250,829. 2 Claims. (Cl. 111-16.)



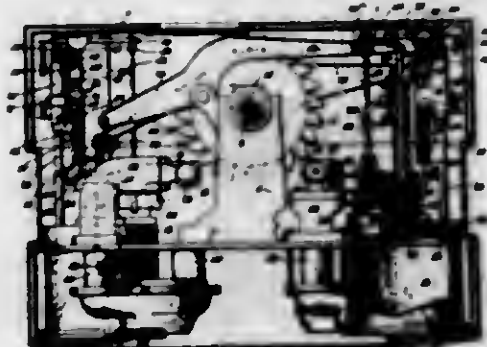
1. The combination with a planter including a rocking seed dropper shaft, and an arm extending radially therefrom, of a drive shaft, a disk having outer and inner graduations concentric with said shaft, a pointer on said shaft movable over said graduations, an arm extending from the shaft into the path of the arm on the rocking seed dropper shaft and in fixed relation to the pointer, and means for operatively connecting the said shaft with the traction mechanism of the planter.

1,310,711. MECHANICAL MOVEMENT FOR DOUGH-HANDLING MACHINES. HAYAN D. PINNEY, Cincinnati, Ohio, assignor to Hugo Jaburg, John Jaburg, and Henry K. Jaburg, comprising the Firm of Jaburg Bros., New York, N. Y. Filed Nov. 6, 1918. Serial No. 201,321. 4 Claims. (Cl. 74-34.)



1. A mechanical movement of the character described wherein revoluble and rotary movements are simultaneously imparted to a punching disk, comprising a punching disk, crank-pins means for revolving said punching disk, and multiple sets of mating gears of different gear ratios for simultaneously imparting rotary movement to said punching disk.

1,310,712. FLUID-OPERATED ENGINE. ENOCH RACOR, New York, N. Y. Filed Apr. 26, 1913. Serial No. 763,726. Renewed Dec. 12, 1918. Serial No. 260,513. 31 Claims. (Cl. 138-20.)

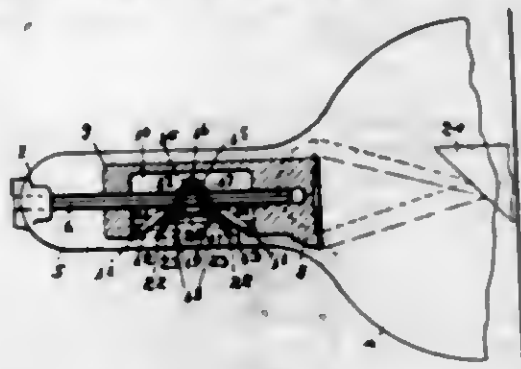


1. A fluid operated engine comprising a closed housing providing a liquid reservoir in the bottom thereof, a liquid in said reservoir, a Pelton wheel mounted within said housing; means for forcing the liquid against said wheel to rotate the same in either direction, said means including a cylinder having a valve controlled liquid inlet opening into said reservoir, means tending to create a reduction of pressure in said cylinder for drawing the liquid from said reservoir into said cylinder, and a steam supply directed to said cylinder for driving the liquid therefrom into operative engagement with said wheel, valvular means contained within said housing for controlling said steam supply and manually controlled means extending exteriorly of the casing for controlling the direction of rotation of said Pelton wheel.

1,310,713. METHOD OF MANUFACTURING OXALIC ACID. HENRIET C. RAMP, Stamford, Conn. Filed Sept. 23, 1915. Serial No. 52,224. 2 Claims. (Cl. 23-24.)

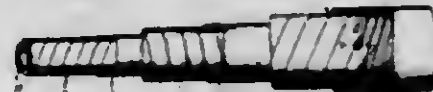
1. In the process of manufacturing oxalic acid from waste liquor from the chemical manufacture of paper, the steps which consist in first subjecting such liquor to evaporation until a substantially dry residue is produced, then subjecting the same to alkali fusion with a large excess of caustic alkali in a highly concentrated form, then subjecting the resultant mixture to an elevated temperature at approximately 250° C. for a sufficient time to form an oxalate compound by chemical reaction between the respective ingredients of the mixture, then effecting a cooling of the mixture, then dissolving the excess of alkaline compound to form an alkaline solution without dissolving said oxalate, then separating the oxalate residue from the alkaline solution.

1,310,714. X-RAY TUBE. THOMAS B. RIDER, Los Angeles, Calif., assignor of one-half to Adolphe Danziger, Los Angeles, Calif. Filed Jan. 18, 1918. Serial No. 212,529. 4 Claims. (Cl. 250-35.)



1. In an X-ray tube an anode having a suitable number of independent insets, and a cathode having means for focusing the cathode toward any of the insets in the anode.

1,310,715. CORROSION-RESISTING CONDUIT-PIPE. CHARLES ALBERT ROSS, Perth Amboy, N. J., and GUAYAMA MONNAT, Chuquibambilla, Chile, assignors to Chile Exploration Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 3, 1915. Serial No. 64,938. 9 Claims. (Cl. 137-75.)



1. A conduit pipe, whose main body portion comprises a series of spirally wound layers of elastic fibrous material, combined with intervening coatings of a corrosion-resisting and moisture-excluding viscous adhesive; substantially as described.

2. A conduit pipe, whose main body portion comprises a series of spirally wound layers of elastic fibrous material impregnated with a hydrocarbon residuum and compacted, adjacent spirals of the series being wound in opposite directions, combined with intervening coatings of a corrosion-resisting and moisture-excluding viscous adhesive; substantially as described.

3. A conduit pipe, whose main body portion comprises a series of spirally wound layers of elastic fibrous material, combined with intervening coatings of a corrosion-resisting and moisture-excluding viscous adhesive and provided with an outer armor envelop of spirally wound wire; substantially as described.

5. A conduit pipe, whose main body portion comprises a series of spirally wound layers of elastic fibrous material impregnated with a hydrocarbon residuum and compacted, combined with intervening coatings of a corrosion-resisting and moisture-excluding viscous adhesive and provided with an outer armor envelop of spirally wound wire, the inner of said spirally wound layers and said armor envelop being further provided with an interior coating and an exterior coating respectively of corrosion-resisting and moisture-excluding material; substantially as described.

7. A conduit pipe, whose main body portion comprises a series of layers of spirally wound rooding felt with intervening coatings of asphalt and an outer protective coating of spirally wound wire, together with an interior coating of asphalt and an exterior coating of asphalt; substantially as described.

1,310,716. AEROPLANE LANDING-FRAME. EMILE JEAN JULIEN SALMON, Billancourt, France, assignor to Societe Des Moteurs Salmon (Systeme Canton-Unne), Billancourt, France. Filed Mar. 14, 1916. Serial No. 84,114. 2 Claims. (Cl. 244-2.)

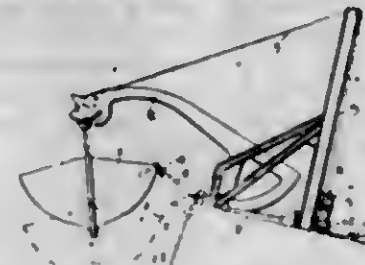


1. An aeroplane landing frame comprising two triangular structures forming each a fork for a wheel of the frame and carrying said wheel by one of the summits of the triangle, a rod fixed to the aeroplane in front of and parallel to the axes of the wheels, means for pivotally connecting the front summits of both triangular structures to said rod independently from each other, and elastic joints connecting the rear summits of the triangular structures to the framing of the aeroplane.

1,310,717. APPARATUS FOR HOISTING AND LOWERING BOATS. GABRIEL CHRISTIAN SMITH, Gottenborg, Sweden. Filed Sept. 17, 1918. Serial No. 254,492. 3 Claims. (Cl. 9-22.)

3. In an apparatus for hoisting and lowering boats, a rotatable shaft, drums rigidly connected thereto, outwardly and downwardly swinging davit arms, lines operating upon the arms and connected to and windable about

the drums, a boat adapted to be suspended from the lines and the arms, a sheave loose on the shaft, a flexible member having one portion wound about the sheave, coating detachable fastening members on the boat and the outer end of the flexible member, means for temporarily con-



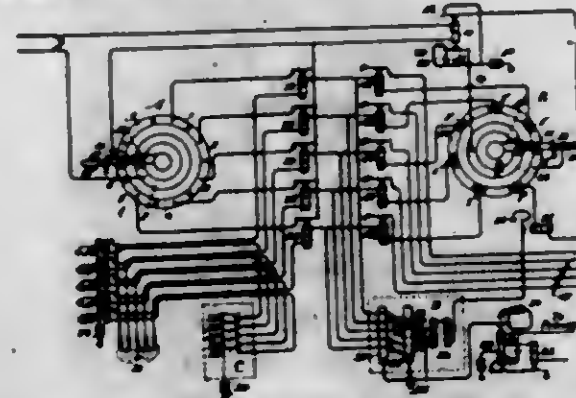
necting the sheave to one of the drums, and the flexible member being trained to a point on the deck of the vessel outside of the mounting point of the arms to cause an outward swinging of the arms upon the actuation of the shaft and during the temporary engagement of the sheave with the drum.

1,310,718. STUMP-BURNER. ELLSWORTH TILDEN, Duluth, Minn. Filed Nov. 19, 1918. Serial No. 263,162. 1 Claim. (Cl. 110-21.)



An apparatus for burning stumps, comprising a metallic hood concaved at one end and adapted to be positioned at an inclination in an excavation in the ground with its upper end concaved, and designed to engage the convex surface of a stump to be burned, the lower portion of the hood having an opening, an elbow having an upright portion passing through said aperture, and a horizontally disposed portion adapted to rest upon the bottom of the excavation and spaced apart from a stump which is adapted to have a transverse passageway in alignment with the opening into said elbow, a pipe secured to the upright portion of the elbow, said pipe and elbow adapted to form a draft to draw fire through the stump and the space in the excavation intermediate the stump and the elbow.

1,310,719. SECRET SIGNALING SYSTEM. GILBERT S. VERNAM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 13, 1918. Serial No. 253,962. 24 Claims. (Cl. 178-22.)

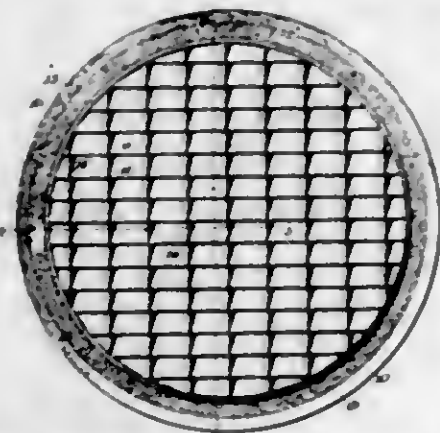


1. The method of enciphering signals where the characters are represented by a number of periods of different current values which consists in altering the normal code impulses of a character to be transmitted in accordance with a rule represented by some other character in a like code.

1,310,720. PROCESS FOR TRANSFORMING ALKALI-METAL MONOCHROMATES INTO BICHROMATES. GERHARD NICOLAAS VIA, Paris, France. Filed Jan. 22, 1918. Serial No. 213,200. 2 Claims. (Cl. 23-13.)

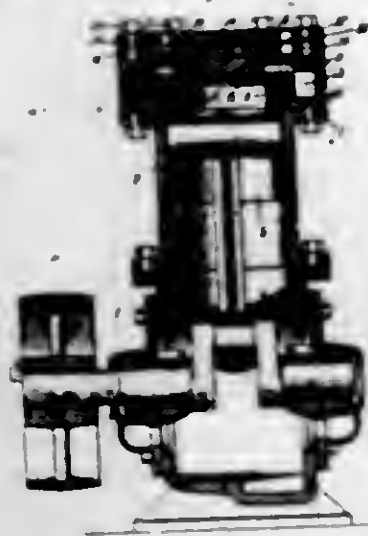
1. The process for the transformation of alkali metal chromates into bichromates and bicarbonates consisting in subjecting a solution of alkali metal monochromate to the action of carbonic acid, in absence of free alkali, the concentration being such that the reaction product, alkali metal bicarbonate, precipitates from the resulting solution of the alkali metal bichromate.

1,310,721. HEADLIGHT-LENS. CHAUNCEY W. WAGGONER, Morgantown, W. Va., assignor to Walter A. Jones, Morgantown, W. Va. Filed Jan. 18, 1918. Serial No. 212,482. 2 Claims. (Cl. 240-48.4.)



1. A headlight lens of the character described comprising a transparent body having one surface provided with a plurality of parallel, transversely arranged flat faces inclined with respect to the plane of said surface to form prisms shaped to refract rays of light downwardly, and a plurality of vertically disposed rows of relatively small tapered bodies shaped to refract rays of light, laterally, each body being superimposed upon and extended across an inclined flat face of the lens and of a length corresponding to the width of the face upon which it is superimposed, the smaller ends of said tapered bodies pointing in the same direction with the ends of the bodies of each row in contact, said rows of tapered bodies being separated by substantial spaces whereby the greater portion of the light rays are permitted to pass through the lens without perceptible diffusion or lateral refraction.

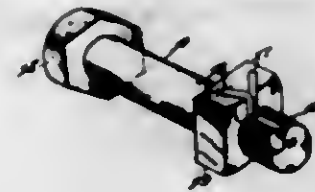
1,310,722. MUFFLER CONSTRUCTION FOR AIR-PUMPS AND THE LIKE. ROBERT WAASOCK, Bloomfield, N. J., assignor to Empire Cream Separator Company, Bloomfield, N. J., a Corporation of New Jersey. Filed June 21, 1916. Serial No. 105,013. 5 Claims. (Cl. 230-34.)



1. In apparatus of the character described, a cylinder assembly including a pair of head members inclosing a

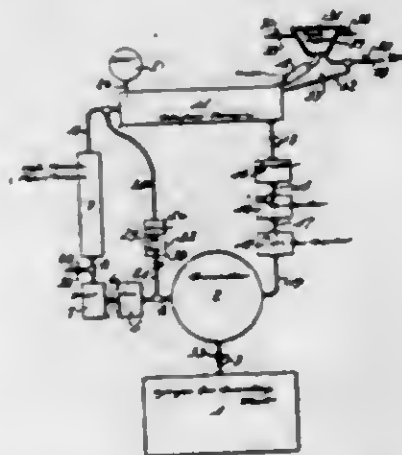
discharge valve chamber between them and a discharge valve in said chamber, said members being formed to provide an elongated opening from said chamber to the outer air to muffle the sound of the exhaust.

1,310,723. NUT-LOCK. FRANCIS H. WEBSTER, St. Louis, Mo. Filed Feb. 13, 1919. Serial No. 276,772. 1 Claim. (Cl. 151-4.)



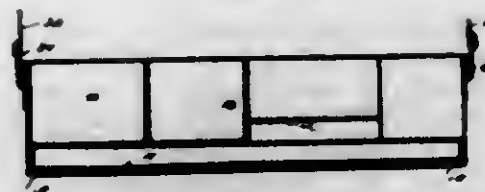
A nut lock comprising a bolt the threaded portion of said bolt provided with a channel running parallel with the bolt and extending approximately the full length of the threads, a split locking pin provided with a head bent at right angles and adapted to be inserted in the channel of the bolt and its free ends bent up and over the nut, said ends being spread apart when in its bent position, substantially as specified.

1,310,724. REDUCTION PROCESS. SIGMUND WESTBERG, Christiania, Norway. Filed Oct. 22, 1917. Serial No. 197,818. 1 Claim. (Cl. 75-17.)



The process of continuously reducing reducible metallic material consisting in subjecting it to a current of pre-heated hydrogenous gas; in regulating the temperature of such current by the introduction of a relatively cool hydrogenous gas; and in cooling the reduced metal in exclusion from an oxidizing agent.

1,310,725. GLAZIER-BOX. EINAR WESTERGAARD, Hellynak, Del. Filed June 14, 1918. Serial No. 240,022. 1 Claim. (Cl. 228-14.)



A box of the character described, comprising a body having a slidable drawer in its lower portion, a plurality of partitions arranged in the body and forming independent compartments therein, trays removably held in certain compartments, a cover removably fitted on the body and having a hasp eye receiving the opening, a hasp eye support in bridging relation over one of the compartments and received in the opening in the cover, a hasp on the drawer and engageable with the hasp eye, a ball handle swingingly connected to the body and having a

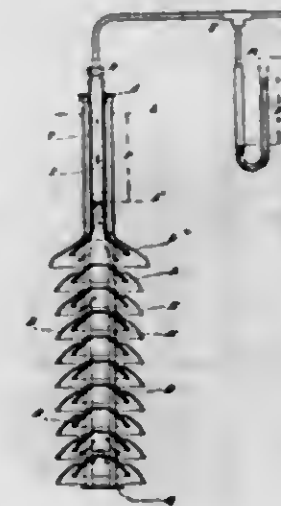
hasp engageable with said hasp eye, and detachable and adjustable lugs mounted on opposite ends of the body for supporting the latter level when resting on an incline.

1,310,726. POWER-TRANSMITTING CHAIN. CHARLES O. WYMAN, Anoka, Minn. Filed June 12, 1915. Serial No. 33,078. 3 Claims. (Cl. 74-82.)



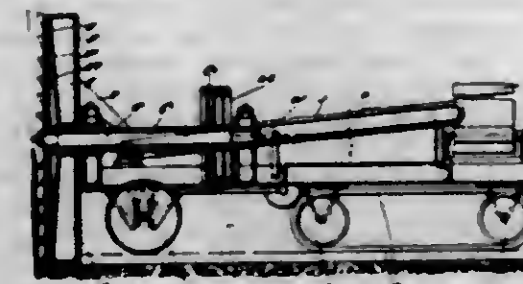
3. A power transmitting chain comprising skeleton links having a plurality of openings and a corresponding number of opposing faces, and couplings having hooked ends and divided longitudinally for connecting the adjacent ends of adjoining links.

1,310,727. ELECTRODE. CARLO ZORZI, Milan, Italy. Filed June 29, 1918. Serial No. 242,030. 5 Claims. (Cl. 204-1.)



4. An electrode of the character specified, comprising a series of centrally-apertured elements, vertical supports whereon said elements are mounted one above another in spaced, parallel relation, with their apertures disposed in co-axial alignment, the spaces between adjacent elements forming guide channels for conducting the liquid or gaseous products of electrolytic decomposition to and through the apertures in said elements, and a collector pipe connected at its lower end to the uppermost element and into which said products pass from that element.

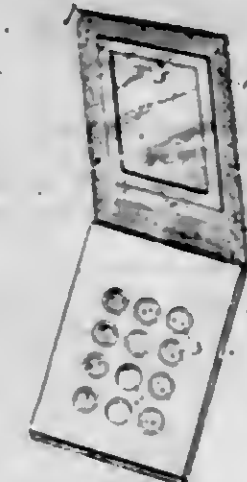
1,310,728. LAND-DIGGING OR EARTH-EXCAVATING MEANS OR DEVICE. NAOM ALCHERANT, Acton Hill, London, England. Filed May 20, 1918. Serial No. 235,713. 1 Claim. (Cl. 37-29.)



A land digging or earth excavating machine comprising in combination, a rotary digging plate provided with

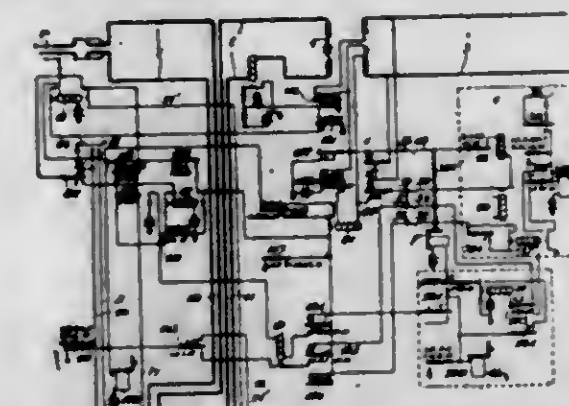
a plurality of teeth on one face thereof adjacent to openings in the plate, an earth collecting drum at the rear of the plate, rotary blades in said collecting drum adapted to discharge the excavated earth in the collector through openings in the rear wall of the latter, the digging plate and rotary blades being centrally but independently mounted on concentric rotatable members, and a conveyor disposed at one side of the said concentric members.

1,310,729. DISPLAY-CARD FOR BUTTONS AND THE LIKE. FRANK J. APPELBERG, Montclair, N. J. Filed May 14, 1918. Serial No. 234,550. 1 Claim. (Cl. 211-34.)



A display card comprising a sheet having perforations to receive articles to be displayed and provided with a backing sheet secured along one face thereof over said perforations, the material of said backing sheet extending freely therefrom to fold in a hinge-like manner over the first named sheet as a covering sheet, and provided with an opening to expose the perforations in the first named sheet, and a sheet of transparent material secured to the inner face of the covering sheet opposing its opening, said covering sheet and the transparent sheet being secured upon the first named sheet for retaining the articles in the perforations thereof and to display said articles.

1,310,730. SEMIMECHANICAL TELEPHONE SYSTEM. WILLIAM G. BLAUVELT, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 12, 1917. Serial No. 196,281. 13 Claims. (Cl. 170-27.)

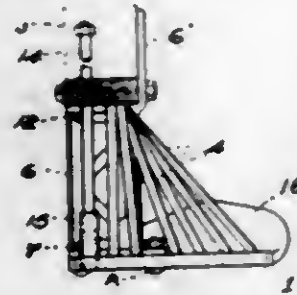


1. In combination, a cord circuit, an operator's loop including controlling keys serially connected therein and an operator's set associated therewith, and means for introducing said loop in said cord circuit.

1,310,731. PILOT FOR LOCOMOTIVES. CHARLES H. BLISSSELL, Oil City, Pa., assignor of one-third to Charles H. Wise, Oil City, Pa. Filed Dec. 17, 1918. Serial No. 267,150. 5 Claims. (Cl. 203-48.)

4. A pilot for locomotives comprising in combination, a triangular base, the lateral sides of which are provided

with sockets for the reception of the lower ends of bars, an upwardly-projecting bolt-socket carried by said base, a head provided with sockets for the reception of the upper ends of said bars, bars insertible into said sockets and removable therefrom through said sockets in said head,



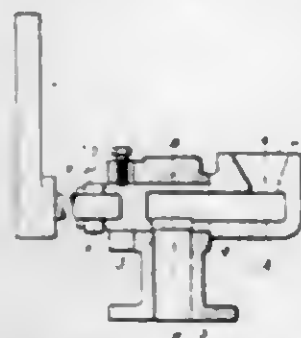
brackets securing said base and said head together, and a bolt carried by and adapted to have longitudinal movement in said bolt-socket, adapted to pass through the pilot beam and to serve as means for securing said pilot to said pilot-beam.

1,310,732. WHEEL FOR MOTOR AND OTHER VEHICLES. WALTER LIGHT BOOMAN, Bromsgrove, England. Filed Mar. 25, 1919. Serial No. 285,070. 4 Claims. (Cl. 21-207.)



1. In a wheel for motor and other vehicles the combination of a rim; a rubber gripping stud; a flexible securing plate arranged inside said rubber stud and whereby said stud is secured to the rim; and a metal stud detachably mounted in the middle of the rubber stud, for the purpose specified.

1,310,733. STEAM CLEANSING APPARATUS, PARTICULARLY FOR VERTICALLY-ARRANGED SMOKE-TUBES. JOHAN BOSS and ALBERT SKOGLUND, Gottenborg, Sweden, assignors to Arvid Westerberg, Stockholm, Sweden. Filed Feb. 14, 1919. Serial No. 277,081. 1 Claim. (Cl. 137-97.)



The combination with a tubular chamber having a lateral supporting stem the bore of which forms an inlet to the casing, and the inlet being enlarged at its point of communication with the casing, of a nozzle including a body having a portion reduced to form an extension designed to be rotatably received in the chamber and leaving an annular shoulder designed to abut one edge of the chamber, the body being provided with a longitudinal bore terminating short of and closed by the ends of the body, the outer end of the body having a flared outlet opening leading laterally from the bore and provided with a spraying orifice, the extension having a lateral inlet opening near the opposite end of the bore and diametrically opposite the outlet opening, a collar detachably secured to the outer projecting end of the extension

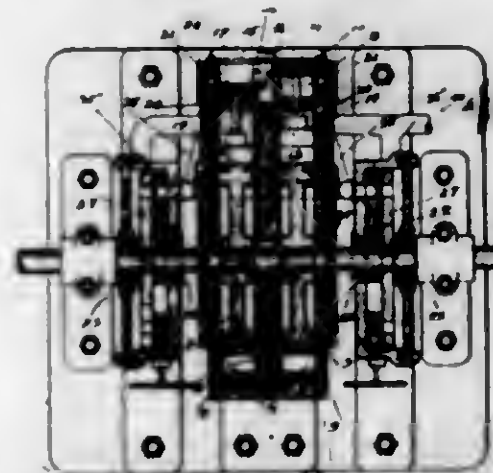
and shutting the other edge of the casing for coacting with the shoulder in preventing longitudinal movement of the body, and a key connected to the extension for oscillating the body.

1,310,734. WASHBOILER. JOSEPHINE BOWMAN, near Evington, Va. Filed Apr. 30, 1919. Serial No. 293,858. 3 Claims. (Cl. 68-30.)



1. A wash boiler attachment, comprising a follower having a perforated horizontal bottom and upstanding sides, a lever pivotally connected with the follower, and locking arms extending through the opposite end walls of the follower and pivotally connected with the lever on opposite sides of its pivotal connection with the follower.

1,310,735. ROTARY STEAM-ENGINE. WARREN H. BARSTOW, Toppenish, Wash. Filed Nov. 26, 1918. Serial No. 264,449. 1 Claim. (Cl. 121-69.)



In a rotary steam engine the combination of a stationary casing comprising separate and independent annular expansion chambers, a rotatably mounted shaft extending through said chambers, rotors fixedly secured to said shaft and operable within said chambers, being respectively provided with a radially extended abutment diametrically opposite each other, radially slidable cut-offs movable across said chambers and arranged in transverse alignment with each other, steam actuated pistons attached respectively to said cut-offs, cylinders for said pistons, cam disks carried by said shaft, levers attached slidably to said cams and to the sliding valves of the cylinders for controlling the intake and cut-off of steam thereto for reciprocating said cut-offs, steam chests stationarily mounted upon said shaft on both sides of said casing, a shiftably and a rotatably mounted disk disposed in each of said steam chests, steam outlet and exhaust pipes leading from said steam chests to each of said rotor chambers for supplying steam thereto to actuate said rotors, crescent shaped slots provided respectively in each of said rotatably mounted disks for limiting the passage of steam from said chests to one of said steam outlet pipes during a predetermined part of each revolution, a longitudinal slot provided in each of said shiftably mounted disks for directing the exhaust expelled from the rotor chambers to the atmosphere, and a plurality of ports provided in each of said shiftably mounted disks for preselecting the ports of the steam outlet pipes

through which steam is permitted to pass from said chests to the rotor chambers, thereby predetermining the direction of rotation of said engine.

1,310,736. FUR-CUTTING IMPLEMENT. WILLIAM BLAU, New York, N. Y. Filed Sept. 7, 1918. Serial No. 253,092. 3 Claims. (Cl. 164-79.)



1. In an implement of the character described, the combination with a base plate having a serrated front edge composed of a plurality of regular and alternate turns, a clamping plate hinged to said base plate provided with a free edge having a contour corresponding to that of the front edge of said base plate, the serrations in both plates being continuous, a line of upwardly extending pins attached to said base-plate in rear of and in parallel relation to the front edge of said base plate, the free edge of said clamping plate being adapted to rest on the fur on said pins and being then in alignment with the front edge of said base plate, and means for moving said clamping plate into clamping position.

1,310,737. RECONNOITERING-HYDROAEROPLANE. WILLIAM STAALING BUNOON, Marblehead, Mass., assignor to Curtiss Aeroplane and Motor Corporation, a Corporation of New York. Filed June 6, 1917. Serial No. 173,170. 5 Claims. (Cl. 244-14.)

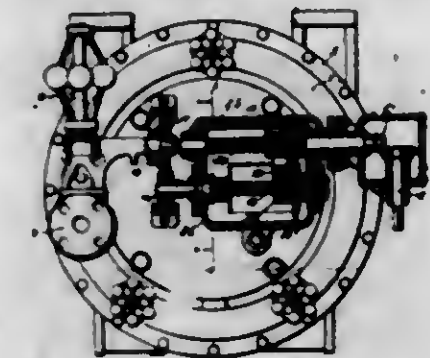


1. In an aeroplane, superposed supporting surfaces, a body supported between said surfaces, landing devices arranged beneath said surfaces, and overlapping V-struts having their apices founded upon said landing devices and their divergent extremities fastened to the upper supporting surface, the outer legs of the V-struts in each instance constituting the outermost strut connections between the superposed supporting surfaces.

1,310,738. GOVERNOR MECHANISM. VIRGINIA Z. CARACIATTI, Bronxville, N. Y., and OLIVER D. H. BURLY, West Roxbury, Mass., assignors to E. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Apr. 9, 1917. Serial No. 160,744. 8 Claims. (Cl. 264-2.)

1. The combination, with an engine, and a governor provided with a drive-shaft, of a countershaft; a support in which the countershaft is journaled parallel with said drive-shaft, said support being movable about an axis coincident with the axis of the drive-shaft; a friction-wheel splined on the countershaft; a frictional drive-member with which the friction-wheel cooperates, said drive-member being connected with and actuated by the

engine; gears connecting the governor drive-shaft with the countershaft; means for moving said support as aforesaid, to regulate the engagement of the friction-wheel



with the frictional drive-member; and means for moving the friction-wheel along the countershaft to vary its point of engagement with the drive-member.

1,310,739. METERING DEVICE. ROBERT S. CARY, Philadelphia, Pa. Filed Aug. 14, 1917. Serial No. 156,120. 6 Claims. (Cl. 73-167.)



1. In a fluid meter the combination of a casing provided with an inlet, a metering cylinder having a plurality of orifices and a discharge outlet, a pressure gage for indicating difference of pressure between said casing and cylinder and means governed in accordance with the number of orifices exposed to indicate the rate of fluid flow.

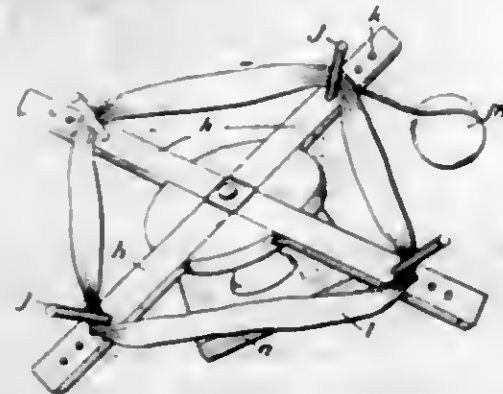
1,310,740. PIPE-COUPLING. MICHAEL J. CORREY, Freeport, N. Y., assignor to T. A. Gillespie Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 5, 1919. Serial No. 275,117. 3 Claims. (Cl. 285-182.)



2. In a pipe joint of the kind described, a pair of similar spigot members placed end to end and spaced apart, a bell member attached to one end of one of the first spigot members to form an extension thereof and extending over the end of the second spigot member, said bell member being coned adjacent the end of the first spigot member to permit the end of the second spigot member free movement laterally within the bell member, a follower ring surrounding the second spigot member adjacent the end of the bell member, a rubber gasket between the ends of the bell member and the follower ring, an

abutment ring surrounding the first spigot member and attached thereto and both extending between the abutment ring and the follower ring and adapted to hold the rubber gasket between the follower ring and the end of the bell member.

1,310,741. SKEIN-HOLDER. KATHLEEN S. COOK, Easton, Pa. Filed Mar. 15, 1918. Serial No. 222,540. 2 Claims. (Cl. 242-115.)



1. In a skein supporter, a circular disk-shaped hub rotatably pivoted upon a central support which is itself rotatably secured in a base, said hub having a plurality of radial slots dovetailed on their lateral edges, a plurality of rigid radial arms outstanding from said hub and having on their inner ends dovetailed surfaces fitting said dovetailed slots on the hub and detachable pins projecting at an outward angle from the upper surface of said arms at their extremities to support and hold the skein while it is being wound.

1,310,742. DETONATING-FUSE. GEORGE DE LAVAL, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1917. Serial No. 177,032. 1 Claim. (Cl. 102-39.)

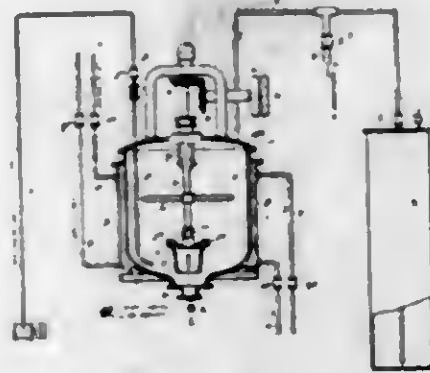


In an impact fuse for explosive shells, in combination, a body member having a central opening therein, a casing containing a striker rod in the opening, a casing retainer in the body member and adapted to hold the casing in position, a firing pin removably inserted in the retaining member and a head plug removably inserted in the body member and adapted to abut against the end of the firing pin.

1,310,743. MANUFACTURE OF ACETIC ALDEHYDE. HENRY DREYFUS, Basel, Switzerland. Filed June 1, 1917. Serial No. 172,325. 8 Claims. (Cl. 23-24.)

1. In the production of acetaldehyde from acetylene, the improvement of passing acetylene into an absorbing solution containing sulfuric acid in amount between

about 10% and about 15% total acid, and a mercury compound in amount corresponding to 1 to 10 per cent. of metallic mercury, both calculated on the weight of the absorbing solution, while maintaining the temperature at not above 40° C. during the introduction of the acetylene, the acetylene being introduced in a weaker current at the beginning, until the mercury compound in the solution has become gray to grayish-black, indicating that the solution has about attained its maximum absorbing



power, whereafter the acetylene is introduced as rapidly as possible, while avoiding excess and non-absorption, strong agitation being maintained during the introduction of the acetylene, the acetaldehyde formed being distilled off at required intervals by raising the temperature to not above 50° to 60° C., while interrupting the introduction of acetylene, and the temperature being thereafter again reduced to not above 40° C. for the reintroduction of the acetylene.

1,310,744. SANITARY HOLDER FOR RAZOR-STROPS. RALPH R. EDWARDS, Helper, Utah. Filed Apr. 8, 1918. Serial No. 227,231. 1 Claim. (Cl. 51-16.)



A device of the character set forth comprising a cylindrical casing having an opening in its bottom, a pair of vertically spaced tubes projecting outwardly from the curved wall of the casing on one side at a point about midway between its top and bottom, said tubes having their inner ends communicating with the interior of the casing, a concave stamped metal member arranged over the open outer ends of the spaced tubes and having its edge shaped to conform to and secured to the adjacent portions of the curved wall of the casing to provide a disinfectant container, an absorbent member in said disinfectant container, and means to permit a disinfectant or the like to be applied to said absorbent member.

1,310,745. AIR-GUN. ALBIN R. FALK, Moline, Ill. Filed Feb. 15, 1919. Serial No. 277,163. 2 Claims. (Cl. 124-10.)

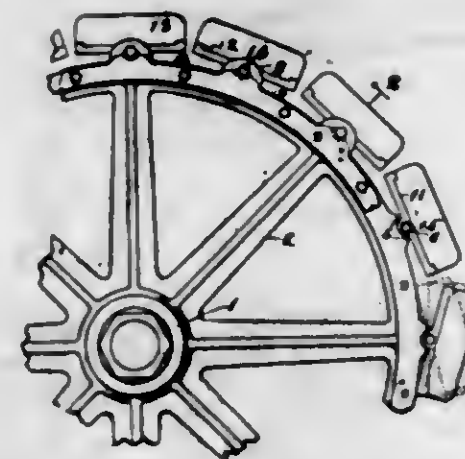
1. In an air gun, the combination with a compression chamber and a barrel having rear openings in the same

plane, of a breech block pivotally supported and movable transversely upon the rear end of said barrel and com-



pression chamber, and the said block having a groove arranged to connect said openings of the barrel and chamber.

1,310,746. VEHICLE-WHEEL. HENRY L. FIRESTONE, Akron, Ohio. Filed Sept. 13, 1917. Serial No. 191,179. 1 Claim. (Cl. 21-230.)



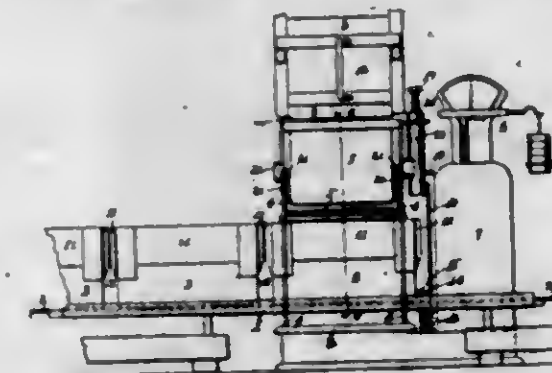
A vehicle wheel embodying a felly having a cylindrical outer face which is provided with a series of pairs of separate transversely-extending outwardly-projecting ribs with a space between each pair of ribs approximately semi-cylindrically formed, the spaces between pair of ribs constituting seats, a plurality of resilient block carrying shoes disposed on said felly, each of said blocks embodying an inwardly and transversely extending semi-cylindrical rib provided with an opening and arranged to be positioned in one of the seats formed between each pair of ribs on the outer face of said felly, a circumferential ring secured to each face of said felly and provided with outwardly-extending ears, each of said ears provided with an aperture constituting a bearing, said rings so disposed on said felly that the apertures in said ears are in transverse alignment with each other and also in transverse alignment with the axes of the semi-cylindrical grooves formed in said felly and bolts extending through the apertures in said ears and the apertures in the ribs on the inner faces of said block carrying shoes to provide means for permitting said block carrying shoes to tilt radially with respect to the axis of said wheel.

1,310,747. APPARATUS FOR BOXING AND NET-WEIGHING MATERIALS. CHARLES F. FLEMING, San Jose, Calif. Filed Mar. 3, 1919. Serial No. 250,311. 5 Claims. (Cl. 265-49.)

1. An apparatus for the described purpose comprising a charging-hopper; a weighing-scale upon which said hopper is supported whereby the net-weight of the charge in the hopper is ascertained by compensating for the fixed weight of the hopper; means, independent of the hopper for supplying the latter with a charge; a traveling conveyor for introducing a container under the charging-

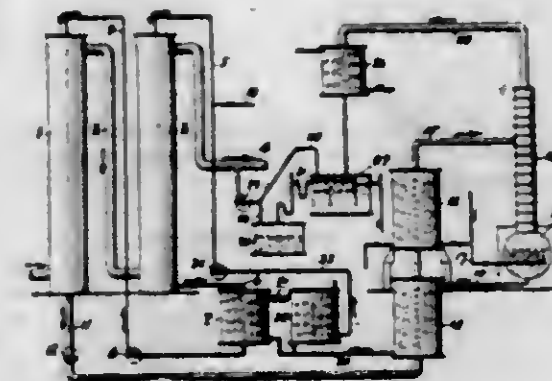
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hopper and supporting it there independent of the hopper and scale; means for dumping the net-weight charge into said container; and a stop contacting with and arrest-



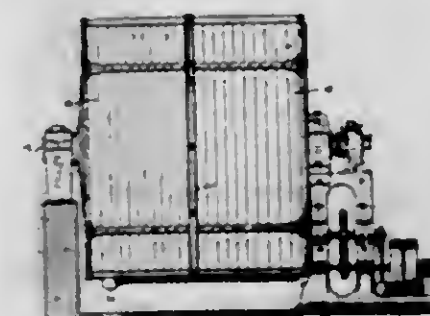
ing the container on the conveyor while receiving its charge and releasing it when charged, to continue its advance with said conveyor.

1,310,748. PROCESS OF RECOVERING BY-PRODUCTS OF ILLUMINATING-GAS. WALTER H. FULWILEA, Wallingford, Pa., assignor to United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1916. Serial No. 120,591. 2 Claims. (Cl. 196-25.)



1. The process of manufacturing toluol from illuminating gas which consists in scrubbing it with an appropriate oil presaturated with benzol, xylol and unsaturated hydrocarbons in substantially the same proportions as they exist in the gas and controlling the temperature conditions to raise the temperature of the gas during the scrubbing operation and approximately balancing the vapor tension of the scrubbing oil before and after the scrubbing operation.

1,310,749. TANNING APPARATUS. CHARLES JOHN GLARK, New York, N. Y., assignor to Maurice Wolfert, New York, N. Y. Filed July 19, 1917. Serial No. 181,558. 14 Claims. (Cl. 140-11.)



2. In a tanning apparatus, the combination with a rectangular tank of watertight construction, of trunnions

forming a horizontal axis for the tank, bearings for the trunnions, sectional hanging bars for the hides, pins in the bars, means for rotating the tank, and means for filling the tank when closed with liquid for tanning and circulating the same through one of the bearings and its trunnion.

1,310,750. EGG-CANDLER. JESSE H. GRANT, Kokomo, Ind. Filed Mar. 15, 1916. Serial No. 84,457. Renewed Jan. 24, 1919. Serial No. 272,907. 5 Claims. (Cl. 99—6.)

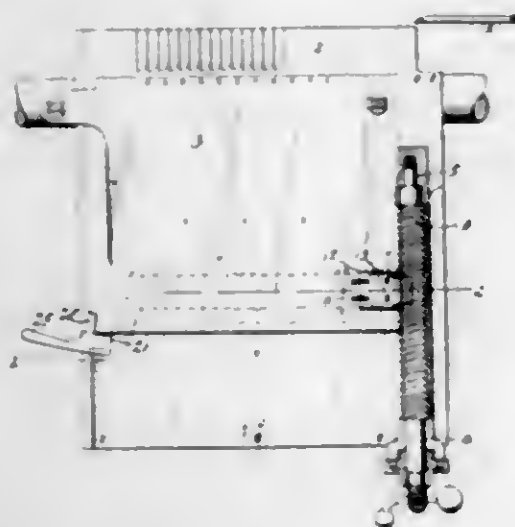


3. An egg candler comprising a chamber for containing illuminating means and having a restricted opening for receiving the end of an egg, and of a size to be closed by the said egg, said candler having a depending flange at one side of the restricted opening and being provided with an inspection opening, and cut away at the opposite side from the inspection opening.

1,310,751. MANUFACTURE OF SULFUR DYES. HIEGER FJELLO HALVORSEN and CHRISTIAN HØSBYE, Christiansia, Norway. Filed Nov. 23, 1918. Serial No. 263,906. 2 Claims. (Cl. 8—1.)

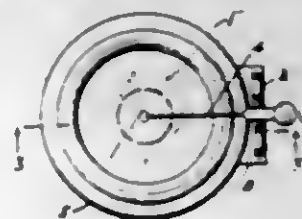
1. Process for the manufacture of brown sulfur dyes comprising the steps of melting nitro compounds of p-toluic acid with polysulfide.

1,310,752. FEED MECHANISM FOR SLICING-MACHINES. ERNEST A. HAND and FREDERICK A. WYGANT, Hornell, N. Y., assignors to The A. J. Iwer Company, Incorporated, Hornell, N. Y., a Corporation of New York. Filed Aug. 28, 1918. Serial No. 251,744. 8 Claims. (Cl. 74—40.)



1. A slicing machine comprising a table, an article carrier slidable on said table, a feed screw shaft mounted on said table and capable of turning but held against lengthwise motion, a screw feed nut mounted on said slide and movable into and out of engagement with said screw shaft, and means for operating said screw nut comprising a shifting bar guided transversely on said slide and carrying said nut, and a spring operating to hold said nut yieldingly in engagement with said screw shaft.

1,310,753. REPRODUCER FOR TALKING-MACHINES. ARNOLD H. HOLMES, Philadelphia, Pa., assignor to Per-feltone Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 27, 1919. Serial No. 273,382. 1 Claim. (Cl. 274—35.)



As a new article of manufacture a soft rubber reproducer housing provided with a hard rubber core having a hard rubber extension through the housing which constitutes a stylus arm fitting support.

1,310,754. TOY PISTOL. JOHN KERNODEMKEI, Joliet, Ill. Filed Jan. 2, 1919. Serial No. 269,202. 2 Claims. (Cl. 124—12.)



1. A toy pistol comprising a stock having a breech block with a perforation therethrough, a spring hammer pivoted in the stock with a firing end adapted to project through the perforation, a hinged barrel adapted for closing upon the breech block and a spring pressed arm extending within the barrel adjacent the breech block adapted for maintaining a missile seated in said perforation when the pistol is cocked.

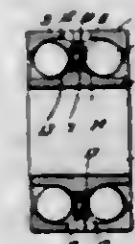
1,310,755. COMB AND BRUSH. JOHN KRAPOL, Helvetia, Pa. Filed Mar. 28, 1919. Serial No. 285,703. 2 Claims. (Cl. 132—35.)



2. A toilet article comprising a brush having a receiving opening in one edge thereof, a comb pivoted to the brush handle adapted for swinging movement into and out of said opening, the comb having a handle portion provided with a notch with the handle portion of the brush cut-away for obtaining access to the notch when the comb is in its closed position within the opening of the brush handle, the handle of the comb being provided with oppositely inclined depressions in one side face thereof longitudinally of the handle and at opposite sides of the pivot point thereof, the handle of the brush

having a recess in the wall of the receiving opening with a longitudinal slot through the backside of the brush handle, a resilient foot slidably mounted in said recess adapted for retraction at will and for projection within said depressions when the comb is at either extremity of its swinging movement and operating means for the foot projecting through said slot, adapted for engagement with the hand of the operator rearwardly of the brush handle.

1,310,756. ANTIFRICTION-BEARING. LOUIS LANO-MARE, Cincinnati, Ohio. Filed May 8, 1917. Serial No. 167,336. 11 Claims. (Cl. 64—36.)



1. An anti-friction bearing comprising inner and outer bearing members having a double ball race between them with two rows of balls in said races, and a restraining member placed between said rows of balls and having location therebetween in a circular direction free and independent of all other parts of the structure, said restraining member comprising two sections forming an annular recess between them, and means inclosed within said recess for forcing the sections into contact with the rows of balls.

1,310,757. CONTROL MECHANISM FOR MOTORS FOR AVIATION APPARATUS. EMILE LETOND, Meudon, France. Filed Nov. 13, 1917. Serial No. 201,844. 1 Claim. (Cl. 244—1.)



Control mechanism for motors for aviation apparatus comprising for the gas control a front handle and a rear handle for each motor, one within the reach of the pilot, a connecting rod uniting said handles, a tubular shaft, a crank thereon, a connecting-rod connecting said front handle to said crank, a second crank on said shaft, a connecting rod connecting said crank to the control lever of the motor gases, two handles for the control of the altimetric correction, one within the reach of the pilot, a connecting rod connecting said latter handles, a crank keyed on a tube, a connecting rod connecting one of said latter handles to said crank, said tube passing through the tubular member for controlling the gases, two cranks fixed on said tube, one opposite each motor and rods connecting said latter cranks to those of the altimetric correction cranks.

1,310,758. LOOM ATTACHMENT FOR OUTLET-BOXES. MATILDA B. LEVIN, San Francisco, Calif. Filed Oct. 9, 1918. Serial No. 257,429. 3 Claims. (Cl. 285—26.)

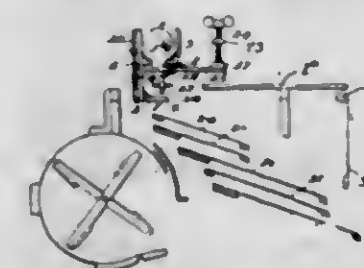
3. An attachment for securing looms within the loom openings of outlet boxes, the same comprising a sheet of metal stamped to form an elongated cup-shaped shell provided on its upper surface with a retaining seat adapted

to engage with the inner edge of a loom opening when applied thereto positioned relative to a loom for holding the



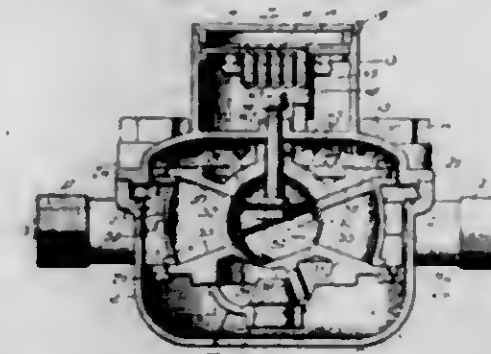
loom under compression within the loom opening of the outlet box.

1,310,759. GRAIN AND SEED SEPARATOR AND CLEANER. JOHN LUCAS, Stockton, Calif. Filed May 23, 1912. Serial No. 699,182. 11 Claims. (Cl. 130—15.)



3. In a device of the character described the combination of superimposed inclined shaking hurdles an inclined shaking shoe below and receiving from said hurdles and comprising upper and lower screens of different mesh each of said lower screens being adjustable in the direction of its length and an adjustable catch board intermediate said screens substantially as and for the purpose set forth.

1,310,760. SPEED-REDUCTION MECHANISM FOR METERS. EARL E. MCCOLLUM, Downers Grove, Ill. Filed Mar. 28, 1918. Serial No. 225,166. 5 Claims. (Cl. 74—14.)

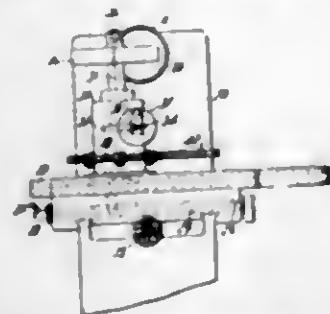


1. A speed reducing mechanism comprising a spur gear rotatable about an axis at right angles to its face; a rotatively-oscillatable, non-rotatable hollow ball open at one end; an internal gear in said ball, in mesh with said spur gear therein and having a different number of teeth, and oscillatable about the axis of said spur gear, whereby to rotatively displace said spur gear an extent proportional to the difference in the number of teeth in the respective gears for each cycle of oscillation of said internal gear.

1,310,761. METHOD OF AND MACHINE FOR CUTTING GEARS. ISAAC E. MCCrackEN, Pittsburgh, Pa., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 4, 1913. Serial No. 758,967. 54 Claims. (Cl. 90—4.)

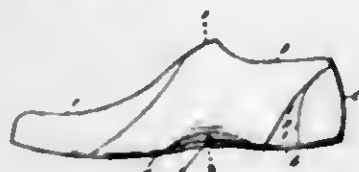
1. In a machine for cutting curved gear teeth, the combination with a blank carrier, means for imparting a rela-

tive rolling motion to the cutter and blank carrier, a cutter having a substantially annular cutting portion, the cutting portion being movable through the blank length-



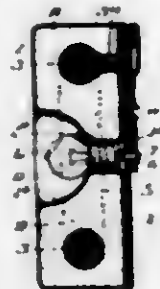
wise of the tooth to be formed in a path curved in opposite directions around the blank axis, and means for rotating the cutter through the blank during its rolling motion.

1,310,762. LAST. JOHN R. MCLAUGHLIN, Holbrook, Mass. Filed Nov. 22, 1917. Serial No. 203,376. 7 Claims. (Cl. 12-133.)



1. A last, having a toe portion, a heel portion, a plate connecting said toe and heel portions and forming the bottom of the last, said plate being operative to hold said portions in cooperative relationship with each other, and an intermediate last portion constructed to fit between said toe and heel portions to complete the last, said intermediate portion including the entire shank portion of the last above said plate and being constructed and arranged to be removed while the last is in the shoe, leaving said toe and heel portions in their normal positions in the shoe.

1,310,763. ELECTRIC LIGHTING-ASSEMBLY. ALBERT H. MARANDA, Pittsburgh, Pa. Filed Aug. 10, 1918. Serial No. 240,341. 6 Claims. (Cl. 240-8.5.)

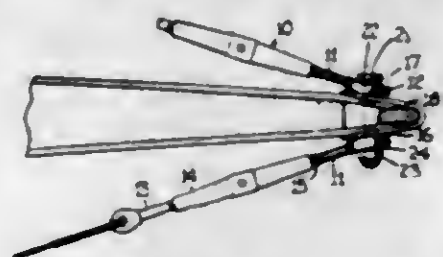


1. An electric lighting assembly comprising a battery a portion at least of one element being on the outer surface of the battery and said one element being formed with a socket to receive the base of a lamp, a lamp having a base adapted to fit in said socket and the part of the base which contacts with said socket constituting one of the terminals of the lamp, and means for connecting the other terminal of said lamp with, and disconnecting it from, the remaining element of said battery.

1,310,764. AIRPLANE WIRE-FASTENING. WILLIAM G. MEYER, Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation, a Corporation of New York. Filed Apr. 13, 1918. Serial No. 228,449. 8 Claims. (Cl. 244-31.)

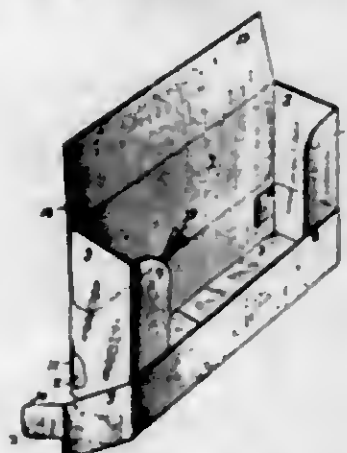
1. A fastening for airplane wire pulls including a bolt, a relatively flat eye-head provided at one end of the wire

pull through which the bolt passes, and rounded bearing surfaces formed respectively upon the bolt and eye-head,



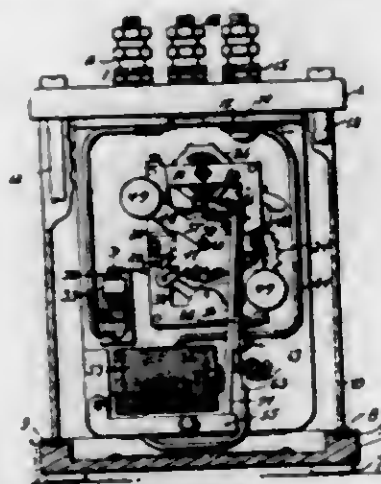
the bearing surfaces being in engagement one with the other whereby the angle of the wire pull may be varied without adjusting the bolt.

1,310,765. PAPER BOX. HAROLD L. MYERS, Morristown, N. J. Filed Nov. 9, 1918. Serial No. 261,766. 3 Claims. (Cl. 229-16.)



3. A paper box comprising a back, a pair of doubled sides, a pair of inwardly extending side wings, a doubled bottom, a doubled bottom wing extending upwardly from the doubled bottom across the side wings, flaps that extend rearwardly from the bottom wing along the doubled sides, means for locking said flaps, a foldable top carried by the back, and a foldable flap carried by said top.

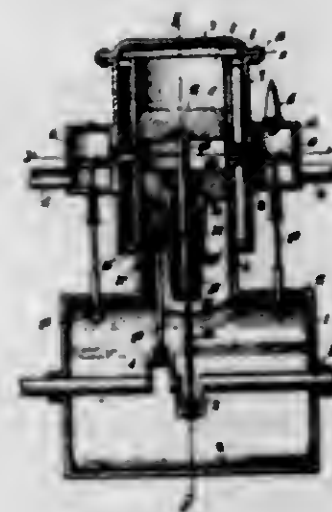
1,310,766. ELECTRICAL-SIGNAL FLASHER. WILL C. NEHRK, Denver, Colo., assignor to The Protective Signal Manufacturing Company, Denver, Colo., a Corporation of Colorado. Filed June 18, 1918. Serial No. 240,609. 10 Claims. (Cl. 177-340.)



1. In apparatus of the character set forth, the combination with a spring motor, of a rotatable cam driven thereby, an electrical make and break device intermittently operated by the cam, a rewinding device operating on the spring of the motor, an electromagnet for operating on the rewinding device, an electrical circuit includ-

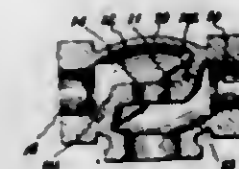
ing the electro-magnet, and a controller for the circuit operated by the rewinding device to intermittently cause the energization of the electro-magnet through said circuit.

1,310,767. ENGINE. LEWIS NEWELL, Union Hill, N. J. Filed July 6, 1918. Serial No. 243,021. 4 Claims. (Cl. 123-51.)



1. An engine of the class described comprising a cylinder, a suction piston head carried within said cylinder, an auxiliary piston head working below said suction piston head, said auxiliary piston head provided with a depending neck portion, a piston rod extending through said neck portion and supporting said suction piston head, said piston rod provided with a plurality of lugs formed upon the sides thereof, said neck portion provided with a plurality of grooves formed therein for constituting a track for said lugs, a link connected to the lower end of said piston rod, a crank shaft, said link connected to said crank shaft, and means connecting said crank shaft to said auxiliary piston.

1,310,768. METHOD OF MAKING OPEN CORES. ROBERT A. NUGENT, Somerville, Mass. Filed May 6, 1919. Serial No. 295,067. 2 Claims. (Cl. 22-196.)



1. A process of making open cores which consists in forming a fusible member in the shape of the opening in the completed core, then forming the core of the usual material about said member, so that said member is embedded in such initially formed core, then baking said core and fusing said member so that it will flow from the core, leaving the latter in its finished open condition.

1,310,769. AUTOMOBILE-LICENSE-TAG-FASTENING DEVICE. JOSEPH F. PARKER, Gardner, Mass. Filed Jan. 30, 1919. Serial No. 274,041. 1 Claim. (Cl. 40-125.)

The combination with a supporting bracket having a circular aperture and a number plate having an elongated slot, of a holding device comprising a flat head adapted to pass through said slot and a shank lying in said circular aperture, a spring encircling said shank in rear of said bracket, a washer between the spring and bracket, a washer on the outer end of the shank against

which the spring bears, and means for permanently holding said last named washer in position, said head having



a straight edge for bearing against the face of the number plate and a lug at one end of said edge for overlying the upper edge of the number plate.

1,310,770. PROCESS OF DECOMPOSING NATURAL SILICATES. BENJAMIN A. PEACOCK, Philadelphia, Pa., assignor, by mesne assignments, to Robert Gilchrist, New York, N. Y. Filed Aug. 30, 1917. Serial No. 188,990. 4 Claims. (Cl. 23-22.)

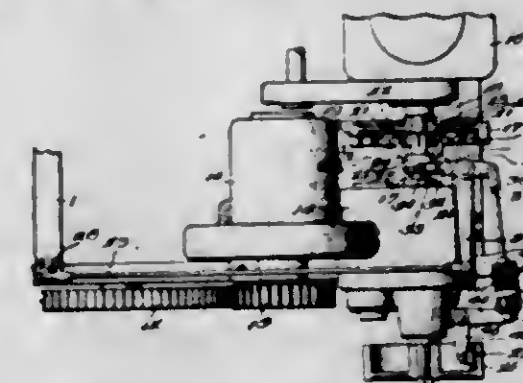
2. The process of decomposing a potassium bearing silicate which consists in mixing with said silicate in a finely divided condition a hydrous silicate mineral containing magnesium; adding to the mixture thus produced sufficient sulfuric acid to combine with all the potassium and magnesium present; and enclosing the reacting mass in a reaction chamber until the reaction has substantially ceased, substantially as described.

1,310,771. CORN-PLASTER. FRANK L. ROUSSEAU, Pittsburgh, Pa. Filed Jan. 31, 1918. Serial No. 214,580. 1 Claim. (Cl. 128-153.)



A corn plaster comprising a flexible strip having its forward end portion of materially greater width than the remaining portion thereof, said narrow portion disposed centrally with respect to said wider portion and of greater length than the latter, said narrow portion having the inner face at its rear provided with an adhesive and that portion of its inner face between said adhesive and the inner edge of said wide portion free of adhesive, a shield secured to said wider portion and of a diameter less than the length of said portion and greater than the width of said portion, said shield secured to said wider portion whereby the latter will project forwardly from the shield, said projecting portion having its inner face coated with an adhesive.

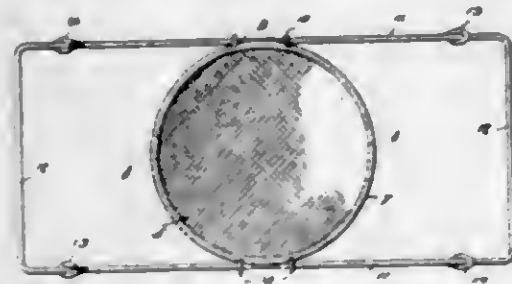
1,310,772. SELF-PROPELLED VEHICLE. GEORGE W. SWARTZ, Peoria, Ill., assignor to Acme Harvesting Machine Company, Peoria, Ill., a Corporation of West Virginia. Filed May 8, 1918. Serial No. 233,251. 1 Claim. (Cl. 74-46.)



A self-propelled vehicle including an engine having a fly-wheel which constitutes one element of a clutch mech-

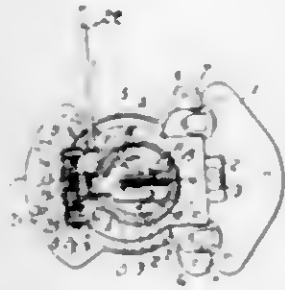
anism; vehicle running gear in separable relation to said engine; a second clutch mechanism element forming a part of said running gear; a clutching collar for engaging the aforesaid elements of the clutch mechanism to couple the engine with the running gear; a brake drum driven by the running gear; a braking element applicable to the brake drum; an operating lever connected with said clutch and brake mechanisms; an arm connected with said lever; a second arm in actuating relation to said clutching collar and fixedly connected with the first arm; a third arm also fixedly connected with the first arm; a rod connected with the third arm; a crosshead connected with said rod; a stirrup having one end operatively connected with said braking element; and a spring interposed between the other end of the stirrup and the aforesaid crosshead.

1,310,773. STRAINER. WALTER BRUCE WILLS, Baltimore, Md. Filed Dec. 6, 1918. Serial No. 265,515. 1 Claim. (Cl. 210-16.)



A strainer of semi-spherical form having a reinforcing band encircling its flat side and said band having a rolled edge forming a closed bead, a pair of stiffening wires embedded in the bead each of a length less than half the circumference of the strainer and oppositely disposed with relation to the flat side thereof, whereby a space is left between the ends of said wires, the ends of the wires projecting from said bead and bent to form a pair of loops at opposite sides of the strainer, and a supporting frame adapted to slidably engage said loops.

1,310,774. LOCK. JOHN WOLF, Topeka, Kans. Filed May 7, 1919. Serial No. 295,363. 8 Claims. (Cl. 70-115.)

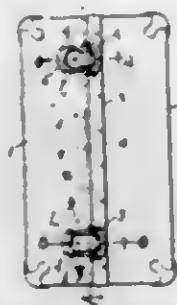


1. A lock comprising two sections movable into position for locking, a spring-controlled leaf mounted on one section and foldable against the opposite section, the latter section being provided with an opening, a latch-bolt casing carried by the leaf of the first section and receivable by the opening of the opposite section for a locking position of the sections, a spring-controlled latch-bolt in the casing carried by the leaf, and foldable therewith to and from the opposite section, and a keeper on the last mentioned section movable across the path of movement of the latch-bolt to and from the opposite lock section.

1,310,775. LOCK. JOHN WOLF, Topeka, Kans. Filed May 8, 1919. Serial No. 295,564. 3 Claims. (Cl. 70-115.)

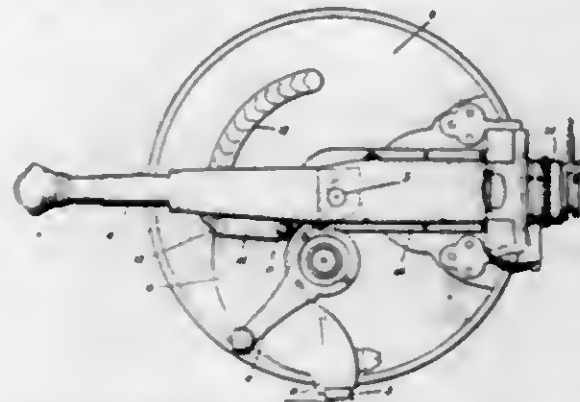
2. In combination with a trunk provided with two sections in hinged relation and abutting with their free edges for a closed position of the trunk, a lock comprising

a socket member on one section and a hinge-leaf on the opposite section adapted to enter the socket of said socket member, a latch-lock removed from the first mentioned lock and comprising a socket member on one of the trunk sections and a hinge-leaf on the opposite section adapted to enter the socket of the socket member, a latch-bolt on the hinge-leaf, the socket members and hinge-leaves of the respective locks being disposed on



corresponding sections of the trunk, a keeper, and an operating rod on the inside of the trunk leading from the keeper to the first mentioned lock, the socket member of the first lock and the trunk wall being provided with a common opening through which the rod may be seized from a point outside the socket-member aforesaid with an opening of the leaf locked thereto, and the latch-lock unlocked by a movement of the rod in proper direction.

1,310,776. FINDER FOR MOVING-PICTURE CAMERAS. CARL E. AKELEY, New York, N. Y., assignor to Akeley Camera Inc., New York, N. Y., a Corporation. Filed July 23, 1918. Serial No. 246,280. 5 Claims. (Cl. 88-1.5.)

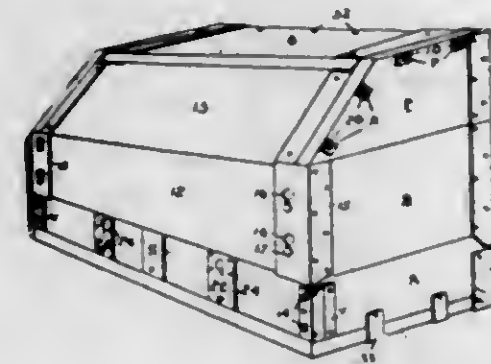


1. The combination with a motion picture camera movable in a vertical plane about a fixed point of support of a slider tube composed of two sections one stationary and the other movable with the camera, and means therein for deflecting the light rays from and through the finder lens at angles varying with the vertical displacement of the two sections relatively to each other and axially through the stationary section.

1,310,777. COLLAPSIBLE SHIPPING-CASE. GEORGE A. HENDER, Pittsburgh, Pa. Filed Dec. 4, 1917. Serial No. 295,319. 9 Claims. (Cl. 217-15.)

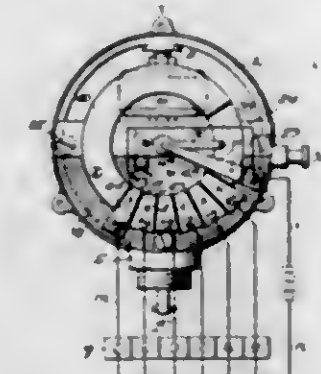
1. A collapsible shipping case comprising front, rear and side walls and a bottom, each of said walls consisting of a lower, intermediate and an upper member, said lower members of the side and rear walls fixedly secured to said bottom, angle-irons projecting from the forward ends of the lower members of the side walls and overlapping the ends of the lower member of the front wall, means carried by and projecting from the intermediate and upper members of the side walls and overlapping and engaging with the intermediate and upper members of the rear wall for detachably connecting said members together, means carried by and projecting inwardly from the intermediate members of the side walls overlapping and engaging with the intermediate member of the front wall for detachably connecting said members together,

means carried by said angle-irons engaging in the lower member of the front wall for detachably connecting said member to the lower members of the side walls, means extending through the upper members of the side walls and engaging in the upper member of the front wall for



detachably connecting said members together, a top member arranged between the upper members of the side walls, means carried by the upper members of the side walls for detachably connecting the top member therewith, and means for hinging the intermediate members of the side walls to the lower members of said walls.

1,310,778. SPEED-SIGNALING SYSTEM. FRANK BRUCE BLAKEMORE, Chicago, Ill. Filed Oct. 12, 1919. Serial No. 125,166. 5 Claims. (Cl. 175-355.)

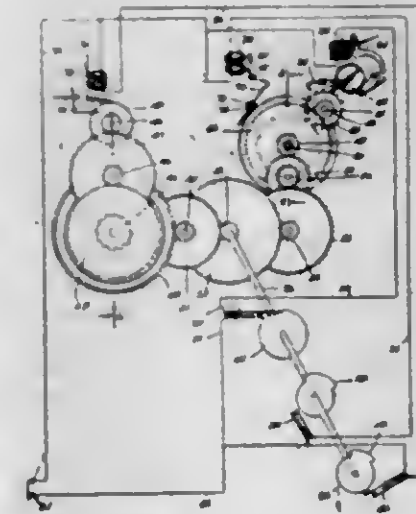
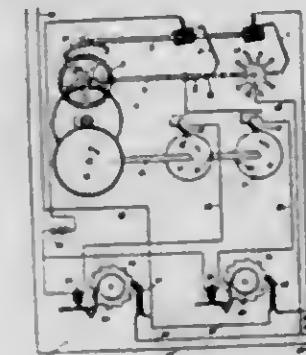


1. In a speed signaling system for vehicles, the combination of a contact arm free at all times to be moved in accordance with the speed of the vehicle, a plurality of contacts arranged to be successively engaged by said arm, electrical circuits successively closed by the engagement of the arm with said contacts and said circuits each including a speed signaling device, and means for maintaining closure of one of said circuits after primary closure thereof whereby the corresponding speed signaling device will be maintained in speed indicating condition.

1,310,779. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BRYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed May 21, 1918. Serial No. 235,813. 7 Claims. (Cl. 58-24.)

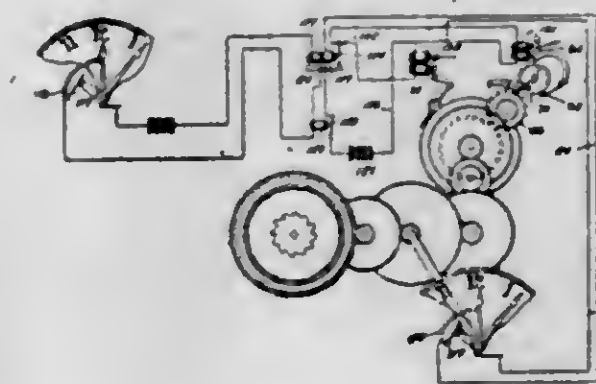
7. The synchronizing clock system herein described, comprising in combination means in the master clock and cooperative means in the second clock for establishing for definite and prolonged intervals electrical relations in the

secondary clocks which, during such periods as said intervals may overlap, will retard the secondary clocks if



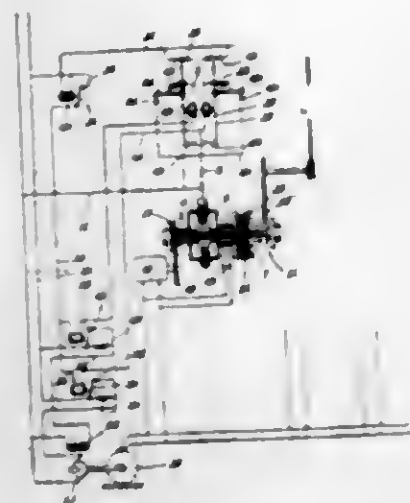
they be too fast or accelerate their rate if they be too slow, until such clocks are brought into synchronism with the master clock.

1,310,780. METHOD OF SYNCHRONIZING CLOCKS. JAMES W. BRYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed Nov. 10, 1918. Serial No. 263,132. 6 Claims. (Cl. 58-24.)



3. The method of synchronizing a secondary clock with and by means of a master clock, which consists in establishing in the secondary clock by the conjoint action of the master and the secondary clock at predetermined periods of definite and substantial duration and in fixed time relation as indicated by the hands of the respective clocks, electrical relations which when the said time relations are disturbed and the secondary clock is too fast or too slow, will by their conjoint effect retard or accelerate the rate of the secondary clock until it is brought into synchronism with the master clock.

1,310,781. SYNCHRONOUS CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed June 22, 1918. Serial No. 241,357. 2 Claims. (Cl. 58-24.)



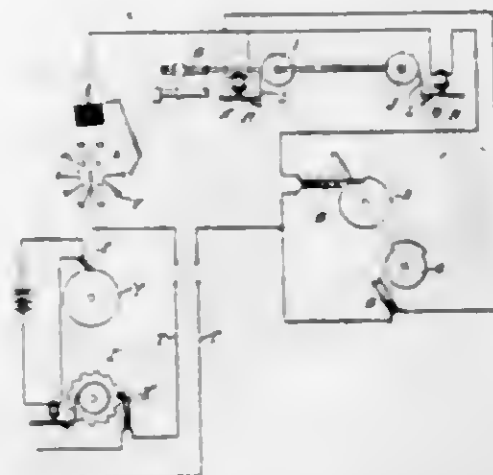
1. In a system of the kind described the combination with a source of continuous current, of a direct current motor operated thereby; means for varying its speed of rotation; an alternating current generator driven by said motor; a synchronous motor operated by said generator; a master clock; a differential operated by the clock on the one hand and the synchronous motor on the other hand; circuits and circuit connections therein controlled by the operation of the differential due to variations in the relative speed of the master clock and the synchronous motor; and means included in the thus-controlled circuits for controlling the speed varying device of the direct current motor whereby the speed of the latter may be maintained uniform, as and for the purposes stated.

1,310,782. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y. Filed Sept. 24, 1918. Serial No. 255,418. 4 Claims. (Cl. 58-32.)



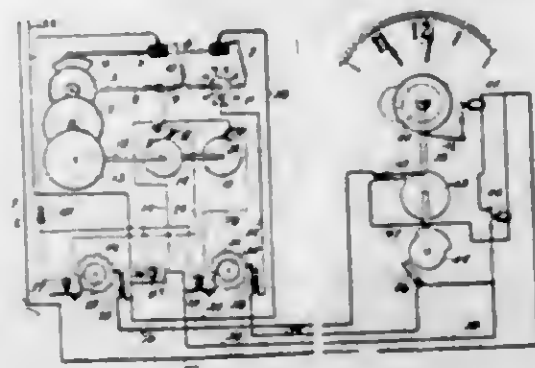
2. The means herein described for stopping the hands of a secondary pendulum clock without interfering with the swing of the pendulum consisting of a differential gear in the driving train, one member in mesh with the pendulum driving mechanism the other with a ratchet wheel, and means for rotating said ratchet wheel backward to stop the clock hands without interfering with the pendulum swing.

1,310,783. SYNCHRONIZING CLOCK. JAMES W. BAYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed Sept. 24, 1918. Serial No. 255,417. 3 Claims. (Cl. 58-31.)



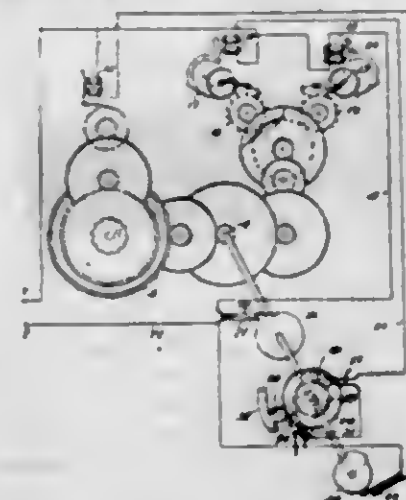
3. The combination with a secondary clock of a spindle which by its rotation in opposite directions lengthens or shortens the pendulum, ratchets and pawls and electro-magnets for operating said pawls and thereby turning the spindle in opposite directions, circuit controllers operated by the clock mechanism and adapted to be closed thereby for given periods, circuit connections and a device for developing impulses of current between the said controllers and the electro-magnets, whereby current when received through a closed controller will be transmitted as impulses therefrom to the magnet connected therewith.

1,310,784. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y. Filed Oct. 4, 1918. Serial No. 256,799. 4 Claims. (Cl. 58-24.)



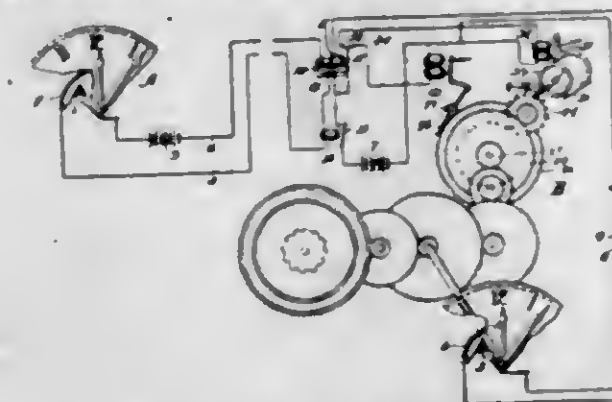
1. In a clock system comprising a master controlling and one or more secondary controlled clocks, the combination with each secondary clock of circuit controllers closed for given periods by and in definite relation to the time as indicated by the hands of said controlled clock, means in the master clock for sending driving impulses of current to the secondary clocks, and circuit controllers also in the master clock which are closed for definite and predetermined periods to send, one a continuous current, the other a rapidly intermittent current, to the secondary clocks, and circuit connections between said clocks, whereby when the periods of closure of the controllers in the master and secondary clocks overlap in time, the secondary clocks will be stopped by the continuous current or rapidly advanced by the intermittent current from the master clock according to whether the said clocks be too fast or too slow.

1,310,785. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y. Filed Oct. 4, 1918. Serial No. 256,800. 8 Claims. (Cl. 58-24.)



8. In a synchronizing clock system, the means for bringing into synchronism with the master clock those secondary clocks that may be too slow comprising in combination means in the secondary clock for advancing the hands at a rate greater than normal, a circuit-controller for actuating at definite intervals such means, and means for prolonging the operative effect of such circuit-controllers so that the relatively higher rate of advance of the hands may, during the periods of their accelerated movement, bring the clock up to synchronism.

1,310,786. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed Nov. 16, 1918. Serial No. 202,755. 4 Claims. (Cl. 58-24.)

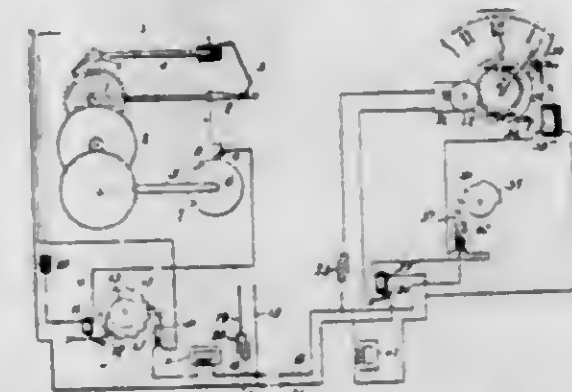


1. In a synchronizing clock system, the combination with a master clock, a circuit, one or more secondary clocks connected with said circuit and adapted to be maintained in synchronism with the master clock, and local circuits in said secondary clocks, of means in the master clock for sending to line for any predetermined intervals a current varying in a definite manner, means in the secondary clock or clocks for sending over the local circuit a corresponding current for the same interval, means actuated by the said two currents and normally neutralized thereby when the said two currents are in phase, and means controlled by the preponderating effect of either of said currents when out of phase to retard or to accelerate the secondary clock or clocks.

1,310,787. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed Nov. 16, 1918. Serial No. 202,756. 2 Claims. (Cl. 58-24.)

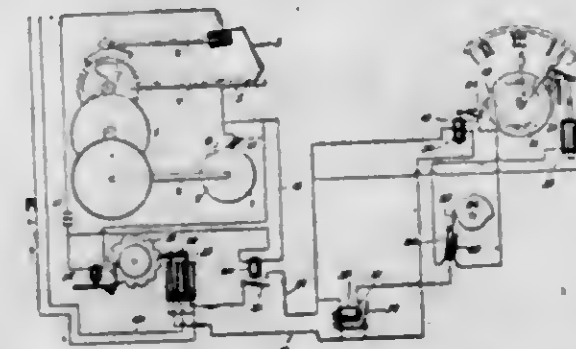
1. In a synchronizing clock system in which the secondary clocks are operated by alternating currents, the

combination with a master clock which sends over the alternating current line a direct current for predetermined intervals of definite duration, of one or more secondary clocks, means therein for retarding and means for accelerating their movements, circuit controllers oper-



ated by the secondary clocks for connecting said devices with the line at predetermined intervals in fixed relation to the time as indicated by the hands of said clocks, and means for permitting or preventing either an alternating or a direct current to flow over such parts of the circuit as may be required.

1,310,788. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BAYCE, Binghamton, N. Y., assignor to International Time Recording Company of New York, a Corporation of New York. Filed Nov. 16, 1918. Serial No. 202,757. 2 Claims. (Cl. 58-24.)

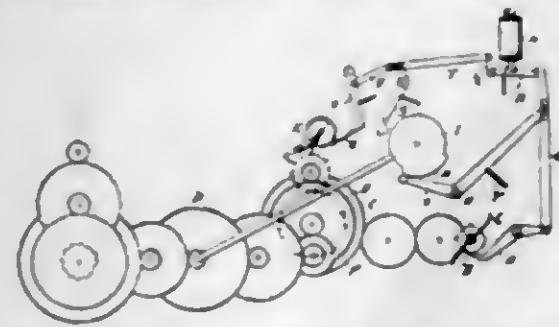


1. In a synchronizing clock system the combination with a master clock adapted to send for predetermined intervals of definite duration current impulses of given direction over the line for the operation of secondary clocks, of one or more secondary clocks each containing means for retarding and means for accelerating its rate of movement, two circuit controllers which bring said means into operative relation to the line circuit at definite intervals in fixed relation to the time as indicated by the hands of the secondary clock, and means dependent upon the direction of the impulses over the line for connecting said line circuit with either the means for retarding or with the means for accelerating the secondary clock, whereby the latter if out of synchronism with the master clock will be retarded if too fast or accelerated if too slow.

1,310,789. CLOCK-SYNCHRONIZING DEVICE. JAMES W. BAYCE, Binghamton, N. Y., assignor to The International Time Recording Company, of New York, a Corporation of New York. Filed May 8, 1919. Serial No. 203,503. 5 Claims. (Cl. 58-24.)

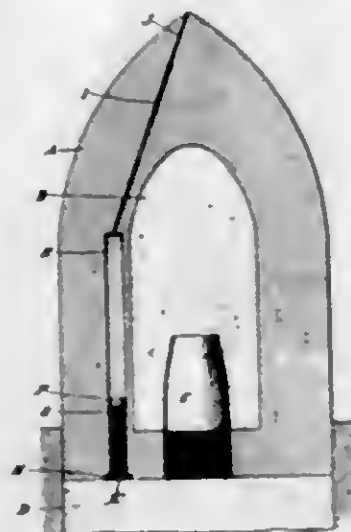
1. A synchronizing mechanism for secondary clocks comprising in combination a clock train, means for retarding and means for accelerating its rate, an electro-magnet adapted to be energized for definite periods of predetermined extent by a master clock, an armature for said magnet and means operative for definite periods in

fixed relation to the time as indicated by the secondary clock to cause said armature to operate the retarding or



the accelerating means when the normal relations of such periods to the periods of energization of said magnet are disturbed.

1,310,790. MUNITION-PROJECTILE. CHARLES ARBOTT BUSH, Brooklyn, N. Y. Filed Dec. 8, 1918. Serial No. 135,740. 8 Claims. (Cl. 102-29.)



1. A munition projectile carrying a reservoir to hold a lubricant, a connection between said reservoir and the surface of the projectile, and means for automatically forcing the lubricant from said reservoir to the surface of the projectile during its flight.

1,310,791. WIRE-LOOPING DEVICE FOR PIANO-STRINGS. ANTONIO COZZO, New York, N. Y., assignor to Rudolph C. Koch, New York, N. Y. Filed Feb. 24, 1919. Serial No. 278,512. 5 Claims. (Cl. 140-73.)



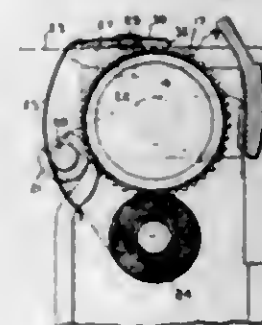
1. In wire looping mechanism of the character designated, the combination with a rotatable spindle and twisting hook, of means for clamping the main strand of a wire, a platen formed with a socket for the reception and retention of the otherwise free lateral extremity of the bent end of the wire, and means for applying pressure to said lateral extremity of the wire during twisting operations, for the purpose described.

1,310,792. DETONATING-FUSE. GEORGE DE LAVAL, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 17, 1917. Serial No. 186,675. 5 Claims. (Cl. 102-39.)



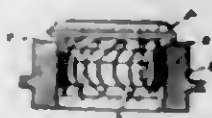
1. In an impact fuse for explosive shells, a primer, a firing pin, a plunger to which the base of the firing pin is attached, locking members adapted to be unlocked by centrifugal force and constructed and arranged normally to lock the plunger and firing pin in inoperative position, the plunger and the pin being free to move out of inoperative position when the locking members are released, and spring devices constructed and arranged normally to prevent the firing pin striking the primer when the plunger moves out of inoperative position during flight but adapted to be overcome by the impact on striking.

1,310,793. AUTOMATIC FILLING-REPLENISHING LOOM. WILLIAM A. DEMPSEY, Scranton, Pa., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 19, 1918. Serial No. 250,450. 7 Claims. (Cl. 139-85.)



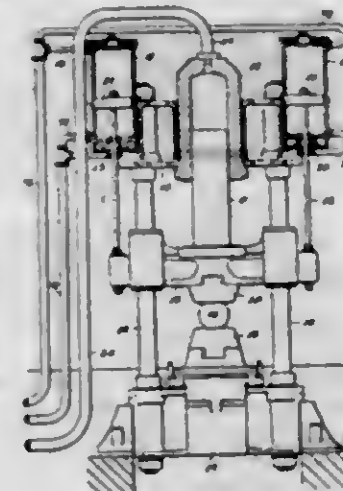
1. In a loom comprising weaving mechanism and including a take-up roll and means for severing the filling beyond the edge of the web of cloth, means for preventing filling ends thus severed from lodging upon the bearing of said take-up roll including a guard plate overlying the end of said roll and adapted to deflect the falling severed ends away from said bearing.

1,310,794. NECK-BEARING. SVEN AUGUST ESKILSON, Stockholm, Sweden, assignor to Aktiebolaget Salenius Verkstäder, Stockholm, Sweden, a Corporation of Sweden. Filed May 14, 1919. Serial No. 297,111. 2 Claims. (Cl. 84-48.)



1. In a neck bearing the combination of a sleeve, an outer bearing surface, and a yielding ring-shaped member inclosing the said sleeve and consisting of a wire or strip of metal or the like bent into a zigzag shape, the parts extending in an oblique direction peripherically from the bends connecting the parts, to the intermediate portions of the parts, and bearing at the ends against the said sleeve and at the intermediate portion against the said bearing surface or vice versa.

1,310,795. HYDRAULIC PRESS, SHEARS, AND THE LIKE. THOMAS WILTON HANE, Sheffield, England, assignor to Dary Brothers, Limited, Sheffield, England. Filed Nov. 4, 1918. Serial No. 261,132. 6 Claims. (Cl. 138-17.)



2. In hydraulic pressure-utilizing apparatus, the combination of a hydraulic cylinder, a ram fitted to reciprocate therein, means for admitting hydraulic pressure to said cylinder for causing the ram to perform its working stroke, an elastic fluid cylinder, a double-acting piston fitted to reciprocate therein and connected to said ram, a passage for admitting high-pressure elastic motive fluid to one end of said elastic fluid cylinder for producing retractive movement of the ram, a passage for discharging elastic motive fluid from the other end of said elastic fluid cylinder to exhaust, and means for opening both of said passages concurrently during such retractive movement and, alternatively, connecting said passages together in a closed circuit during the idle portion of a working stroke of said ram, for the purpose set forth.

1,310,796. TEA-CARTRIDGE. BENJAMIN HIRSCHHORN, New York, N. Y., assignor to National Tea Bag Manufacturing Co., New York, N. Y., a Firm. Filed Nov. 9, 1918. Serial No. 261,867. 3 Claims. (Cl. 53-3.)



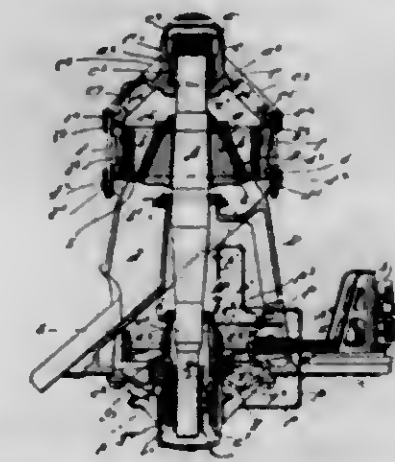
1. A device for extracting essence from tea-leaves or coffee, comprising a bag of textile fabric having its mouth drawn into folds, a metal strip engaging and compressing said folds for closing the mouth of said bag, and a suspending string attached by said strip to said bag.

1,310,797. EXTENSION-WINDOW. CARL SEVERIN JOHANSSON, Montclair, N. J. Filed May 4, 1918. Serial No. 232,580. 6 Claims. (Cl. 20-40.)



1. A window including a casing a frame hinged at one edge thereto adapted to swing out from the casing, a sash hinged to the outer extremity of said first frame and a second sash outside of said first sash and hinged thereto.

1,310,798. GYRATORY CRUSHING APPARATUS. JOSEPH E. KENNEDY, New York, N. Y. Filed Oct. 23, 1917. Serial No. 198,923. 6 Claims. (Cl. 83-10.)



6. In crushing apparatus of the character designated, the combination with the crushing chamber and gyratory shaft, of a closure plate formed with feed openings and closures and covering the upper parts of said crushing chamber and said gyratory shaft, for the purpose described.

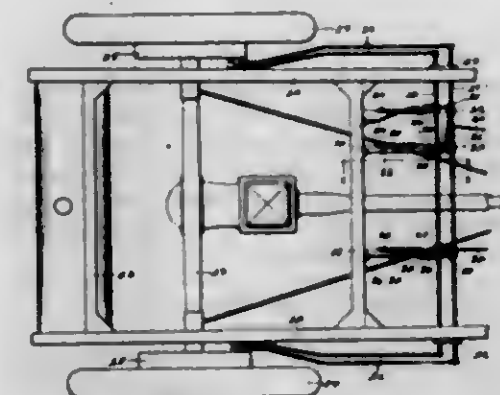
1,310,799. [WITHDRAWN.]

1,310,800. FRUIT-TRAY. ALFRED M. LANE, St. Louis, Mo., assignor to Monarch Metal Weather Strip Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 30, 1918. Serial No. 256,200. 7 Claims. (Cl. 34-17.)



1. A fruit tray comprising an open main frame having an outwardly extending top portion, said portion having a groove in its underside, an openwork bottom extending across the bottom of said frame and having its marginal portions turned up along the outside face of the frame, and a frame arranged outside of said main frame with its upper margin extending into said groove and clamping the marginal portions of the openwork bottom to said main frame.

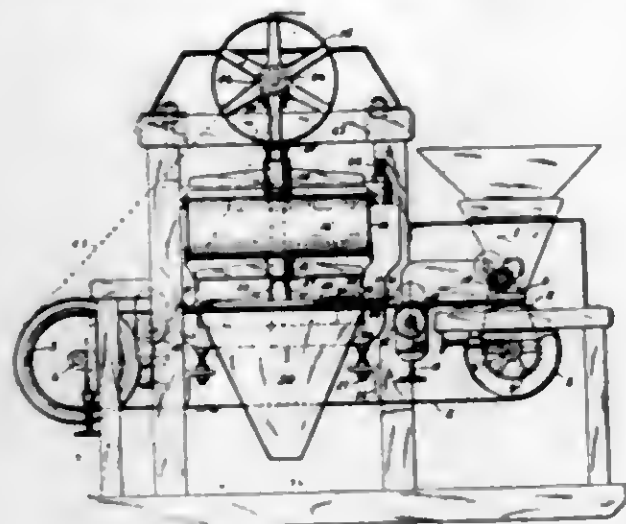
1,310,801. BRAKE-OPERATING MECHANISM. CHARLES W. MCKINLEY, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1917. Serial No. 199,091. 6 Claims. (Cl. 21-8.)



5. In a motor vehicle, the combination with a frame, of a plurality of suitably journaled brake shafts extending

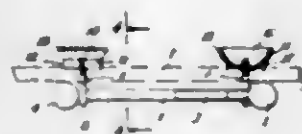
transversely of the frame, a spring member between said shafts intermediate the side members of the frame, and an arm connecting said spring member with said frame.

1,310,802. MAGNETIC SEPARATOR. ROBERT A. MANGOLD and GEORGE H. FORBES, Milwaukee, Wis., assignors to Dings Magnetic Separator Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 30, 1917. Serial No. 158,586. 2 Claims. (Cl. 83-71.)



1. A magnetic separator, including the combination with a main horizontally disposed conveyor for the material to be separated, of a magnet having segmental pole pieces and a cooperating inductor magnet arranged to establish a magnetic field through the conveyor, and a cross conveyor of thin, non-magnetizable material having an annular depressed portion, traversing the magnetic field immediately above the first mentioned conveyor and substantially in contact with the magnet, said cross conveyor comprising a revolving disk provided with a flat annular carrier portion having a segment in the magnetic field insufficient in thickness to afford the requisite mechanical strength, and reinforced by an outer annular rim adapted to travel in close proximity to said pole pieces, whereby the carrier portion of the disk may be utilized to convey magnetizable material from the main conveyor while maintaining a magnetic gap of minimum dimensions and maximum intensity.

1,310,803. MEDAL-HOLDER. ALBERT MACRER, New York, N. Y. Filed Mar. 14, 1910. Serial No. 282,631. 5 Claims. (Cl. 24-3.)

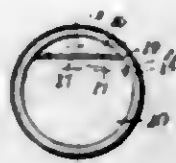


1. In a medal holder, the combination of a sleeve having an enlarged end, a headed pin, adapted to slidably fit in said sleeve and to be frictionally held therein, and means adapted to be detachably secured to a garment, having loops through which said sleeve and pin may be removably inserted, for detachably securing said sleeve and inclosed pin to the garment.

1,310,804. BUTTON AND PIN THEREFOR. WALTER H. PHELPS, Newark, N. J. Filed June 12, 1918. Serial No. 239,615. 3 Claims. (Cl. 40-1.5.)

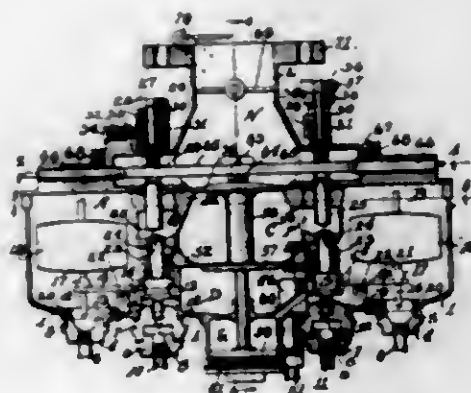
3. A button having an inwardly directed flange at the rear thereof and having a pin member secured under said

flange, said pin member having a resilient pin portion slightly offset rearwardly from the plane of said flange and adapted to be telescoped to permit securing its end



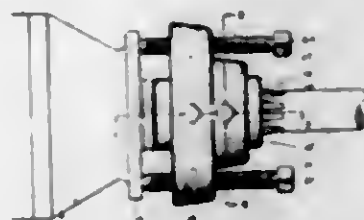
under said flange or removing same therefrom at will for the purpose of securing the button to or removing same from a garment.

1,310,805. MULTIFLUID, MULTIJET CARBURETER. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Finkel & Kropf Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1913. Serial No. 788,821. 4 Claims. (Cl. 201-18.)



1. In a carbureter of the class described a plurality of float chambers, a common mixing chamber therefor, a plurality of simultaneously actuatable needle valves, puppet valves in said mixing chamber, connections on said puppet valves adapted to operate all of said needle valves, a rotatable element for establishing communication between the respective float feed chambers and said mixing chamber, a needle valve for controlling the flow of a fluid to one of said needle valves, mechanism connected on said rotatable element adapted to close said latter needle valve, and a throttle valve for controlling the flow of mixture from the carbureter.

1,310,806. TOOL FOR REMOVING SHAFT-COUPPLINGS. GRANT W. ROLLINS, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 5, 1917. Serial No. 200,319. 4 Claims. (Cl. 29-85.)



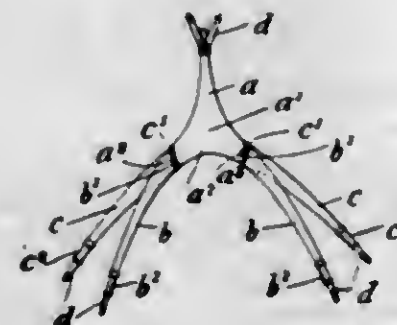
1. A device of the class described, comprising a ring, provided with a plurality of radially extending set screws carried thereby and a plurality of set screws extending parallel to the axis of said ring and spaced from each other circumferentially of the ring.

1,310,807. STEAM-ROILER. WILLIAM L. SCOTT, Montreal, Quebec, Canada. Filed Dec. 4, 1916. Serial No. 135,038. 2 Claims. (Cl. 122-73.)



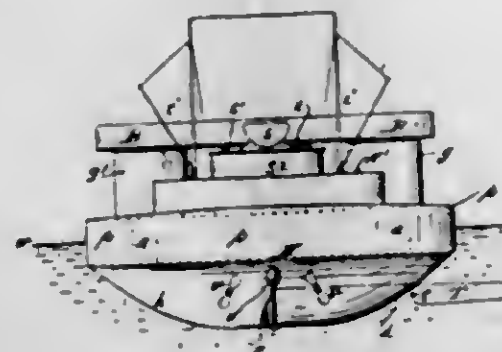
1. In a horizontal tubular boiler, the combination with the barrel, fire box and a steam space above the fire box, of an auxiliary boiler barrel projecting into the fire box, a leg equal in extent to the auxiliary barrel and communicating with the said auxiliary barrel, the main barrel and the steam space above the fire box, the said auxiliary barrel being of less diameter than the main barrel, a series of tubes within the said main barrel and communicating with the fire box outside of the auxiliary barrel and an inner series of tubes within the said main barrel and extending through the auxiliary barrel and communicating with the fire box at the end of the said auxiliary barrel.

1,310,808. SUSPENDERS. EDWARD SHANKA, Belfast, Ireland. Filed Oct. 23, 1910. Serial No. 127,286. 2 Claims. (Cl. 241-12.)



1. Suspenders comprising a back member adapted to fit in collar fashion over the back and top of the shoulders of the wearer, and a pair of members connecting with each front end of said back member immediately adjacent the shoulders, and one member of each pair being adapted to be brought near to the center of the top of the trousers.

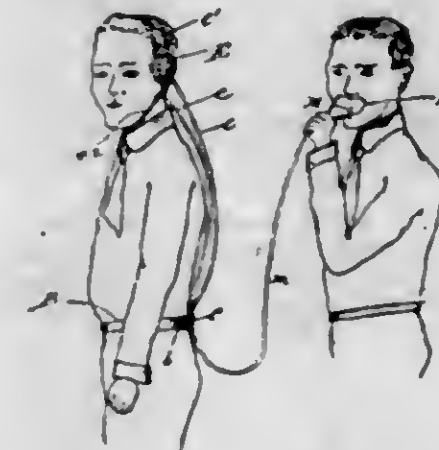
1,310,809. MARINE CRAFT. JAMES SMITH STOCKMAN, Brooklyn, N. Y. Filed May 14, 1918. Serial No. 234,427. 5 Claims. (Cl. 114-1.)



1. A marine craft of the character designated, formed with a hull bottom the convergent sides of which are

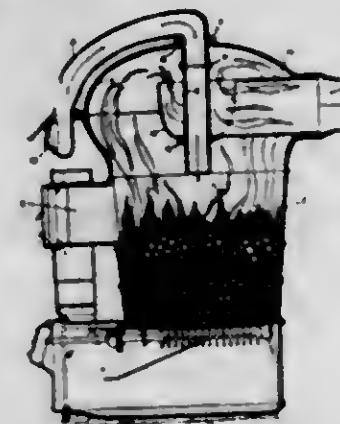
curved obtusely, said hull being formed with a circumscribing zone of compacted fibrous material extended upward from the convergent sides of the hull and disposed above and below the water line.

1,310,810. MEANS OF COMMUNICATION BETWEEN AVIATORS. GEORGE S. THOMPSON, Hockessin, Del. Filed Oct. 15, 1918. Serial No. 235,193. 1 Claim. (Cl. 181-25.)



Means for vocal communication substantially such as described, comprising ear shields, a speaking trumpet, a body belt, a tubular coupling piece attached to said belt, flexible tubes connecting the ends of said coupling with said ear shields, means for securing said ear shields upon the head of a listener, and a flexible tube connecting the other end of said coupling with said speaking trumpet.

1,310,811. FURNACE. JAMES M. TRIGGS and WILLIAM D. REPAIR, Huntington, Ind., assignors to The Majestic Company, Huntington, Ind., a Corporation of Indiana. Filed Mar. 22, 1918. Serial No. 223,907. 4 Claims. (Cl. 126-112.)



1. A furnace having a fire-pot and a surmounting dome, a smoke bowl within said dome and having an outlet flue, and an air introducing pipe extending down into the dome from without the same through said bowl and terminating adjacent to the top of the fire-pot.

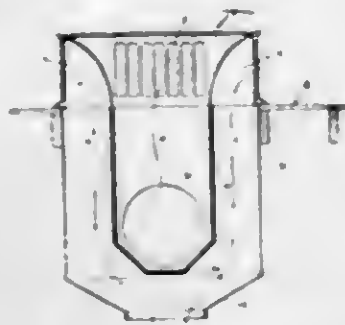
2. In a furnace, a fire-pot, a dome forming a combustion chamber and having an exit flue, a smoke bowl within said dome and having a flue leading therefrom and connecting with said exit flue, and an air introducing pipe extending down through the central portion of said dome, from without the same and through said bowl, and terminating adjacent to the top of the fire-pot, said bowl being supported by said pipe.

3. In a furnace, a fire-pot, a dome forming a combustion chamber and having an exit flue, an air introducing pipe extending over one side of said dome and thence down

through the top central portion thereof into the combustion chamber and terminating adjacent to the top of the fire-pot, at least a portion of said pipe being rotatable relative to the dome, and a smoke bowl encircling said pipe within the dome in spaced relation to its top and having a flue extending therefrom in communication with said exit flue.

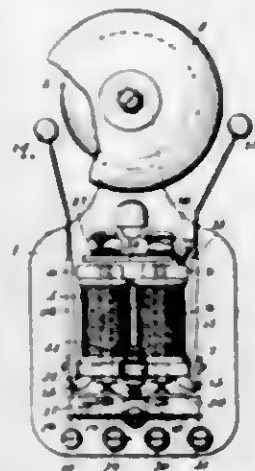
4. In a furnace, a fire-pot, a dome forming a combustion chamber and having an exit flue, an air introducing pipe extending at one side of said dome over its top and thence down through the center thereof for rotary adjustment relative thereto, a pipe section extending down into the combustion chamber from said first pipe and terminating adjacent to the top of the fire-box, said section having a shoulder adjacent to its lower end, and a smoke bowl encircling said pipe section in spaced relation to the dome and resting on said shoulder, said bowl having a flue extending from one side thereof to said exit flue.

1,310,812. DUPLEX-REGISTER BOOT. JAMES M. TRIGGS and WILLIAM D. RADSPUR, Huntington, Ind., assignors to The Majestic Company, Huntington, Ind., a Corporation of Indiana. Filed Mar. 22, 1918. Serial No. 223,968. 1 Claim. (Cl. 98-49.)



A boot of the class described, comprising a casing open at its top and having a downwardly converging bottom with an outlet opening at its center, partitions disposed in spaced relation transversely of said casing and connected at their lower ends in vertically spaced relation to said bottom opening, said partitions being joined at their side edges to opposite side walls of said casing to co-operate with the casing to form a central passage and opposite side passages all open at their tops with the side passages extending under the bottom of the central passage and communicating with said bottom opening, said central passage having a side inlet opening near its bottom intermediate said side passages.

1,310,813. SIGNAL. ALBERT M. WARD, Rochester, N. Y. Filed Oct. 21, 1918. Serial No. 259,073. 5 Claims. (Cl. 177-7.)



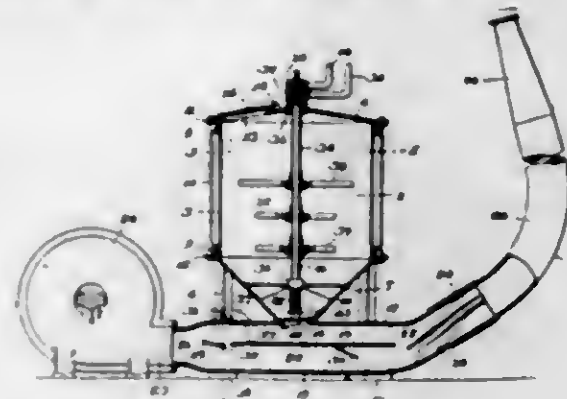
1. In a signal, the combination with two coils, independently movable armatures for the coils, and two independently controllable circuits, one for each armature, of a single make-and-break device common to the two circuits and controlled by both of the armatures.

1,310,814. PHONOGRAPH-DISK-RECORD-HOLDING CABINET. WILLIAM M. WARD, Wyandotte, Mich. Filed Mar. 24, 1919. Serial No. 284,767. 6 Claims. (Cl. 211-16.)



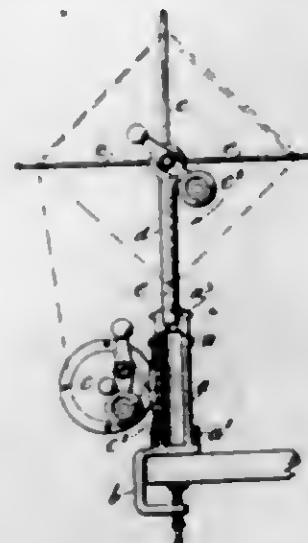
3. The combination with a cabinet for receiving a series of records, of a slotted panel forming a wall of said cabinet and movably attached thereto so as to be adjustable from a position where the records are all concealed in the slots to a position where a segment of each is exposed, and resilient means for closing the slots in the former position.

1,310,815. DUSTING-MACHINE. BERT L. WEAVER, Harrisburg, Pa. Filed Aug. 1, 1918. Serial No. 247,715. 8 Claims. (Cl. 43-14.)



1. In a dusting machine, the combination of a casing having a single inlet passage, a single outlet passage, and two separate passages having independent communication at the respective ends thereof with said inlet passage and said outlet passage, means operative to force air through said passages, and a dust hopper formed independently of said passages and having a discharging opening in communication with one of said separate passages between said inlet passage and said outlet passage.

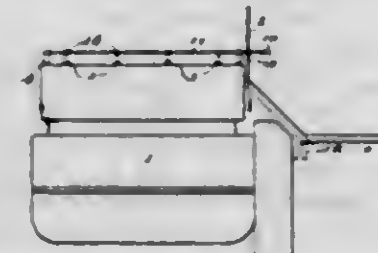
1,310,816. REWINDING-MACHINE FOR FISHING-LINES. LOUIS T. WEISS, Brooklyn, N. Y. Filed Dec. 16, 1918. Serial No. 266,918. 1 Claim. (Cl. 242-104.)



A vertical standard provided at its lower end with a clamp for securing it in position, with a sliding ring for securing a fishing reel thereon, and at its upper end with a socket, a pillar seated at its lower end in said socket

and provided at its upper end with a bearing, a shaft mounted in said bearing and provided at one end with an operating handle, and a drying reel mounted detachably on the other end of the shaft, the standard, pillar, shaft and drying reel being readily separable to permit close packing.

1,310,817. SELF-CLEANING SPARK-PLUG. CHARLES A. WELLMAN, Chicago, Ill. Filed Mar. 19, 1917. Serial No. 155,706. 4 Claims. (Cl. 123-169.)

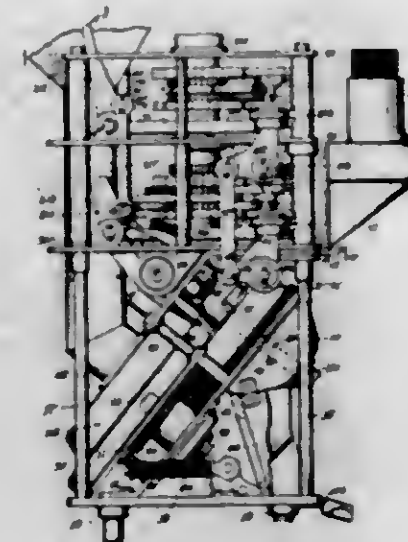


1. The combination with a spark plug provided with a slidable spring controlled terminal member, of a rotatable shaft, and a crank arm secured thereon and disposed to bear on the upper end of said member, said shaft adapted to be rotated to swing said crank arm downwardly to cause depression of the member to clean the interior of the spark plug.

1,310,818. PROCESS OF PROOFING MATERIALS. FREDERICK P. WOOD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 28, 1915. Serial No. 30,911. 4 Claims. (Cl. 91-70.)

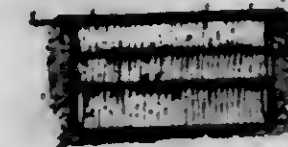
3. The process of proofing paper container bodies which consists in applying hide glue to fibrous container bodies at a viscosity and degree of heat which will restrain permeation into said bodies, and subsequently drying and hardening said coating under conditions preventing increased fluidity.

1,310,819. FARE-REGISTER. ARTHUR H. WOODWARD, Altadena, Calif., assignor, by mesne assignments, to Johnson Fare Box Company, Chicago, Ill., a Corporation of New York. Filed Dec. 30, 1915. Serial No. 69,484. 55 Claims. (Cl. 235-32.)



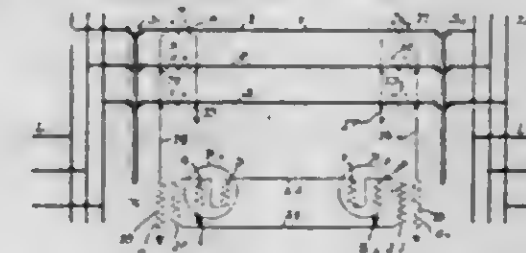
46. In combination, a token receiving hopper, token gaging means, a plurality of registers, each register comprising a totalling register and a trip register, automatic means for registering tokens of one denomination upon one register, means for registering tokens of a different denomination upon another register, and common resetting means for resetting said trip registers.

1,310,820. GRAVE-LINING. JOHN C. BECK, Milton, Ind. Filed July 15, 1918. Serial No. 244,881. 2 Claims. (Cl. 27-2.)



1. A grave lining comprising a double flange portion adapted to lie flat upon the ground around a grave, a skirt portion having a ruffle at its upper edge and secured to said flange portion, all of said parts being formed of paper, a fabric having its upper edge secured between the members of the flange and projecting down below the attachment of the skirt portion, and means for secretly securing the lining in position, substantially as set forth.

1,310,821. PROTECTIVE RELAY SYSTEM. OSVILLE J. BLISS, Chicago, Ill. Filed July 29, 1918. Serial No. 247,133. 21 Claims. (Cl. 175-294.)



1. In combination, a pair of relays, a pair of pilot wires connecting said relays and transformer windings connected to said relays and pilot wires, the electro-motive forces of said transformer windings being normally additive to cause current to flow through the pilot wires and relays.

1,310,822. CONTROLLING MECHANISM FOR LIQUID-DISPENSERS. AUGUSTUS BOWEN, Fort Wayne, Ind. Filed Apr. 28, 1919. Serial No. 293,260. 2 Claims. (Cl. 221-99.)

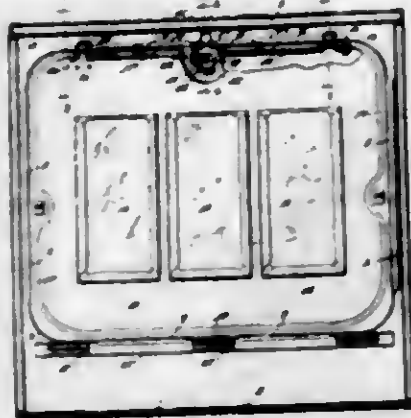


1. In apparatus of the class described having a feed pipe provided with an inlet valve and an electric switch adapted to close an electrical circuit that governs the supply of liquid to the feed pipe, two relatively adjustable arms pivotally supported, one of which is adapted to actuate the switch and the other being adapted to actuate the inlet valve, and being adapted to close the switch and open the valve simultaneously, and means for operatively moving the arms.

1,310,823. FASTENING MEANS FOR OVEN-DOORS AND THE LIKE. LEO S. CHADWICK, East Cleveland, and CARL C. REHMER, Cleveland, Ohio, assignors to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 1, 1915. Serial No. 58,951. 6 Claims. (Cl. 126-196.)

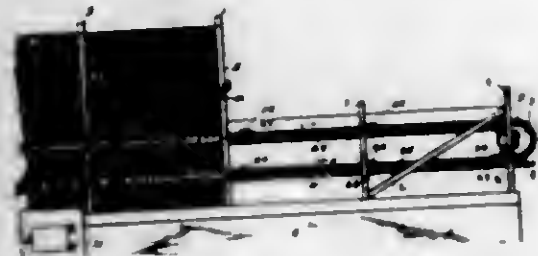
6. The combination with a pair of elements, one constituting a frame and the other a closure, of fastening

means for the closure comprising a rock shaft which consists of a rod having an offset portion, said shaft being supported by one element and having a finger for engagement with the other, and a keeper pivotally supported by the closure and having a latch arm that is



adapted to engage the frame and an actuating arm that is adapted to cooperate with and override the offset portion of the shaft when the keeper is turned to effective position thereby to oscillate the shaft to project its finger against the frame and retain the same in such position.

1,310,824. DRYING-MACHINE. EDWARD T. FIRTH, Richmond, Ind. Filed Oct. 12, 1917. Serial No. 196,101. 1 Claim. (Cl. 34-12.)



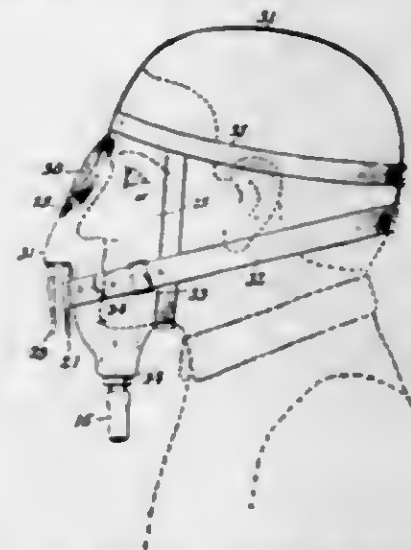
A drying machine comprising a base frame, a main frame extending up from the base, sides and a top covering said main frame and forming a tunnel extending longitudinally through the main frame, an upper set of cross-ties connecting the sides of the frame, a lower set of cross-ties connecting the sides of the frame, tracks carried by the upper set of ties, tracks carried by the lower set of ties, all of said tracks being formed to extend through the tunnel, drums revolvably mounted at each end of the tunnel and midway of the two sets of tracks and located outside of the frame, sprocket chains connecting said drums, an endless conveyor apron formed of wire netting stretched around the two drums and extending through the tunnel, trucks secured to the apron with their wheels adapted to travel on said tracks to carry the apron horizontally through the tunnel, means for revolving said drums to move said apron, guards projecting inward from the sides of the frame over the wheels of the trucks, swinging doors for closing the ends of the tunnel and adapted to swing inward and outward, a heating plant located in the frame and below said apron, and including a furnace located near each end of the machine, a drum extending across the center of machine, conduits connecting the furnaces with said central drum, and an exhaust pipe leading from said central drum, all substantially as shown and described and for the purposes set forth.

1,310,825. RESPIRATORY APPARATUS. JOHN M. GANER, Poughkeepsie, N. Y. Filed Feb. 20, 1918. Serial No. 218,270. 13 Claims. (Cl. 128-141.)

1. In an apparatus of the class stated, a hollow mouth piece, a hollow nose piece, both made of flexible material, an air passage connecting the two, an air inlet for the

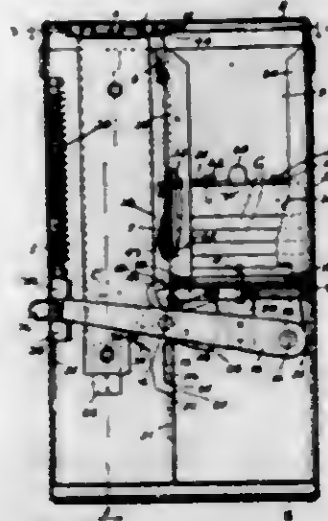
mouth piece, a check valve in the inlet to permit inward and prevent outward passage of air, an outlet for used air from the mouth and nose pieces, a check valve in the outlet to permit outward and prevent inward passage of air, a hood surrounding the mouth and nose pieces and engaging with the face of the wearer, means to both permit the entrance of air to, and prevent its exit from, the hood, other means to both permit the exit of air from, and prevent its entrance to, the hood, means actuated by the respiration of the wearer whereby air is forced into and out of the hood, and means to firmly hold the apparatus against the face of the wearer.

1,310,826. SLOT-CLOSING MECHANISM FOR COIN-CONTROLLED VENDING-MACHINES. ALBERT D. GROVER, New York, N. Y., assignor, by means assignments, to Autosales Corporation, a Corporation of New York. Original application filed May 11, 1915, Serial No. 27,392. Divided and this application filed Oct. 29, 1915. Serial No. 58,543. 8 Claims. (Cl. 194-1.)



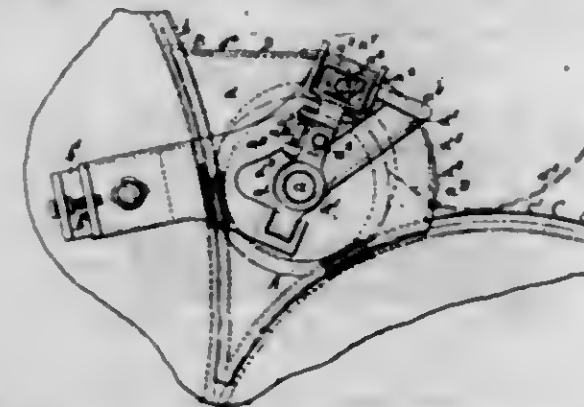
3. In a coin-controlled vending machine, a casing provided with a coin-slot, a magazine for containing the vendible goods, a weight or follower for the goods in said magazine, a member movably mounted on said weight, and mechanism controlled by said member for automatically obstructing said coin-slot when the supply of goods in said magazine becomes exhausted.

1,310,827. CARDING-ENGINE. GEORGE WHITTAKER HARGREAVES, ALBERT HARGREAVES, and ROBERT HARGREAVES, Blackburn, England. Filed Oct. 15, 1917. Serial No. 196,587. 8 Claims. (Cl. 19-15.)



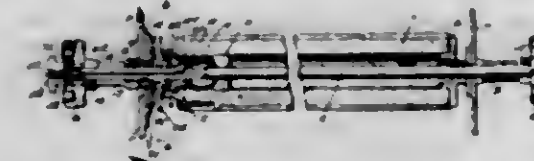
2. In stripping brush apparatus for a carding engine having a doffer and a cylinder forming a throat, a cylindrical stripping brush, means for adjustably mounting

the stripping brush in said throat, a closely fitting casing adapted to inclose the brush, and means for moving



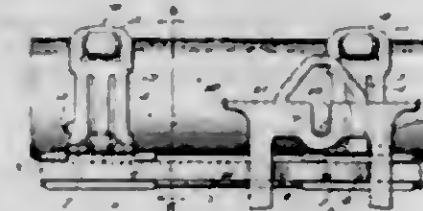
the latter into and out of simultaneous contact with the carding surfaces of the doffer and cylinder.

1,310,828. VARIABLE LINE-SPACER. OTTO A. HOKANSON, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed May 11, 1918. Serial No. 233,935. 12 Claims. (Cl. 197-123.)



1. In a variable line spacer, a rotatable platen, means including a ratchet wheel for normally rotating the platen for line spacing, and means including resilient tongues movable radially for directly and frictionally engaging the wheel with the platen so that upon the release the platen is separately rotatable.

1,310,829. PAPER-FINGER. OTTO A. HOKANSON and ALFRED O. H. KASER, Woodstock, Ill., assignors to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed July 8, 1918. Serial No. 243,823. 10 Claims. (Cl. 197-139.)



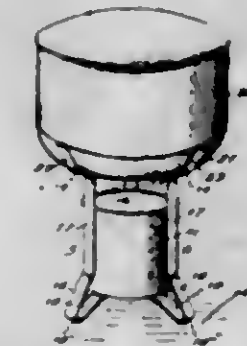
1. A paper finger having a slidable member, and a pivoted member with an integral spring tongue which normally engages the slidable member for pressing the pivoted member in one direction from the slidable member and also with a portion which limits manual movement of the pivoted member in the other direction so that the pivoted member is always returned by the spring tongue in the first-mentioned direction as soon as the manual engagement is released.

1,310,830. BURNER-STAND. JOHN M. HOTHERRALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 16, 1915. Serial No. 45,649. 1 Claim. (Cl. 129-43.)

A burner stand of flat metal strips with their flat faces presented inward and upward and forming a tripod, one member of which is cut at its lower end to form hori-

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zontal lateral legs and a downwardly extending lip, and the other two members of which are pivoted to said legs and are adapted to fold parallel with the first member and also to engage said lip when the parts are turned out in vessel-supporting arrangement, the three members



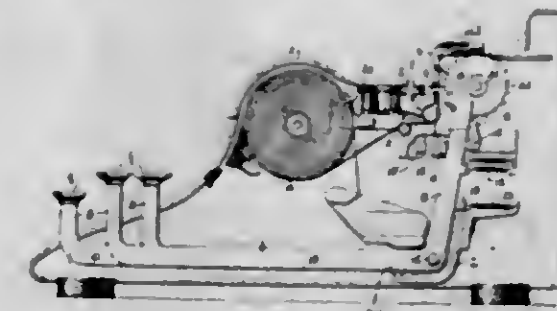
being bent outward and downward from their points of connection to form supporting feet, and thence upward and inward, and thence vertically upward to form a clasp for a burner and stiffly resist the weight of a vessel and thence outward and upward to form a top vessel support.

1,310,831. PUNCTURE-PLUG. WILLIAM C. HUNTOON, Providence, R. I. Filed Jan. 28, 1919. Serial No. 273,506. 3 Claims. (Cl. 152-26.)



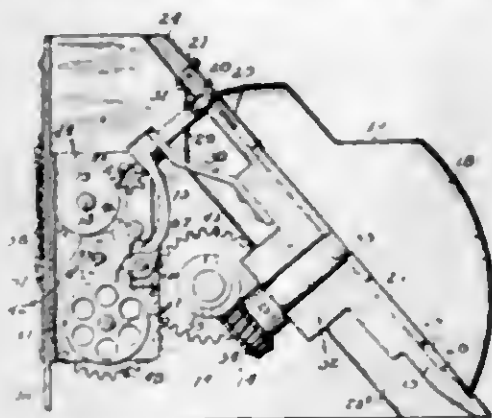
1. A puncture plug comprising a base member formed of a base plate and a sheet metal cap having its edge turned up about the edge of the plate and over onto the opposite face thereof, said plate formed with a groove adjacent to and within the interned edge and a central opening elongated toward one edge, a screw-threaded stem passing through the central opening and formed with a head swiveled between the plate and cap, and a top clamping plate threaded on the stem and conforming to the interned edge.

1,310,832. TYPE-WRITING MACHINE. WARD S. IRELAND, St. Louis, Mo., and WALTER E. LUPPERT, Cincinnati, Ohio, assignors, by direct and mesne assignments, to National Shorthand Machine Company, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 18, 1916. Serial No. 132,078. 9 Claims. (Cl. 197-97.)



1. In a typewriter machine having key levers, a universal frame operable by said key levers, and a pivotal support for said universal frame, said universal frame comprising a pair of arms extending from said pivotal support and connecting members uniting said arms, said connecting members being located at opposite sides of said key levers.

1,310,833. COIN AND TICKET FAKE REGISTER. JAY M. JOHNSON, Chicago, Ill., assignor, by mesne assignments, to Johnson Fare Box Company, Chicago, Ill., a Corporation of New York. Filed Nov. 19, 1914. Serial No. 872,919. 21 Claims. (Cl. 235—32.)



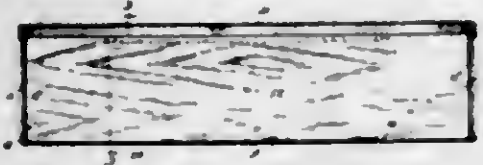
1. In a machine of the class described a register, a mechanism for operating the same set in initial motion by contact of coins, a carrying element for coins having pockets therein and means permitting the coins dropping deeper into the pockets prior to the coins contacting a part of the operating mechanism.

1,310,834. LOCK-GUARD. ROY D. KING, Chicago, Ill., assignor to Coin Controlled Lock Company, Chicago, Ill., a Corporation of California. Original application filed June 2, 1916, Serial No. 101,212. Divided and this application filed May 8, 1918. Serial No. 233,381. 7 Claims. (Cl. 70—46.)



1. In a lock, the combination of a key-cylinder, an abutment projecting laterally from said cylinder, a yieldingly mounted pawl having a tail normally disposed in the path of a key inserted in said cylinder and a tooth adapted to engage said abutment, and a spring controlling said pawl so that when the key-cylinder is moved to locked position said pawl will be disposed in the path of travel of said abutment to prevent unlocking of the lock prior to withdrawal of the key, the pawl being adapted to be moved transversely of the cylinder from operative position by the insertion of a key in said cylinder.

1,310,835. CIGAR-BOX. EDWARD A. KLINE, Montreal, Quebec, Canada, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed July 31, 1915. Serial No. 42,881. 1 Claim. (Cl. 131—11.)



A cigar box, comprising a metal receptacle provided with a lining of thin cedar wood, said metal receptacle having ventilating openings closed by the cedar lining, said cedar lining having spaced openings at a distance from the ventilating openings of the receptacle, whereby

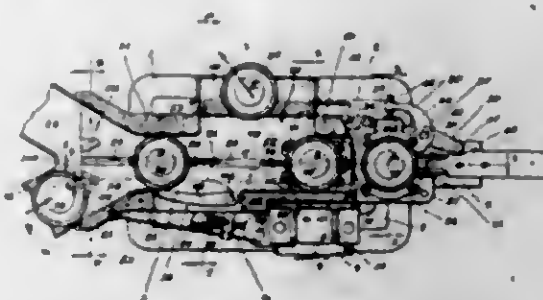
circulation of air is limited and incoming air is caused to pass for a distance in contact with the surface of the cedar lining between the same and the metal receptacle and take up the cedar oils and aid in imparting the same gradually to the cigars.

1,310,836. RECEPTACLE-COVER. DOMEN H. MOSTELER, Oak Park, Ill. Filed June 15, 1918. Serial No. 240,109. 4 Claims. (Cl. 220—55.)



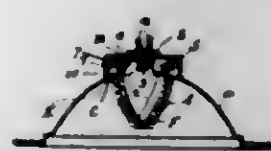
1. The combination with a receptacle having a circumferential shoulder, of a cover comprising a disk having a downwardly extending flange on its periphery, said cover having an opening of relatively small size therethrough, a door positioned over said opening, and hingedly mounted on said cover, a plurality of independent supporting members mounted on the under side of said cover; and a plurality of independent locking members adapted to positively engage said circumferential shoulder.

1,310,837. APPARATUS FOR FEEDING, SORTING, AND DISTRIBUTING CAN ENDS. JOHN H. MCACH, San Francisco, Calif., assignor to American Can Company, San Francisco, Calif., a Corporation of New Jersey. Filed Sept. 23, 1916. Serial No. 121,799. 15 Claims. (Cl. 83—92.)



1. In an apparatus for the described purpose, means at a rear part of said receiving and conveying means for receiving and conveying a series of can ends, means for diverting the unlined from the lined can ends and separately discharging the same, devices at a forward part of said receiving means for counting the lined can ends, and means for distributing said lined can ends in measured quantities.

1,310,838. ELECTRIC RADIATOR. ADLER PRITZKE, Toronto, Ontario, Canada. Filed Sept. 9, 1918. Serial No. 233,124. 5 Claims. (Cl. 210—34.)



3. In an electric radiator, the combination with a reflector provided with a hole therethrough, of a heating element base made of suitable insulating material designed to extend through said hole and project beyond each side of said reflector, and integrally provided with a projecting flange which rests against said reflector, and an apertured detachable housing means attached to the end of said base which projects beyond the rear side of said reflector and adapted to cooperate with said projecting end and said flange whereby said base is held against longitudinal displacement in the said reflector.

1,310,839. PARACHUTE. HERBERT K. REEVES, London, England. Filed Apr. 23, 1919. Serial No. 292,047. 4 Claims. (Cl. 244—21.)



1. The combination with an aerial craft, of a parachute resting within the aerial craft, supporting means in said aerial craft on which said parachute rests, a connection from the load to the parachute and to the supporting means, so that when load is applied, said supporting means is rendered inoperative, whereby the parachute is withdrawn from the aerial craft.

1,310,840. DOOR. WILLIAM AFFLECK ROBERTSON, Glasgow, Scotland, assignor of one-half to William Henderson, Toronto, Ontario, Canada. Filed June 7, 1918. Serial No. 238,802. 3 Claims. (Cl. 20—16.)

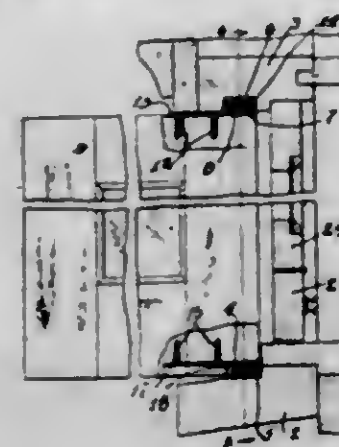


1. The combination with a door frame provided with beveled edges at least at one side and one end, of a door having the edges of its sides and ends shaped to fit the door frame; and a spring pressed bolt and a keeper secured to the door and frame at the beveled sides of the latter adapted to disengage on the occurrence of longitudinal displacement of the parts to which they are connected and to resist disengaging pressure normal to the door's surface.

1,310,841. FIREPROOF COMPOSITION. EDMUND G. ROBINSON, Montclair, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 25, 1918. Serial No. 218,990. 14 Claims. (Cl. 134—79.)

9. A composition containing cellulose acetate and ammonium magnesium phosphate.

1,310,842. FOLDING AND SLIDING WINDOW. ALPHONSE A. SERANTIAN, Chicago, Ill., assignor to Andrew Hoffman Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 12, 1917. Serial No. 206,718. 1 Claim. (Cl. 20—42.)



In a device of the class described, a window frame, a sash horizontally adjustable within the frame and guided above, a plate disposed at the sill and having an upstanding flange, and a block pivotally mounted at the lower edge of the sash and provided on its lower face

with a groove to receive the upstanding flange, the opposite walls of the groove having a bearing engagement on the front and rear faces of the flange.

1,310,843. SWINGING AND SLIDING WINDOW. ALPHONSE A. SERANTIAN, Chicago, Ill., assignor to Andrew Hoffman Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 26, 1918. Serial No. 219,191. Renewed Mar. 14, 1919. Serial No. 282,720. 4 Claims. (Cl. 20—42.)



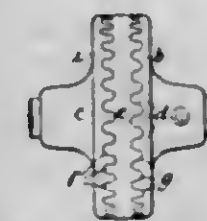
2. In a window, a frame, a guide above and a guide below, hingedly connected sashes in said frame, supporting means attached to the sashes and traveling on the upper guide, vertical pins at the bottom of the sashes, rollers mounted to rotate on the pins in a horizontal plane and to bear upon the lower guide, and flanged elements carried by the sashes and engaging over the lower guides to confine the roller in operative relation thereto.

1,310,844. FUSE. JOHN H. SAMPLE, Sewickley, Pa. Filed Aug. 2, 1918. Serial No. 248,022. 6 Claims. (Cl. 102—36.)



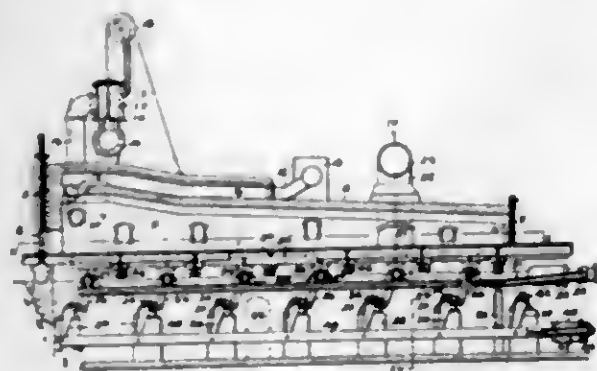
1. In a fuse for detonating high explosives a detonation train of explosives comprising successively arranged small bodies of an accelerating explosive, a sensitive initiating detonating explosive, and an inert detonating explosive having a large detonation jump as compared to that of the second-named explosive.

1,310,845. SHAFT-COUPLING. FREDERICK RICHARD SIMMS, Rathbone Place, London, England, assignor of one-half to Simms Motor Units, Limited, Rathbone Place, London, England. Filed Mar. 4, 1919. Serial No. 280,650. 3 Claims. (Cl. 64—90.)



1. A shaft coupling comprising two disks designed to be secured respectively to the shafts to be connected and each provided with a series of teeth, and a connecting ring having two sets of teeth with which the teeth on the disks engage, the number of teeth on one disk being greater than the number of teeth on the other disk, substantially as described.

1,310,848. CONTINUOUS FURNACE. HORACE E. SMYTHE, Pittsburgh, Pa., assignor to The S. R. Smythe Company, Pittsburgh, Pa., a Corporation of West Virginia. Filed Jan. 23, 1919. Serial No. 272,646. 2 Claims. (Cl. 214—18.)



1. In a heating furnace, a hearth comprising parallel stationary and movable members, the latter being arranged between the stationary members, upright links pivoted at one end to the movable member and oscillating in directions parallel with the length of the said members, means pivoted to the other end of the links for elevating the links so as to move the movable member above the stationary members, and means for causing the movable member to travel longitudinally and the links to oscillate while they support the movable member in its elevated position.

1,310,847. SPARK-PLUG. WILLIAM F. SPRENGNETHER, St. Louis, Mo. Filed Apr. 14, 1919. Serial No. 289,791. 4 Claims. (Cl. 123—160.)



1. A spark-plug provided with a metallic casing, said casing having an annular flange, a socket adapted to receive said spark-plug, a pair of links pivotally secured to said socket, a yoke pivotally secured to said links, and a set-screw passing through the yoke and adapted to bear upon the annular flange of the metallic casing.

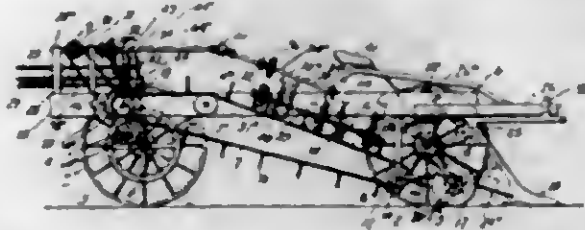
1,310,848. PROCESS OF PRODUCING PROPELLANT POWDER. OLIVER J. TRACLE, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed July 29, 1916. Serial No. 112,035. 7 Claims. (Cl. 32—3.)

1. The process which comprises tumbling a gelatinized powder grain with a powdered material which is a solvent for the grain, and then melting the solvent during the continued tumbling operation with a hot aqueous vapor to impregnate the surface of the grain with the solvent.

1,310,849. BEET-TOPPER. OTTO WALTHER, Bloomington, Ill. Filed Oct. 11, 1917. Serial No. 196,060. 8 Claims. (Cl. 35—107.)

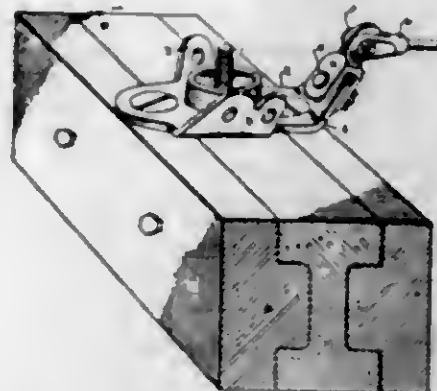
1. In a beet picking and topping machine, the combination with a truck, of a beet picker supported by the truck, means actuated by the movement of the truck for operating the picker, a conveyer arranged to receive

beets from the picker, a leaf cutter operated by the said conveyer, a movable beet gage arranged in the path of the beets carried by the said conveyer, and beet topping mechanism actuated by the movement of the truck and having a cutter intermittently operated by the movement of the said gage.



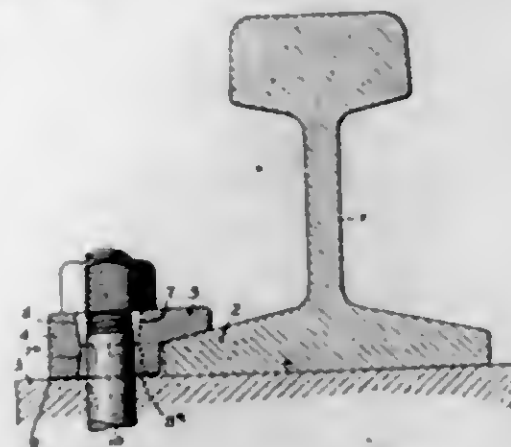
5. In a beet picking machine, a beet picker comprising twin disks placed opposite each other, picker plates pivotally attached to the said disks near the rims thereof, and means for connecting the disks and for spacing them apart.

1,310,850. GUY-WIRE ATTACHMENT. CHARLES F. WILLARD, New York, N. Y., assignor, by mesne assignments, to L-W-F Engineering Company, Inc., College Point, Long Island, N. Y., a Corporation of New York. Filed Oct. 18, 1916. Serial No. 120,284. 3 Claims. (Cl. 244—31.)



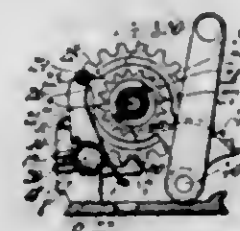
2. A guy wire attachment comprising a base plate having an upturned lug, a forked member inclosing said lug and pivoted thereto, and a wire terminal having a forked end pivoted to said forked member on an axis at right angles to the axis of said first mentioned pivot.

1,310,851. RAIL-CLAMP. CARLTON A. WILMORE, Ben Ayon, Pa., assignor of one-third to E. J. Schellentrager and one-third to J. Homer Schellentrager, Pittsburgh, Pa. Filed Apr. 24, 1919. Serial No. 292,414. 2 Claims. (Cl. 238—338.)



1. A rail clamp having a body provided with a lip to extend over the rail base flange and provided with a bolt hole which increases in size from approximately the vertical middle of the body toward both the top and bottom faces thereof.

1,310,852. CALCULATING-MACHINE. VICTOR OSKAR JULIUS ANDERSSON, Malmö, Sweden. Filed Aug. 16, 1918. Serial No. 250,157. 7 Claims. (Cl. 235—130.)



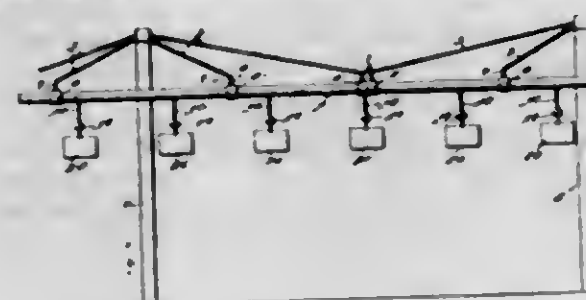
1. In a calculating machine, a cam disk, a counter wheel, a pinion movable with the counter wheel, a pawl for locking said pinion against rotation, a movable bridge, means carried by said bridge and engageable with said pawl for biasing the latter to locking position, manually operable means for rotating said cam disk, and means operable by said cam disk for lifting said bridge to render said biasing means inactive.

1,310,853. FABRIC-CUTTING MACHINE. ISAAC APPELBAUM, Philadelphia, Pa. Filed Jan. 30, 1919. Serial No. 274,008. 5 Claims. (Cl. 164—75.)



3. In a fabric cutting machine, a guide and retainer for a blade of the machine, said blade having on a side thereof a resilient tongue which is adapted to project laterally from said side, and said guide having therein a runway for said blade, and a channel in a wall of said runway for said tongue, said blade and tongue being freely movable in said runway and channel respectively.

1,310,854. TRAMWAY-CONVEYER. WESLEY MARTINEZ, Philadelphia, Pa. Filed Oct. 23, 1918. Serial No. 259,305. 5 Claims. (Cl. 104—172.)

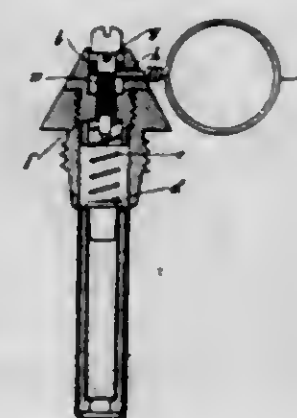


1. A tramway conveyer of the class described, comprising a track, bearing heads mounted within said track, a tramway conveyer chain passing through said track, said bearing heads mounted upon said chain, said heads provided with sockets formed therein, ball-bearings mounted within said sockets, said ball-bearings traveling upon the inner face of said track, and article supporting hangers connected to said bearing heads.

1,310,855. FUSE FOR EXPLOSIVE SHELLS WITH SAFETY DEVICE. EDGAR WILLIAM BRANDT and CHARLES EMILE JULES BRANDT, Paris, France. Filed July 6, 1917. Serial No. 179,091. 2 Claims. (Cl. 102—39.)

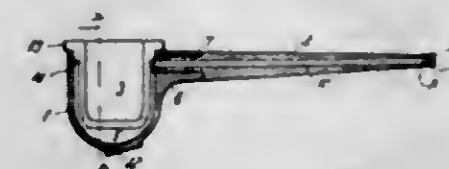
1. A fuse for shells, containing, in combination; a fuse body; a stopper fixed in said fuse body; a plug disposed within said fuse body; a fulminating cap disposed within said plug; a percussion piece with threaded portion screwing with very easy friction into the fuse stopper; a spring designed to prevent normal contact between

the percussion piece and the fulminating cap of said plug; and a wire attached to the body of the percussion piece



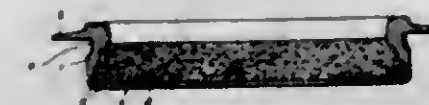
and, wrapped around said body with the free end of the wire lying outside the fuse; substantially as described and for the purpose set forth.

1,310,856. TOBACCO-PIPE. PETER F. CAMPBELL, Vinal Haven, Me. Filed Nov. 20, 1918. Serial No. 263,390. 2 Claims. (Cl. 131—12.)



1. The combination, in a tobacco pipe, with an outer bowl, and a stem, of a removable inner bowl supported in said outer bowl, the bottom of said inner bowl being integral with the sides thereof and having therein parallel slots which extend across and above the same into said sides, and are adapted to have introduced into any one of such slots, throughout the length and including the portions of the slots that are in said sides of said inner bowl, a thin flat object for cleaning purposes, when said inner bowl is removed from said outer bowl.

1,310,857. BARREL-HEAD. SAMUEL R. COCHRANE, Brooklyn, N. Y. Filed Mar. 31, 1919. Serial No. 286,299. 2 Claims. (Cl. 220—73.)

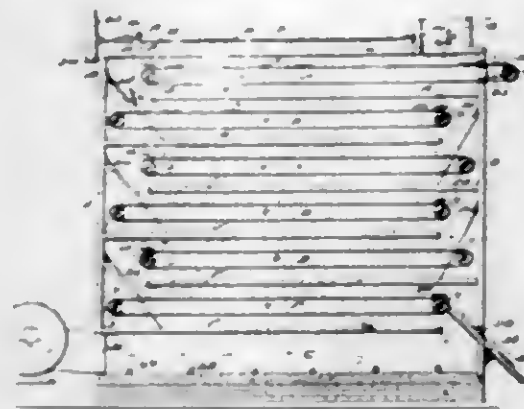


1. A barrel head comprising a metal inner plate having an outwardly turned annular flange, an outer layer of composite material for the purpose specified covering said inner metal plate, and overhanging means on the annular flange for retaining said composite layer in place.

1,310,858. DRIER. JAMES C. DOZIER, Baton Rouge, La. Filed Feb. 5, 1919. Serial No. 275,177. 4 Claims. (Cl. 34—12.)

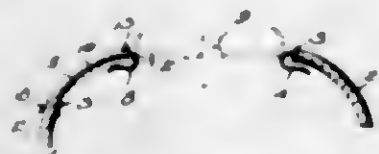
1. A drier comprising a chamber, a plurality of endless conveyers therein, a partition above and below each conveyer, each partition having therein an opening at one end for the passage of the air to the next higher compartment, said openings being alternately arranged at opposite ends of the chamber, and guide bars arranged alter-

ately at opposite ends of the chamber, said guide bars being disposed at an angle to the travel of the conveyers



and traversing the space between each two adjacent conveyers.

1,310,859. BRACELET. ALEXANDER BELUND, Attleboro, Mass., assignor to Bliss Bros. Co., Attleboro, Mass. Filed Feb. 24, 1919. Serial No. 278,563. 3 Claims. (Cl. 63—11.)



1. A bracelet including a band, a pin carried by the band, a slide having a longitudinal slot receiving the pin in said slot said slide having an opening to one side of one end of the slot and a transverse slot beyond the other end of the longitudinal slot, and a catch having one end turned at an angle and passing through the slide opening and anchored thereto and having its other end passed through the transverse slot and movable along the length of the latter, said slide having its outer end bent to form a hook and said catch having a part movable across the longitudinal slot of the slide to engage the pin.

1,310,860. CASKET. JOHN E. FINNEGAN and PATRICK J. MCCARTHY, Providence, R. I. Filed May 9, 1919. Serial No. 295,971. 2 Claims. (Cl. 27—3.)

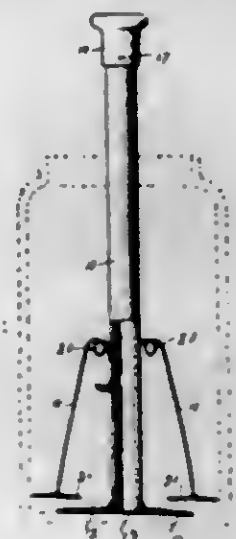


1. In a casket, a thin metal shell formed with upper and lower outwardly extending hollow moldings along the sides and ends thereof, the moldings opening into the shell interior, filler pieces in the hollow moldings arranged flush with the inner side faces of the sides and ends of the shell, filler boards engaged with said filler pieces and disposed along the ends and sides of the shell, and a filler board in the bottom of the shell engaged with the filler boards, the upper edges of the shell being interset and countersunk in the inner faces of the filler boards of the ends and sides.

1,310,861. CREAM-WHEEL. BENJAMIN F. FOWLER, Minneapolis, Minn. Filed Dec. 18, 1918. Serial No. 267,299. 3 Claims. (Cl. 259—143.)

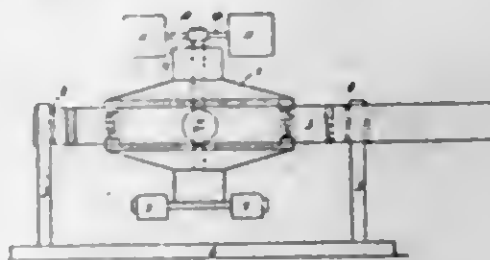
1. An agitating device of the character described comprising a reciprocable shank, a plurality of resilient arms

mounted upon the shank and extending downward and outward therefrom resiliently urged outward at their



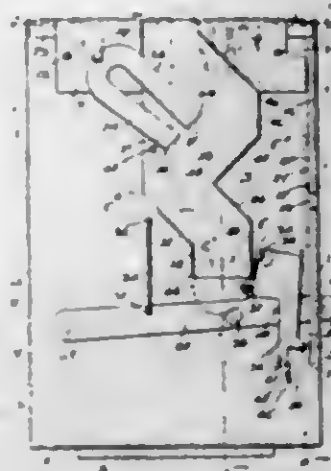
lower ends, and perforated disks carried by said arms at their lower ends.

1,310,862. GYROSCOPIC APPARATUS. JOHN GRAY, London, England, and JAMES GORDON GRAY, Glasgow, Scotland. Filed Oct. 14, 1918. Serial No. 258,125. 4 Claims. (Cl. 74—78.)



1. The hereindescribed gyroscopic apparatus comprising, in combination, a gyroscope casing, a spindle journaled for rotation within said casing, and a brake rotatable in the same circular direction as said spindle and adapted to exercise on said casing a torque the sense of which is opposite to that of rotation of said spindle.

1,310,863. COIN-CONTROLLED VENDING-MACHINE. ALBERT D. GROVER, New York, N. Y., assignor, by mesne assignments, to Autosales Corporation, a Corporation of New York. Filed Dec. 17, 1914. Serial No. 877,647. 15 Claims. (Cl. 211—8.)



1. In a vending machine, a plurality of movable members mounted independently of each other for normally supporting the articles to be vended, an actuating device for said members, adjustable but inseparable connections

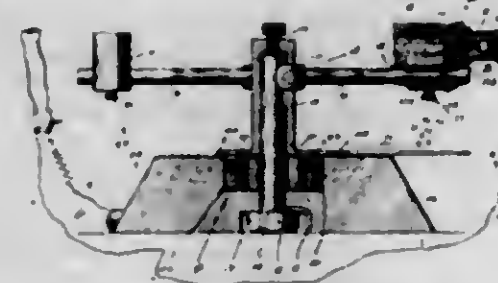
between said members and said device for operating said members successively by successive actuations of said device to release the articles for delivery, said connections causing automatic movement of the actuated members into normal supporting position when said device is restored to normal or initial position, and hand-operated means for actuating said device.

1,310,864. TURBINE-BUCKET CONSTRUCTION. HENRY J. HANZLIK, Wellsville, N. Y., assignor to Kerr Turbine Company, Wellsville, N. Y., a Corporation of New York. Filed Sept. 28, 1916. Serial No. 122,612. 12 Claims. (Cl. 253—77.)



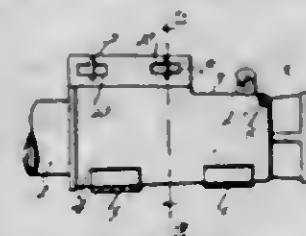
1. A shroud ring having bucket receiving openings and connecting portions which separate said openings from the edges of the ring and are sufficiently narrow to permit variation in the length of the ring incidental to normal operation to occur without distortion of the ring.

1,310,865. CENTRIFUGAL-PRESSURE CASTING APPARATUS. GEORGE M. HOLLENBACK, Lewistown, Mont. Filed July 11, 1918. Serial No. 244,468. 7 Claims. (Cl. 22—65.)



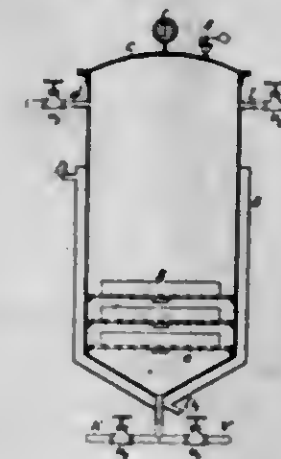
1. Improvements of the character disclosed, comprising a crucible, a mold applied to the crucible, means for fusing metal in the crucible, removable means separating the mold from the crucible during such fusing process, and means for subjecting the crucible and mold to centrifugal action.

1,310,866. HOSE ATTACHMENT. THOMAS MARION HUGHES, San Jose, Calif. Filed July 29, 1918. Serial No. 247,196. 1 Claim. (Cl. 285—84.)



In a device of the class described, a hose; a nipple in the hose; a coupling rotatable on the nipple beyond the end of the hose; a strap surrounding the hose and binding the same on the nipple, the strap having outstanding ears; a clamping device connecting the ears; and a sleeve comprising hingedly connected trough-like sections surrounding the hose and provided at one end with interned flanges engaging the end of the hose to the rear of the coupling, the edges of the sections being cut away to receive the ears of the strap, the said edges of the sections being provided with outstanding parallel flanges; and means for connecting the said flanges detachably.

1,310,867. PROCESS OF TREATING WOVEN TEXTILE BELTS. LAURITZ PETERSEN-ILVID, Copenhagen, Denmark, assignor to Aktieselskab Roulunds Fabrikker, Odense, Denmark. Filed Sept. 30, 1918. Serial No. 256,364. 1 Claim. (Cl. 91—70.)



The process of treating woven textile belting, which consists in initially impregnating the belting while in a vacuum with a liquid filler containing a solvent; relieving the vacuum and drawing off the superfluous liquid; subjecting the impregnated belting to the direct action of steam at a suitable temperature and pressure to vaporize the solvent contained in the liquid filler and to drive out the hygroscopic substances contained in the belting, thereby permitting said liquid to fill the spaces from which said hygroscopic substances were driven out; drawing off the vapors and steam; and then drying the belting under heat and vacuum; substantially as described.

1,310,868. DISLIDGING ATTACHMENT FOR RAKES. JACK MCGINN, Oakland, Calif., assignor of one-third to Lola F. Thornton and Joseph N. Thornton, Oakland, Calif. Filed Jan. 15, 1918. Serial No. 211,972. 4 Claims. (Cl. 55—146.)



1. In combination with an implement having lines, a material dislodging member therefor, spring arms rigidly secured to the head of said implement and connected to the said member to normally hold the dislodging member inactive, guides mounted on the head of said implement below said spring arms, flexible members connected to the spring arms and passing through said guides, and a slidable operating means connected to said flexible member and carried by the handle of said implement.

1,310,869. TOBACCO-POUCH. JAMES L. McILHUGH, Seattle, Wash. Filed Dec. 29, 1917. Serial No. 209,512. 4 Claims. (Cl. 150—3.)

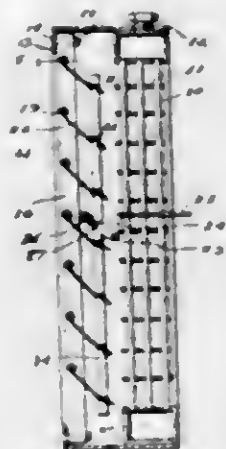
1. A tobacco pouch including a substantially U-shaped frame adapted to extend around the pouch at opposite sides and the bottom of the same, and transverse bars or members extending across the frame at the top thereof and connected with the side portions of the mouth of the pouch, one of the bars or members being of greater length

and disposed in a plane above the other and the side of the pouch attached to the same being extended so as to be



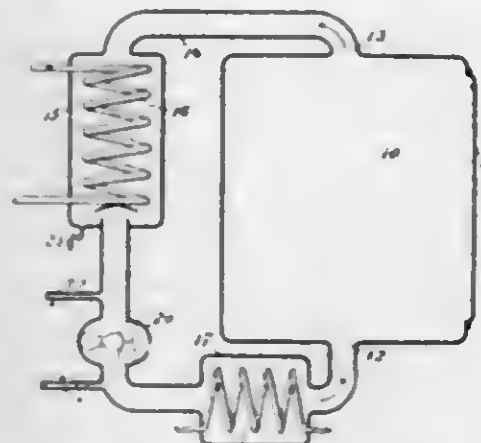
carried across to the other side of the mouth for closing the bag.

1,310,870. RADIATOR-PROTECTOR. ARTHUR L. MAPSON, Grapada, Minn. Filed May 13, 1918. Serial No. 234,181. 3 Claims. (Cl. 257-132.)



2. A radiator protector including a casing detachably carried by the radiator, transversely adjustable vertical bars mounted on the casing, shutter blades having tapering journal pins at their ends, said bars having tapering openings receiving said journal pins, rods connecting the free portions of the blades, and means for swinging the blades into and out of overlapping position.

1,310,871. PROCESS AND APPARATUS FOR TREATING STORAGE-BATTERY PLATES. HAROLD M. MARTIN, New York, N. Y., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation. Filed Nov. 14, 1914. Serial No. 872,062. 6 Claims. (Cl. 204-20.)



3. The process of drying negative storage battery plates having their active material in the metallic state, which comprises subjecting the plates to the drying action of a gas inert with respect to such active material; cooling the

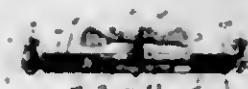
gas to condense the moisture therefrom; heating the gas; raising the hot gas to further act on the plates; and finally subjecting the plates to the action of cooled gas before exposing them to the air.

1,310,872. BAFFLE-PLATE FOR OVENS. ABRAM C. MOTT, Jr., Philadelphia, Pa., assignor to Abram Cox Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1917. Serial No. 197,242. 2 Claims. (Cl. 126-22.)



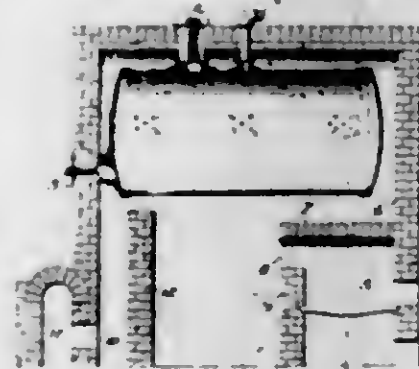
1. The combination of a baffle for ovens consisting of two sheet metal plates, one of said plates having inward flanges on three sides, the other plate having three of its edges located in the space formed by the flanges, the two plates being spaced apart at the center to form an air space, one of said plates having projections pressed therefrom to form feet for supporting the baffle on the bottom of the oven.

1,310,873. FUEL-VAPORIZER. BERTRAM JOSEPH PYE and HENRY RABES, Oakland, Calif. Filed Aug. 21, 1918. Serial No. 250,818. 2 Claims. (Cl. 219-38.)



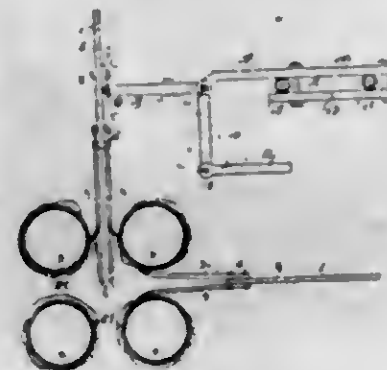
1. A heater and volatilizer for internal combustion engines adapted to be arranged between the carburetor and the intake manifold and comprising a suitable support having an opening for registering with the opening of the manifold, an electrical heater on the support at the opening, a rotatable element carried by the support and adapted to be rotated by the passage of the fuel, said support consisting of spaced insulated rigidly connected rings, said rings having diametrically arranged cross bars extending at approximately right angles to each other, and the heater having a coil connected at its ends to the cross bars.

1,310,874. STILL. PETER C. REILLY, Indianapolis, Ind. Filed Mar. 28, 1914. Serial No. 827,007. 9 Claims. (Cl. 190-3.)



7. In an apparatus for obtaining the products of distillation of hydrocarbons, the combination of a metallic still adapted to contain the material to be treated, said still having a free outlet; a furnace for applying heat thereto; and a housing for the still spaced away from and entirely surrounding the same, the arrangement being such that the products of combustion from the furnace may have free access to all portions of the still and the still thereby subjected to a substantially even temperature over its entire surface.

1,310,875. STEAM-BOILER CLEANER. GIDEON EPHRAIM SANDALOM, Gottenborg, Sweden, assignor to Elektriska Pannrensningss Aktiebolaget, Gottenborg, Sweden. Filed May 2, 1918. Serial No. 232,093. 2 Claims. (Cl. 83-64.)



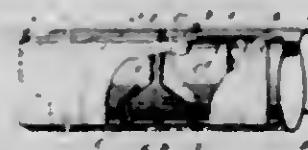
1. A boiler tube cleaner for the outside of a tube comprising a shank, outwardly flared arms secured at their inner ends to the shank and provided at their outer ends with cutting edges, and extensions on said arms and projecting longitudinally beyond the same and adapted to moving the arms toward each other when the extensions are inserted between two boiler tubes.

1,310,876. AIR-PUMP. PARIS L. SAVAGE and HERBERT E. MORTON, Bisbee, Ariz. Filed May 15, 1918. Serial No. 234,734. 5 Claims. (Cl. 230-27.)



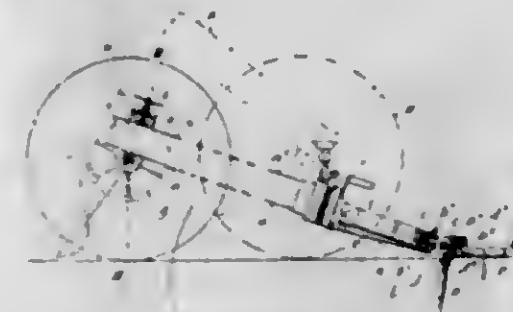
1. A pump of the class described comprising a pump cylinder, a frame supporting said pump cylinder, a tray hingedly secured to the lower end of said frame, an air supply pipe carried by said tray and communicating with said pump cylinder, and a pressure gauge carried by said tray.

1,310,877. CONSTRUCTION OF WATER-BALLAST TANKS FOR SUBMARINE AND OTHER SUBMERSIBLE FLOATING STRUCTURES. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 11, 1916. Serial No. 77,713. 11 Claims. (Cl. 114-16.)



1. In a submarine, a ballast tank subdivided to provide a plurality of tanks coextensive in depth, one of said subdivisions having a lower portion of large capacity and an upper air-outlet portion of small capacity.

1,310,878. LIGHT-ARTILLERY GUN. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 11, 1916. Serial No. 77,715. 28 Claims. (Cl. 89-40.)



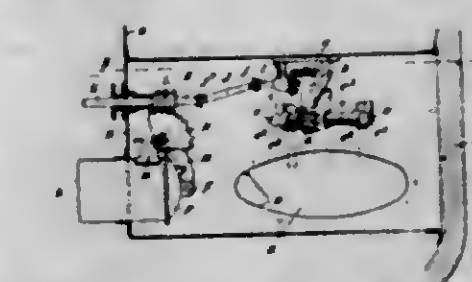
18. In a light artillery gun, the combination with the gun barrel, of an anchoring device, a universal joint between said gun barrel and anchoring device, and means to train said gun by movement of the members of said universal joint relatively to said anchoring device.

1,310,879. SEMI-AUTOMATIC MECHANISM FOR BREACH-BLOCKS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed July 3, 1916. Serial No. 107,391. 7 Claims. (Cl. 89-4.)



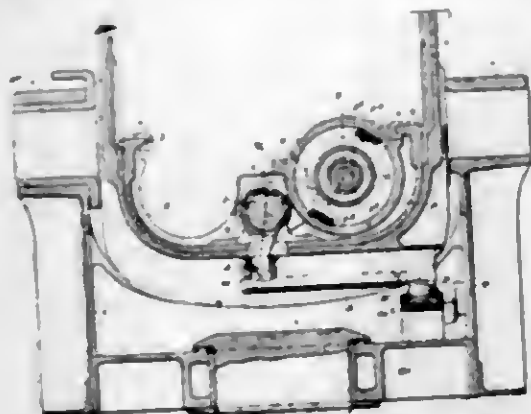
1. In combination, a gun provided with a breech-block, and gun recoil means, means adapted both to lock said block in closed position and in open position, means in the path of the gun on recoil adapted to engage said locking means to release said block for opening, and means actuated by stored energy of said recoil means for moving said block into open and into closed position after being unlocked.

1,310,880. DOOR FOR THE EXIT OF TORPEDOES LAUNCHED FROM TORPEDO-TUBES. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed May 15, 1917. Serial No. 108,850. 3 Claims. (Cl. 114-17.)



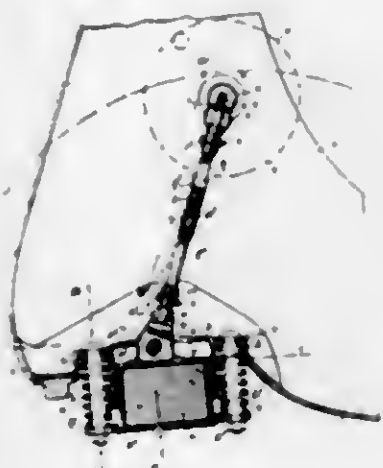
1. In combination, a boat provided with a torpedo tube and having a torpedo exit opening in the side thereof, a closure for said opening provided with a substantially horizontal axle fast thereto, said axle having approximately the direction of the flow lines of the hull of the boat.

1,310,881. BRAKE FOR GUNS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed May 15, 1917. Serial No. 198,857. 6 Claims. (Cl. 89-43.)



1. A brake apparatus for guns, characterized by the combination of two brakes working with entirely separate bodies of liquid each furnishing alternately almost the whole of the braking force, respectively during the long recoils and during the short-recoils: the liquid in the short-recoil brake having an almost free flow during the long recoils while it is caused to act upon a considerably increased cross-sectional area during the short-recoils.

1,310,882. WHEELED GUN-CARRIAGE. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed May 15, 1917. Serial No. 198,858. 2 Claims. (Cl. 89-40.)

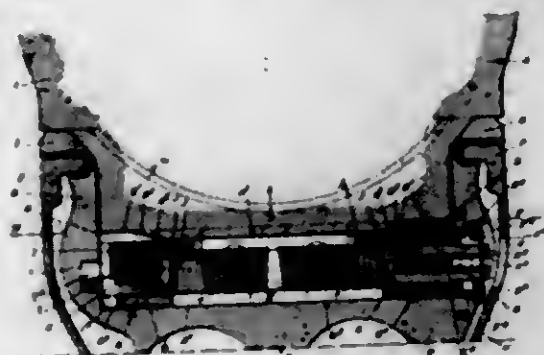


1. An apparatus for mounting a gun carriage sliding along a wheeled axle, wherein the guidance of the gun carriage in its sliding movement along the wheeled axle is effected by means of a box composed of two elements carried respectively by the gun carriage and the axle, and capable of sliding vertically in relation to each other without relative displacement along the axle: metal or other springs being arranged between the said two elements.

1,310,883. MEANS FOR CONNECTING AND DISCONNECTING LARGE-CALIBER GUN-BARRELS TO AND FROM THEIR SLIDES. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 6, 1917. Serial No. 184,650. 2 Claims. (Cl. 89-37.)

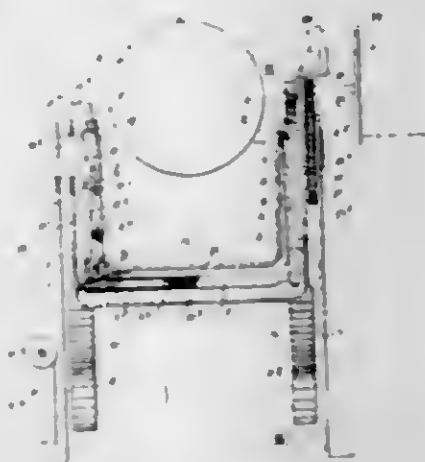
1. In means for connecting and disconnecting a large caliber gun barrel to and from its slide, the combination with said slide, of supporting surfaces on said gun barrel, fore and aft depending stops on said gun barrel, a cross shaft journaled at both ends in said slide, having two opposite screw-threads and two nuts capable of axial, but

not of rotational motion, engaging respectively with said screw-threads, having upper bosses for co-operating with said supporting gun surfaces, and lateral bosses for co-operating with said fore and aft stops, whereby by rotating said cross shaft in one direction so as to move



said nuts away from each other, the gun barrel is moved forward, lowered and engaged with its cradle, while by rotating said cross shaft in the opposite direction so as to move the nuts toward each other, the gun barrel is raised, moved back and disengaged from its cradle.

1,310,884. SAFETY LOCKING APPARATUS FOR GUNS OF LARGE CALIBER. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 6, 1917. Serial No. 184,651. 3 Claims. (Cl. 89-41.)



1. In safety apparatus for preventing the premature actuation of the firing means of guns during loading, the combination of a gun cradle provided with a gun having firing means, elevating sectors for said cradle and gun, and means for imparting relative movement between the cradle and sectors, a spring-pressed catch member carried by said sectors and adapted to engage said cradle to lock the same to the sectors for firing, manual means for operating said catch member, a spring-pressed safety member normally tending to move into the path of said firing means to prevent its operation and adapted to be engaged by said catch member and held out of said path when the cradle and sectors are locked for firing and when released from said catch to move into said path, and automatic means for preventing the reengagement of said catch member and the safety member during the loading operation.

1,310,885. GUN-CARRIAGE. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Sept. 6, 1917. Serial No. 189,951. 3 Claims. (Cl. 89-40.)

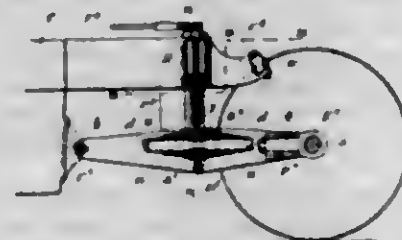
1. In combination, a gun carriage support adapted to receive a gun carriage and provided with gun trails hinged

thereto, a pair of caterpillars provided with a transverse connection, and means mounted on said transverse con-



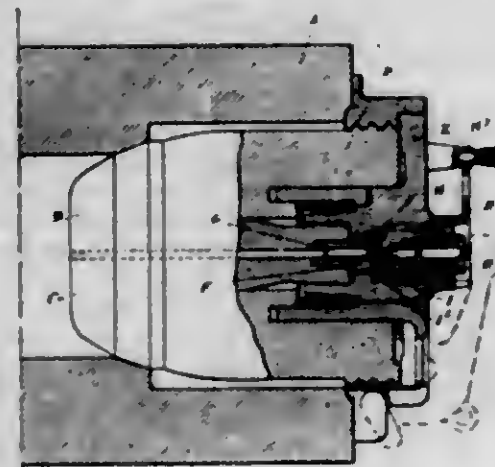
nection and revolvably supporting said gun carriage support.

1,310,886. RESILIENT SUSPENSION FOR GUN-CARRIAGES. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Sept. 20, 1917. Serial No. 194,017. 3 Claims. (Cl. 207-8.)



1. In combination a wheeled carriage axle, a gun carriage frame supported thereon and provided with an undercarriage frame adapted to be lowered to rest on the ground, a rocking beam having one end hinged to said undercarriage frame and having the opposite end supported by the wheeled carriage axle, and depressing and elevating means mounted on the carriage frame and having connection with said beam for lowering said undercarriage to rest on the ground and by continued movement to then elevate the wheeled axle.

1,310,887. FIRING MECHANISM OF GUNS. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,184. 3 Claims. (Cl. 89-27.)



1. In the firing mechanism of a gun, the combination of a striker-carrier, a firing tube holder pivoted thereto, to swing transverse to the axis of said carrier, and means for securing said holder in firing position on said carrier.

1,310,888. TRAIL-CARRIAGE FOR GUNS OF LARGE CALIBER. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,187. 4 Claims. (Cl. 89-40.)

1. In a trail carriage for guns, the combination with a trail pivotable on the trail spade for training the gun, and caterpillars serving for the transport of the carriage,

of means whereby the endless chains of the caterpillars can be opened out flat on the ground in the form of arcs of a circle struck from the trail spade as a center, where-



upon said chains form circular tracks on which the caterpillar truck wheels can travel in an arc for the purpose of training the gun carriage.

1,310,889. WHEELED GUN-CARRIAGE. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,192. 3 Claims. (Cl. 89-40.)



1. In a wheeled gun-carriage, a trail having forwardly extending gun-supporting members, a wheeled axle for supporting the forward end of each of said members, a bearing block for each axle having a pivotal support on and normal to said axle and constituting a bearing support for the forward end of a gun-supporting member, and means for coupling said blocks together whereby said axles may adapt themselves to inequalities of the ground during transport and during firing.

1,310,890. APPARATUS FOR LOADING GUNS. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,193. 2 Claims. (Cl. 89-45.)

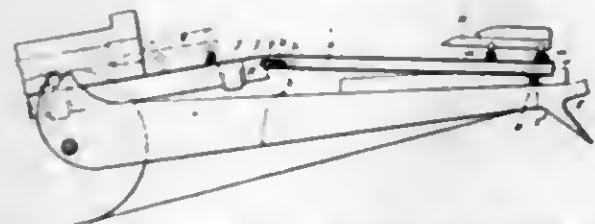


1. In an apparatus for loading guns, the combination with a loading carriage, a fixed framing in which said loading carriage can be moved out of the way during firing and in which said carriage travels, a rammer having a to-and-fro motion in said fixed framing, and a motor for operating said rammer, of a first clutch member located on said loading carriage a cooperating second clutch member located on said fixed framing, an actuating member for actuating a controlling device for starting and stopping said motor, a first gear whereof said cooperating second clutch member forms a part and ending at said actuating member, and a second gear whereof said first clutch member forms a part actuated by said rammer in its to-and-fro movements whereby the to-and-fro movements of said rammer determine automatically the starting and stopping of the latter.

1,310,891. APPARATUS FOR LOADING GUNS. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,190. 1 Claim. (Cl. 89-45.)

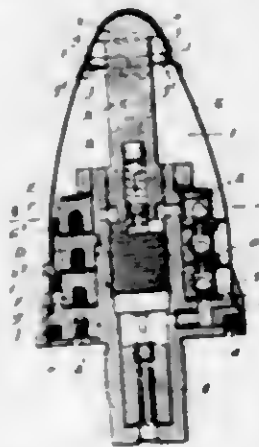
In an apparatus for loading guns, the combination with the gun carriage and with the gun cradle located on the

latter, of a track for the travel of a loading carriage carrying the gun charge, pivoted at its rear end to the gun carriage, a complementary coupling element on the gun carriage, a similar complementary coupling element on the gun cradle, and a coupling element on the front end of said track adapted to engage each of said complementary coupling elements, whereby the mere elevation



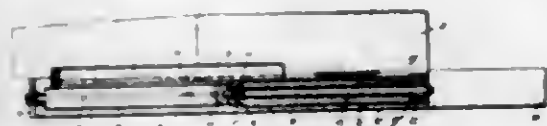
of the breech of the gun barrel into any desired loading position, will open the coupling between said track and the gun carriage, and move said track into position for loading; while the mere return of the gun barrel into a determined position of elevation will open the coupling between said track and the gun cradle, and close the coupling between said track and the gun carriage.

1,310,892. SAFETY APPARATUS FOR PREVENTING UNTIMELY EXTINCTIONS IN THE FUSE-RINGS OF TIME-FUSES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,197. 5 Claims. (Cl. 102—36.)



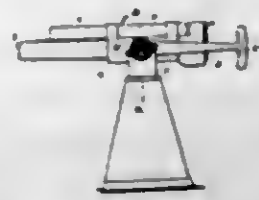
1. In a device for preventing premature extinction of combustion in time fuses for projectiles during flight, the combination of a fuse body having discharge ports for products of combustion, a casing supported on said body and spaced therefrom to form a chamber for receiving and for confining said products of combustion to create pressure therein during said flight.

1,310,893. COMBINED RECUPERATOR AND RECOIL-BRAKE APPARATUS FOR GUNS. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,200. 6 Claims. (Cl. 89—43.)



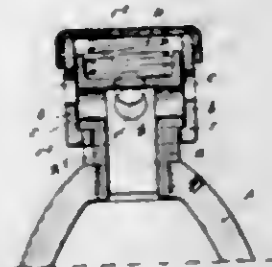
1. In a combined recuperator and brake apparatus for guns, the combination of a fluid pressure reservoir, cylinders of different cross sections one of which is open to said reservoir through the companion cylinder, pistons in said cylinders, a tapering piston-rod connecting said pistons and working through said opening between said cylinders and adapted to progressively throttle the flow of fluid between said cylinders during recoil.

1,310,894. AUTOMATIC APPARATUS FOR LOCKING THE CRADLE AND PEDESTAL OF GUNS OF SMALL CALIBER DURING THEIR RECOIL AND RETURN INTO FIRING POSITION. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,804. 11 Claims. (Cl. 89—37.)



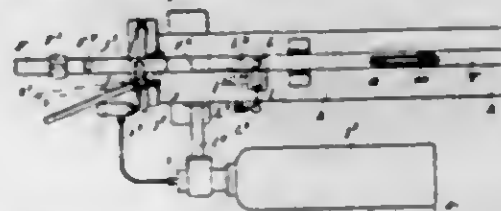
1. In apparatus for locking the gun cradle to the pedestal during the recoil and running-out movement of the gun barrel, the combination with a trunnion of the cradle and its bearing, of a jamming member between said trunnion and bearing, and means controlled by the movement of the gun barrel for moving said member into jamming position to automatically lock the cradle to the pedestal.

1,310,895. APPARATUS FOR REGULATING THE COMBUSTION IN FUSES FOR SHELLS. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,870. 9 Claims. (Cl. 102—36.)



1. In apparatus for regulating the combustion of the fuses of projectiles, in combination with the fuse body provided with one or more orifices for the escape of the gases, a valve controlled by the exterior pressure to which the projectile is subjected during its flight for regulating the size of said orifice.

1,310,896. APPARATUS FOR LAUNCHING TORPEDOES BY MEANS OF UNDER-WATER TORPEDO-TUBES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed September 10, 1918. Serial No. 253,455. 13 Claims. (Cl. 114—238.)

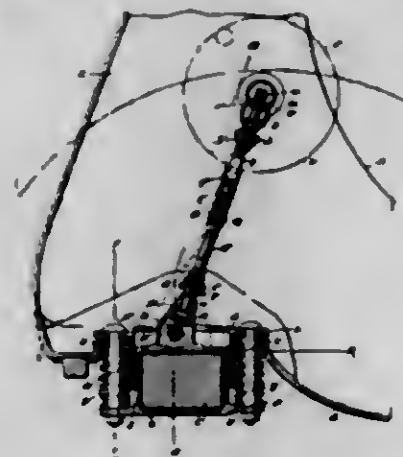


1. In combination with a torpedo tube, its door, and the torpedo releasing and ejecting mechanism, means for opening said door, and means operated by said door-opening means for successively actuating said torpedo-releasing and said torpedo-ejecting mechanism.

1,310,897. WHEELED GUN-CARRIAGE. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France. Original application filed May 15, 1917. Serial No. 168,858. Divided and this application filed Feb. 28, 1919. Serial No. 279,870. 3 Claims. (Cl. 89—40.)

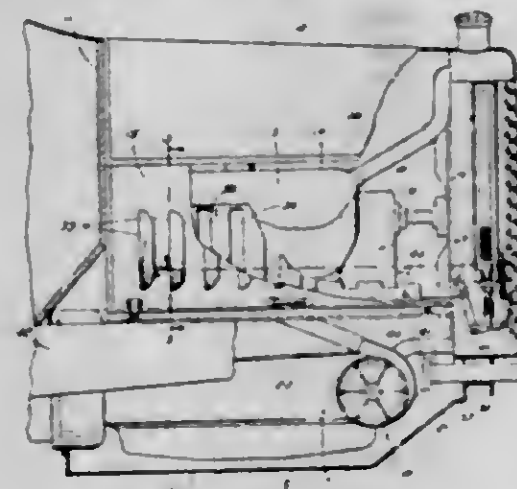
2. In combination, a wheeled axle having a slide box element thereon, a gun carriage frame having a companion

box element yieldingly mounted on said first-named box element, mechanism for sliding said gun carriage along the axle comprising gear means mounted on the first-



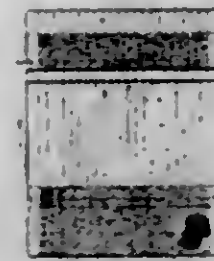
named box element and other gear means mounted on said carriage frame, and a longitudinally yielding power shaft having flexible connections with each of said gear means.

1,310,898. MOTOR-VEHICLE. LYLE K. SNELL, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 1, 1917. Serial No. 194,259. 9 Claims. (Cl. 180—54.)



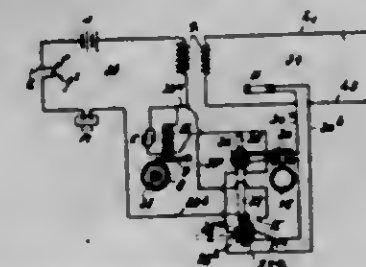
1. The combination with a vehicle front frame, of a motor mounted on said frame, a radiator mounted on said frame in advance of said motor and operatively connected therewith, a dash board supported across said frame behind said motor, a casing supported across said frame in front of said radiator, a hood secured to said frame over said motor, said casing and said hood having shutters closing ventilation openings therethrough.

1,310,899. PINION. JOSEPH W. THORP, Trenton, N. J. Filed Feb. 14, 1918. Serial No. 217,067. 1 Claim. (Cl. 74—28.)



A pinion consisting of a series of sections clamped together, each section being made from a composition in which asbestos fiber is the base with sections of wire, cotton fiber and a vulcanizable rubber binding.

1,310,900. TELEPHONOGRAPH. HUGO ULLMANN, St. Gallen, Switzerland. Filed Mar. 20, 1919. Serial No. 285,352. 2 Claims. (Cl. 179—6.)



1. In a telephonograph system for at will recording all or part of the conversation between two telephonically connected parties, the arrangement that a manually operable contacting member, comprising a handle and a depending contact arm, in its operative position causes a recorder with its recording stylus to descend into operative contact with a wax cylinder and connects the recorder across the receiver circuit as well as across the transmitter circuit of the telephone station, and also by the local battery current causes the electromagnetic release of a driving mechanism for operating the phonographic unit, which contacting member in its inoperative position closes the transmitter circuit direct and cuts out the phonograph unit, substantially as set forth.

1,310,901. METHOD OF MAKING DENTAL CEMENTS. VIGGO VALDEMAR JULIUS ANDERSEN, Copenhagen, Denmark. Filed Jan. 27, 1919. Serial No. 273,268. 5 Claims. (Cl. 106—6.)

1. The method of making a dental cement, which consists in working up zinc oxide and alum with a liquid or fluid to form a paste.

1,310,902. WOVEN FABRIC. GEORGE R. AYRES, Philadelphia, Pa., assignor to Wm. Ayres & Sons, Philadelphia, Pa., a Firm comprising Louis H. Ayres, William G. Ayres, George R. Ayres, and the Estate of William M. Ayres. Filed Feb. 23, 1917. Serial No. 150,581. 0 Claims. (Cl. 139—10.)



1. The process of forming fringe on rugs, which consists in providing warp threads, applying filler or weft threads and weaving the same substantially at right angles to said warp threads, the warps at the selvages of the woven structure being disposed at relatively wide distances apart whereby a looser fabric is produced, teasing or napping the surfaces of the woven fabric, removing the warp threads from the selvage portions of said sections, then twisting said weft ends, applying a medium to said twisted weft ends to set the same in their twisted condition, and finally cutting the woven fabric into sections of the desired size.

1,310,903. SANITARY TABLE UTENSIL. ANNE WHITE BUTTERFIELD, Columbus, Ohio. Filed Oct. 23, 1918. Serial No. 269,373. 1 Claim. (Cl. 65—53.)



A detachable tray formed with an upper reinforcing bead about its edges and provided with a plurality of

corrugated disk pads fixed on its under surface, said tray fashioned with a front wall and an underbent integral flange, and pivoted resilient retaining fingers on the flange adapted to swing to position to engage the under-side of a table and co-act with said pads for retaining the tray in position.

1,310,904. PRUNING-SAW. ALBERT S. CARTER, Philadelphia, Pa., assignor to Henry Dison & Sons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1917. Serial No. 189,755. 4 Claims. (Cl. 30—11.)



1. The combination in a pruning saw, of a saw blade; a support to which the blade is attached; a spring arm having a member at each side of the blade and secured to the support at the base of the blade, the arm extending beyond the blade so as to engage a limb and guide it into the space between the arm and the toothed edge of the blade.

1,310,905. CALENDAR. CARL B. COOK, Haddonfield, N. J. Filed Mar. 9, 1916. Serial No. 83,072. 5 Claims. (Cl. 40—117.)

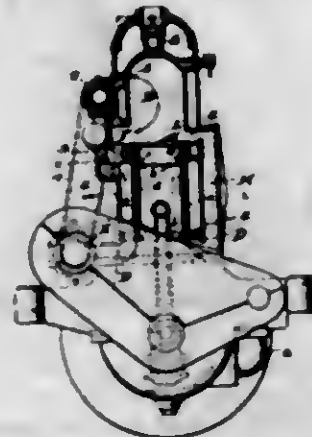


1. The combination with a calendar sheet having a multiplicity of date lines representing weekly and monthly divisions of time, of a mounting for said calendar sheet arranged to display a definite number of said week date lines, and means whereby any single week date line of said number may be selectively indicated with greater prominence to the exclusion of the others.

1,310,906. INTERNAL-COMBUSTION ENGINE. JOSE RAMON DE ASURTO, Madrid, Spain. Filed May 24, 1918. Serial No. 236,342. 8 Claims. (Cl. 123—65.)

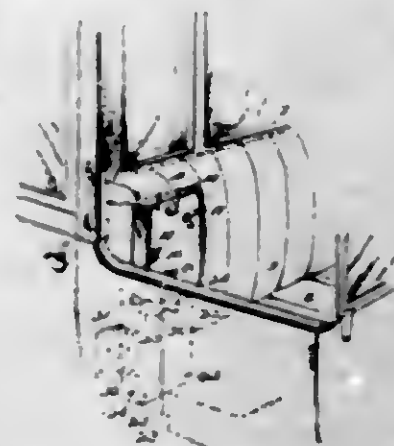
1. In an internal combustion engine, the combination of a cylinder comprising upper and lower chambers, the latter consisting of an inner portion disposed in alignment with, and having substantially the same diameter as, the upper chamber, an outer annular portion encircling the inner portion, and an annular partition sep-

arating said outer and inner portions; and a piston arranged to reciprocate in the upper chamber and in the inner portion of the lower chamber, and consisting of spaced outer and inner tubular compressing members disposed on opposite sides of said partition, and a cap to which both members are fastened at their upper edges; the outer member having openings providing communica-



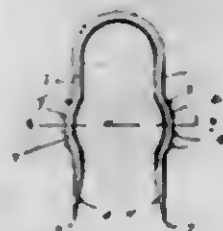
tion between the outer portion of said lower chamber and the annular space between the outer and inner piston members, and also having at its lower edge a circumferential flange adapted to reciprocate in said outer portion, and said cap having openings formed through it to provide communication between said annular space and the interior of the inner piston member.

1,310,907. FARE-METER INSTALLATION FOR AUTOMOBILES. GEORGE THOMAS DENLOP and JOHN J. BOGARA, Washington, D. C., assignors to Terminal Taxi-cab Company, Washington, D. C., a Corporation of Virginia. Filed May 18, 1918. Serial No. 235,396. 12 Claims. (Cl. 21—7.)



1. The combination with an automobile, of a fare-meter, and means movably attaching said meter to the automobile whereby it may be moved from a position in which it is readable by a passenger to a changed position in which it is readable by the driver.

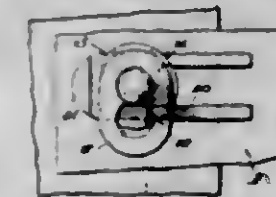
1,310,908. STAPLE. FRED F. GILBERT, Draper, S. D. Filed Feb. 18, 1919. Serial No. 277,845. 1 Claim. (Cl. 85—49.)



A staple comprising parallel shanks connected together at one end of the staple and having their opposite

ends pointed, curved binding portions formed intermediate the end of each shank and curved outwardly to form binding elements when the said staple is driven into position, the said curved portions having notches, the material adjacent the notches being bent outwardly to form prongs for co-operating with the said binding curved portions to prevent displacement of the staple.

1,310,909. BOLT. WILLIAM HACKETT, Portland, Oreg., assignor of one-half to John McPhee, Portland, Oreg. Filed Nov. 27, 1918. Serial No. 264,333. 4 Claims. (Cl. 85—8.)



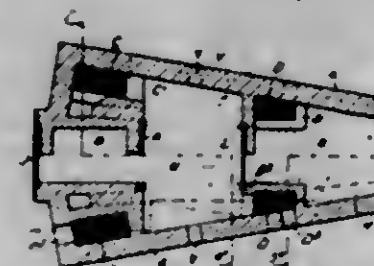
4. A locking bolt comprising a bolt shank having a head at one end, a locking plate adjacent the opposite end of the bolt and detachable therefrom, relatively engageable means carried by the bolt shank and the locking plate for securing the latter with respect to the bolt shank, and a wedge member having a slot extending partially therethrough to receive the bolt shank, forming side portions straddling the shank and having their points of greatest thickness movable to one side of the plane of the axis of the shank for the purpose described.

1,310,910. MOP. FREDERICK HODGKINS, Brooklyn, N. Y. Filed Oct. 27, 1916. Serial No. 128,004. Renewed June 14, 1919. Serial No. 304,276. 2 Claims. (Cl. 15—13.)



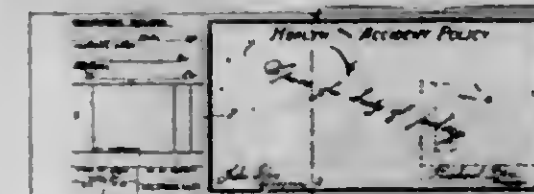
1. A mop comprising a rigid supporting member; a handle connected thereto; and a flexible resilient element folded inwardly upon itself, the inner folds forming a passage therebetween connecting a channel formed interior to the resilient element with a pocket formed upon the lateral edge of said element.

1,310,911. FURNACE FOR ANNEALING METAL PLATES. WILLIAM JOHN MORRISON, Swansea, Wales. Filed Apr. 15, 1919. Serial No. 290,298. 2 Claims. (Cl. 263—36.)



1. A furnace for annealing metal plates, a central track along the same for trolleys, a drop door at the receiving end and a similar door at the discharge end, the side walls of the furnace being tapered so that it is wider at the discharge end than at the receiving end, two fireplaces for coal at the wider end, one at each side of the discharge door, and two additional fireplaces for coke, one in each of the taper side walls near the middle of the furnace.

1,310,912. COMBINED INSURANCE-CONTRACT AND HOTEL-RECEIPT. HARRY C. KEMMERT, Denver, Colo. Filed June 8, 1917. Serial No. 173,443. 1 Claim. (Cl. 282—27.)



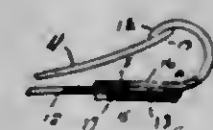
An instrument of the class described comprising two separable sections adapted to be folded with parts of their obverse faces together, a form for an insurance policy on the front face of one section, a form for a record on the front face of the other section, a form for a receipt on the reverse face of the first named section corresponding to and so located with respect to the record form that the two forms may be made to register when the sheet is folded, whereby a carbon copy of the receipt may be produced on the record form when the forms are superposed.

1,310,913. MOTOR-CYLINDER. CLARENCE A. KIRKHAM, Hammondsport, N. Y., assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y., a Corporation of New York. Filed Oct. 22, 1915. Serial No. 37,293. 6 Claims. (Cl. 123—193.)



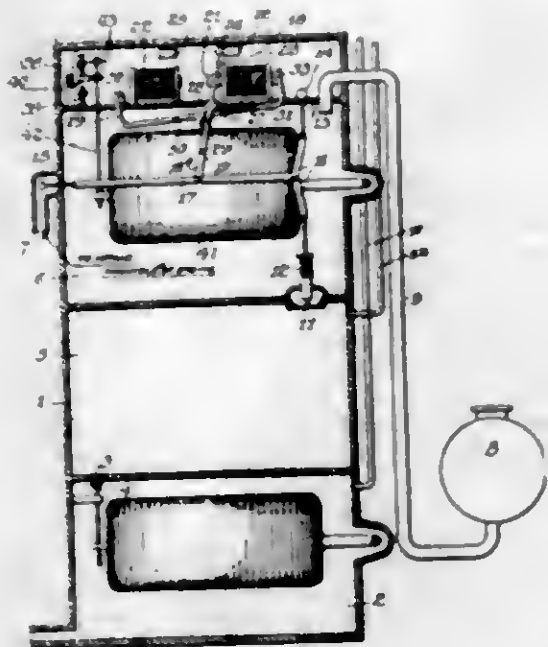
1. An engine cylinder including a hollowed body, a head for said cylinder formed integral with said body, valve seats formed integrally in said head to overlap the periphery of the cylinder body, a water-jacket surrounding said body, and a crown plate supported by said integral valve seats and overhanging said combustion chamber to form the top of said jacket.

1,310,914. HAIR-RETAINER. GERTRUDE I. LANDRY, Pawtucket, and GEORGE S. KELLEY, Cranston, R. I., said Kelley assignor to said Landry. Filed Apr. 20, 1919. Serial No. 292,805. 2 Claims. (Cl. 132—18.)



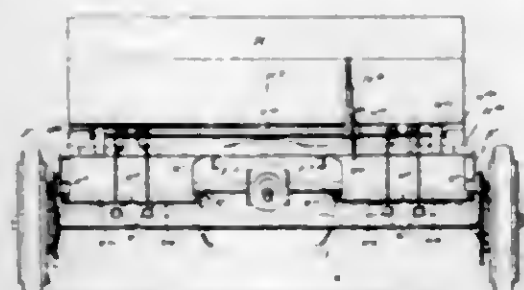
2. A retainer comprising a strip of resilient material folded upon itself forming two opposing arms, a guard member slidably mounted on and permanently connected to one of the arm members of the retainer, one of said members having its edge rolled over that of the other to slidably connect them together, one of said members being provided with a protuberance and the other having an elongated recess into which said protuberance on the other member projects providing a positive stop to limit the sliding movement of said guard member.

1,310,915. GASOLINE-FEED SYSTEM FOR CARBURETERS. RICHARD A. LEAVELL, Chicago, Ill., assignor of one-half to Stromberg Motor Devices Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 3, 1914. Serial No. 860,006. Renewed Dec. 26, 1918. Serial No. 268,416. 16 Claims. (Cl. 158-36.)



1. In combination, a chamber, a supply pipe for supplying liquid to said chamber, a normally closed valve through which the liquid is discharged from said chamber, electromagnetic means for operating said valve, a float subject to the level of the liquid in said chamber for controlling said electromagnetic means and a separate inlet pipe for supplying liquid to said chamber said inlet being controlled to pass liquid in a single direction into said chamber.

1,310,916. DUMP WAGON. MORRIS VOLNEY LIDDELL, Harvey, Ill., assignor to Austin Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed July 24, 1918. Serial No. 246,437. Divided and this application filed Oct. 15, 1918. Serial No. 259,644. 3 Claims. (Cl. 298-33.)

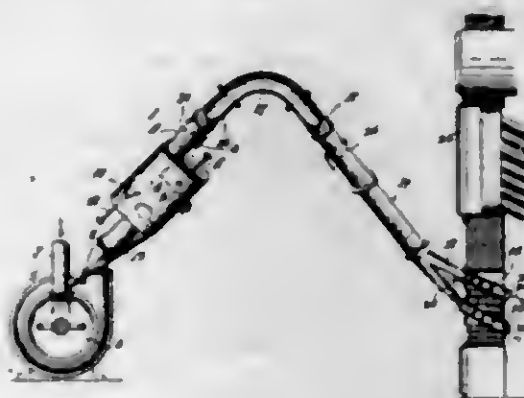


2. In a dump vehicle, the combination of a receptacle having a double-hopper bottom providing depending discharge legs with an arch between them, a pair of doors for each depending leg, a frame comprising inner longitudinal rails extending through the arch, outer longitudinal rails extending along the outer sides of the depending legs, cross bars resting upon the longitudinal rails, and means for controlling the doors, comprising a winding shaft mounted upon said cross bar and extending across both depending legs, and chains connecting said winding shaft with the doors.

1,310,917. CLASSIFIER. EDWARD F. MCCOOL, Victor, Colo. Filed Oct. 9, 1917. Serial No. 195,512. 3 Claims. (Cl. 83-54.)

4. A classifier comprising an impervious casing having a downwardly inclined lower wall, an outlet opening ar-

ranged in its front wall and an inlet opening in its rear wall, said openings being arranged wholly out of alignment with each other, a baffle plate arranged opposite said inlet opening and parallel to said rear wall, a conduit ex-



tending into said casing from said outlet opening and having its mouth in the rear of said baffle plate, and an opening in the lower part of said casing for escape of large particles.

1,310,918. CARBONIZING COMPOUND AND PROCESS OF MAKING THE SAME. CHARLES PLEASANTS MERRITT, Cleveland, Ohio, assignor, by mesne assignments, to Edwin C. Henna, Cleveland, Ohio, a Corporation of Ohio. Filed June 7, 1917. Serial No. 173,430. 30 Claims. (Cl. 148-30.)

13. The process of preparing a carbonizing composition, which consists in treating wood with a fireproofed solution containing an energizer including sodium chlorid, and then drying the so treated material.

1,310,919. INTERNAL-COMBUSTION ENGINE. HERBERT L. MERRER, Denver, Colo., assignor of one-half to Lewis S. Hall, Denver, Colo. Filed Feb. 11, 1918. Serial No. 216,527. 2 Claims. (Cl. 123-74.)



1. In an internal combustion engine, a cylinder, a piston adapted to reciprocate therein, the cylinder being offset at an intermediate point and one end of the piston being offset annularly to fit therein, a combustion chamber being provided above the piston and a compression chamber being provided below the piston and offset end portion thereof, there being a connecting passage between said chambers, the space between said offset cylinder portion and said offset piston end portion being free of communication with each of said chambers, a piston rod for operating said piston, a sleeve united with the bottom of said compression chamber to make a gas-tight joint, a sleeve surrounding said rod and extending from the bottom of the compression chamber up into said piston, the lower end of the piston being closed between the cylinder wall and the sleeve, the lower end of the compression chamber having a fuel-intake passage leading thereto.

1,310,920. FASTENING. HOWARD C. NOBLE, New Britain, Conn., assignor to The North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 26, 1919. Serial No. 279,359. 2 Claims. (Cl. 24-266.)



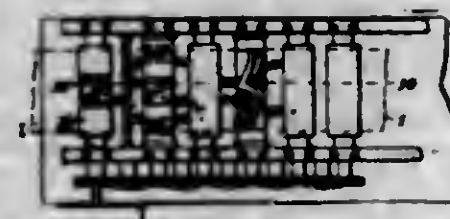
2. A strap for a fastening of the class described, comprising plies marginally stitched together, and a stop between the plies in the form of superimposed pieces of duplicate construction, the outer faces of which are adhesively united to the respective plies of the strap.

1,310,921. FRUIT-SORTING MACHINE. PIETER NOTENBOOM, Rotterdam, Netherlands. Filed Aug. 26, 1916. Serial No. 117,041. 3 Claims. (Cl. 130-32.)



1. In a fruit sorting machine, in which the fruit is passed over a fixed inclined bed formed with a number of sorting holes increasing in diameter from the upper charging end to the lower discharging end, the combination of a plurality of laths adapted to be moved through a series of slots connecting the sorting holes, and means for imparting simultaneously a longitudinal movement to said laths and a differential vertical movement to the extremities thereof, whereby said laths engage any fruit, which may have settled in sorting holes of too small diameter, at their lowest point, thus lifting said fruit and causing the same to move along the bed until it reaches the sorting holes of proper diameter.

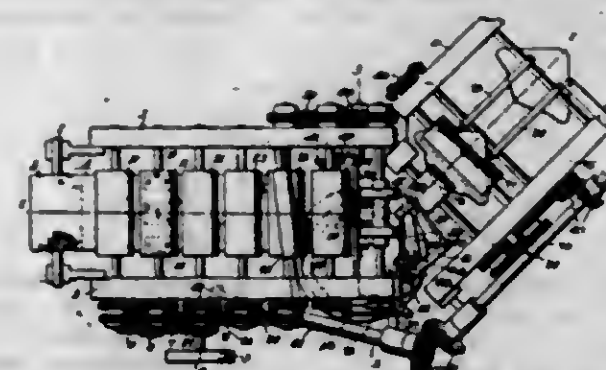
1,310,922. CUTTING MECHANISM FOR ENVELOP-BLANKS. ABRAHAM NOVICK, New York, N. Y., assignor, by mesne assignments, to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed Nov. 28, 1916. Serial No. 133,976. 10 Claims. (Cl. 164-68.)



1. In a mechanism of the class described, a pair of rolls for forwarding a continuous web, one of the rolls in said pair carrying a knife cooperating with the other roll of the pair for forming part of an opening in the center of the web, a second pair of rolls with one of the rolls of the pair recessed to clear the web, knives carried by said recessed roll and cooperating with the other roll of said second pair of rolls to complete the center opening in the web and to form notches in the edge of the web, and a third pair of rolls contacting with the web to forward the same, all of said pairs of rolls operating upon the web in the order named.

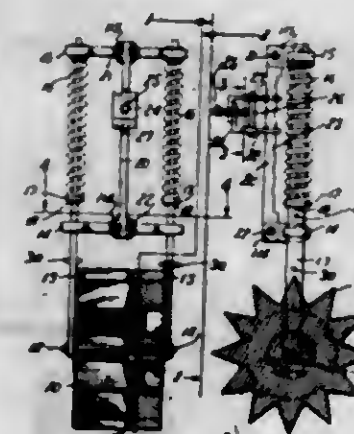
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1,310,923. ENVELOP-BLANK CUTTING AND FORWARDING MECHANISM. ABRAHAM NOVICK, New York, N. Y., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Continuation of application Serial No. 26,675, filed May 8, 1915. This application filed Oct. 17, 1917. Serial No. 197,023. 20 Claims. (Cl. 164-61.)



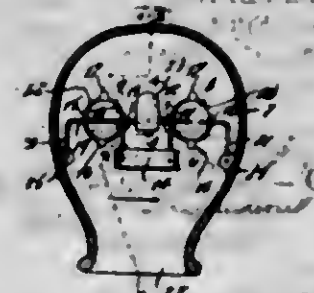
1. In mechanism of the class described, the combination with means for cutting a series of oppositely disposed envelop blanks from a web, of a blank turning mechanism operable in opposite directions upon successive adjacent blanks, and means for advancing the blanks in single file, uniformly disposed, for further operation.

1,310,924. CRUST-BREAKING ATTACHMENT FOR CULTIVATORS. TAKANO ONO, Sedgwick, Colo. Filed Aug. 19, 1918. Serial No. 250,469. 3 Claims. (Cl. 97-38.)



2. A crust breaker comprising a framework having upper and lower cross bars, a post connected with said bars, means to connect the post with a cultivator beam, vertically reciprocable arms in the ends of said cross bars, and a crust-breaking roller journaled in the lower ends of said arms.

1,310,925. MOVABLE-EYE DOLL. JACQUES PAUL, New York, N. Y. Filed Oct. 24, 1918. Serial No. 259,479. 6 Claims. (Cl. 46-40.)



1. In combination with a doll head having openings for eyes, movable eye-members, a frame therefor pivotally connected to said eyes centrally thereof, means carried

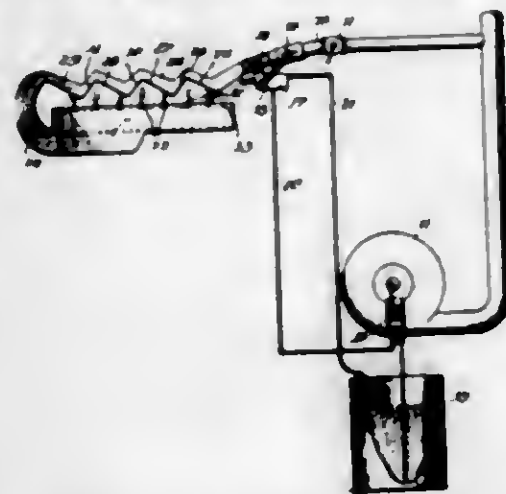
by the doll-head to engage said frame at its ends, and means also carried by the head to engage said frame intermediate its ends and arranged to position the eyes centrally of the openings therefor.

1,310,926. GAS ATTACHMENT FOR HEATING-FURNACES. MATILDA PELZER, Norwood, Ohio. Filed May 16, 1917. Serial No. 169,076. 1 Claim. (Cl. 126-116.)



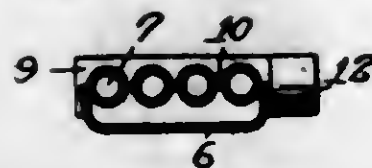
The combination with a hot air furnace comprising a solid fuel burning element for heating the air, and a casing for the furnace extending in a dome-shape above said burning element, of a separate supplemental heater mounted above and outside of the solid fuel burning element, and in the dome-shaped portion of the furnace casing, said heater comprising a casing to fit within said dome-shaped portion and having a passage-way to the outside of the casing through which the air enters the casing, gas burners in the casing, and an outlet from the casing for the products of combustion, said casing being entirely inclosed inside of the furnace casing, as and for the purpose described.

1,310,927. GASIFIER AND FIXING DEVICE. GEORGE L. RACHNHALM, New Haven, Conn. Filed July 7, 1917. Serial No. 179,184. 15 Claims. (Cl. 158-65.)



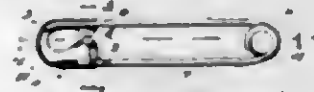
15. In a device of the class described, the combination of a burner, a passageway leading to said burner, means for supplying oil to said passageway in the form of a foam, and means for conveying air through said passageway to produce a combustible mixture which becomes fixed in said passageway and part of which is supplied to said burner to heat said passageway and the remaining part being supplied for another heating purpose.

1,310,928. METHOD AND APPARATUS FOR BURNING COMBUSTIBLE FLUIDS. GEORGE L. RACHNHALM, New Haven, Conn. Filed July 13, 1917. Serial No. 180,299. 5 Claims. (Cl. 158-69.)



1. A burner comprising in combination a pair of exteriorly arranged cylindrical members in close proximity to each other, and means for forcing a gaseous mixture through the space between said members.

1,310,929. SAFETY-PIN. JOHN HENRY RICHARDSON, San Pedro, Calif. Filed Dec. 28, 1918. Serial No. 268,683. 1 Claim. (Cl. 24-156.)



A safety pin comprising a pair of arms, one of said arms carrying a sheath and the other being the piercing arm, said arm having a slot, and the sheath a tongue for engagement by the slot when the piercing arm is in the sheath, said sheath having a substantially channel shaped portion held in spaced relation to the arm to which the sheath is secured and with the channel facing the said arm and having an extension from the said arm extending between the side walls of the channel shaped portion of the sheath, each side wall having its upper edge turned the distance between the extension and the turned edge of each side wall being equal to the distance between the turned portions and a tongue in the channel between the side walls for engaging the slot, said tongue being struck up from the material of one of the side walls.

1,310,930. KEYLESS PADLOCK. ROBERT RICHARDSON, Flushing, N. Y. Filed June 13, 1918. Serial No. 239,815. 1 Claim. (Cl. 70-105.)



In a lock of the character described, the combination of a casing, a shackle pivotally connected to said casing and having a catch portion therein, a spring formed from a resilient strip of material and being bent intermediate its ends to form a closed loop, a stud carried by said casing, said loop fitting about said stud, said spring having one end thereof bent in the arc of a circle and extending away from said loop, said casing also having another stud, said bent portion of said spring resting upon said last mentioned stud for urging the spring in one direction, the remaining end portion of said spring being bent at its extreme end for forming a catch, said casing having a slot therein; a bifurcated stud extending through said slot and engaging the last mentioned end portion of said spring adjacent the catch thereof, a head carried on said stud and covering said slot whereby said last mentioned stud may be freely shifted to spring the last mentioned end portion of said spring rearwardly to cause the catch thereof to release the shackle whereupon the spring will pivot slightly, around the first mentioned stud to be slightly compressed whereby when the spring is again released it will return to its normal position to cause the catch thereof to be in the path of movement of the shackle when the same is moved into said casing.

1,310,931. STEAMING-RECEPTACLE. FRANK P. SCHMITZ, Clinton, Ohio, and NORMAN P. COLLIS, Dubuque, Iowa, assignors to Oliver D. Collis, Clinton, Iowa. Filed May 6, 1916. Serial No. 95,946. 7 Claims. (Cl. 17-7.)

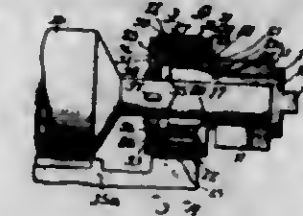
1. In a device of the class described, the combination of a receptacle provided with an opening in its top, a vertical post within the receptacle at one side of said opening, a suspending bracket rotatably mounted on said

post and provided with a plurality of radially arranged forked hangers, a cover for said opening, and means for



admitting steam to the interior of the receptacle, substantially as described.

1,310,932. INKING-ROLLER FOR PRINTING-PRESSES. JOHN H. SCHUAALEM, Chicago, Ill. Filed Oct. 19, 1917. Serial No. 197,389. 15 Claims. (Cl. 101-362.)



1. In a printing press a combination of an inking roller, traveling supports upon which said inking roller is mounted, a rotatable eccentric journal bearing carrying said inking roller, means for limiting the rotation of said journal bearing, a frictional roller mounted upon said eccentric member, and means mounted upon the inking roller for engagement with the frictional roller.

1,310,933. METHOD OF AND MEANS FOR RIFLING GUNS. EDWARD A. SUVERKHOFF, Sea Cliff, N. Y., and ETHAN VIALI, East Orange, N. J. Filed June 4, 1918. Serial No. 238,106. 18 Claims. (Cl. 90-28.1.)



1. The method of rifling a gun which consists in mounting the gun in a fixed position, fixing a guide bar in the bore of the gun with its axis coinciding with the axis of the bore, and simultaneously forcing a plural number of independent cutters having teeth of increasing size along the guide bar through the bore of the gun, and thereby at one continuous operation roughing and finishing the rifling grooves.

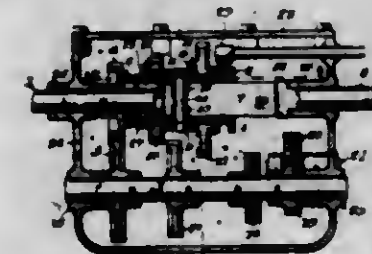
1,310,934. METHOD OF AND MEANS FOR RIFLING GUNS. EDWARD A. SUVERKHOFF, Sea Cliff, N. Y., and ETHAN VIALI, East Orange, N. J. Filed Aug. 16, 1918. Serial No. 250,171. 10 Claims. (Cl. 90-28.1.)



1. The method of rifling guns which consists in causing a relative longitudinal-rotary movement between a gun and a cutter and forming a pilot groove having the desired twist in the interior of the bore and completing the cutting of the rifling groove by succeeding cutters which are caused to follow the pilot groove.

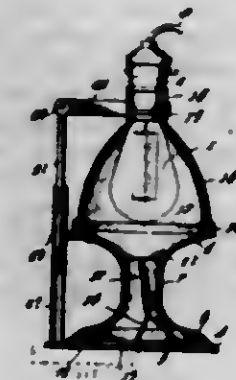
7. An apparatus for cutting the rifling grooves in the bores of guns, consisting of a shaft, a disk with cutting teeth fixed upon the shaft, and disks with cutting teeth rotatably mounted on the shaft.

1,310,935. TRANSMISSION-GEARING. OLE O. STORLE, Tacoma, Wash., assignor to The Storle Engine Company, Kewanee, Wis., a Corporation of Wisconsin. Filed Feb. 19, 1917. Serial No. 140,387. 5 Claims. (Cl. 74-68.)



5. In transmission gearing the combination of a driven shaft, a counter shaft parallel therewith, a shifting member mounted and movable axially on the driven shaft and having a roller driving connection therewith, gears of different sizes mounted on the counter shaft, a reversing gear in constant mesh with a gear on the counter shaft, gears mounted on the shifting member movable therewith into and out of mesh one at a time with gears on the counter shaft and the reversing gear, one of each pair of coacting gears for transmission of power from the counter shaft to the driven shaft being capable of a limited angular movement relative to the part on which it is mounted, and means tending to hold back the angularly shiftable gears when they run idly.

1,310,936. ELECTRIC-LIGHT FIXTURE. MATTHEW S. WALKER, Corning, N. Y. Filed Oct. 24, 1918. Serial No. 259,489. 2 Claims. (Cl. 240-53.)

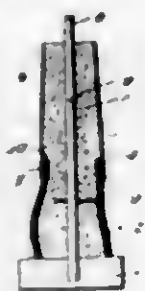


1. In an electric light fixture, a stand comprising a base, a top and an intermediate hollow connecting portion, a weighted ring in the base, a clamp disposed wholly within the base and connected at one end to the weighted ring and stepped in its length to provide a finger piece, a grip and a stop, a disk located in the lower portion of the top, and a contractile helical spring disposed in the hollow connection between the top and base and attached at its ends to the said disk and clamp, respectively.

1,310,937. POSITIVE OR MASTER CAST FOR THE REPRODUCTION OF NEGATIVE OR SOCKETED ARTIFICIAL LIMBS. JOSEPH F. WISERACK, Pittsburgh, Pa. Filed Jan. 17, 1918. Serial No. 212,172. 6 Claims. (Cl. 142-1.)

1. The method of forming a positive turning pattern for the reproduction of a socketed artificial limb which

consists in taking a mold of the stump, centering said mold about a shaft, then filling the mold with a plastic



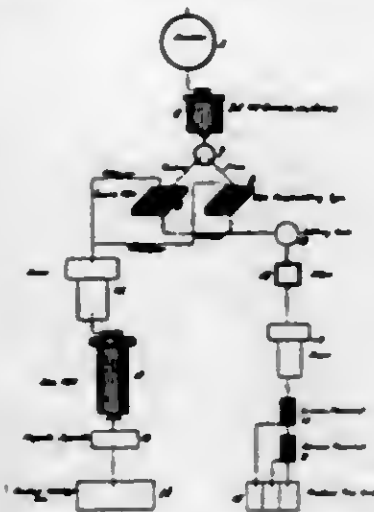
substance embedding the shaft therein, then cutting the said mold from about the set plastic substance.

1,310,938. SPRAY-NOZZLE. WILLIAM D. HALLERSTEDT, Los Angeles, Calif. Filed Aug. 22, 1918. Serial No. 116,385. 3 Claims. (Cl. 137-86.)



2. The combination with an externally screw-threaded connection leading from a liquid supply source, of a spray nozzle comprising a sprinkler head having at one end a diaphragm which is provided with a central orifice therein and an inner flat surface, and a bore, cylindrical throughout its length and extending from the other end of the head to the inner surface of the diaphragm and being coaxial with the orifice, the bore having screw threads which fit the threads of the connection so that the head is thereby adjustably attached to the connection; and a vortex plug adjustably mounted in the bore and adapted to form between one end of the vortex plug and the inner surface of the diaphragm a vortex chamber which is reduced from the wall of the bore toward the orifice, the vortex plug also having apical peripheral channels which lead from the other end of the vortex plug to the vortex chamber, and the liquid supply to the nozzle being regulated by adjusting the head toward or away from the end of the connection and being entirely shut off when the last-named end of the vortex plug is seated upon the end of the connection.

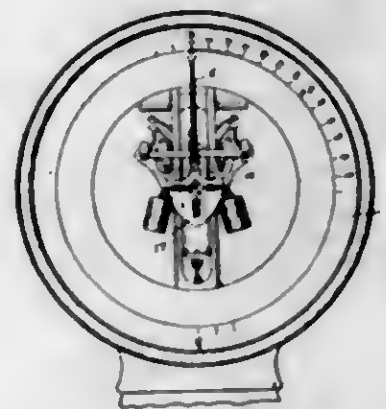
1,310,939. PROCESS OF SEPARATING MICA FROM FELDSPAR. GEORGE J. RANSFORD, Denver, Colo. Filed Aug. 9, 1917. Serial No. 185,274. 4 Claims. (Cl. 83-84.)



1. A process which comprises grinding together mica and an insoluble abrasive material which is granular

when ground and is lighter than the mica, washing the ground materials on a table, whereby the mica is washed from the lighter abrasive material as a sort of tailings due to the flaky characteristics of the mica and the abrasive material is removed from the table as a sort of concentrates due to its granular nature.

1,310,940. WEIGHING-SCALE. HARRY S. BERGEN, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Aug. 30, 1915. Serial No. 48,043. 7 Claims. (Cl. 73-151.)



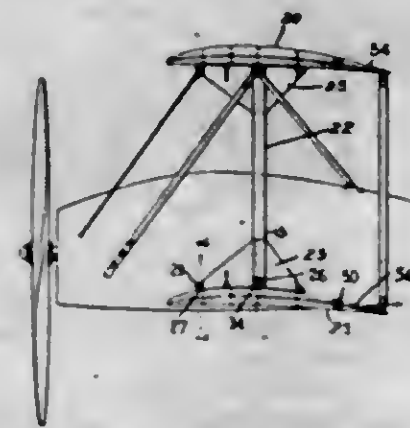
1. In a weighing scale, an indicator hand formed of separable parts having aligned portions adapted to form a hub, means for securing the parts in aligned position, adjustable means carried by one of said parts for balancing the hand on all sides of the axis of its hub, and another of said parts being slotted to receive securing means whereby the hand may be secured to the weighing mechanism.

1,310,941. PORTABLE BURGLAR-ALARM. JAMES M. BUTCHER, Chicago, Ill., assignor, by mesne assignments, to Marshall Dobbins & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1914. Serial No. 861,365. 3 Claims. (Cl. 116-44.)



2. An alarm comprising a bell having an operating member, a standard by which said bell is carried, said operating member being movable transversely to the principal axis of said standard, a clamp member to which the standard is pivoted and which is adapted to be attached to a supporting member, and an actuating member pivoted on said standard and arranged to be actuated by said clamp member upon relative movement of said clamp member and said standard, said actuating member being provided with an offset portion adapted to coact with said operating member to actuate the same.

1,310,942. AIRPLANE-WING CONSTRUCTION. NELSON W. DALTON, Garden City, N. Y., assignor to Curtiss Aeroplane and Motor Corporation, a Corporation of New York. Filed Mar. 25, 1918. Serial No. 224,547. 7 Claims. (Cl. 244-31.)

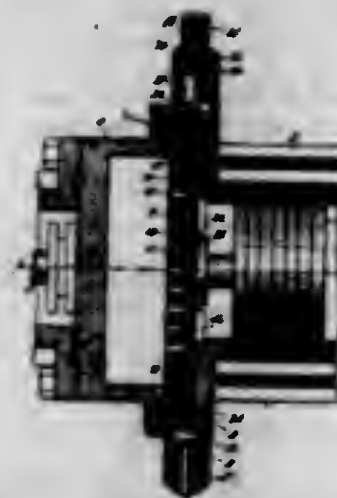


1. An airplane wing including a longitudinal beam continuous throughout the full length of the wing, a transverse beam continuous throughout the full width of the wing, said transverse beam being apertured to let the longitudinal beam pass through it, and a plurality of divided longitudinal beams having adjacent beam sections abutting the opposite faces of the transverse beams, the arrangement being such that the stresses due to the air lift load and interplane wiring are distributed by means of the transverse beam over all of the longitudinal beams.

1,310,943. PROCESS OF PRODUCING CHLORIN. RAJIKAL DATTA, Calcutta, India. Filed Aug. 17, 1916. Serial No. 115,554. 3 Claims. (Cl. 23-10.)

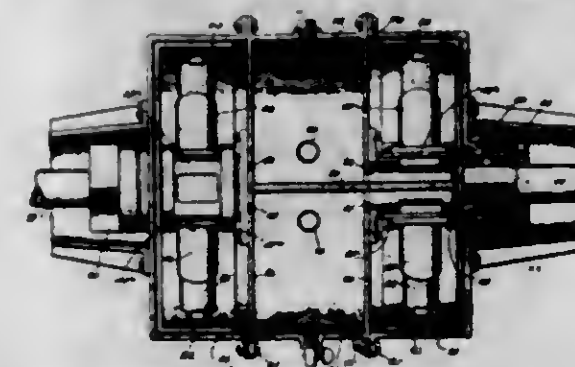
1. The herein described process of producing chlorine gas, which consists in passing nitrosyl chloride and air through a heated tube containing an inert filler whereby nitrous gases and chlorine gas are produced, passing the gaseous mixture thus produced through sulfuric acid whereby the nitrous gases react with the sulfuric acid to form nitrosyl sulfuric acid and the chlorine gas escapes from the presence of the sulfuric acid.

1,310,944. AIR-COMPRESSOR. GEORGE K. DAYOL, San Francisco, Calif., assignor, by mesne assignments, to P. H. Reardon, San Francisco, Calif. Filed Oct. 2, 1915. Serial No. 54,309. 28 Claims. (Cl. 230-34.)



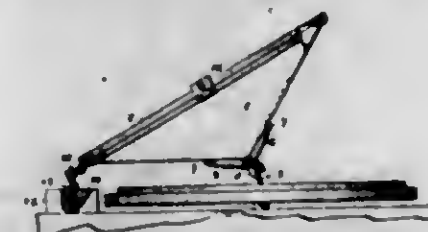
1. In combination a cylinder having a relatively shallow rectangular passage formed across the end thereof in a plane substantially perpendicular to the axis of the cylinder, said passage having parallel grooves formed in two of its opposite internal surfaces, end plates closing the ends of said passage and a flat valve seat within said passage, and parallel tongues on two of the opposite sides of the valve seat for coöperation with the grooves of said passage to hold the valve.

1,310,945. HYDRAULIC TRANSMISSION. JOSEPH DE MARTINO and EUGENE MAURER, Chicago, Ill. Filed Apr. 20, 1914. Serial No. 833,081. 14 Claims. (Cl. 60-53.)



1. The combination of an outer enclosing casing, a rotary member arranged therein, said casing having a bearing and said member having a hub portion mounted within said bearing, pistons and cylinders arranged within said member and arranged in a substantially radial manner, the outer ends of said pistons being pivotally connected with said rotary member and the inner ends of said cylinders being connected together, valve mechanism for controlling the inlet and outlet of fluid to and from the inner ends of said cylinders, said valve mechanism being mounted upon said casing, and shiftable relatively to same.

1,310,946. PHONOGRAPHIC REPRODUCER. JOHN H. J. HAINES, New York, N. Y. Filed June 15, 1918. Serial No. 240,154. 4 Claims. (Cl. 274-35.)



1. A reproducer for phonographic machines consisting of the combination of a diaphragm, a stylus and a connecting member by which the stylus is rigidly attached to the diaphragm, said connecting member being attached to the diaphragm at three points only located in a diametrical plane thereof.

1,310,947. COTTON-SACK HANGER. WALTER HAMBRICK, Emory, Tex. Filed May 20, 1916. Serial No. 98,921. 1 Claim. (Cl. 24-244.)



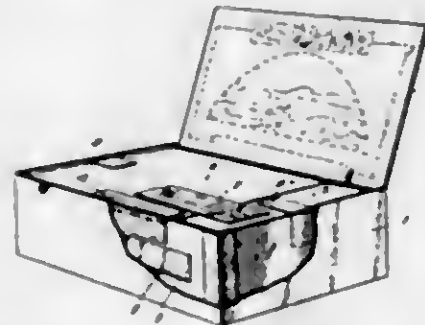
As a new article of manufacture, the herein described cotton sack hanger, consisting of a single piece of wire the intermediate portion of which is straight to constitute a shank, one end of the wire being coiled upon itself in a plane substantially at right angles to the shank whereby to form a ring for engagement with one corner of a cotton sack and the other end being returned upon itself parallel with the shank and thence extended toward the same and secured thereto to form an elongated loop, as and for the purpose set forth.

1,310,948. **WEIGHING-SCALE.** CLARENCE H. HAPGOOD, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Original application filed Sept. 25, 1911. Serial No. 651,045. Divided and this application filed Nov. 6, 1915. Serial No. 59,922. 6 Claims. (Cl. 74-104.)



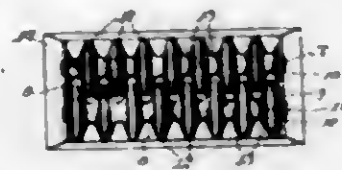
1. In a scale, a scale beam having knife-edge pivots, a base having standards thereon for the support of the beam, bearings in said standards for the knives of the beam, screws threaded in the standards opposite the bearings, and hardened heads adjustably mounted in said screws against which the knives may bear endwise.

1,310,949. **CIGAR-BOX.** OTTO W. HARMS, Chicago, Ill. Filed Dec. 2, 1918. Serial No. 264,908. 1 Claim. (Cl. 131-11.)



In combination with a cigar box made of flavoring wood a package formed to inclose the cigars and to conformably fit within the box and having means whereby the flavor of the wood may have access to the cigars within the package, and means whereby to seal said package so as to require mutilation of the package in order to allow of removal of the cigars from the package, said package being bodily removable from the box so as to allow the latter to be resealed with a fresh sealed and stamped package containing cigars.

1,310,950. **MASSAGE DEVICE.** DANNIS J. BRADANT, Chicago, Ill. Filed Mar. 15, 1919. Serial No. 282,914. 4 Claims. (Cl. 128-57.)

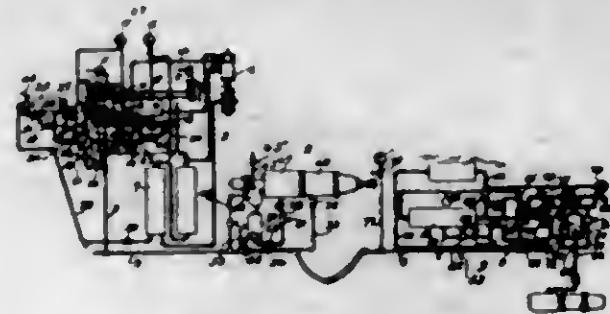


1. A massage device consisting of a holder and a plurality of rollers journaled thereon in parallelism with one another, each of said rollers having thereon a plurality of spaced apart circumferentially disposed enlargements tapered toward their peripheries, the enlargements of said rollers being extended between each other and of uniform size.

1,310,951. **PRESSURE BRAKE SYSTEM.** MARTIN G. HIEGNA, Dunmore, Pa. Filed May 18, 1918. Serial No. 98,309. 5 Claims. (Cl. 188-1.)

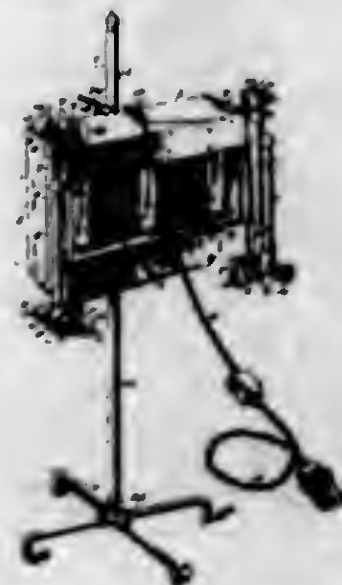
1. A pressure brake system comprising in combination a primary control station having a source of pressure me-

dium; a circulating system therefor; a brake valve in connection therewith; a secondary control valve in connection



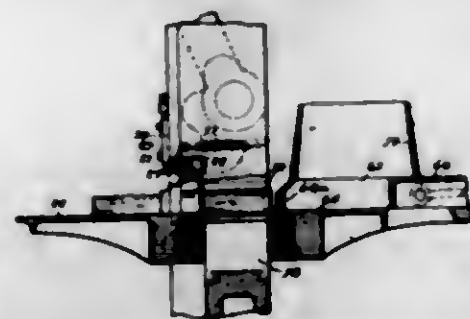
with said brake valve; and an automatic means of regulating the pressure medium in connection with said brake valve and said control valve.

1,310,952. **ELECTRIC HEATING AND LIGHTING APPARATUS.** RICHARD G. LEDIG, ROBERT C. LEDIG, and NICHOLAS GERSON, Philadelphia, Pa., assignors to A. Mecky Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1918. Serial No. 230,603. 3 Claims. (Cl. 248-41.)



1. A member, means on said member for the connection therewith of an electric conductor, a standard, a collar, a pivotal connection for said collar with said member, said member being adapted to be fitted movably on said standard whereby the member may be adjusted in vertical direction on said standard and turned on the latter, said member having on its back secured thereto braces with which said connection of the collar and member are connected.

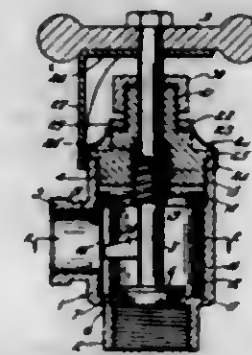
1,310,953. **BRICK-MACHINE.** ANDREW MALINOVSKY, Belleville, Ill., assignor to The Mallin Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 17, 1917. Serial No. 207,442. 14 Claims. (Cl. 25-1.)



14. In a brick machine, the combination of a mold, rams movable toward and from each other to compress the

material within the mold, a pair of stippling plates mounted on one of the rams, one of said plates being hinged to swing to a vertical position and the other to move in a right line, both of the plates adapted to enter the mold with the rams and to form a liner therefor, and means actuated automatically by the ascending rams to swing the first mentioned stippling plate clear of the formed brick and move the other stippling plate in a right line away from the brick as the latter leaves the mold, the mold being provided with vent slots in line with the entering plates for the escape of the surplus material displaced by said plates.

1,310,954. **VALVE.** ANTON RUDOLF MÖLLE, Everett, Mass. Filed Mar. 15, 1919. Serial No. 282,864. 6 Claims. (Cl. 277-32.)



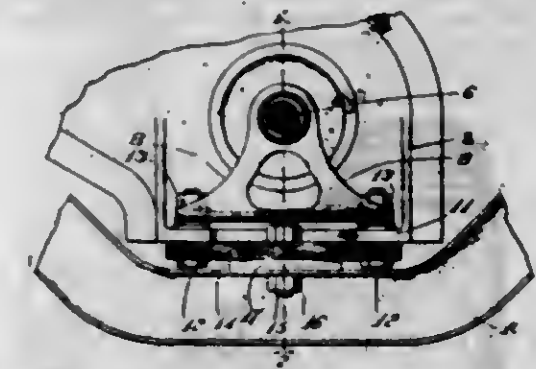
6. In combination with a valve body having a screw down valve provided with a valve stem, said valve body having an inlet and an outlet opening, a hollow throttling cylinder located within the chamber of said valve body and having an opening in its periphery, means whereby the rotation of the valve stem rotates said cylinder, a bonnet screwed into one end of the valve body and having an aperture through which the valve stem passes, said bonnet being formed with a shank and with an annular shoulder between the shank and the body of the bonnet, and a bell which goes loosely over said shank and is seated upon said shoulder, being rotatably adjustable thereon, means for clamping said bell in its adjusted position, a stop projection on said bell, an arm connected with the valve stem which during the rotation of the valve stem is adapted to engage said stop to limit the opening movement of the valve stem and thereby determine the degree of registration of the opening in the cylinder with the outlet opening from the valve body, and a graduated scale on the outside of the valve body whereby the degree of possible opening through the said cylinder for any predetermined position of the said stop will be indicated by the position of the said stop with relation to the scale.

1,310,955. **CONTROL-LEVER MOUNTING.** JOSEPH W. NELSON, St. Cloud, Minn. Filed Nov. 18, 1918. Serial No. 263,103. 6 Claims. (Cl. 64-14.)



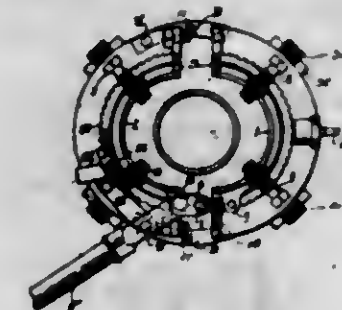
1. A mounting of the class described, comprising a bracket of resilient metal provided with a lower attaching end, while the upper end is socketed and provided with a slit extending from the socket and disposed lengthwise of the bracket.

1,310,956. **SUPPORTING MEANS FOR MOTORS.** JOSEPH W. NELSON, St. Cloud, Minn. Filed Nov. 18, 1918. Serial No. 263,104. 6 Claims. (Cl. 180-64.)



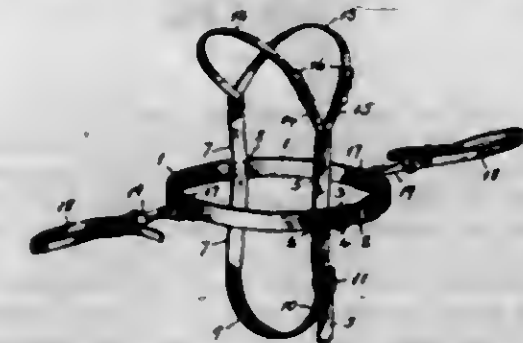
1. Supporting means of the class described, comprising, in combination with the motor-casing and cross-member of a chassis, flexible means disposed intermediate of the motor-casing and the cross-member, said means being secured to the motor-casing and said cross-member at different points, and means adapted to bear against said flexible means at a point intermediate of the ends thereof so as to permit said first means to flex about said second means.

1,310,957. **PIPE-CUTTER.** IRA W. NONNEMAN, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Jan. 18, 1917. Serial No. 142,990. 10 Claims. (Cl. 81-190.)



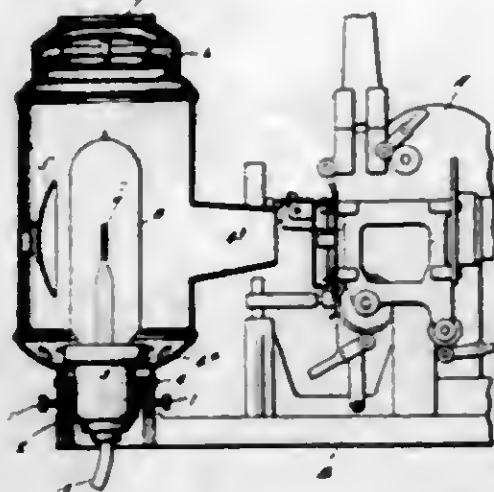
1. The combination of a separable annular cutter frame, cutters carried thereby and a scroll ring inclosed within the cutter frame and adapted to feed the cutters, said ring being separable on planes coincident with planes of separation of the frame.

1,310,958. **SAFETY-HARNESS FOR CHILDREN.** ROSALIE C. O'CONNOR, Highlandtown, Md. Filed Apr. 12, 1918. Serial No. 288,244. 3 Claims. (Cl. 155-12.)



1. The combination with a waist belt strap, of a single strap extending upwardly from the belt strap at the front; a single strap extending upwardly from the belt strap at the rear; two shoulder straps both of which have their rear ends attached to the upper end of the single rear strap, means for detachably connecting the front ends of both shoulder straps to the upper end of the single front strap, and retaining means at opposite sides of the waist belt strap.

1,310,959. ADJUSTABLE LAMP FOR MOTION-PICTURE-PROJECTING MACHINES. JOSEPH G. R. O'HARA, St. Louis, Mo., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo., a Corporation of Missouri. Filed June 8, 1918. Serial No. 239,025. 3 Claims. (Cl. 240-44.)



1. In a lamp for motion picture projecting machines, the combination of a supporting member, a split ring having flexible tongues, said ring being secured to said supporting member, a lamp socket which is designed to be positioned within and embraced by said tongues, and clamping devices cooperating with said tongues to cause them to bind against said socket, said clamping devices being capable of adjusting the socket carried by the tongues.

1,310,960. BOTTLE-CAPPING MACHINE. ERNEST A. OLIVER, Flushing, N. Y., assignor to Victory Bottle Capping Machine Co., Inc., a Corporation of New York. Filed Jan. 24, 1919. Serial No. 272,905. 6 Claims. (Cl. 113-2.)

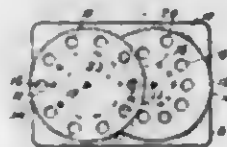


1. In a bottle capping machine the combination, with the main frame, of a rotating table for carrying the bottles, a rotating spider located above the table, a series of vertically movable plunger heads mounted in said spider one over each bottle on the table, a stationary pressure cam located above the head and adapted to be engaged successively by the plunger heads, as the spider rotates, yielding means for holding said cam down in engagement with each plunger head coming under it, whereby said plunger head is forced down upon the bottle beneath, means for elevating the plungers after they are freed from the pressure cam, and means for synchronously rotating the table and spider and means for feeding a cap to each bottle carried by the table and holding same in position on the bottle during the downward motion of the plunger head above the bottle.

3. In a bottle capping machine, a rotating bottle capping mechanism combined with a bottle feeding apparatus comprising a pair of vertical guides, continuously moving

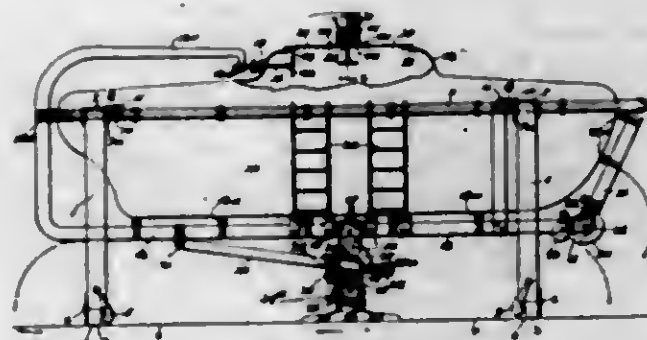
friction means for advancing a series of bottles along between said guides, and a double stop apparatus for regulating the delivery of such bottles to the capping machine at regular intervals of time, which stop apparatus consists of a pointed gate projecting laterally through one guide near the delivery end and adapted to hold a bottle in a definite position against the advancing friction means, a broader faced clamp projecting through the guide and adapted to hold the next bottle in whatever position it may be caught, within limits, and means for simultaneously projecting said gates through the guide synchronously with the movements of the bottle capping mechanism.

1,310,961. CALCULATING DEVICE. CARL T. OSTERBERG, Milwaukee, Wis., assignor of one-half to Allen Hudson, Milwaukee, Wis. Filed Sept. 20, 1918. Serial No. 254,935. 10 Claims. (Cl. 235-113.)



1. A calculating device, comprising a pair of spaced plates having eight openings therein, and a pair of overlapped disks journaled between said plates and having circumferential lines of numerals on their opposite sides which may be turned to register with the eight openings, said disks also having circumferential lines of apertures through which some of the numerals of one disk may be viewed through the apertures of the other disk.

1,310,962. BOAT-LAUNCHING APPARATUS. CARL PETERS, St. Louis, Mo. Filed Aug. 6, 1918. Serial No. 248,603. 2 Claims. (Cl. 9-22.)

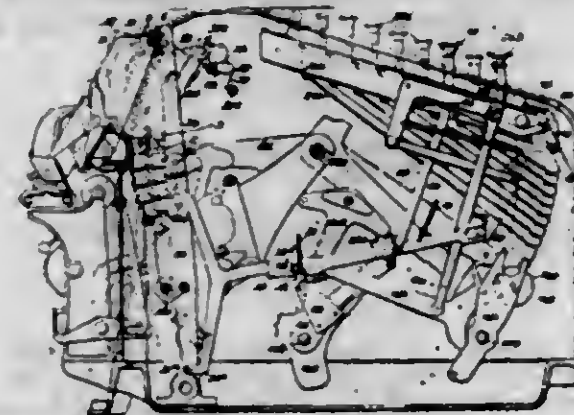


1. Boat launching apparatus comprising a frame rotatably mounted upon the deck of a vessel and adapted to support a life boat, means for maintaining said frame in horizontal position, a lever disposed beneath and attached to said frame, and devices for operating said lever against said frame to tilt the same longitudinally upon release of said means preparatory to launching said boat.

1,310,963. ADDING-MACHINE. HERMAN C. PETERS, New York, N. Y., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 14, 1905. Serial No. 255,637. 89 Claims. (Cl. 235-60.)

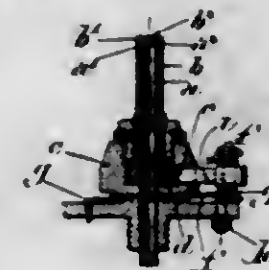
88. In a machine of the class described, the combination of differentially reciprocating racks; two sets of accumulating pinions independently engageable with and disengageable from said racks; plural means for engag-

ing and disengaging the racks and pinions, said means severally adjustable to vary the periods of engagement



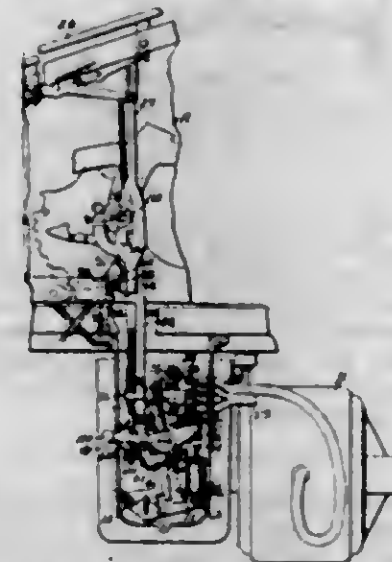
and disengagement between racks and pinions; and means for changing the adjustment of either such means.

1,310,964. CARBURETER-NOZZLE. JOANNES PIAT, Lyon, France. Filed Nov. 22, 1917. Serial No. 203,433. 1 Claim. (Cl. 137-17.)



An adjustable nozzle for carbureters comprising a vertical jet tube in communication with the fuel supply at its lower end and closed at its upper end and having a curved fuel delivery orifice or orifices in said closed end, a tube concentric with and closely surrounding said jet tube and closed at its upper end and having a curved slot, fuel delivery orifice or orifices at the same radius as said first mentioned orifice or orifices in its closed end, a collar at the base of said latter tube, a lever attached to said collar for rotating said latter tube upon said jet tube so as to cause said orifices to coincide or to more or less screen one another to allow passage of the fuel or to be entirely masked to cut off the supply of fuel and adjustable means for regulating the displacement of said lever.

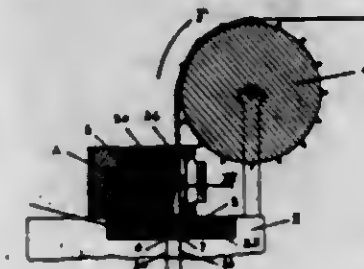
1,310,965. TIME-SWITCH FOR ADDING-MACHINES. FRANK C. RINACHA, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed May 15, 1916. Serial No. 97,708. 24 Claims. (Cl. 101-25.)



9. In a device of the class described, a motor, a switch controlling the supply of current to the motor comprising

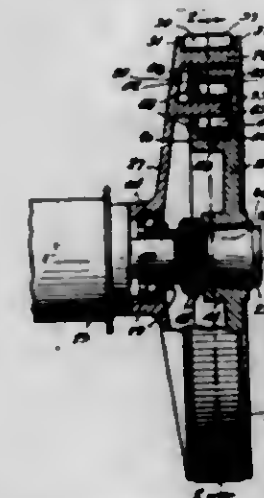
a rotatable element, means for moving the element to close the switch, means for engaging said element when in closed position and moving it to and maintaining it in open position, and manipulative means for releasing the element from said engagement.

1,310,966. APPARATUS FOR THE MANUFACTURE OF WIRE-NETTING. FRANCISCO RIVIERA and FERNANDO RIVIERA, Barcelona, Spain. Filed June 15, 1916. Serial No. 103,861. 4 Claims. (Cl. 140-6.)



2. In a wire net machine, two parallel wire guides, each arranged to guide a row of spaced-apart wires, means arranged to oppositely reciprocate said guides one half the width of a mesh, a plurality of toothed twisting wheels, a carrier for said wheels, means for reciprocating said carrier to move said wheels into or from cooperative position with said rows of wires, means for reciprocating said carrier to move said wheels laterally of the rows of wires one half the width of a mesh, and means for rotating said wheels in both the positions to which said wheels are movable by the second mentioned reciprocating means, comprising a rack slidable in said carrier and engaged with said twisting wheels, and means for actuating said rack.

1,310,967. FRICTION-CLUTCH DRIVE. KARL SCHEINER, Brooklyn, N. Y. Original application filed Nov. 17, 1917, Serial No. 202,654. Divided and this application filed Nov. 7, 1918. Serial No. 262,091. 2 Claims. (Cl. 192-22.)

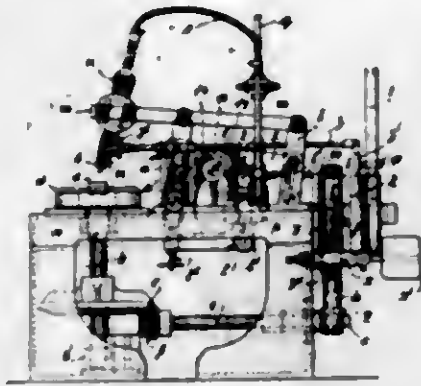


1. In a power transmitting device, the combination with the driving spindle and a rotatable element revolvable thereon, of a disk fixed upon said driving spindle, a rim formed with said disk, said rim containing annular concentric recesses, pairs of opposed cams eccentrically mounted in said recesses, an annular flanged ring extending integrally from said rotatable element, said ring being received between opposed cams and means for causing said cams to turn upon their eccentric mountings and impinge upon said ring.

1,310,968. APPARATUS FOR HAMMERING THE DIES OF WIRE-DRAWING MACHINES. ROBERT DUNCAN CONNOR and ROBERT PERCIVAL SLINGER, Manchester, England. Filed Feb. 4, 1919. Serial No. 275,033. 11 Claims. (Cl. 76-4.)

1. Apparatus for closing or reducing the holes in dies used in wire drawing machines comprising a rotary disk

or turn-table adapted to receive the die to be hammered, a hammer arranged with its longitudinal axis lying at an acute angle to the top face of the die and in the same plane as the vertical axis of the hole in the die, and

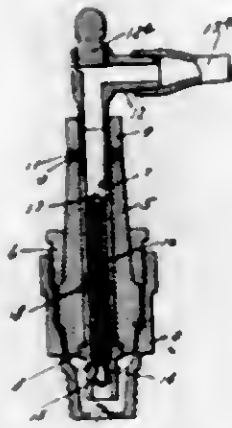


means whereby the hammer is automatically brought in contact with the face of the die to hammer the die transversely across its face and subsequently raised clear of the die, substantially as described.

1,310,969. EXPLOSIVE COMPOUND. WALTER O. SHEL-LINO, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1917. Serial No. 186,209. 4 Claims. (Cl. 52-3.)

1. Smokeless powder comprising granules of nitrostarch uncolloided in their interior and superficially colloided to secure adhesion.

1,310,970. SPARK-PLUG. CHARLES M. STROUD, Minneapolis, Minn., assignor of one-half to Rollin E. Starkey, Minneapolis, Minn. Filed Dec. 1, 1918. Serial No. 134,337. 1 Claim. (Cl. 123-169.)



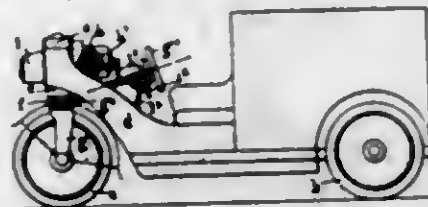
A spark plug comprising a body, an insulating core therefor, a hollow fuel tube extending through the core and serving as an electrode, the lower end of said tube being open, a grounded electrode located beneath the open end of the tube, a valve arranged in the tube a slight distance above the lower end thereof and arranged, when open, to cause a spraying of the fuel against the wall of the tube, a valve stem extending upwardly through the fuel tube, and a closing spring for the valve encircling the stem and arranged within the tube, there being an annular space between the stem and the wall of the tube, whereby the fuel will be conveyed to all sides of the valve, said wall being arranged to direct the fuel against the grounded electrode and against that portion of the tube which acts as the second electrode, whereby the electrodes are kept free from carbon.

1,310,971. TELESCOPIC DRIVING-SHAFT. DANIEL T. TIMMERLAKE, St. Louis, Mo., assignor to Universal Motor Truck and Traction Engine Company, St. James, Mo., a Corporation of Missouri. Filed Oct. 26, 1918. Serial No. 259,744. 8 Claims. (Cl. 64-89.)



1. A telescopic driving shaft comprising a sleeve, a shaft arranged to move lengthwise therein, and a disk journaled upon said shaft, the periphery of which disk is adapted to engage the inner face of the sleeve.

1,310,972. MOTOR ROAD-VEHICLE. AUGUSTE ALBERT HONORE TISSERANT, St. Cloud, France. Filed Mar. 4, 1919. Serial No. 280,552. 3 Claims. (Cl. 180-26.)



1. A motor road vehicle, comprising a front driving and steering wheel and two rear carrying wheels, wherein the fork of the front wheel is fixed to a hollow piece forming a steering pivot and adapted to slide elastically in a vertical direction and to be turned in any desired direction on its vertical axis, this hollow piece being contained within a second hollow piece constituted by an extension of the front part of the chassis, the motor and the speed gear box being mounted on this second hollow piece symmetrically with reference to the said vertical axis, and wherein the front wheel is a double wheel so constructed that between its two parts there can pass coaxially with the steering pivot a reducing shaft driving the axle of the double wheel without the invention of any universal joint.

1,310,973. REMOVABLE RUNNING-BOARD FOR AUTOMOBILES. ARNOLD VON SCHRENE, St. Louis, Mo. Filed May 1, 1918. Serial No. 94,634. 3 Claims. (Cl. 21-55.)

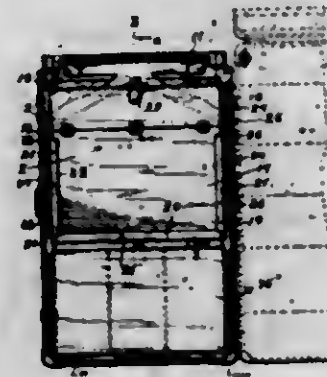


1. In a device of the character described, the combination of supporting brackets extending under the running board, a removable running board supported by said brackets and secured at its inner edge to said brackets by pin and socket connections, and manually operable means co-operating with the outer edge of said running board for clamping it in position and enabling it to be entirely removed from its supporting brackets.

1,310,974. SOILED-APPAREL RECEPTACLE. GEORGE HENRY WHEART, Racine, Wis. Filed Jan. 3, 1918. Serial No. 69,801. 10 Claims. (Cl. 190-13.)

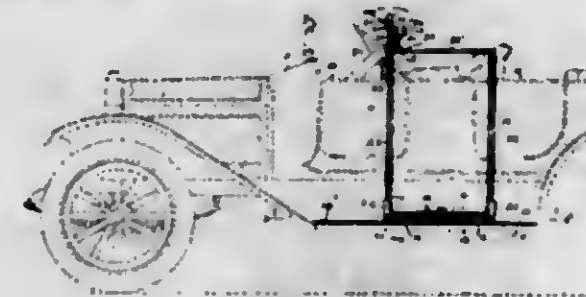
1. A soiled apparel receptacle for trunks, comprising an expansible receptacle having an open front and formed

in part of flexible material, a non-flexible front member freely removably closing a portion of the open front, a



hinged cover closing the remaining portion of the open front, and means for removably and detachably connecting the receptacle within and to a trunk.

1,310,975. SLIDABLE TRUNK-HOLDER. GEORGE HENRY WHEART, Racine, Wis. Filed Feb. 23, 1917. Serial No. 150,503. 10 Claims. (Cl. 224-29.)



1. A trunk holder, comprising a track, a base member slidably mounted thereon and having upright portions, trunk engaging members yieldingly connected to the upright portions and extending upwardly therefrom for locking engaging a trunk mounted on the base member, and means controlled by one of the trunk engaging members for locking the base member in adjusted position on the track.

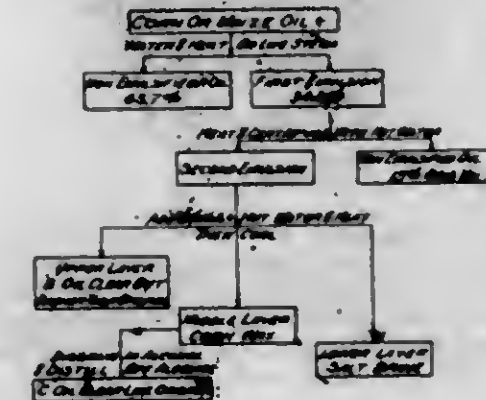
1,310,976. DIFFERENTIAL GEARING. ALFRED O. WILLIAMS, South Bend, Ind., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed June 25, 1917. Serial No. 176,792. 4 Claims. (Cl. 74-99.)



1. A differential gearing comprising a suitable support, a drive gear carried by said support, axle shafts journaled in said support concentrically with the axis of said drive gear, pinions connected with said axle shafts, a shaft mounted in said support and intersecting the axis of said

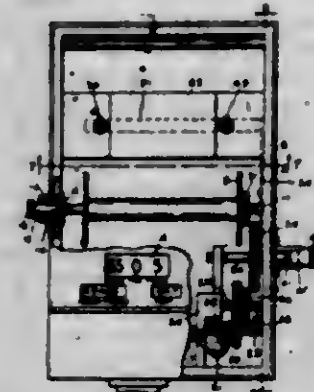
drive gear at a right angle, one or more worm wheels carried by the latter shaft, worms mounted in said support and meshing with said worm wheels, the threads of said worms being at an angle of more than 14 1/2°, and pinions connected with said worms and meshing with said first-mentioned pinions.

1,310,977. PROCESS OF TREATING VEGETABLE OILS. CARLETON JOSEPH BARTON, Chicago, Ill. Filed Sept. 22, 1917. Serial No. 192,743. 12 Claims. (Cl. 87-12.)



1. The process of treating corn oil, which comprises the heating of said oil with steam or water to a temperature sufficiently high to produce an emulsion, removing by means of decantation such part of the non-emulsified oil from the warm emulsified oil and water as may be separated by a brief interval of standing, reheating with additional water the emulsion so obtained to a temperature sufficiently high to permit the balance of the non-emulsified oil to be separated, while hot, with a centrifuge, and passing such emulsion through a centrifuge and thereby effecting such separation.

1,310,978. ROUTE AND STATION INDICATING MEANS. WILLIAM F. BRIEN and MARVIN H. WHITTAKER, Indianapolis, Ind. Filed Jan. 21, 1918. Serial No. 212,968. 12 Claims. (Cl. 40-42.)

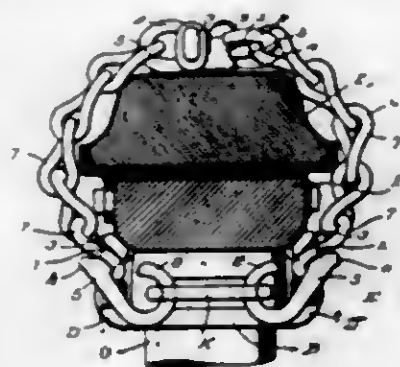


1. In a route indicator, the combination with a pair of spools, a gear on each spool, and a tape adapted to be wound upon one or the other of said spools, of a shifting gear slidable in a horizontal plane axially of said spools adapted to coöperate with each gear of the spools, a means to simultaneously operate said shifting gears to move one toward its coöperating gear and the other away from its coöperating gear, and a common driving means for both of the shifting gears.

1,310,979. CONNECTING DEVICE. LOUIS W. CHISM, Plantsville, Conn., assignor to The Steel Products Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 24, 1918. Serial No. 259,519. 6 Claims. (Cl. 24-73.)

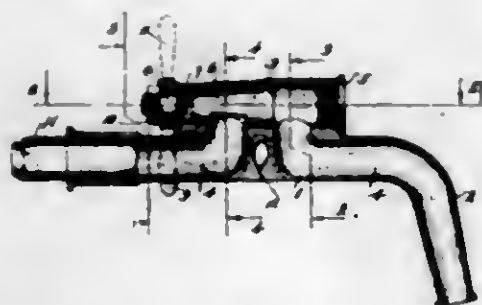
3. A connecting device having an opening adjacent its butt and provided with a stud at its butt, on the upper end of which stud is mounted a button, the lower end of

said stud being provided with a rearwardly presented lug, said button and lug serving to keep an additional element in normal position on said stud, the distance between the inner faces of all portions of said stud and button and the bill of the device being sufficient to permit the passage



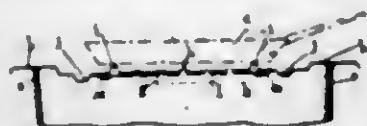
successively of portions of the elements to be connected by said device, but insufficient to permit the passage of portions of two of such elements simultaneously, and the inner faces of said device being too close to permit the passage of two such elements simultaneously except at one point, which is remote from said opening.

1,310,980. VALVE. CHARLES ALBERT CONN, Anacosta, Mont. Filed June 8, 1917. Serial No. 173,639. 1 Claim. (Cl. 251—95.)



A nozzle for pressure lines comprising a body having a curved end portion for receiving a hose connection, said curved portion constituting a handle, said body having a hollow offset portion at the top of the same forming a plug receiving chamber to which the entrance through the body portion leads at right angles, said offset portion having an interior annular shoulder at one end forming a valve seat, a turning plug of tapered form mounted within said offset chamber and against the annular shoulder aforesaid, said plug having a projecting portion extending outwardly of the chamber and a handle removably mounted upon said extending portion, the other end of the plug terminating short of the entrance to the offset chamber heretofore mentioned and being open at this end to permit passage of fluid through the nozzle, said plug also having an outlet port communicating with the outlet passage of the nozzle, and a screw plug closure for the end of the offset chamber permitting introduction and removal of the turning plug therein.

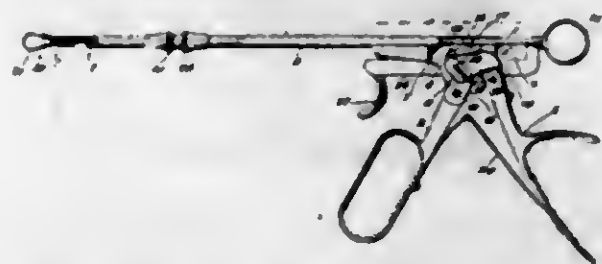
1,310,981. COVER OR LID FOR COOKING POTS, SAUCEPANS, AND OTHER SIMILAR UTENSILS. GUSTAVE DAUTAL, Angers, France. Filed May 28, 1919. Serial No. 300,470. 5 Claims. (Cl. 53—8.)



1. A lid for cooking vessels comprising a rim adapted to rest upon the side walls of the vessel to be covered, a depressed central portion to receive a vessel to be

heated, and a cover handle lying substantially in the plane of the rim and secured to the latter at a point outside the area of the vessel walls on which the cover rests.

1,310,982. SURGICAL SNARE. CHARLES E. DAVIS, New York, N. Y., assignor to Frank E. Miller, New York, N. Y. Filed Feb. 14, 1918. Serial No. 217,970. 5 Claims. (Cl. 128—320.)



1. In a surgical snare a retracting needle provided with ratchet teeth on one side; pawl and detent mechanism for cooperating with said ratchet teeth; a guide bar for preventing the rotation of said needle; and a releasable catch for cooperation with said guide bar.

1,310,983. PISTON-ROD PACKING. JOHN W. DREW, St. Louis, Mo., assignor to Moon Brothers Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 8, 1919. Serial No. 275,739. 3 Claims. (Cl. 286—38.)



1. In a piston rod packing for pumps, the combination of a flanged cylinder, of a packing washer superposed upon the flange thereof, a metallic washer for clamping the packing washer against said flange, said metallic washer having an opening designed to snugly fit the piston rod but permit easy movement therethrough, a cap piece having a tapered recess in axial alignment with the cylinder, a plurality of packing washers designed to be crowded into said tapered recess and thereby make a tight joint with the piston rod, and means for adjustably clamping said cap piece in position.

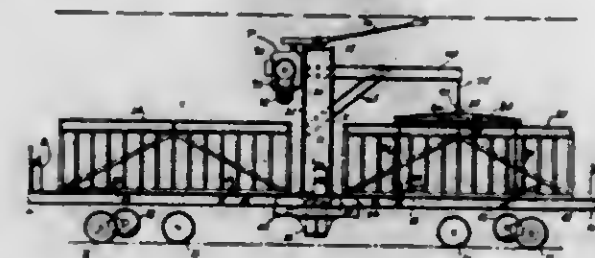
1,310,984. MANUFACTURE OF ACETIC ALDEHYDE. HENRY DAEVUS, Basel, Switzerland. Original application filed June 1, 1917, Serial No. 172,325. Divided and this application filed Apr. 17, 1918. Serial No. 229,174. 3 Claims. (Cl. 23—24.)

1. In a process for the manufacture of acetaldehyde by the passage of acetylene into an absorbing solution containing dilute sulfuric acid and a mercury compound, carrying out the absorption reaction in apparatus whereof parts exposed to the absorbing solution consist of lead coated with an insoluble layer of a compound of lead which is resistant to the action of dilute sulfuric acid and to amalgamation with mercury.

1,310,985. GASOLINE-ENGINE-CYLINDER CLEANER. CHARLTON ELLIS and ALFRED A. WELLS, Montclair, N. J. Filed May 4, 1917. Serial No. 166,334. 7 Claims. (Cl. 44—8.)

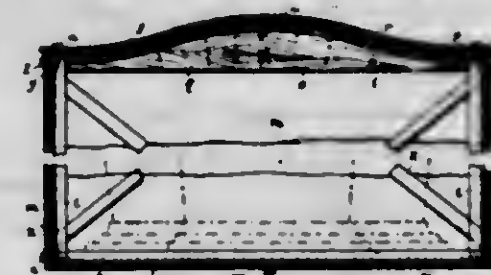
1. A cylinder cleaner comprising a carbon dislodging agent, an igniting element and a solid oxidizing element comprising ammonium nitrate.

1,310,986. MEANS FOR TRANSFERRING FREIGHT TO AND FROM ELECTRIC LINES. BENJAMIN F. FITCH, Evanston, Ill., assignor to The Motor Terminals Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 23, 1918. Serial No. 218,078. 21 Claims. (Cl. 214—38.)



1. The combination of an electric trolley car having a supporting platform, a removable body adapted to rest on the platform, a motor truck adapted to receive and transport such removable body, a crane carried by the car, and a trolley pole mounted on the crane, said crane being adapted to be operated by current from the trolley and swing the body to the motor truck.

1,310,987. BURIAL-OVERBOX. JOHN GRAY, Paterson, N. J. Filed Apr. 21, 1919. Serial No. 291,559. 5 Claims. (Cl. 27—35.)



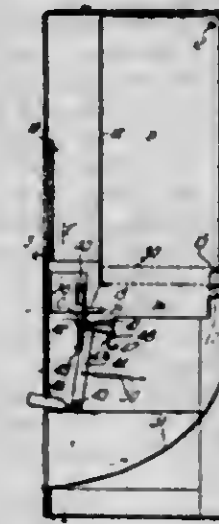
5. In a burial overbox, the combination, with a rectangular metal frame, of a bottom slab, two end slabs, and two side slabs of lithoidal material secured to five sides of the frame and forming therewith the body portion of the overbox open at the top, and a cover structure for the overbox, the cover structure having along its several edges holes to receive securing devices and also downward tapering studs, and the frame having at its top holes to receive the securing devices and other holes to receive the studs.

1,310,988. VENDING-MACHINE. McDOWELL GRAVES, Los Angeles, Calif., assignor, by mesne assignments, to R. A. Dallagge, Los Angeles, Calif. Filed Sept. 2, 1916. Serial No. 118,168. Renewed Dec. 12, 1918. Serial No. 268,509. 5 Claims. (Cl. 211—8.)



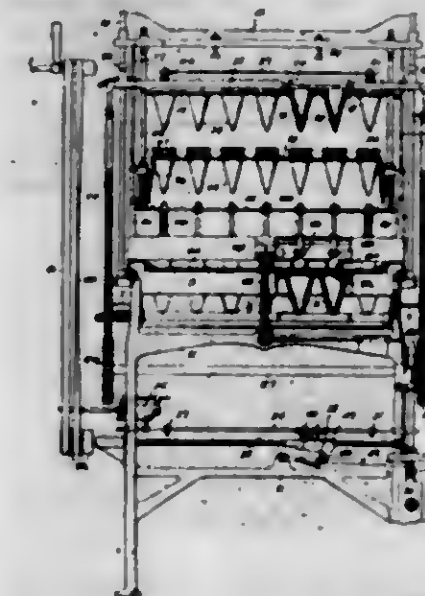
1. In a vending machine, a stationary frame having a package supporting shelf, a horizontally movable hopper having package supporting parts opposite the stationary shelf, a movable package supporting shelf on the hopper beneath the stationary shelf, and a stationary package supporting member beneath the package supporting parts on the hopper.

1,310,989. COIN-CONTROLLED MECHANISM FOR VENDING-MACHINES. McDOWELL GRAVES, Los Angeles, Calif., assignor, by mesne assignments, to R. A. Dallagge, Los Angeles, Calif. Filed Sept. 2, 1916. Serial No. 118,169. Renewed Dec. 12, 1918. Serial No. 268,510. 6 Claims. (Cl. 194—88.)



3. A coin controlled mechanism, embodying two individually pivoted members extending toward each other from their pivots, coin-holding parts on said members embodying a coin-opening in one of said members and a coin-holding-and-supporting trough in the other of said members, and inter-engaging means on said members arranged on one side of the line between the two pivotal points so that the movement of the said means toward said line causes movement of the means toward each other and causes them to inter-engage.

1,310,990. MACHINE FOR MAKING PASTRY-SHELLS. OSCAR HAUGE and WILLIAM A. ENGLAND, San Francisco, Calif. Filed Feb. 10, 1917. Serial No. 149,456. 16 Claims. (Cl. 107—66.)



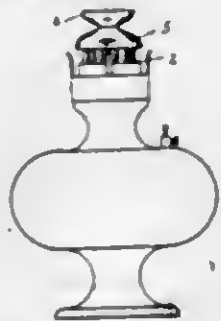
1. In a machine of the character described, a plurality of split molds, means for heating said molds, a corresponding plurality of taps, said molds and taps being relatively movable, means for separating said taps and molds, means for opening said molds prior to the separation of the taps and molds, whereby the baked shells remain on said taps, a tray movable to position under said taps, means for stripping the baked shells from the taps and means operative by the tray during its movement for throwing said shell discharging means into operation.

5. In a machine of the character described, a plurality of split molds, means for heating said molds, a corresponding plurality of taps, said molds and taps being relatively movable, means for separating said taps and

molds, a batter receptacle movable into position above said molds, means on said receptacle for discharging batter into said molds, a vertically movable head arranged above said receptacle, means on said head arranged to engage and operate said batter discharging means and means operative by said receptacle during its movement for releasing said head.

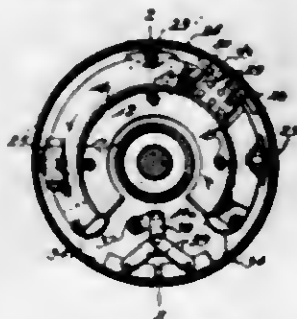
16. In a machine of the character described, a main frame, molds on said frame, a tap frame slidably arranged on said main frame, taps on said slidable frame aligned with said molds and adapted to enter therein for the purpose described when said tap frame is lowered, a lead screw journaled in said main frame, means for raising and lowering the tap frame, means on the lead screw for automatically controlling the operation of said raising and lowering means, a batter receptacle, means for automatically moving said receptacle into position above said molds while said tap frame is raised, batter feeding mechanism for filling the molds automatically thrown into operation by said batter receptacle, means for automatically reversing the operation of said receptacle-moving means whereby said receptacle is withdrawn prior to the lowering of said tap frame, and means for heating said molds.

1,310,991. AIR-DISTRIBUTER. SAMUEL HEATH, Roxborough, Pa. Filed Mar. 1, 1917. Serial No. 151,825. 2 Claims. (Cl. 67-63.)



1. An air distributor comprising in combination with a perforated burner hood, a bell shaped deflector, a cup shaped baffle member of smaller diameter than the deflector, and means for securing the baffle member and the reflector to the burner hood.

1,310,992. DRUM-BRAKE. WILLIAM SANFORD HUTCHINSON, Oyster Bay, N. Y. Filed Jan. 31, 1917. Serial No. 145,573. 6 Claims. (Cl. 74-13.)

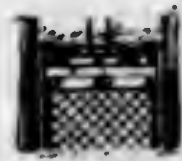


1. The combination with the drum and the internal stationary support of a shoe between the support and the flange of the drum, a plurality of pressure devices carried by the support behind the drum and adapted to force the shoe against the drum flange, and a connector connecting the several pressure devices whereby the movement of one pressure device is simultaneously transmitted to the others.

1,310,993. SAFETY DEVICE FOR ELEVATORS. NATHAN KOHLER, New York, N. Y., assignor of one-half to Nicholas F. Bader, New York, N. Y. Filed Dec. 6, 1918. Serial No. 265,478. 2 Claims. (Cl. 187-81.)

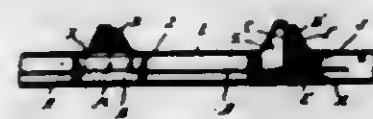
1. The combination of an elevator and a safety device therefor, comprising a stationary guide arranged near the

path of the elevator and having a zig-zag groove, a plunger carried by the elevator and normally held out of operative relation with said guide by the elevator cable, means for projecting said plunger into said groove, said



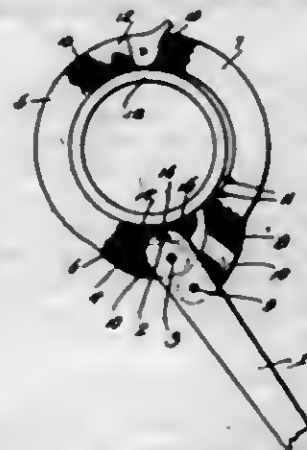
plunger being adapted to move laterally to follow the course of said groove as the elevator descends, and resisting means for opposing the lateral movement of said plunger for the purpose set forth.

1,310,994. ELECTRICAL HEATING UNIT. FRANK KUHN and FRANK E. SHATTUCK, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 9, 1915. Serial No. 49,725. 7 Claims. (Cl. 219-63.)



1. An electrical heating unit, comprising a continuous resistor having a series of spaced convoluted portions and insulators formed of complementary sections engaging each of said convoluted portions directly and clamping the same in position.

1,310,995. PIPE-WRENCH. WALTER R. LANOFOSHI, Coalinga, Calif. Filed Dec. 27, 1918. Serial No. 268,531. 1 Claim. (Cl. 81-64.)



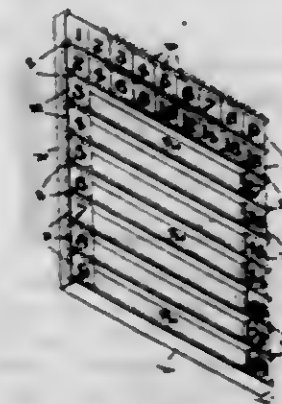
A pipe wrench comprising an oscillatory handle having in its front end a transverse diagonal slot, a curved jaw having its rear end offset rearwardly from the arc of said jaw and pivoted to said handle in rear of said diagonal slot, a second curved jaw opposed to said first named jaw and having its rear end offset rearwardly from the arc of the jaw and pivoted to said handle in rear of the pivot of said first named jaw, means for detachably connecting the front ends of said jaws, a curved pipe engaging shoe in front of said offset end of the first named jaw and having a recess into which the slotted front end of the handle projects, and a pin extending across said recess and through said slot, said pin and slot coacting to force said shoe against the pipe when the handle is moved in a direction to contract said jaws and serving to withdraw said shoe when the handle is moved in the opposite direction, said first named jaw having a shoulder at the point of offset of its rear end to limit the movement of said shoe transversely of the handle when the latter is moved to release the jaws.

1,310,996. HORSESHOE-CALK. PETER LA PLANT, Duluth, Minn. Filed Feb. 24, 1919. Serial No. 278,823. 3 Claims. (Cl. 168-41.)



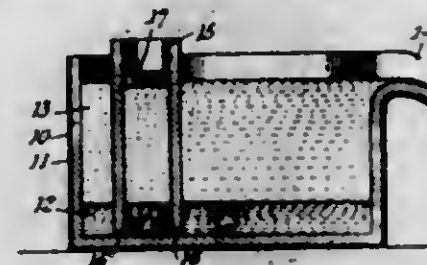
1. The combination with a calk of the character described having a shank and a substantially rectangular-shaped blade, the front wall of which is a straight continuation of the front line of the shank and extending laterally beyond the base of the shank forming shoulders for extracting purposes, of a reinforcement for said blade, and shoulders extending transverse the full width of the blade and of arcuate form in cross-section.

1,310,997. DEVICE OR APPLIANCE FOR USE IN TEACHING CHILDREN. ETHEL LOUISE LINAY, Reading, England. Filed Apr. 18, 1918. Serial No. 229,361. 5 Claims. (Cl. 35-2.)



1. A device for teaching children comprising a series of blocks bearing numerals representing multiplicands and a related series of blocks bearing numerals of which one represents a multiplier and the rest the results of the arithmetical combination of said multiplier with the several multiplicands of the first series.

1,310,998. SEPARATION OF MATERIALS BY GRAVITY. RICHARD LEWIS LLOYD, New York, N. Y., assignor to Dwight & Lloyd Metallurgical Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1916. Serial No. 79,595. 5 Claims. (Cl. 266-37.)



1. The method of chemically treating one or more of a plurality of commingled materials and effecting their separation by gravity, comprising providing a settling vessel having a well extending downwardly and open to the vessel at its lower end; establishing in the lower part of the vessel a layer or body of the heavier of the materials

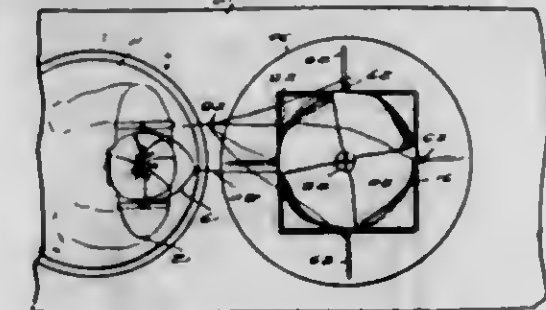
and above the same a layer or body of the lighter material or materials; establishing in the well a floating layer or body containing one or more reagents; and delivering into the well above the reagent layer the materials to be treated and separated.

1,310,999. ANTIREFILLABLE BOTTLE. ALBERT W. LONGAKER, VICTOR E. TRAORE, and RINGVALL P. RODAM, Burrwood, La. Filed Sept. 18, 1916. Serial No. 120,767. 1 Claim. (Cl. 215-106.)



In a non-refillable bottle, the combination with a body having an elongated neck and closed at the outer end by an integral dome, said neck being provided with a valve seat at its inner end, an external groove near its outer end and an internal groove intermediate the valve seat and the external groove, a guard within the neck and engaging the internal groove, and a valve removably engaging the seat, the portion of the neck between the guard and the dome adapted to receive a stopper.

1,311,000. PARACHUTE. FRANK W. McFARLAND, Reynolds, Ill. Filed Aug. 12, 1918. Serial No. 248,440. 5 Claims. (Cl. 244-21.)



1. In a life saving appliance for aeroplanes, a parachute including a collapsible rib structure, a flexible body carried thereby, expansible springs connecting the terminals of pairs of the ribs and normally tending to distend the rib structure, and means to releasably lock the rib structure in collapsed condition.

1,311,001. CATERPILLAR-CATCHER. JOHN ALFRED MARSEAU, Becancour, Quebec, Canada. Filed Jan. 7, 1919. Serial No. 270,052. 2 Claims. (Cl. 47-35.)



1. A caterpillar catcher comprising, a conical shaped member adapted to be arranged on the trunk of a tree; said conical shaped member having its upper portion contacting with the trunk of the tree and having spaced openings about its upper edge; and a second conical shaped member adapted to encircle the trunk of a tree.

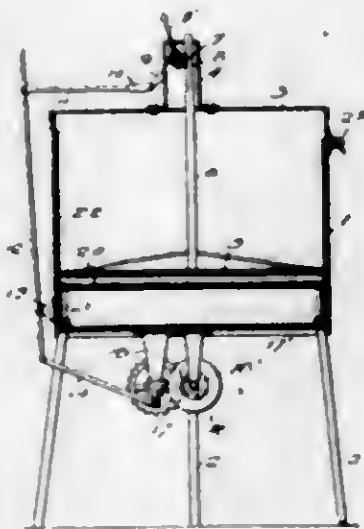
and arranged above the first named conical member, said second named conical member adapted to have its upper portion in contact with the trunk of the tree and having its lower edge in engagement with the first named conical member at a point spaced from its lower edge, said upper conical member being tapered more gradually than the lower conical member thereby providing an annular trap chamber.

1,311,002. SHIELD FOR THE PROTECTION OF SHIPS. WILLIAM L. MARTIN, Boyne City, Mich. Filed Oct. 19, 1918. Serial No. 258,771. 4 Claims. (Cl. 114—240.)



1. A device of the character described comprising a plurality of bracket arms, each of said bracket arms being pivotally secured intermediate its length to the hull of a ship, metallic floats provided with a reinforced upper portion to which each end of each bracket arm is hingedly secured, a shield composed of a series of horizontally arranged slats flexibly secured together and unsuspended from the bottom portion of each float, and a towing cable secured to the front end of the foremost float and to the bow of the ship.

1,311,003. OPERATING MEANS FOR WASHING-MACHINES. FRED MICHALICK, Portland, Oreg. Filed May 3, 1917. Serial No. 166,173. 1 Claim. (Cl. 74—27.)



In a washing machine, a receptacle, a plunger in said receptacle having the rod thereof formed with a rack at its upper end, a cover for said receptacle, a housing arranged on said cover and communicating with an opening formed in the cover, said housing having slots formed in its side walls, the rod of the plunger extending upwardly into the housing and through an opening formed in the top thereof whereby to maintain the same against lateral movement during sliding movement of the plunger, a segmental gear slidably and rotatably supported in said slots in the housing, a handle connected to said gear, an arm carried by the gear, an operating handle pivoted to one side of the receptacle and having detachable connection with said arm, and momentum increasing means secured to the lower portion of the receptacle and having connection with the lower end of said operating lever.

1,311,004. COVER FOR PASTE-TUBES. LUCIEN LUTTRELL MIXER, Tyrone, N. Mex. Filed Feb. 13, 1919. Serial No. 276,784. 1 Claim. (Cl. 221—60.)



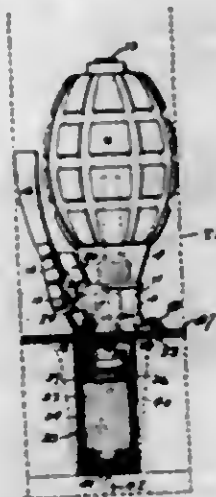
A collapsible receptacle having its sides converging toward its discharge end, a flat transverse seat connecting the upper edges of said sides and having a discharge orifice at one end and parallel undercut strengthening flanges along its sides, a pin rising from the seat near its opposite end and adjacent one flange, a cover plate slidably mounted upon the seat and having beveled edges engaging said flanges and one edge cut away from the outer end of the plate inward and terminating in an abrupt shoulder so that the cutaway portion moves past said pin and the shoulder engages it when the plate is retracted, the inner end of the plate being formed with a sharp edge to pass across said orifice and the outer end with a downturned lip adapted to engage against the end of the seat when the inner end of the plate has closed the orifice, and serrations on the upper face of the plate near its outer end rising above said flanges, all as and for the purpose set forth.

1,311,005. RECEPTACLE ATTACHMENT. JESSE L. PERRIT, Seattle, Wash. Filed Dec. 3, 1918. Serial No. 265,114. 3 Claims. (Cl. 220—90.)



1. A device of the character described formed from a single piece of wire coiled near one end to provide a resilient attaching ring, a supporting arm extending from the ring and rising therefrom and also inclined slightly inwardly, and a handle receiving and supporting hook formed at the upper end of the arm.

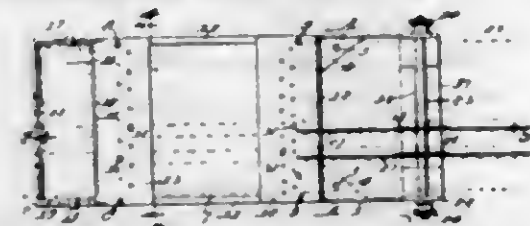
1,311,006. ADAPTER FOR HAND-GRENADES. TANNAN W. POST, New York, N. Y., assignor to Arms Products Company, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1918. Serial No. 220,984. 16 Claims. (Cl. 102—29.)



1. A device for adapting a fused grenade for gun firing, comprising a grenade carrier substantially corresponding

in diameter to the gun bore, means on said carrier for engaging the grenade, a cartridge support on said carrier, and means operated by the explosion of the cartridge for causing the ignition of the grenade fuse.

1,311,007. SEALING-TAPE MOISTENER. WALTER C. POWELL, Columbus, Ohio. Filed Feb. 12, 1919. Serial No. 276,569. 2 Claims. (Cl. 91—14.5.)



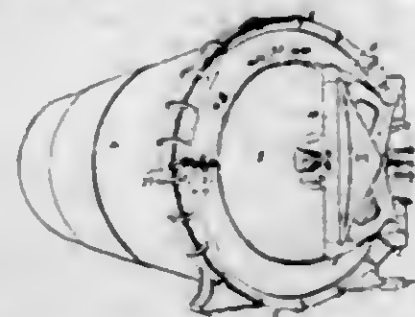
1. In a sealing tape moistener, an open frame, a reel mounted at one end of the frame, a moistening roll rotatably mounted at the opposite end of the frame, a plate positioned on top of the frame between the reel and the moistening roll, other plates mounted on top of the first said plate at opposite ends of the latter and spaced above the same, a moistener pan carried within the frame with whose contents the moistening roll is brought into contact, means for guiding strips carried by the reel and passed between the first and second said plates to the moistening roll, and means for severing the strips adjacent the roll, whereby no part of the strip which has been brought into contact with the roll will remain unsevered.

1,311,008. STEREOSCOPIC MOTION-PICTURE CAMERA. HOWARD L. QUICK, Brooklyn, N. Y. Filed Jan. 29, 1916. Serial No. 74,988. 4 Claims. (Cl. 88—17.)



1. In a device of the class described, the combination of a camera for taking successive pictures of objects in motion, and means for recording the subject on a sensitized medium or film and including a lens through which all the exposures are made and means for alternately opening different portions of the lens whereby alternate exposures will record the subject stereoscopically and with all the exposures in substantial alignment lengthwise of the sensitized medium.

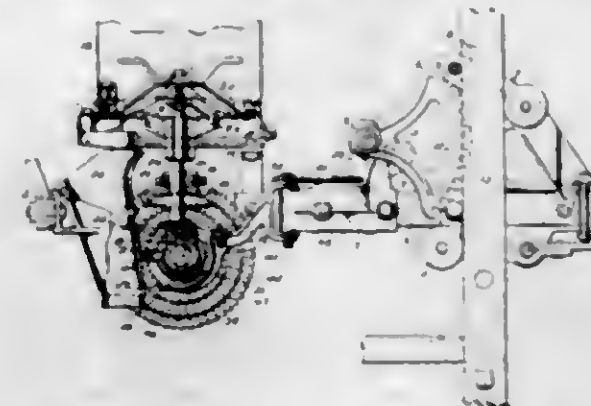
1,311,009. AIR-TIGHT DOOR FOR PRESSURE CYLINDERS AND TANKS. ERNEST RINEHIMER, Wilkes-Barre, Pa., assignor to Vulcan Iron Works, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1914. Serial No. 870,143. 3 Claims. (Cl. 220—25.)



1. The combination of a container having an annular flange at one end; the two diametrically opposite portions of the flange being wider than the remainder thereof; a door hung on the outside of the container and adapted

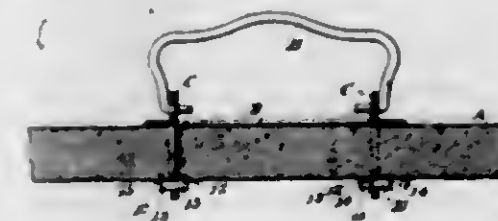
to pass through the opening in the flange and to bear against the inner side of said flange, said door having diametrically opposite portions of a greater width than the other portions of the door, the door being so pivoted that it can be turned to allow the narrow portion thereof to align with the reduced portion of the flange of the container when the door is passed through the opening in the container; and means for drawing the door tightly against the inner side of the flange.

1,311,010. GEARING FOR THE FEED MECHANISM OF PLANTERS. WILLIAM H. ROBERTS, Dallas, Tex., and EDWARD M. HEYLMAN, South Bend, Ind., assignors to Oliver Chilled Plow Works, South Bend, Ind. Filed June 20, 1918. Serial No. 240,986. 6 Claims. (Cl. 74—58.)



1. The combination with variable speed gearing for operating feeding mechanism of a planter, said gearing comprising a plural shiftable gear and a shiftable pinion, of a lever pivoted between its ends, connections between said lever and the plural gear for moving the same away from the pinion, a hand lever pivoted to one arm of said first-mentioned lever and adapted to engage the other arm thereof, to turn said lever for shifting the plural gear, and connection between said hand lever and the pinion for shifting the latter relative to the plural gear when said hand lever is moved on its pivotal connection with said first-mentioned lever.

1,311,011. NUT-LOCK WASHER. EMIL C. ROSENCRANZ, Evansville, Ind., assignor of one-third to William H. Rumpf, Evansville, Ind. Filed Dec. 15, 1917. Serial No. 207,315. 1 Claim. (Cl. 151—53.)



A nut locking washer for use with articles of wood, comprising a substantially rectangular blank of galvanized pliable sheet metal having a central bolt aperture, said blank having a greater length than width, the side edges being straight and the upper and lower edges being straight from the side edges inwardly to points where the two sides of the nut will come, said upper and lower edges being extended outwardly at said points beyond the other two sides of the nut and having the said extensions rounded at their ends where they join with said straight portions, projections formed in the blank by a punch so that each projection will present a plurality of burrs to engage a wood surface, said projections being provided at points between the bolt aperture and said extensions so as to be in a position to receive direct pressure from the nut, the straight side edges of the blank combining with the straight upper and lower edges to form bendable tongues the main portions of which are flat, their outer

or side edges being bent outwardly to form lips whereby they are in a position to be engaged by a suitable tool for manually bending the tongues about the side faces of the nut, said tongues bending from points where the curved ends of the extension merge into the straight upper and lower edges of the blank.

1,311,012. VULCANIZER FOR RUBBER BOOTS AND SHOES. FRANK B. ROSS, Cape Girardeau, Mo. Filed Dec. 31, 1918. Serial No. 269,165. 2 Claims. (Cl. 18—17.)



1. A device of the character described including a stand, an inverted shoe supporting tree carried by the upper end thereof, a shelf extending laterally from the stand, a universally mounted mold above the tree, notched lugs projecting from the sides of the mold, brackets carried by the shelf, an inverted U-shaped frame having the terminals of its side portions swingably connected to the brackets and designed to be straddled about the tree and the mold and engaged by the notched lugs to coact with the latter in guiding the sliding movement of the mold relative to the tree, a manually operable pressure applying element adjustably mounted in the frame for acting against the mold, and means for applying heat to the mold.

1,311,013. DISPENSING CAN. JOHN RYAN, Baltimore, Md., assignor to Anti Friction Belt Dressing Company, Baltimore, Md. Filed Mar. 21, 1917. Serial No. 156,347. 1 Claim. (Cl. 221—50.)

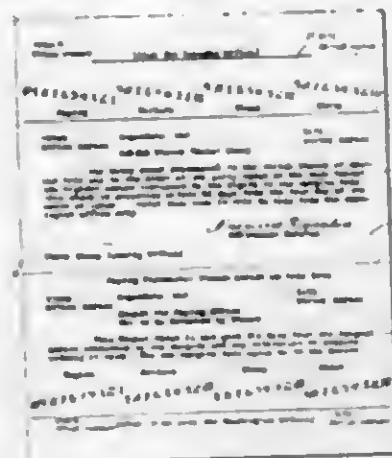


A dispensing can including a fixed nozzle having a flat unobstructed free end and a diametrically disposed bridging element extending across said free end of the nozzle and forming opposed segmental outlet openings, the curved walls of the openings being close to and concentric with the wall of the nozzle.

1,311,014. POSTAL CHECK. CHARLES M. SAIN, Logansdale, Nev. Filed Nov. 21, 1918. Serial No. 263,543. 1 Claim. (Cl. 283—58.)

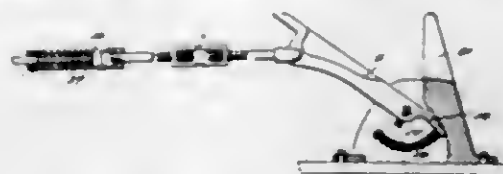
In a postal check, a sheet of material divided into an upper member and a lower member by a transverse line of perforations, said numbers having like identifying data, said upper member having printed thereon an order for payment of the check, the upper member being further

printed to designate coins of different denominations, a series of digits being printed above each denomination in numerical order and each series being inclined downwardly toward the right hand edge of the sheet of material, the lower member of said check having printed adjacent the bottom thereof the names of coins of different denominations, these names corresponding to the names at the top of the upper member and in alignment therewith, the lower member being further provided beneath each name with a series of digits corresponding to the



series at the top of the upper member and inclined oppositely thereto whereby, by folding the upper portion or member of the sheet downwardly and rearwardly into contact with the back of the lower member, the various series of digits may be brought into register so that the amount for which the check is issued may be indicated upon both the upper and lower members thereof simultaneously by a single tearing operation so as to remove certain of the digits of the different series, the remaining digits indicating the amount of the check.

1,311,015. VEHICLE JACK. ALEXANDER J. SEAYON, Carney, Okla. Filed Jan. 15, 1918. Serial No. 211,963. 1 Claim. (Cl. 254—89.)

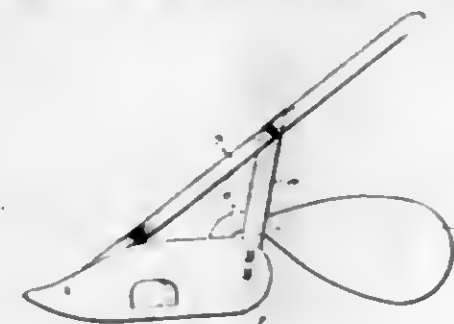


In a vehicle jack, a base including parallel tracks, forward and rearward jacks pivoted to the opposite portions of said frame, vertical stops arranged adjacent said rearward jacks for limiting pivotal movement thereof, segmental guide bolts supported by said stops having cushioning means arranged thereover, apertured extensions formed on the lower ends of said rearward jacks slidably engaged over said guide bolts and bearing on the cushioning means, means for adjustably interconnecting said forward and rearward jacks and allowing relative movement therebetween to effect the arranging of the forward jacks in a plane lower than the plane in which the rearward jacks are arranged when in position so as to receive a vehicle, and means for releasably locking all of said jacks in their elevated positions.

1,311,016. GRASS-DIVIDER. GEORGE M. SHOOT, Litchfield, Calif. Filed Apr. 1, 1919. Serial No. 286,713. 1 Claim. (Cl. 56—320.)

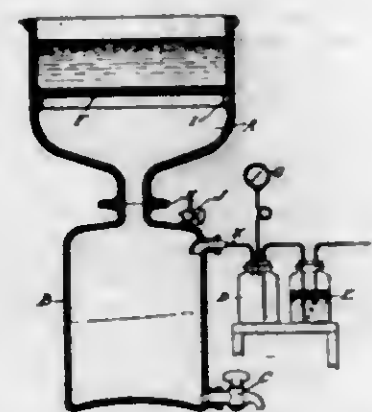
The combination in a grass divider of the character described including a shoe and a rearwardly and upwardly extending arm, a supporting bar interposed between the rear portion of said shoe and the intermediate portion of said arm, an outer guide bar having an offset shoulder secured to said supporting bar in parallel spaced relation thereto, a pivot bolt secured to said shoe below the end of said bar, a goose-neck shank having its lower end

secured to said bolt and curving rearwardly therefrom, with its upper end resting on said shoulder, and a pear



shaped dividing blade secured to said shank, all arranged so that said blade may move upward, as and for the purpose set forth.

1,311,017. PROCESS OF TREATING NITRATED BODIES. JEAN V. SKOGLUND, New York, N. Y., assignor, by mesne assignments, to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1918. Serial No. 220,176. 12 Claims. (Cl. 52—3.)



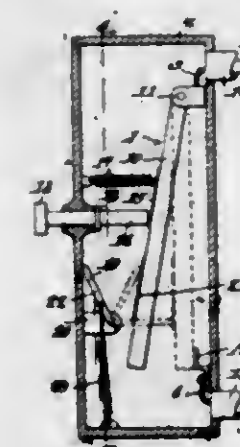
3. The process of treating nitrated bodies to free the same from mixed acid, which consists in displacing the free acid by acids of a gradually decreasing strength, substantially as described.

1,311,018. ELEVATED CARRIER. JOHN F. SMILEY, Dallas, Tex. Filed Apr. 10, 1919. Serial No. 289,006. 3 Claims. (Cl. 105—150.)



1. In an elevated carrier, a relatively short vertical bar and a comparatively long bar parallel therewith, a track wheel mounted between the lower end of the short bar and the intermediate portion of the longer bar, the upper ends of the two bars being secured together, a vertical handle spaced outwardly from said comparatively long bar and secured at its upper end thereto, and means for securing the lower ends of said comparatively long bar and said handle together, whereby said handle forms a brace for said bar.

1,311,019. AUTOMOBILE-ALARM. THOMAS H. SMITH, El Paso, Tex. Filed Sept. 26, 1917. Serial No. 193,309. 3 Claims. (Cl. 175—282.)



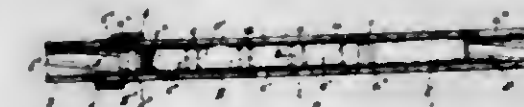
3. In a device of the character described, a casing, an electric switch therein, a pivoted latch within the casing swingable into and out of engagement with the switch and arranged to hold the switch in closed position, means for operating the switch from the exterior of the casing, the casing having a door and a lock for the door, and a spring means for holding the latch either in or out of engagement with the switch to move automatically or manually to latching position, respectively.

1,311,020. CARRURETER-SUPPORT. WILLIAM G. SMITH, New York, N. Y. Filed Feb. 6, 1918. Serial No. 215,716. 5 Claims. (Cl. 123—119.)



4. In an internal combustion engine a vapor supply pipe made in sections, a ball and socket joint connecting the sections with each other, one of the sections being attached to the manifold of the engine and the other section being free to swing relative to the fixed section, the movable section of the joint being provided with a transverse bar, a carbureter mounted on the end of the said free swinging section of the vapor supply pipe, a gasoline feed pipe extending through the joint and formed of sections, coupled together in said joint, and a spring bearing on the transverse member of the movable member of the said ball and socket joint and a coupling of the feed pipe.

1,311,021. FIXED AMMUNITION FOR NON-RECOIL GUNS. LAWRENCE Y. SPEAR and GREGORY C. DAVISON, New London, Conn. Filed May 25, 1918. Serial No. 236,568. 9 Claims. (Cl. 102—29.)



1. Fixed ammunition for use in a rifled non-recoil gun having its bore open both at the breech and the muzzle, comprising a cartridge case of a weight approximately equal to that of the projectile, said cartridge case having its rear end normally closed and its front end closed by the projectile and said cartridge case and said projectile both being provided with rifling bands, with a propelling charge contained in said cartridge case between said closed

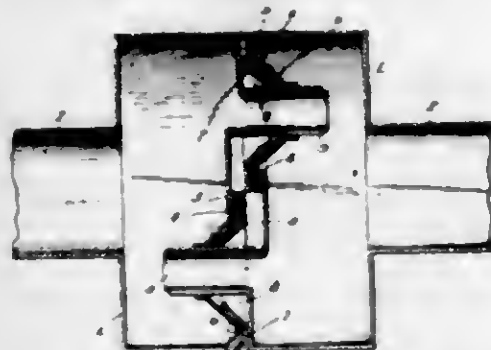
end and said projectile, said case thus serving a two-fold purpose of acting as a container for the powder charge and also as a recoil mass to balance the inertia and friction of the projectile.

1,311,022. EXPANSION-DRILL. CHARLES L. STICKNEY, Skull Valley, Ariz. Filed Nov. 12, 1918. Serial No. 262,179. 2 Claims. (Cl. 255-75.)



1. The combination with a mandrel bifurcated to provide spaced jaws and a recess the lateral walls of which are inclined toward each other and slightly curved at their inner ends, and a stop formed medially of the inclined walls, of a pair of cutters pivotally and slidably mounted between the jaws and having the upper ends designed to abut and ride upon the inclined and curved walls of the recess when the cutters are moved upwardly to insure the extending of the cutters, the inner edges of the upper portions of the cutters being designed to abut each other at the time they abut the stop for limiting the extension of the cutters, and the cutters being shaped and mounted to act as weights so that they will automatically assume a retracted position at times.

1,311,023. AUTOMATIC AIR-HOSE COUPLING. WALLACE H. STONE, Wabasha, Minn. Filed July 26, 1918. Serial No. 246,893. 1 Claim. (Cl. 285-58.)



A coupling comprising a hollow head, a pipe attached to one side of the head, a nipple attached to the opposite side of the head and being offset with relation to the pipe, the head being provided at the same side as that at which the nipple is located with an opening, a shoulder surrounding said opening and having an interned annular flange, a ring having screwthread engagement with the shoulder and provided with a central conical portion extending within said opening, a flexible sleeve clamped between the ring and the flange and an inwardly extending conical portion bearing against the conical portion of the sleeve and located interiorly of the head.

1,311,024. RESILIENT WHEEL. JOHN STUART, St. Kilda, Melbourne, Victoria, Australia. Filed Jan. 28, 1919. Serial No. 273,581. 5 Claims. (Cl. 152-36.)

5. In a resilient wheel, a hub element including an inner rim, a felly surrounding and spaced from the inner rim, a series of spaced radial abutments rigidly secured to the inner rim, a series of segmental cushions arranged upon

the inner rim between the abutments and serving to engage the inner periphery of the felly, said segmental cushions having a substantially less width than the width of the



periphery of the inner rim, plates secured to the opposite sides of the inner rim and spaced from the segmental cushions, and means to hold the segmental cushions against lateral displacement.

1,311,025. FLEXIBLE TUBING. AUGUST SUNDH, Hastings-on-Hudson, N. Y., assignor to National Clutch Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 9, 1918. Serial No. 221,382. 8 Claims. (Cl. 137-75.)



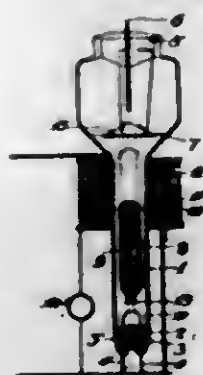
1. In a flexible metallic tubing, the combination of a wire spiral and a spiral of diaphragmatic material formed in a loop, and rigidly attached to the wire spiral, the wire spiral being substantially triangular in cross section.

1,311,026. PEN. HARRINGTON SWANN, Kemerton, near Tewkesbury, England. Filed July 31, 1918. Serial No. 247,690. 4 Claims. (Cl. 120-114.)



2. An attachment for pens comprising an upstanding enclosing wall of flexible yielding substance open at the top and communicating at the bottom with the top of the pen, said wall having a slit near one edge whereby said wall is mounted upon the pen to form an ink container.

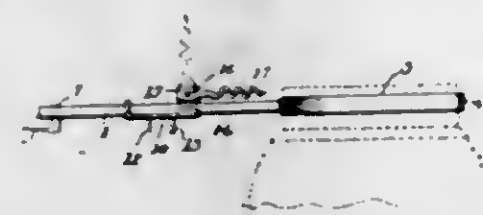
1,311,027. ELECTRIC-CURRENT LIMITER. YOSHIO UCHIDA, Tokyo, Japan. Filed June 18, 1917. Serial No. 175,467. 1 Claim. (Cl. 175-268.)



A circuit breaker including a tube, contacts located in the bottom thereof, such tube being filled throughout its

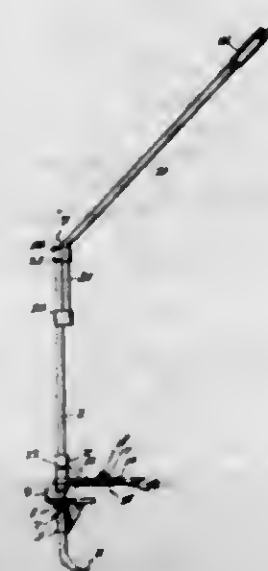
operative length with a fluid, a movable member within such tube, means secured to the lower end of said member for bridging said contacts, and a magnet above said movable member, and a shield extending from the top of such tube adapted to prevent too great a vertical motion of the movable member.

1,311,028. CAN-OPENER. HARRY W. WILAY, Black Lick, Pa. Filed Apr. 11, 1917. Serial No. 161,262. 1 Claim. (Cl. 30-3.)



The herein described can opener consisting essentially of a bar of rectangular form in cross-section, a penetrating point secured at one side of the bar and projecting outwardly parallel to the bar and beyond the end thereof, a carriage slidable upon said bar; said carriage including a plate of sheet-metal disposed against the flat under side of the bar and having a cutter and a guide struck therefrom and bent at right angles thereto, and arranged in spaced relation, an outer end portion bent in an opposite direction at right angles to the plate and apertured for the passage of the bar and upwardly bent portions formed at the inner end of the plate and snugly fitting the flat sides of the bar and merging into inwardly extending portions disposed above the upper side of the bar and provided at their inner ends with spaced apertured ears, whereby said portions are adapted to hold the inner end of the carriage to the bar, and a cam member mounted between said ears for adjustably fixing the carriage on the bar.

1,311,029. DISMANTLING-TOOL. EDWARD F. WILSON, Gramercy, La. Filed Apr. 1, 1919. Serial No. 286,688. 11 Claims. (Cl. 254-131.)



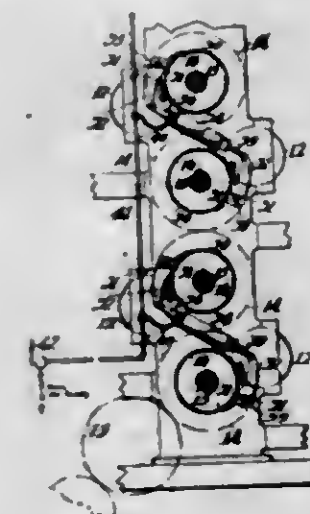
1. A dismantling tool of the character described, including a shank, a lower foot carried by said shank and adapted to be engaged at one side of a board to be removed, and an upper foot movable longitudinally on said shank and adapted to engage at the opposite side of said board, substantially as described.

1,311,030. QUADRUPLE AIR-BRAKE FOR ROTARY PRESSES. HENRY A. WISE WOON, New York, and JOHN A. FARRELL, Middletown, N. Y., assignors to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 29, 1916. Serial No. 94,459. Renewed Dec. 26, 1918. Serial No. 268,419. 6 Claims. (Cl. 74-13.)



1. The combination with two cylinders, of a brake hub for each of said cylinders, a pair of brake bands for said hubs, freely movable means for connecting one end of each band with one end of the other band, and means for simultaneously operating the other end of each band to apply the brakes.

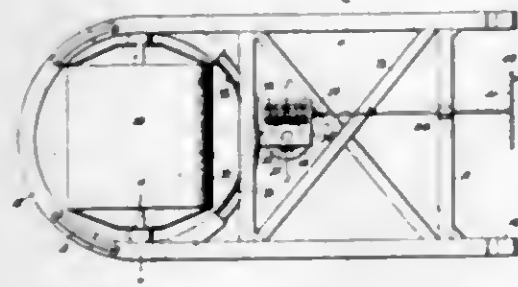
1,311,031. BRAKING MECHANISM FOR ROTARY PRESSES. HENRY A. WISE WOON, New York, N. Y., and CONRAD NORDFORS, Jersey City Heights, N. J., assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 17, 1914. Serial No. 812,725. Renewed Dec. 26, 1918. Serial No. 268,421. 6 Claims. (Cl. 101-220.)



2. In a printing press, the combination with a pair of cylinders and means for driving said cylinders, of a brake or retarding mechanism for each of said cylinders, and a single means comprising a movable cylinder and piston, for operating said brake or retarding mechanisms simultaneously and oppositely to retard both cylinders.

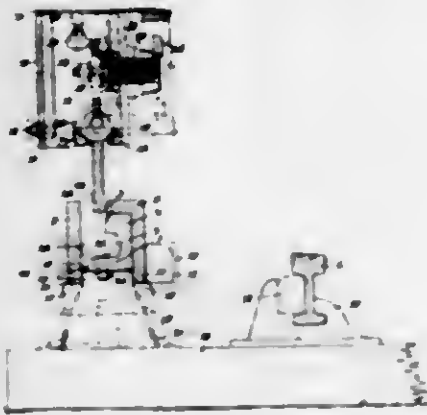
4. In a braking device, the combination of a pair of hubs, a separate brake for each hub, a separate lever connected with each of said brakes for operating them, a cylinder and piston, the piston being connected with one of said brakes, and the cylinder independently connected with the other, means whereby air can be admitted into the cylinder for forcing the cylinder and piston apart to apply the brakes to the two hubs, and means for automatically forcing the piston into the cylinder when the air pressure is released to release the brakes.

1,311,032. STEERING DEVICE. EDMUND P. ASPIN. U. S. Army. Filed Apr. 18, 1919. Serial No. 291,017. 3 Claims. (Cl. 21-202.)



1. In a device for the purpose set forth, a frame, a circular carriage secured at the front thereof having a partly open inner side and an intumed flange upon the lower edge of its outer side, a pair of oppositely disposed carriages arranged in the frame and having rollers thereon contacting with the under face of the track and in the path of contact with the intumed flange, a shaft journaled in said carriages, a steering wheel thereon, and means for imparting a simultaneous motion to the carriages to move the same on the track to bring the steering wheel to a desired angle with respect to the frame.

1,311,033. PROTECTED THIRD RAIL. JOHN A. F. ASPINALL, Liverpool, England. Filed July 24, 1914. Serial No. 852,885. 6 Claims. (Cl. 191-29.)



1. In a third rail system, a third rail having a vertically disposed working side face, an insulator adapted to be secured to a sleeper, and having shoulders at its opposite sides, a cushion between the shoulders upon which the rail loosely rests, an inner angle guard resting at its lower edge on one of said shoulders with its upper horizontal member overlying the top surface of the rail, a second or outer guard resting at its lower edge on the other shoulder and from which the base of the rail is spaced to permit exit of water, etc., a clamp having ends one of which engages the outer side of the outer guard and the other of which extends up parallel with the inner guard, and a locking key between the inner guard and the adjacent end of said clamp.

1,311,034. DRIFTING-VALVE APPARATUS FOR LOCOMOTIVES. HARRY G. BECKEN, Watervliet, N. Y. Filed Aug. 25, 1919. Serial No. 116,770. 29 Claims. (Cl. 121-14.)

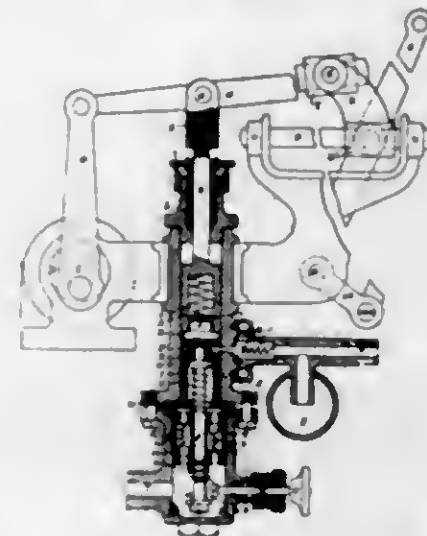
1. A drifting-valve comprising, with means for supplying independent pressure to the interior of said valve at the respective ends of the valve, a valve-casing, a valve-chamber having a plurality of port-openings therein, and a movable valve-member for said valve-chamber engageable with all of said port-openings, and adapted by pressure in one direction on an end thereof to be disengaged

from all said port-openings to open the same simultaneously, and by pressure independent of the last mentioned



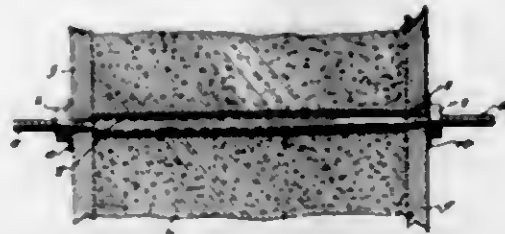
pressure in a reverse direction on an opposite end of said valve-member to engage all said port-openings to close the same simultaneously.

1,311,035. PUMP. DANIEL BERTHELOT, Paris, and HENRI J. F. GUILBAUD, Meudon, France. Filed Feb. 11, 1919. Serial No. 276,426. 14 Claims. (Cl. 103-75.)



1. A pump comprising in combination a cylinder a delivery piston therein, a suction piston in tandem with it and having transfer passages in it, a delivery passage connected to said cylinder, a spring loaded valve cooperating with said transfer passages when the suction piston moves against it, an inlet passage connected to the cylinder at the bottom of the suction piston, a cage in said delivery passage, one way valves opening in opposite directions and mounted in said cage.

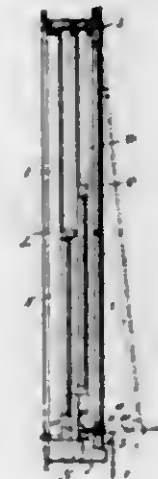
1,311,036. CONCRETE-WORK FASTENER. JAMES S. BIRCH, Chicago, Ill. Filed May 7, 1919. Serial No. 295,357. 4 Claims. (Cl. 25-131.)



1. In combination with a mold consisting of a pair of walls, means spanning the distance between said walls for holding the same from spreading, and a protector sleeve positioned upon said first mentioned means formed from a strand of wire and coiled to provide a plurality

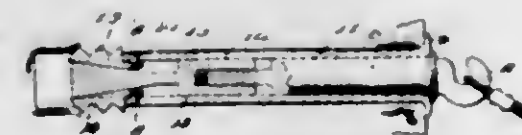
of contacting convolutions, whereby after said mold and said first mentioned means are displaced said sleeve may be gripped and pulled outwardly from engagement with a body formed within the mold.

1,311,037. STORM-SASH FASTENER. LEWIS R. BORDLAND, Merced Falls, Calif. Filed June 12, 1917. Serial No. 174,386. Renewed Dec. 10, 1918. Serial No. 266,129. 1 Claim. (Cl. 16-22.)



A swinging sash fastener, comprising a bracket to be secured to a fixed part of the frame, a bar pivotally connected to said bracket and formed in two hingedly connected parts, a plate slidably mounted on the bar and adapted to be secured to the outer side of the sash, angle plates arranged on opposite sides of the bar, the aligned portions thereof being adapted to be secured to the sash, and a lever pivotally mounted in between the remaining sections of the angle plates and having an eccentric head adapted to cooperate with the bar to secure the plates against movement longitudinally of the bar.

1,311,038. WALL-ANCHOR. NEWTON K. BOWMAN, North Lawrence, Ohio, assignor to The American Mine Door Company, a Corporation of Ohio. Filed July 2, 1918. Serial No. 243,058. 8 Claims. (Cl. 85-24.)



1. A wall anchor including a casing, an expanding element slidably mounted within the casing and provided with oppositely disposed grooves the walls of which are inclined, gripping dogs normally seated in and bearing against the inclined walls of said grooves and each having its inner end provided with a pin and slot connection with the casing, and an actuating member having its inner end operatively connected with the expanding element and its outer end provided with means for engagement with a cable, said actuating member when rotated serving to move the dogs to gripping position.

1,311,039. SPARK-PLUG. WALFRED RICHMAN, Worcester, Mass. Filed Oct. 31, 1917. Serial No. 199,357. 4 Claims. (Cl. 123-169.)

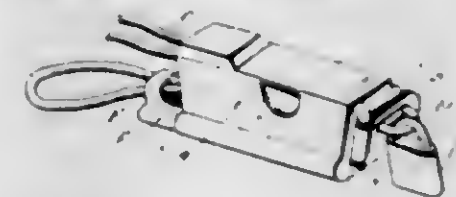
1. A spark plug having a windowed core, a threaded bushing fixed to the head of the core, relatively adjustable electrode sections having their adjacent tips visible

through windows in the core, one section threaded in said bushing, and an insulated socket member turnably



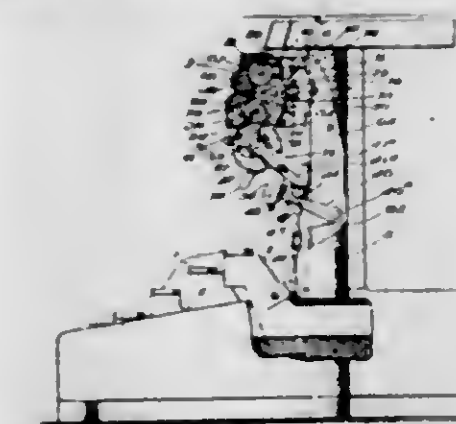
mounted on said bushing for turning said threaded section to vary the spark gap between the electrode tips while the plug is in service.

1,311,040. CORD-FASTENER LOCK. GEORGE C. HERRON, Louisville, Ky. Filed June 17, 1918. Serial No. 240,411. 6 Claims. (Cl. 24-80.5.)



5. A lock for cord fasteners comprising a casing applicable to and removable from the fastener by longitudinal sliding, a dog projectable into said casing to engage the fastener and hold the casing against such sliding until said dog is retracted, a rock shaft on which said dog is carried, an arm on said shaft for turning it as required, said arm being mounted for swinging longitudinally of the shaft and having an opening, a staple carried by said casing end receivable in said opening, and a lock for passage through said staple.

1,311,041. CALCULATING MACHINE. SAMUEL EDWARD CARLIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Co., a Corporation of New York. Filed Dec. 12, 1904. Serial No. 236,498. 66 Claims. (Cl. 235-59.)

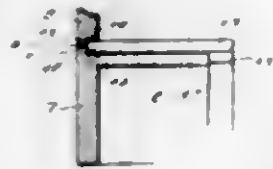


32. The combination with a carriage, of a totalizer, and connections for repeatedly joining said totalizer to move with said carriage during a single run thereof.

1,311,042. DRAWER-MOUNTING. GUSTAVE ELVIN CARLSON, Topeka, Kans. Filed May 5, 1919. Serial No. 294,693. 3 Claims. (Cl. 45-77.)

1. The combination with a drawer having laterally extending flanges at its front end, of a front plate having a drawer-receiving opening therethrough, said opening having vertical surfaces normally contiguous to the said flanges of the drawer, said front plate being formed

with vertical grooves each having its intermediate portion in the plane of the corresponding one of said vertical surfaces, and guiding bars each having its front end fitted and secured in said grooves, the front extremities

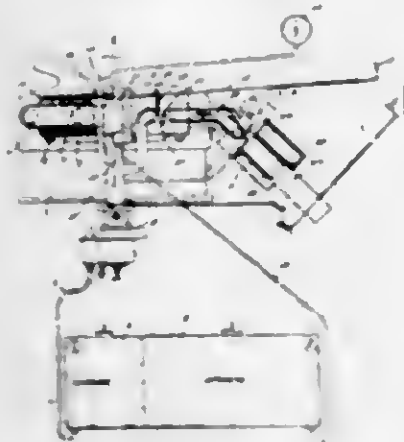


of said bars being spaced from the front surface of said plate a distance equal to the thickness of said flanges, whereby said extremities coast with said flanges to stop the drawer where its front surface is flush with that of said front plate.

1,311,043. TREATMENT OF ORES FOR PRODUCTION OF METAL AND OF POTASSIUM COMPOUNDS. CHARLES CATLETT, Staunton, Va., assignor to The British Potash Company, Limited, London, England. Filed Feb. 18, 1918. Serial No. 217,922. 16 Claims. (Cl. 23-22.)

13. The process of producing potassium compounds which comprises smelting metalliferous and potassiferous mineral matter with fuel and flux in a suitable furnace, the furnace charge being arranged to include a salt acting to favor volatilization of combined potassium, recovering potash values from the furnace gases.

1,311,044. INTERNAL-COMBUSTION ENGINE. MICHAEL CAVANAGH, New York, N. Y. Filed Oct. 31, 1917. Serial No. 199,467. 3 Claims. (Cl. 123-127.)



2. In a device of the character described, the combination of an internal combustion engine having an inlet manifold, an exhaust manifold, of a jacket surrounding said exhaust manifold, a filling of loose metallic material arranged in the jacket for breaking up oil, means for supplying a less volatile oil than gasoline to the lower part of said jacket, a pipe connected with the upper part of said jacket and to said intake manifold between the engine and the carburetor, a valve arranged in said pipe, an air pipe connected to said intake manifold, means for heating air passing through said air pipe, a valve in said air pipe, and means for simultaneously opening and closing both of said valves.

1,311,045. MUSIC-ROLL PROTECTOR. ANTONIO CHIARRO, New York, N. Y. Filed Dec. 29, 1917. Serial No. 209,532. 3 Claims. (Cl. 84-161.)

1. The combination with a frame, music rolls journaled therein and adapted to support a perforated note sheet, of a protector comprising a bracket secured to the rear of said casing, arms projecting forwardly from said bracket, a swingingly mounted plate, a roller journaled

in said plate and bearing against the note sheet wound about the adjacent music roll; ears extending from the plate between said arms and pivotally connected thereto, a link pivoted to one of said ears, and a lever ful-



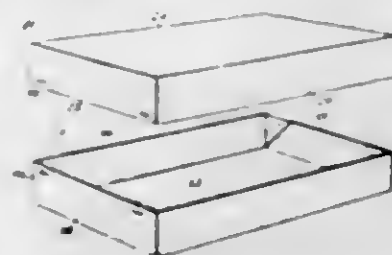
crumed on said arm and having one end pivotally connected to the adjacent extremity of said link, whereby said plate and roller may be moved out of engagement with the perforated note sheet.

1,311,046. SHOE-PROTECTOR. PINCUS CITRON, New York, N. Y. Filed Apr. 2, 1919. Serial No. 280,862. 3 Claims. (Cl. 36-72.)



1. A shoe protector comprising a main body portion to cover the front of the foot, said body portion having an edge which extends around the edge and under the sole of the shoe and a cord wire slidably extending around the edge of said shoe protector to draw the covering snugly over the foot and to adjust the covering for different sizes.

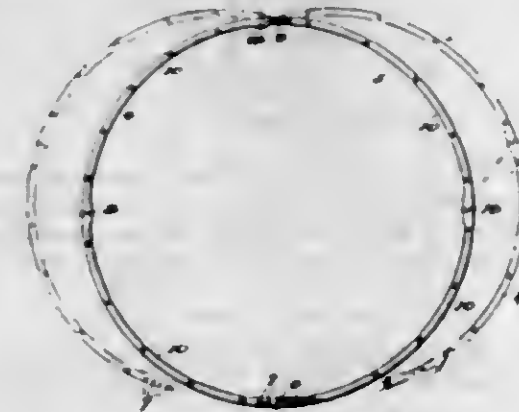
1,311,047. FOLDING BOX. LITTLE W. COLE, Lansing, Mich. Filed Sept. 13, 1918. Serial No. 253,936. 1 Claim. (Cl. 229-31.)



A folding box comprising complementary bottom and cover sections each formed from a single sheet of material longitudinally and transversely scored to define a bottom portion and side and end portions, each sheet being scored from its corners to the adjacent juncture of the line of longitudinal and transverse scoring to define lapping portions, the lapping portions adjacent the end portions being permanently secured thereto and the lapping portions adjacent the side portions being unsecured thereto, the side portions of the sheet forming one section being further scored from the junctures of the lines

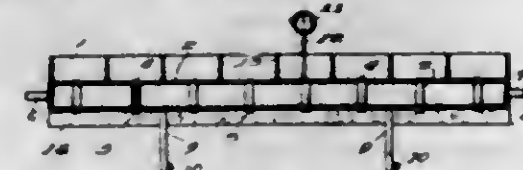
of longitudinal and transverse scoring to the adjacent free side edges of the sheet at an angle of 45° thereto to define other lapping portions whereby said end portions and the lapping portions secured thereto may be folded inwardly onto the folded side portions and the bottom portion, the natural resilience of the material from which said sections are formed causing a normal outwardly moving tendency of the side and end portions of the first section and inwardly moving tendency of the side and end portions of the other section whereby the assembled sections will remain in frictional contact, both of said sections being foldable while the securing members are in position.

1,311,048. ANTISKID DEVICE. WALTER G. CRAMER, Cincinnati, Ohio. Filed Feb. 25, 1919. Serial No. 279,035. 1 Claim. (Cl. 152-14.)



An antiskid device for automobile tires comprising a plurality of tread pieces adapted to be arranged transversely of the tire, a pair of rings adapted to be disposed on opposite sides of the tire and to which said tread pieces are connected, means for securing the free meeting extremities of each ring, each of said rings comprising two substantially semi-circular parts fulcrumed together at a point diametrically opposite the meeting extremities of the ring to permit of lengthwise opening and closing movements and to fold laterally, each of said parts consisting of a plurality of segments connected together by radially disposed hinges and adapted, when the device is removed and collapsed, to fold upon themselves to form a single arc-shaped stack with said segments held against sidewise movement by said radial hinges.

1,311,049. EVAPORATING-PAN. CHARLES M. CAORNO, Stillman, Okla. Filed July 8, 1918. Serial No. 243,929. 1 Claim. (Cl. 257-208.)

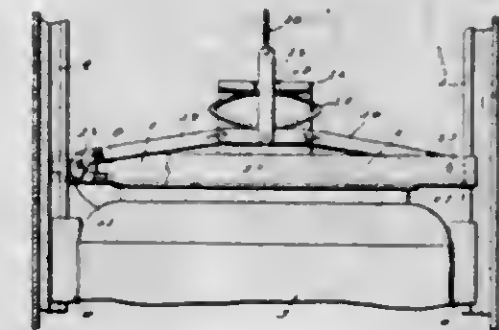


A device of the character described comprising a pan having an upper chamber and a lower chamber, the upper chamber having a bottom and side walls and the lower chamber having a bottom and side walls, sleeves in the lower chamber extending between the bottom of the chambers, bolts extending through the sleeves and through the bottoms of the chambers, steam inlet and outlet pipes communicating with the lower chamber, a drain pipe communicating with the lower chamber, and an asbestos jacket positioned about the bottom and side walls of the lower chamber.

1,311,050. SAFETY-BRAKE FOR ELEVATORS. JOSEPH CRAST, Renton, Wash. Filed Feb. 1, 1919. Serial No. 274,395. 2 Claims. (Cl. 187-81.)

1. In a safety brake for elevators, the combination with vertical guide rails, of horizontally disposed bars se-

cured to the top of the car and spaced apart, the opposite ends of said bars being relatively thick and provided with intersecting vertical and horizontal grooves, a clamping element slidably mounted in the horizontal grooves at each end of the bars, a right angularly disposed jaw on each element arranged within the vertical groove and normally spaced from said guide rails, levers pivoted be-



tween the bars, a connection between the adjacent ends of said levers and the hoisting cable, whereby said levers are normally elevated, means providing a connection between the said levers and clamping elements, to move the latter into engagement with the guide rails when the levers are lowered, and means for lowering said levers upon the braking of the cable.

1,311,051. COMPOSITION FOR THE MANUFACTURE OF LININGS OF ACID-POTS OR SUCH LIKE VESSELS. CHARLES FROUDE CRETIN, Pontardawe, Wales. Filed Apr. 19, 1919. Serial No. 290,359. 1 Claim. (Cl. 106-24.)

A composition for the manufacture of lining of acid pots or such like vessels and analogous purposes, of which the ingredients and proportions are approximately as follows: sawdust 30%, Portland cement 30%, whit-lug 10% and the residue dust from burnt pyrites 30%, the resultant mixture being moistened for use in any of the ways herein specified or for analogous purposes.

1,311,052. WINDOW-LOCK. OSCAR L. DANFORTH, San Diego, Calif., assignor to Matilda Danforth, San Diego, Calif. Filed May 13, 1919. Serial No. 290,836. 3 Claims. (Cl. 16-19.)



1. In a window lock, a supporting member pivotally connected to the window sash, another member pivotally connected to said supporting member adapted to fold against said supporting member and when folded forms an eccentric with the pivotal mounting of said supporting member.

1,311,053. PICKER-STICK CHECK FOR LOOMS. ALBERT E. DARLINGTON, Columbia, S. C. Filed May 20, 1919. Serial No. 298,366. 5 Claims. (Cl. 139-22.)

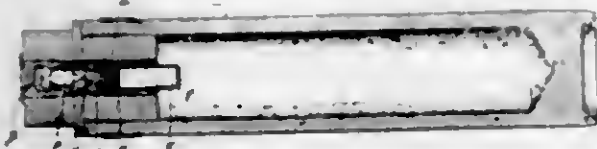
1. A picker stick check, comprising a vertically arranged plate, a cross piece at the upper end of said plate

having laterally projecting abutments against which the stick strikes, a drum to which said plate is secured, and



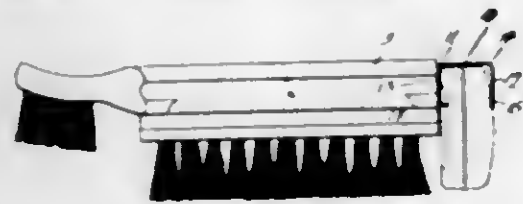
means for applying a frictional braking action to the periphery of said drum.

1,311,054. DELAYED-ACTION FUSE. GARGOY CALDWELL DAVISON, Grafton, Conn. Filed Aug. 8, 1918. Serial No. 248,900. 4 Claims. (Cl. 102-39.)



1. A delayed action attachment for shell fuses, comprising a strong envelop partly filled with gun powder and secured to the base of the fuse, with a passage for the flame from the primer into said envelop, substantially as described.

1,311,055. SHOE POLISHING BRUSH. ARTHUR L. DELTAUX, Champlain, Ill. Filed Mar. 10, 1919. Serial No. 281,676. 1 Claim. (Cl. 15-16.)

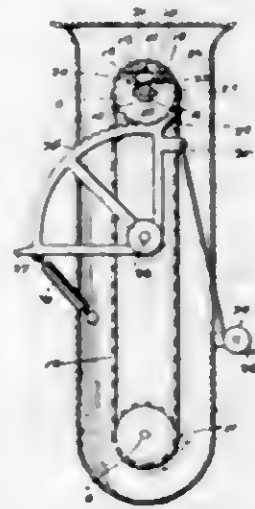


In a device of the character described, a support, a box retaining clamp secured to the support including a length of resilient metal bent in substantially U shaped formation and including a pair of parallel gripping members, one of the gripping members being provided with a longitudinally curved end which extends toward the remaining gripping member, the latter member being transversely curved to conform to the contour of the box, the curved end of said gripping member and the transversely curved end of said other gripping member coacting to retain the box therebetween.

1,311,056. STREET INDICATOR. DENNIS A. DOWNEY, Cleveland, Ohio. Filed Mar. 29, 1918. Serial No. 225,540. 1 Claim. (Cl. 40-87.)

In a machine of the class described, a pair of rollers mounted for rotation and each provided with a sprocket wheel, an endless sprocket chain engaging the said sprocket wheels and connecting said rollers together for simultaneous rotation in either direction, an apron connected to said rollers and partly wound on each of them, diametrically opposite ratchet teeth fixed on the shaft of one of the rollers, a spur gear also on said shaft, mounted for rotation independently of said rollers and provided with dogs having angularly-related cam faces, a spring

secured to the spur gear and bearing against said dogs, a rod connecting the dogs and having a finger piece, a segment gear engaged with said spur gear and mounted for partial rotation in either direction, said segment gear



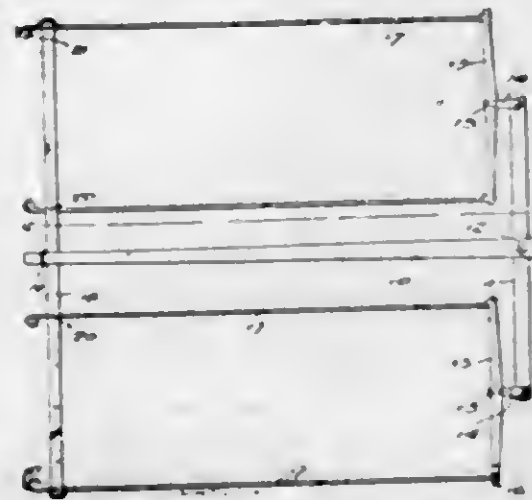
being provided with stops to engage the spur gear and limit the movement of the segment gear, a spring to turn the segment gear in one direction, and an operating cord to enable the segment gear to be turned in the reverse direction.

1,311,057. REPRODUCER. ZENA ECKELBARGER, Goshen, Ind. Filed Feb. 4, 1918. Serial No. 215,357. 2 Claims. (Cl. 274-24.)



1. In a tone arm, a tubular section, a second tubular section having a circumferential recess formed at its reduced outer threaded end portion, or threaded collar secured to said outer threaded end portion, an annular ball disposed within said recess between the said collar and an annular shoulder formed at the reduced end portion and disposed within the end of the first named section, a spring interposed between the ball and collar to prevent too free movement of the ball, and oppositely disposed screws threaded in the first section and fitted into the apertures of the ball, one screw extending into an opening formed in the reduced end of the second section.

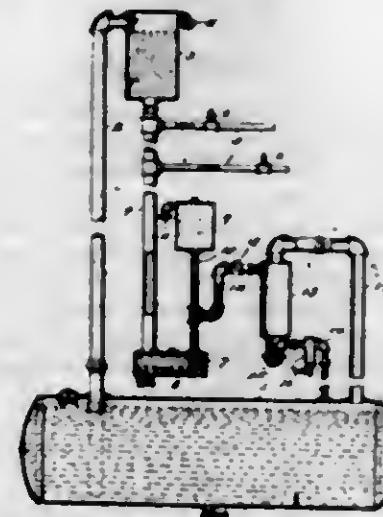
1,311,058. DRAFT-EQUALIZER. ALBERT K. ENGELSON, Canby, Minn. Filed Sept. 6, 1918. Serial No. 252,837. 3 Claims. (Cl. 21-76.)



1. A four-horse draft equalizer comprising the combination with a whistle tree, uprights mounted on the ends

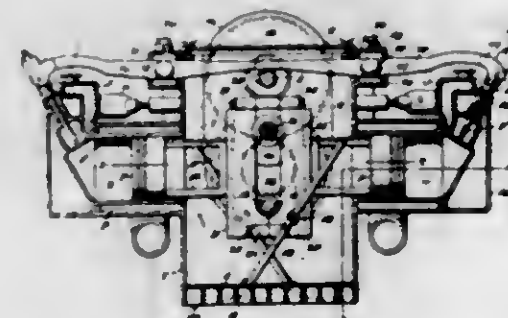
thereof, said uprights being pivoted intermediately of their ends, swingle trees connected to the upper ends thereof, swingle trees connected to the lower ends thereof, and traces extending forwardly from said lower swingle trees to be disposed upon either side of the rear draft animals connected to the upper swingle trees and serving for connection with the forward draft animals thereto forwardly of the rear draft animals.

1,311,059. STATIONARY CHEMICAL-MIXING FIRE-EXTINGUISHER SYSTEM. JOHN W. EXAIGHT, New Orleans, La. Filed Jan. 17, 1918. Serial No. 212,304. 1 Claim. (Cl. 169-24.)



In a stationary chemical mixing fire extinguisher system, a tank for an alkaline solution, a riser extending therefrom, a stand pipe communicating with the upper end of said riser and supplying the outlets of the system, said stand pipe being normally charged with fire extinguisher liquid, an elevated acid receptacle located externally of said tank, means of communication between said acid receptacle and said tank, and a vessel containing mercury which is normally subject to the weight of the column of liquid in said stand pipe and thereby functions as a trap to close the outlet of said receptacle.

1,311,060. MULTICYLINDER ENGINE. PAUL FELIX, Knoxville, Tenn. Filed Jan. 19, 1918. Serial No. 212,708. Renewed Jan. 15, 1919. Serial No. 271,349. 7 Claims. (Cl. 123-56.)



1. In an engine of the type described, a crank case cast with opposed cylinders and an integral bottom plate open at its top, and having integral end walls with openings therein which open through the upper edges of said walls, and a removable top plate; combined with pistons in pairs in said cylinder, yokes connecting their stems, and plates removably mounted in the openings in said end walls beneath said top plate, bearings to the end plates, a main shaft mounted in certain of said bearings and having cranks between them moving in the yokes, a superposed cam shaft mounted in other of said bearings, a housing on one end plate, gear connections therein between said shafts, valve casings removably attached to and closing the outer ends of the cylinders, means for detachably connecting said casings with the intake and exhaust manifolds, valves in the casings, and for each

valve a cocker arm having its outer end connected with the valve stem and its inner end overlying a cam on said cam shaft, and a fulcrum between its ends.

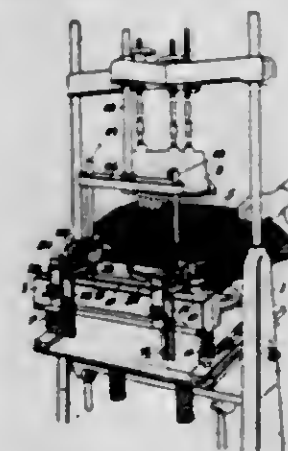
3. In an engine of the type described including a horizontal cylinder, its piston, its crank shaft, and a cam shaft driven from the latter, the combination with the crank casing having an open topped pocket above the cylinder with transverse slots through its walls, and a valve casing and valve at the outer end of the cylinder; of a yoke mounted on the valve stem, a rocker arm whose outer end is detachably connected with said yoke and whose inner end overlies a cam, and a ball fulcrum at the midlength of the arm removably mounted in said pocket.

1,311,061. SPRING SUSPENSION. FRANK EDWARD FRY, Portland, Oreg. Filed Feb. 27, 1918. Serial No. 210,454. 5 Claims. (Cl. 267-27.)



3. In a vehicle suspension means employing side springs comprising a central spring, centrally held to the vehicle, and front and rear axle springs respectively connected with the adjacent end of the central spring; means forming a connection between the central spring and an adjacent axle spring, and presenting triangularly disposed points of spring connection, two of said points of connection pertaining to one of the springs and being out of vertical alignment with each other, and the third point of connection being with the other spring, one of the first two points of connection being above the other two points, so that the two lower points of connection pertain to the respective springs.

1,311,062. ATTACHMENT FOR HAT-STAMPING MACHINES. NATHAN FROMM, New York, and ALFRED JOSEPH THWAITES, Huntington, N. Y. Filed Sept. 28, 1918. Serial No. 256,971. 5 Claims. (Cl. 223-31.)

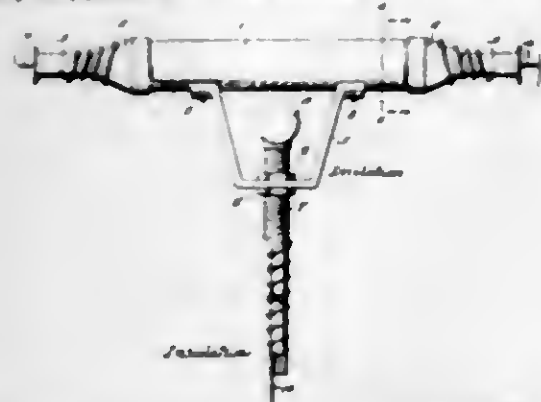


1. In a hat stamping machine provided with a die and mold of means for holding one edge of the cloth so that the cloth will be engaging the operating face of said die, means comprising a plurality of clamping plates, a clamping bar for each clamping plate, each bar and each plate having a jaw, said clamping bars being hingedly mounted on said clamping plates, springs for normally holding said jaws open, a manually operated locking lever for closing said jaws, and means for supporting said clamping members in substantially the same plane as said die.

1,311,063. LIGHTNING-ARRESTER. ALBERT GABEL, Muscatine, Iowa. Filed Apr. 15, 1919. Serial No. 290,134. 4 Claims. (Cl. 175-30.)

4. A device of the class described comprising a drum having screw threaded ends, end members screwed to said ends and provided with tubular slot portions, circuit wires, engaging said slotted portion, a bracket carried by

split drum and made of insulated material, a rod adjustably supported in said bracket, a hollow ball carried



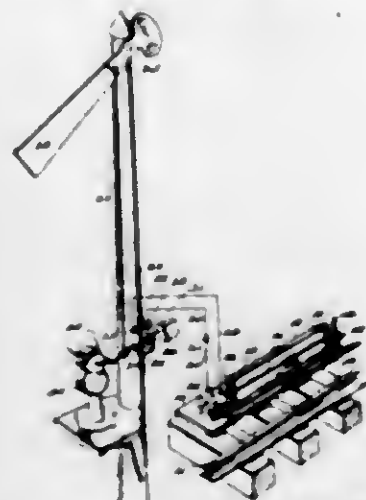
by the upper end of said rod and a ground wire connected with the lower end of said rod.

1,311,064. PACKAGE TIE. HORACE L. GEBHART, Doylestown, Pa. Filed Nov. 7, 1917. Serial No. 200,734. 2 Claims. (Cl. 21-18.)



2. A package tie including a base plate having cord receiving means adjacent one end thereof, a guide element arranged adjacent said end of the base plate, the remaining end of said base plate being enlarged and formed with a longitudinally disposed V-shaped corrugation, the opposite sides of said last mentioned end of the base plate being upturned whereby to provide a concave-convex gripping surface, and a substantially V-shaped spring clip secured to the enlarged end of the plate adjacent the V-shaped corrugation having its free end disposed inwardly whereby to receive a tying connection and to secure the same between the clip and the V-shaped corrugation.

1,311,065. TRACK OBSTACLE AND CONTROLLING MECHANISM THEREFOR. GEORGE W. GERLACH, Cumberland, Iowa. Original application filed May 26, 1917, Serial No. 171,217. Divided and this application filed Mar. 1, 1919. Serial No. 280,083. 5 Claims. (Cl. 246-203.)



1. A track obstacle and controlling mechanism therefor including a revolvable shaft, a contact operatively connected with said shaft, gravity actuated means operatively connected with the shaft and tending to swing the contact to active position, stop means carried by the shaft for limiting the contact in its movement to active position, and means operatively connected with said shaft for normally holding the contact in inactive position.

1,311,066. DOLL AND METHOD OF APPLYING HAIR TO DOLLS' HEADS. ISAAC GOLDMAN, New York, N. Y. Filed Oct. 26, 1918. Serial No. 259,831. 3 Claims. (Cl. 46-40.)



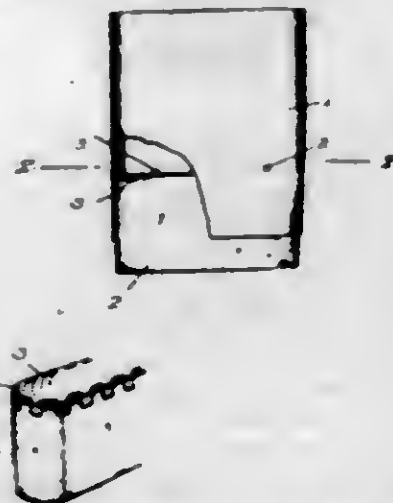
1. A doll having a head, strands of hair adhesively secured to the head at one end, such strands being dressed and trained to cover other portions of the head and adhesively secured thereto at points intermediate their ends; adjacent strands covering and adhesively secured to different parts of the head and presenting the appearance of a finished coiffure.

1,311,067. INSULATOR. WALTER T. GODDARD, Hamilton, Ontario, Canada. Filed June 7, 1916. Serial No. 102,288. 2 Claims. (Cl. 173-318.)



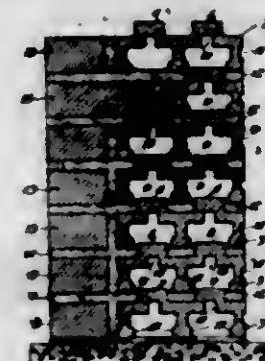
1. An insulator comprising a plurality of substantially cylindrical sections closed at their upper ends and provided with skirts adjacent their bases, bearing surfaces on said sections adjacent their bases, the side walls of said sections being relatively thin and spaced from one another to receive cementing material, and said sections being nested to bear directly upon each other at their upper ends and also at said bearing surfaces to distribute the strain.

1,311,068. OILING DEVICE. PATRICK HALE, Lexington, Ky. Filed Feb. 10, 1919. Serial No. 276,074. 6 Claims. (Cl. 91-54.4.)



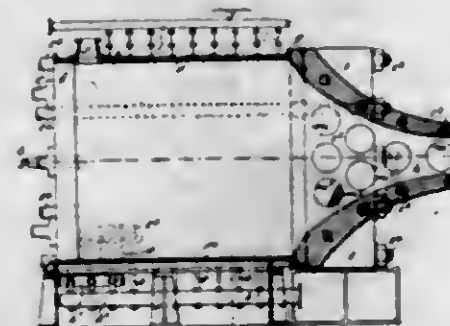
1. A device of the character described embodying a casing, a pad fitting within the casing, and rigid means at the inner portion of the pad fitting within the casing.

1,311,069. WALL CONSTRUCTION AND CHANNEL BRICK OR BLOCK THEREFOR. ARTHUR HADDOX-COVERT, JR., Brooklyn, N. Y. Substitute for application Serial No. 695,379, filed May 6, 1912, which was renewed on Feb. 23, 1915, Serial No. 10,129. This application filed July 16, 1915. Serial No. 40,250. 4 Claims. (Cl. 72-29.)



1. Hollow wall construction, comprising horizontal rows of superimposed longitudinally extending channel brick, each channel brick comprising a body portion and parallel webs projecting from the body portion at right angles thereto and spaced apart from each other forming an open channel, the space between the projecting webs being open from end to end and the webs and body portion being coextensive in length, and the outer faces of such webs being rectangular and approximately corresponding in size to the face of a standard brick, the whole being of substantially uniform thickness throughout; the channel brick in one row combining with the body portions of the channel brick of a subjacent row to form longitudinally extending superimposed air spaces; and longitudinally extending parallel mortar joints uniting said rows of channel brick, the mortar joints being adjacent the opposite faces of the wall and separated by the air space.

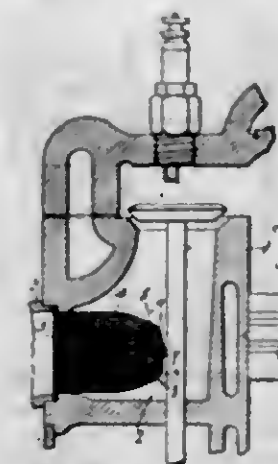
1,311,070. EXPRESSING LIQUID FROM MATERIALS. JOHN WILLIAM HINCHLEY, London, and CLEMENT STEPHEN DREW HANPER, Stockton-upon-Tees, England. Filed Dec. 26, 1918. Serial No. 268,366. 5 Claims. (Cl. 100-50.)



1. A press of the character described comprising a pressure chamber having an extrusion orifice, means for compressing material in said chamber, and means controlled by the pressure in said chamber for closing said orifice.

3. A press of the character described comprising a pressure chamber having an extrusion orifice, said orifice having walls provided with cavities and with means for permitting the passage of liquid from said cavities, grooved and perforated plates in said cavities, plates of porous ceramic material superimposed upon said first-named plates within said cavities, and means for compressing material in said chamber and extruding the same through said orifice.

1,311,071. GASEOUS-FUEL MIXER. WILLIAM FLETCHER HENNER, Arcata, Calif., assignor of one-half to Carl L. Koster, San Francisco, Calif. Filed May 24, 1917. Serial No. 170,750. 3 Claims. (Cl. 48-180.)



1. A device of the class described, comprising a tubular screen closed at one end, and baffles formed from the material of the screen at the closed end thereof and extending toward the center of the screen.

1,311,072. RAIL-BRAKE. JACOB JENDRAL, Barnesboro, Pa. Filed Feb. 28, 1919. Serial No. 279,841. 2 Claims. (Cl. 188-48.)



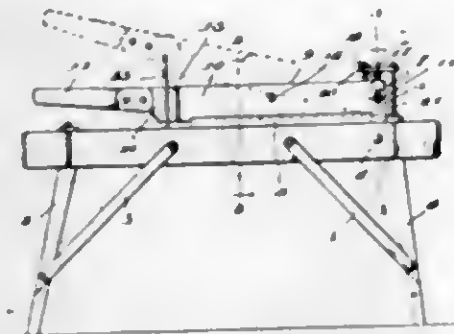
1. A rail brake comprising a beam, a shoe carried by the beam and adapted to be opposed to one side of a rail, a shoe carried by the beam and adapted to be positioned at the opposite side of a rail, a shaft journaled in the beam and the last-named shoe and having an eccentric portion disposed in said shoe, and a wheel disposed in said shoe and receiving said eccentric portion of the shaft and adapted to engage the adjacent side of the rail.

1,311,073. MOTION-PICTURE-PROJECTING APPARATUS. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to The Graphoscope Company, Washington, D. C., a Corporation of Delaware. Filed Aug. 3, 1918. Serial No. 248,163. 6 Claims. (Cl. 88-17.)



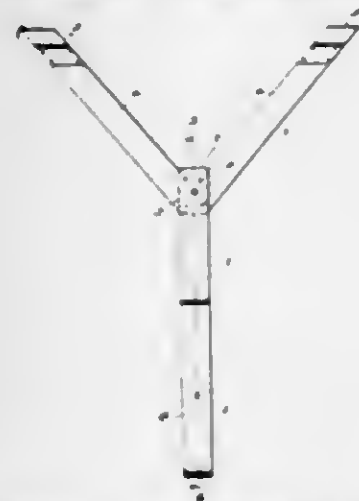
1. In a picture projecting machine, the combination with a fire shutter, of a spring arranged to transmit opening and closing power to said shutter and adapted to transmit such power without flexure and to yield when greater opening power is manually applied to the shutter, whereby a fire shutter operable as usual may be manually opened when the machine is at rest.

1,311,074. **BROOM-CORN CLEANER.** FRANK JOHNSON, Weingarten, Mo. Filed Nov. 17, 1917. Serial No. 202,587. Renewed Mar. 8, 1919. Serial No. 281,547. 1 Claim. (Cl. 130—30.)



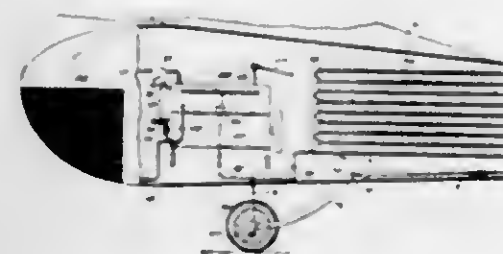
In a broom-corn cleaner a base, standards on the base provided with vertical slots, a bar comprising spaced members arranged for movement toward and from the base, a T-bolt on which the bar is pivoted at one end, the horizontal arm of the T-bolt being arranged for movement in the slots of the standards and the vertical arm of the T-bolt extending upwardly above the bar, a guide plate having an opening through which the vertical arm of the T-bolt extends, supports for the guide plate, and a spring on the vertical arm of the T-bolt and bearing downwardly thereagainst and also bearing under the guide plate, said T-bolt, standards, and spring permitting limited vertical movement of the pivoted end of said bar.

1,311,075. **CAR-STRAP.** ALBERT THEODOR JOHNSON, Stratford, Conn. Filed Dec. 6, 1918. Serial No. 265,555. 4 Claims. (Cl. 105—354.)



1. A Y-shaped car strap comprising a hanger and brace member doubled diagonally at the center to form downwardly converging arms, and a handle member secured to the doubled central portion of the hanger and brace member and depending therefrom.

1,311,076. **AIRPLANE.** ALFRED E. JOHNSON, Racine, Wis. Filed June 19, 1918. Serial No. 240,858. 2 Claims. (Cl. 244—14.)



1. In an airplane, the combination of a body of stream line formation, substantially oval in cross section, an

engine thereon, and oppositely arranged fuel reservoir sections located within the forward portion of said body and arranged partly in advance and partly in rear of the center of gravity of the machine, the laterally disposed sections of the fuel reservoir having their discharge ends in communication with the engine.

1,311,077. **FILTER-HOOD MECHANISM.** HERBERT N. KILBY, Cleveland, Ohio. Filed Dec. 6, 1917. Serial No. 205,760. 3 Claims. (Cl. 220—24.)



1. In a two part filter press casing, means for pivotally joining the sections thereof comprising complementary bearing arms on each part having shaft receiving openings, one set of which is elongated to permit play, and additional means for locking said shaft in any position of adjustment in said elongated openings.

1,311,078. **HACKSAW.** GEORGE KUCERA, Grand Island, Nebr. Filed June 6, 1918. Serial No. 238,517. 1 Claim. (Cl. 145—35.)



A saw-end-holding device for hack saws comprising a base plate provided at one end with an opening to engage over the saw stud of the hack saw and provided adjacent its opposite end with laterally projecting ears at its upper and lower edges, an eccentric clamping head mounted between said ears to engage against flat outer face of the saw blade, and a handle extending radially from said head, the base plate being offset opposite the clamping head whereby the blade end engaged between the base plate and the clamping head will be flexed when clamped by said head.

1,311,079. **SHOE ATTACHMENT.** JOHN J. McDERMOTT, Woodstown, N. J. Filed Mar. 15, 1919. Serial No. 282,865. 1 Claim. (Cl. 36—63.)

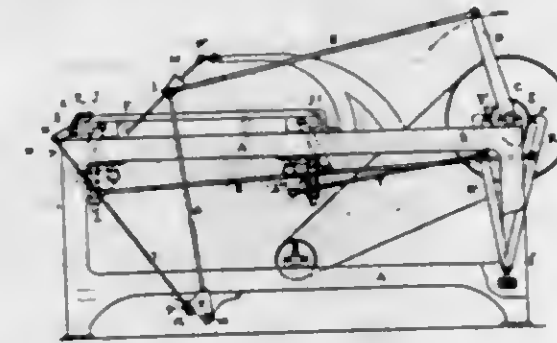


A shoe attachment comprising a sole and heel portion, the body of said attachment being cut away to provide a plurality of transversely and longitudinally disposed strips, ground engaging spurs projecting from said body and means for securing the attachment to a shoe including toe engaging members slidably mounted transversely of the sole, guides carried by the transverse strips for the said toe engaging members, and means for holding said members fixed in a given position.

1,311,080. **CLOTH-FOLDING MACHINE.** EDWIN H. MARBLE, Worcester, Mass., assignor to Curtis & Marble Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 3, 1918. Serial No. 252,204. 7 Claims. (Cl. 74—105.)

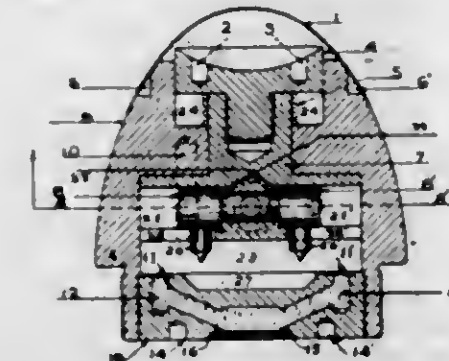
1. In a folding machine of the character specified, the combination with the cloth-receiving table, cloth-carrying

blades, and front fold-retaining jaw; of an elevatable guard positioned normally adjacent the top surface of said jaw, and means actuated synchronous with the



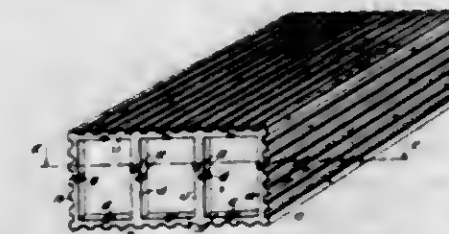
blade movement, for raising said guard therefrom as the cloth-carrying blades approach the jaw, but before inserting the fold of cloth beneath the jaw.

1,311,081. **FUSE FOR EXPLOSIVE SHELLS.** IRA J. MARTIN and HOWARD H. MARTIN, Pawtucket, R. I. Filed July 16, 1917. Serial No. 180,814. 5 Claims. (Cl. 102—39.)



1. A fuse for explosive shells consisting of an exterior body, a plunger movable axially therein by resistance applied at its outer end and having a transverse runway; and a plurality of centrifugally operated members slidably located in said runway, each of said members being provided with a firing point, substantially as described for the purposes specified.

1,311,082. **STOP FOR HOLLOW TILES.** OTTO D. MOCK, Louisville, Ky. Filed Aug. 14, 1918. Serial No. 249,831. 3 Claims. (Cl. 72—66.)

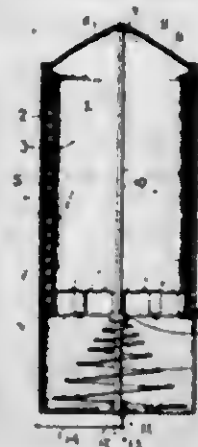


1. The combination with a hollow tile having an open end, of a stop member to close said open end to prevent the inflow of concrete, said stop member comprising a plate approximately in size and form the cross section of the opening, and having a plurality of narrow prongs extending outward therefrom and angularly disposed with respect thereto to limit the inward movement of the plate.

1,311,083. **PARACHUTE.** GEORGE H. MOON, Dallas, Iowa. Filed Jan. 27, 1919. Serial No. 273,386. 2 Claims. (Cl. 244—21.)

1. A parachute embodying an inflatable bag, a container shell in which said bag is adapted to be housed,

ropes connecting said bag and shell, individual stalls in said shell, each adapted to house one of said ropes, a stem within said shell attached to the upper part of the



bag, and a bag ejecting spring in said shell engaging said stem, said stalls being arranged in a circular series around the path of movement of the bag ejecting spring.

1,311,084. **CABLE-CLIMBING DEVICE FOR MINERS.** CHARLES EDWARD MORGAN, Hinton, N. Mex. Filed Mar. 18, 1919. Serial No. 283,434. 3 Claims. (Cl. 187—1.)



1. A device of the character described comprising upper and lower housing members, side plates secured to and connecting said members, drums journaled in said upper and lower housing members, sprockets journaled within said housing members and rotatable with said drums, a chain trained about said sprockets, a cable extending through said housing members and trained about said drums, a rod extending transversely between said side plates, a pawl pivoted upon said rod and having its active end engageable with the teeth of the lower sprocket, and means for controlling the speed of rotation of said drums.

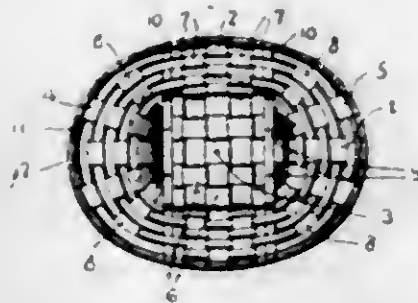
1,311,085. **TUBE-SQUEEZER.** JOHN JOSEPH MUECHER, Brooklyn, N. Y. Filed Feb. 20, 1919. Serial No. 270,386. 3 Claims. (Cl. 221—60.)



1. A squeezing or collapsing device for collapsible tubes comprising a supporting frame formed with a plurality of openings therein, a shaft extending through each of said openings, a roller arranged on each of said shafts,

one of said rollers being secured to the shaft on which it is mounted, each of said rollers being formed with a smooth portion and a raised central corrugated portion which is adapted to form indentations in the tube as it is squeezed, and means for rotating said rollers to force the tube therethrough.

1,311,086. BASKET. WILLIAM B. O'LOUGHLIN, LEO G. O'LOUGHLIN, and CHARLES EDWARD O'LOUGHLIN, Providence, R. I. Filed Nov. 26, 1918. Serial No. 264,277. 2 Claims. (Cl. 217-122.)



1. In a basket structure, the combination of main longitudinal and transverse central splints, main diagonal splints, all of said splints crossing each other at a common central point, a common central fastener securing all of said splints together, and auxiliary longitudinal and transverse splints arranged at opposite sides of the center of the structure and closely interwoven with each other and with the main longitudinal and transverse central splints forming a substantially closed basket bottom.

1,311,087. PERISCOPE-CASING. HAROLD FLOYD OLMSTED, Grand Rapids, Mich. Filed Aug. 9, 1918. Serial No. 249,143. 3 Claims. (Cl. 88-1.)

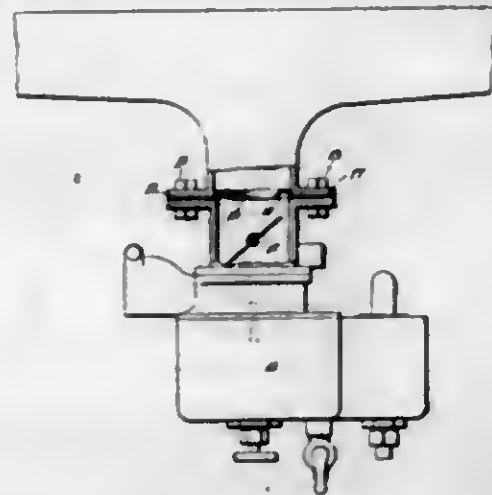


1. A camouflaging casing for periscopes consisting of a plurality of inverted conical reflecting units.

1,311,088. CARBURETOR DEVICE. HAROLD F. ONO, Portland, Ore. Filed Sept. 22, 1917. Serial No. 192,707. 2 Claims. (Cl. 48-180.)

2. As an article of manufacture, an auxiliary mixing device for hydrocarbon motors comprising a plate having suitable openings for connection to a carburetor and formed with a central aperture, the portion of the plate bordering said aperture being formed with an annular groove on its under side, for the purpose of intercepting

unvaporized globules of the liquid fuel and conducting them to the aperture where they are vaporized by the



rapid flow of mixture passing the inner periphery of said plate.

1,311,089. SUPPORTING-CLAMP FOR VARIOUS OBJECTS. NEWELL D. PARKER, New York, N. Y., assignor to Standard Scientific Company, New York, N. Y., a Corporation of New York. Filed Sept. 28, 1916. Serial No. 122,617. 1 Claim. (Cl. 24-248.)



A clamp for holding suspended maps, charts and the like, comprising an attaching plate, a pair of bracket arms extending outwardly from the upper end thereof, the ends of the bracket arms depending and being substantially parallel with the attaching plate, and a clamping arm pivotally supported to the lower ends of the depending portions of the bracket arms, arranged to have its weighted end bearing by gravity against the front face of the attaching plate along a line below the lower edges of the outwardly extending portions of the bracket arms, which portions serve as stops to arrest an article being applied to the stop, and determining the proper position in which it should be held by the clamp.

1,311,090. MANUFACTURE OF NAPHTHALENE TRISULFONIC ACID. LESTER ALBERT PRATT, Winchester, and FRANCIS NEWTON BRINK, Woburn, Mass., assignors to Merrimack Chemical Company, North Woburn, Mass., a Corporation of Massachusetts. Filed Aug. 31, 1918. Serial No. 252,233. 2 Claims. (Cl. 23-24.)

1. Method of preparing naphthalene trisulfonic acid, comprising mono-sulfonating naphthalene by means of sulfuric acid of approximately 100% concentration, and thereafter introducing oleum into the acid mixture and continuing the sulfonation to produce the trisulfonic body.

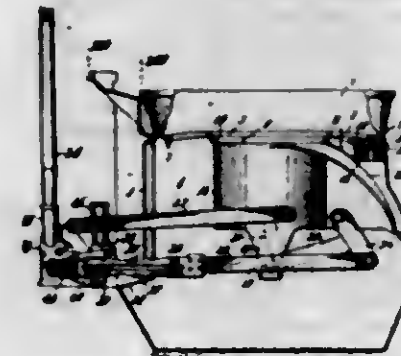
1,311,091. RECEPTACLE-CLOSURE. HERBERT REINER, Ludlow, Ky. Filed Jan. 26, 1917. Serial No. 144,717. Renewed Apr. 5, 1919. Serial No. 287,927. 1 Claim. (Cl. 220-40.)



A receptacle having a neck provided with opposed bayonet grooves, each groove having a straight vertically dis-

posed branch opening adjacent the upper edge of the neck, a cap, a resilient annulus secured within the cap adjacent its lower end, and offset projections extending from said annulus inwardly of said cap and adapted to be fitted in said grooves to hold the cap in position on the neck.

1,311,092. FURNACE. JOHN N. RICHARDSON and EDWARD A. MULLER, Cincinnati, Ohio, assignors to The Williamson Heater Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 22, 1914. Serial No. 846,486. 24 Claims. (Cl. 110-46.)



1. A furnace formed with a circular fuel charging port in the center of the grate and a fuel inlet port in the wall, a container, means for moving said container to align it with either of said ports, means for forcing the fuel upwardly through the container, and a spherical member movable with the container for blocking the charging port when the container is out of alignment therewith.

1,311,093. NEEDLE-CAM STRUCTURE FOR KNITTING-MACHINES. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Oct. 22, 1914. Serial No. 868,109. 4 Claims. (Cl. 66-21.)



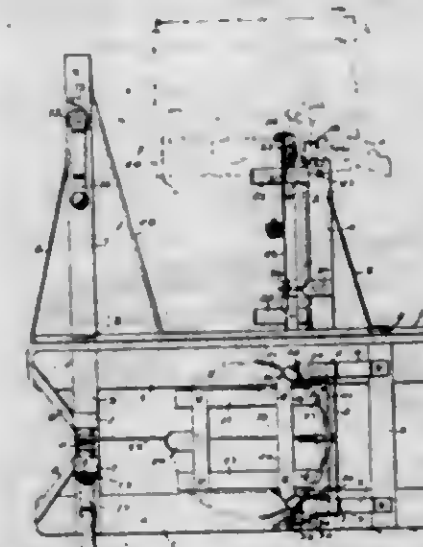
1. In a cam device for knitting machines a needle cam structure comprising a carrier segment of a cylinder, a stitch cam and a spacer between said segment and stitch cam having an edge offset within an operative edge of said stitch cam, whereby said spacer is out of contact with the needle butts operated by said cam and means for holding together segment, spacer and cam to fixedly position the cam.

1,311,094. BARREL HOISTING AND TILTING DEVICE. FRED A. SERRING, Granite Falls, Minn. Filed May 4, 1918. Serial No. 232,538. 1 Claim. (Cl. 248-52.)

In a barrel hoisting and tilting device, a base, a pair of spaced uprights, a cradle comprising a bottom, strips rising from said bottom and arranged in the arc of a circle, curved bands secured to all of said strips, a yoke having its cross piece connected to the bottom of said cradle, and its parallel arms secured to said curved bands adjacent the extremities thereof, adjustable hooks arranged upon said arms, a U-shaped element arranged in advance of the cradle and having a curved intermedi-

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ate portion secured to one of said bands, the ends of said element projecting rearwardly and secured to said



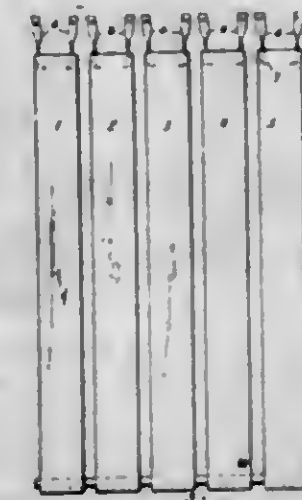
band and pinlets projecting at right angles from the ends of said element and journaled in said uprights.

1,311,095. BELT-SHIFTING DEVICE. FRANK W. SIREN, Detroit, Mich., and EMIL TAVANTILA, Donora, Pa. Filed Feb. 24, 1919. Serial No. 278,718. 3 Claims. (Cl. 64-4.)



1. A belt shifting device comprising a rotatable upright, belt engaging arms, and means connecting said arms to said upright so that one arm may be operated in advance of the other arm, said means including an arm support on said upright, and a collar on said upright adapted to engage and shift said arm support.

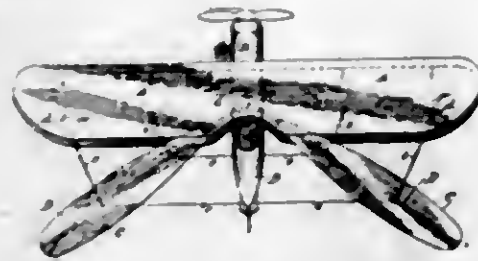
1,311,096. ELECTRODE. ELIAS ANTHON CAPPEL, Smith, New York, N. Y. Filed Jan. 7, 1918. Serial No. 210,740. 3 Claims. (Cl. 204-4.)



1. An electrode composed of cast silicon iron having a conductive lead of a metal of lower melting point than

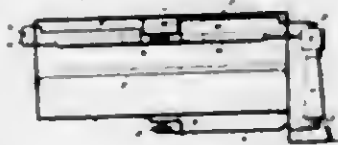
said silicon iron, one end of said conductive lead being embedded in the said silicon iron and in intimate mechanical and electrical contact therewith while physically separate and distinct therefrom; substantially as described.

1,311,097. AIRPLANE. CHARLES E. STACY, Dayton, Ohio. Filed May 27, 1918. Serial No. 236,744. 1 Claim. (Cl. 244—29.)



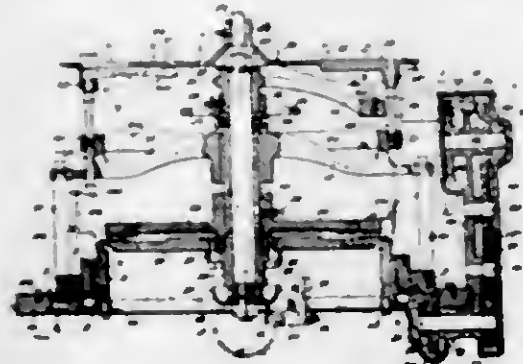
In an airplane, control planes separate from the main planes and attached to the airplane centrally and extending diagonally rearwardly, and at other points by means of wires, said control planes extending outwardly and drifting rearwardly on a level with the thrust line of the propeller, and being capable of turning on axes extending through their lengths, and means for manually controlling the turning of the control planes from a pilot seat, said means including levers interposed between the control stick and the control planes.

1,311,098. INCUBATOR THERMOSTATIC CONTROL. ERNEST L. STEWART, La Veta, Colo. Filed Mar. 7, 1917. Serial No. 153,022. 1 Claim. (Cl. 236—4.)



The combination with an incubator and a heater supplying heat thereto, and a thermostat within the incubator and responsive to the temperature therein for controlling the delivery of heat to the incubator, of a second thermostat responsive to the temperature of the air outside the incubator for controlling the generation of the heat, said thermostats acting independently of each other.

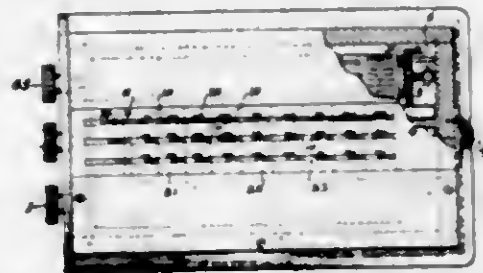
1,311,099. DIAL-HOLDING MECHANISM FOR KNITTING MACHINES. HARRY SWINGLEDUCST, Laconia, N. H., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Feb. 20, 1915. Serial No. 9,725. Renewed June 2, 1919. Serial No. 301,352. 15 Claims. (Cl. 69—22.)



9. A rib knitting machine having in combination a needle cylinder and needle dial, cam carriers for cylinder and dial cams, driving means for said cam carriers, a bobbin-stand, a plurality of supports on one of said cam carriers equidistant from the center thereof for holding and driving said bobbin-stand and means to hold the said cylinder and dial in a fixed relation to each other comprising means rigid with said dial within the path swept by said sup-

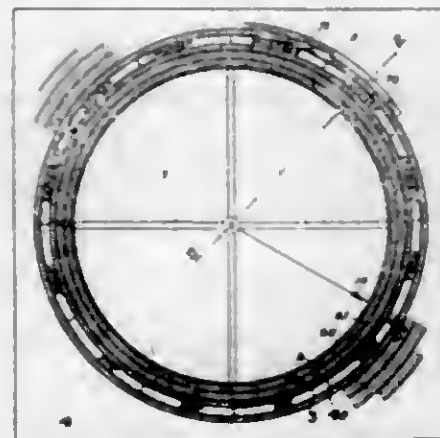
ports, slides movable across said path into contact with said means, means for moving said slides successively out of said path during the passage of each of said supports, and for returning one of said slides before moving another.

1,311,100. INTEREST-COMPUTING MACHINE. STANLEY P. THOMPSON, Seattle, Wash. Filed Dec. 14, 1917. Serial No. 207,195. 5 Claims. (Cl. 235—86.)



5. In a device of the character described the combination with a plurality of webs carrying matter of such nature as to require the complementary consideration thereof, a casing in which said webs are mounted, sight openings in the opposite sides of said casing, a mounting for said casing which permits the same to be bodily rotated and guide means for said web of such nature that the opposite sides of the several webs are exposed to view at the respective sight openings.

1,311,101. TIME AND DATE INDICATOR. STANLEY P. THOMPSON, Seattle, Wash. Filed July 20, 1918. Serial No. 247,164. 3 Claims. (Cl. 40—113.)

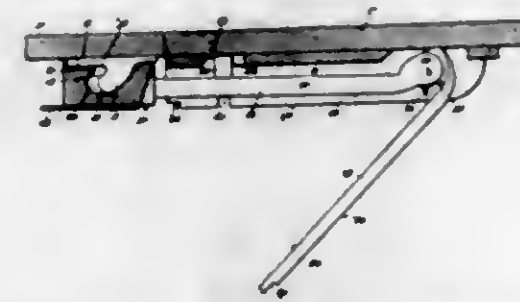


1. A date indicator comprising two disks mounted for relative rotative movement about a common point, one of said disks having thereon a circular band with the months of the years and the numbers of the days in the months, arranged in sequential order, the other having an adjacent ring containing the days of the week arranged in sequential order, and alongside of this an arc having therein the days of the week arranged in sequential order and extending each way from the point in said ring which represents the first of the year, said markings in the arc matching with the markings of that part of the ring which represents the month of December, and a screen carried by the other disk and having two opaque segments extending from a common central point in opposite directions, one acting to screen the days of the week in the ring and the other to screen the days of the week in the arc.

1,311,102. LOCK. THOMAS THOMPSON, Makoti, N. D. Filed Feb. 11, 1919. Serial No. 270,290. 4 Claims. (Cl. 70—102.)

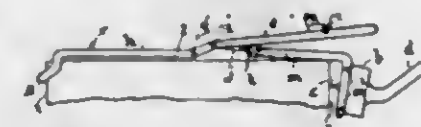
2. A sliding door lock comprising a keeper secured upon the door jamb and provided with an undercut portion, a casing secured upon the door, a latch member disposed within said casing and arranged for pivotal and sliding movement, a head carried by said latch member and pro-

vided with a recess for the accommodation of said keeper, a projection within said recess, a bar pivotally connected with said casing and with said latch member whereby rec-



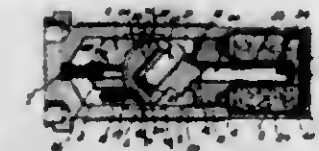
tilinear movement may be imparted to said latch member to engage said projection within the undercut portion of said keeper, and means for preventing movement of said bar.

1,311,103. ATTACHMENT FOR DISCHARGE OF LIQUID FROM CONTAINERS. JAMES WALKER, Cardarvon, Western Australia, Australia. Filed Dec. 18, 1918. Serial No. 267,313. 2 Claims. (Cl. 221—23.)



1. In a can punching and pouring attachment, the combination of a frame having an end portion which is V-shape in cross section to engage the corner of a can and extended portions which are bent and connected at their ends, a hollow punch supported in the portion which is V-shape in cross section to form an opening in a can and also serve as a spout, a second frame formed with an angularly bent portion at one end to engage the opposite side of a can, a lever pivoted between the legs of the second mentioned frame and a pivot connection between the lever and the connection at the ends of the extension on the first mentioned frame, whereby when the lever is moved in one direction, the hollow punch will be driven into the can and the angular bent portion of the second mentioned frame will grip the opposite side of the can.

1,311,104. DETONATOR FOR ORDNANCE-PROJECTILES. CHARLES P. WATSON, Philadelphia, Pa., assignor to Watson Arms Company, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed July 27, 1915. Serial No. 42,134. 30 Claims. (Cl. 102—39.)



1. In a detonator for ordnance shells, an inclosing case, a movable body within the case for causing the firing of the detonator, a runway along which the said body travels, and a movable carrier in which the said body is supported, which carrier normally occupies a safety position with the said body out of line with the runway, and is arranged to move to an arming position with the said body in line with the runway under action of centrifugal force upon the shell being fired from a gun.

1,311,105. COLLAR-FORM. WILLIAM D. WHITE, El Paso, Tex. Filed Apr. 12, 1918. Serial No. 228,223. 2 Claims. (Cl. 2—91.)

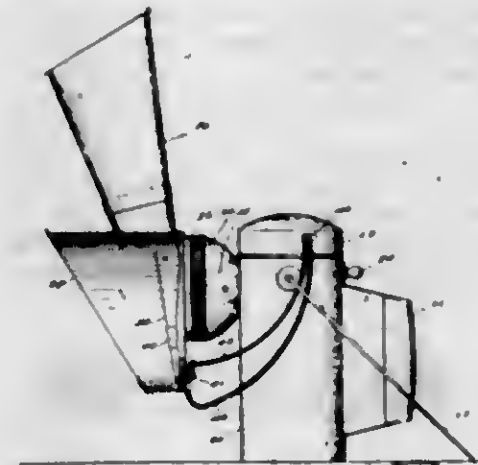
1. A combined collar fastener and support formed from a single blank of material and comprising an elongated body portion, laterally extending side wings located at one

end of the body portion, outwardly and downwardly extending collar engaging prongs, a centrally arranged lon-



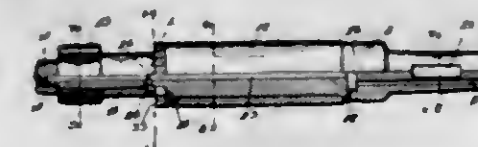
gitudinally disposed strip of fabric carried by the body portion and means formed on said body portion for holding the fabric in position.

1,311,106. EGG-CANDLING ATTACHMENT FOR PORTABLE LANTERNS. HOMER A. WOODS, Indianapolis, Ind. Filed Jan. 25, 1918. Serial No. 213,657. 6 Claims. (Cl. 99—6.)



1. An egg-candling attachment for portable electric lanterns, comprising a screw-threaded member for attachment to a screw-threaded light-containing part of the lantern, a hood pivotally mounted on said screw-threaded member so that it can be adjusted to the desired position regardless of the position taken by the screw-threaded member, and a spring latch for holding said screw-threaded member and hood in any desired adjusted position, said spring latch being mounted on one of said two pivotally connected parts and cooperating with a circular series of holes in the other of said parts, said hood and said screw-threaded member being provided with an opening to allow the light to enter the hood.

1,311,107. RIFLING-TOOL AND METHOD OF USING SAME. CARL G. ALLENBURN, Rochester, N. Y. Filed Feb. 23, 1918. Serial No. 218,722. 18 Claims. (Cl. 90—25.1.)

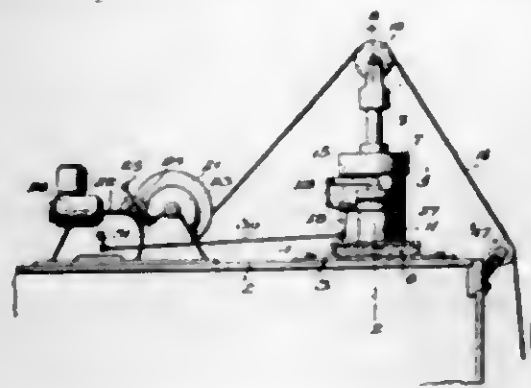


1. The process of rifling a gun-barrel which consists in forcing one at a time a series of circular disks having broadening teeth integral therewith and equally distributed over the periphery thereof through said gun-barrel, the teeth on said disks being higher in each succeeding disk than that is forced through the gun-barrel.

1,311,108. HYDRAULIC STRAIN-EQUALIZER. WALTER C. BECKWITH, Fostoria, Ohio. Filed Nov. 4, 1918. Serial No. 261,096. 5 Claims. (Cl. 254—135.)

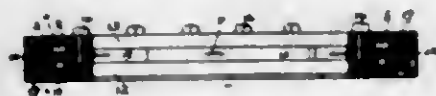
1. A device of the type described, including opposed pistons, cables controlled by said pistons for lifting heavy bodies, an auxiliary piston, means providing communication between the containing chambers of said pistons, said chambers being supplied with a liquid, resilient

means provided within the auxiliary piston chamber for opposing the pressure of fluid on said auxiliary piston,



and means controlled by said auxiliary piston for limiting the pull which the hoisting means may exert upon any given set of cables.

1,311,109. METHOD AND MEANS FOR MAKING TURBINE-ROTOR. AXEL W. CARLSON, Worcester, Mass., assignor to Carling Turbine Blower Co., Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1918. Serial No. 267,540. 19 Claims. (Cl. 22-203.)



1. The method of making molds for turbine rotors, which consists in primarily forming a blading annulus by assembling the series of blades between circular concentrically disposed outer and inner perforated bands, the shank of the blades extending through and projecting at the interior of the inner band; securing the outer ends of the blades in the outer band, supporting said blading annulus in a circular clamping device, placing the same within a surrounding core-box and inclosing the blades and outer band with core material, baking said core material thereon, then removing the clamping device leaving the face of the band and projecting shank exposed, placing the circular core and inclosed blade annulus in a suitably formed wheel-mold, and casting the body of the rotor therein, integrant with the inner band and solidly embedding the inwardly projecting shanks of the blades.

1,311,110. WRENCH-HANDLE. RUSSELL R. COEN, Worcester, Mass., assignor of one-half to Coes Wrench Co., Worcester, Mass., a Corporation of Massachusetts. Filed May 1, 1919. Serial No. 294,917. 5 Claims. (Cl. 81-177.)



1. A wrench-handle having its exterior grip surface composed of straight hollow drawn wrought-metal tubing of uniform thickness, in combination with a skeleton handle-frame provided integrally with a plurality of out-

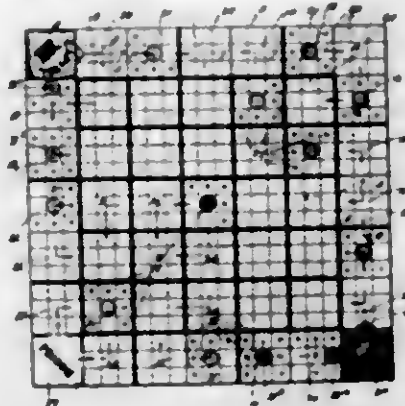
standing longitudinal ribs, the exterior faces of which are formed to fit against the interior surface of said tubing.

1,311,111. HANDLE FOR WRENCHES. RUSSELL R. COEN, Worcester, Mass., assignor of one-half to Coes Wrench Co., Worcester, Mass., a Corporation of Massachusetts. Filed May 1, 1919. Serial No. 294,945. 3 Claims. (Cl. 81-177.)



1. In a wrench handle the combination with the wrench-bar shank having straight side surfaces, and a grip-forming shell consisting of uniform straight drawn tubing, of a tip-end member provided with a plurality of integral longitudinal tongues that extend into the interior of the handle, the inner faces of said tongues contacting with the sides of the wrench-bar-shank and their outer faces contacting with the interior of said grip-forming tube, substantially as and for the purpose set forth.

1,311,112. GAME APPARATUS. LIONEL W. CROMPTON, Tampa, Fla. Filed Mar. 28, 1918. Serial No. 225,305. 7 Claims. (Cl. 46-63.)

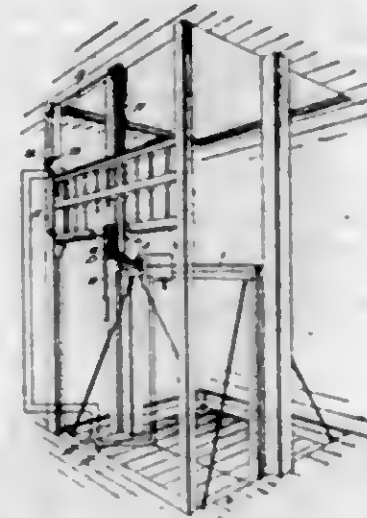


2. In a game apparatus, a board divided into a plurality of squares by lines on the board, the squares at opposite corners of the board being indicated as capitals or goals, and each of the other squares being divided into nine smaller squares by lines.

1,311,113. MECHANISM FOR OPERATING GATES, DOORS, OR OTHER CLOSURES. SIMON DEUTSCH and EDWARD L. GROSS, Chicago, Ill. Filed Jan. 28, 1910. Serial No. 540,528. 6 Claims. (Cl. 187-52.)

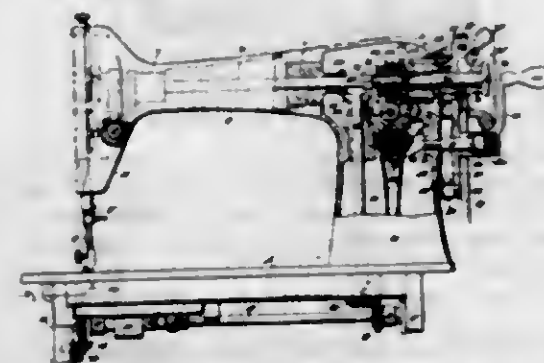
4. In an elevator, a motor carried thereby, gate-operating mechanism comprising a motor-operated driving element on the car, and a revoluble gate-opening shaft on

the housing, means for raising said driving-element to cooperate with said shaft when the floor of the car is



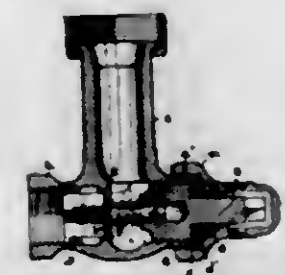
substantially level with the floor of the building, and means for closing the circuit through said motor.

1,311,114. SEWING-MACHINE. OLIVER L. DOSCH and MARTIN HEMLEB, Elizabeth, N. J., assignors to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Dec. 20, 1916. Serial No. 137,946. Renewed Nov. 4, 1918. Serial No. 261,149. 48 Claims. (Cl. 112-220.)



1. In a sewing machine, in combination, a frame formed with an aperture, stitch-forming mechanism comprising a reciprocating needle and complementary loop-taking means incorporated in said frame, operating mechanism interconnecting said needle and loop-taking means, a motor-unit comprising a stator detachably supported by said frame, and a rotor journaled in said stator and including a power-shaft entering said aperture and operatively connected with said operating mechanism.

1,311,115. COMBINED CHECK AND COMPRESSION VALVE. ARTHUR I. FRIEDEN, Cleveland, Ohio, assignor to Glauber Brass Manufacturing Company, Cleveland, Ohio. Filed Feb. 14, 1917. Serial No. 148,579. 1 Claim. (Cl. 251-145.)



A device as described comprising a pipe joint, a check valve seated therein having a stem on its rear, a plug adjustable in said joint having a central bore in which said stem is slidably mounted and a spring interposed between said plug and valve, the said plug having a key stem and a nut about the same, packing confined within said nut about said stem spaced apart from the body of

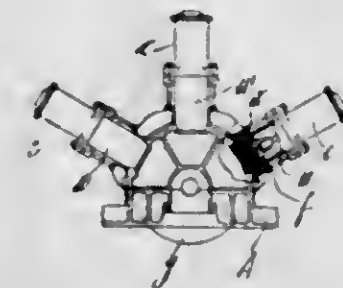
said plug, a disk sleeved over said stem and engaged by said nut on the neck of said joint and adapted to confine the packing regardless of the position of the plug, and a cap over the extremity of said key stem.

1,311,116. PORTABLE AND KNOCKDOWN STORAGE-BIN. MAXWELL R. FITCH, Corona, Calif. Filed July 22, 1918. Serial No. 246,201. 4 Claims. (Cl. 189-3.)



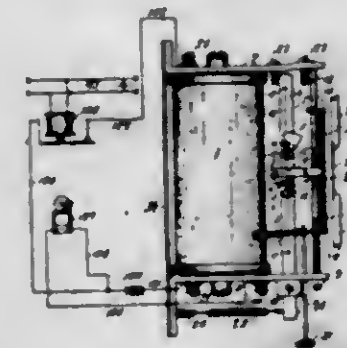
1. A series of wall plates, and interlocking hooks formed upon the meeting edges of the wall plates and connecting the plates together to form a continuous band; the plates being notched out at the ends of the seams formed by the interlocking hooks.

1,311,117. WOOD-PULP GRINDER. HENRY J. FRANK, Holyoke, Mass., assignor to Holyoke Machine Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Apr. 26, 1919. Serial No. 292,832. 3 Claims. (Cl. 83-75.)



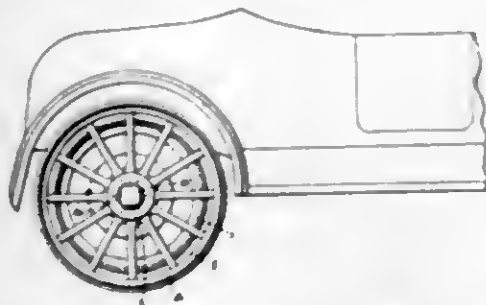
1. In a wood pulp grinder, a rotary grindstone, a pocket to hold the wood to be ground, a follower to force the wood against the stone, an actuating means for the follower, a hinge connection between the follower and actuating means restricting the former to swinging movement in a single plane and to and from the stone, and stops to limit the swinging movement of the follower in each direction.

1,311,118. THREE-POSITION ANNUNCIATOR. WEALEY H. GEIGER, Wormleysburg, Pa. Filed Apr. 23, 1914. Serial No. 833,900. Renewed Oct. 28, 1918. Serial No. 260,009. 26 Claims. (Cl. 177-327.)



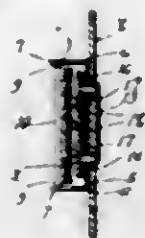
1. In an annunciator of the type described in combination with, an electromagnet and coacting armature having two stops thereon, a three position signal member having two train and one clear visual sections operatively associated with said electro-magnet and coacting armature in two of its positions.

- 1,311,119. EMERGENCY-WHEEL FOR AUTOMOBILES. JOHN D. GOLDSMITH, Indianapolis, Ind. Filed Dec. 26, 1918. Serial No. 268,265. 4 Claims. (Cl. 31-49.)



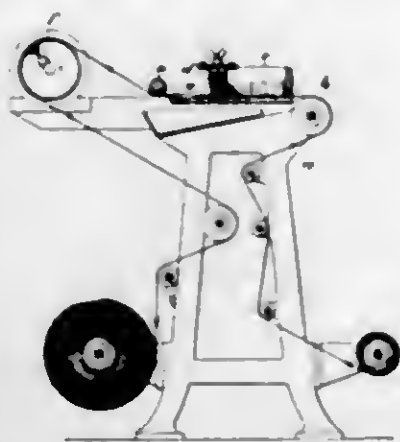
1. The combination with a vehicle wheel, including a hub, having threads exteriorly thereof, of an emergency wheel, and an auxiliary hub separate from the vehicle wheel and between the hub of the vehicle wheel and the emergency wheel for carrying the emergency wheel adapted to be engaged with the threaded portion of the wheel hub, said emergency wheel being adjustably mounted on said auxiliary hub for movement toward or from the vehicle wheel.

- 1,311,120. SHOE-BUCKLE. BENNIE T. GRINDELAND, Mabel, Minn. Filed Nov. 23, 1917. Serial No. 203,557. 1 Claim. (Cl. 24-170.)



In a buckle of the class described, a flat base plate, upstanding ears carried by the base plate, a plate pivotally supported by said ears, a plurality of downturned teeth formed on the forward edge of said pivoted plate, said base plate adapted to be positioned on the outer surface of the article which is to be secured, rivets adapted to be forced through an article and secured to said base plate for securing said buckle thereto and forming a rest for a strap arranged to be engaged by the buckle to space the same from the base plate, thereby permitting the tongues to readily bite into the strap, and a flat reinforcing plate positioned on the inner surface of the article directly below said base plate and connecting said rivets to prevent displacement thereof, as and for the purpose specified.

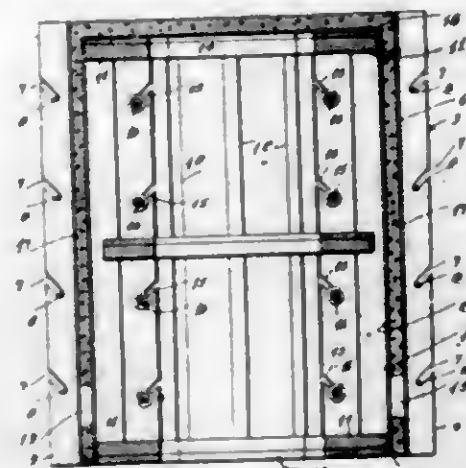
- 1,311,121. MANUFACTURE OF INSULATING FIBROUS WEBS FOR ELECTRIC INSULATION PURPOSES. EMIL HAEFELY, Basel, Switzerland. Filed Dec. 19, 1918. Serial No. 267,509. 8 Claims. (Cl. 91-30.)



2. In an apparatus for the manufacture of insulating fibrous webs for electric insulation purposes, a receptacle

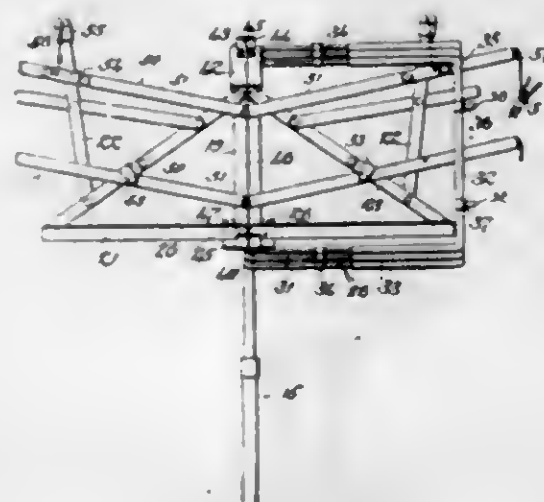
to receive a charge of powdered agglutinant, means for conveying a web through said receptacle in contact with the powdered agglutinant to carry therefrom along with it, adjustable means for regulating the agglutinant supply upon the web, distributing means to uniformly distribute the agglutinant upon the web and heating means to smelt the agglutinant for causing it to adhere to the web, substantially as described.

- 1,311,122. MOLD. JOHN F. HARRIS, Wilmington, N. C., assignor to Cement Products Company, Wilmington, N. C., a Corporation of North Carolina. Filed Oct. 30, 1918. Serial No. 260,342. 6 Claims. (Cl. 25-130.)



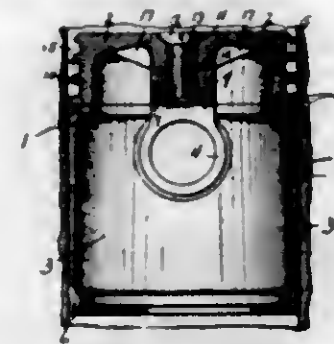
6. A mold comprising a cylindrical shell having both ends fully open, a cylindrical core within said shell and having both ends fully open, and a plate resting upon the upper end of the core to form the bottom to the molded article.

- 1,311,123. MUSIC-LEAF TURNER. THOMAS T. JAKOBSON, Los Angeles, Calif. Filed Feb. 28, 1917. Serial No. 151,522. 2 Claims. (Cl. 84-17.)



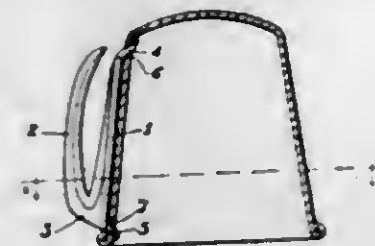
1. A music leaf turner comprising a rack including a central member, rack members pivoted thereto, a fastening plate for maintaining said rack members in extended position and including lugs formed upon one edge thereof and engaging said rack members on each side of said central member, a supporting element adjustably mounted upon said central member, and to which a plurality of leaf engaging frames are pivotally connected.

- 1,311,124. PISTON. AATHA HOLMES, Canton, Ohio. Filed Aug. 16, 1917. Serial No. 180,510. 9 Claims. (Cl. 74-85.)



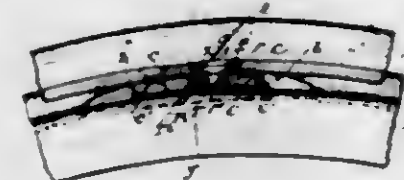
3. A piston comprising two sections of different heat conductivity and of different diameters connected at their axes only, and free to expand radially independently of each other.

- 1,311,125. THREAD-CUTTING ATTACHMENT. JAY M. C. JOHNSON, Seattle, Wash. Filed Jan. 2, 1918. Serial No. 209,865. 1 Claim. (Cl. 223-51.)



A thread cutting attachment for thimbles comprising a metal plate bent to form two connected flanges which are substantially at right angles, one of said flanges having prongs at its ends by which it may be secured to the thimble and the other flange being slotted inward from one end to form two slightly separated fingers having their adjacent edges sharpened and both extending substantially parallel with the side of the thimble.

- 1,311,126. SECURING MEANS FOR SPLIT TIRE-HOLDING RIMS. JOHN KELSEY, Detroit, Mich., assignor to Kelsey Wheel Company, Inc., Detroit, Mich., a Corporation of New York. Filed Apr. 9, 1914. Serial No. 830,779. 3 Claims. (Cl. 152-21.)

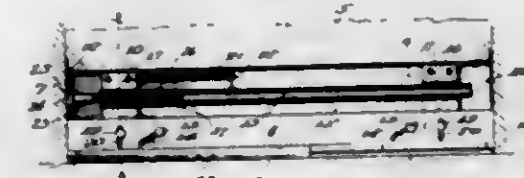


1. The combination with a transversely split rim and felly band, of plates secured to the rim on opposite sides of the split therein having beveled or dove-tailed edges parallel transversely of the rim and contacting beveled or dove-tailed lugs upon the felly band for engaging said plates.

- 1,311,127. WEATHER-STRIP. WILLIAM D. KENDRICK, Miami, Ariz., assignor of one-half to Robert S. Knowles, Geronimo, Ariz., and one-eighth to John S. Van Rusk, Miami, Ariz. Filed Apr. 16, 1917. Serial No. 162,448. Renewed Oct. 24, 1918. Serial No. 259,594. 1 Claim. (Cl. 20-65.)

The combination with a swinging door and the jamb of the door frame against which the door closes, the door having a bottom recess on one side, and vertically slotted

plates closing the ends of the recess; of a longitudinally slidable member in the door recess and having projecting studs, a vertically slidable weather-strip in the recess and seating at its ends in the slots of the end plates aforesaid, said weather-strip having oblique slots in to which the aforesaid studs extend, a plunger carried by the longitudinally slidable member and projecting from one end thereof, said plunger having a threaded stem, and the longitudinally slidable member having a tubular portion



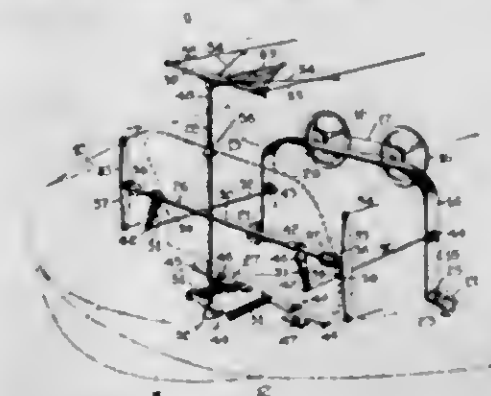
into which the stem extends, said tubular portion having a recess, a nut seating in the recess, through which nut the stem is threaded, a spring connected to the longitudinally slidable member and moving the same in a direction to project the plunger from the door to engage the aforesaid jamb when the door is closed, and a bearing in the door recess in which the tubular portion of the longitudinally slidable member works, said bearing intercepting the aforesaid nut to limit the last-mentioned movement of said member.

- 1,311,128. DRIFT-PIN. DAVID KILGOUR, Vancouver, British Columbia, Canada. Filed Aug. 29, 1918. Serial No. 231,977. 2 Claims. (Cl. 29-84.)



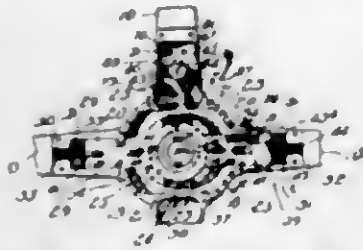
1. In a tapered drift pin, a tapered body part, a cylindrical part projecting from each end of the body part in axial alignment with the same, the larger cylindrical projection having its surface smooth and the smaller cylindrical projection being threaded to receive a nut element which, in coöperation with the threaded part, enables the pin to be drawn into the bolt holes or plates to bring the same into alignment.

- 1,311,129. CONTROL SYSTEM. HENRY KLECKLER, Buffalo, N. Y., assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y., a Corporation of New York. Filed Feb. 29, 1910. Serial No. 81,129. 16 Claims. (Cl. 244-29.)



10. A control system for the control surfaces of an aircraft, including a shaft mounted to extend transversely through and beyond a wall of the body of the craft, a connection between the extended terminal of said shaft and the control surfaces, and a bearing for said extended terminal spaced beyond the wall of said body.

1,311,130. STEERING-WHEEL. LEROY C. LAKKAR, Chicago, Ill. Filed Aug. 28, 1916, Serial No. 117,167. Renewed Feb. 21, 1919, Serial No. 278,515. 18 Claims. (Cl. 74—33.)



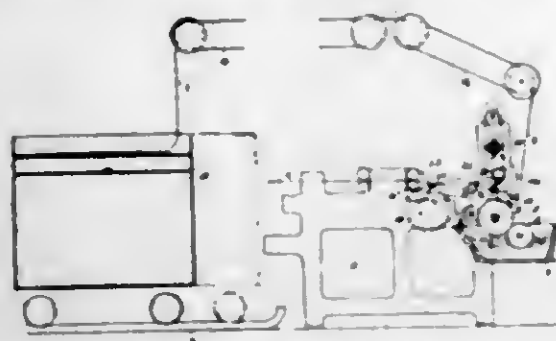
1. Steering apparatus embodying, in combination, a shaft, a sleeve upon the shaft, there being slots formed in the sleeve and shaft, a connecting plate between the sleeve and shaft having projections arranged to lie within the said slots, whereby the sleeve and shaft are interlocked against relative rotation, a chambered wheel freely mounted upon the sleeve, and means located within the chambered portion of the wheel for interlocking the wheel and sleeve against relative rotative movement, substantially as described.

10. Steering apparatus embodying, in combination, a shaft, a chambered wheel operatively mounted upon the shaft, means within the chambered portion of the wheel for establishing and disestablishing an interlocking connection between the wheel and shaft, including movable clutch members, tension means for normally causing the members to move toward the shaft, projecting elements secured to the shaft with which the clutch members may engage when moved into locking position, means for causing the clutch members to be retracted into unlocking position, and means for holding the clutch members in retracted unlocking position comprising a lug on one clutch member, and a tension actuated latch arranged to engage with the lug when the clutch member is retracted, and means for releasing the latch from engaging position comprising a rack sector, and a key controlled platen meshing with the rack sector, substantially as described.

11. Steering apparatus embodying in combination, a shaft, a wheel operatively mounted upon the shaft, means for interlocking the wheel and shaft, means for disestablishing the interlocking connection between the wheel and shaft, and other means for normally preventing reestablishment of the interlocking connection between the wheel and shaft, substantially as described.

18. Steering apparatus embodying, in combination, a tube, a shaft within the tube, there being a space between the shaft and tube, a sleeve having an internal flange at one end thereof arranged to fit over the end of the tube with its flanged portion upon the tube end, a ring-shaped plate member having inwardly and outwardly extending lugs interposed between the shaft and sleeve, there being slots within the shaft and sleeve ends within which the said lugs may lie to lock the sleeve shaft against relative rotative movement, and a wheel having means for connection with the sleeve, substantially as described.

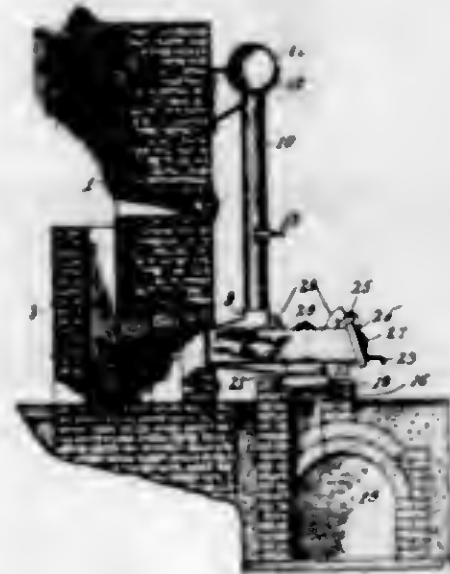
1,311,131. PROCESS OF PRODUCING INTERMITTENTLY KAYED YARN. FRED LONGTHORNE, Undercliffe, near Bradford, England, assignor of one-half to G. H. Leather Limited, Bradford, England. Filed Apr. 15, 1919. Serial No. 290,340. 4 Claims. (Cl. 8—5.)



4. A process of forming mélange yarn comprising forming a combed sliver of the fiber, moving the same con-

tinuously, applying spots of color thereto intermittently by a reciprocating action, and subsequently forming said sliver into a yarn.

1,311,132. GAS-BURNER. ROY H. McELROY, Dayton, Ohio, assignor to International Clay Machinery Company, Dayton, Ohio. Filed Apr. 21, 1919. Serial No. 291,720. 3 Claims. (Cl. 158—7.)



1. A removable burner for kilns, comprising an elongated rectangular shell the inner end of which has a downwardly and forwardly slanting air passage within the space of the burner adapted to receive air through the top of the burner, and a gas passage in said burner below the air passage, the said air and gas passages discharging into the burner opening in the wall of the kiln, said burner having a gas inlet in the bottom thereof communicating with the gas passage of the burner, said inlet being in communication with the source of gas supply, substantially as described.

1,311,133. ARC-LAMP ELECTRODE. WILLIAM HAY MOTT, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Oct. 2, 1918. Serial No. 256,000. 8 Claims. (Cl. 176—135.)

1. An electrode containing carbon and tantalum.

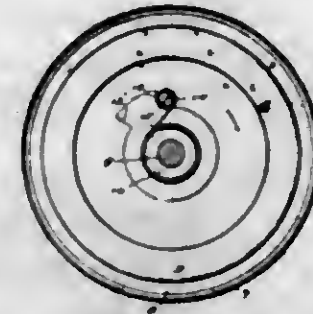
1,311,134. PROCESS OF MANUFACTURING AUTOMOBILE-TIRE PATCHES. ALBERT L. MURRAY, Auburn, Ind. Filed Mar. 15, 1918. Serial No. 222,016. 2 Claims. (Cl. 18—56.)

1. The method of shaping and vulcanizing tire patches which consists first in laying a raw patch into a hot mold having the desired shape of concavity, then applying a tightly packed sand bag to the patch and compressing it to cause the ends of the patch to adhere to the wall of the concavity, then removing the sand bag, then securing the side edges of the patch to the mold and then applying a loosely packed sand bag to the patch and compressing it to cause the remainder of the patch to stretch into contact with the wall of the mold.

1,311,135. APPARATUS FOR OPERATING AUTOMOBILE-SIGNALS. ALFRED W. OLDS, Windsor, Conn. Filed Jan. 23, 1917. Serial No. 143,994. 3 Claims. (Cl. 175—355.)

1. An apparatus for causing the operation of a vehicle speed signal having a casing designed to be fixed on the vehicle, a shaft supported by the casing and adapted to be rotated from a moving part of the vehicle, a rotatable

weighted member loosely mounted on the shaft and adapted to be rotated thereby, a conducting brush carried by



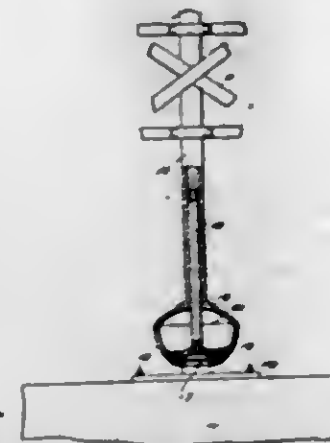
the weighted member, a conducting brush fixed to the casing, and a commutator rotatable with the shaft and engaged by said brushes.

1,311,136. COLLAPSIBLE FAN-TRELLIS. GEORGE T. PARR, St. Paul, Minn. Filed May 27, 1918. Serial No. 236,947. 6 Claims. (Cl. 47—12.)



1. In a collapsible trellis having a detachable stake, a series of thin flexible members hinged together on their lower extremity, recesses formed on one side near the upper free end of said members, a spacing bar having recesses formed therein for engaging in the recesses formed in said flexible members to space the free ends of said flexible members apart when in a spread out position and holding means on said stake for engaging the lower ends of said flexible members to draw said lower ends together parallel to and adjacent each other when said ends are slid into said holding means to rigidly hold said lower end of said trellis by their spring tension to said stake.

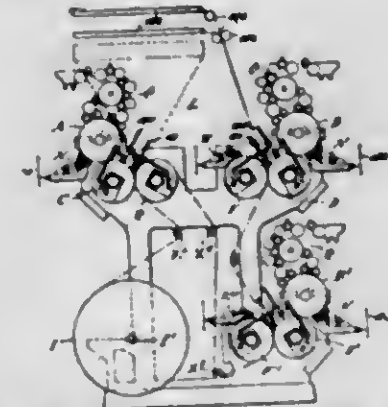
1,311,137. INTERNAL-LOCK BAIT FOR DRAWING GLASS. JOHN R. SCOTT, Okmulgee, Okla. Filed Oct. 30, 1918. Serial No. 260,319. 1 Claim. (Cl. 49—17.)



In a glass drawing apparatus, the combination with a furnace having a dog house with an opening and shield therein or the like, a bait raising and lowering apparatus, and a bait held therein, said bait comprising a tube adapted to receive a supply of compressed air or the like, said tube having a transverse portion at the lower end thereof

and a bowl portion depending from said transverse portion and provided with an opening in the bottom portion thereof restricted as respects to the opening in the top portion thereof, and a plunger operable in said tube and adapted to move downwardly by gravity while the tube and bowl are forced downwardly, said plunger having a concavo-convex flange at the lower portion thereof forming an interlock adapted to clamp the glass between the same and the bowl portion when the latter is inserted in the molten glass, for drawing the latter as and for the purposes specified.

1,311,138. OFFSET WEB-PERFECTING MACHINE. DAVID JOHN SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed Sept. 20, 1916. Serial No. 122,830. 5 Claims. (Cl. 270—5.)



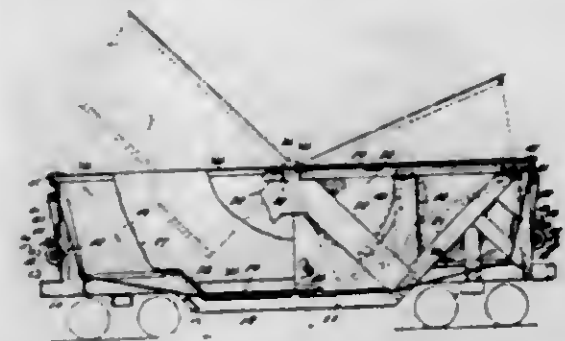
1. A rotary offset web perfecting machine comprising a plurality of units printing from positive forms on opposite sides of impression receiving material, each unit including a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders arranged one above the other and the impression cylinder out of line with the other cylinders to form an exposed operating side, said units grouped with their operating sides outermost, and delivery means located at the end of the units and spaced therefrom to afford unobstructed access to said units, said means including a folder, a slitter and angle bars for giving both sections a single quarter turn to bring them in superposed relation to the folder.

1,311,139. LOCK-NUT. SEYMOUR D. SCHROEDER, Brooklyn, N. Y. Filed Apr. 12, 1918. Serial No. 228,079. 1 Claim. (Cl. 151—21.)



A nut having on one face an outer concentric circular rib and intersecting channels in its opposite face.

1,311,140. DUMP-CAR. ALFRED D. TAIT, Evanston, Ill. Filed June 27, 1918. Serial No. 242,147. 10 Claims. (Cl. 105—202.)



1. In a dump car, in combination, a suitable frame, a body loosely supported in the frame and divided on a ver-

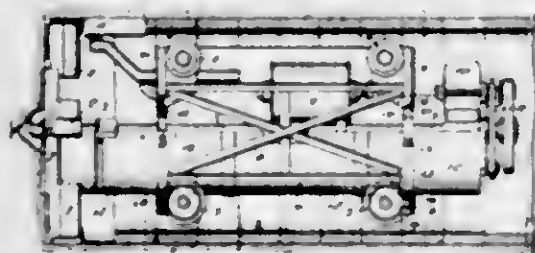
tical plane into two sections, the two sections being pivoted to the frame on a common center adjacent the upper portion of their meeting edges.

1,311,141. SADDLE FOR ANCHORING CABLES FOR SILOS AND THE LIKE. FRANK J. VAN COTT, Unadilla, N. Y. Original application filed July 31, 1916, Serial No. 112,431. Divided and this application filed Oct. 3, 1917. Serial No. 194,631. 3 Claims. (Cl. 24-123.)



3. In a device of the class described, the combination of a fixed rod, with a saddle, comprising a central body portion having an opening extending through it for receiving said rod, means for limiting the movement of said saddle on said rod in one direction, said saddle having a laterally extended portion provided with substantially opposite guide means adapted to receive anchoring members, said saddle having means capable of engaging such anchoring means, and preventing the anchoring means from dropping off the saddle.

1,311,142. SHIELD TUNNELING-MACHINE. DOUGLAS WHITAKER, Leicester, England. Filed May 13, 1919. Serial No. 296,950. 1 Claim. (Cl. 202-7.)



A tunneling machine comprising a main frame adapted to move lengthwise of a tunnel, a cutting head, a shaft upon which said head is mounted, a structure carried by the main frame for the support of said shaft, gimbal joint connections between the rear end of the said structure and the main frame, adapted to allow the shaft to be diverted from axial alignment with the tunnel and laterally and vertically adjustable means for supporting said shaft near its forward end.

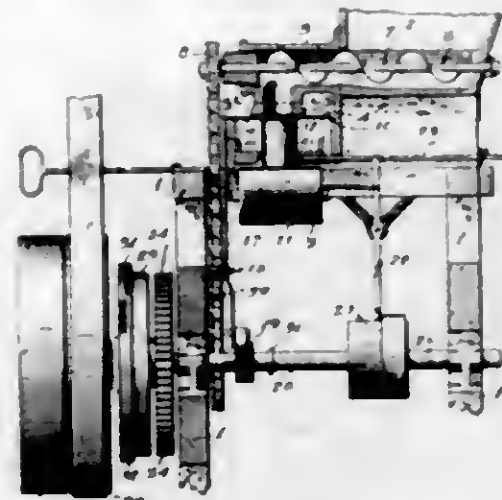
1,311,143. SHIELD TUNNELING-MACHINE. DOUGLAS WHITAKER, Leicester, England. Filed May 13, 1919. Serial No. 296,951. 3 Claims. (Cl. 202-7.)



1. A shield tunneling machine of the self-contained type, comprising an outer casing, internal tunneling mechanism, capable of rotation relatively to the outer

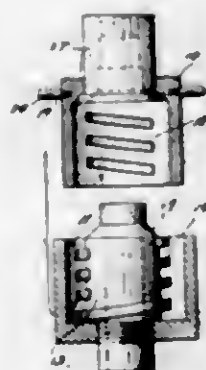
casing and means for effecting such rotation and for securing the casing and internal mechanism in their relatively adjusted positions.

1,311,144. CAN-STUFFING MACHINE. ROBERT J. WORKMAN, San Francisco, Calif. Filed Sept. 3, 1917. Serial No. 189,889. 7 Claims. (Cl. 228-9.)



1. A can stuffing machine comprising a hopper; a filling spout connected to the hopper; a draper to carry cans under and past the spout; a shutter secured to the spout to normally prevent the passage of contents from the hopper; a conveyor to convey the contents from the hopper to a can under the spout; means for arresting cans under the spout; and means for operating the shutter, conveyor and can arresting means whereby a portion of the contents from the hopper may be deposited through the spout into successive cans.

1,311,145. COUPLING TO BE USED FOR PIPE, HOSE, FOLDING CRUTCHES, AND THE LIKE. WEINER ZEINDLER and JOHN E. MARTIN, Philadelphia, Pa. Filed Jan. 11, 1919. Serial No. 270,702. 2 Claims. (Cl. 285-177.)

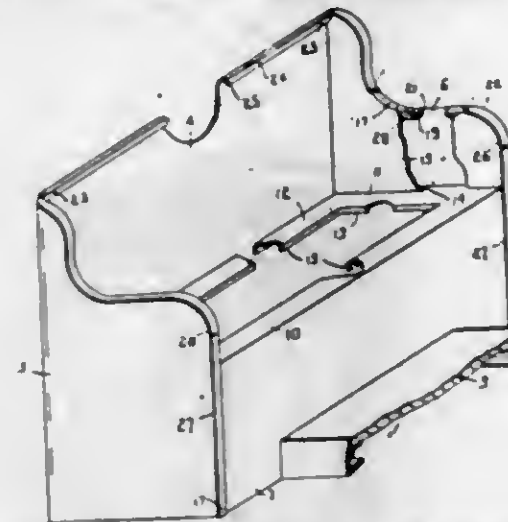


1. A device of the character stated comprising coupling parts adapted for interlocking, telescopic engagement of which one part is provided with a mutilated female screw-thread and the other part is provided with a mutilated male screw-thread, and a bayonet joint connection forming a guide to properly align said mutilated threads and to assist in said interlocking of parts.

1,311,146. MOTOR-TRUCK SEAT. KENNETH S. BAXTER, Bryan, Ohio, assignor to The Sheet Steel Products Company, Bryan, Ohio, a Corporation of Ohio. Filed July 2, 1918. Serial No. 243,057. Renewed June 16, 1919. Serial No. 304,727. 5 Claims. (Cl. 155-3.)

1. A structure for mounting on a vehicle frame to provide a driver's station, embodying a continuous U-shaped vertical wall, means providing a ledge mounted upon and

disposed within the parallel legs of the U-wall for a seat, and means providing an inner wall mounted on the ledge



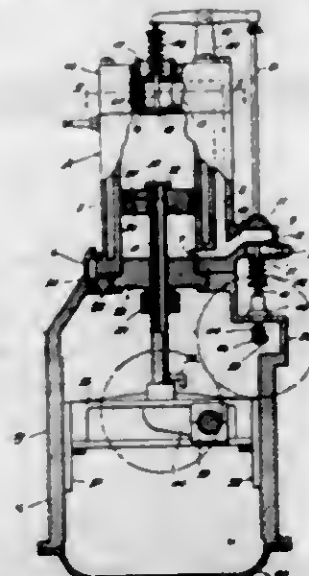
and upwardly extending adjacent the leg portions of the U-wall to form therewith seat arms.

1,311,147. SCREW-DRIVER. REERT M. BERNTSEN, Brooklyn, N. Y. Filed Oct. 15, 1918. Serial No. 258,154. 1 Claim. (Cl. 145-52.)



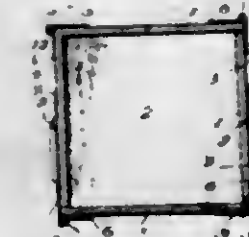
A screw driver having a pair of longitudinally-extending slots in its shank and a pair of oppositely arranged holes in said shank, a pair of spring strips in said slots, jaws on the ends of said strips and screw-threaded portions on the other ends of the strips, a nut engaging said portions for moving the jaws longitudinally, and a second nut engaging the said portions for closing the jaws on the screw when the jaws are in operative position and for forcing the jaws into the holes when the jaws are in inoperative position.

1,311,148. TWO-CYCLE RECIPROCATING ENGINE. JOHN W. BRANA, Los Angeles, Calif., assignor of one-third to Rufus A. Holt and one-third to Joseph W. Harasta, Los Angeles, Calif. Filed Sept. 5, 1918. Serial No. 252,713. 2 Claims. (Cl. 123-74.)



1. A two cycle internal combustion engine comprising a cylinder, a piston therein, said cylinder having both ends closed and being provided with an inlet communicating with one end thereof and a bypass communicating with both ends, a valve controlling the flow of gas to said inlet, a valve controlling the flow of gas through said bypass, a valve controlling the exhaust, and means to positively actuate all of said valves and capable of varying the valves.

1,311,149. BOX. JOSEPH W. WINTERMAN, Gallon, Ohio. Filed Oct. 10, 1918. Serial No. 257,598. 2 Claims. (Cl. 217-12.)



2. A knock-down box comprising side panels, a bracing strip secured to a side panel at an end thereof and having an out-turned lip at its free edge, a bracing strip secured to the parallel side panel at the corresponding end thereof and having its free edge turned outwardly and then doubled on itself to form a groove, an end panel abutting the ends of the side panels, a flat bracing strip secured to said end panel and having its free end seating in said groove, and a latch at the opposite edge of said end panel engaging over the lip at the end of the abutting side panel.

1,311,150. DEVELOPER FOR DYED FABRICS. WILLY WOLFF, Milwaukee, Wis., assignor to Radium Chemical Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1917. Serial No. 145,830. 3 Claims. (Cl. 8-5.)

3. A developer for dyed fabrics comprising the reaction products of the mixture of the following:

- 80 gr. acetic acid 30%.
- 80 gr. chloroform.
- 80 gr. zinc acetate.
- 10 gr. aqua ammonia 26%.
- 880 gr. cold water.
- 5 lb. beta naphthol.
- 1 lb. alpha naphthylamin.
- 3 lb. phenol (crystallized).
- 8 lb. caustic soda.
- 75 lb. sodium chloride.
- 5 lb. a mineral acid.

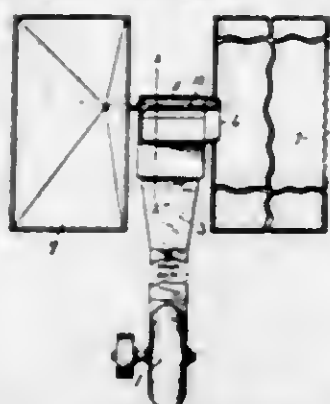
REISSUES.

14,982. PLANTER. EUGENE MACON COLE, Charlotte, N. C. Filed May 6, 1919. Serial No. 295,206. Original No. 908,549, dated Jan. 5, 1909. Serial No. 413,224, filed Jan. 29, 1908. 12 Claims. (Cl. 221-135.)



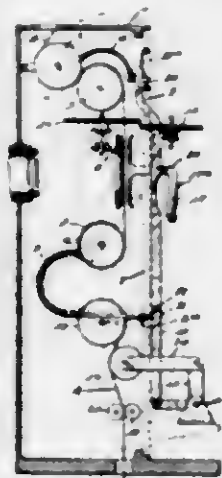
1. In a planter, a seed box having an inclined bottom provided near its upper portion with an outlet, an inclined separating device revoluble in the box for selecting seeds and elevating them to the outlet, said device having one face fully exposed, and having a series of seed cells associated with discarding passages disposed between the seed cells to discharge the surplus seeds from the selected seeds by gravity over any portion of the exposed face of the separating device above the axis thereof prior to the discharge of said selected seeds into the outlet.

14,693. PROCESS FOR OBTAINING THE SOLIDS FROM LIQUIDS. OLIVER E. MERRELL, Syracuse, N. Y., assignor to Merrell-Soule Company, Syracuse, N. Y., a Corporation of New York. Filed Feb. 16, 1916. Serial No. 78,736. Original application filed Mar. 29, 1910, Serial No. 522,223. Divided and application filed Feb. 16, 1912, Serial No. 678,142. Original No. 1,136,356, dated Apr. 20, 1915. 10 Claims. (Cl. 127-9.)



10. The process of producing desiccated milk powder which comprises concentrating milk, simultaneously atomizing and desiccating the concentrated milk by an excess of heated air introduced through the atomizer with a spirally forward movement and separating the powder from the air and vapor.

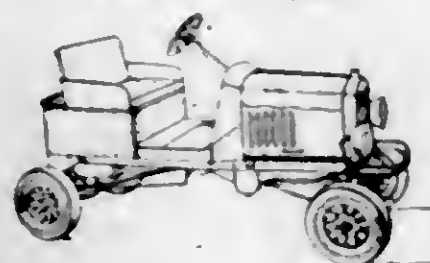
14,694. FILM-GUIDE CONTROL. CHARLES URSALMERSEN, New York, N. Y., assignor to Cru Patents Corporation, a Corporation of New York. Filed June 11, 1919. Serial No. 303,529. Original No. 1,300,057, dated Apr. 8, 1919. Serial No. 15,070, filed Mar. 17, 1915. 5 Claims. (Cl. 88-18.)



4. In a motion picture machine, a movably mounted aperture guide for the film, means for normally holding said guide in an inoperative position and means controlled by the tension of the film for releasing said guide.

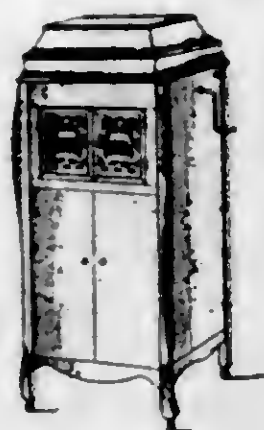
DESIGNS.

53,627. INDUSTRIAL TRACTOR. HORACE M. CAPRON, Chicago, Ill., assignor, by mesne assignments, to Equipment Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Mar. 6, 1918. Serial No. 220,874. Term of patent 14 years.



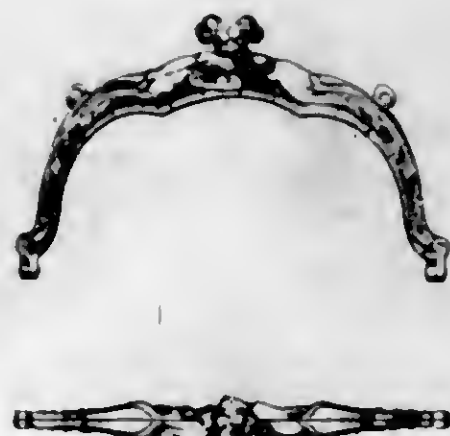
The ornamental design for an industrial tractor, as shown.

53,628. PHONOGRAPH-CABINET. ERNEST C. COOK, Chicago, Ill. Filed Feb. 20, 1919. Serial No. 279,455. Term of patent 14 years.



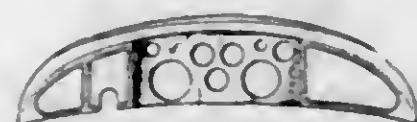
The ornamental design for a phonograph cabinet as shown.

53,629. BAG-FRAME. WOLF T. GOLDSMITH, Newark, N. J. Filed Apr. 18, 1919. Serial No. 291,137. Term of patent 3½ years.



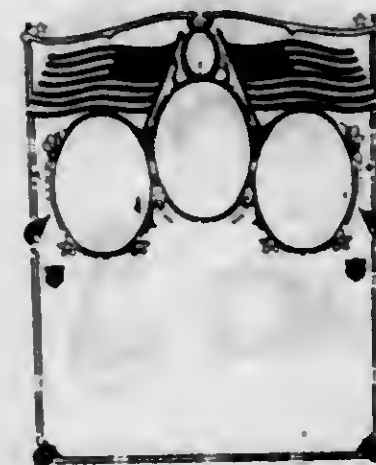
The ornamental design for a bag frame as shown.

53,630. INSTRUMENT-BOARD FOR MOTOR-VEHICLES. EDWARD W. GOODWIN, Detroit, Mich. Filed Apr. 5, 1919. Serial No. 287,831. Term of patent 14 years.



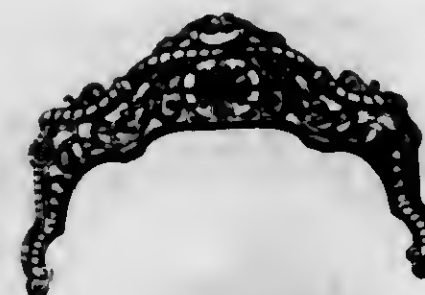
The ornamental design for an instrument board for motor vehicles, as shown.

53,631. CHART. JOHN E. HUNSAKER, Vienna, Ill., assignor of one-third to Lucas Parker and one-third to Ralph Morray, Vienna, Ill. Filed Mar. 5, 1919. Serial No. 289,568. Term of patent 7 years.



The ornamental design for a chart, as shown in the accompanying drawing.

53,632. HAND-BAG FRAME. LEO JACOBS, New York, N. Y., assignor to Wolf T. Goldsmith, Newark, N. J. Filed May 17, 1919. Serial No. 297,961. Term of patent 3½ years.



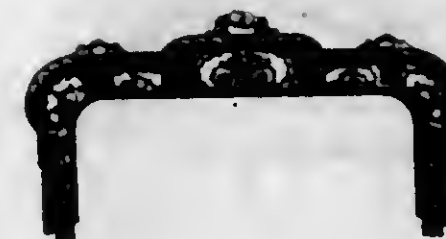
The ornamental design for a hand bag frame, as shown.

53,633. HAND-BAG FRAME. LEO JACOBS, New York, N. Y., assignor to Wolf T. Goldsmith, Newark, N. J. Filed May 17, 1919. Serial No. 297,962. Term of patent 3½ years.



The ornamental design for a hand bag frame as shown.

53,634. HAND-BAG FRAME. LEO JACOBS, New York, N. Y., assignor to Wolf T. Goldsmith, Newark, N. J. Filed May 17, 1919. Serial No. 297,963. Term of patent 3½ years.



The ornamental design for a hand bag frame, as shown.

53,635. HORSESHOE-PAD. WILLIAM J. KENT, Brooklyn, N. Y., assignor to Revere Rubber Company, a Corporation of Rhode Island. Filed Sept. 1, 1915. Serial No. 48,557. Term of patent 14 years.



The ornamental design for a horseshoe pad as shown.

53,636. LACE. FELIX MEYER, New York, N. Y., assignor to Blanck & Company, Inc., New York, N. Y., a Corporation of New York. Filed May 5, 1919. Serial No. 294,995. Term of patent 3½ years.



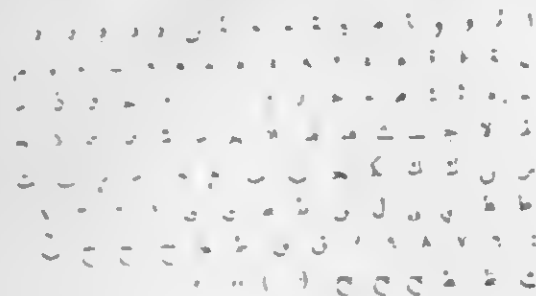
The ornamental design for lace as herein shown and described.

53,637. HOE. JOSEPH O. MCGEE, Westpoint, Tenn. Filed Dec. 6, 1917. Serial No. 205,901. Term of patent 14 years.



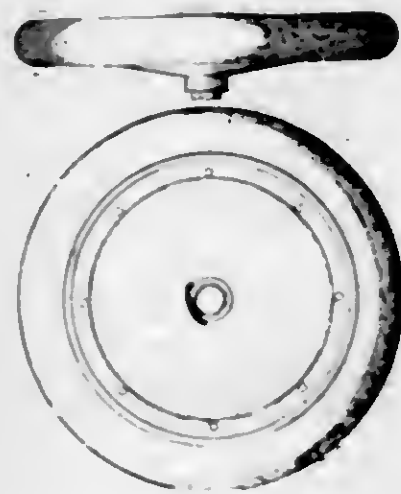
The ornamental design for a hoe is shown.

53,638. FONT OF ARABIC TYPE. SALLOUM A. MORAZZEL, New York, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Apr. 26, 1919. Serial No. 293,025. Term of patent 14 years.



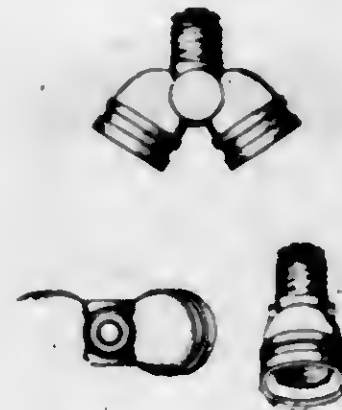
The ornamental design for a font of Arabic type as shown.

53,639. WHEEL. WILLIAM J. P. MOORE, New York, N. Y. Filed Jan. 6, 1917. Serial No. 141,044. Term of patent 7 years.



The ornamental design for a wheel, as shown.

53,640. PLURAL SOCKET. WILLIAM M. PARKER, Parkersburg, W. Va., assignor to J. H. Parker & Son, Incorporated, Parkersburg, W. Va., a Corporation of West Virginia. Filed Mar. 22, 1919. Serial No. 284,507. Term of patent 14 years.



The ornamental design for a plural socket as shown.

53,641. SPARK-PLUG TOOL. WILLIAM E. ROSEL, Columbus, Ohio. Filed Apr. 10, 1919. Serial No. 289,141. Term of patent 14 years.



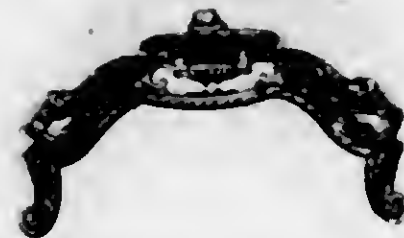
The ornamental design for a spark plug tool, as shown.

53,642. HAND-BAG FRAME. JOHN SCALABRINO, New York, N. Y., assignor to Wolf T. Goldsmith, Newark, N. J. Filed May 17, 1919. Serial No. 297,972. Term of patent 3 1/2 years.



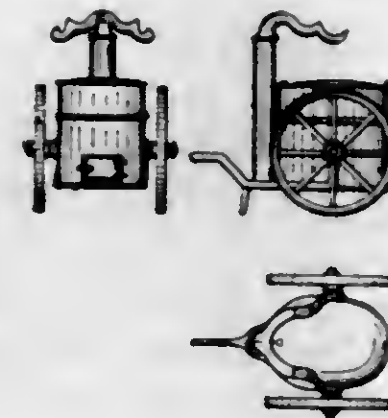
The ornamental design for a hand bag frame, as shown.

53,643. HAND-BAG FRAME. JOHN SCALABRINO, New York, N. Y., assignor to Wolf T. Goldsmith, Newark, N. J. Filed May 17, 1919. Serial No. 297,973. Term of patent 3 1/2 years.



The ornamental design for a hand bag frame, as shown.

53,644. INK-WELL. EDWIN FORREST SHAFER, Columbus, Ohio. Filed May 12, 1919. Serial No. 296,703. Term of patent 14 years.



The ornamental design for an ink well as shown.

53,645. DEVICE FOR SHARPENING FISH-HOOKS. WILLIAM W. TAYLOR, Columbus, Ohio. Filed Mar. 26, 1919. Serial No. 285,390. Term of patent 14 years.



The ornamental design for a device for sharpening fish hooks, as shown.

53,646. SWEATER. IDA E. TERO, Brooklyn, N. Y. Filed Feb. 4, 1919. Serial No. 275,031. Term of patent 3 1/2 years.



The ornamental design for a sweater, as shown.

53,647. MEMBER FOR BAG-FRAMES, PURSE-FRAMES, AND SIMILAR ARTICLES. WILLIAM TUNTON, East Orange, N. J. Filed May 16, 1919. Serial No. 297,708. Term of patent 3 1/2 years.



The ornamental design for a member for bag frames, purse frames, and similar articles, as shown.

53,648. BUTTON. BERTHOLD VEIT, Freeport, N. Y. Filed Aug. 8, 1918. Serial No. 249,018. Term of patent 3 1/2 years.



The ornamental design for a button as shown.

53,649. TONGUE-DEPRESSOR. HERMANN WEDER, Sr., and CHARLES H. WOLFF, Philadelphia, Pa. Filed Mar. 20, 1919. Serial No. 283,938. Term of patent 14 years.



The ornamental design for a tongue depressor, as shown and described.

53,650. BUTTON OR BADGE. ROBERT H. WEIMAN, Denver, Colo. Filed Dec. 28, 1918. Serial No. 268,771. Term of patent 3 1/2 years.



The ornamental design for a button or badge, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 22, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 70,824. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) JOHN F. CHAMBER, Freeport, Ill. Filed June 2, 1913.

Over-All

Particular description of goods.—Canned Fruits, Canned Vegetables, Teas, Coffee, Spices, Flavoring Extracts for Food, Jellies, Fruit Preserves, Tapioca, Catsup, Mince Meat, Olives, Pickles, Cotton Seed Salad Oils, Cocoa, Cooking and Eating Chocolate, Cider Vinegar, Rice, Raisins, Dried Currants, Canned Salmon, Evaporated Milk, Corn Starch, Shredded Coconut, Wheat Flour, Prepared Mustard and Jams.
Claims use since July 3, 1910.

Ser. No. 101,250. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) RIMAL ZIEVE, Minneapolis, Minn. Filed Feb. 8, 1917.



The first letter of the word having its lower prong extended and united with the extended lower prong of the last letter of the word to form a continuous loop under the whole word.

Particular description of goods.—A Fruit and Vegetable Compound for Flavoring Soft Drinks, Containing Approximately Five Per Cent. in Volume of Grain Alcohol for Preservative Purposes.
Claims use since about July 1, 1915.

Ser. No. 101,992. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) New York Mills Corporation, New York Mills, N. Y. Filed Mar. 8, 1917.



No claim is made to the words "Tub Corduroy" apart from the mark shown in the drawing.

Particular description of goods.—Corduroy.
Claims use since Nov. 2, 1915.

264 O. G.—40

Ser. No. 102,893. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) REGINA SWIMMING DEVICES CO., New York, N. Y. Filed Apr. 11, 1917.



The trade-mark consists of the word "Regina."
Particular description of goods.—Swimming or Bathing Devices Comprising Body-Supporting Floats.
Claims use since about June 1, 1912.

Ser. No. 103,144. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GRIGGS, COOPER & COMPANY, St. Paul, Minn. Filed Apr. 20, 1917.



Particular description of goods.—Creamed and Preserved Fruits, Canned Vegetables, Canned Fish and Oysters.
Claims use since April, 1900.

Ser. No. 108,392. (CLASS 43. THREAD AND YARN.) NONOTUCK SILK COMPANY, Florence, Mass. Filed Jan. 9, 1918.

ARMY-NAVY

Particular description of goods.—Thread and Yarn.
Claims use since about Sept. 12, 1917.

Ser. No. 109,159. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WILLIAM FRANKLIN PENROD, Blanchester, Ohio, assignor to Anthony J. Wisel and Max S. Wise, Cincinnati, Ohio, partners doing business as Auto Sales and Service Company. Filed Feb. 21, 1918.



Particular description of goods.—Electric-Light Controlling Switches and Wiring Connections for Automobiles.
Claims use since Dec. 6, 1917.

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Ser. No. 109,251. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE TRUE ARTIFICIAL LIMB COMPANY, Niagara Falls, N. Y. Filed Feb. 27, 1918.



No claim being made to the representation of the artificial limb and the words "True Limb" except as associated with the mark shown.

Particular description of goods.—Artificial Limbs.
Claims use since Feb. 19, 1918.

Ser. No. 110,114. (CLASS 18. PAINTS AND PAINTERS' MATERIALS.) GOODLASS WALL & COMPANY LIMITED, Liverpool, England. Filed Apr. 11, 1918.



Particular description of goods.—Oils for Mixing With Dry Paint-Pigments, Oils for Mixing With Paint in Paste State, and Turpentine for Use in the Manufacture of Varnishes.

Claims use since the 14th day of June, 1876.

Ser. No. 110,165. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) EUREKA FIRE HOSE MANUFACTURING COMPANY, New York, N. Y. Filed Apr. 13, 1918.



No claim is made for the representation of a hose apart from the mark shown in the drawing.

Particular description of goods.—Hose Made of Rubber Fabric or Rubber and Fabric.

Claims use since Dec. 24, 1917.

Ser. No. 110,720. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE THORO CORPORATION, Chicago, Ill. Filed May 6, 1918.



Particular description of goods.—Powdered Skin-Cleanser Adapted to be Used as a Soap Substitute.
Claims use since on or about Apr. 25, 1917.

Ser. No. 110,880. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CURTIS PHARMACAL COMPANY, Denver, Colo. Filed May 14, 1918.



Particular description of goods.—A Preparation for Use in the Treatment of Venereal Diseases.
Claims use since Mar. 15, 1916.

Ser. No. 111,083. (CLASS 39. CLOTHING.) JAMES WANAMAKERS, New York, New York, N. Y. Filed May 21, 1918.



The trade-mark consists of the word "Silphix."
Particular description of goods.—Corsets, Brassières, and Bust-Supporters.
Claims use since about Sept. 1, 1909.

Ser. No. 111,093. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) THE CLEVELAND OSBORN MANUFACTURING COMPANY, Cleveland, Ohio. Filed May 22, 1918.



Particular description of goods.—Brushes—Namely, Paint, Varnish, and Paper-Hangers' Brushes.
Claims use since about Oct. 1, 1917.

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Ser. No. 111,228. (CLASS 39. CLOTHING.) E. E. TAYLOR COMPANY, Boston, Mass. Filed May 27, 1918.

EVER-RITE

The word "Ever-Rite."
Particular description of goods.—Men's and Women's Leather Boots and Shoes.
Claims use since Jan. 25, 1918.

Ser. No. 111,394. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS MOTTARD, London, England. Filed June 6, 1918.

RAPIDOL

Particular description of goods.—Dyes for the Hair.
Claims use since Dec. 15, 1917.

Ser. No. 111,467. (CLASS 37. PAPER AND STATIONERY.) CHARLES H. J. TRUMAN, San Francisco, Calif. Filed June 10, 1918.

IDEAL

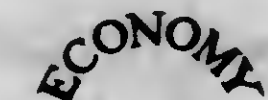
Particular description of goods.—Partially-Printed Sheets for Keeping Funeral-Records.
Claims use since April, 1914.

Ser. No. 112,619. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) UNION LUMBER COMPANY, San Francisco, Calif. Filed Aug. 7, 1918.



Particular description of goods.—Grape-Packing Made of Redwood Sawdust, Cut and Shredded Tanbark.
Claims use since June 24, 1918.

Ser. No. 112,724. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) AMERICAN MUTUAL SEED COMPANY, Chicago, Ill. Filed Aug. 15, 1918.



Particular description of goods.—Seeds.
Claims use since Dec. 15, 1915.

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Ser. No. 112,725. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) AMERICAN MUTUAL SEED COMPANY, Chicago, Ill. Filed Aug. 15, 1918.



Particular description of goods.—Seeds.
Claims use since Dec. 15, 1915.

Ser. No. 113,026. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) ARMSTRONG CORK COMPANY, Pittsburgh, Pa. Filed Sept. 5, 1918.



Particular description of goods.—Composition Material Containing Cork for Making Soles for Boots and Shoes.
Claims use since Aug. 27, 1918.

Ser. No. 113,212. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE INTRAVENOUS PRODUCTS COMPANY, Denver, Colo. Filed Sept. 17, 1918.

VENHORMONE

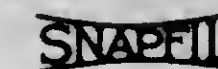
Particular description of goods.—Nerve-Tonic.
Claims use since July 1, 1916.

Ser. No. 113,215. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE INTRAVENOUS PRODUCTS COMPANY, Denver, Colo. Filed Sept. 17, 1918.

VENOUABAIN

Particular description of goods.—Heart-Stimulant.
Claims use since July 1, 1915.

Ser. No. 113,621. (CLASS 37. PAPER AND STATIONERY.) GENERAL MANUFACTURING CO., Sioux City, Iowa. Filed Oct. 8, 1918.



Particular description of goods.—Fountain-Pens.
Claims use since July 1, 1918.

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Ser. No. 113,846. (CLASS 37. PAPER AND STATIONERY.) FOX RIVER PAPER CO., Appleton, Wis. Filed Oct. 22, 1918.

ENVELOPES

Particular description of goods.—Writing-Paper. Claims use since Sept. 10, 1918.

Ser. No. 113,999. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ANTHONY S. KOHLER, Savannah, Ga. Filed Nov. 1, 1918.



The use of the word "Service" is disclaimed apart from the mark shown in the drawing.

Particular description of goods.—Enameled Steelware, Commonly Known as Enameled Ware, and Comprising Coffee-Pots, Saucepans, Frying-Pans, Tea-Kettles, Rice-Bollers, Milk-Pans, Dish-Pans, Soup-Palls, Bread-Raisers, Ladles, Bread-Pans, Water-Pitchers. Claims use since Aug. 16, 1918.

Ser. No. 114,117. (CLASS 37. PAPER AND STATIONERY.) THE MAJESTIC MILL PAPER COMPANY INC., New York, N. Y. Filed Nov. 9, 1918.

MAYFLOWER
BOND R

No claim is made to "Bond" apart from the mark shown in the drawing.

Particular description of goods.—Writing-Paper, Printing-Paper, Note-Paper, and Envelopes for Holding Correspondence.

Claims use since June 25, 1918.

Ser. No. 114,315. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CARLING TURBINE BLOWER CO., Worcester, Mass. Filed Nov. 23, 1918.



The trade-mark consists of the representation of a pair of conventionalized outspread wings disposed across a circular ring or turbine form and having the word "Carling" displayed upon the central portion of the wing device.

Particular description of goods.—Turbine-Actuated Blowers; Power-Turbines Operated by Steam or Elastic Fluid; Turbine Centrifugal Blowers and Exhausters; Rotary Fan-Blowers, and Parts of Said Machines.

Claims use since Sept. 5, 1918.

Ser. No. 114,460. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Dec. 3, 1918.

Unipack

Particular description of goods.—Paper for Writing, Envelopes for Correspondence, and Writing-Tablets. Claims use since Sept. 4, 1918.

Ser. No. 114,558. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE O. E. CONKEY CO., Cleveland, Ohio. Filed Dec. 9, 1918. Under ten-year proviso.

Conkey's

Particular description of goods.—Poultry Remedies: Roup Remedy, Cold Remedy, Canker Remedy, Catarrh Remedy, Cholera Remedy, Gape Remedy, Remedy for Sore Head, Remedy for Chicken-Pox, Remedy for Scaly Legs, Remedy for Limber Neck, Remedy for Black Head, Laxative, Tonic, Worm Remedy, Remedy for White Diarrhea, and Remedy for Bronchitis; Also for the Following Stock Remedies—Namely, Tonic for Stock, Regulator for Stock, and Worm Remedy for Stock; Also for Disinfectants, Insecticides, Germicides, Ointments, Salves and Insect Repellants to be Applied to Poultry.

Claims use since July 1, 1893.

Ser. No. 114,559. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE O. E. CONKEY CO., Cleveland, Ohio. Filed Dec. 9, 1918.



Particular description of goods.—Poultry Remedies: Canker Remedy, Gape Remedy, Remedy for Sore Head, Remedy for Chicken-Pox, Remedy for Scaly Legs, Remedy for Limber Neck, Tonic, Worm Remedy, and Remedy for White Diarrhea; Also, for Disinfectants, Insecticides, and Germicides to be Applied to Poultry.

Claims use since July 1, 1900.

Ser. No. 114,705. (CLASS 37. PAPER AND STATIONERY.) ALICE SMITH, New York, N. Y. Filed Dec. 18, 1918.

THE JEWEL BOOKMARKER

No claim is made to the exclusive use of the word "Bookmarker" apart from the mark as shown in the drawing.

Particular description of goods.—Book-Markers. Claims use since May 18, 1917.

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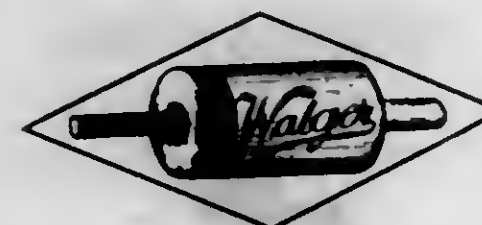
Ser. No. 114,724. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AUTORALES CORPORATION OF DETROIT, Detroit, Mich. Filed Dec. 20, 1918.

DUST-ETER

Particular description of goods.—Air-Purifiers Particularly Adapted for Use in Connection with Internal-Combustion Engines.

Claims use since Dec. 3, 1918.

Ser. No. 114,794. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) EDWIN A. WALSHAW, Bolton, Ontario, Canada. Filed Dec. 23, 1918.



Applicant disclaims the depiction of the electrical insulator and connector from the drawings as part of the trade-mark and specifically claims the word "Walger" surrounded by a diamond-shaped figure as my trade-mark.

Particular description of goods.—Electrical-Insulator Connectors.

Claims use since Nov. 1, 1918.

Ser. No. 114,975. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE W. LORT, New York, N. Y. Filed Jan. 3, 1919.

BRIARCLIFF

Particular description of goods.—Candy. Claims use since Dec. 15, 1918.

Ser. No. 114,994. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) JOHN STODDARD STOKES, Philadelphia, Pa. Filed Jan. 4, 1919.



Particular description of goods.—Printing Plates and Matrices and Mats or Blanks for Making Said Plates and Matrices, Said Printing Plates, Matrices, and Mats or Blanks Including a Plastic or Cement-Like Substance as an Essential Ingredient.

Claims use since Dec. 17, 1917.

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Ser. No. 115,007. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELIZABETH DAVIS, McAdoo, Pa. Filed Jan. 6, 1919.

DAVIS
BULL DOG



No claim belog made to the word "Davis" apart from the mark shown in the drawing.

Particular description of goods.—Healing-Salve for Use in the Treatment of Burns, Cuts, Wounds, and Bruises. Claims use since Oct. 1, 1918.

Ser. No. 115,011. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) PITTSBURGH BREWING COMPANY, Pittsburgh, Pa. Filed Jan. 6, 1919.

E.&O. BEVERAGE

No claim is made to the word "Beverage." Particular description of goods.—A Malt Beverage Commonly Known as Near Beer. Claims use since Dec. 27, 1918.

Ser. No. 115,012. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) PITTSBURGH BREWING COMPANY, Pittsburgh, Pa. Filed Jan. 6, 1919.

WINTER BEVERAGE

No claim is made to the word "Beverage." Particular description of goods.—A Malt Beverage Commonly Known as Near Beer. Claims use since Dec. 27, 1918.

Ser. No. 115,013. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) PITTSBURGH BREWING COMPANY, Pittsburgh, Pa. Filed Jan. 6, 1919.



Particular description of goods.—A Malt Beverage Commonly Known as Near Beer. Claims use since Dec. 27, 1918.

Ser. No. 115,014. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) PITTSBURGH BREWING COMPANY, Pittsburgh, Pa. Filed Jan. 6, 1919.

Tack Beverage

No claim is made to the word "Beverage." Particular description of goods.—A Malt Beverage Commonly Known as Near Beer. Claims use since Dec. 27, 1918.

Ser. No. 115,024. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) HENRY B. CARTER, Pittsburgh, Pa. Filed Jan. 7, 1919.

NEW  HOME

Particular description of goods.—Electric Vacuum-Cleaners.
Claims use since Jan. 1, 1916.

Ser. No. 115,086. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed Jan. 10, 1919.

AURICBLU

No claim is made to the word "Blu" apart from the mark as shown.
Particular description of goods.—Fabrics of Silk and Silk Mixtures.
Claims use since about Dec. 17, 1918.

Ser. No. 115,087. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed Jan. 10, 1919.

RADIANTBLU

No claim is made to the word "Blu" apart from the mark as shown.
Particular description of goods.—Fabrics of Silk and Silk Mixtures.
Claims use since about Dec. 17, 1918.

Ser. No. 115,091. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed Jan. 10, 1919.

AEMIGRAE

No claim is made to the word "Grae" apart from the mark as shown.
Particular description of goods.—Fabrics of Silk and Silk Mixtures.
Claims use since about Dec. 17, 1918.

Ser. No. 115,094. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed Jan. 10, 1919.

RADIORBLU

No claim is made to the word "Blu" apart from the mark as shown.
Particular description of goods.—Fabrics of Silk and Silk Mixtures.
Claims use since about Dec. 17, 1918.

Ser. No. 115,095. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed Jan. 10, 1919.

AKASHABLU

No claim is made to the word "Blu" apart from the mark as shown.
Particular description of goods.—Fabrics of Silk and Silk Mixtures.
Claims use since about Dec. 17, 1918.

Ser. No. 115,339. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HENRY DIXON & SONS, INCORPORATED, Philadelphia, Pa. Filed Jan. 21, 1919.



Particular description of goods.—Saws.
Claims use since Dec. 9, 1918.

Ser. No. 115,473. (CLASS 39. CLOTHING.) THE WATERS-WEIMANN CO. INC., Binghamton, N. Y. Filed Jan. 27, 1919.



Particular description of goods.—Top Skirts and Petticoats.
Claims use since February, 1917.

Ser. No. 115,626. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE MILWAUKEE TALKING MACHINE MFG. CO., Milwaukee, Wis. Filed Feb. 4, 1919.



No claim being made to the representation of the records except in association with the rest of the mark.
Particular description of goods.—Talking-Machines and Records Therefor.
Claims use since Jan. 10, 1919.

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Ser. No. 115,837. (CLASS 39. CLOTHING.) J. F. HATO & CO. LTD., Belfast, Ireland. Filed Feb. 13, 1919.

EMERALD

Particular description of goods.—Gents' Dress, Negligee, and Work Shirts, Collars, Cuffs, and Detached Shirt-Fronts or Pieces of Material of Suitable Shape Worn in Front of the Bosom Portion of the Shirt, Which May be Different Material from the Front and Either With or Without an Attached Collar; and Pajamas, Singlets, and Underwear of Wool, Linen, Cotton, Silk, or Any Combination of Such Materials.
Claims use since July 4, 1910.

Ser. No. 115,923. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) MORRISON-WATERS PIANO COMPANY, Cincinnati, Ohio. Filed Feb. 17, 1919.

SMITH & NIXON

Under ten-year proviso.
Particular description of goods.—Pianos.
Claims use since 1885.

Ser. No. 115,990. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE LUST-ITE CORPORATION, Brooklyn, N. Y. Filed Feb. 19, 1919.

Lustr-ite

Particular description of goods.—Cold-Cream, Face-Powder, Face-Ronge, Lip-Stick, Liquid Nail-Polish, Massage-Cream, Nail-Bleach, Nail-Enamel, Nail-Whitener, Peroxid Cream, Rose Tint, Brilliantine Rose, Toilet and Medicinal Salve and Enamel, and Vanishing Cream.
Claims use since Sept. 15, 1902.

Ser. No. 116,077. (CLASS 39. CLOTHING.) BLASKOFF & CO., New York, N. Y. Filed Feb. 24, 1919.

Sub — Del

Particular description of goods.—Shirt-Waists and Blouses for Women.
Claims use since the 1st day of February, 1918.

Ser. No. 116,080. (CLASS 5. ADHESIVES.) COLUMBIA FASTENER COMPANY, Chicago, Ill. Filed Feb. 24, 1919.



Particular description of goods.—Mucilage.
Claims use since Feb. 14, 1919.

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Ser. No. 116,103. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NATIONAL ANILINE & CHEMICAL COMPANY, INC., New York, N. Y. Filed Feb. 24, 1919.



Particular description of goods.—Coal-tar dyestuffs.
Claims use since the fall of 1918.

Ser. No. 116,144. (CLASS 37. PAPER AND STATIONERY.) A. M. COLLINS MANUFACTURING COMPANY, Philadelphia, Pa. Filed Feb. 26, 1919.

Velumet

The trade-mark consists of the word "Velumet."
Particular description of goods.—Coated Printing-Paper; Coated Printing-Cardboard; Ornamental and Fancy Box-Covering Paper; Card-Mounts; Photographic Mounts; and Book-Covers, Booklet-Covers, and Program-Covers Made of Paper and Cardboard and Coated Paper and Coated Cardboard.
Claims use since about Sept. 1, 1915.

Ser. No. 116,194. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE SCHWEPPE & WILT MANUFACTURING COMPANY, Detroit, Mich. Filed Feb. 27, 1919.

REROD

Particular description of goods.—Automobile Reach-Rods, Radius-Rods, Torque-Rods, Tie-Rods, and Brake-Rods.
Claims use since Jan. 13, 1919.

Ser. No. 116,231. (CLASS 39. CLOTHING.) DAHM ROSSER SPRITZES CO., New York, N. Y. Filed Mar. 1, 1919.

DOUGHBOY

Consisting of the word "Doughboy."
Particular description of goods.—Hosiery for Boys and Girls.
Claims use since Feb. 15, 1919.

Ser. No. 116,365. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) ESDA MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 7, 1919.



Particular description of goods.—Gas Water-Heaters, Gas Room-Heaters, Gas-Furnaces, Control-Valves for Use in Controlling the Flow of Gas and Water in Heating Apparatus, and Gas-Burners for Ranges and Furnaces, Gas Hot-Plates, Gas-Ovens, and Gas-Ranges.
Claims use since Oct. 5, 1918.

Ser. No. 116,458. (CLASS 37. PAPER AND STATIONERY.) THE DENNEY TAG COMPANY, West Chester, Pa. Filed Mar. 11, 1919.

QUAKER

Particular description of goods.—Shipping-Tags.
Claims use since Feb. 26, 1919.

Ser. No. 116,720. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MAX REIMANN, New York, N. Y. Filed Mar. 10, 1919.

GERMOSOL

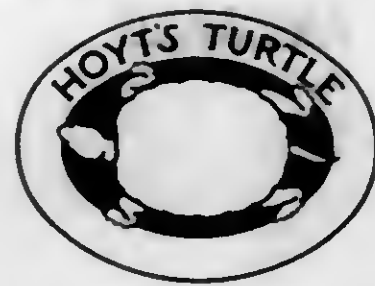
The trade-mark consisting of the word "Germosol."
Particular description of goods.—A Germicide.
Claims use since Mar. 13, 1919.

Ser. No. 116,791. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) EDWARD R. LADEW COMPANY, INC., Glen Cove, N. Y. Filed Mar. 21, 1919.



Particular description of goods.—Leather Belting.
Claims use since the year 1890.

Ser. No. 116,793. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) EDWARD R. LADEW COMPANY, INC., Glen Cove, N. Y. Filed Mar. 21, 1919.



Particular description of goods.—Leather Belting.
Claims use since the year 1908.

Ser. No. 116,964. (CLASS 39. CLOTHING.) ELDER MANUFACTURING CO., St. Louis, Mo. Filed Mar. 27, 1919.



No exclusive claim being made to the word "Elder" apart from the mark shown.

Particular description of goods.—Dress, Negligée, Flannel, and Work Shirts, Neckties, Neckwear-Scarfs, Mofers, Pajamas, Night-Shirts, and Sleeping-Garments of that Type Commercially and Commonly Known as Sleepers, Boys' Blouses.
Claims use since January, 1917.

Ser. No. 117,007. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) IOOTHAN STAUF CO., Dothan, Ala. Filed Mar. 29, 1919.



Particular description of goods.—Corn and Cane Syrup Combined and Intended for Table Purposes.
Claims use since July 1, 1918.

Ser. No. 117,060. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) R. P. SMITH & CO., Georgetown, Ill. Filed Mar. 31, 1919.



The applicant hereby disclaims the use of the words "Pile Remedy" on the drawing as being descriptive.
Particular description of goods.—Pile Remedy.
Claims use since Jan. 1, 1918.

Ser. No. 117,094. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE RIDGELY TRIMMER COMPANY, Springfield, Ohio. Filed Apr. 1, 1919.



Particular description of goods.—Rack-Exhibitors for Wall-Paper, Display-Fixtures for Wall-Paper.
Claims use since Mar. 1, 1907.

Ser. No. 117,096. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE RIDGELY TRIMMER COMPANY, Springfield, Ohio. Filed Apr. 1, 1919.



Particular description of goods.—Painters', Decorators', and Paper-Hangers' Tools and Supplies—to wit, Trestles, Roof-Brackets for Scaffolding, Ladder-Brackets, Stage-Hooks, Folding Scaffolds.
Claims use since Mar. 1, 1907.

Ser. No. 117,162. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HERRON TILLER & TRACTOR CORPORATION, Buffalo, N. Y. Filed Apr. 4, 1919.



No claim being made for the word "Wheat" and "Tractor" apart from the mark shown in the drawing, but without waiving any common-law or other rights incident thereto other than the disclaimer specifically set forth above.

Particular description of goods.—Tractors and Soil-Pulverizers.
Claims use since Jan. 28, 1919.

Ser. No. 117,186. (CLASS 38. PRINTS AND PUBLICATIONS.) HAY TRADE PUBLISHING CO., New York, N. Y. Filed Apr. 5, 1919.

THE AMERICAN HATTER

Consisting of the words "The American Hatter."
Particular description of goods.—A Monthly Magazine.
Claims use since 1872.

Ser. No. 117,192. (CLASS 38. PRINTS AND PUBLICATIONS.) MILLINERY TRADE PUBLISHING CO., New York, N. Y. Filed Apr. 5, 1919.

The Millinery Trade Review

Consisting of the words "The Millinery Trade Review."
Particular description of goods.—A Monthly Magazine.
Claims use since 1876.

Ser. No. 117,345. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE KORAL MANUFACTURING COMPANY, Boston, Mass. Filed Apr. 10, 1919.

"Koral"

Particular description of goods.—Florists' Letters, Emblems, Designs, and Strips, and Decorations, All in the Nature of Artificial Flowers.
Claims use since Aug. 11, 1904.

Ser. No. 117,388. (CLASS 43. THREAD AND YARN.) A. H. RICE CO., Pittsfield, Mass. Filed Apr. 11, 1919.

ARCO

Consisting of the word "Arco."
Particular description of goods.—Sewing-Silks.
Claims use since Mar. 11, 1919.

Ser. No. 117,389. (CLASS 38. PRINTS AND PUBLICATIONS.) ROBERT RUSSELL BENNETT COMPANY, New York, N. Y. Filed Apr. 11, 1919.

MUSICAL AUTOGRAMS

Particular description of goods.—Musical Compositions Published Continuously from Time to Time.
Claims use since on or about Jan. 16, 1918.

Ser. No. 117,407. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARQUETTE KUSSNER, New York, N. Y. Filed Apr. 12, 1919.



No claim is made to the exclusive use of the words "Trade-Mark" or "Wondercream" apart from the mark as shown.

Particular description of goods.—Facial Creams. Claims use since on or about Feb. 15, 1919.

Ser. No. 117,468. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) LOUIS SILBERMAN, Philadelphia, Pa. Filed Apr. 14, 1919.



Particular description of goods.—Sole-Leathers. Claims use since about Apr. 4, 1919.

Ser. No. 117,482. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) WM. ENDERS MANUFACTURING COMPANY, Walden, N. Y. Filed Apr. 15, 1919.



Particular description of goods.—Sad-Irons, Laundry-Washing Machines, and Clothes-Wringers. Claims use since May 28, 1914.

Ser. No. 117,530. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE HARTMAN COMPANY, Chicago, Ill. Filed Apr. 16, 1919.



Particular description of goods.—Horse-Drawn Carts, Wagons, and Parts Thereof, and Wheelbarrows. Claims use since September, 1918.

Ser. No. 117,533. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MILLBROOK WOOLLEN MILLS, New York, N. Y. Filed Apr. 16, 1919.

FROSTONE

Particular description of goods.—Woolen Piece Goods and Piece Goods Consisting of a Mixture of Wool and Cotton.

Claims use since Mar. 15, 1919.

Ser. No. 117,623. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919. Under ten-year proviso.

RELIABLE

Particular description of goods.—Varnish-Brushes. Claims use since 1891.

Ser. No. 117,624. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919.

UNIVERSAL

Particular description of goods.—Paint and Varnish Brushes. Claims use since 1891.

Ser. No. 117,625. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919. Under ten-year proviso.

PERFECTION

Particular description of goods.—Varnish and Paint Brushes and Brushes Used as Sash-Tools. Claims use since 1891.

Ser. No. 117,626. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919.

CHAMPION

Particular description of goods.—Brushes Used as Sash-Tools. Claims use since February, 1892.

Ser. No. 117,628. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919.

ECHO

Particular description of goods.—Varnish-Brushes. Claims use since 1891.

Ser. No. 117,631. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) UNITED BAUGH MANUFACTORIES, New York, N. Y. Filed Apr. 19, 1919.

RUBENS

Particular description of goods.—Artists' Brushes. Claims use since 1904.

Ser. No. 117,641. (CLASS 12. CONSTRUCTION MATERIALS.) E. T. CHAPIN Co., Spokane, Wash. Filed Apr. 21, 1919.

LIFE TIME

Particular description of goods.—Red-Cedar Fence-Posts. Claims use since Mar. 14, 1919.

Ser. No. 117,717. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WISCONSIN BUTTERINE CO., Milwaukee, Wis. Filed Apr. 21, 1919.

NUDOE

Particular description of goods.—Lard Substitute. The Lard Substitute for which said mark is used is composed of Peanut-Oil, Coconut-Oil, and Beef-Stearin. Claims use since on or about Mar. 7, 1919.

Ser. No. 117,740. (CLASS 14. METALS AND METAL CASTINGS AND FORGING.) THE OHIO METAL CO., Columbus, Ohio. Filed Apr. 22, 1919.



No claim herein being made to the exclusive use of the words "Babbitt Metal" apart from the mark shown in the drawing.

Particular description of goods.—Antifriction Babbitt Metals. Claims use since about Mar. 20, 1919.

Ser. No. 117,763. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WESTERN GROCER COMPANY, Marshalltown, Iowa. Filed Apr. 22, 1919.



The lining shown in the drawing being intended to represent shading only.

Particular description of goods.—Castor-Oil, Glycerin, Borax, Baking-Powder, Ammonia, and Bluing. Claims use since Mar. 11, 1918.

Ser. No. 117,801. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) FEDERAL SNAP FASTENER CORPORATION, New York, N. Y. Filed Apr. 24, 1919.

Federalloy

Particular description of goods.—Snap-Fasteners and Placket-Fasteners. Claims use since Apr. 18, 1919.

Ser. No. 117,818. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE WILLIAM REISNER, Lancaster, Pa. Filed Apr. 24, 1919. Under ten-year proviso.



Particular description of goods.—Candy. Claims use since about July, 1875.

Ser. No. 117,864. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PAUL F. BAICH CO., Bloomington, Ill. Filed Apr. 26, 1919.

RIDGMOOR

Particular description of goods.—Candles. Claims use since Aug. 17, 1917.

Ser. No. 117,869. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COUNTRY CORRECTION COMPANY, Chicago, Ill. Filed Apr. 26, 1919.



Particular description of goods.—Salted Peanuts. Claims use since Mar. 11, 1919.

Ser. No. 117,923. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CHAPIN COMPANY, New York, N. Y. Filed Apr. 28, 1919.

PRO-LAC

Particular description of goods.—Prophylactics for the Treatment and Prevention of Venereal Diseases.
Claims use since April 16, 1919.

Ser. No. 117,972. (CLASS 39. CLOTHING.) P. A. FIELD SHOE CO., Beverly, Mass. Filed Apr. 29, 1919.

INSOLITE

The word "Insolite."
Particular description of goods.—Shoes Made Wholly or in Part of Leather.
Claims use since April 1, 1919.

Ser. No. 118,074. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE BIO-PHARM CHEMICAL COMPANY, Denver, Colo. Filed May 2, 1919.



The lining shown in the drawing is merely intended to represent shading.

Particular description of goods.—Lozenges for Throat Irritations and Ointments for Local Congestions and Eruptions or Abrasions of the Skin.
Claims use since Jan. 1, 1916.

Ser. No. 118,247. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) FRANCIS R. ARNOLD, New York, N. Y. Filed May 8, 1919.

LA DORINE

Consisting of the words "La Dorine."
Particular description of goods.—Powder-Pads and Powder-Puffs.
Claims use since Apr. 18, 1919.

Ser. No. 118,292. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BELL & CO., INC., Orangeburg, N. Y. Filed May 9, 1919.



Particular description of goods.—A Medicinal Remedy for the Treatment of Indigestion.
Claims use since Feb. 20, 1919.

Ser. No. 118,329. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PALATINE ANILINE & CHEMICAL CORPORATION, Poughkeepsie, N. Y. Filed May 9, 1919.

Dahlko

Particular description of goods.—Dyes.
Claims use since June 1, 1918.

Ser. No. 118,425. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BONNEY VISE & TOOL WORKS, INC., Philadelphia and Allentown, Pa.; and New York, N. Y. Filed May 13, 1919.



Particular description of goods.—Wrenches, Pliers, and Vises.
Claims use since about Apr. 25, 1919.

Ser. No. 118,433. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) DARWIN & MILNER, INC., New York, N. Y. Filed May 13, 1919.

PYREKS

Particular description of goods.—Bar-Steel and Steel Castings.
Claims use since January, 1918.

Ser. No. 118,560. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KOKEN BARBERS' SUPPLY COMPANY, St. Louis, Mo. Filed May 16, 1919.

KDX

Particular description of goods.—A Dandruff-Exterminator.
Claims use since June 18, 1917.

Ser. No. 118,561. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KOKEN BARBERS' SUPPLY COMPANY, St. Louis, Mo. Filed May 16, 1919.



Particular description of goods.—A Dandruff-Exterminator.
Claims use since May 8, 1919.

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Ser. No. 118,569. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. MYERS LYE COMPANY, St. Louis, Mo. Filed May 16, 1919.

MERRY WAR

Particular description of goods.—Lye.
Claims use since Oct. 4, 1888.

Ser. No. 118,587. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) BUCKEYE NURSERY, Tampa, Winterhaven, Lucerne Park, and Howey, Fla. Filed May 17, 1919.

Temple

Particular description of goods.—Trees.
Claims use since Feb. 1, 1919.

Ser. No. 118,601. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOBERT CHEMICAL COMPANY, Detroit, Mich. Filed May 17, 1919.



Particular description of goods.—Tooth-Paste.
Claims use since Apr. 27, 1919.

Ser. No. 118,605. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARICATTE ET CIE, Indianapolis, Ind. Filed May 17, 1919.

D'NOMLA

Consisting of the word "D'Nomla."
Particular description of goods.—Toilet Powders and Creams, Perfumery, and Toilet Waters.
Claims use since Jan., 1919.

Ser. No. 118,663. (CLASS 39. CLOTHING.) THE GOOD-YEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed May 19, 1919.

WING FOOT

Particular description of goods.—Rubber or Composition Heels and Soles for Boots and Shoes.
Claims use since about May 1, 1919.

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Ser. No. 118,678. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KNAPP & BAXTER, INC., San Francisco, Calif. Filed May 19, 1919.

Bright Eye

Particular description of goods.—Canned Salmon and Canned Sardines.
Claims use since Mar. 15, 1919.

Ser. No. 118,709. (CLASS 39. CLOTHING.) SAMUEL SCHWAB, New York, N. Y. Filed May 19, 1919.



Particular description of goods.—Suits for Infants and Children.
Claims use since June 22, 1917.

Ser. No. 118,747. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) WILLIAM BRUSH CO., Philadelphia, Pa. Filed May 20, 1919. Under ten-year proviso.

D. MINTZER'S

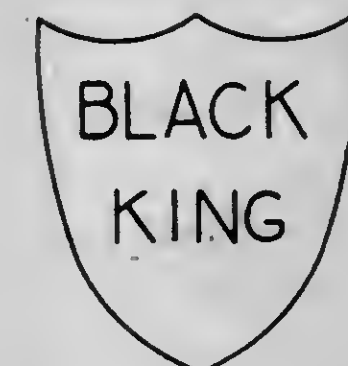
Particular description of goods.—Tooth-Brushes.
Claims use since about May, 1863.

Ser. No. 118,750. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) L. C. CHASE & COMPANY, Boston, Mass. Filed May 21, 1919.

Velmo

Particular description of goods.—Pile Fabrics Made Wholly or in Part of Mohair.
Claims use since the spring of 1915.

Ser. No. 118,767. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE REX FILE COMPANY, Newcomerstown, Ohio. Filed May 21, 1919.



Particular description of goods.—Files and Rasps.
Claims use since Apr. 1, 1919.

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Ser. No. 118,822. (CLASS 43. THREAD AND YARN.) THE BARBOUR BROTHERS CO., Paterson, N. J. Filed May 23, 1919. Under ten-year proviso.



Particular description of goods.—Linen Thread.
Claims use since about October, 1878.

Ser. No. 118,825. (CLASS 39. CLOTHING.) BEAUX ARTS CORSET COMPAGNIE, Newark, N. J. Filed May 23, 1919.

Beaux Arts

Particular description of goods.—Corsets.
Claims use since the 3d day of May, 1919.

Ser. No. 118,925. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MINNEAPOLIS STEEL & MACHINERY COMPANY, Minneapolis, Minn. Filed May 26, 1919.



Particular description of goods.—Threshing-Machines.
Claims use since the 1st day of May, 1919.

Ser. No. 118,943. (CLASS 39. CLOTHING.) GEORGE SPERLINO, New York, N. Y. Filed May 26, 1919.

"PERENNIA"

Particular description of goods.—Petticoats.
Claims use since May 1, 1919.

Ser. No. 119,017. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 29, 1919.

Furkin

Particular description of goods.—Pile Fabric in the Piece.
Claims use since the 21st day of March, 1919.

Ser. No. 119,018. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 29, 1919.

Beaverkin

Particular description of goods.—Pile Fabric in the Piece.
Claims use since the 26th day of March, 1919.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 22, 1919.

- 125,946. LADIES' WAISTERS. THE ACE WAIST CO. INC., New York, N. Y.
Filed July 16, 1918. Serial No. 112,158. PUBLISHED MARCH 18, 1919.
- 125,947. SWEATERS. ANDREW ADIE, Newton, Mass.
Filed December 18, 1917. Serial No. 108,930. PUBLISHED MARCH 25, 1919.
- 125,948. PUBLICATIONS—I. E., PAMPHLETS ISSUED FROM TIME TO TIME, MAGAZINES ISSUED FROM TIME TO TIME, MONTHLY PERIODICALS. ALEXANDER HAMILTON INSTITUTE, New York, N. Y.
Filed March 29, 1917. Serial No. 102,560. PUBLISHED MARCH 18, 1919.
- 125,949. CLOTHES-LINE. AMERICAN CORE-TWINE COMPANY, Boston, Mass.
Filed December 11, 1918. Serial No. 114,593. PUBLISHED MARCH 25, 1919.
- 125,950. TANNED LEATHER HIDES FOR SHOE-UPPERS. ANCHOR LEATHER CO., Chicago, Ill.
Filed November 30, 1917. Serial No. 107,672. PUBLISHED MARCH 25, 1919.
- 125,951. SOLUBLE BLUE. A. R. ANSCHUTZ & COMPANY, INC., New York, N. Y.
Filed February 11, 1919. Serial No. 115,752. PUBLISHED MARCH 25, 1919.
- 125,952. CERTAIN NAMED CLOTHING FOR MEN AND BOYS. APPAREL MANUFACTURING COMPANY, Chicago, Ill.
Filed January 11, 1919. Serial No. 115,115. PUBLISHED MARCH 18, 1919.
- 125,953. PUBLICATIONS ISSUED REGULARLY BI-MONTHLY. ARMSTRONG CORK COMPANY, Pittsburgh, Pa.
Filed November 7, 1918. Serial No. 114,070. PUBLISHED FEBRUARY 25, 1919.
- 125,954. COMPOSITION SOLES FOR BOOTS AND SHOES. ARMSTRONG CORK COMPANY, Pittsburgh, Pa.
Filed December 16, 1918. Serial No. 114,656. PUBLISHED MARCH 18, 1919.
- 125,955. TALCUM POWDER. ASSOCIATED PHARMACEUTISTS, INC., New York, N. Y.
Filed January 23, 1919. Serial No. 115,386. PUBLISHED MARCH 25, 1919.
- 125,956. TONIC AND CONDITIONER FOR USE IN HOGS ONLY. THE AVALON FARMS COMPANY, Chicago, Ill.
Filed September 25, 1918. Serial No. 113,342. PUBLISHED APRIL 1, 1919.
- 125,957. WORK-CLOTHES FOR MEN, BOYS, AND CHILDREN—NAMES, OVERALLS, JUMPERS, COATS, AND TROUSERS. J. BAKER & SONS, INC., Evansville, Ind.
Filed February 1, 1919. Serial No. 115,564. PUBLISHED MARCH 18, 1919.
- 125,958. COTTON PIECE GOODS. BATES MANUFACTURING COMPANY, Lewiston, Me.
Filed January 29, 1919. Serial No. 115,498. PUBLISHED APRIL 8, 1919.
- 125,959. MEN'S, BOYS', AND CHILDREN'S OUTER WEARING-APPAREL CONSISTING OF COATS, VESTS, AND TROUSERS. ABRAHAM BAUMAN, New York, N. Y.
Filed December 23, 1918. Serial No. 114,774. PUBLISHED MARCH 18, 1919.
- 125,960. CERTAIN NAMED MACHINERY AND TOOLS AND PARTS THEREOF. RAUSH MACHINE TOOL COMPANY, Springfield, Mass.
Filed July 31, 1918. Serial No. 112,435. PUBLISHED MARCH 25, 1919.
- 125,961. CANNED CONDENSED MILK. BENCOX EXPORTING & IMPORTING CO., INC., New York, N. Y.
Filed January 11, 1919. Serial No. 115,116. PUBLISHED APRIL 1, 1919.
- 125,962. CERTAIN NAMED ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. BENJAMIN ELECTRIC MANUFACTURING COMPANY, Chicago, Ill.
Filed July 11, 1918. Serial No. 112,953. PUBLISHED JANUARY 28, 1919.
- 125,963. SIDEWALK-FORMS, METAL LUMBER, STEEL CEILING, CORRUGATED CORES, AND METAL LATH. THE BERGER MANUFACTURING COMPANY, Canton, Ohio.
Filed August 27, 1917. Serial No. 105,885. PUBLISHED FEBRUARY 5, 1918.
- 125,964. METAL-CLEANSER IN POWDERED OR CRYSTALLINE FORM. DAVID BERNSTEIN, Cleveland, Ohio.
Filed January 17, 1919. Serial No. 115,241. PUBLISHED MARCH 11, 1919.
- 125,965. LUBRICATING OILS AND GREASES. WILLIAM R. BLECKER, Albany, N. Y.
Filed November 5, 1917. Serial No. 107,151. PUBLISHED MARCH 18, 1919.
- 125,966. SUBSTITUTE FOR AND CONTAINING THE CONSTITUENTS OF EGGS AND BAKING-POWDER. HENRY D. BODDINGTON, Los Angeles, Calif.
Filed December 28, 1917. Serial No. 108,192. PUBLISHED APRIL 1, 1919.
- 125,967. DANDRUFF-DESTROYER AND HAIR-GROWER. ADRIANO BONA, New York, N. Y.
Filed August 6, 1918. Serial No. 112,558. PUBLISHED APRIL 1, 1919.
- 125,968. CANNED SARDINES. BOOTH FISHERIE SARDINE COMPANY, Chicago, Ill.
Filed December 31, 1918. Serial No. 114,897. PUBLISHED MARCH 25, 1919.
- 125,969. ARTICLES APPEARING IN BULLETINS OR LESSONS ISSUED FROM TIME TO TIME. ALVIN A. BRATTON, Columbus, Ohio.
Filed November 14, 1918. Serial No. 114,137. PUBLISHED APRIL 1, 1919.
- 125,970. CORN REMEDY. H. L. BRINKHOFF COMPANY, Pittsburgh, Pa.
Filed March 7, 1918. Serial No. 109,409. PUBLISHED APRIL 1, 1919.
- 125,971. SAFETY-RAZORS. AUGUSTUS HAGER BRYANT, New York, N. Y.
Filed June 4, 1918. Serial No. 111,350. PUBLISHED OCTOBER 15, 1918.
- 125,972. MACARONI. BUCKLEY MACARONI COMPANY, INC., Kensington, Conn.
Filed February 17, 1919. Serial No. 115,900. PUBLISHED APRIL 8, 1919.
- 125,973. CANNED SALMON. CASCADE PACKING COMPANY, Astoria, Wash.
Filed March 20, 1917. Serial No. 102,281. PUBLISHED MARCH 25, 1919.

125,974. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed February 18, 1918. Serial No. 109,009. PUBLISHED APRIL 15, 1919.

125,975. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed February 18, 1918. Serial No. 109,091. PUBLISHED APRIL 15, 1919.

125,976. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed May 6, 1918. Serial No. 110,666. PUBLISHED APRIL 15, 1919.

125,977. MEN'S AND CHILDREN'S HOSIERY. CHRIST-HENRICK SOCK CO., Boston, Mass.

Filed November 8, 1918. Serial No. 114,092. PUBLISHED MARCH 25, 1919.

125,978. MEDICINAL PREPARATIONS FOR COLDS, CATARRH, HAY-FEVER, AND BRONCHITIS. ROBERT W. CLOTHIER, Washington, D. C.

Filed January 20, 1919. Serial No. 115,314. PUBLISHED APRIL 1, 1919.

125,979. COTTON PIECE GOODS. COHN-HALL-MARK CO., New York, N. Y.

Filed December 28, 1918. Serial No. 114,848. PUBLISHED MARCH 25, 1919.

125,980. PREPARED FLOOR-COVERINGS OF THE OILED-CLOTH TYPE. THE CONGOLEUM COMPANY, Philadelphia, Pa.

Filed January 6, 1919. Serial No. 115,006. PUBLISHED MARCH 4, 1919.

125,981. PREPARED FLOOR-COVERINGS OF THE OILED-CLOTH TYPE. THE CONGOLEUM COMPANY, Philadelphia, Pa.

Filed January 7, 1919. Serial No. 115,023. PUBLISHED MARCH 4, 1919.

125,982. LADIES' HOSIERY. JOHN T. CONOVER, New Brunswick, N. J.

Filed January 9, 1919. Serial No. 113,058. PUBLISHED MARCH 25, 1919.

125,983. BAKING-POWDER. R. B. DAVIS COMPANY, Hoboken, N. J.

Filed January 25, 1919. Serial No. 115,418. PUBLISHED MARCH 25, 1919.

125,984. BAKING-POWDER. R. B. DAVIS COMPANY, Hoboken, N. J.

Filed January 25, 1919. Serial No. 115,419. PUBLISHED APRIL 1, 1919.

125,985. DEPILATORY. JACOB DONIGER, Brooklyn, N. Y.

Filed February 12, 1919. Serial No. 115,502. PUBLISHED MARCH 25, 1919.

125,986. REMEDY FOR THE TREATMENT OF FRECKLES, TAN, PIMPLES, AND SUNBURN AFFECTING THE SKIN. JAS. W. DOUTHITT, Bedford, Ind.

Filed January 30, 1919. Serial No. 115,524. PUBLISHED MARCH 25, 1919.

125,987. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y.

Filed February 12, 1919. Serial No. 115,806.

125,988. CERTAIN NAMED PAPER AND STATIONERY. DUBOC PAPER COMPANY, Chicago, Ill.

Filed August 23, 1918. Serial No. 112,848. PUBLISHED JANUARY 14, 1919.

125,989. CANNED SWEET POTATOES PREPARED WITH MOLASSES. G. H. DUNBAR & SONS, INC., Gulfport, Miss.

Filed January 15, 1917. Serial No. 100,615. PUBLISHED MARCH 4, 1919.

125,990. PHOTOGRAPHS AND FRAMED AND UNFRAMED PICTURES. EASTLAND STUDIO, Philadelphia, Pa.; Baltimore, Md.; Wilmington, Del., and Washington, D. C.

Filed November 4, 1918. Serial No. 114,036. PUBLISHED MARCH 25, 1919.

125,991. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed January 29, 1919. Serial No. 115,500. PUBLISHED MARCH 18, 1919.

125,992. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed January 30, 1919. Serial No. 115,525. PUBLISHED MARCH 25, 1919.

125,993. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed January 31, 1919. Serial No. 115,546. PUBLISHED MARCH 18, 1919.

125,994. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed January 31, 1919. Serial No. 115,547. PUBLISHED MARCH 18, 1919.

125,995. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 3, 1919. Serial No. 115,585. PUBLISHED APRIL 1, 1919.

125,996. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 3, 1919. Serial No. 115,586. PUBLISHED APRIL 1, 1919.

125,997. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 3, 1919. Serial No. 115,587. PUBLISHED APRIL 1, 1919.

125,998. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 3, 1919. Serial No. 115,638. PUBLISHED APRIL 1, 1919.

125,999. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 10, 1919. Serial No. 115,724. PUBLISHED APRIL 1, 1919.

126,000. SILK PIECE GOODS. EMPIRE SILK COMPANY, Wilmington, Del., and New York, N. Y.

Filed February 18, 1919. Serial No. 115,954. PUBLISHED APRIL 1, 1919.

126,001. COMPOSITION SOLES AND HEELS. THE FEDERAL RUBBER COMPANY, Cudahy, Wis.

Filed December 26, 1918. Serial No. 114,819. PUBLISHED MARCH 25, 1919.

126,002. HOSIERY AND GLOVES. FINCH, VAN SLICK & McCONVILLE, St. Paul, Minn.

Filed June 4, 1917. Serial No. 104,247. PUBLISHED JULY 16, 1918.

126,003. CERTAIN NAMED CLOTHING FOR MEN, WOMEN AND CHILDREN. FINCH, VAN SLICK & McCONVILLE, St. Paul, Minn.

Filed June 4, 1917. Serial No. 104,249. PUBLISHED JULY 16, 1918.

126,004. PREPARATION FOR TREATMENT OF RHEUMATISM AND KIDNEY DISORDERS. FINCH AND JOHNSON, Fort Wayne, Ind.

Filed February 14, 1919. Serial No. 115,013. PUBLISHED MARCH 25, 1919.

126,005. CERTAIN NAMED ATHLETIC GOODS FOR MEN, WOMEN, AND CHILDREN. MAURICE B. FREEDRICKS, New York, N. Y.

Filed January 14, 1919. Serial No. 115,173. PUBLISHED MARCH 25, 1919.

126,006. PERIODICAL PUBLISHED MONTHLY. GENERAL APPRAISAL COMPANY, Seattle, Wash.

Filed January 22, 1919. Serial No. 115,376. PUBLISHED MARCH 11, 1919.

126,007. BREAD. GREISERL GUTTEN COMPANY, Detroit, Mich.

Filed January 27, 1919. Serial No. 115,455. PUBLISHED APRIL 8, 1919.

126,008. CHOCOLATES, CHOCOLATE AND COCOA COMBINED, AND COCOA. GUSTARD COMPANY, San Francisco, Calif.

Filed December 31, 1918. Serial No. 114,905. PUBLISHED MARCH 25, 1919.

126,009. WEEKLY MAGAZINES. GOLF PUBLISHING COMPANY, INC., Houston, Tex.

Filed June 3, 1918. Serial No. 111,340. PUBLISHED FEBRUARY 25, 1919.

126,010. LIQUID CHEMICALS FOR USE IN TANNING PROCESSES. GUTMANN & COMPANY, Chicago, Ill.

Filed January 31, 1919. Serial No. 115,540. PUBLISHED MARCH 25, 1919.

126,011. COASTER-WAGON. HEIDER MANUFACTURING COMPANY, Carroll, Iowa.

Filed December 26, 1918. Serial No. 114,823. PUBLISHED FEBRUARY 25, 1919.

126,012. PREPARATION FOR THE TREATMENT OF INFLUENZA. CHARLES HERZOG, New York, N. Y.

Filed January 7, 1919. Serial No. 115,027. PUBLISHED MARCH 25, 1919.

126,013. SHORTENING COMPOSED OF COTTON-SEED OIL AND COTTON-SEED-OIL STEARIN. HODGSON OIL REFINING COMPANY, Athens, Ga.

Filed October 25, 1918. Serial No. 118,983. PUBLISHED SEPTEMBER 17, 1918.

126,014. WOOLEN PIECE GOODS. HOLDEN-LEONARD COMPANY, New York, N. Y.

Filed January 15, 1919. Serial No. 115,204. PUBLISHED APRIL 15, 1919.

126,015. WOOLEN PIECE GOODS. HOLDEN-LEONARD COMPANY, New York, N. Y.

Filed January 15, 1919. Serial No. 115,205. PUBLISHED APRIL 15, 1919.

126,016. WOOLEN PIECE GOODS. HOLDEN-LEONARD COMPANY, New York, N. Y.

Filed January 21, 1919. Serial No. 115,348. PUBLISHED MARCH 25, 1919.

126,017. TOILET CREAM. HOWARD BRO'S. CHEMICAL CO., Buffalo, N. Y.

Filed June 17, 1918. Serial No. 111,615. PUBLISHED APRIL 15, 1919.

126,018. CORSETS. MARGARET J. HUNTER, Los Angeles, Calif.

Filed February 4, 1919. Serial No. 115,619. PUBLISHED MARCH 25, 1919.

126,019. POULTRY FOOD. HYMAN & ACKERMAN, Lima, Ohio.

Filed October 25, 1918. Serial No. 113,863. PUBLISHED APRIL 8, 1919.

126,020. POULTRY FEED. HYMAN & ACKERMAN, Lima, Ohio.

Filed December 3, 1918. Serial No. 114,493. PUBLISHED MARCH 18, 1919.

126,021. LINEN-MESH UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. IDEAL LINEN MESH COMPANY, Poughkeepsie, N. Y.

Filed July 25, 1918. Serial No. 112,319. PUBLISHED NOVEMBER 10, 1918.

126,022. TONIC USED TO ALLEVIATE NERVOUS DISORDERS AND WEAKNESS AND EXHAUSTION OF THE NERVOUS SYSTEM. ITALIAN DRUG IMPORTING CO., New York, N. Y.

Filed February 11, 1919. Serial No. 115,765. PUBLISHED APRIL 15, 1919.

126,023. RIBBONS. JOHNSON, COWDIN & CO., New York, N. Y.

Filed January 24, 1919. Serial No. 115,407. PUBLISHED MARCH 25, 1919.

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126,024. MEDICINAL PLASTERS. JOHNSON & JOHNSON, New Brunswick, N. J.

Filed February 12, 1919. Serial No. 115,814. PUBLISHED MARCH 25, 1919.

126,025. COCOANUT-BUTTER. KAOLA COMPANY, Portland, Oreg.

Filed April 23, 1918. Serial No. 110,399. PUBLISHED MARCH 25, 1919.

126,026. MEN'S CRAVATS. JAMES R. KEISER, INC., New York, N. Y.

Filed January 17, 1919. Serial No. 115,248. PUBLISHED MARCH 25, 1919.

126,027. MEN'S CRAVATS. JAMES R. KEISER, INC., New York, N. Y.

Filed January 17, 1919. Serial No. 115,250. PUBLISHED MARCH 25, 1919.

126,028. COLORING FOR FOODS. H. KORNATMAN & CO., New York, N. Y.

Filed January 13, 1919. Serial No. 115,150. PUBLISHED MARCH 25, 1919.

126,029. LIQUID PREPARATION FOR THE ALLEVIATION OF CONSUMPTION AND OTHER LUNG DISEASE. THEODORE KOTLAR, Elizabeth, N. J.

Filed March 7, 1919. Serial No. 116,385. PUBLISHED APRIL 15, 1919.

126,030. CERTAIN PHARMACEUTICAL PREPARATIONS USED IN DRESSING THE HAIR AND CLEANSING THE SCALP. ELLA LEWIS, St. Louis, Mo.

Filed August 19, 1918. Serial No. 112,788. PUBLISHED APRIL 15, 1919.

126,031. EDIBLE COTTON-SEED OIL. LITTAUER OIL COMPANY, Guttenberg, N. J.

Filed August 14, 1918. Serial No. 112,712. PUBLISHED APRIL 1, 1919.

126,032. PRODUCT OF METHYL SALICYLIC ACID FOR TREATING CERTAIN EXTERNAL CONDITIONS AND IN ANTISEPTIC SURGERY. LLOYD BROTHERS, Cincinnati, Ohio.

Filed July 15, 1918. Serial No. 112,143. PUBLISHED APRIL 1, 1919.

126,033. LADIES' WEARING-APPAREL—NAMELY, BRASSIERES, PLAIN AND FANCY COLLARS, CUFFS, AND JAROTS. LOUIS LEVI, New York, N. Y.

Filed April 16, 1917. Serial No. 103,025. PUBLISHED MARCH 25, 1919.

126,034. LAUNDRY BLUING. J. S. MCKENZIE & CO., INC., New York, N. Y.

Filed February 5, 1919. Serial No. 115,645. PUBLISHED MARCH 25, 1919.

126,035. DYES AND TANNING EXTRACTS. MARDEN, ORTH & HASTINGS CORPORATION, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash., and San Francisco, Calif.

Filed February 13, 1919. Serial No. 115,841. PUBLISHED MARCH 25, 1919.

126,036. OIL FOR THE LUBRICATION OF YARN IN THE PROCESS OF MANUFACTURE. MARDEN, ORTH & HASTINGS CORPORATION, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash., and San Francisco, Calif.

Filed February 13, 1919. Serial No. 115,842. PUBLISHED MARCH 25, 1919.

126,037. ELECTRIC OSCILLATING FANS. ERCOLE MARZELLI & CO., Milan, Italy.

Filed August 2, 1917. Serial No. 105,433. PUBLISHED MARCH 4, 1919.

126,038. CERTAIN NAMED CONSTRUCTION MATERIALS. H. A. MARR, Norfolk, Va.

Filed February 13, 1917. Serial No. 101,348. PUBLISHED MARCH 25, 1919.

- 126,039. COTTON-SEED SALAD-OIL OR A LARD SUBSTITUTE FOR USE IN COOKING. V. MARRONE & COMPANY, INC., Utica, N. Y.
Filed December 19, 1918. Serial No. 114,713. PUBLISHED FEBRUARY 25, 1919.
- 126,040. SILVER-PLATED HOLLOW WARE AND SILVER-PLATED TABLEWARE. THE MIDDLETOWN SILVER COMPANY, Middletown, Conn.
Filed January 3, 1919. Serial No. 114,976. PUBLISHED FEBRUARY 25, 1919.
- 126,041. CERTAIN NAMED PAPER AND STATIONERY. MOSER PAPER COMPANY, Chicago, Ill.
Filed September 25, 1918. Serial No. 113,370. PUBLISHED MARCH 4, 1919.
- 126,042. WRITING, PRINTING, MARKING, AND DRAWING INKS, TYPE-WRITER RIBBONS, INKING-RIBBONS, AND INKING STAMP-PADS. EDGAR FREDERICK MENDAT, London, England.
Filed November 8, 1918. Serial No. 114,099. PUBLISHED MARCH 4, 1919.
- 126,043. OINTMENT USED EXTERNALLY AS AN ANODYNE, DEODORANT, GERMICIDE, AND ANTISEPTIC. J. EARL NAREGAN, Los Angeles, Calif.
Filed January 14, 1919. Serial No. 115,151. PUBLISHED APRIL 1, 1919.
- 126,044. TRUNKS. NATIONAL VENEEZE PRODUCTS COMPANY, Mahwah, Ind.
Filed October 14, 1918. Serial No. 113,721. PUBLISHED APRIL 15, 1919.
- 126,045. WATCH-MOVEMENTS. NATIONAL WATCH COMPANY, INC., New York, N. Y.
Filed January 13, 1919. Serial No. 115,155. PUBLISHED MARCH 4, 1919.
- 126,046. CERTAIN NAMED CLOTHING FOR MEN, WOMEN, BOYS, GIRLS, AND CHILDREN. NOLL-HAUWORTH COMPANY, Quincy, Ill.
Filed January 11, 1919. Serial No. 115,125. PUBLISHED MARCH 11, 1919.
- 126,047. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. NORMAN AUGUSTUS LANE, Birmingham, England.
Filed November 9, 1917. Serial No. 107,200. PUBLISHED MARCH 11, 1919.
- 126,048. ALTERNATIVE HEMATIC STIMULANT AND MEDICINE FOR BRONCHIAL AFFECTIONS, COUGHS, AND GENERAL DEBILITY. NYAL COMPANY, Detroit, Mich.
Filed December 20, 1918. Serial No. 114,746. PUBLISHED MARCH 25, 1919.
- 126,049. CANNED CRAB. ORADA & COMPANY, LTD., San Francisco, Calif.
Filed February 17, 1919. Serial No. 115,926. PUBLISHED APRIL 8, 1919.
- 126,050. WATCHES AND WATCH-MOVEMENTS. I. DULENDORFF COMPANY, New York, N. Y.
Filed January 30, 1919. Serial No. 115,538. PUBLISHED APRIL 1, 1919.
- 126,051. WOVEN RUGS. OLSON RUG COMPANY, Chicago, Ill.
Filed November 29, 1918. Serial No. 114,423. PUBLISHED APRIL 15, 1919.
- 126,052. CERTAIN NAMED LADIES' AND CHILDREN'S UNDERWEAR AND APRONS. OSHKOSH MUSLIN UNDERWEAR CO., Oshkosh, Wis.
Filed October 10, 1918. Serial No. 113,665. PUBLISHED MARCH 25, 1919.
- 126,053. KNIT AND WOVEN UNDERWEAR FOR MEN, CONSISTING OF SHIRTS, DRAWERS, AND UNION-SUITS. OTIS CO., Ware, Mass.
Filed November 22, 1918. Serial No. 114,292. PUBLISHED MARCH 18, 1919.
- 126,054. COTTON PIECE GOODS. OTIS CO., Ware, Mass.
Filed January 25, 1919. Serial No. 115,429. PUBLISHED MARCH 25, 1919.
- 126,055. AUTOMATIC AND SPRING MOTORS FOR CERTAIN NAMED MUSICAL INSTRUMENTS. OTTO HEINEMAN PHONOGRAPH SUPPLY CO., INC., New York, N. Y.
Filed October 9, 1918. Serial No. 113,629. PUBLISHED FEBRUARY 25, 1919.
- 126,056. FOOD-FLAVORING EXTRACTS. PARST PURE EXTRACT CO., INC., Reading, Pa.
Filed November 20, 1918. Serial No. 114,254. PUBLISHED MARCH 25, 1919.
- 126,057. CERTAIN NAMED MEN'S CLOTHING. PHILLIPS-JONES COMPANY, INC., New York, N. Y.
Filed February 8, 1919. Serial No. 115,006. PUBLISHED MARCH 25, 1919.
- 126,058. LAXATIVE WAFER. PIEDMONT CHEMICAL WORKS, Atlanta, Ga.
Filed February 19, 1919. Serial No. 116,006. PUBLISHED APRIL 15, 1919.
- 126,059. WRITING-INK IN SOLUBLE TABLET FORM. P. L. M. CORPORATION, New York, N. Y.
Filed December 7, 1918. Serial No. 114,544. PUBLISHED FEBRUARY 25, 1919.
- 126,060. VARNISHES AND SANDING-FILLERS. THE POUGHKEEPSIE PAINT CO., Poughkeepsie, N. Y.
Filed February 21, 1919. Serial No. 116,060. PUBLISHED APRIL 29, 1919.
- 126,061. GAITERS OR SPATS. A. PRIEMETER SHOE COMPANY, Jefferson City, Mo.
Filed October 17, 1918. Serial No. 113,780. PUBLISHED MARCH 18, 1919.
- 126,062. LAUNDRY BLUE. HARRY PROPPER, New York, N. Y.
Filed December 26, 1918. Serial No. 114,830. PUBLISHED APRIL 1, 1919.
- 126,063. RUBBER HEELS OR LIFTS FOR FOOTWEAR. RACINE AUTO TIRE COMPANY, Racine, Wis.
Filed January 31, 1919. Serial No. 115,554. PUBLISHED MARCH 18, 1919.
- 126,064. LEATHER BELTING. GEO. RAHMANN & CO., New York, N. Y.
Filed February 21, 1919. Serial No. 116,063. PUBLISHED APRIL 8, 1919.
- 126,065. COLLARS, CUFFS, AND SHIRT-ROSBOMS. REVERSIBLE COLLAR COMPANY, Boston, Mass.
Filed February 11, 1919. Serial No. 115,785. PUBLISHED MARCH 25, 1919.
- 126,066. CHILDREN'S UNDERWEAR, DRESSES, AND NIGHTGOWNS AND PAJAMAS. HAZEL ROCK, Salt Lake City, Utah.
Filed December 20, 1918. Serial No. 114,750. PUBLISHED MARCH 18, 1919.
- 126,067. PLUSHES. LOUIS ROESSEL & CO., New York, N. Y.
Filed March 11, 1918. Serial No. 109,508. PUBLISHED FEBRUARY 18, 1919.
- 126,068. LAXATIVE PILLS. THOMAS ROSA, New York, N. Y.
Filed August 24, 1918. Serial No. 112,858. PUBLISHED MARCH 25, 1919.
- 126,069. NIGHT-SHIRTS, NIGHTGOWNS, AND PAJAMAS. E. ROSENFIELD & COMPANY, Baltimore, Md.
Filed July 20, 1918. Serial No. 112,239. PUBLISHED MARCH 18, 1919.
- 126,070. GLUE IN LIQUID AND POWDERED FORM. ROXIS & CO., Philadelphia, Pa.
Filed December 9, 1918. Serial No. 114,570. PUBLISHED MARCH 11, 1919.

- 126,071. WOOLEN PIECE GOODS. JOHN ROSS, Glasgow, Scotland.
Filed October 22, 1918. Serial No. 113,849. PUBLISHED MARCH 18, 1919.
- 126,072. OLIVE-OIL. ANDREA RUSSO, Chicago, Ill.
Filed December 18, 1917. Serial No. 108,042. PUBLISHED OCTOBER 29, 1918.
- 126,073. PREPARATION FOR SORE THROAT, TONSILLITIS, QUINSY, DIPHTHERIA, CATARRH, ASTHMA, AND HAY-FEVER. FRANK PAUL SALEME, Janata, Pa.
Filed October 7, 1918. Serial No. 113,614. PUBLISHED MARCH 25, 1919.
- 126,074. TOMATO PULP. SALBINA CANNINO & PACKING CO., San Jose, Calif.
Filed February 11, 1919. Serial No. 115,784. PUBLISHED APRIL 8, 1919.
- 126,075. MEN'S, WOMEN'S, BOYS', AND CHILDREN'S KNIT UNDERSHIRTS, UNDERDRAWERS, UNION-SUITS, UNDERVESTS. SANITARY KNITTING COMPANY, Grand Rapids, Mich.
Filed November 1, 1918. Serial No. 114,015. PUBLISHED MARCH 25, 1919.
- 126,076. MEDICAL JELLY FOR THE NOSE. MAURICE F. SCHLERINGER, New York, N. Y.
Filed February 20, 1919. Serial No. 116,039. PUBLISHED APRIL 15, 1919.
- 126,077. FACE-POWDERS. JULIUS SCHMID, INCORPORATED, New York, N. Y.
Filed March 22, 1917. Serial No. 102,344. PUBLISHED MARCH 25, 1919.
- 126,078. FACE-POWDERS. JULIUS SCHMID, INCORPORATED, New York, N. Y.
Filed March 22, 1917. Serial No. 102,347. PUBLISHED MARCH 25, 1919.
- 126,079. FRESH APPLES. SHERIDAN INTERMENT COMPANY, Sheridan, Oreg.
Filed January 17, 1919. Serial No. 115,270. PUBLISHED MARCH 25, 1919.
- 126,080. CERTAIN NAMED FOODS. THE J. E. SHOE-MAKER CO., San Francisco, Calif.
Filed November 25, 1918. Serial No. 114,350. PUBLISHED MARCH 25, 1919.
- 126,081. AUTOMOBILE-TIRE PUMPS. SIDEL-BATTNER MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed December 9, 1918. Serial No. 114,572. PUBLISHED MARCH 4, 1919.
- 126,082. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR—NAMELY, UNION-SUITS MADE OF TEXTILE MATERIAL. FRANCIS T. SIMMONS & CO., Chicago, Ill.
Filed January 8, 1919. Serial No. 115,051. PUBLISHED MARCH 11, 1919.
- 126,083. CERTAIN NAMED OILS FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES. SINCLAIR REFINING COMPANY, Chicago, Ill.
Filed March 17, 1919. Serial No. 116,671. PUBLISHED MAY 13, 1919.
- 126,084. FACE-CREAM. SKINTEX CO., New York and Forest Hills, N. Y.
Filed November 14, 1918. Serial No. 114,173. PUBLISHED APRIL 1, 1919.
- 126,085. INSECTICIDES AND POISONS FOR RODENTS AND INSECT PESTS. SLEEP-IN-PEACE COMPANY, Savannah, Ga.
Filed July 20, 1918. Serial No. 112,348. PUBLISHED MARCH 25, 1919.
- 126,086. COAL-TAR COLORS. SOCIETY OF CHEMICAL INDUSTRY IN BASEL, Basel, Switzerland.
Filed April 27, 1918. Serial No. 110,503. PUBLISHED MARCH 25, 1919.
- 126,087. INDIGO. SOCIETY OF CHEMICAL INDUSTRY IN BASEL, Basel, Switzerland.
Filed April 27, 1918. Serial No. 110,504. PUBLISHED MARCH 25, 1919.
- 126,088. PHARMACEUTICAL PRODUCT—VIZ., C.C-DI-ALLYLBARBITURIC ACID—AND PARTICULARLY APPLICABLE AS A DORMITIVE AND A SEDATIVE. SOCIETY OF CHEMICAL INDUSTRY IN BASEL, Basel, Switzerland.
Filed April 27, 1918. Serial No. 110,506. PUBLISHED MARCH 25, 1919.
- 126,089. CERTAIN NAMED MUSICAL INSTRUMENTS AND SUPPLIES. SONORA PHONOGRAPH SALES COMPANY, INC., New York, N. Y.
Filed January 17, 1918. Serial No. 108,511. PUBLISHED MARCH 11, 1919.
- 126,090. PLAYING-BALL WITH A LOOP-HANDLE, THE BALL BEING COVERED WITH FEBBLED-GRAIN LEATHER. A. G. SPALDING & BROS., New York, N. Y.
Filed September 25, 1918. Serial No. 113,395. PUBLISHED FEBRUARY 4, 1919.
- 126,091. REFINED OIL FOR LIGHTING, HEATING, AND POWER PURPOSES. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y.
Filed March 11, 1919. Serial No. 116,474. PUBLISHED APRIL 22, 1919.
- 126,092. CHILDREN'S OVERALLS. STEEN & RIEMER, New York, N. Y.
Filed September 7, 1918. Serial No. 113,060. PUBLISHED MARCH 25, 1919.
- 126,093. CHILDREN'S DRESSES, COATS, AND SUITS. SUNSHINE CLOAK & SUIT COMPANY, Cleveland, Ohio.
Filed September 25, 1918. Serial No. 113,391. PUBLISHED MARCH 25, 1919.
- 126,094. MEDICINAL PREPARATION FOR DISORDERS OF STOMACH AND BOWELS. JAMES H. TANN, Dayton, Ohio.
Filed February 11, 1919. Serial No. 115,793. PUBLISHED MARCH 25, 1919.
- 126,095. DRY FUEL CONTAINING CHARCOAL AS A BASE. TAPLEX CORPORATION, New York, N. Y.
Filed January 18, 1919. Serial No. 115,298. PUBLISHED APRIL 8, 1919.
- 126,096. MEN'S AND WOMEN'S LEATHER BOOTS AND SHOES. E. E. TAYLOR COMPANY, Boston, Mass.
Filed February 11, 1919. Serial No. 115,794. PUBLISHED MARCH 25, 1919.
- 126,097. WOODEN TOYS—NAMELY, DOLLS, ANIMALS, BIRDS, AND DOLL-CRADLES. THOS. H. THOMPSON, New Haven, Conn.
Filed January 2, 1919. Serial No. 114,962. PUBLISHED MARCH 25, 1919.
- 126,098. LIQUID MEDICINE FOR EXTERNAL APPLICATION FOR CORNS, BUNIONS, AND CALLOSES. HUGH L. S. TOOMER, Louisville, Ky.
Filed February 11, 1919. Serial No. 115,795. PUBLISHED APRIL 1, 1919.
- 126,099. ELECTRIC PLUGS. CLIFFORD E. TREAT, Santa Ana, Calif.
Filed July 31, 1918. Serial No. 112,451. PUBLISHED NOVEMBER 12, 1918.
- 126,100. WRITING-PAPER. UNITED DRUG COMPANY, Boston, Mass.
Filed January 21, 1919. Serial No. 115,362. PUBLISHED APRIL 1, 1919.
- 126,101. AMMONIUM SULFATE. UNITED STATES STEEL PRODUCTS COMPANY, New York, N. Y.
Filed February 1, 1919. Serial No. 115,579. PUBLISHED MARCH 25, 1919.

- 126,102. CANNED SARDINES. VAN SANT & Co., San Francisco, Calif.
Filed February 17, 1919. Serial No. 115,938. PUBLISHED APRIL 8, 1919.
- 126,103. WATERPROOF CEMENT FOR USE ON LEATHER, ARTIFICIAL LEATHER, CLOTH, CANVAS, PAPER, AND WOOD. VAN SCHAAK BROS. CHEMICAL WORKS, Chicago, Ill.
Filed January 11, 1919. Serial No. 115,131. PUBLISHED MARCH 4, 1919.
- 126,104. MEDICINAL TONIC. WM. R. WANNER & COMPANY, INC., New York, N. Y.
Filed October 28, 1918. Serial No. 113,927. PUBLISHED MARCH 25, 1919.
- 126,105. PRINTING-PAPER. S. D. WABGAN COMPANY, Boston, Mass.
Filed September 9, 1918. Serial No. 113,097. PUBLISHED APRIL 1, 1919.
- 126,106. CERTAIN NAMED STATIONERS' SUPPLIES. FRANK A. WEEER MFG. CO., New York, N. Y.
Filed August 29, 1918. Serial No. 112,935. PUBLISHED DECEMBER 3, 1918.
- 126,107. PUBLICATION ISSUED MONTHLY KNOWN AS A HOUSE ORGAN. WEINSTOCK-NICHOLS CO., San Francisco, Oakland, and Los Angeles, Calif.
Filed February 1, 1919. Serial No. 115,580. PUBLISHED MARCH 18, 1919.
- 126,108. JAM OR CONSERVE. THE WALCH GRAPE JUICE COMPANY, Westfield, N. Y.
Filed January 20, 1919. Serial No. 115,331. PUBLISHED MARCH 25, 1919.
- 126,109. JAM OR CONSERVE. THE WALCH GRAPE JUICE COMPANY, Westfield, N. Y.
Filed January 20, 1919. Serial No. 115,332. PUBLISHED MARCH 25, 1919.

- 126,110. CANNED SWEETENED CONDENSED MILK. WHEAT'S ICE CREAM COMPANY, Buffalo, N. Y.
Filed December 31, 1918. Serial No. 114,939. PUBLISHED MARCH 25, 1919.
- 126,111. OINTMENT FOR TREATING CERTAIN NAMED CONDITIONS OF THE SKIN. WILLIAM H. WHITMORE, Cleveland, Ohio.
Filed January 22, 1919. Serial No. 115,384. PUBLISHED MARCH 25, 1919.
- 126,112. PRINTED BOOKS, MAGAZINES PUBLISHED MONTHLY, CATALOGUES, PERIODICALS PUBLISHED MONTHLY, AND MANUALS. WIRELESS PRESS, INC., New York, N. Y.
Filed October 7, 1918. Serial No. 113,616. PUBLISHED FEBRUARY 25, 1919.
- 126,113. TRADING STAMPS OR COUPONS. ALBERT WISS, Peekskill, N. Y.
Filed March 26, 1918. Serial No. 109,821. PUBLISHED APRIL 1, 1919.
- 126,114. NEWSPAPERS. YALE DAILY NEWS, New Haven, Conn.
Filed December 7, 1918. Serial No. 114,531. PUBLISHED APRIL 1, 1919.
- 126,115. MEN'S HATS. YOUNG BROTHERS, New York, N. Y.
Filed January 9, 1919. Serial No. 115,079. PUBLISHED MARCH 25, 1919.
- 126,116. MEN'S HATS. YOUNG BROTHERS, New York, N. Y.
Filed January 9, 1919. Serial No. 115,080. PUBLISHED MARCH 25, 1919.
- 126,117. PREPARATION FOR THE RELIEF OF EXCESSIVE PERSPIRATION. YOUTH CRAFT CO., Chicago, Ill.
Filed February 1, 1919. Serial No. 115,581. PUBLISHED MARCH 25, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

- 15,733. FODDER CUTTERS AND THEIR ATTACHMENTS. SMALLER MANUFACTURING COMPANY, Manitowoc, Wis.
Registered July 31, 1888. Renewed July 31, 1918.
- 17,011. LADIES' AND CHILDREN'S UNDER-CLOTHING, GARMENTS, CORSETS, AND EMBROIDERIES, LACES, AND TRIMMINGS FOR THE SAME. STAPLEY & SMITH, London, England.
Registered September 10, 1889. Renewed September 10, 1919.

- 17,012. LADIES' AND CHILDREN'S UNDER-CLOTHING, GARMENTS, CORSETS, AND EMBROIDERIES, LACES, AND TRIMMINGS FOR THE SAME. STAPLEY & SMITH, London, England.
Registered September 10, 1889. Renewed September 10, 1919.
- 17,013. LADIES' AND CHILDREN'S UNDER-CLOTHING, GARMENTS, CORSETS, AND EMBROIDERIES, LACES, AND TRIMMINGS FOR THE SAME. STAPLEY & SMITH, London, England.
Registered September 10, 1889. Renewed September 10, 1919.

DECISIONS

OF THE COMMISSIONER OF PATENTS AND OF UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS

Supreme Court of the United States.

MINERALS SEPARATION, LIMITED, MINERALS SEPARATION AMERICAN SYNDICATE, LIMITED, AND MINERALS SEPARATION NORTH AMERICAN CORPORATION v. BUTTE AND SUPERIOR MINING COMPANY, DESIGNATED AS BUTTE AND SUPERIOR COPPER COMPANY, LIMITED.

Decided June 2, 1919.

1. CLAIMS—CONSTRUCTION—ART WELL DEVELOPED.

Where a patentee comes so late into the art that his discovery rests upon a prior art so fully developed that it was clear from the record that approach was being made slowly but more and more nearly to the result which he reached and the final step taken by him was not a long one, the patent must be construed strictly, but candidly and fairly, to give to the patentee the full benefit, but not more, of the disclosure of his discovery which is to become a part of the public stock of knowledge upon the expiration of the patent period and which was the consideration for the grant of the patent monopoly.

2. SAME—PATENTEE BOUND BY HIS CLAIMS.

The courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office. As patents are procured *ex parte*, the public is not bound by them, but the patentees are, and the latter cannot show that their invention is broader than the terms of their claim, or, if broader, they must be held to have surrendered the surplus to the public. (*Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274; *White v. Dunbar*, 119 U. S. 47; *Motion Picture Patents Co. v. Universal Film Co.*, 243 U. S. 502.)

3. INFRINGEMENT—ORE-CONCENTRATION PROCESS—INCREASING AMOUNT OF LESS EFFICIENT OIL TO EXCEED TOTAL AMOUNT DESCRIBED AS NECESSARY.

The use of a more efficient in combination with a less efficient oil of the Sulman, Picard, and Ballot patent, No. 805,120, for an ore-concentration process, does not constitute infringement where the former is used in an amount within the limits of the claims, but the combined amount is in excess of such limit, and when the amount of the more efficient oil used would probably produce better results from the process than are produced with the combination of oils, particularly where the specification gave no notice to the public, and it is nowhere particularly pointed out in the claims, that some oils or combination of oils having a preferential affinity for metalliferous matter are more useful than others in the process, or that some may be used successfully and some not, or that some are "frothing oils," a designation not appearing in the patent, and that some are not.

4. SAME—SAME.

The Sulman, Picard, and Ballot patent, No. 805,120, for a process of concentrating ores, known as the air-filtration process, employing oil having an affinity for the ore particles, claims 9, 10 and 11 held void; claims 1, 2, 3, 4 and 12 construed and held not infringed by

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a process employing more than a fraction of one per cent. of oil on the ore.

5. DISCLAIMER—DELAY IN FILING—EVASIVENESS.

A disclaimer filed on March 28, 1917, after a decision of the United States Supreme Court on December 11, 1916, holding certain claims of the Sulman, Picard, and Ballot patent, No. 805,120, invalid, held not to have been "unreasonably neglected and delayed," having regard to the fact that the owners of the patent resided in a foreign country and to the wartime conditions of communication then prevailing. Also held that the disclaimer was not so evasive as to be invalid. While bordering on finessing, it cannot be interpreted as giving any rights under the patent greater than may be legitimately obtained under certain claims held valid.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Ninth Circuit.

Mr. Henry D. Williams, Mr. H. Kenyon, Mr. L. M. Garrison, Mr. Frederick D. McKenney, Mr. Garrett W. McEnerney, and Mr. Odell W. McConnell for the appellant.

Mr. Thomas P. Sheridan, Mr. Frederick P. Fish, Mr. J. Edgar Hull, Mr. J. Bruce Kremer, Mr. K. R. Babbitt, and Mr. T. L. Chadbourne for the appellee. Mr. Justice CLARKE delivered the opinion of the Court.

This is a suit by the Minerals Separation, Limited, et al., plaintiffs below and petitioners in this court, against the Butte & Superior Mining Company, defendant below and respondent here, to recover for infringement of United States Patent No. 835,120, applied for May 29, 1905, and issued November 6, 1906, the validity of which was sustained by this court in *Minerals Separation Limited, et al., v. Hyde*, (242 U. S. 261.)

The patent has been so frequently described in court proceedings,* that it will suffice to say of it here, in the terms of the specification, that it—

relates to improvements in the concentration of ores, the object being to separate metalliferous material, graphite and the like, from gangue, by means of oils, fatty acids or other substances, which have a preferential affinity for metalliferous matter over gangue.

*British Ore Concentration Syndicate, Ltd., v. Minerals Separation, Ltd., 25 R. P. C. 741.
Minerals Separation, Ltd., v. British Ore Concentration Syndicate, Ltd., 27 R. P. C. 33.
Ore Concentration Company, Ltd., v. Sulphide Corporation, Ltd., Supreme Court, New South Wales, 31 R. P. C. 216, 217.
Ore Concentration Company, Ltd., v. Sulphide Corporation, 31 R. P. C. 206. Privy Council British Empire.
Minerals Separation, Ltd., v. Hyde, 207 Fed., 956, D. C. Montana.
Hyde v. Minerals Separation, Ltd., 214 Fed., 100, (C. C. A. 9th Circuit.)
Minerals Separation, Ltd., v. Miami Copper Co., 237 Fed., 609, (D. C. Delaware.)
Minerals Separation, Ltd., v. Miami Copper Co., 244 Fed. 752, (C. C. A. 3d Circuit, including dissenting opinion of Judge Huffington, p. 775.)

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The patent contains thirteen claims, which, for the purposes of this opinion, may be conveniently grouped, as follows:

(1) Numbers 1, 2, 3, 4 and 12, as "fraction of one per cent. claims," because they call for the use of that amount of oil on the ore; (2) Numbers 5, 6, 7, 8 and 13, as "oleic acid claims," because they are limited to the use of oleic acid in a small fraction of one per cent. on the ore,—0.02–0.5 per cent.; (3) Numbers 9, 10 and 11, as "small quantity of oil claims," all three of which were held invalid by the former decision of this Court. Only the five "fraction of one per cent. claims," are involved in this case.

The respondent denied the validity of the patent and the claim of infringement.

The lower courts followed the decision by this Court and sustained the patent except as to the three "small quantity of oil claims."

The new evidence introduced on the validity issue is meager in amount, and of a character so unsatisfying that we see no reason for modifying our former conclusion.

The chief controversy in the case centers about the claim of infringement based upon the use of oil by the respondent in excess of one per cent. on, (of the weight of), the ore, after the decision of the former case by this Court.

The evidence shows, and counsel now admit, that prior to the decision by this Court in December, 1916, the respondent used, in its ore concentration operations, various oils in quantities less than one-half of one per cent. on the ore, but that from January 9, 1917, to the time of trial, with the exception of two or three weeks, it used oils of a composition which we shall discuss later on, in quantities in excess of one per cent. on the ore. In other respects its methods were substantially those of the patent in suit.

On this showing, the district court found the patent infringed by the respondent, when it used oil in quantities greater than, as well as when it used it in quantities less than, one per cent. on the ore.

The circuit court of appeals held the patent infringed only when the respondent used oil in quantities equal to, or less than, one-half of one per cent. on the ore, and it therefore reversed both of the holdings of the district court, but allowed recovery for the period when less than one-half of one per cent. of oil on the ore was used.

The circuit court of appeals derived its authority to limit the claims to one-half of one per cent. on the ore from the construction which it placed upon the following clause of the opinion of this Court in the former case, viz:

The patent must be confined to the results obtained by the use of oil within the proportions often described in the testimony and in the claims of the patent as "critical proportions," "amounting to a fraction of one per cent. on the ore."

The reasoning which carried two members of the court to their conclusion was, that, as shown by the evidence of the patentees and the argument of their counsel, the amount of oil which is "critical," in the sense of marking the point of transi-

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tion from the processes of the prior art to the process and discovery of the patent, is one-half of one per cent. of oil on the ore, and that therefore this Court, by using the expression quoted, intended to limit the claims, not to a "fraction of one per cent." but to a "fraction of one-half of one per cent. on the ore."

The specification of the patent points out that the proportion of mineral which floats in the form of froth varies with different ores and with different oily substances used and that simple preliminary tests are necessary to determine which oily substance will yield the best results with each ore. Of this feature of the patent this Court said:

Such variation of treatment must be within the scope of the claims, and the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject matter. . . . The process in one for dealing with a large class of substances and the range of treatment within the terms of the claims, while leaving something to the skill of persons applying the invention, is clearly sufficiently definite to guide those skilled in the art to its successful application, as the evidence abundantly shows. This satisfies the law.

Thus was it plainly held proper for the patentees to claim a reasonable degree of variation—"within the terms of the claims"—in the amount of oil to be used in the application of their discovery in practice, and that the restricting of the amount to a fraction of one per cent. on the ore was reasonable and lawful.

The two expressions "critical proportions" and "amounting to a fraction of one per cent. on the ore" being used, the former derived from the evidence and the latter from the claims of the patent, obviously, to the extent that they differ—if they differ at all—the language of the claims must rule in determining the rights of the patentees.

While in the former case this Court was not called upon, and in its opinion did not attempt, to define the scope of the claims, but was considering the patent only from the point of view of the invention and usefulness of the claimed discovery, nevertheless, the language quoted seems to indicate clearly enough that the opinion of the Court then was, as it is declared now to be, that as to the claims here involved the patent extends to and covers the use in the process of oils of the patent, in amounts equal to any fraction of one per cent. on the ore. The oleic acid claims are in terms limited to 0.02–0.5 per cent. on the ore. The circuit court of appeals fell into error in the interpretation which it placed upon our opinion and its judgment in this respect is reversed.

Since the case must be retried, there remains to be considered the reversal by the circuit court of appeals of the holding by the district court that the use of oil by the respondent in excess of one per cent. on the ore constituted an infringement of the patent.

As we have said, prior to the former decision by this Court, the respondent used in its ore-concentration process less than one-half of one per cent. of oil on the ore, and as to such practice infringement is clear, but from January 9, 1917, to the time of trial, with slight exceptions, it used in excess

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of one per cent. on the ore, and it is necessary to consider only the operations during this latter period. The oil used during this period, was a compound, varying in composition from time to time, but we agree with the district court in selecting as typical a mixture made up of eighteen per cent. of pine-oil, and the remainder of petroleum products or derivatives—twelve per cent. of kerosene-oil, and seventy per cent. of fuel-oil. Of this compound there was used thirty pounds to the ton of ore, which would be one and one-half per cent. on the ore. As thus stated, without more, it is obvious that the use of such an amount of oil, would not infringe the claims of the patent which limit the oil to be used to a fraction of one per cent. on the ore.

But the contention of the petitioners, approved by the district court, was, and now is, that kerosene and fuel oil were inert and valueless, if not harmful, as used by the respondent in the process and rendered the recovery less than it would have been if the pine-oil only had been used; that they were added solely to carry the content of oil beyond the prescribed fraction of one per cent. on the ore, in the hope of technically avoiding infringement; and that essentially in its operations the respondent used the process of the patent with twenty-seven one-hundredths of one per cent. of pine-oil on the ore, and therefore infringed it.

The respondent replied that it was not true that kerosene and fuel oil were inert and useless, and asserted that they were oils of the patent, "having a preferential affinity for metalliferous matter;" that the patentees by the claims of their patent had limited their exclusive right to the use, in the process, of any oil or oily substance having such an affinity, but in an amount not greater than a fraction of one per cent. on the ore, and that, therefore, the process of the respondent, in which more than one per cent. of oil on the ore was used, did not infringe the patent.

The entire evidence in the Hyde case was introduced on the trial of this case, and whether the petroleum products or derivatives used by the respondent were oils within the scope of the patent must be determined from the record now before us.

It is admitted that petroleum products are "oils having a preferential affinity for metalliferous matter."

In each of the four claims of the "complete specification" of the British patent, filed by the same persons who were patentees of the patent in suit, on June 3, 1905, "petrol" is given as an equivalent of oleic acid in the process. This appears in the statement, repeated in each claim, that the ore and acidified water shall be mixed or agitated with—

a small proportion of an oily substance such as oleic acid or petrol, amounting to a fraction of one per cent. on the ore.

"Petrol" is the name used in England for gasoline.

The claims of the patent in suit which we are considering call for the use in the process of an

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"oily liquid," "an oily substance," and in the twelfth claim simply of an "oil." These expressions are said by Professor Chandler, an expert for the petitioners, much relied on in the Hyde case and in this, to include petroleum products.

Higgins, one of the experimenters who discovered the process in suit, and who is much relied upon by the petitioners as an expert witness in both cases, testified as follows in the Hyde case:

Q. Have you since found it possible to use other oils than oleic acid with the result of producing a froth?

A. Yes.

Q. What other oils?

A. I have obtained satisfactory results by the use of petrol and certain proportions of distillate of crude petroleum, such as Cosmos oil.

and he said "Cosmos oil" is "a petroleum distillate."

Chapman, an engineer and a witness for the petitioners in the Hyde case, testified that he had obtained good recoveries in the laboratory and in commercial practice, from the ore of the Braden mine, in Chile, using three pounds of Texas fuel-oil to one pound of American wood-tar oil per ton of ore. Texas fuel-oil is petroleum.

Graninger, an engineer employed by one of the petitioners in installing its flotation plants, testified in this case that in a mine in British Columbia he used a mixture of oil, 75 per cent. of which was derived from petroleum.

There is much more of the same character from witnesses for the petitioners and the evidence of the respondent is strongly to the effect that petroleum products are useful and efficient and have been widely used in the process in laboratory and commercial practice.

Without quoting more from the record before us, we must conclude that when the patent in suit was obtained, and even until the testimony in the Hyde case was closed in 1912, petroleum products were recognized by the petitioners, and that they are still used, as oils, efficient, and useful in the process of the patent in suit. Much of this evidence is especially impressive because the papers from which it is derived were written and the witnesses testified before the question as to petroleum, now made in this case, was raised or discussed.

While we thus conclude that petroleum and petroleum products are oils useful in this process of the patent, it is also clear that they are not as highly efficient as pine-oil and several other oils and combinations of oils, which, in the nomenclature of the record are called "frothing oils," and also that better results would probably have been obtained by the use of less than one per cent. on the ore, of pine-oil alone, than were obtained by the respondent with that oil in combination with the larger amounts of petroleum products. And this presents the further question necessary to a decision of the case, viz:

Does the use of a more efficient, in combination with a less efficient, oil of the patent, constitute infringement, where the former is used in an amount within the limits of the claims but the combined amount is in excess of such limit, and when the

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amount of the more efficient oil used would probably produce better results from the process than are produced with the combination of oils?

To answer this question requires a consideration of the state of the prior art as it was when the discovery of the patent was made, and of the scope of the claims which we are considering.

It is always difficult to recover the realities of a situation long past, such as we have here, but it is especially difficult when the importance of the discovery has led, as in this case, to extensive improvements in mechanical appliances for utilizing the invention and to large additions to the knowledge of the adaptability to the process of various oils, singly and in combination.

We held in the former case that the patentees came late into the field of ore concentration investigation and that their discovery rests upon a prior art so fully developed that it was—clear from the record that approach was being made slowly but more and more nearly to the result which was reached by the patentees of the process in suit in March, 1905,

and that their final step was not a long one.

Such a patent, in such a field of investigation, must be construed strictly, but candidly and fairly, to give to the patentees the full benefit, but not more, of the disclosure of their discovery which is to become a part of the public stock of knowledge upon the expiration of the patent period, and which was the consideration for the grant to them of a patent monopoly.

With the state of the prior art in mind, we come to consider the nature and extent of the disclosures of the patent in suit, but only with respect to the kinds and quantities of oil which may be used in the process.

The specification recites that the invention of the patent relates to an "improvement" upon prior processes employed in ore concentration—by means of oils, fatty acids, or other substances which have a preferential affinity for metalliferous matter over gangue.

Next come the specific disclosures required by the patent law (R. S. 4888), which are intended to describe the advance which the patentees claimed to have made from the prior art. Cattermole agglomeration of metalliferous matter into granules, which separate from the gangue, and sink to the bottom of the pulp under treatment, to the discovery of the patent in suit, with its metal-bearing froth, rising to the surface of the pulp. Here is the essence of the discovery and it is announced in these terms:

We have found that if the proportion of oily substance be considerably reduced, say to a fraction of one per cent. on the ore, granulation ceases to take place, and after vigorous agitation there is a tendency for a part of the oil-coated metalliferous matter to rise to the surface of the pulp in the form of a froth or scum.

This is followed by the description of three "factors" on which "this tendency is dependent," viz, slight acidification, heat, and fine pulverization of the ore, and then the disclosure concludes with the statement that the proportion of mineral which floats in the form of froth varies with different ores and with different oily substances, and that a

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simple preliminary test is necessary to determine which oily substance yields the proportion of froth or scum desired.

The only additional statement contained in the specification, which is in the nature of a disclosure, is found in the description of the example of the application of the invention, in which it is stated that the "froth or scum" derives its power of flotation mainly from the inclusion of air-bubbles introduced into the mass by agitation, such bubbles or air-films adhering only to the mineral particles which are coated with oleic acid.

There remain the claims of the patent, in which the act of Congress requires that the patentee shall—

particularly point out and distinctly claim the improvement which he claims as his invention or discovery.

And of these this court has said in *Keystone Bridge Co. v. Phoenix Iron Co.*, (95 U. S. 274, 278:)

But the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office. As patents are procured *ex parte*, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim; or, if broader, they must be held to have surrendered the surplus to the public.

And in *White v. Dunbar*, (119 U. S. 47, 52:)

The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.

And see *Motion Picture Patents Co. v. Universal Film Co.*, (243 U. S. 502, 510.)

Since we are concerned only with the five "fraction of one per cent. claims," and since the question we are discussing relates only to the use of petroleum products, we need consider them only with respect to the amount and character of the oil prescribed, and, as they are substantially identical, we quote the first as typical:

The herein described process of concentrating ores which consists in mixing powdered ore with water, adding a small proportion of oily liquid having a preferential affinity for metalliferous matter (amounting to a fraction of one per cent. on the ore), agitating the mixture until the oil-coated mineral matter forms into a froth, and separating the froth from the remainder by flotation.

The first three claims declare that, so far as oil is concerned, the discovery resides or consists in adding a small proportion of an oily liquid having a preferential affinity for metalliferous matter, amounting to a fraction of one per cent. on the ore;

the fourth claim differs only in substituting the word "substance" for "liquid" in the first three; and the twelfth claim provides for carrying out the process with oil in water containing a fraction of one per cent. of oil or the ore.

From this consideration of the terms of the patent as written, it is apparent that it makes no differentiation whatever, either in the claims or in the specification, among the oils having a preferential affinity for metalliferous matter, and that its disclosure, to which the petitioners must be limited, is, that when a fraction of one per cent. on the ore of any such oil is used in the manner prescribed, there will be produced a metal-bearing froth, the result of the process. No notice is given to the public, and it is nowhere "particularly pointed out" in

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the claims, that some oils or combination of oils, having a preferential affinity for metalliferous matter, are more useful than others in the process, or that some may be used successfully and some not, or that some are "frothing oils," a designation not appearing in the patent, and that some are not. The patentees discovered the described process for producing the result or effect, the metal-bearing froth, but they did not invent that result or froth,—their patent is on the process, it is not and cannot be on the result,—and the scope of their right is limited to the means they have devised and described as constituting the process. (*Corning v. Burden*, 15 How., 252, 268; *Le Roy v. Tatham*, 14 How., 156, 175; *Fuller v. Yentzer*, 94 U. S., 288; *Rob. on Pats.*, Sec. 149.)

The patent in suit was applied for in this country on May 29, 1905, within a few weeks after the discovery which it embodies was made, and whether, from haste or lack of investigation, from the necessity of meeting the exigencies imposed by the prior art or from a desire to make the claims as comprehensive as possible, this discussion of its terms makes it clear, that the only disclosure as to the kind and amount of oil which the patentees made to the public as necessary to the practicing of their process is that it must be an oil or oily substance, or oily liquid having a "preferential affinity for metalliferous matter," and that it shall be limited in amount "to a fraction of one per cent. on the ore."

It is argued that the provision of the claims that the mixture prescribed, of oil, water and ore, shall be agitated, until the oil-coated mineral matter forms into a froth, serves to differentiate the "frothing oils" from others having the required preferential affinity for metalliferous matter but which, when agitated in the mixtures, may not produce the characteristic froth, if any such there are, and that a proper construction of the patent limits it to such "frothing oils" and renders the use of them in a fraction of one per cent. on the ore an infringement when used with "non-frothing oils" having the required affinity in amounts sufficient to make the combination exceed the quantity limit of the patent.

To give such a construction to the patent would subordinate the clear description contained in it of what are oils of the process, to an implied and vague description and classification which would leave the whole subject again at large, to become a field for further experimentation, without definition in the patent of what oils or froths would satisfy it. So interpreted the patent could not reasonably be said to contain a disclosure of the discovered process in the "full, clear, concise and exact terms" required by law (R. S. 4888) and the claims might conceivably be said to fall short of "particularly pointing out and distinctly claiming" any discovery at all within the meaning of the act of Congress.

Thus when to our former conclusion that the respondent used an efficient oil of the patent, we add

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the further conclusion, derived from a study of its terms, that the patentees failed to differentiate among the oils described in the patent, we must conclude that it is impossible for the courts to distinguish among them, as more or less efficient in the process, without amending the claims of the patent and this they are powerless to do.

We are confirmed in the conclusion thus arrived at by the evidence which the patentees in the Hyde case, petitioners in this, introduced to show that their discovered process could not be made operative when more than a fraction of one per cent. of oil on the ore was used, and that the use of a greater amount would not produce the typical froth which results from it,—this without differentiation among the oils described in the patent, save as to their varying adaptability to different ores.

Thus, Ballantyne, a metallurgist and the patent agent who prepared the patent specifications for the petitioners, when called by them as an expert witness, testifies to intimate relations with the patentees and with their investigations before and since the patented discovery was made, and says:

I have never seen the agitation-froth process successfully carried out by the use of an amount of oil equal to practically one per cent. by weight on the ore, and in my opinion .0009 per cent. of oil would not be a proper quantity (that is to say a suitable and economical quantity), as contemplated by the patent, and would not, therefore, be a suitable fraction of one per cent., as contemplated by the patent.

Liebman, an expert much relied upon by the petitioners, testified:

Q. I understand from your answer . . . that you have never in your operations . . . obtained any floating mineral-bearing froth when using an amount of oil, or other selective agents, amounting to more than one per cent. of the weight on the ore. In order that there may be no misunderstanding, will you state whether I have understood you rightly?
A. That is my recollection.

John Ballot, one of the patentees, testified that he had never seen a froth of the character produced by the patent in suit using a pulp containing more than one per cent. of oil.

There is much more of similar import in the record. This, however, will suffice, adding only the record of a remarkable incident which occurred in this court during the argument of the Hyde case by Mr. Kenyon for the petitioners:

Mr. Justice McReynolds: I would like to ask you when in this process of reducing oil your invention came into existence?

Mr. Kenyon: At about one-half of one per cent. of oil. Mr. Justice McReynolds: Before you got to the one-half of one per cent. did you have any invention?

Mr. Kenyon: We were passing from the region of Cattermole, which was a distant—

Mr. Justice McReynolds: I want to know when your invention came into existence?

Mr. Kenyon: This invention was not reached, I should say, from those figures, until about .5, that is one-half of one per cent. of oil was reached.

Mr. Justice McReynolds: At one per cent. you had no invention?

Mr. Kenyon: No. Mr. Justice McReynolds: At one-half of one per cent. you did have invention?

Mr. Kenyon: It began to come. Remote, but it began to come. At .3 of one per cent. the float vastly increased. At .1 of one per cent. the float again vastly increased.

Mr. Justice McReynolds: When this float has more than one-half of one per cent. of oil it does not infringe?

Mr. Kenyon: It does not infringe.

Mr. Justice Pitney: What have you to say in answer to what Mr. Scott said the other day to the effect that 1.8 per cent., or perhaps more, of oil, would give the same result with increased agitation?

Mr. Williams: Absolutely no.

Mr. Kenyon: It would not.

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While parties should not be held rigidly to statements made by their counsel in the stress of argument, even when replying to questions from members of the court, nevertheless these statements from leading counsel in charge of the Hyde case and of this case, are impressive and significant.

This and much more of like character in the record brings us unhesitatingly to the conclusion that the scope we have given to the patent, based upon an interpretation of the language of the claims, is justified also by the evidence in the case and that it is, in fact, that which the petitioners and their counsel, until very recently, placed upon it in full confidence, that the essence of the discovery lay to such an extent in the use of a small amount of oil, such as is described in the patent, that the result could not be obtained with more than a fraction of one per cent. on the ore.

It must be added that the evidence is far from satisfying that the results of the respondent's process was, in fact, that peculiarly superior quality of metal-bearing froth characteristic of the patented process when worked with a fraction of one per cent. on the ore. The evidence, otherwise doubtful on the point, is rendered especially so by the testimony introduced by the petitioners, and not contradicted, that a computation on the basis of the tonnage of ore treated by the respondent shows that if the process as practised by it after January 9, 1917, had been used through the year it would have involved a loss of over a million dollars in increased cost of oil and in diminished recoveries, as compared with what the results of operation would have been for the same time using the process of the patent as practised by the petitioners. It is difficult to see how a process so wasteful and inefficient as that of the respondent is thus proved to be can be other than substantially different from that of the petitioners.

It is vaguely suggested in the testimony for the petitioners that there was some peculiarity in the composition of the ore of the respondent, or in the treatment of it, which resulted in the presence of "clayey gangue slimes" which absorbed an unusual quantity of oil and that this contributed to render it possible to produce the results of the patented process when more than the prescribed fraction of one per cent. of oil on the ore was used.

It is hard to see how this, if true, would be of value to the petitioners, but the evidence is quite too indefinite in character and meagre in extent to be accepted as the basis for the judicial determination of such a claim.

The respondent contends that the disclaimer filed by the petitioners with respect to the three claims held invalid by the decision of this court in the former case, was so delayed and is so evasive in form that it is invalid and that, for this reason, the petitioners should not be permitted to further prosecute this suit, under the provisions of Revised Statutes 4917, 4922.

The decision holding the three claims invalid was rendered on December 11, 1916, and the disclaimer was recorded on the 28th day of March, 1917. Having regard, to the fact that the owners of the patent in suit resided in a foreign country, and to the war time conditions of communication then prevailing, the entry required by law was not "unreasonably neglected or delayed." While the wording of the disclaimer borders on finesse, we do not think it can be interpreted as giving any rights under the patent greater than may be legitimately obtained under the claims held valid, and we therefore deem it sufficient to meet the requirements of the statutes cited.

It results that the decree of the circuit court of appeals that the respondent infringed the patent only when using one-half of one per cent. or less of oil on the ore must be reversed, but that its implied holding that the use made by respondent of petroleum products and pine-oil in excess of one per cent. on the ore did not constitute infringement must be sustained. The cause is remanded to the district court for further proceedings in conformity with this opinion.

Reversed in part.

ADJUDICATED PATENTS.

(U. S. D. C. Ill.) The Sinks patent, No. 1,005,756, dated October 10, 1911, relating to concrete floors for buildings, *Held invalid. Condon Co. v. Corrugated Bar Co.*, 256 Fed. Rep., 672.

(U. S. C. C. A. Ill.) The Cropp patent, No. 947,193, dated January 18, 1910, claims 1, 2, 3, 4, 7, 9, 12, 13, 14 and 16, for a concrete-mixer, *Held valid and infringed. Standard Scale & Supply Co. v. Cropp Concrete Machinery Co.*, 256 Fed. Rep., 666.

(U. S. C. C. A. N. Y.) The Rutan patent, No. 1,170,193, claims 1, 2 and 3, for hoisting apparatus, *Held valid, but not infringed. Geoghegan v. Ernst*, 256 Fed. Rep., 670.

(U. S. C. C. A. N. Y.) The Stryker patent, No. 1,148,128, claims 1 and 2, for incandescent-electric-light deflectors, *Held valid and infringed. Stryker Deflector Co. v. Perrin Mfg. Co.*, 256 Fed. Rep., 656.

Changes in Classification.

(Order No. 2,509.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 7, 1919.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 172, Electricity—Conductors, (Division XLII,) abolish subclasses—

Connectors—
Wire-splices—
Sleeved—
304. Bent or upset end.
305. Crimped or twisted.

The patents formerly contained in these subclasses have been placed for the most part in class 287, Rod Joints or Couplings.

J. T. NEWTON,
Commissioner.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

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Designs.....	19—No. 33,631 to No. 33,640, inclusive.
Trade-Marks.....	110—No. 126,115 to No. 126,227, inclusive.
Reissues.....	7—No. 14,695 to No. 14,701, inclusive.
Total.....	850

Give the graduate a good start in life with War Savings Stamps.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

Jose Vila Fernandez, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Gilbert Jackson, of 1731 Amsterdam avenue, New York, N. Y., for patent and a patent granted January 29, 1918, No. 1,254,898, to Jose Vila Fernandez, of Central Dos Amigos, Camaguey, Oriente, Cuba, and a notice of such declaration sent by registered mail to said Jose Vila Fernandez at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Jose Vila Fernandez, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

A. B. Clark Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Anchor Leather Co., of 1001

West Division street, Chicago, Ill., for registration of a trade-mark and trade-mark registered May 29, 1906, No. 33,263, to A. B. Clark Co., of 29 Spruce street, New York, N. Y., and a notice of such declaration sent by registered mail to said A. B. Clark Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said A. B. Clark Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 10, 1919.

Edward T. Willis and David B. Macdonald, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of S. Hirsch Distilling Co., of No. 417 Delaware street, Kansas City, Mo., for registration of a trade-mark and trade-mark registered March 25, 1890, No. 17,721, to Edward T. Willis and David B. Macdonald, and a notice of such declaration sent by registered mail to said Edward T. Willis and David B. Macdonald at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Edward T. Willis and David B. Macdonald, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Adverse Decisions in Interference.

PATENT No. 1,223,850.

On June 30, 1919, a decision was rendered that Hans Braille was not the first inventor of the subject-matter covered by claims 1, 2, 3, and 4 of his Patent No. 1,223,850, subject, "Shock-absorber for vehicles," and no appeal having been taken within the time allowed such decision has become final.

Amendments.

RULE 73. In every amendment the exact word or words to be stricken out or inserted in the application must be specified and the precise point indicated where the erasure or insertion is to be made. All such amendments must be on sheets of paper separate from the papers previously filed, and written on but one side of the paper. Erasures, additions, insertions, or mutilations of the papers and records must not be made by the applicant.

Amendments and papers requiring the signature of the applicant must also, in case of assignment of an undivided part of the invention, be signed by the assignee. (Rules 6, 107.)

APPLICATIONS UNDER EXAMINATION.

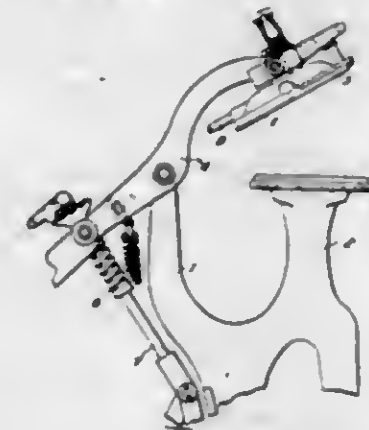
Condition at Close of Business July 25, 1919.

Room No.	Divisions and subjects of invention	Oldest new application and oldest action by applicant awaiting office action.		No of applications awaiting action.
		New.	Amended.	
314	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 17	May 19	390
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Processes; Tents, Canopies, Umbrellas, and Caves; Tobacco.	Mar. 8	Apr. 29	714
173	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 3	Jan. 16	196
234	4. Conveyers; Elevators; Escavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Mar. 26	June 10	473
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter; Tying Cords or Strands.	May 31	Feb. 13	194
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 22	Apr. 7	397
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	May 12	June 27	313
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 8	June 3	204
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Feb. 21	Mar. 24	313
235	10. Carriages and Wagons; Motor Vehicles.	Mar. 18	May 20	824
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 1	June 18	293
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements.	Dec. 31	Jan. 14	1130
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 22	June 21	688
223	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 24	May 3	300
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 15	May 12	650
112	16. Radiant Energy; Telegraphy; Telephony.	Feb. 14	Mar. 1	712
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 30	May 28	343
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 24	Apr. 8	484
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 24	Apr. 12	324
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Saws; Undertaking.	June 16	June 4	283
313	21. Brakes and Gears; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 12	Mar. 11	391
249	22. Aeronomics; Firearms; Ordnance.	May 12	June 18	286
217	23. Acoustics; Com-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 23	May 21	432
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 9	Apr. 4	474
316	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 10	June 16	163
108	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Dec. 21	Feb. 24	637
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	May 7	June 2	448
225	28. Internal-Combustion Engines.	Feb. 6	May 3	585
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 8	700
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 8	July 9	364
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glee; Sugar and Salt.	May 31	Mar. 22	417
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Jan. 25	May 18	654
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Paving; Roofs.	Feb. 11	Mar. 17	343
304	34. Railway; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 22	May 14	250
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	June 2	June 21	299
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	May 26	Apr. 3	774
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Mar. 17	Apr. 15	713
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stationery; Stone-Working; Wells.	June 16	June 17	210
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 11	Jan. 23	707
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 21	Mar. 24	410
126	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 13	Mar. 27	410
111	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electricity, Conducts; Electric Signaling.	Mar. 13	Mar. 17	580
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Jan. 13	June 9	145
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	May 14	June 16	110
379	45. Clutches; Lubrication; Motors; Railway Brakes.	Mar. 14	May 22	280
Oldest new case, Dec. 21; oldest amended, Jan. 11.				19,900
Total number of applications awaiting action.				
163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks.	May 31	July 2	1553
	Designs.	May 9	June 17	616
	Labels and Prints.	July 1	July 14	112

PATENTS

GRANTED JULY 29, 1919.

1,311,151. GARMENT-PRESS. WILLIAM E. ANDRES, Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 19, 1916. Serial No. 104,434. 4 Claims. (Cl. 68-9.)



1. In a garment press, a stationary buck, a movable buck supported for movement in the arc of a circle, the ironing faces of said bucks being substantially radial with respect to the path of movement of the movable buck, a steaming device along the front edge only of the movable buck and adapted to project a spray of steam across the face of the movable buck and toward the rear edge, and means for supplying steam to said steaming device.

1,311,152. MEANS FOR INDICATING THE CONDITION OF INTERNAL-COMBUSTION ENGINES. HARRISON H. BOYCE, Forest Hills, N. Y. Filed June 20, 1914. Serial No. 846,247. 3 Claims. (Cl. 73-52.)



1. In apparatus of the character described, the combination with the radiator of a water-cooled internal combustion engine, said radiator having a filler spout and cap for closing the same, said cap having an opening formed therethrough, of a temperature indicating instrument mounted on said cap and comprising a casing mounted above the cap and having a stem of reduced diameter projecting through the opening in the cap, said instrument having a temperature responsive element carried by the stem and located within the radiator, said element being of such dimensions as to permit it to be passed through the opening in said cap, said casing having a window in the rear, a drum within the casing mounted to rotate about a vertical axis and having a horizontal series of temperature indicating indicia thereon adapted to be successively exposed to view through

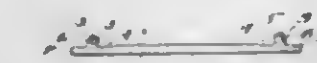
said window, means engaging the portion of the stem projecting below the cap for securing the instrument to the cap, and movement transmitting means connected with said temperature responsive element and arranged to rotate said drum.

1,311,153. MEANS FOR ILLUMINATING INDICATING INSTRUMENTS. HARRISON H. BOYCE, Forest Hills, N. Y. Filed Mar. 29, 1916. Serial No. 87,421. 6 Claims. (Cl. 240-2.)



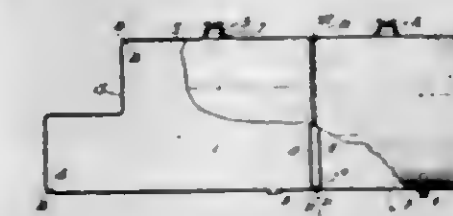
3. The combination of an automobile radiator cap, an indicating instrument secured thereto, a bracket clamped between said instrument and said cap, and an electric lamp carried by said bracket.

1,311,154. INSOLE. EDWIN N. CHANDLER, Braintree, Mass. Filed Mar. 28, 1916. Serial No. 87,334. 2 Claims. (Cl. 30-22.)



1. A welt insole for boots and shoes, comprising a leather blank having a composite sewing rib formed around the marginal portion of the forepart and shank of the blank, consisting in a lip and a flap cut from said blanks parallel with each other and each turned upwardly and backwardly toward the other, being united by an intermediate reinforcing element between the lip and flap to constitute the composite sewing rib.

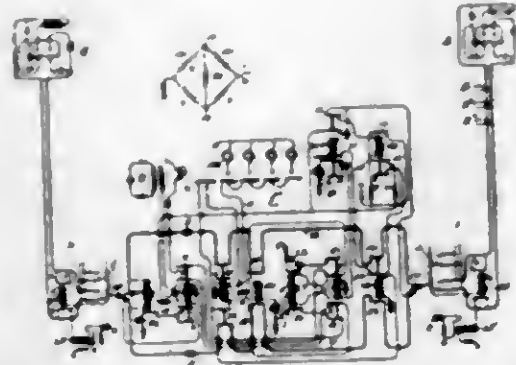
1,311,155. OIL WAGON-TANK. AUGUSTINE DAVIS, Jr., Cincinnati, Ohio. Filed June 22, 1914. Serial No. 840,444. 4 Claims. (220-4.)



4. A safety compartment wagon tank, comprising a plurality of shells, and flanged heads welded into the adjacent ends of the shells.

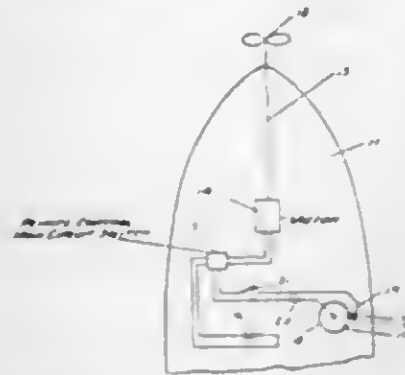
adjacent ends of the shells with their flanges extending into contiguity and welded to each other and their double-partition-forming walls spaced apart.

1,311,156. AUTOMATIC TEST AND RINGING CIRCUITS. HIRSH D. CUNTER, Chicago, and HARVEY H. IDE, La Grange, Ill., assignors to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1915. Serial No. 19,169. 19 Claims. (Cl. 179-55.)



11. A telephone system including subscribers' telephone lines, a link circuit provided with a pair of terminals for interconnecting said lines, a test relay for said link circuit, means for either supplying or depriving said relay of current when connected to a called one of said lines according to whether said line is in an idle or a busy condition, and a relay controlled by said test relay for operatively connecting the said link circuit to the subscriber's line.

1,311,157. SUBMARINE SIGNALING. REGINALD A. FRASER, Brookline, Mass., assignor to Submarine Signal Company, Portland, Me., a Corporation of Maine. Filed Mar. 13, 1918. Serial No. 222,090. 2 Claims. (Cl. 177-352.)



1. The method of signaling in a fluid medium which consists in varying by control in a predetermined manner the noises produced by the motion of a vessel through the fluid medium, whereby intelligible predetermined signals may be given to a distant observer.

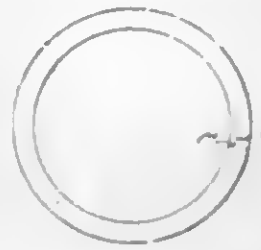
1,311,158. PROCESS OF CONCENTRATING ACETIC ANHYDRIDE. LEON S. FINCH, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 7, 1919. Serial No. 281,220. 6 Claims. (Cl. 23-24.)

1. The process of concentrating acetic anhydride which comprises mixing the same with sodium acetate and distilling off acetic anhydride.

1,311,159. PACKING-RING. PHILIP M. FROEN, Detroit, Mich. Filed Feb. 16, 1914. Serial No. 518,834. 4 Claims. (Cl. 288-1.)

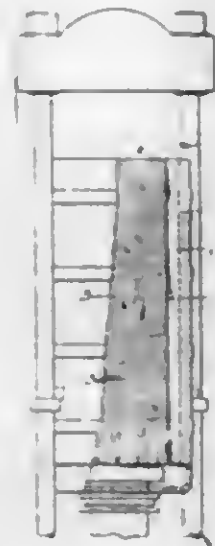
2. A packing ring comprising an annular body, said body having a slanting surface upon one side thereof, the

said body being split providing two extending projections which slidably engage each other, said extensions engaging along a plane which is at substantially right angles



to a diameter of the ring, the plane of the surfaces upon which the projections slidably engage intersecting the surface of the aforesaid slanting portion.

1,311,160. CAGE AND DRAINAGE-PLATE FOR OIL-EXTRACTING PRESSES. ALFRED W. FRENCH, Piqua, Ohio. Filed Dec. 31, 1917. Serial No. 209,654. 7 Claims. (Cl. 100-34.)



1. A drainage plate for oil presses having narrow drainage slits in the side thereof which faces the material being pressed, and a plurality of spaced openings in the opposite side of the plate connecting with each of said narrow slits, said slits having contracted mouths of less width than the inner portions of the slits.

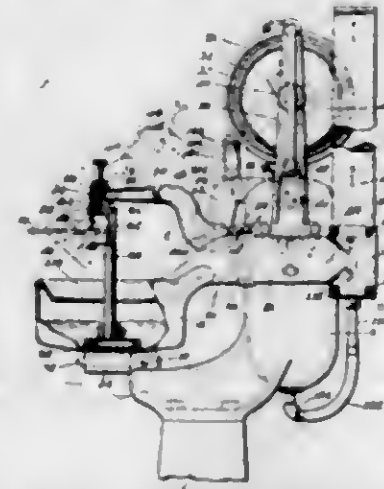
2. A drainage plate for oil presses having narrow drainage slits in the side thereof which faces the material being pressed, and a plurality of spaced openings in the opposite side of the plate connecting with each of said narrow slits, said slits having lips at their outer edges projecting toward each other from the opposite walls of the slits.

3. A drainage plate for oil presses having narrow drainage slits in the side thereof which faces the material being pressed, and a plurality of spaced openings in the opposite side of the plate connecting with each of said narrow slits, said slits having compressed edge portions forming lips which contract the mouths of the slits.

4. A drainage plate for oil presses having narrow slits with contracted mouths in the side of the plate which faces the material being pressed, face depressions in said side of the plate connecting with said slits, and a plurality of spaced openings in the opposite side of the plate connecting with each of said narrow slits.

5. A drainage plate for oil presses having narrow drainage slits in the side thereof which faces the material being pressed, and a plurality of spaced openings in the opposite side of the plate connecting with each of said narrow slits, said plate having shallow face depressions from which said slits extend into the plate.

1,311,161. BLACKING-MACHINE. FREDERICK M. FURBER, Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 20, 1915. Serial No. 64,025. 48 Claims. (Cl. 91-45.)



5. A machine of the class described having, in combination, means for delivering blacking in the form of spray, and a work guide extending longitudinally of the path of the spray to permit the work to be positioned in the path of the spray at different distances from the point of delivery.

7. A machine of the class described having, in combination, means for delivering blacking in the form of spray, and adjustable means for variably determining the distance from the point of delivery of the spray at which work shall be presented in the path of the spray.

36. A machine of the class described having, in combination, a blacking receptacle formed with an opening, means for delivering a spray of blacking toward said opening, and additional means for creating an inward current through said opening to facilitate the passage of the spray through the opening.

48. In a machine in which the work is presented by hand to relatively stationary mechanism for delivering blacking in the form of spray, the combination with said mechanism of means to confine the spray to a predetermined marginal portion of the work.

1,311,162. WINDOW-STEADYING DEVICE. LOUIS W. GATES and JOHN T. ALLMANN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1918. Serial No. 257,926. 7 Claims. (Cl. 16-19.)

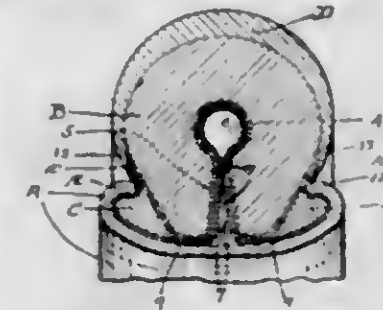


5. An anti-rattler, having in combination, a housing for attachment to the face of a post, an arm movable therein, a spring for resisting such movement, and a shoe on the said arm but offset therefrom to function across the face of said housing in a plane parallel therewith.

1,311,163. RESILIENT WHEEL-TIRE. GEORGE E. GILMORE, Cleveland, and HARVEY M. HAXER, Wellington, Ohio, assignors, by direct and mesne assignments, to The Security Tire & Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 19, 1918. Serial No. 263,123. 8 Claims. (Cl. 152-1.)

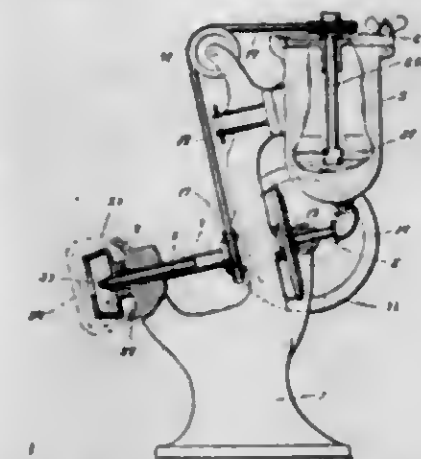
1. In a resilient tire, the combination, with an elastic and compressible body having a central chamber and a slot which is formed in the inner half of said body and

arranged centrally between the sides of the tire and divides said half into two parts, and two beads at opposite sides respectively of said slot, of a flexible covering for the walls of the aforesaid chamber, said covering being se-



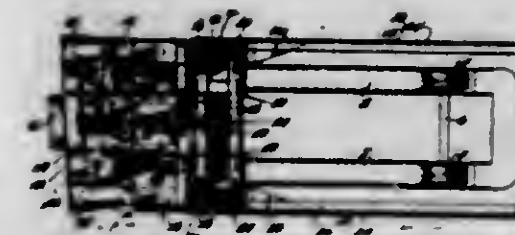
cured to said body, each of the aforesaid parts of the inner half of said body being embraced by an extension of said covering, and said extension participating in the attachment of the adjacent bead to said body.

1,311,164. EDGE-INKING MACHINE. PEARLY R. GLASS, Brookline, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 2, 1915. Serial No. 64,706. 7 Claims. (Cl. 91-49.)



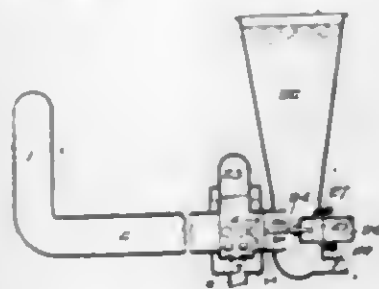
1. A machine for inking the edges of pieces of leather, having, in combination, a reservoir for ink, an outlet pipe leading from said reservoir, a sleeve rotatably mounted on said pipe, and extending to a point adjacent to the outer end of said pipe, and an ink applying member fast to the outer end of said sleeve, said member comprising a perforated shell and a cover of absorbent material.

1,311,165. TRUCK. DANIEL E. HENNESSY, Holyoke, Mass., assignor to Herbert W. Cowan, J. Lewis Wyckoff, and Edward N. White, as trustees, doing business as Cowan Truck Company. Filed Oct. 4, 1915. Serial No. 53,897. 38 Claims. (Cl. 254-7.)



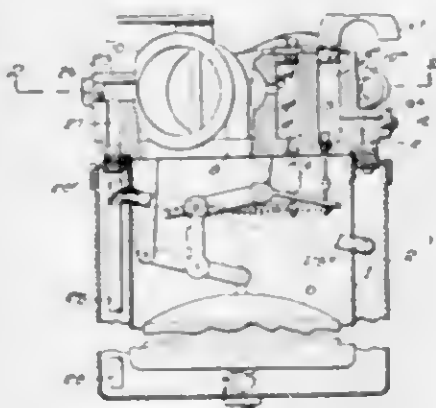
5. In a machine of the class described, a truck having a body and supporting wheels, elevating mechanism mounted on said truck body, and an elevating support comprising a pair of arms connected to said mechanism at one end and arranged to embrace said truck body when in lowered position.

1,311,166. PUMP. HERBERT ALFRED HUMPHREY, London, and WILLIAM JOSEPH RUSSELL, Wolverhampton, England, assignors to Humphrey Gas Pump Company, a Corporation of New York. Original application filed Aug. 12, 1912, Serial No. 714,563. Divided and this application filed Apr. 6, 1917. Serial No. 160,306. 3 Claims. (Cl. 103-67.)



1. The combination of a plunger, a mass for reciprocation therein having sufficient weight to acquire useful momentum, a power chamber for an expansible medium operating upon said mass to cause the power stroke, an accumulator for storing energy developed by the power stroke and for communicating energy to the reciprocating mass in connection with the return stroke, a valve and a timing device for controlling same, for limiting the period during which said stored energy is communicated to said mass.

1,311,167. COMBINED CARBURETER AND VACUUM-FEED DEVICE. WERN JAY, Chicago, Ill. Filed Apr. 29, 1917. Serial No. 231,315. 5 Claims. (Cl. 158-36.)

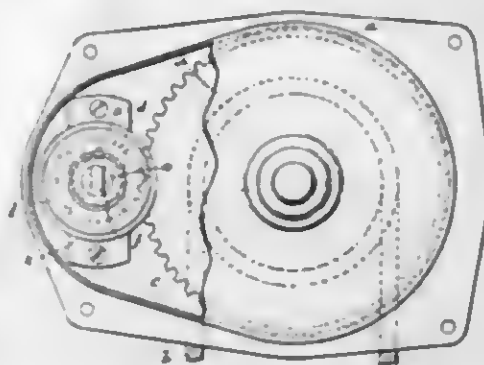


1. In a combined carbureter and vacuum fuel feed device, the latter comprising a vacuum chamber and a fuel reserve chamber into which the vacuum chamber discharges upon relief of the vacuum in the latter, and means for alternately producing and relieving the partial vacuum in the vacuum chamber, the fuel reserve chamber having means for admitting pressure of the atmosphere upon the surface of the liquid therein, said reserve chamber being as to its entire liquid-containing cavity, situated at a lower level than the mixing chamber of the carbureter, and a duct leading from the lower part of said reserve chamber, terminating in the mixing chamber for discharge of the liquid fuel in the latter by the suction of the engine.

1,311,168. WINDOW-LIFTER STOP. JOHN D. LAWRENCE and WILLIAM G. FLEISCHAUER, Detroit, Mich., assignors to Torpedo Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 16, 1918. Serial No. 254,171. 3 Claims. (Cl. 268-4.)

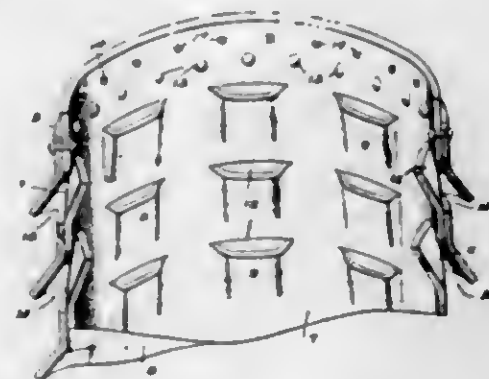
1. A window lifter stop, comprising a pinion provided with a driving pin projecting laterally therefrom, a cam having a segmental slot in which the pin protrudes, a crank spindle fast to the cam, a pair of friction clutch

parts, which engage by friction only, and a spring for normally holding them in engagement, the said spindle



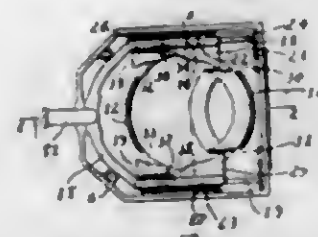
operating to turn the cam which initially disengages the clutch parts and then picks up the driving pin to drive the driving pinion.

1,311,169. APPARATUS FOR SEPARATING FLUID IN WELLS. MAHLON E. LAYNE, Memphis, Tenn. Filed Sept. 28, 1917. Serial No. 193,746. 6 Claims. (Cl. 166-5.)



1. In well apparatus, a tubular fluid collecting member formed of two casings, the inner casing having formed therein a plurality of displaced portions the upper terminals of which open into the collecting member, and the outer casing having a plurality of displaced portions the lower terminals of which open exteriorly of the collecting member, the said displaced portions being arranged in juxtaposition so as to constitute inclined inlet channels.

1,311,170. DISPENSING-MACHINE. MARQUIS H. LOCKWOOD, New York, and HENRY NIAS, Brooklyn, N. Y., assignors to Public Service Cup Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 23, 1916. Serial No. 121,717. 15 Claims. (Cl. 211-8.)

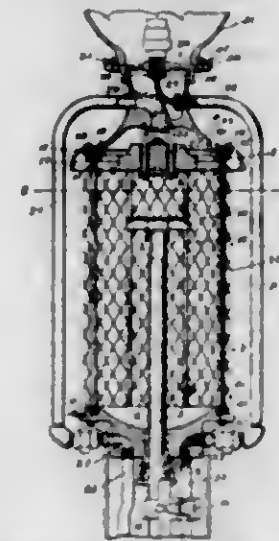


2. In a machine for dispensing flanged cups from a nested stack, the combination of a slide operable transversely of said stack, a blade pivotally mounted on said slide for supporting the next to the lowermost cup of the stack, and means for rotating said pivotally mounted blade to separate the lowermost cup while supporting the next to the lowermost cup.

1,311,171. EXPLOSIVE. CHARLES F. McKENNA, New York, N. Y. Filed Aug. 22, 1914. Serial No. 853,047. Renewed Sept. 28, 1918. Serial No. 250,145. 1 Claim. (Cl. 52-1.)

An explosive consisting of seventy-five parts of ammonium perchlorate, five parts of nitrated oils obtained by nitration of oils separated by fractional distillation from wood tar, five parts of nitrobenzol, five parts of dinitrobenzol, and ten parts of carbon bisulfide, substantially as described.

1,311,172. MEASURING AND DISPENSING PUMP. GEORGE W. MACKENZIE, JR., Beaver, and RAYMOND CROWDER, Edgewood, Pa., assignors to Guarantee Liquid Measure Company, Rochester, Pa., a Corporation of Delaware. Filed Nov. 12, 1917. Serial No. 201,685. 5 Claims. (Cl. 221-100.)



1. In a liquid measuring vessel, a supporting base having an upper surrounding receiving groove for the bottom of a glass casing of materially greater width than the thickness of the casing, a supporting packing gasket on the bottom of the groove, a casing set by its lower edge in the middle portion of said groove against said gasket, a filling of cement between the inner and outer edge portions of the casing and the adjacent walls of the groove, and an upper terminal ring having a lower receiving groove and packing material engaging the upper edge of the casing and provided with a superimposed coping having an air suction conduit.

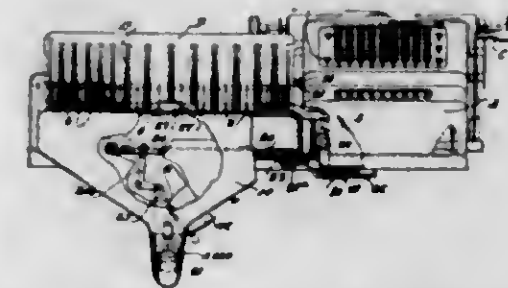
1,311,173. REGISTERING-MACHINE. MILES H. MANN, Terre Haute, Ind., assignor to International Money Machine Company, Terre Haute, Ind. Filed May 20, 1916. Serial No. 29,355. 8 Claims. (Cl. 235-91.)



1. In registering mechanism of the class described, the combination of a shaft, registering means controlled by said shaft, means for effecting registering action of the registering means by movement thereof relatively to the shaft, a locking device for the shaft, means to turn the shaft when unlocked for clearing the registering means, a casing enclosing said parts and having a vision opening, and an indicating member operative by said shaft incident only to its movement for clearing the registering means and when being restored, said member being provided with indicia normally visible opposite said vision opening and indicating that the shaft is in its normal locked position, and also having indicia different from that above referred to adapted to be seen through the vision opening

whereby to advise an operator when said shaft is not in its restored normal or locked position, as when moved for clearing the registering means.

1,311,174. PAY-ROLL ACCOUNTING AND PAYING MACHINE. MILES H. MANN, Reading, Pa. Filed Mar. 16, 1918. Serial No. 222,919. 27 Claims. (Cl. 133-4.)



1. In combination, an accounting machine comprising a main actuator and a special functioning mechanism associated with the accounting machine to operate with the latter as an incident to the operation of said main actuator, lock means normally preventing actuation of said main actuator, and a controlling device adapted to be operated manually from the special functioning mechanism to release said lock means.

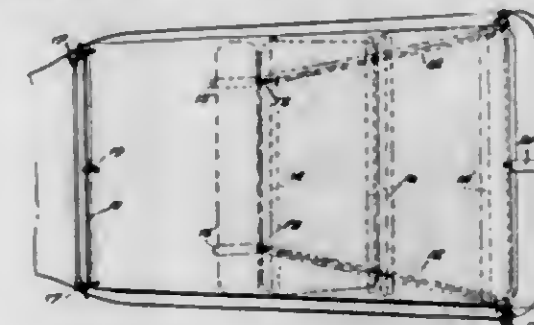
1,311,175. MANUFACTURE OF CHLORIN. HERBERT H. MATERN, Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed July 3, 1918. Serial No. 243,117. 2 Claims. (Cl. 23-10.)

1. The method of making chlorine, which comprises passing a gas mixture containing hydrochloric acid vapor and oxygen through a catalytic body of mineral alunite; substantially as described.

1,311,176. COOLING EXPLOSIVE SHELLS. ARTHUR J. MOZHAM, New York, N. Y. Filed Jan. 9, 1918. Serial No. 211,088. 8 Claims. (Cl. 86-20.)

1. The process of treating high explosive material of shells to effect cooling or solidification while preventing pipe or cavitation, which consists in reducing the temperature of the entire body of explosive material to a point approximating, but above, its point of crystallization, and then cooling the entire body of explosive material to a temperature below its point of crystallization.

1,311,177. VEHICLE-BED. WILLIAM A. NEWMAN, Oakland, Calif. Filed Feb. 27, 1919. Serial No. 279,028. 1 Claim. (Cl. 5-6.)



In a bed for a vehicle, a plurality of supports secured at their opposite ends to the vehicle structure to extend longitudinally from the front to the rear of the rear vehicle compartment and each comprising a flexible member of a length greater than the depth from front to rear of said rear vehicle compartment, a tubular rigid member surrounding each of said flexible members and adjustable longitudinally thereof, said rigid members each being of a length slightly less than the depth from front to rear of said rear vehicle compartment, and a plurality of cushions extending across said supports and mounted

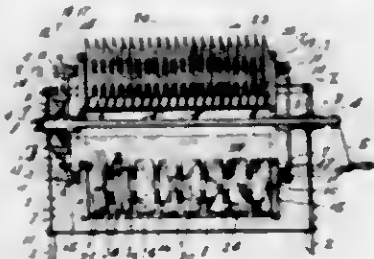
on said rigid members, the longitudinal adjustment of said rigid members on said flexible members maintaining the upper surfaces of said cushions in a substantially horizontal plane in a line substantially level with the upper edge of the front seat back.

1,311,178. CULINARY UTENSIL. GEORGE W. PASSMAN, Sunnyvale, Calif. Filed Apr. 15, 1919. Serial No. 290,285. 3 Claims. (Cl. 107-19.)



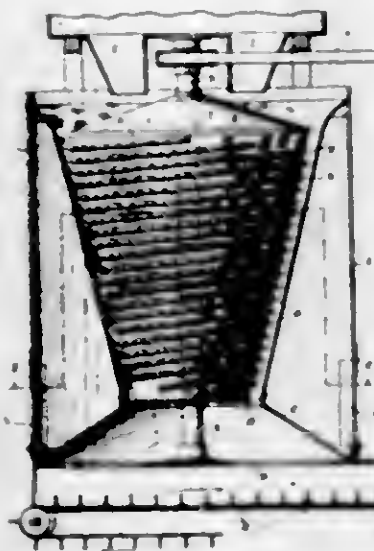
1. A culinary utensil comprising a standard comprising a foot and a shaft mounted thereon, a receptacle slidably mounted on said shaft, a resilient means supporting said receptacle on said standard, a disk secured to the upper end of said shaft and within said receptacle and cooperating with said resilient means for holding said receptacle in a normal operative position.

1,311,179. DISH-WASHING MACHINE. AARON RAYNES, New York, N. Y. Filed Sept. 7, 1918. Serial No. 253,008. 5 Claims. (Cl. 141-9.)



1. A dish-washing machine, comprising a tank, a rotatable main frame within said tank, rotatable dish-supporting means journaled in connection with said main frame, and a transmission mechanism operated by the rotation of said main frame for rotating said dish-supporting means so as to hold the latter continuously upright in horizontal position while the same are revolved with said main frame.

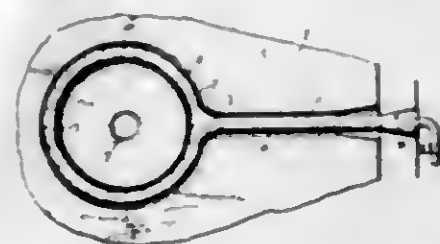
1,311,180. COTTON-CLEANER. WILLIAM C. REEVE, Elmerado, Okla. Filed Feb. 24, 1919. Serial No. 278,082. 3 Claims. (Cl. 13-12.)



3. A cotton cleaner comprising a frusto-conical screened drum mounted on a shaft, pipes carrying teeth on the periphery of said drum, a screened closure for

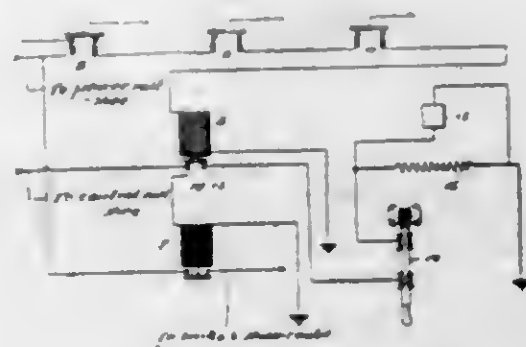
said drum, a platform supporting said closure with openings at the bottom of said closure and a platform for the passage of the cotton to a suitable conveyor.

1,311,181. GAS-STOVE. WALTER F. ROCKE, Chicago, Ill. Filed Dec. 3, 1917. Serial No. 205,072. 1 Claim. (Cl. 120-36.)



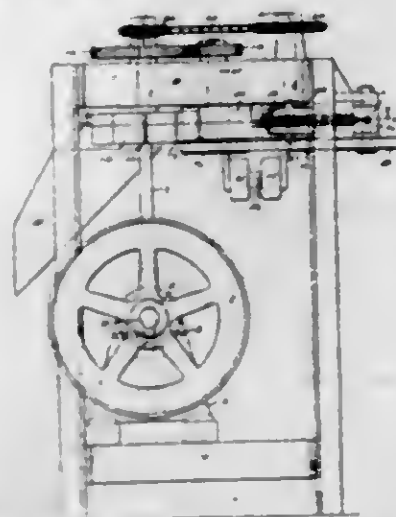
In a stove of the class described, an oven, the bottom wall of said oven having an integral depressed portion in the form of a ring having a lateral branch, and a gas burner resting on and conforming to the shape of said depressed portion of the bottom wall of the oven, said bottom wall having an opening within the area circumscribed by said ring and serving as a secondary inlet.

1,311,182. TRAIN-CONTROL SYSTEM. HAROLD HOWN-TREE, Kenilworth, Ill., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Original application filed Aug. 3, 1917, Serial No. 184,211. Divided and this application filed Mar. 25, 1918. Serial No. 224,416. 7 Claims. (Cl. 104,149.)



1. A railway system comprising an endless chain of cars, doors for each of said cars, a control station for controlling the movements of said chain of cars, and means for indicating at said control station when all of the doors of all of the cars have been closed.

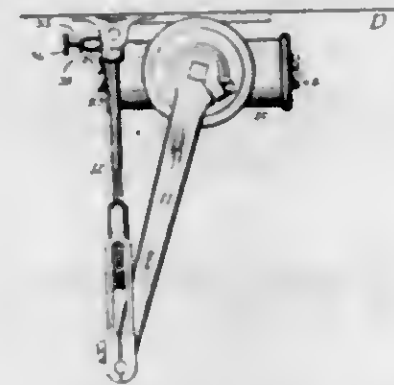
1,311,183. TOBACCO-STRIPPER. WILLIAM H. SKAYER, Agawam, Mass., assignor to Edwin Krause, Springfield, Mass. Filed Feb. 21, 1918. Serial No. 218,448. 9 Claims. (Cl. 131-60.)



3. A machine for stripping tobacco leaves from stalks, having means for gripping and feeding the stalks forward

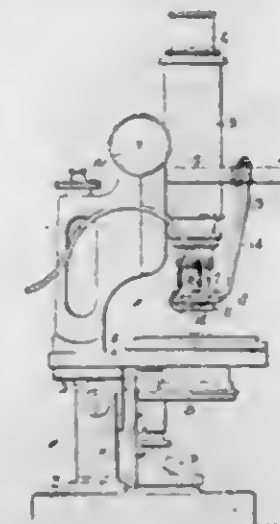
ward longitudinally in one direction, means below and independent of the stalk feeding means for catching leaves hanging by their stems from said stalks as the stalks are fed and carrying said leaves to one side in a divergent direction from the direction of the feed of the stalks and thus pulling them from the stalks, and a throat for receiving and holding vertically the leaves stripped from the stalks.

1,311,184. DOOR-CHECK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Jan. 28, 1918. Serial No. 214,135. 31 Claims. (Cl. 74-69.)



1. In a liquid door check, a checking cylinder, a piston therein, a passage formed in a wall of the cylinder connecting the spaces at opposite sides of the piston, means regulable from the exterior of the check to control the flow of the retarding liquid between said spaces, and other means regulable from the exterior of the check for causing an additional retarding action of the liquid on the piston to commence at any of a plurality of points in the path of the piston; substantially as described.

1,311,185. ILLUMINATOR FOR MICROSCOPES. ALEXANDER SILVERMAN, Pittsburgh, Pa. Filed Feb. 19, 1917. Serial No. 140,501. 3 Claims. (Cl. 240-2.)

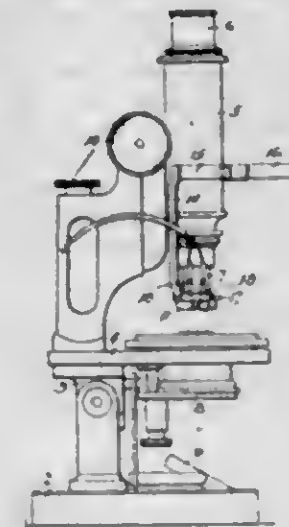


1. The combination with a microscope body, of a ring-like electric lamp adapted to surround the objective, a support therefor having means adapted to removably secure said lamp to the microscope body.

1,311,186. ILLUMINATOR FOR MICROSCOPES. ALEXANDER SILVERMAN, Pittsburgh, Pa. Filed Sept. 12, 1917. Serial No. 180,905. 5 Claims. (Cl. 240-2.)

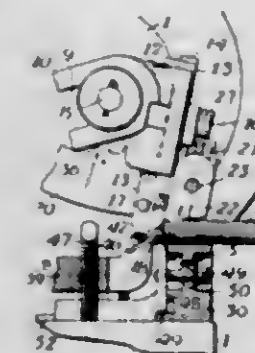
1. An illuminator for microscopes and the like, comprising a removable support, attaching means on said support for attaching same to the microscope, a lamp adapted to lie adjacent to and substantially surrounded

the objective of the microscope, an arm on said support between said attaching means and said lamp adapted to



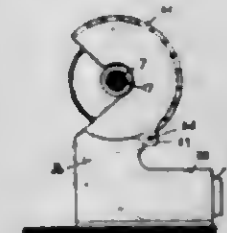
lie adjacent the junction between the objective-tube and the supporting means for said tube.

1,311,187. MACHINE FOR FORMING HOOKS ON SPIRAL SPRINGS. FRANK H. SLEEPER, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed May 15, 1916. Serial No. 97,498. 8 Claims. (Cl. 140-103.)



1. In a machine of the class described, a framework, a support for a spring, means for clamping a spring on said support, a hook forming mechanism comprising a reciprocating head, means for actuating said head, a grooved bar adjustably held in said head having its lower end beveled, a plate adjustably held in said bar having its lower end beveled in the opposite direction to said bar, and a stationary plate over which the end roll of the spring is bent by the downward movement of said beveled bar.

1,311,188. LEATHER-FINISHING PROCESS. ROLAND L. SMITH, Everett, Mass. Filed May 2, 1917. Serial No. 166,004. 8 Claims. (Cl. 91-68.)



4. The process of resurfacing damaged enamel which consists in applying to the damaged portion a suitable filler, frictionally treating the filler and adjacent enamel with a solid oleaginous composition having a granular caustic material intimately mixed therein and capable of

acting when applied with a predetermined amount of friction to render the molecular elements of the enamel and filling mobile and to intermingle homogeneously the molecular elements of said filler and enamel whereby the same lustrous appearance is produced upon the prepared portion as that of the original enamel.

7. A step in the process of treating enameled leather to produce a lustrous finish which consists in rubbing the surface thereof with a fibrous frictional material traveling at a rate of about three thousand feet per minute and carrying a solid composition comprising finely granular Vienna lime intimately mixed with mutton tallow.

1,311,189. RECEIPTING STAMP AND REGISTER. MEREDITH G. STANDLEY, Cincinnati, Ohio, and ARTHUR EARL BOWMAN, Covington, Ky. Filed Sept. 12, 1918. Serial No. 253,821. 4 Claims. (Cl. 101-113.)



1. A stamp comprising a box-like casing, printing wheels journaled therein and projecting through an orifice in the base of the casing, an inking ribbon supported at opposite sides of the printing wheels and passing over the type characters of said wheels at the casing base opening, a platen hingedly mounted upon the casing adjacent the casing base adapted to be pressed against said printing wheels, reciprocating slide members respectively mounted upon opposite side walls of the casing arranged to engage with and swing said platen, and lever devices for reciprocating said slide members.

1,311,190. POWER-STORED MECHANISM. FAIRBANK H. STOCKDALE, Brooklyn, N. Y., and ROBERT A. SIMPSON, Ocean Grove, N. J. Filed Apr. 29, 1916. Serial No. 94,446. 3 Claims. (Cl. 185-41.)

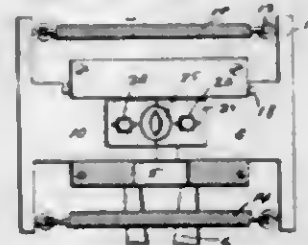


2. In a power storing mechanism, in combination, a rotatable member, a power storing spring, winding means for said spring, a clutch between said rotatable member and said winding means, and means for automatically controlling said clutch, comprising a member resiliently mounted within said spring and moved by the contraction of said power storing spring to release said clutch, said member releasable by the expansion of said spring to gradually throw in said clutch.

1,311,191. CANE-STRIPPER. JAMES W. SWAYNGIM, East Laport, N. C. Filed Aug. 22, 1918. Serial No. 251,020. 4 Claims. (Cl. 130-31.)

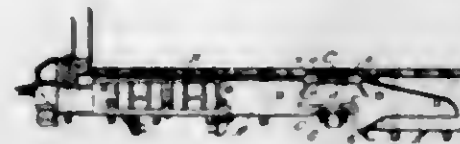
1. The herein described cane stripper, the same comprising an upright support forked at its upper end, and a guide having a transverse channel intersected by a hole and a trash opening from the center of said channel downward between the arms of the supporting fork; of a

pair of slides movably mounted in said guide and having notches at their inner ends adapted to coast opposite said hole, contractile springs connecting said slides to



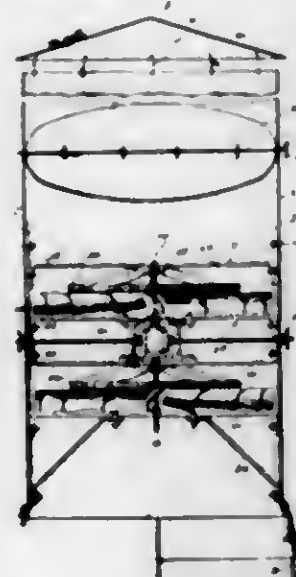
cause their automatic inward movement, and pins in the slides striking the ends of the guide when the meeting ends of the slides are directly opposite the center of said hole.

1,311,192. CAR-UNDERFRAME. ROBERT C. TAFT, Moline, Ill. Filed Jan. 25, 1918. Serial No. 218,679. 12 Claims. (Cl. 105-426.)



1. An underframe for cars comprising a body-bolster, draft-members and shims each consisting of a plate interposed between the horizontal contacting surfaces of said bolster and draft-members.

1,311,193. MOTOR. CHARLES F. URCKE, New London, Wis. Filed Jan. 22, 1916. Serial No. 272,513. 1 Claim. (Cl. 253-38.)

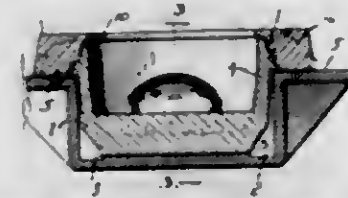


In combination, a draft due, a plurality of pairs of cross bars secured within the due diametrically thereof, a shaft journaled in each pair of bars at the axis of the due, a wind wheel secured to each shaft, said wheels being mounted to rotate in opposite directions, aligned cross shafts between the pairs of cross bars, said shafts being journaled at their outer ends in the wall of the due, braces connecting adjacent bars of the pairs for supporting the inner ends of the shafts, and gear connections between the shafts of the inner walls and the last named shafts.

1,311,194. HAT-SHAPING APPARATUS. VINCENZO VALENTE and ATTILIO MICHELETTI, New York, N. Y. Filed Aug. 6, 1918. Serial No. 248,529. 3 Claims. (Cl. 223-31.)

1. The combination with a crown die having smooth converging side walls adapted to seat in a die seat, and

provided with spaced projections on the exterior surface of opposite ends thereof to form slots having divergently extending walls, of a hrim die encircling said crown die



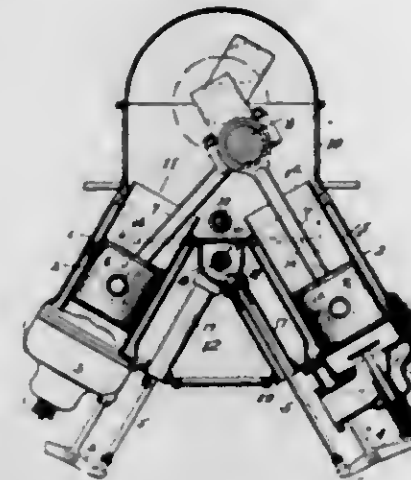
and provided with downwardly extending diverging logs on opposite ends of the interior thereof adapted to slidably make a snug fit in said slots, substantially as shown and described.

1,311,195. TRANSFERRING AND UNLOADING APPARATUS. WILLIAM M. VENABLE, Pittsburgh, Pa., assignor to Hlaw-Knox Company, a Corporation of New Jersey. Filed Sept. 26, 1918. Serial No. 255,785. 7 Claims. (Cl. 214-113.)



1. The combination with a clam-shell bucket comprising pivoted segments and a closing line therefor, of a bucket guiding means formed with a slideway having end portions constructed and arranged with reference to the bucket and to the material to be transported thereby so as to constitute vertically disposed unloading and loading stations, that portion constituting the unloading station provided with segment opening means and an operating device for the bucket closing line.

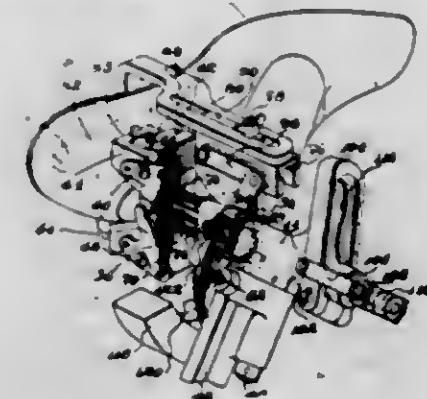
1,311,196. INTERNAL-COMBUSTION ENGINE. ELVERTON W. WEAVER, Cleveland Heights, Ohio. Filed Feb. 10, 1917. Serial No. 147,732. 14 Claims. (Cl. 184-6.)



3. In an internal combustion engine, a casing having a crank shaft portion and a lubricant containing portion,

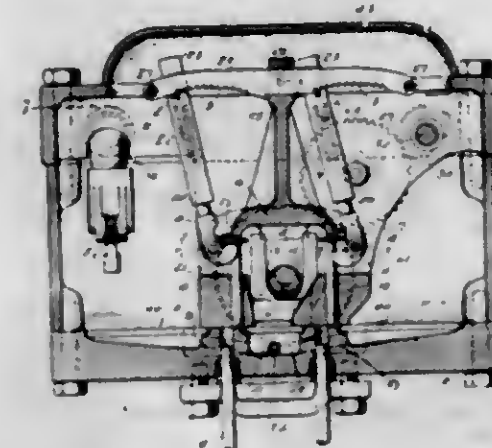
said casing having a partition across the same which separates the aforesaid portions of the casing, and two rows of cylinders arranged as a V extending through the side walls of the said casing, through the lubricant containing portion of the casing and the partition which divides the said portions of the casing, the lubricant containing portion of said casing lying principally between the cylinders and within the V, and exit means from the receptacle whereby lubricant may pass to the engine parts to be lubricated.

1,311,197. TRIMMING-MACHINE. HORACE D. WEBB, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 3, 1917. Serial No. 200,361. 33 Claims. (Cl. 12-87.)



1. In a machine of the class described, operating means, a work support arranged to carry the point of contact of the operating means and the work progressively along the work, and means arranged to guide the work support to lead the said point of contact out of the work when said point has progressed to a predetermined part of the work.

1,311,198. INKING MECHANISM FOR PRINTING-MACHINES. BACON C. WHITE, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed July 7, 1915. Serial No. 38,528. 25 Claims. (Cl. 101-365.)

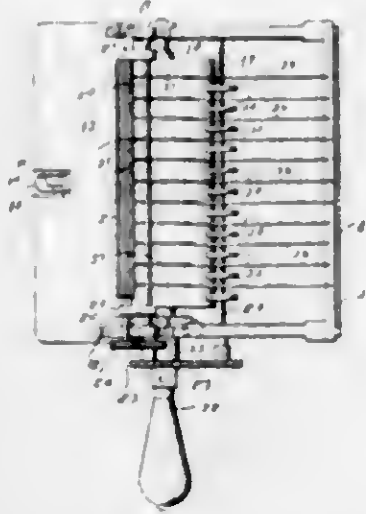


20. A printing press including in combination a form cylinder, an ink drum, and means for supplying atomized ink to said drum, said means including an atomizing device and a pump presenting intermittently thereto minute globules of ink.

1,311,199. MACHINE FOR GUMMING AND MOISTENING LABELS. MICHAEL T. WOTTON, Jamaica, N. Y. Filed Mar. 9, 1918. Serial No. 221,434. 2 Claims. (Cl. 92-51.)

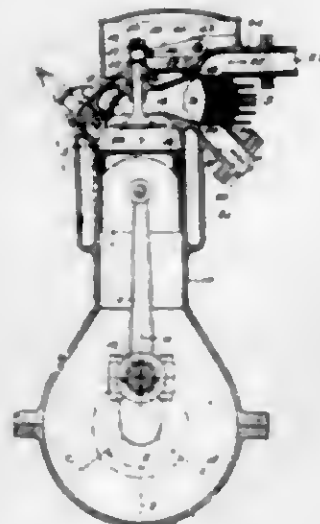
1. A device of the character set forth comprising a base, a pair of side members carried by said base and hav-

ing notches in their forward ends, transversely extending rods carried by said side members, a tray having its rear end supported by said rods between said side members, oppositely disposed lugs formed on said tray and received within said notches, a transversely extending bar carried by the side members, a movable ratchet carried by said bar and adapted to engage the tray for holding the



same against accidental movement, a cylinder journaled to the side members and disposed within the tray, means feeding labels into contact with the cylinder, and means receiving the labels after coming in contact with the cylinder.

1,311,200. INTERNAL-COMBUSTION ENGINE. ROLLIN ABELL, Milton, Mass. Filed May 26, 1915. Serial No. 30,549. 9 Claims. (Cl. 123-79.)

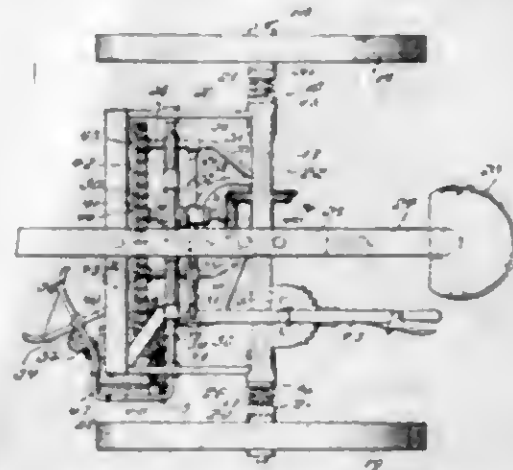


8. In an internal combustion engine, the combination of a combustion cylinder, a puppet valve arranged to co-act with said cylinder, a pivoted rigid lever having two forked arms, a rotary cam arranged to co-act with one of said forked arms to oscillate said lever positively in both directions, and a rigid grooved collar rigidly mounted on said puppet valve, the other one of said forked arms being arranged in the groove of said collar to impart positive opening movement and positive closing movement to said valve.

1,311,201. STALK PULLER AND CHOPPER. JEFF ANDERSON, Atlanta, Tex. Filed July 12, 1915. Serial No. 244,610. 7 Claims. (Cl. 55-168.)

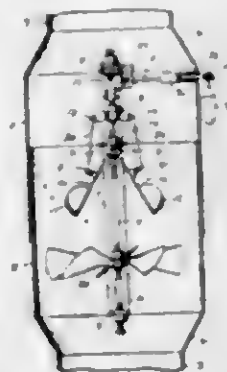
1. In a machine of the class described, the combination with a revolvable axle and ground wheels carried thereby, of a carriage slidably supported with respect to

the axle, a chain mounted on the carriage for movement in a substantially vertical plane, said chain having links



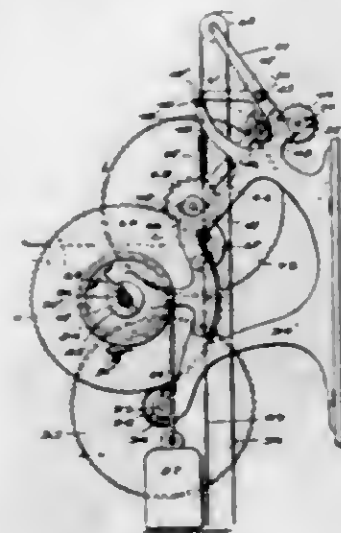
provided with stalk-pulling hooks and means for transmitting motion from the axle to the chain.

1,311,202. AUTOMATIC DAMPER. JOHN ANDERSON, Duluth, Minn. Filed Mar. 15, 1919. Serial No. 253,340. 3 Claims. (Cl. 230-45.)



1. The combination with a flue damper of the character described, comprising a vertically disposed shaft, means for rotating said shaft and a centrifugally operated damper, of a vertically reciprocable cross-head pivotally attached to the damper, horizontally disposed cooperating means extending to the exterior of the flue and manually adjustable therefrom.

1,311,203. WEIGHT-MOTOR. HARRY LLOYD ARTZ, New York, N. Y. Filed June 15, 1918. Serial No. 240,590. 9 Claims. (Cl. 185-1.)



1. A weight motor of the character described, comprising a driven element, a gear carried thereby to rotate the same, a rotatable drum supported near the driven

element, a ratchet associated with the drum to control its rotation, driving connecting means between the drum and the gear including a movable gear to be shifted into and out of engagement with the first named gear, a bell-crank lever pivoted near the movable gear and connected therewith to move the same, a pulley supported above one arm of the bell-crank lever, a cable connected with the arm of the bell-crank lever and passed about the pulley to extend downwardly therefrom, a dog to engage the ratchet, a retractile coil spring connecting the dog and arm of the bell-crank lever to move the dog upwardly into engagement with the ratchet, a member connected with the lower end of the cable and having a suitable weight to swing the bell-crank lever upwardly in opposition to the retractile coil spring thereby shifting the movable gear out of engagement with the first named gear, a cable carried by the drum, a weight secured to the cable and adapted to contact with the member to move it downwardly whereby the bell-crank lever is swung upwardly, and means to move the dog downwardly whereby the spring will swing the bell-crank lever downwardly when the weight is in the elevated position.

1,311,204. THERMAL CIRCUIT-CLOSER. JOSEPH C. BAKER, Denver, Colo., assignor of one-half to John L. Rokey, Denver, Colo. Filed Nov. 27, 1918. Serial No. 264,340. 4 Claims. (Cl. 200-31.)



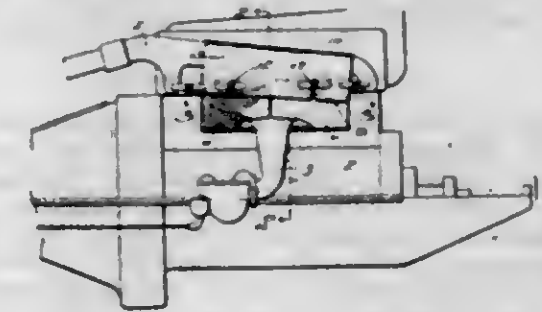
1. The combination with a chamber having a thermostat therein, a lever fulcrumed intermediately of its ends with one end extending into said chamber and connected with said thermostat, the other end extending outside the chamber, a rod connected with the outer lever end, a lever fulcrumed intermediately of its ends and adjustably engaged with said rod on one side of the lever fulcrum, an upstanding arm carried by the other end of said last-mentioned lever, an electric circuit having spaced contacts positioned in the path of said arm, one wire of said circuit being connected with said arm carrying lever, and the other with said contacts.

1,311,205. AEROPLANE CONSTRUCTION. OSWALD T. BELCHER, Los Angeles, Calif. Filed Aug. 26, 1918. Serial No. 251,553. 6 Claims. (Cl. 214-31.)



1. In an aeroplane construction, a covering comprising a corrugated filler of hard material, and walls of hard material secured to the faces of the filler.

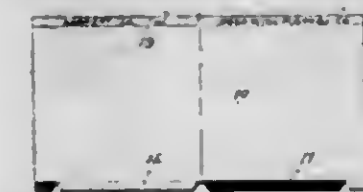
1,311,206. HEATER FOR INTERNAL-COMBUSTION ENGINES. LESLIE H. BELL, Paullina, Iowa. Filed Sept. 23, 1918. Serial No. 255,291. 2 Claims. (Cl. 257-241.)



1. In combination with the exhaust pipe and the intake manifold of an internal combustion engine, of a casing detachably connected with the pipe and the manifold and partially inclosing the same for the purpose specified, said casing being sectional and consisting of a lower or body portion engaging the manifold and a hood or cover engaging the exhaust pipe, the hood being a plate having a hooked portion for engaging over the manifold and having notches at its lower edge for engagement by the bolts securing the exhaust pipe in place, said notches providing adjustment between the sections.

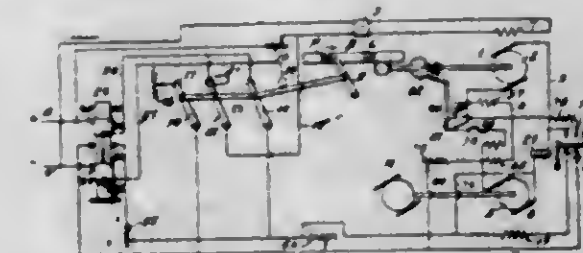
2. A heater for internal combustion engines, consisting of a lower section for engaging the manifold and a hood or cover section for engaging the exhaust pipe, the hood having a portion for hooking over the exhaust pipe and having notches at its lower edge, the lower section having openings registering with the notches and said notches and openings being adapted for engagement by the bolts holding the exhaust pipe in place.

1,311,207. INDEX-CARDS. JOHN AUSTIN HEAT, Augusta, Ga. Filed July 8, 1918. Serial No. 243,952. 3 Claims. (Cl. 129-16.5.)



2. A card index consisting of a plurality of cards, each having an extension and a void at the same edge, the cards being arranged so that the extensions and voids are regularly staggered throughout the series, the extensions being movable into the voids for the purpose described.

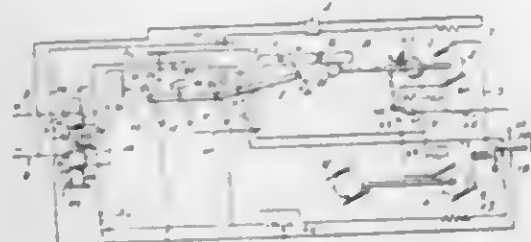
1,311,208. PLANNER AND SYSTEM OF MOTOR CONTROL THEREFOR. HAROLD L. BLOOD, Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1914. Serial No. 563,600. 43 Claims. (Cl. 172-240.)



4. The combination of an electric motor, automatic means serving to cause the motor to rotate successively

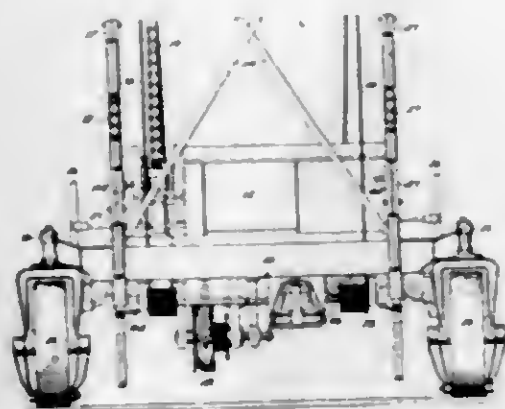
in opposite directions, the said means providing an armature short circuit at the end of rotation in one direction to effect dynamic braking, and automatic means for weakening the motor field during the said braking and thereby reducing the braking current, the last said means being at all other times inoperative to weaken the field.

1,311,209. PLANER AND SYSTEM OF MOTOR CONTROL THEREFOR. HAROLD L. BLOOD, Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y., a Corporation of New Jersey. Original application filed Sept. 26, 1914, Serial No. 883,600. Divided and this application filed Jan. 7, 1918, Serial No. 210,625. Renewed Nov. 23, 1918. Serial No. 263,935. 5 Claims. (Cl. 172-240.)



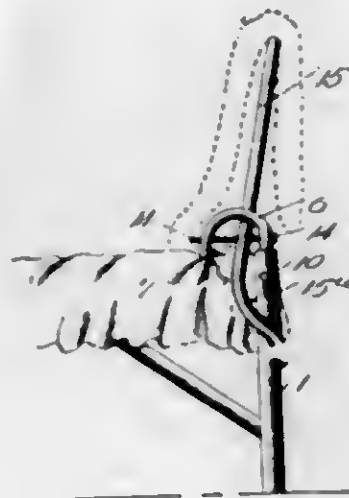
1. In a planer or other machine having a reciprocating table, the combination with the table, of a reversing compound motor connected with the table, a generator having its armature connected in closed circuit with the motor armature, automatic means for successively reversing the generator polarity to successively reverse the motor and thereby cause it to drive the table successively in opposite directions, and automatic means for short-circuiting the series field of the motor during rotation of the motor in one direction.

1,311,210. AUTOMATIC LOADER FOR TIE AND TIMBER PILERS. JAMES O. HADNEY and HENRY PRINSTER, Middletown, N. Y. Filed Nov. 4, 1918. Serial No. 261,116. 25 Claims. (Cl. 193-24.)



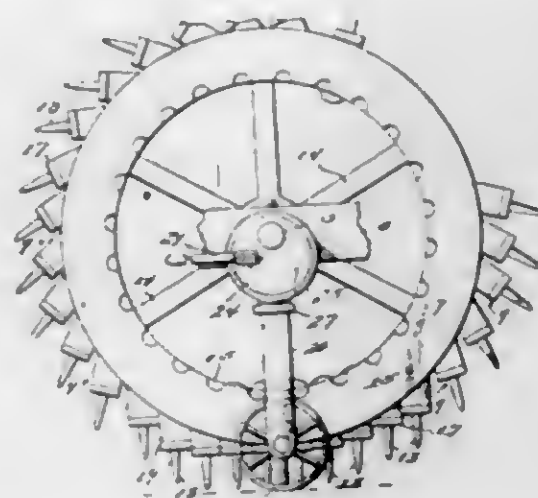
1. A device of the class described comprising in combination, a piler, a vertically adjustable loader associated with the piler, feeding means upon the loader adapted for step-by-step operations, actuating means for the said feeding means adapted for operation during the operation of the piler, means adapted for normally maintaining the actuating means out of the path of movement of the piler mechanism, and automatic shifting means for the automatic means adapted for positioning the actuating means within the operative path of movement of the piler mechanism.

1,311,211. BEDSTEAD AND ATTACHMENT. DON CARLOS BROWNELL, Seward, Alaska. Filed Apr. 20, 1916. Serial No. 92,390. 3 Claims. (Cl. 5-41.)



1. The combination with bedstead posts, of a vertically adjustable clothes-clamp, and a vertical clothes-supporting rack connected with said clamp and vertically adjustable therewith.

1,311,212. COMBINED SURFACE-BREAKER AND CULTIVATOR. ALBERT H. CARRIER, Asheville, N. C., assignor of one-half to Edwin W. Grove, St. Louis, Mo. Filed Aug. 29, 1918. Serial No. 251,963. 10 Claims. (Cl. 55-24.)

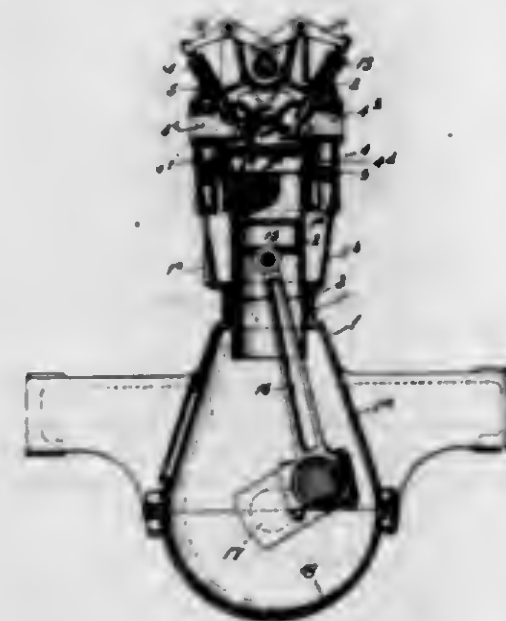


2. In a device of the class specified, an axle, roller couples thereon having rims with a clear space between the same, and puncturing devices having teeth and means to engage and freely move in the said clear space between the rims.

1,311,213. INTERNAL-COMBUSTION ENGINE. JAMES E. DIAMOND, Cleveland, Ohio. Filed June 14, 1917. Serial No. 174,098. 8 Claims. (Cl. 123-173.)

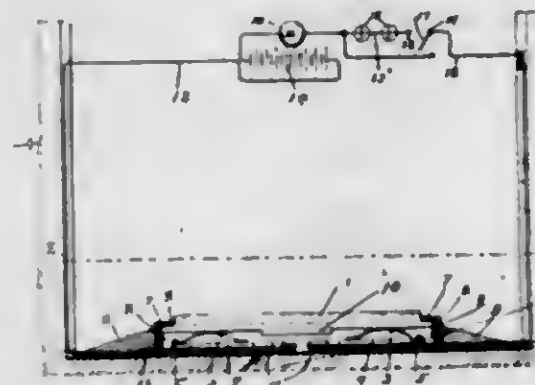
1. In an internal combustion engine, the combination with a cylinder sleeve of wear-resisting metal, of a frame casting of light weight metal shaped to form water jacket

walls surrounding and spaced from the cylinder sleeve so that the jacket water comes in direct contact with said



sleeve, the frame casting being permanently rigidly united to the upper end of said sleeve by being cast thereon.

1,311,214. CIRCUIT-CLOSER. WILLIAM DONOHUE, New York, N. Y. Filed Mar. 30, 1917. Serial No. 158,742. 2 Claims. (Cl. 200-35.)



2. A circuit closer comprising a movable switch bar having a rounded upper face, oppositely inclined guide members for said switch bar, said bar being adapted for vertical movement between said guide members, and plates connecting said guide members, inclined end members projecting from said end plates, said end connecting plates being provided with means to limit upward movement of said switch bar, said switch bar and guide members being adapted to extend across a doorway with the end members pointed toward the opposite sides of said doorway and positioned adjacent to said sides, and means to normally retain said switch bar in raised position.

1,311,215. SULFITE-LIQUOR PRODUCT AND PROCESS OF PRODUCING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed July 17, 1918. Serial No. 779,516. Renewed June 13, 1918. Serial No. 239,582. 31 Claims. (Cl. 134-1.)

2. A blinder comprising strongly-acid sulfite cellulose liquor solids in a non-fluent form, soluble in water, stable on exposure to air, while said solids are in a dried condition and becoming gradually insoluble when subjected to a protracted exposure to air in the presence of moisture.

1,311,216. BINDING AGENT. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed June 22, 1917. Serial No. 176,279. 17 Claims. (Cl. 134-1.)

13. A blinder composition comprising solid oxidized constituents of waste sulfate cellulose liquor which has its normal acidity reduced about one-half.

1,311,217. DRIED SULFITE-WASTE-LIQUOR SOLID AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed May 8, 1917. Serial No. 167,332. 6 Claims. (Cl. 134-1.)

3. The process of treating cellulose sulfite waste liquor which comprises neutralizing a material part, but not approximately the entire amount of its normal fixed acidity, then evaporating the partially neutralized liquor to a solid mass and in comminuting the latter.

1,311,218. PROCESS OF DRYING SULFITE WASTE LIQUOR. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Aug. 27, 1917. Serial No. 188,360. 13 Claims. (Cl. 134-1.)

8. The herein described process of producing a blinder composition, which consists in adding an alkaline substance to normally acid sulfite waste liquor until the normal acidity thereof is reduced a substantial amount, but not approximately entirely neutralized, and evaporating the liquid product by atomization in the presence of oxygen, to a solid form.

1,311,219. BINDING AND ADHESIVE SUBSTANCE, TANNING AGENT, AND THE LIKE. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed May 12, 1917. Serial No. 168,275. 12 Claims. (Cl. 134-1.)

5. An acid binding agent comprising the desiccated solids of sulfite cellulose waste liquor dissolved in water, said composition being characterized by having a viscosity of at least 10% less than ordinary concentrated sulfite cellulose waste liquor of like density.

1,311,220. SULFITE-WASTE-LIQUOR PRODUCT. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Nov. 13, 1917. Serial No. 201,807. 6 Claims. (Cl. 106-39.)

5. A dry mixture of acid solids of sulfite waste liquor and lime.

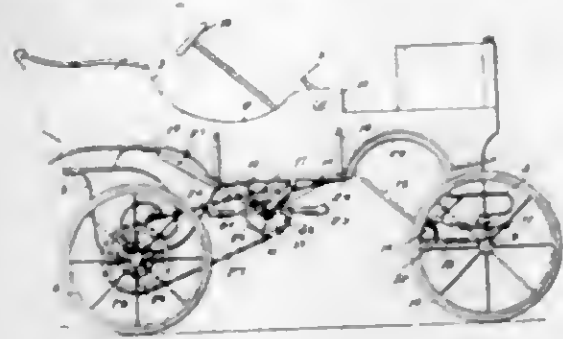
1,311,221. BRIQUET AND PROCESS OF MANUFACTURING THE SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed June 22, 1917. Serial No. 176,280. 21 Claims. (Cl. 44-1.)

1. The process of making briquets or other molded articles which comprises incorporating a bulking material and a binding agent comprising atomized dried slightly-oxidized water-soluble solids of sulfite cellulose waste liquor, in forming into shaped masses, and in insolubilizing said water-soluble solids; whereby a substantially water resistant briquet or other molded article is obtained.

1,311,222. BRIQUET AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Aug. 16, 1917. Serial No. 186,481. 5 Claims. (Cl. 44-1.)

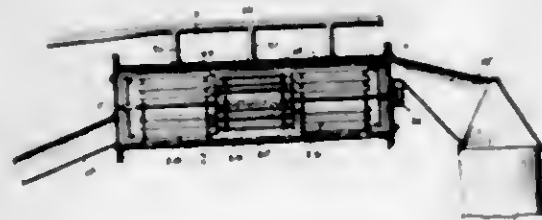
1. A process of making shaped articles, which comprises incorporating dried pulverulent sulfite waste sulfite liquor solids, an agent capable of insolubilizing the same, a waterproofing agent, water, and a material to serve as a filler, and shaping the mass.

1,311,223. PEDAL-OPERATING DEVICE. SAVINO GIACOLETTO, Hancock, Mich. Filed Sept. 27, 1917. Serial No. 193,551. 1 Claim. (Cl. 208—55.)



A pedal operated device including a body mounted on front and rear axles having wheels journaled thereon, a crank shaft having pedals and journaled to said body, clutch members secured to the shaft, sprocket wheels slidably and rotatably mounted on the shaft, means connecting the sprocket wheels to the rear wheels, clutch members formed on the hubs of the sprocket wheels, disks formed on the hubs of the sprocket wheels, forked levers engaging the disks and slidably mounted on the body and having angularly related portions, rods journaled to the body, eccentrics secured to the rods and engaging the angularly related portions, and means for rotating the rods to engage and disengage the first and second named clutch members.

1,311,224. SMOKE-CONSUMER. JOHN H. GENTHER, Taylorville, Ill. Filed Sept. 4, 1918. Serial No. 252,617. 1 Claim. (Cl. 261—92.)

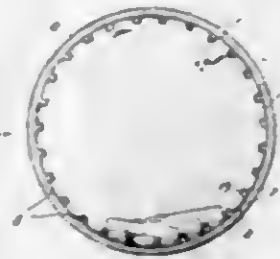


A smoke consumer comprising a horizontally disposed drum having head plates, one of said plates being provided with an inlet opening located above the horizontal axis of the drum and having its upper wall coincident with the upper side thereof, and the other plate being provided with an outlet opening located below said horizontal axis and having its lower wall terminating above the lower wall of the drum to permit the drum to contain a quantity of water, a plurality of spraying nozzles located in the drum in alignment with and in the plane of said inlet opening and forming baffles, a supply pipe communicating with said nozzles, a shaft extending axially of the drum, a plurality of paddle wheels secured to said shaft, the blades of one of said wheels being arranged out of alignment with the blades of adjacent wheels, an inlet funnel communicating with said inlet opening, and an air draft pipe communicating with said funnel.

1,311,225. BARKING-DRUM. HERBERT WESTROM GUETTLER, Chicago, Ill., assignor to American Barking Drum Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1918. Serial No. 238,430. 6 Claims. (Cl. 144—208.)

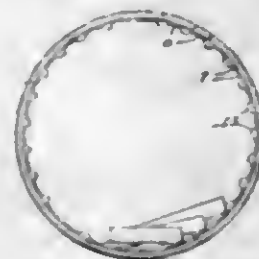
1. In a barking apparatus, a hollow, rotatable container for the blocks, having a plurality of tumbling devices of substantially U-section, the rounded bases of which are directed inwardly toward the center of the container; said devices being spaced apart an appreciable

distance from one another so as to form pockets between them adapted to catch the corners of the blocks therein



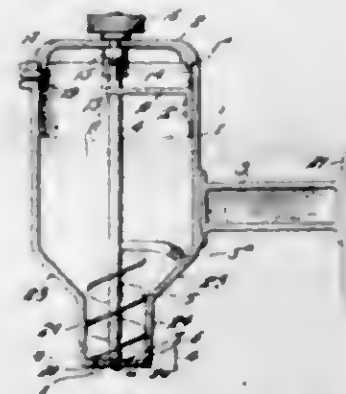
during the rotation of the container and thereby positively force said blocks to travel part way around with said container.

1,311,226. BARKING-DRUM. HERBERT GUETTLER, Chicago, Ill., assignor to American Barking Drum Company, a Corporation of Illinois. Filed Aug. 26, 1918. Serial No. 251,357. 9 Claims. (Cl. 144—208.)



1. In a barking apparatus, a hollow, rotatable container for the blocks having a plurality of tumbling devices each consisting entirely of a bar of substantially U-section, the rounded bases of said bars being directed inwardly toward the center of said container.

1,311,227. TOILET-POWDER DISPENSER. HANS HARTMAN, New York, N. Y. Filed Nov. 22, 1917. Serial No. 203,359. 1 Claim. (Cl. 221—61.)

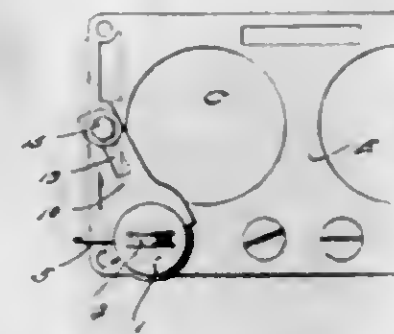


In a dispensing device of the character described, the combination of a receptacle having means whereby said receptacle can be attached to a support, a cylindrical extension at one end of the receptacle closed by a perforated plate, a removable cover at the opposite end of the receptacle, a spiral conveyor within the receptacle operative within the said extension and having a shaft journaled at one end within said perforated plate and its other end operatively engaged by means on said cover for rotating the shaft when the cover is in operative position, and an agitator connected with said shaft above the conveyor within the receptacle to agitate its content during rotative operation of the conveyor.

1,311,228. ENGINE-TESTER. WILBUR E. HOLLENBECK and WILLIAM R. GRAY, Lebnec, Mo. Filed Mar. 1, 1919. Serial No. 280,023. 9 Claims. (Cl. 73—51.)

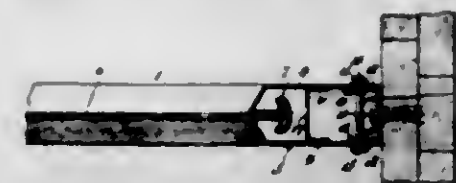
1. The herein described engine tester comprising a cup having a gasket around its mouth, an air pressure gage

supported by said cup and communicating with the interior thereof, a nipple also communicating with said interior for permitting the admission of air under pressure,



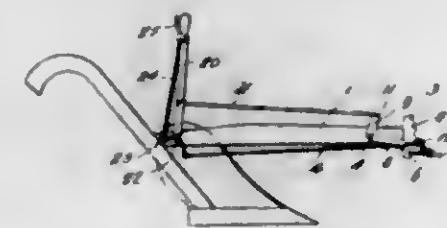
and means engaging the cup adjacent the mouth thereof for pressing the mouth of the cup upon an article over the element to be tested.

1,311,229. TOILET PARTITION. ARTHUR SHERIDAN HUGHES, Mansfield, Ohio. Filed Nov. 30, 1918. Serial No. 264,795. 2 Claims. (Cl. 189—34.)



1. Fastening means for securing the wall-tile of a sheet metal partition to a wall, comprising a channel member made fast to the wall and provided with flaring sides, with the tile having an open edge and embracing and compressing the side walls of the channel, and the channel and tile being secured together by through bolts traversing the side walls of both.

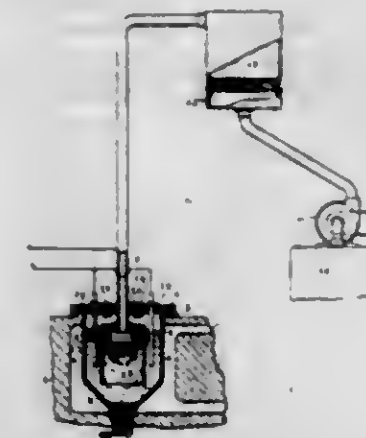
1,311,230. ADJUSTABLE CLEVIS ATTACHMENT FOR PLOWS. LAYMAN S. HYPES, Bluefield, W. Va. Filed Aug. 16, 1918. Serial No. 250,183. 1 Claim. (Cl. 97—4.)



The combination with a plow beam having a notched clevis at its end, and equipped with a pivotally mounted yoke member including parallel arms disposed on opposite sides of the said plow beam and projecting forwardly of the said clevis, the said yoke having right angularly projecting arms connected together at their ends; of a latch extended laterally across the said parallel arms of the yoke and pivotally connected to one of the same, a retaining lug carried by the other arm and normally overlying the said latch, a spring element connected to the arm which carries the said lug and to the said latch to urge the latter normally into engagement with the notches in the said clevis, the pivoted end of the said latch being extended, a pull rod connected to the said extended end of the latch, a connecting rod connected to the said joined angularly extended arms of the said yoke and manually operated means pivotally mounted on the said beam and connected to the said pull rod and the said connecting rod to manually actuate the said yoke and latch.

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1,311,231. PROCESS OF MAKING NITROGEN COMPOUNDS. CHARLES B. JACOBS, Bloomfield, N. J., assignor, by mesne assignments, to Air Reduction Company, Incorporated, a Corporation of New York. Filed Dec. 26, 1914. Serial No. 878,995. 1 Claim. (Cl. 204—21.)



A process of producing an alkali metal cyanid which comprises electrolyzing an alkali metal compound so as to liberate alkali metal of the compound at one pole and delivering a nitrogenous gas and carbon in the form of a plurality of relatively fine streams at the point of liberation of said metal so that the same contacts with the said metal while it is in a nascent state and at a temperature sufficient to effect chemical combination.

1,311,232. PROCESS FOR THE SEPARATION OF CYANID COMPOUNDS FROM OTHER SUBSTANCES. CHARLES B. JACOBS, Bloomfield, N. J., assignor, by mesne assignments, to Air Reduction Company, Incorporated, a Corporation of New York. Filed Nov. 7, 1916. Serial No. 130,080. 4 Claims. (Cl. 23—13.)

1. The method of separating alkali metal cyanid from a mixture containing said cyanid, together with alkali metal hydrate, which comprises, treating said mixture with water in the presence of alkali metal bicarbonate to convert said hydrate into alkali metal carbonate and to form a solution of alkali metal cyanid in the presence of the carbonate, and thereafter separating the solution from the residue.

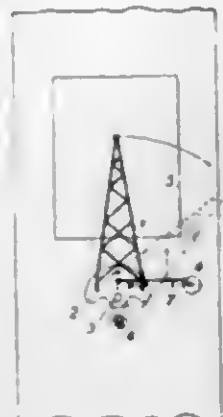
1,311,233. BURGLAR-ALARM. ISIDORE JASCULKA, Milwaukee, Wis. Filed Feb. 12, 1918. Serial No. 216,752. 5 Claims. (Cl. 177—314.)



2. In a burglar alarm, the combination, with a supporting member adapted to be secured to a support ad-

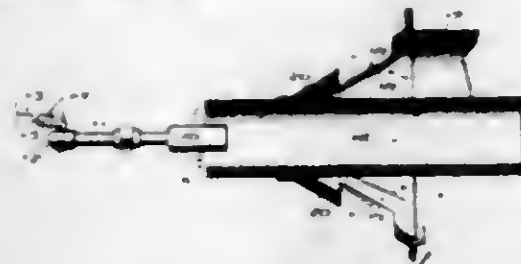
cent the body of the operator, of a railing, connections between said member and said railing including a circuit closure adapted to be operated when said railing is pressed against by the body of the operator, electrical means controlled by the operation of said circuit closure for giving an alarm at a distance from the operator, and means for warning the operator against accidental operation of the alarm.

1,311,234. DRIVING ARRANGEMENT FOR PIVOTED SHIP'S DERRICKS. OTTO KAHAN, Christiania, Norway. Filed June 25, 1918. Serial No. 241,884. 2 Claims. (Cl. 212-66.)



1. The combination with a ship's mast of a derrick, the derrick beam being pivoted to a transom which is pivoted to the mast, and a driving arrangement for the derrick, comprising a rotatable crank disk rigidly connected by means of a crank rod with part of the derrick, and means for connecting said crank rod with the derrick at different distances from its pivot, so as to vary the extreme positions of the derrick or to vary the swinging axis thereof, the arrangement being such that a complete revolution of the crank disk produces two oscillations of the derrick.

1,311,235. METHOD OF AND APPARATUS FOR PRODUCING BLASTS OF HEATED AIR. WILLIAM WALLACE KEMP and WILLIAM H. VAN HORN, Baltimore, Md. Filed June 23, 1916. Serial No. 105,525. 4 Claims. (Cl. 158-99.)

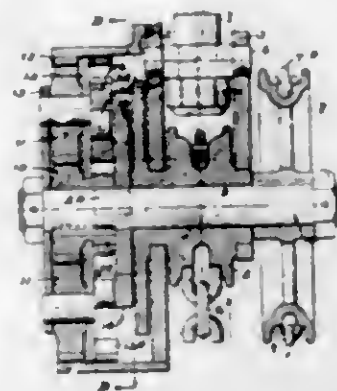


1. In an apparatus for producing a blast of heated air, the combination of a conduit, a burner projecting into one end of the conduit and separated from the side walls thereof by an annular air space, and means for supplying a completely combustible mixture under pressure to the burner, the parts being so related that the flame or burning gases from the burner will be confined entirely within the conduit and that the ignited mixture discharged from the burner under pressure will entrain a body of air supplemental to the combustible mixture through the space surrounding the burner and force it with the non-flaming products of combustion from the other end of the conduit with considerable velocity.

1,311,236. AUTOMATIC POWER TRANSMISSION. JOHN W. KITTRIDGE, Akron, Ohio. Filed Oct. 28, 1916. Serial No. 128,244. 4 Claims. (Cl. 74-34.)

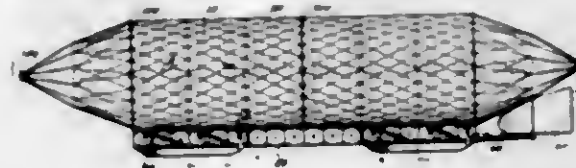
1. A transmission mechanism comprising a driving and a driven member, a plurality of means for transmitting

power comprising interlocking members and adapted to transmit power through any one of said means from the driving to the driven member, shifting mechanism whereby a change of load on the driven member shifts the trans-



mission from one transmitting means to another, and interlocking members adapted to hold one or another of the transmitting means continuously in operation so long as the load remains unchanged.

1,311,237. AIRSHIP. OSCAR J. LAIST, Cleveland, Ohio. Filed May 25, 1916. Serial No. 99,720. 23 Claims. (Cl. 244-6.)



7. The combination of a gas bag, a lattice-work shaft extending longitudinally therethrough, spokes for holding the gas bag distended pivoted at their inner ends to the shaft and secured at their outer ends to the gas bag, brace wires leading from one set of spokes to the other and extending diagonally from points adjacent the shaft on one set of spokes to points adjacent the canvas at the other and slidably engaging the spokes.

1,311,238. FILM-ADVANCING MEANS. JEAN A. LE ROR, New York, N. Y. Filed July 5, 1918. Serial No. 243,443. 17 Claims. (Cl. 88-18.5.)



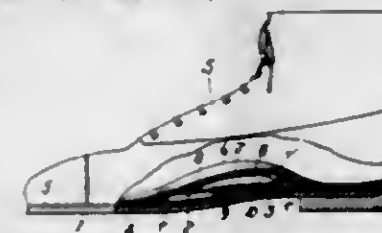
1. Advancing mechanism for perforated strips, comprising: a continuously rotating element carrying means to intermittently engage the perforations of said strip; an apertured support in relation to which said strip is designed to move; resilient means to retain the strip against said support, said means being designed to permit the engaging element to pass therethrough, and yieldable under contact with same through the interposition of the strip.

1,311,239. SURFACE CONDENSER. THOMAS C. McBRIDE, Philadelphia, Pa. Filed May 1, 1916. Serial No. 94,577. 5 Claims. (Cl. 257-43.)



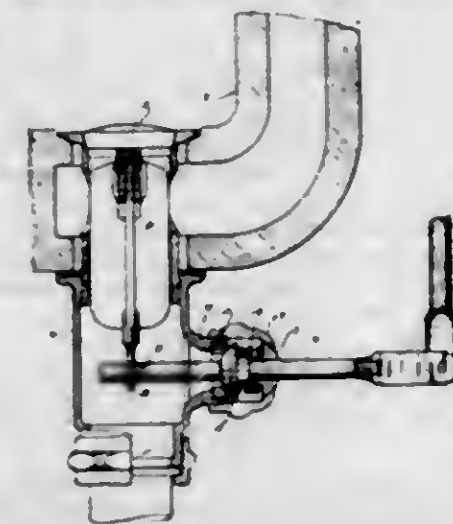
1. A surface condenser or cooler, provided with means to cause the cooling water to separate and a portion of it to pass a greater number of times through the tubes in that part of the condenser in the neighborhood of the outlet opening from the condenser to the air pump than in the balance of the condenser, there being an unequal number of tubes in the several sections or passes in the neighborhood of the outlet opening from the condenser to the air pump.

1,311,240. ARCH-SUPPORT. ABRAHAM MAYER, St. Louis, Mo. Filed Nov. 4, 1918. Serial No. 261,060. 3 Claims. (Cl. 36-71.)



1. An arch-support comprising a flexible sheet insertible into a shoe and arched over the shank of the shoe, a longitudinally disposed tension member spanning the arch, a bottom reinforcing plate contoured to the arch of the sheet and supporting said tension member, and a bowed cushioning member interposed between the plate and tension member and secured at its ends to said tension member.

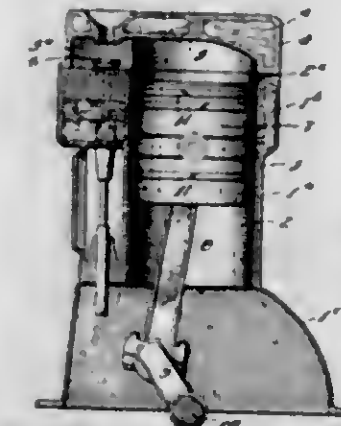
1,311,241. BASIN WASTE-FIXTURE. WILLIAM G. NEWTON, New Haven, Conn., assignor to The Peck Bros. & Co., New Haven, Conn., a Corporation. Filed May 1, 1919. Serial No. 293,985. 1 Claim. (Cl. 4-24.)



A basin waste fixture comprising a casing, a crossed plate plug carrier mounted therein, a plug at the upper

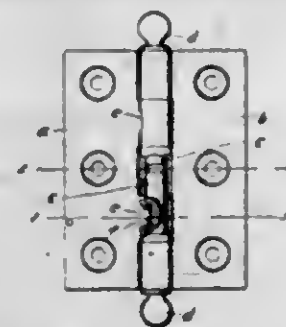
end of the said carrier, said carrier provided at its lower end with a hook having its nose offset from the plane of the carrier and an operating shaft with which said centrally arranged downwardly projecting hook may engage, and means for operating said shaft.

1,311,242. INTERNAL-COMBUSTION MOTOR. ALLEN B. NORTON, Detroit, Mich. Filed Oct. 20, 1916. Serial No. 126,718. Renewed Oct. 24, 1918. Serial No. 259,597. 6 Claims. (Cl. 74-85.)



6. In an internal combustion motor, the combination with a piston made of light weight metallic alloy having a higher coefficient of thermal expansion than iron, of a working cylinder in which the piston is operatively mounted, the said cylinder having its wall with which the piston slidably engages made of metal having a co-efficient of thermal expansion approximating that of the metallic alloy of the piston.

1,311,243. BUTT. STUART W. PARSONS and PATRICK F. KINO, New Britain, Conn., assignors to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 13, 1917. Serial No. 101,880. 3 Claims. (Cl. 16-107.)

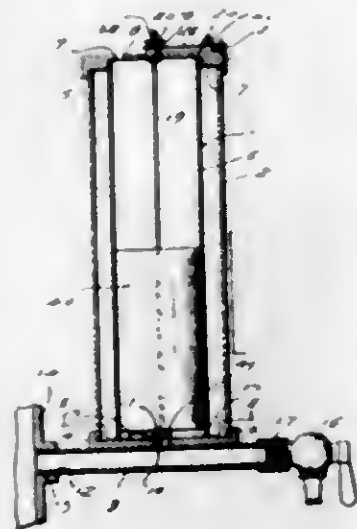


2. A butt comprising a pair of leaves each formed of sheet-metal folded back upon itself to form two over-lying parts with the folds shaped to form inter-fitting aligned knuckles, a plurality of headed pintles introducible into said knuckles at opposite ends thereof and each pintle having a recess, projections on the knuckles of one of said leaves engaging in said recesses of the pintles, the over-lying parts of each of said leaves normally standing apart and being adapted to be drawn together by the means which secures the butt in place.

1,311,244. LIQUID-INDICATOR FOR TANKS. WILLIAM H. PIPPIN, Paris, Tex. Filed Aug. 22, 1917. Serial No. 187,707. 1 Claim. (Cl. 200-34.)

In a sight gage and alarm for tanks and the like, an outwardly extending pipe connected to the lower portion of the tank and having an opening in the upper surface thereof, a transparent cylinder, a guide cylinder arranged concentrically in the transparent cylinder, means joining the upper and lower surfaces respectively of said cylinders, means connecting the lower portions of the cylinders

with the pipe and communicating with the opening therein, said guide cylinder having a plurality of openings in its lower edge, a normally open electrical circuit, a contact carried by the upper portion of the cylinder, a guide stem slidably mounted in the central portion of the guide



cylinder, a contact carried by the upper portion of said guide stem, spring means normally holding said guide stem in its extended position, and a float slidably mounted in the cylinder and on said guide stem, whereby upon downward movement of said float, the stem will be carried thereby to close the electrical circuit.

1,311,245. ERASER-PAD. JAMES H. POU, JR., Raleigh, N. C. Filed Feb. 25, 1919. Serial No. 279,095. 1 Claim. (Cl. 197-181.)



An eraser pad attachment for typewriters, comprising a bracket support with an ear for one end, arranged to be affixed to one end of a typewriter carriage; a single flat bar pivotally mounted at one end to said ear and including a suitable fingerpiece at the free end, a suitable pad covering the major portion of the bar, and a bracket support for said free end of the bar arranged to be affixed to the other end of the carriage, and including a receiver notch to receive the bar when turned thereto in a horizontal plane.

1,311,246. TRAIN CONTROL. EDWARD A. REBOUL, Philadelphia, Pa. Filed Apr. 26, 1917. Serial No. 163,455. 2 Claims. (Cl. 246-207.)



1. In a train stopping apparatus, a portable trip member removably associated with a rail and comprising a pair of sections hinged together, one section extending below and inclosing the base of the rail, both of said sections bearing upon the top of the base of the rail and against the web of the rail, an extension formed on said first named section and extending above the top of the rail to form a trip and in spaced relation to the side of the ball thereof,

to permit passage of the flange of a car wheel, and the other section terminating below the ball of the rail, and a clamping member extending through both of said sections below the base of the rail whereby said sections may be clamped in position upon the rail.

1,311,247. LUBRICATING-BEARING. LAURENT EUGENE RIGOTARD, Paris, France. Filed June 24, 1918. Serial No. 241,607. 2 Claims. (Cl. 64-24.)



1. A lubricating bearing including a casing having a two-part bearing and a space therebetween, a shaft mounted in said bearing, and a helicoidal ring member on said shaft and arranged within said space, said helicoidal ring member being formed to move fluid across said space and in a direction parallel with said shaft when said shaft is rotated.

1,311,248. WINDOW-SCREEN. JOSEPH ROCH, Detroit, Mich. Filed Apr. 3, 1919. Serial No. 287,167. 4 Claims. (Cl. 156-39.)



1. The combination with a window casing, of a spring roller at one end thereof, a flexible screen adapted to be wound on the roller, means to hold one end of the screen at the opposite end of the casing, and guide bars secured to the sides of the casing and extending across the normal plane of the screen when extended so that the screen will be drawn against said bars by the spring roller.

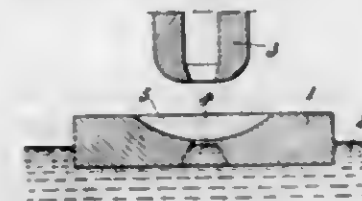
2. The combination with a window casing, of a spring roller at the upper part thereof adapted to carry a screen, a flexible screen adapted to be wound on the roller, guide bars secured to the sides of the casing and so positioned that the screen will be drawn against the bars when lowered, and means to hold down the lower end of the screen, the edges of the guide bars engaging the screen being convex lengthwise.

3. The combination with a window casing, of a spring roller at the upper part thereof adapted to carry a screen, a flexible screen adapted to be wound on the roller, guide bars secured vertically to the sides of the casing and so positioned that the screen will be drawn against the bars when lowered, and means to hold down the lower end of the screen, the guide bars being resilient and secured at their lower ends and having their upper ends free to move in and out.

4. The combination with a window casing, of a spring roller at the upper part thereof adapted to carry a screen, a screen on said roller and a cross bar at the lower end of the screen, guide bars secured vertically to the sides of the casing and having notches to receive the cross bar and

being so positioned that the screen will be drawn against the bars when lowered, the vertical edges of the guide bars engaging the screen being convex lengthwise, and means to hold the cross bar in the notches at the lower ends of the guide bars.

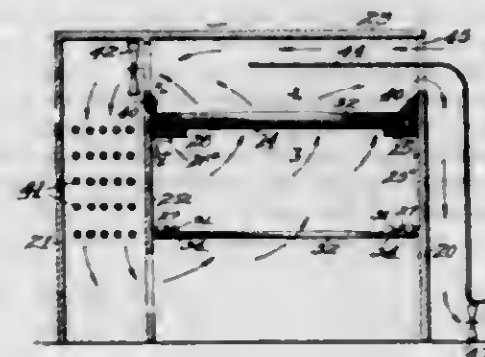
1,311,249. METHOD OF AND APPARATUS FOR GATHERING GLASS BY SUCTION. EMILE HOUBANT, St. Ouen, France, assignor to Arthur Wilkin, St. Ouen, France. Filed Nov. 14, 1918. Serial No. 262,591. 6 Claims. (Cl. 49-62.)



1. Apparatus for gathering glass by suction, comprising, in combination, a molten glass container, an apertured block supported with its lower face in the molten glass the upper face of the block having a cavity communicating with said aperture, gathering means for the glass, and means to place the gathering means into contact with the block over the aperture therein.

6. The herein described method of gathering glass from a molten glass container having an apertured float therein, which consists in applying to the aperture of the float a glass-gathering suction device, forcing said float downwardly by means of said suction device, and removing the glass thus forced through the aperture into the suction device by suction.

1,311,250. DRIER. FREDERICK G. SARGENT, Westford, Mass., assignor to C. G. Sargent's Sons Corporation, Granterville, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1919. Serial No. 280,914. 4 Claims. (Cl. 34-12.)

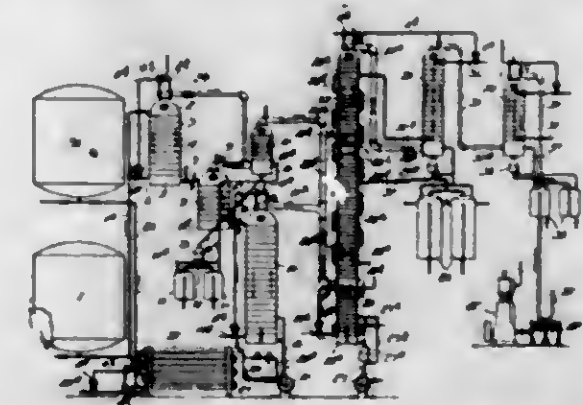


1. In a drier, a fixed support for the material to be dried, a perforated drum adjacent the end thereof, means to advance the material over said support and drum, and means to force heated air upward through said support and drum to dry the material.

1,311,251. MANUFACTURE OF BEVERAGES. JOSEPH SCHNEIDER, Chicago, Ill. Filed June 27, 1917. Serial No. 177,230. 7 Claims. (Cl. 195-1.)

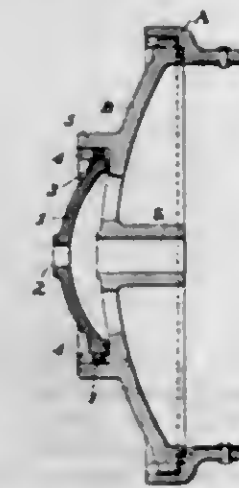
7. The continuous process for treating fermented liquor containing albuminous matter in solution which consists in heating the liquor without impairing its contained albumin and then passing the heated liquor into and through a space in which is maintained a sub-atmos-

pheric pressure substantially lower than the boiling pressure of the heated liquor, subsequently distilling the



ethyl alcohol from the remaining liquor, dissociating the water from the alcoholic vapors, condensing the alcohol and exhausting the uncondensed gases.

1,311,252. AUXILIARY HEAD FOR HEATERS. WILLIAM A. SHELTON, Akron, Ohio, assignor to The Williams Foundry & Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 13, 1919. Serial No. 276,826. 3 Claims. (Cl. 18-7.)



2. A removable vulcanizer head having a central opening and an annular flange therearound provided with inwardly projecting lugs, and an auxiliary head having casing lugs.

1,311,253. DISTANCE-INDICATOR. LOUIS J. STERN, Boston, Mass. Filed Dec. 4, 1917. Serial No. 205,440. 9 Claims. (Cl. 88-23.)



2. A mirror having a plurality of parallel indications on its reflecting surface calibrated and arranged to intercept the image of an object in the mirror to make known the distance to the object.

1,311,254. DIRIGIBLE AND TILTABLE HEADLIGHT. LEONARD J. STRIMPLE, Clevel., Ohio. Filed Mar. 22, 1918. Serial No. 223,930. 2 Claims. (Cl. 240-61.)

1. A device of the class described comprising a casing, a tubular carrying member rotatably mounted in the casing and having means for oscillating it, a lamp pivotally carried by the carrying member, a rod extending through the carrying member and pivotally connected at

its upper end with the lamp, a lever upon which the lower end of the rod is disposed, a foot pedal connected



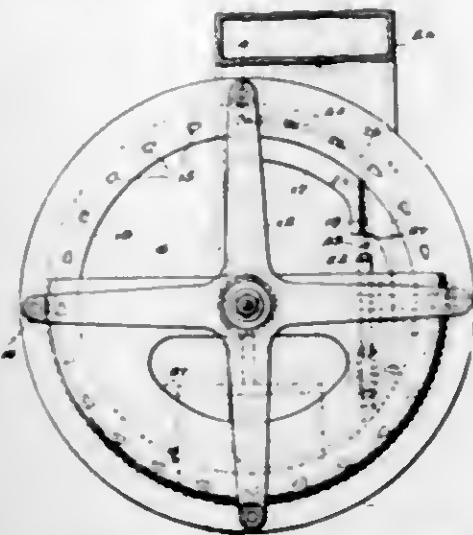
with the lever for rocking it and a spring disposed to hold the rod normally with the lamp at a predetermined point of its pivotal movement.

1,311,255. STOCKING. RICHARD THIERFELDER, Milwaukee, Wis., assignor to Phoenix Knitting Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 27, 1916. Serial No. 74,565. 1 Claim. (Cl. 2-23.)



A stocking composed of a fabric blank, the margins of which tend to curl toward the wrong side of the fabric and inwardly of the stocking and having said margins disposed together face to face and joined by stitching therethrough, the margins thus being on the outside of the stocking.

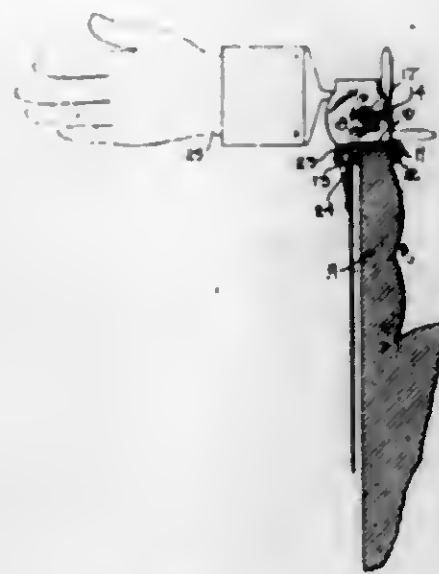
1,311,256. HOPPER MECHANISM. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed May 9, 1916, Serial No. 96,368. Divided and this application filed May 8, 1917. Serial No. 167,243. 15 Claims. (Cl. 86-45.)



1. In a hopper mechanism, the combination with a hopper; of a dial plate mounted thereon at an angle to

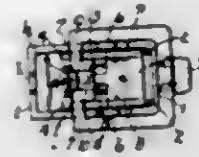
the vertical, having a plurality of openings therein of substantially the same shape in cross section as that of the blanks to be operated upon; means for rotating said dial plate; and a plate connected with said hopper and having an angular groove therein of varying depth, one end of said groove being in juxtaposition with said dial plate and lying in a path of movement substantially tangential with relation to said openings.

1,311,257. DIRECTION-INDICATOR FOR AUTOMOBILES. MICHAEL EDWARD WILSON, Detroit, Mich. Filed Jan. 15, 1917. Serial No. 271,275. 6 Claims. (Cl. 116-31.)



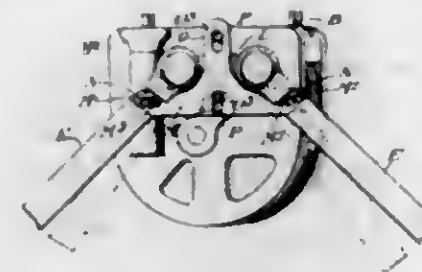
1. An automobile signal including a housing having means whereby it may be attached to the top of an automobile wall and having resilient side walls formed with oppositely disposed depressions, a body mounted between said side walls and having crossed ribs adapted to engage in said depressions, the body being pivoted to the housing on an axis extending through the intersection of said crossed ribs, and having means whereby it may be rotated within the housing, a rotatable spindle mounted in the body and extending at right angles to the axis of the body, a semaphore attached to said spindle and rotating therewith, means causing a rotation of the spindle as the body is turned to swing the semaphore away from the wall of the vehicle, and a spring resisting said rotation of the spindle and urging the spindle in a reverse direction to thereby return the semaphore to a position parallel to the wall of the vehicle.

1,311,258. LOCK. JOHN WOLF, Topeka, Kans. Filed May 12, 1919. Serial No. 296,375. 3 Claims. (Cl. 70-27.)



3. In a lid fastener of the character described, a bolt-actuating yoke comprising an open frame having trunnions at one end thereof directed inwardly toward the axis of the yoke, offsets or arms leading from the trunnions at an angle to the axis of the trunnions, a cam connecting the sweep ends of the offsets, and a sliding bolt having formations cooperating with the cam for driving the bolt first in one direction and then the other depending on the direction of throw of the yoke.

1,311,259. BUCKET. HERBERT S. ATKINSON, East Orange, N. J., assignor to The Hayward Company, New York, N. Y., a Corporation of New York. Filed May 26, 1915. Serial No. 30,521. 10 Claims. (Cl. 37-30.)



1. In an excavating bucket, the combination with a plurality of oscillating connecting rods, and a supporting head, to which said connecting rods are pivotally connected, of a guide plate having a vertically slotted portion movably affixed to the bucket-head and other portions horizontally slotted movably secured to an adjoining pair of connecting rods, whereby the relative movements of the connecting rods and supporting head are limited and controlled, said guide plate having no part in supporting said connecting rods or head.

1,311,260. COMBINED SWITCH AND CONNECTOR FOR ELECTRIC CIRCUITS. CARL BRAMMING, Chicago, Ill., assignor to Accessories Manufacturing Company, a Corporation of Illinois. Filed Feb. 19, 1917. Serial No. 140,628. Renewed May 26, 1919. Serial No. 299,942. 2 Claims. (Cl. 173-346.)



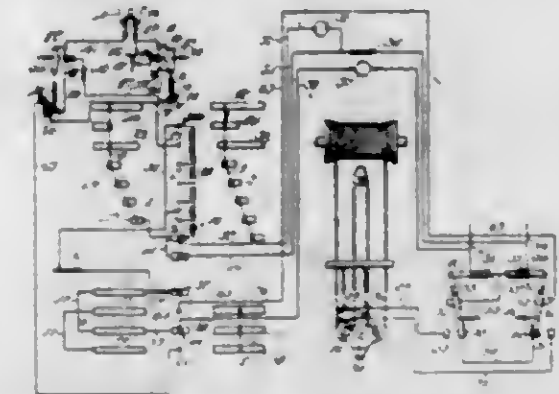
2. In a combined switch and connector for electric circuits, in combination, a socket having an insulated contact element in post form, a sleeve of insulating material mounted on the contact adjacent its end and having a recess in its peripheral face, a plug adapted to enter the socket, a pair of spring contact fingers carried by the plug and adapted to slide over the sleeve and engage the body of the contact element.

1,311,261. SPARK-PLUG AND PROCESS FOR MAKING THE SAME. CHESTER H. BRASELTON, Dayton, Ohio. Filed Mar. 5, 1915. Serial No. 12,359. 32 Claims. (Cl. 123-169.)



1. The process of making spark plugs comprising depositing a metallic sheath upon a body formed out of insulating material by liquefying a relatively soft metal, atomizing said liquefied metal and projecting said atomized metal upon said body by a blast of gas and forming screw threads in a portion of said metallic sheath.

1,311,262. ELEVATOR. EDWARD P. COLLINS, Chicago, Ill. Filed Mar. 19, 1917. Serial No. 155,646. 15 Claims. (Cl. 172-152.)



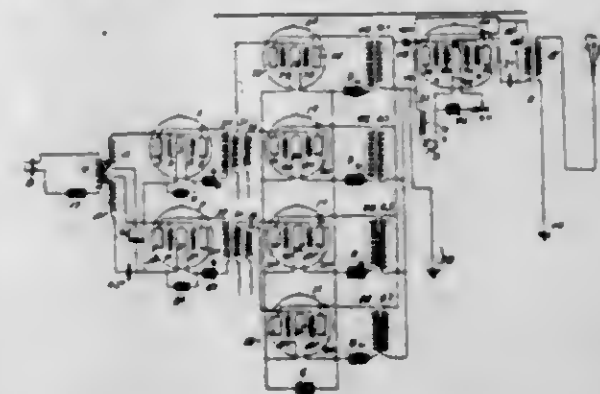
6. In an electric hoisting system an up limit switch and automatic means for disconnecting said switch entirely from the source of electric power at all times except when said system is in elevating operation.

1,311,263. ELECTRIC SWITCH. OTIS L. DAVIS, Iowa City, Iowa, assignor to The D and D Auto Lock Co., Chicago, Ill., a firm composed of Otis L. Davis and A. C. Dunkel. Filed Jan. 12, 1917. Serial No. 141,960. 2 Claims. (Cl. 175-282.)



1. In an electric switch, a plurality of disks of non-conducting material, a contact member carried by each disk, means to turn each disk independently, two contact fingers for engagement with each contact adapted to be simultaneously engaged thereby, connections between said fingers to connect them in series, a connection from the last finger to a pivot post, a lever mounted on said pivot post, a binding post placed to be engaged by one end of said lever on depression thereof and a second binding post placed to be engaged by the other end of said lever on depression thereof, and two push buttons adapted to engage the two ends of said lever, each to depress the end it engages.

1,311,264. OSCILLATION-GENERATOR. LEE DE FOREST, Spayten Dayvil, N. Y., assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 4, 1915. Serial No. 48,948. 37 Claims. (Cl. 250-6.)



1. A source of electrical oscillating energy including an exhausted vessel containing one hot and three cold elec-

trodes, each of said cold electrodes being located at a relatively different distance from said hot electrode, a work circuit, and means to transmit the generated oscillations to said work circuit comprising circuits associated with said electrodes.

1,311,265. AUGER. REX DORGE, South Bellingham, Wash. Filed May 13, 1918. Serial No. 234,351. 2 Claims. (Cl. 145-119.)



1. An auger comprising a rotatable tubular shaft having an outlet at one end and having an aperture between its ends, a cutting bit at the other end of said shaft and in a position to deliver the cuttings into the tubular shaft, an air tube in said tubular shaft and communicating with the exterior thereof through said aperture, an annular air-chamber surrounding the tubular shaft and communicating with said air tube, and means through which air may be introduced into said annular air-chamber so as to cooperate therewith and with said air tube for removing said cuttings through said outlet.

1,311,266. PLUG AND RECEPTACLE. ARTHUR H. FANGO, Poughkeepsie, N. Y. Filed Mar. 4, 1915. Serial No. 12,603. 3 Claims. (Cl. 173-301.)



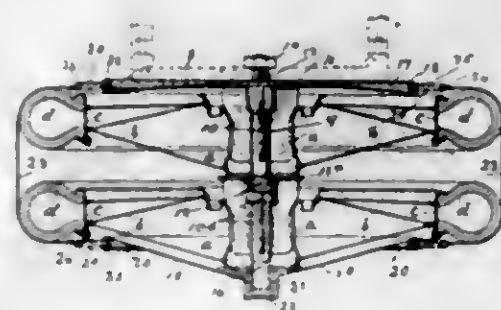
1. The combination of a receptacle with a pair of spaced resilient contacts, one of which is provided with an inwardly projecting shoulder, a substantially horseshoe shaped resilient member partially encircling said contacts, its ends pressing together to contract said contacts, and a plug contact provided with a recess extending inwardly from one edge, adapted to cooperate with said contacts, and said shoulder adapted to enter said recess.

3. A plug contact, comprising a substantially flat contact portion, a substantially flat base portion perpendicular to the former, and an integral flange extending longitudinally of both of said portions and perpendicular to the planes of said respective portions, adjacent to one of their edges, said contact portion being provided in its opposite edge with notches adapted to receive various receptacle contact locking devices.

1,311,267. WHEEL-CARRIER. EMIL R. DRAVER, Richmond, Ind. Filed Mar. 19, 1917. Serial No. 155,647. 2 Claims. (Cl. 224-29.)

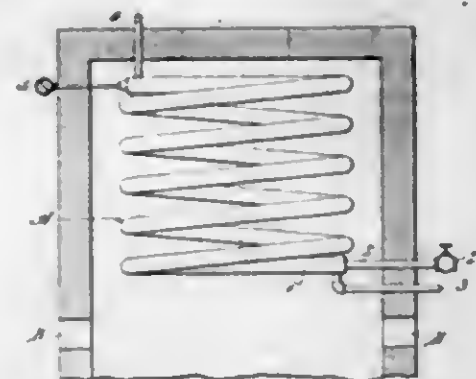
1. An extra wheel carrier for vehicles, comprising a wheel supporting spindle, with means for securing the same to a vehicle, a metallic back plate applied to the inner portion of said spindle and adapted to close the

inner side of the wheel on said spindle, an outer plate removably mounted on the outer portion of said spindle and adapted to close the outer side of a wheel on said spindle,



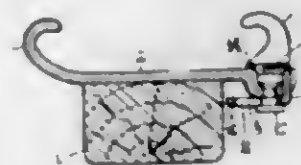
and means on the outer end of said spindle for forcing said front plate toward said back plate to secure one or more wheels on said spindle with their spokes inclosed and protected by said plates.

1,311,268. OIL-TREATING APPARATUS. CHARLES F. GAZDA, Chicago, Ill. Filed Nov. 2, 1917. Serial No. 199,832. 4 Claims. (Cl. 196-8.)



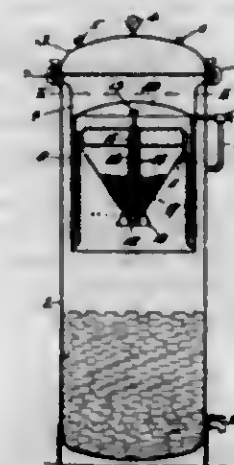
1. An apparatus of the character described provided with a passageway of annular form in cross section through which oil flows and also a closed space in which a variable pressure is created according to the temperature of the oil flowing through said passageway, means for heating said passageway, and means for indicating the pressure in said closed space.

1,311,269. VEHICLE-WHEEL RIM. CHARLES W. GARASKE, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 22, 1916. Serial No. 105,148. 6 Claims. (Cl. 152-21.)



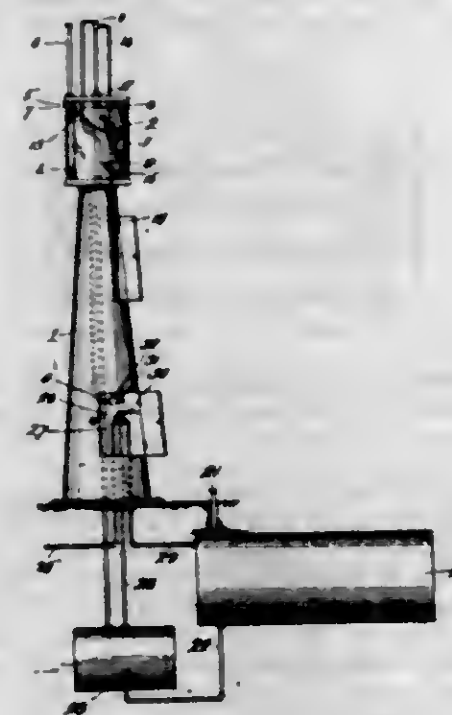
1. The combination with a wheel rim; of a split side-flange removably mounted on said rim, said flange being adapted when in place to interlock laterally with said rim and having complementary transverse slots in its shuffling ends; and a locking member for said flange attached to said rim so as to be movable transversely thereof and adapted to resiliently engage with the slots in such flange-ends to hold the latter against radially outward movement.

1,311,270. ACETYLENE-GAS GENERATOR. ALVAN M. GRIFFIN, Kansas City, Mo. Filed July 10, 1918. Serial No. 244,198. 7 Claims. (Cl. 48-38.)



7. An acetylene generator comprising a tank, means including a liquid seal chamber and a bell floating therein, dividing the tank into a generating chamber and a pressure chamber, means for generating gas in the generating chamber, means for introducing fluid under pressure in said pressure chamber, and means actuated by descending movement of the bell for discharging carbide into the generating chamber.

1,311,271. GASOLINE-TOWER. ALVAN M. GRIFFIN, Kansas City, Mo. Filed Aug. 24, 1918. Serial No. 251,312. 7 Claims. (Cl. 221-100.)

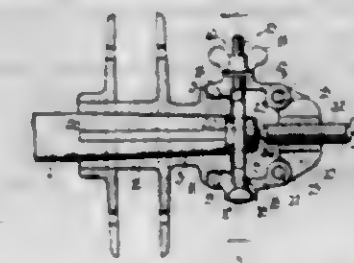


1. A gasoline tower comprising a supply tank, an elevated tank for containing a measured quantity of gasoline, and a siphon for conducting gasoline from the supply tank to the elevated tank and for withdrawing all gasoline from the last-named tank standing above the level of the short leg of the siphon.

1,311,272. WHEEL-REMOVING TOOL. JOHN K. GUMPFEN, Decatur, Ill., assignor of one-half to W. H. Woolums, Decatur, Ill. Filed June 13, 1918. Serial No. 236,747. 6 Claims. (Cl. 29-85.)

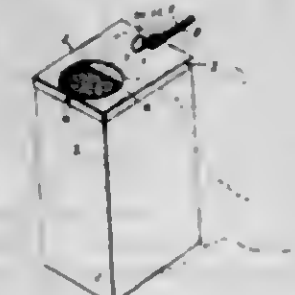
1. A device of the character described comprising a bridge member, a pair of arms pivotally mounted on the bridge member for engagement with the periphery of the

outer end of a wheel hub, a tension member arranged adjacent to the outer ends of said arms, for clamping the



latter upon a wheel hub, and a set screw carried by the bridge member for exerting pressure against an axle mounted in the wheel hub.

1,311,273. DISPENSING-CONTAINER. EMIL H. HACKMUT, Cleveland, Ohio. Filed Oct. 31, 1917. Serial No. 199,435. 3 Claims. (Cl. 220-41.)



1. A container of the character set forth comprising an open ended receptacle, a cover hingedly connected to the receptacle adjacent one side of its open end, the cover being provided with an aperture, a slide located on the inner side of the cover for closing said aperture, and an actuator for said slide consisting of a wire having one of its ends connected to the slide and extending along the inner surface of the cover and about the hinged edge thereof and overlying the outer surface of the cover.

1,311,274. EXPLOSIVE AND PROCESS FOR MAKING SAME. CARL T. P. HANSEN, Glen Olden, Pa., assignor of one-half to Frank Herman, Chester, Pa. Filed Feb. 7, 1918. Serial No. 215,901. 4 Claims. (Cl. 52-1.)

1. An explosive, comprising a mixture of ammonium-nitrate, potassium-nitrate, resin, sulfur, manganese-dioxide, starch, naphthalene, paraffin, tallow, potassium-permanganate, and sodium-chloride.

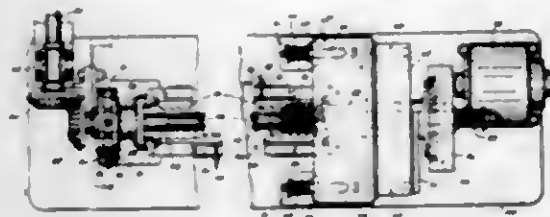
1,311,275. ELECTROLYTIC PROCESS FOR MAKING STENCILS. RALPH H. HARRISON, Detroit, Mich. Filed Sept. 11, 1918. Serial No. 253,614. 8 Claims. (Cl. 191-112.)

1. The process of forming a metallic stencil which consists in giving a sensitive photographic plate a double exposure, one to obtain a negative of the picture or device to be reproduced and the other to obtain a network of fine lines which will connect the tonal areas of the negative of the picture, then developing the negative, coating the areas and lines of the negative with copper, and then electrically depositing metal upon the copper.

1,311,276. METAL-WORKING MACHINE. LOUIS A. HAWTHORNT, Newark, and BERTRAM S. PEOU, Jersey City, N. J., assignors to Steel Utilities, Incorporated, a Corporation of New York. Filed May 5, 1917. Serial No. 166,585. 25 Claims. (Cl. 164-115.)

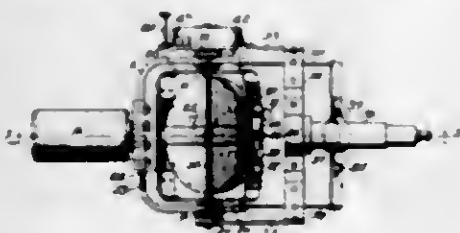
1. A machine for punching structural shapes including in combination means for longitudinally feeding the

shape, means for stopping the shape, punch and die blocks traveling together transversely to the shape, screw shafts on which the punch and die blocks are mounted, respectively, a shaft rotating proportionally to the relative travel of the shape and punches, connections for rotating said last-mentioned shaft and said screw-threaded shafts together, an arm on said shaft and rotating therewith, an annular series of stop pins in the path of said arm, a series of solenoids to project the stop pins as selected, circuit controlling devices comprising series of pairs of electrical contacts, a contact pin for each pair, each pair



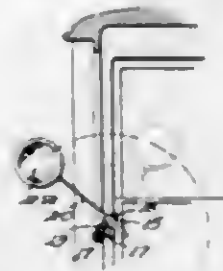
of contacts being closed by the corresponding pin, a contact controller mounted upon and movable along said shaft and acting to close the corresponding contacts, a circular series of spring-pressed pins encircling said shaft, a corresponding series of pairs of electrical contacts, a second contact controller mounted on said shaft to rotate therewith and to successively actuate the circularly arranged spring-pressed pins to close the corresponding pairs of contacts, and circuit connections from the various contacts to the solenoids to energize a selected solenoid to actuate the corresponding stop pin to arrest the stop arm and the shaft.

1,311,277. SIGHTING DEVICE FOR AEROPLANES. RALPH B. HEAD, Moundee, Ill. Filed June 19, 1918. Serial No. 240,723. 17 Claims. (Cl. 88—1.)



1. In a sighting device for air craft, in combination, a plurality of members mounted to have relative movement about a common axis, one of said members being provided with means adapting it to constantly occupy a true perpendicular position, another of said members carrying a telescope, and the other of said members carrying a mirror disposed at an angle to the axis of said telescope and adapted to reflect into the telescope an image of an object beneath said mirror, and means connecting said members whereby angular movement of said telescope-carrying member about said axis effects an angular movement of less extent of said mirror-carrying member in the same direction.

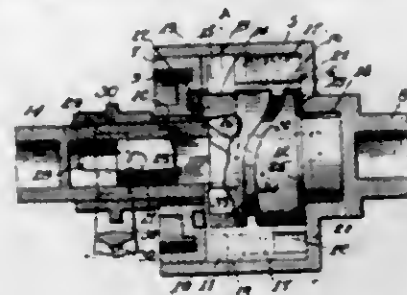
1,311,278. MIRROR-SUPPORT FOR USE IN CLOSED CARS. MARMADUKE HOLDSWORTH, Worcester, Mass., assignor to Alfred Thomas, Worcester, Mass. Filed Sept. 21, 1918. Serial No. 255,028. 2 Claims. (Cl. 88—67.)



1. A mirror support comprising a main frame having a stud projecting rearwardly therefrom, a connection piv-

oted on said stud and provided with a transverse passage, a holder having a stud in said passage and pivoted to swing thereon, an arm carried by said holder, a mirror on said arm, means whereby said arm can be adjusted axially and longitudinally and positively fixed in adjusted position, means whereby the mirror can be adjusted with respect to the arm and positively fixed in adjusted position, and thumb-nuts on the ends of said studs for readily loosening them and fastening them in adjusted positions.

1,311,279. FLUID-CLUTCH. SINCLAIR J. JOHNSON, Montclair, N. J.; Sarah Johnson, executrix of the will of said Sinclair J. Johnson, deceased, assignor of one-half to Walter C. Shultz, Montclair, N. J. Filed Apr. 20, 1918. Serial No. 92,441. 14 Claims. (Cl. 192—18.)



7. A fluid clutch comprising an annular fluid chamber, a rotatable head carrying a piston to work in said chamber, and an abutment adapted to be reciprocated transversely of the fluid chamber and the path of movement of the piston alternately and in proper timed sequence with the movement of the piston, substantially as and for the purpose specified.

1,311,280. FILTER ELEMENT. KARL KIEFER, Cincinnati, Ohio. Filed Mar. 27, 1916. Serial No. 86,984. 2 Claims. (Cl. 210—13.)



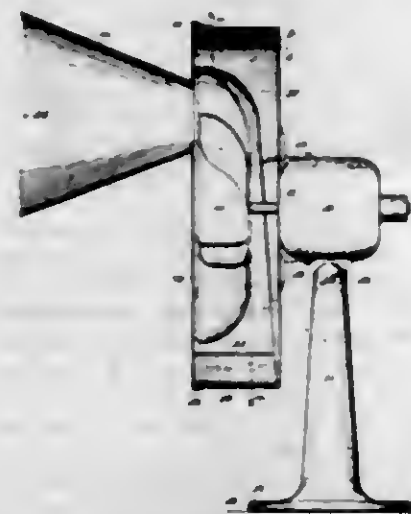
1. In a filter, in combination with filter layers of compressed moist pulp, an impermeate liquid conductor between said layers consisting of a single relatively thin flat plate having intersecting channels in both of its flat sides, and said channels opening through the peripheral edges of said plate, to receive or discharge liquid without any other peripherally located conducting means in the plate, said channels being of substantially rectangular cross section whereby their sides are at substantially right angles with the flat surfaces of the plate between the channels, so that said pulp of said filter layers is adequately supported upon said flat surfaces and across said channels without materially bedding in said channels.

2. In a filter, in combination with filter layers of compressed moist pulp, an impermeate liquid conductor between said layers consisting of a single relatively thin flat plate having intersecting channels in both of its flat sides, opening through the peripheral edges of the plate to receive or discharge said liquid without any other peripherally located conducting means in the plate.

1,311,281. FLYCATCHER. MARK KURKA, Toronto, Ontario, Canada. Filed May 1, 1919. Serial No. 294,029. 3 Claims. (Cl. 43—1.)

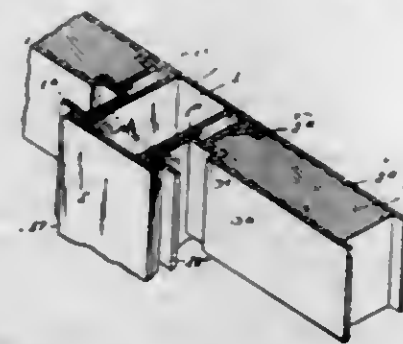
3. A device of the class described comprising a pill-box shaped casing, a curved partition within the casing forming a receiving chamber between the partition and the outer annular wall of the casing communicating with the

central portion of the casing, a suction fan mounted for rotation within the casing inwardly of said partition, an inlet for flies in the front wall of the casing communicat-



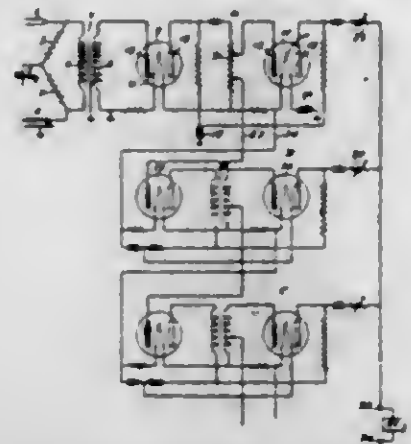
ing with the fan chamber and an outlet in the rear wall of the casing communicating with the chamber between said partition and the annular wall of the casing.

1,311,282. CONCRETE-FORM. STEWART R. MCKAY, Cleveland, Ohio, assignor to McKay Concrete Form Company, Sewaren, N. J., a Corporation of New Jersey. Original application filed June 12, 1915, Serial No. 33,798. Divided and this application filed Sept. 13, 1916. Serial No. 119,851. 5 Claims. (Cl. 25—181.)



3. The combination, with a post having a channeled side, of a panel having a tongue projecting laterally therefrom, and a channeled clamp adapted to be inserted between one of the post flanges and said tongue.

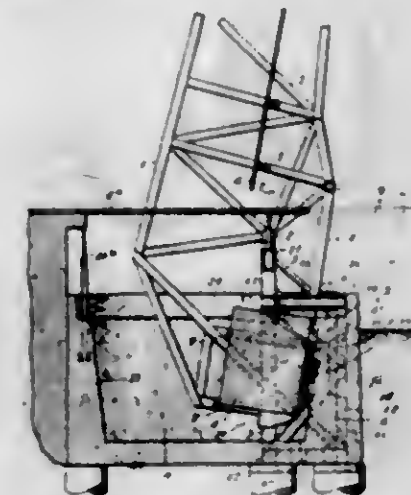
1,311,283. AMPLIFYING AND CORRECTING SYSTEM. ROBERT C. MATHES, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1918. Serial No. 249,828. 4 Claims. (Cl. 178—44.)



1. The method of combining with an electric wave of given form, other derived waves of different forms so as to

produce a resultant wave of a desired form which consists in separating out the various component waves, amplifying them separately to the desired degree, and recombining the separately amplified waves to actuate a common receiving device.

1,311,284. BASCULE-BRIDGE. SAMUEL MOSELEY, Chicago, Ill. Filed Dec. 3, 1917. Serial No. 205,202. Renewed June 13, 1919. Serial No. 304,093. 3 Claims. (Cl. 14—36.)



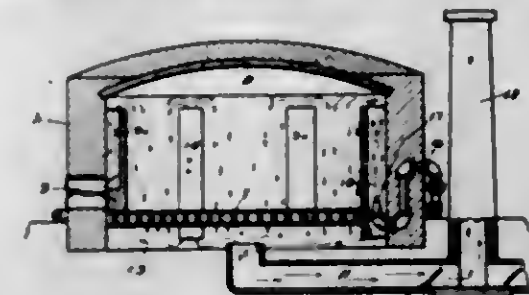
1. A bascule bridge comprising movable trusses, a counterweight therefor, trunnions on which the structure turns, inside column supports for said trunnions, and supporting truss construction for said inside columns having an opening within which said counterweight may pass when it swings below said trunnions.

1,311,285. PROJECTILE. CHESTER A. MCLAUGHLIN and CECIL A. TAYLOR, Sayre, Pa. Filed Dec. 28, 1917. Serial No. 209,335. 5 Claims. (Cl. 102—29.)



1. In a projectile, a hollow body, a supplemental explosive member disposed therein, a fused tube disposed removably longitudinally and eccentrically of the body in engagement with the inner surface of the wall of the body and said tube being held against displacement by said member, means to ignite the fuse of the tube and means to explode said supplemental member through the action of the fuse.

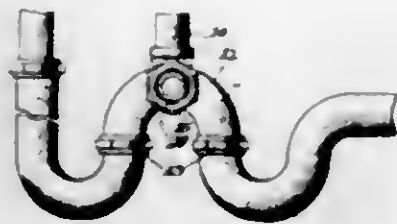
1,311,286. KILN. FRANK MCKENDELLO, Cleveland, Ohio, assignor of one-third to Charles F. Lockhart, Cleveland, Ohio. Filed Jan. 20, 1919. Serial No. 272,118. 4 Claims. (Cl. 25—145.)



1. A kiln comprising a chamber having a perforated floor with a space thereunder, a plurality of fireplaces spaced

around the chamber and discharging hot gases into the upper part thereof, an outlet from the space under the floor, and a plurality of circulating ducts arranged around the chamber in alternation with the fireplaces and connecting said space and the upper part of the chamber.

1,311,287. SANITARY TRAP. ROBERT NICHOLAS MURPHY, Ottawa, Ontario, Canada. Filed Mar. 18, 1918. Serial No. 223,161. 3 Claims. (Cl. 182-12.)



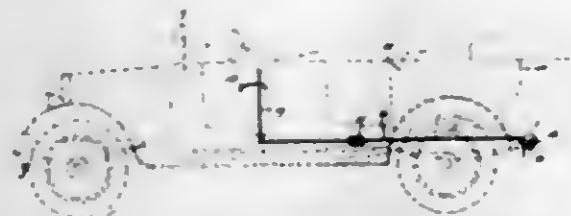
1. A trap of the class described comprising a pair of water seals, an air chamber intermediate of the water seals and adjusted relatively thereto, a ventilating pipe connected to the air chamber, and means engaging with the air chamber adapted to flush the water seals and ventilating pipe individually and successively.

1,311,288. CLOSURE FOR JARS OR RECEPTACLES. JOHN CHRISTOPHER NICHOL, Perth, Ontario, Canada. Filed Dec. 2, 1918. Serial No. 265,011. 1 Claim. (Cl. 215-87.)



In a jar closure or the like, in combination, a container having a flange formed therearound, a plurality of lugs on the container and flange, a top, a projection, a curved spring member hingedly secured between aforesaid flange and lugs, adapted to press on the said projection and held in place by lugs formed at or near the circumference of the top, clamping V shaped arms provided at its other end to engage the under side of said flange, a wire band placed around the container, under the flange, serving as a pivot to the hinge, and holding spring member in position.

1,311,289. DIRECTION INDICATOR. JESSE P. NIXON, Allamuchy, N. J. Filed Apr. 12, 1917. Serial No. 141,451. 1 Claim. (Cl. 40-77.)



A direction indicator, comprising a hood having end walls formed with bearings and its inner surface polished to provide a reflector, a lamp box mounted in said bearings in the hood for rotation on a horizontal axis, said lamp box having one wall open, a translucent sign arranged adjacent the open wall, a rack gear on one end of said lamp box, a horizontal rack bar mounted for sliding movement and meshing with said gear, and held in meshing engagement by the hood, and a lever connected to said rack bar for imparting reciprocatory movement thereto.

1,311,290. DIRIGIBLE HEADLIGHT. THOMAS PADGETT, East Palestine, Ohio. Filed Oct. 11, 1918. Serial No. 257,779. 8 Claims. (Cl. 240-62.)



1. A headlight steering mechanism comprising, in combination with the front axle and the transverse steering rod of an automobile, two tubular members disposed in telescopic relation and normally in parallelism with the longitudinal axis of the automobile, a pipe-T carried by each of said members, each of said T's having its stem extended laterally and threaded both exteriorly and interiorly, said stems being of even size, a cap-nut, an axle embracing clamp attached to said cap-nut, a post having its opposite ends threaded, a cap-nut threaded upon the upper end of said post, a steering rod clamp attached to the last mentioned cap-nut, said post and the first mentioned cap-nut being adapted to be interchangeably carried by the stems of said T's with the lower end of said post received interiorly and the first mentioned cap-nut received exteriorly of said stems, and a lamp carried by the foremost of said tubular members.

1,311,291. CASKET-HANDLE. EDWARD R. SARGENT, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Apr. 6, 1917. Serial No. 160,273. 6 Claims. (Cl. 16-103.)



1. In a casket handle or the like, a sheet metal arm member having rearwardly turned side walls extending lengthwise of said arm, a bar extending transversely across said arm member at the rear thereof in engagement with the edges of said rearwardly turned side walls, a separate bar-supporting clip of substantially U-shape set in between the side walls of said arm member at opposite sides of said bar, the legs of said clip extending to the rear surface of the arm member between said side walls and being provided at their ends with outwardly bent lugs lying flatwise against the rear surface of the arm member on opposite sides of the bar, and fastening members for securing said lugs to the arm member.

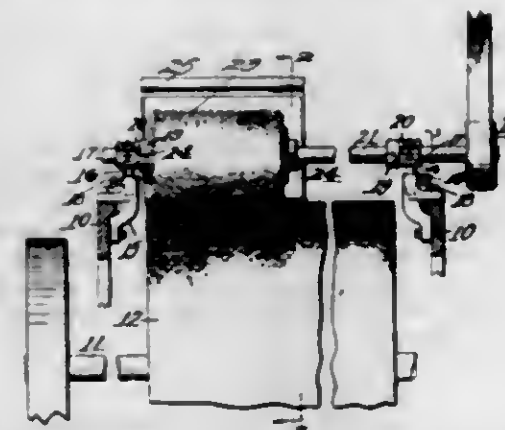
1,311,292. CASKET-HANDLE. EDWARD R. SARGENT, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Apr. 6, 1917. Serial No. 160,274. 3 Claims. (Cl. 16-103.)



1. In a casket handle or the like, a sheet metal arm member with rearwardly turned side walls having partly

round recesses at their rear edge portions, a round bar extending transversely across said arm member at the rear thereof and fitting in said recesses, a separate clip set in between said side walls and embracing the bar at the rear of said arm member, said clip having a curved intermediate portion conforming to said bar at the rear of the latter and being provided with legs extending to the rear surface of the arm member between said side walls above and below the bar respectively, the ends of said legs being bent up to present outwardly directed lugs lying flatwise against the rear surface of the arm member, and fastening members for securing said lugs to the arm member.

1,311,293. CLEANER FOR GARNETTING-MACHINES. GUSTAV SCHAEFER, Worcester, Mass. Filed May 25, 1918. Serial No. 236,559. 1 Claim. (Cl. 10-15.)



The combination with a fiber preparing machine having a cylinder provided with teeth for operating on the fibers, of a rotary brush located in position for its teeth to enter the spaces between the teeth of said cylinder to remove solid matter therefrom, a shaft with which said brush rotates mounted adjacently adjacent said cylinder, connections for said brush whereby it may be moved to different positions upon said shaft, a casing substantially surrounding said brush for receiving the dirt picked up thereby, said casing having a curved bottom resting on the cylinder and extending substantially to the point of contact between the cylinder and brush, and means for holding said casing in stationary position to prevent its being moved by the cylinder.

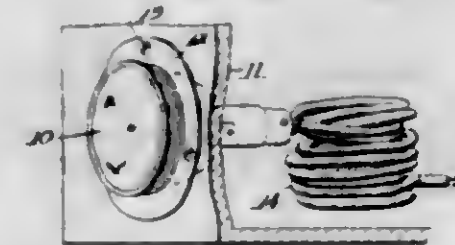
1,311,294. EPISCOPAL FOR TANKS AND OTHER USES. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Sept. 6, 1917. Serial No. 180,949. 4 Claims. (Cl. 85-1.)



1. In an episcopal affixed to an armored shelter such as a "tank," for enabling an observer inside to gain a view

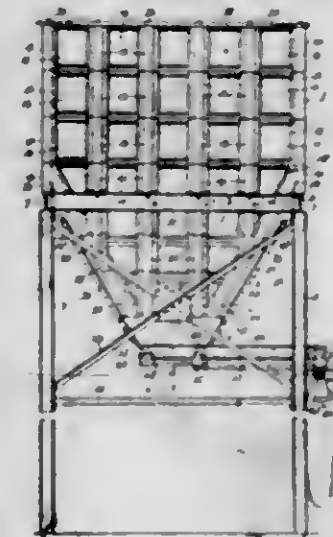
of a portion of the horizon, the combination with the armored wall of the shelter, pierced with an inlet aperture for the entrance of the light from the outside, of an armored casing, fixed to the inside of said armored wall, formed with an exit aperture for light from said casing, and with a side opening, a removable frame made of thin metal adapted to be introduced through said side opening in said casing, a first reflector in said casing arranged to receive light entering through said inlet aperture, and a second reflector in said casing arranged to receive the light reflected from said first reflector and to reflect same through said outlet aperture to the eye of the observer inside the shelter.

1,311,295. COMBINED TONNEAU AND TROUBLE LAMP. JASON C. STEARNS, Worcester, Mass. Filed Mar. 31, 1919. Serial No. 286,397. 1 Claim. (Cl. 240-7.)



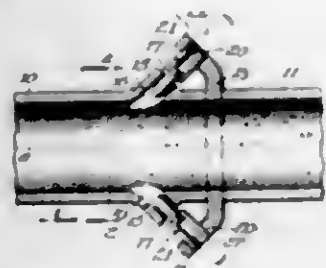
The combination with a supporting ring mounted on the vertical wall of an automobile and substantially flush with the surface thereof and having a central passage therethrough, of a tonneau lamp adapted to be supported within said ring and passage and beyond said wall, the front surface of the lamp lying substantially in the plane of said ring, and yielding means within the ring for detachably holding the lamp therein but allowing it to be turned.

1,311,296. STORAGE-TANK OR RECEPTACLE. HERMAN A. POPPENHAGEN, Hammond, Ind., and ARTHUR P. STENO, Chicago, Ill., assignors to Green Engineering Company, East Chicago, Ind., a Corporation of Illinois. Filed Dec. 2, 1918. Serial No. 264,885. 19 Claims. (Cl. 189-3.)



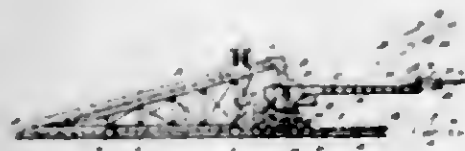
1. A receptacle having a wall, comprising a base member, a plurality of upright members laterally spaced apart and supported by said base member, and a plurality of panels or plates removably inserted between and having engagement with said upright members.

1,311,297. ASH-CONVEYING SYSTEM. ARTHUR P. STRONO, Chicago, Ill., assignor to Green Engineering Company, East Chicago, Ind., a Corporation of Illinois. Filed Mar. 21, 1918. Serial No. 223,890. 10 Claims. (Cl. 137-75.)



6. In an ash conveying or like system, two aligned pipe sections, one of said pipe sections having a hole extending through the wall thereof, a nozzle projecting into said hole, and means clamped between the opposed ends of said pipe sections for supporting said nozzle.

1,311,298. CONVEYER. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1918. Serial No. 263,345. 8 Claims. (Cl. 193-3.)



1. Reclaiming apparatus, comprising a main conveyor belt, a truck mounted to move over said belt, a conveyor frame carried by the truck and pivotally connected therewith to move about both vertical and horizontal axes, a conveyor belt carried by said frame and delivering to the main conveyor, a gathering device detachably secured to the outer portion of the frame which delivers to the conveyor belt thereon, and a caterpillar tractor pivotally connected with said gathering device and detachable therewith from said conveyor frame which supports said gathering device and said conveyor frame, moves it about its pivotal connection with the truck and by reason of its pivotal connection may be set to move the conveyor frame with the truck which supports it longitudinally with reference to said main conveyor belt.

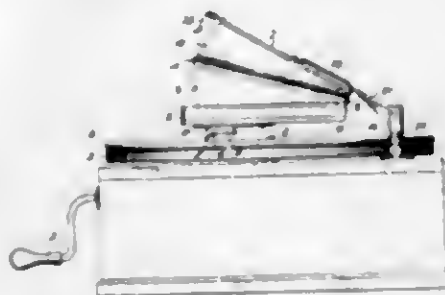
1,311,299. AUTOMATIC FRICTION-CLUTCH. JOSEPH H. THRENTEN, San Francisco, Calif., assignor of one-half to L. Carrie, San Francisco, Calif. Filed July 2, 1917. Serial No. 179,401. 7 Claims. (Cl. 192-8.)



1. In an apparatus of the character described, a driving friction clutch member, a driven friction clutch member, a spring tending to separate said members, an

upwardly movable wedge arranged to move the members together and a weighted lever connected to the lower end of said wedge and adapted to move the wedge upward.

1,311,300. COMBINED HORN AND SOUND-BOX. WILLIAM H. TONK, New York, N. Y., assignor to William Tonk & Bro., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 18, 1918. Serial No. 223,075. 2 Claims. (Cl. 274-25.)



1. In combination, a horn closed at one end and comprising an upper leaf and a hollow lower leaf or tone chamber connected together by folding members, the hollow leaf having openings in opposite walls thereof, the opening in the inner wall being adjacent to the closed end of the horn, and a sound box mounted upon the hollow leaf with its diaphragm filling the opening in the outside wall thereof.

1,311,301. INSULATING AND WATERPROOFING COMPOSITION FOR ELECTRICAL APPLIANCES. GEORGE TUCKER, Brockton, Mass. Filed June 1, 1918. Serial No. 237,754. 2 Claims. (Cl. 134-13.)

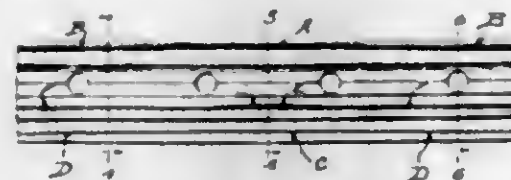
2. A composition for insulating and waterproofing electrical elements consisting of a mixture of rosin and linseed oil in the proportions of six pounds of red rosin to one pint of linseed oil.

1,311,302. CAMP-STOVE. RODERICK D. TURNER and WALTER O. DEDOLPH, Mount Vernon, Wash. Filed Feb. 19, 1919. Serial No. 277,995. 1 Claim. (Cl. 126-30.)



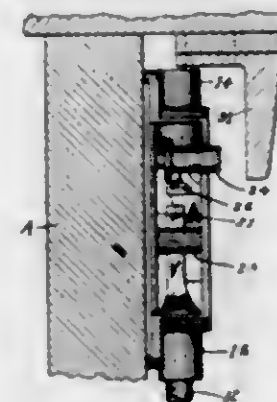
A camp stove comprising a post, radially extending grate-supporting bars pivotally connected to the post above the lower end thereof and foldable alongside the post, a runner slidably and rotatably mounted on the post above the grate-supporting bars, link connections between the runner and the bars for effecting the unfolding and folding of the latter, grate bars carried by the afore-said supporting bars, said grate bars extending transversely between two adjacent supporting bars and being loosely connected thereto, and composed of pivotally connected sections to fold between said adjacent bars when the latter are folded alongside the post, and foldable supporting legs pivoted to the post above the runner and positioned beyond the outer ends of the grate-supporting bars.

1,311,303. RAIL-JOINT. ELMER L. VAN DREAR, St. Paul, Minn., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1919. Serial No. 292,855. 6 Claims. (Cl. 238-188.)



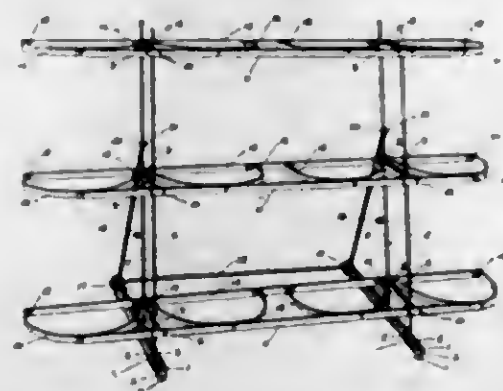
1. A rail joint bar having rail head clearance toward its ends, and a rail flange clearance at the central part of the under-side of its foot flange.

1,311,304. BOLT-DOGGING MEANS. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Original application filed Dec. 8, 1917. Serial No. 206,323. Divided and this application filed Nov. 15, 1918. Serial No. 262,650. 7 Claims. (Cl. 70-120.)



1. In combination with a door, a rim casing applied to the face of the door near the upper edge thereof, a sliding bolt extending through the casing in a vertical direction and guided in openings at the top and bottom of the casing, a keeper on the upper part of the door frame to receive said bolt, a detent member for dogging the bolt in retracted position normally projecting outward from the front face of said casing, and a rigid depending releasing member on the keeper extending downward in front of said detent member to engage the projecting end thereof when the door is closed and thereby release the bolt.

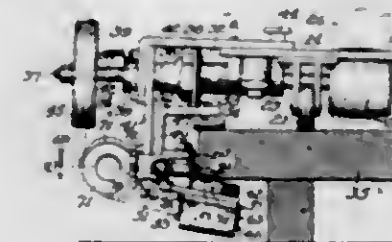
1,311,305. DISPLAY-RACK. BENEDICT E. WILLETT, Dayton, Ohio. Filed Jan. 25, 1918. Serial No. 213,663. 5 Claims. (Cl. 211-14.)



4. In a display rack, a pair of horizontal base members, each base member consisting of two angle-irons so con-

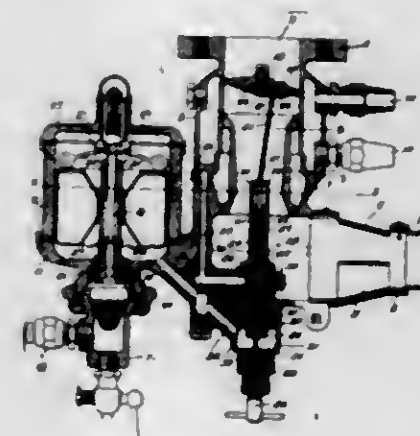
nected that two corresponding sides thereof face each other a short distance apart, a collar at each end of said base members, a pair of parallel standards secured at their lower ends between the facing sides of each pair of angle-irons, a pair of cross pieces straddling the side portions of each pair of standards at intervals throughout their length, the cross pieces of one pair of standards being directly opposite those of the other pair of standards, said cross pieces having right-angled ends, a horizontal supporting member secured to the front and rear right-angled ends of each row of cross pieces, and bowed receptacle holders connected in alignment between the horizontal supporting members belonging to each row of cross pieces.

1,311,306. MACHINE FOR MANUFACTURING TANK-BOTTOMS. JERRY A. ANDERSON, Batavia, Ill. Filed Jan. 11, 1919. Serial No. 270,645. 6 Claims. (Cl. 147-36.)



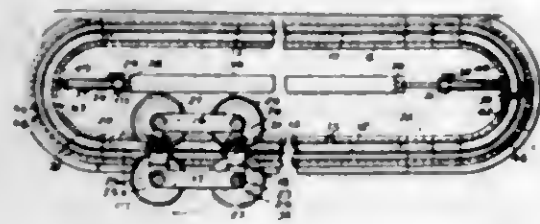
1. Apparatus for chamfering circular bodies comprising a member movable around the periphery of the body to be chamfered and a rotatable chamfering element carried by said member and positioned to operate against the face of the body to be chamfered, with the axis of said chamfering element extending within the circumference of the body being operated on.

1,311,307. CARBURETER. RAYMOND M. ANDERSON, Chicago, Ill., assignor to Stromberg Motor Devices Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1915. Serial No. 24,849. 7 Claims. (Cl. 261-41.)



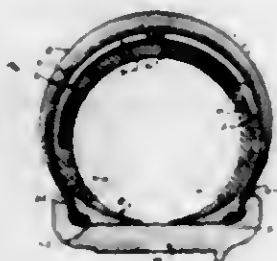
7. In a carbureter, a carbureting chamber having an air-inlet and a fuel-outlet, a throttle valve controlling said outlet, a fuel-nozzle leading into said carbureting chamber, said nozzle having a central chamber, an intermediate chamber and an outer chamber, said central chamber being connected to a point above the throttle and being fed from said intermediate chamber, said intermediate chamber leading directly from the supply to the nozzle outlet, and said outer chamber being fed from said intermediate chamber and connected with a well communicating with the atmosphere, said outer chamber feeding into said intermediate chamber from the top thereof under suction.

1,311,308. SAW SETTING AND SHARPENING MACHINE. ROCCO ARMONDIA, Zellenople, Pa. Filed Dec. 10, 1918. Serial No. 246,933. 3 Claims. (Cl. 76-39.)



1. A machine for the purpose set forth comprising means to provide a combined track and saw holder, and a portable saw set traveling against said track and including rotatable disks adapted to act upon the teeth of a saw supported by the holder, one of said disks having a toothed periphery and the other a beveled periphery.

1,311,309. TWO-PART INTERLOCKING TIRE. HARVEY EDWARD BLISS, Wichita, Kans. Filed Feb. 15, 1919. Serial No. 277,240. 4 Claims. (Cl. 152-17.)



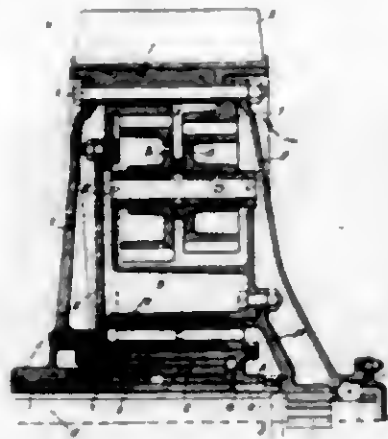
3. In combination as a shoe for pneumatic tires, an inner casing enveloped by an outer casing; each of said casings comprising a plurality of layers of fabric and elastic body elements integrally cemented together; a centrally situated longitudinally extending channel formed in the periphery of said inner casing and intersected at spaced intervals by channels transversely arranged in said casing periphery; and edge beads of said inner casing having grooves inwardly formed therein as specified; a centrally situated longitudinally extending rib protruding from the inner wall of said outer casing and intersected at spaced intervals by ribs transversely protruding from said inner wall of said casing; said protruding longitudinal and transverse ribs of the outer casing engaging within said longitudinal and transverse channels of the inner casing as specified; and edges of said outer casing inwardly bent and fabricated to form inextensible flanged members and engaged within the adjacent grooves in the edge beads of said inner casing for the purposes as specified.

1,311,310. SPEED REDUCING GEAR. GEORGES BOUTON, Paris, France, assignor to Etablissements De Dion Bouton, Société Anonyme, Puteaux, France, a Corporation of France. Filed Dec. 10, 1917. Serial No. 206,516. 4 Claims. (Cl. 74-34.)

1. A speed reducing gear comprising a power shaft, a cage rotatable with said shaft, a bearing for said cage, means for securing the cage to the shaft, planet wheels supported by the cage, a stationary rack with which one of said wheels engages, and a rack adapted to be secured to a road wheel and with which the other of said wheels engages.

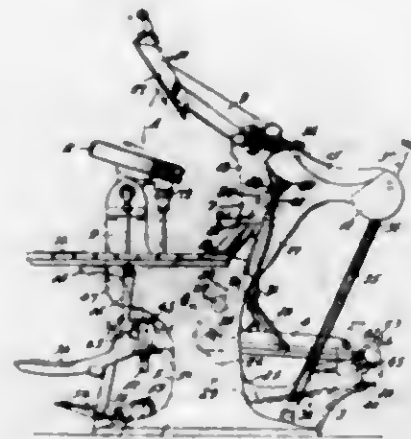
2. A speed reducing gear comprising a hollow spindle, a pair of bearings thereon, a cheek mounted between said bearings, a power shaft, a stationary cheek, a rack car-

ried by the last mentioned cheek, a rack adapted to be secured to a road wheel, a cage secured to the power



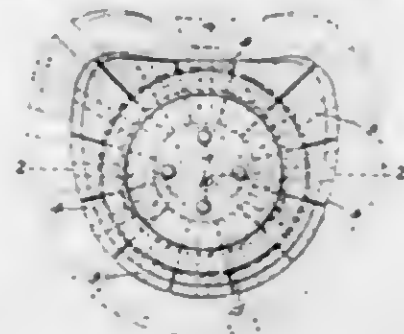
shaft, and planet wheels carried by the cage and engaging the racks.

1,311,311. PRESSING-MACHINE. CHARLES L. BRALY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 14, 1910. Serial No. 114,794. 23 Claims. (Cl. 68-9.)



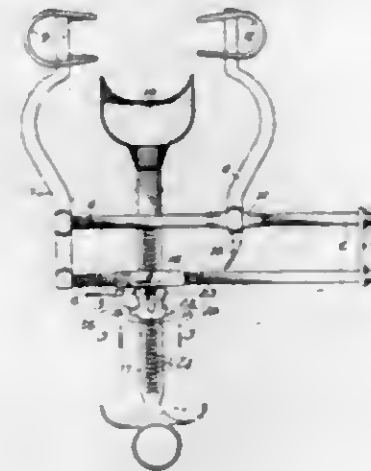
20. A pressing machine, comprising a stationary buck, a movable buck, a lever having a cam face and arranged when operated to actuate said movable buck, and an operating lever carrying a roller traveling over said cam face, and a rigid link operatively connecting said levers.

1,311,312. NECK-BAND-EXPANDER FOR SHIRT-PRESSES. CHARLES L. BRALY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 8, 1916. Serial No. 135,811. 7 Claims. (Cl. 68-1.)



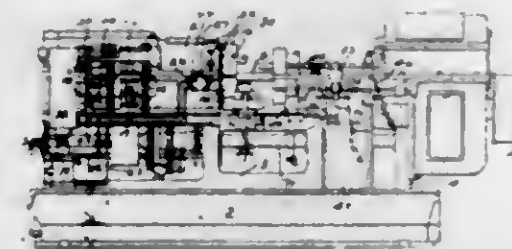
1. In a neck band former, a base, a center boss thereon, a plurality of neck band former slides movable radially on said base, and means associated with said boss for moving said slides, comprising a cam, and means for raising and lowering said cam.

1,311,313. RETRACTOR. HAROLD M. BATZ, Chicago, Ill., assignor to Sharp & Smith, Chicago, Ill., a Corporation of Illinois. Filed June 22, 1918. Serial No. 241,329. 4 Claims. (Cl. 128-20.)



1. In combination, a pair of parallel bars, a pair of opposed hooks carried by said bars and adapted to be drawn apart and fixed in position, a third hook adapted to be moved transversely of the line of said first two hooks, and carried by a bar transversely slidable on one of said first mentioned bars, a channelled clip in which said transversely slidable bar is mounted and a dog pivoted to the clip and adapted to be engaged with notches in the transversely slidable bar to hold the same in position.

1,311,314. METAL-WORKING MACHINE. ROBERT S. BROWN, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 25, 1918. Serial No. 250,630. 14 Claims. (Cl. 29-37.)



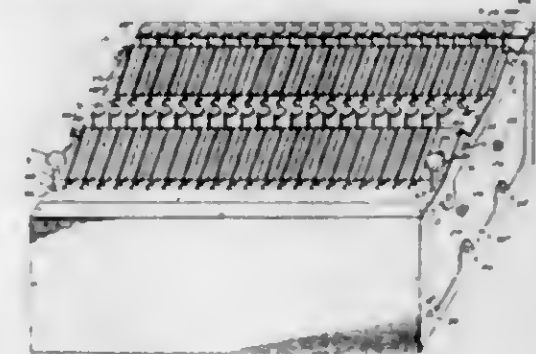
4. In a machine of the class described, the combination of a rotary carrier provided with a series of rotary spindles each provided with a work-holder, a reciprocatory carrier provided with means to act on the work carried by the respective holders on the rotary carrier, and fluid-governed means to be actuated at will and supported independently of the spindles, for effecting the stoppage of a spindle and subsequently the operation of its holder to free the part carried thereby, and for also arresting the movement of the reciprocatory carrier.

1,311,315. LAUNDRY-REGISTERING APPARATUS. CHARLES A. BENKER, Kansas City, Mo. Filed Aug. 14, 1916. Serial No. 114,828. 2 Claims. (Cl. 255-110.)

2. In re-setting mechanism for registering apparatus, the combination with the registering wheels, and actuators, of a series of aligned pivoted bell crank levers having long and short arms, and bars connecting with the aligned bell crank levers, and vibrating bars upon the short arms of said levers in the path of movement of said actuators, trip bars movable in the direction of and releasing said actuators, counter wheels and accumulating wheels, and separate fixed and movable boxes inclosing said counter wheels and accumulator, respectively, a support for said boxes, and an expanding spring between said boxes, said accumulator box having an opening in its outer end, a

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clutch having one part connected with one of said accumulators, and the other part with the support for the said boxes, a device connected with the movable box for moving the box against the pressure of said spring and



disengaging the clutch, a synchronous mechanism actuated by the vibrating bar, in the path of the actuators, communicating motion to said counter wheel shaft, and a releasing key bar pivotally connected with the long arm of one of said pivoted bell crank levers.

1,311,316. MOP-HOLDER. CLAYTON E. BURKE and GROVE R. BACKWITT, Minneapolis, Minn., assignors to B. B. Specialty Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 27, 1918. Serial No. 231,170. 4 Claims. (Cl. 15-50.)



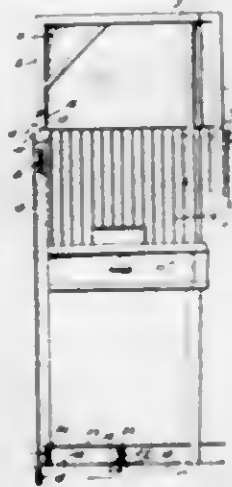
1. A mop holder comprising a head frame, a clamping bar slidable on said frame and a toggle pivotally anchored to said head and detachably engageable with said clamping bar.

1,311,317. SAFETY-WINDOW FOR CASHIERS' BOOTHS. GEORGE W. CLINGAN, Daisy, Ark. Filed Apr. 12, 1917. Serial No. 161,629. 5 Claims. (Cl. 268-2.)

1. In a safety window construction, vertical standards having longitudinal grooves therein, a slide mounted in the grooves, pivoted latches for engagement with the slide to retain the same in raised position, rods operatively connected with the latches, a rotatable shaft operatively connected with the rods, a keeper carried by the rotatable shaft, and a latch member adapted for engagement with the keeper to hold the shaft against rotation, the slide being allowed to descend by force of gravity upon the release of the latch from the keeper.

2. In a window construction, vertical standards having longitudinal grooves therein, a slide movable in the grooves, rotatable latches pivoted on the standards adapted for engagement with the slide to retain the same in raised position, rods operatively connected with the latches, a rotatable shaft operatively connected with the rods, a keeper carried by the shaft, a latch adapted for engagement with the keeper to hold the shaft against rotation, resilient means urging the latch into such position, and a horizontally disposed bar capable of vertical movement disposed over the last named latch whereupon depression

of the latch the shaft will be free to rotate to allow the slide to descend.

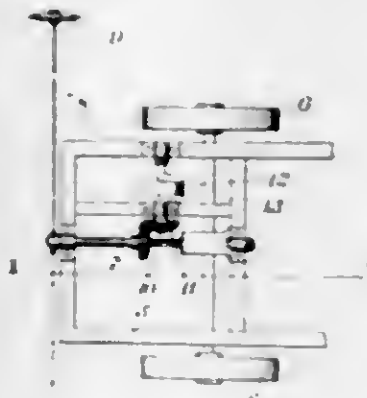


3. In a safety window, a vertically movable slide latches for retaining the slide in a raised position, rotatably connected with the latches, a rotatable shaft operatively connected with the rods, a keeper carried thereby, a latch member adapted for engagement with the keeper to hold the shaft against rotation, vertical stems mounted adjacent the last named latch, a vertical bar slidably mounted on the stems, and expansible means mounted on the stems and urging the bar upwardly.

4. A safety window, including parallel grooved standards having slots communicating with the grooves formed therein, a slide movable in said grooves, rotatable disks mounted in said slot and provided with flattened portion adapted to be engaged beneath said slide to hold the same in an elevated position between said standards, and operating means for rotating said disk out of engagement with said slide to permit downward engagement of the latter between said standards.

5. A safety window, including a vertically movable slide, latches normally retaining said slide in elevated position, a rotatable shaft having cranks formed on its respective ends, an operative connection between said cranks and said latches an intermediate crank formed on said shaft and disposed at an angle to said first mentioned cranks, a latch member normally engaging said intermediate crank to prevent rotation of said shaft, means engageable with said latch to move the same out of engagement with said crank in order to permit rotation of said shaft.

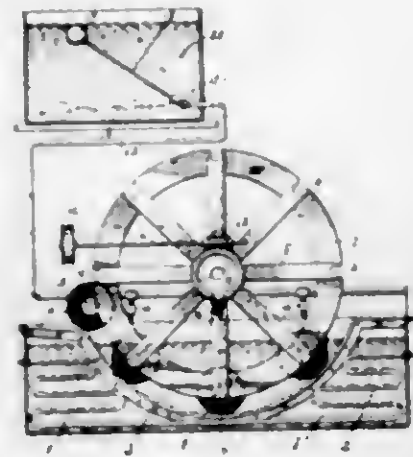
1,311,318. MARKER FOR CORN PLANTERS. RAY COE MAX, Bloom township Fairfield county, Ohio. Filed Feb. 24, 1919. Serial No. 278,621. 3 Claims. (Cl. 97—83.)



1. In a corn planter the combination of a marker arm and a rotary shaft on which the marker arm is fixed,

a foot-operated crank shaft, and gears connecting said shafts, said gears arranged and proportioned with respect to each other as to require movement of the crank downward and beyond a vertical plane coinciding with that of the crank shaft to shift the marker from either side of the planter to the other, substantially as described.

1,311,319. PROCESS FOR RUST-PROOFING IRON AND STEEL. ROY D. COLQUHOUN, Detroit, Mich., assignor to Parker Rust-Proof Company of America, Detroit, Mich., a Corporation of Michigan. Filed Mar. 31, 1919. Serial No. 286,383. 3 Claims. (Cl. 148—7.)



1. The process of treating articles of iron and steel to prevent rusting which consists in submerging them in a bath comprising a compound of phosphorus to which is constantly added a similar compound of phosphorus in more concentrated solution to keep the bath at maximum activity.

1,311,320. BRAKE-SHOE. JEDSON COOK, Albany, N. Y. Filed Dec. 16, 1918. Serial No. 266,937. 1 Claim. (Cl. 188—28.)

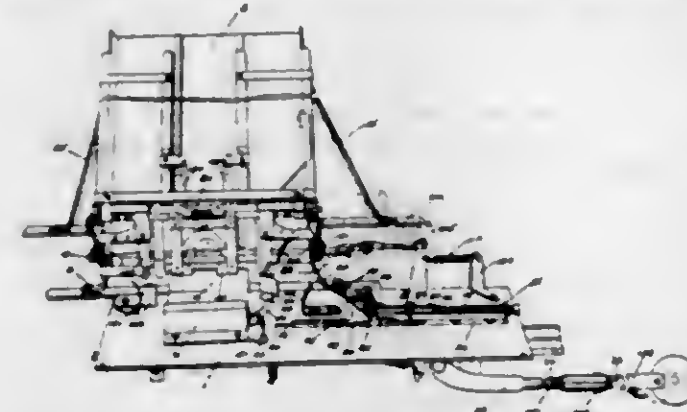


The combination in a brake shoe, of a body portion, a reinforcing back, means to secure the back to the body portion, and a key lug produced from a single blank of material to provide an upstanding hollow member with depending retaining wings bent from the sides of the upstanding member and thereafter secured in binding engagement with said reinforcing back, and the outer wings of said lug bent inwardly to substantially abutting engagement to lie parallel with the upper face of the reinforcing back and within the upstanding hollow member of the key lug.

1,311,321. MACHINE FOR SETTING UP CARTONS. LEWIS M. CHOCKETT, Kalamazoo, Mich. Filed Oct. 18, 1918. Serial No. 258,766. 41 Claims. (Cl. 93—36.)

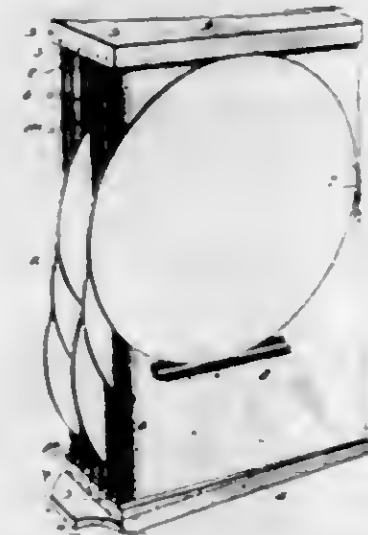
1. In a structure of the class described, the combination of a carton setting up means, a pair of inner flap folders, an outer flap folder and closing means, an actuating member, operating connections therefor to said setting up member and said inner flap folders and said outer flap folder and closing means whereby the setting up means is first actuated, the inner flap folders are successively actuated and then the outer flap folder and closer

actuated, means for feeding cartons to said setting up means actuated by said actuating member, an ejector, and



operating means therefor including said actuating member whereby the erected cartons are ejected on the return stroke of the actuating member.

1,311,322. STORAGE-CABINET FOR PHONOGRAPHIC DISK RECORDS. JOSEPH F. CULVERWELL, Washington, D. C., assignor of one-half to Louis G. Jullien, Washington, D. C. Filed Dec. 18, 1915. Serial No. 67,559. 2 Claims. (Cl. 211—16.)



1. A phonographic record cabinet having three series of individual disk record supports, each series of supports being arranged in a horizontal plane different from the horizontal planes in which the other two series of supports are arranged, and each pair of supports of a given series being located in vertical planes spaced apart to accommodate another pair of record supports belonging to two different series, whereby when three longitudinal series of vertically disposed disk records are mounted on the supports thus arranged, each record will have an exposed grasping portion spaced from the next adjacent records by intervals or spaces, each of which is equal to the space required for the storage of two records.

1,311,323. METALLIC TIE AND RAIL-FASTENER. BENJAMIN F. CRUMMING, Locust Grove, Okla., assignor of one-half to Clyde W. Davis, Locust Grove, Okla. Filed Apr. 30, 1919. Serial No. 293,616. 4 Claims. (Cl. 238—30.)



1. The combination with a metallic tie having the upper portion of its body provided with a rail plate receiving

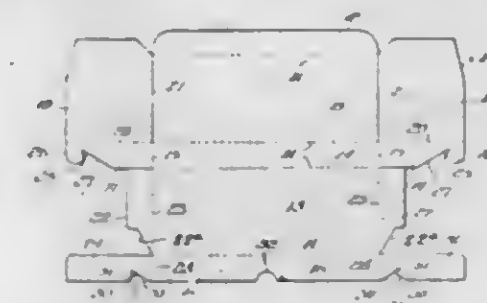
recess, that portion of the tie having said recess having a vertical opening, of a rail plate in said recess and provided with oppositely arranged lugs in engagement with the base of a rail, said rail plate having a notch in one edge thereof, and means extending through the opening and engaging said notch to secure the rail plate in position.

1,311,324. MANUFACTURING LIGHTING-BODIES. GUSTAF DALEN, Stockholm, Sweden, assignor to Aktiebolaget Keros, Södertälje, Sweden. Filed Apr. 17, 1918. Serial No. 229,189. 6 Claims. (Cl. 67—89.)



4. In combination with a backing of refractory material having a recess formed therein, an illuminating body set into said recess and fused attaching material also set into said recess and holding the pastill in place.

1,311,325. CARTON. FRANK H. DAVIDSON, Marselles, Ill., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 10, 1917. Serial No. 195,677. 5 Claims. (Cl. 229—30.)



1. A container having connected bottom and side walls, the latter being provided at the ends thereof with flaps adapted to overlap and form the end walls of said container, one of the end flaps at each end of the container being provided with a notch opening outward through one of the longitudinal edges of said flap, and the other end flap at each end of the container being provided with a locking tongue adapted to be inserted into the notch, and the notch and tongue at each end of the container being provided with integral parts adapted to interlock for holding the tongue from being swung out of the notch.

1,311,326. RAILROAD STOCK-TRUCK. GEORGE SLC COMBE DAVIS, Kogarah, New South Wales, Australia. Filed Aug. 9, 1918. Serial No. 249,193. 2 Claims. (Cl. 119—7.)



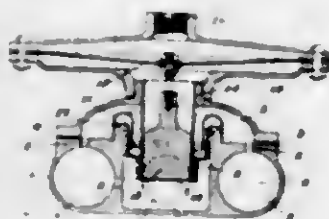
1. A railroad stock-car having a tank on the roof thereof, of a reticulated pipe system above the roof thereof, air-vent stand pipes connected to said system, a connection between said tank and pipe system, a cock in said connection means for operating said cock from the side of the stock compartment, and at short intervals in said reticulated pipe system downwardly directed branches extending through the roof of the truck, and provided with pendant drip-valves.

1,311,327. OIL-CUP. FRANCIS X. DEVLIN, Chicago, Ill. Filed Jan. 14, 1918. Serial No. 211,765. 12 Claims. (Cl. 184-91.)



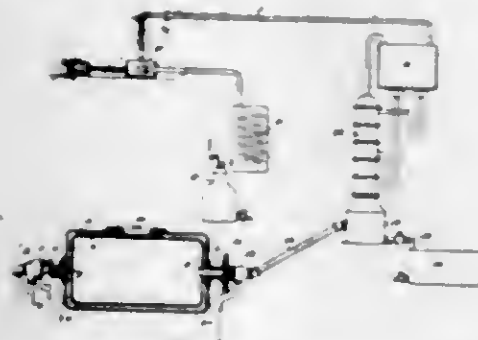
12. The combination of an oil cup having a main tubular oil-holding chamber and a lateral oil-holding recess the bottom of which drains into said chamber, of a pivot shaft traversing the recess and bearing in the walls thereof, a cap for the cup and recess pivoted on said shaft, and a cap closing spring coiled about the shaft and having its ends respectively connected to the cup and cap; the cap shaft and spring standing laterally clear of the main bore of said chamber during the open position of the cap; the wall of the recess and said cap being shaped to wedge together when the cap is in open position.

1,311,328. AUTOMATIC VALVE FOR CONTROLLING THE FLOW OF GASEOUS MIXTURES. HENRY S. BOOTH, Toronto, Ontario, Canada, assignor, by mesne assignments, of one-half to John O'Neill, Toronto, Ontario, Canada. Filed May 14, 1918. Serial No. 214,592. 5 Claims. (Cl. 48-184.)



1. In a valve, the combination of an air-tight diaphragm chamber; a diaphragm therein; the chamber above the diaphragm being provided with an opening for connection with a chamber containing a fluid whose pressure is to cause the operation of the valve; a fixed mercury chamber below the diaphragm chamber; a plunger attached to the diaphragm adapted to displace mercury in the mercury chamber; a mixing chamber provided with air and gas inlets and a mixture outlet; a gas chamber provided with a gas inlet and with a gas passage therefrom leading to the gas inlet of the mixing chamber, said passages being adapted to be sealed by the displacement of the mercury as aforesaid.

1,311,329. METHOD OF MANUFACTURING CHLOROFORM. HENRY H. DOW, Midland, Mich., and WILLIAM O. QUAYLE, Wilmington, Del., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 8, 1914. Serial No. 843,605. 11 Claims. (Cl. 23-24.)



1. The process of making chloroform which contains the steps of mixing carbon tetrachloride and water with a reducing agent sufficient in quantity to effect substantially

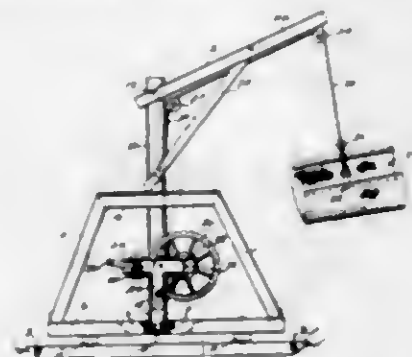
complete reaction, reducing the pressure and concurrently elevating the temperature in the reaction vessel to such a point that distillation will proceed concurrently with the reaction, and separating the chloroform from the vapors so produced.

1,311,330. HAIR-COMB. JULIA DUNN, Brooklyn, N. Y. Filed Sept. 11, 1918. Serial No. 253,618. 1 Claim. (Cl. 132-3.)



In a comb of the class described, a pair of rectangular backing sections, connections between the opposite ends of the sections for holding them in confronting spaced relation, one connection consisting of an end flange formed integral with a section and the other of a fixed end tooth, a strip carried by one of the sections between said end flange and said end tooth, a series of teeth notched between their ends to slidably fit on said retaining strip and projecting beyond the sections, one of said teeth representing an end tooth which comes adjacent to said end flange, and means associated with said end flange and adapted to act on the last-mentioned end tooth for clamping the series of teeth rigidly between the last-mentioned end tooth and said fixed tooth.

1,311,331. PORTABLE TRANSFERRING DERRICK. ANDREW EBERSOLE, Dodge City, Kans. Filed Jan. 22, 1918. Serial No. 213,245. 1 Claim. (Cl. 212-65.)



In a portable transferring derrick, the combination with the main frame and the mast pivoting on the lower portion of the frame and having a cable runway in its side, of a plate disposed horizontally on the upper end of the frame and having an opening for loosely receiving the mast, and a ring demountably arranged on the mast over the cable runway therein and journaled in said plate.

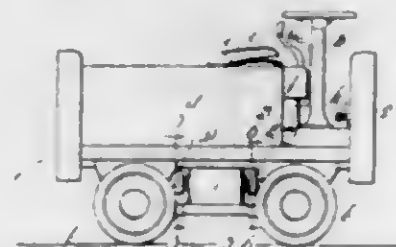
1,311,332. GATE MECHANISM. JAMES M. EDWARDS, New York, N. Y. Filed May 1, 1918. Serial No. 231,597. 2 Claims. (Cl. 251-56.)



1. In a gate mechanism for grain chutes the combination with adjacent conduit sections, the adjacent parts of which have correspondingly shaped rectangular flanges, the inner portion of one of the flanges having diametrically op-

positely disposed parallel channel guides, the inner wall of said guides being fore-shortened and offset below the flanged end of the other section, of a slide plate mounted for transverse movement between the sections and provided with depending opposite flanges engaging and resting upon the bottoms of the channel guides for holding the slide plate in spaced relation between the sections and out of contact with the adjacent ends of the sections.

1,311,333. INDUSTRIAL TRUCK. GEORGE R. FAIRCHILD, Holyoke, Mass., assignor to J. Lewis Wyrkoff, Edward N. White, and George F. Jenks, trustees, Holyoke, Mass., doing business as The Cowan Truck Company. Filed May 18, 1918. Serial No. 235,373. 9 Claims. (Cl. 180-82.)



1. The combination in a self-propelled vehicle having operable driving means, of brake mechanism automatically operable to prevent movement of the vehicle, releasing means for said mechanism including a member movable in a substantially horizontal direction to release the mechanism, said member being so located as to be conveniently operated only by physical exertion on the part of the operator, and means controlled by said releasing means to render the driving means ineffective to propel the vehicle, except when the braking mechanism is released.

1,311,334. CAN-OPENER. L. VIA M. FERGUSON, Toledo, Ohio. Filed July 11, 1917. Serial No. 170,911. 1 Claim. (Cl. 30-3.)



In a device as set forth, an elongated flat lever, provided with an elongated slot, the direct opposite longitudinal side walls of said slot being inclined in the same direction in parallelism, a cutter having an upper flat face to engage the under face of said lever, said flat face having a reduced part, said reduced part having a threaded stud, a thumb nut threaded on said stud and engaging the upper face of said lever for drawing the flat upper face of the cutter firmly in contact with the under face of the lever, two opposite side walls of said reduced part being inclined their full height in the same direction and in parallelism thereby constituting an inclined projection corresponding to and engaging the inclined walls of said slot thereby relieving the strain on the stud and its threads and the thumb nut, and whereby the cutter may be removed from the under face of the lever at any point along the slot after detaching the thumb nut.

1,311,335. DEVICE FOR INSERTING FENCE-ANCHORS. JOHN T. FOULKE, Richmond, Ind. Filed Oct. 23, 1915. Serial No. 57,425. 4 Claims. (Cl. 189-90.)

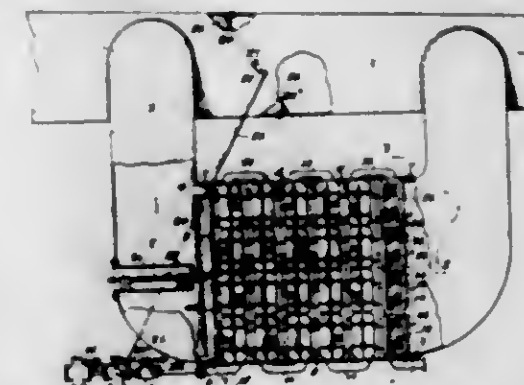
1. In a device for inserting fence anchors comprising in combination with a sheet metal anchor and a driving rod adapted to carry the anchor down into the ground as the rod is being driven; a collar surrounding the rod and adapted to slide thereon, a substantially square sheet

metal plate having a slot extending to the center from one edge thereof, hangers pivotally connecting the collar



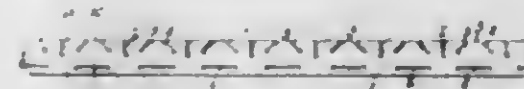
and said plate, and means whereby the plate may be manually operated to swing it out away from the rod.

1,311,336. BY-PASSED-FLUE-GAS CANE-JUICE HEATER. JULIA OMAR FRAZIER, New Orleans, La. Filed Mar. 21, 1918. Serial No. 223,878. 12 Claims. (Cl. 257-240.)



1. In a heater for the purpose described, the combination with a flue for conducting gases of combustion, of a by-pass connected to the flue, a series of pipes located in and extending back and forth through the by-pass for conducting liquid, a damper within the flue between the ends of the by-pass, and a valve connected to the pipes and responsive to liquid pressure, said valve having a normal tendency to close the damper in the flue.

1,311,337. TOY. SAMUEL C. FREDSON, Kenosha, Wis. Filed Nov. 16, 1917. Serial No. 202,359. 11 Claims. (Cl. 46-35.)



1. A structural toy comprising a strip of material having a plurality of perpendicular slots cut in one edge, angularly disposed slots cut in at one edge of the strip, and other slots cut into the strip parallel to the edges thereof.

1,311,338. SCRAPER. SAMUEL C. FREDSON, Savannah, Ga. Filed Jan. 31, 1919. Serial No. 274,261. 1 Claim. (Cl. 37-40.)

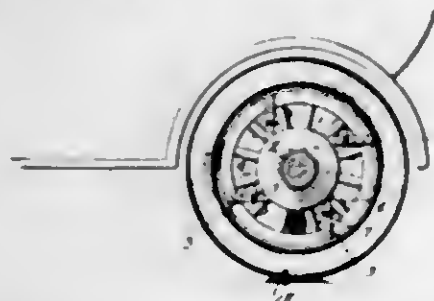
A scraper comprising a scoop, a ball pivoted to the scoop at the opposite sides thereof nearer the cutting edge than the other edge, handles rigidly secured at their forward ends to said ball and extending rearwardly along the sides of and beyond the rear wall of the scoop, a shaft journaled in the handles transversely thereof above

and to the rear of the rear wall of the scoop, a latch secured centrally upon said shaft and having its lower end extending angularly forwardly, a member secured centrally upon the rear wall of the scoop and provided with a plurality of notches selectively engageable by said latch whereby to hold the scraper with its bottom substantially horizontal whereby the scraper may ride free or to lift the rear end of the scraper to cause the cutting edge thereof to engage the ground and trip the scraper, and an arm secured to said shaft adjacent to and extending along one of said handles whereby to effect movement of said shaft and latch.



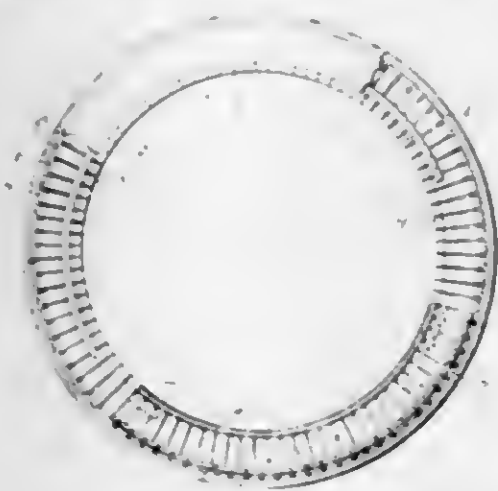
stantially horizontal whereby the scraper may ride free or to lift the rear end of the scraper to cause the cutting edge thereof to engage the ground and trip the scraper, and an arm secured to said shaft adjacent to and extending along one of said handles whereby to effect movement of said shaft and latch.

1,311,339. POWER ATTACHMENT. LIEGH B. FREED, Williamstown, Ohio. Filed Dec. 14, 1918. Serial No. 296,764. 3 Claims. (Cl. 74-106.)



1. An attachment of the character specified, comprising a base provided with a belt pulley, bars adjustably connected with the base and adapted to engage one side of the drive wheel, elements coacting with the bars and adapted to engage the opposite side of the drive wheel and means for connecting the elements to the bars for clamping the drive wheel between them.

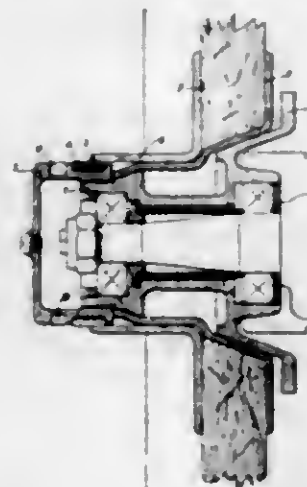
1,311,340. PROTECTOR FOR PNEUMATIC TIRES. DANIEL B. FREEL, Detroit, Mich. Filed Sept. 25, 1918. Serial No. 255,705. 3 Claims. (Cl. 152-18.)



1. A protector for pneumatic tires comprising a resilient frame composed of sets of arcuately shaped transverse strips and sets of longitudinally extending tread

and side strips, the strips of one of said sets being arranged in pairs and embracing the strips of the other set, and fastening means connecting said sets of strips at their points of intersection.

1,311,341. LOCKING DEVICE FOR DETACHABLE WHEELS. HENRI GILLET, Puteaux, France, assignor to Etablissements De Dion Bouton, Société Anonyme, Puteaux, France, a Corporation of France. Filed Mar. 6, 1917. Serial No. 152,638. 1 Claim. (Cl. 21-31.)



The combination with a wheel, including a false hub and a flange ring, the hub and ring being spaced apart at their outer ends, the end of the hub having external threads and the end of the ring having internal milling, of a hub cap adapted to screw upon the end of the false hub and having an annular recess therein, and a split ring located in said recess, said ring having a milled outer face arranged to engage the milled face of the flange ring and having a portion projecting beyond the end of said ring.

1,311,342. PRODUCTION OF DISK RECORDS. RAYMOND A. GLOETZNER, Berlin-Schöneberg, Germany. Filed May 14, 1919. Serial No. 297,172. 6 Claims. (Cl. 18-48.6.)

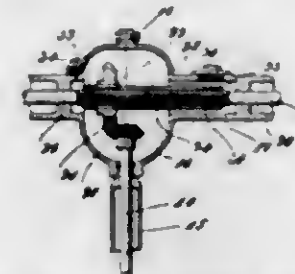


1. The process of molding disk sound records, which consists in imposing against the record blank, while supported against movement, a flexible matrix having the sound vibration to be recorded marked on its working face; and subjecting the matrix to the action of fluid pressure directed toward its opposite face so as to force the matrix against the record blank and thereby impress the vibrations in the adjacent face of said record blank, substantially as described.

1,311,343. FRONT-AXLE DRIVE FOR DIRIGIBLE VEHICLES. WACLAW GOLJAN, Cosmopolis, Wash. Filed Dec. 4, 1917. Serial No. 205,315. 1 Claim. (Cl. 74-7.)

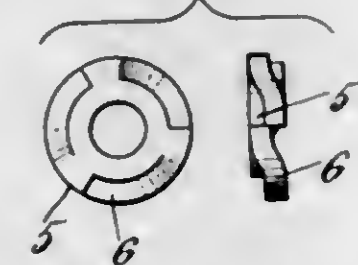
In a front drive for vehicles, the combination with a casing, and an axle rotatably mounted therein, of a perforated sleeve, screw threaded on said axle, a gear keyed to one end of said sleeve, lock nuts at the ends of said sleeve for allowing an adjustment of the same longitudinally on the screw-threaded part of the axle, said sleeve permitting a turning on said axle through the engagement of its perforations by a tool, a shaft transversely

disposed to said axle, a gear secured to the end of said shaft located within said casing, and meshing with said



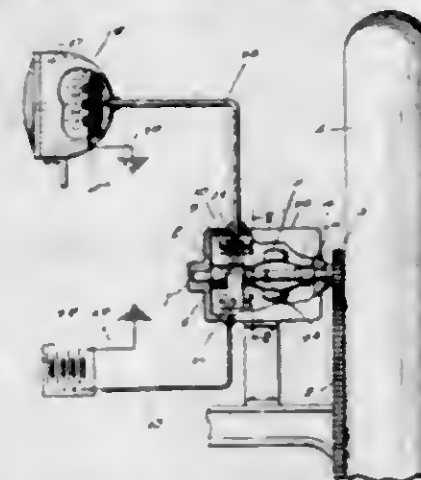
first named gear, and caps closing openings in said casing and permitting the introduction of said nut turning tools, substantially as described.

1,311,344. SPACING-WASHER. MONROE GULTT, Hartford, Conn., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed July 6, 1917. Serial No. 178,922. 4 Claims. (Cl. 85-50.)



1. An adjustable spacing washer formed of bendable, non-resilient material and comprising a main body part and fingers formed integrally therewith and bent out of the plane of said body part.

1,311,345. TAIL-END LIGHT FOR AUTOMOBILES. JOHN RICHARD OBERN, Dalhart, Tex. Filed Nov. 3, 1917. Serial No. 200,065. 1 Claim. (Cl. 175-355.)

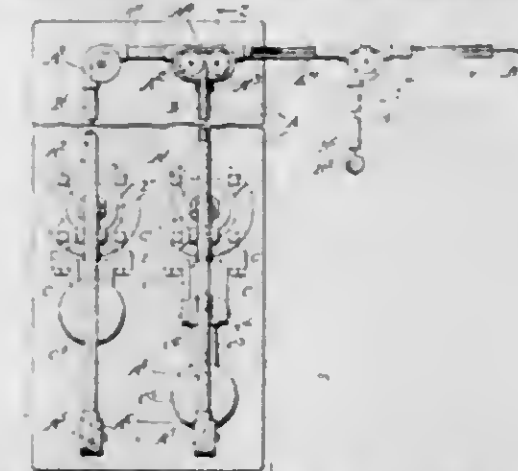


An electric tail-end light for automobiles, trains, etc., comprising different colored lamps each having one of its poles connected to a stationary bar and grounded, a wire leading from the other pole of each lamp, each of said wires terminating in a contact post, an insulated sleeve revolving beneath said posts, a metallic ring carried by said sleeve, a metallic plate in circuit with a battery and wiping over the ring of said sleeve, a governor arranged to shift the ring to alternate contact posts while still in contact with said plate, said governor controlled by the speed of said vehicle.

1,311,346. AUTOMATIC CONTROL. CHARLES C. HANSEN, Chicago, Ill., assignor to Refrigerating Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 17, 1917. Serial No. 197,098. 14 Claims. (Cl. 74-93.)

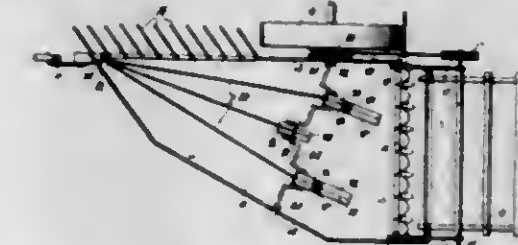
1. A safety control for pressure systems comprising a pressure transmitting device, an operating member lead-

ing therefrom, and automatic means for manipulating such member when the pressure is abnormal, said auto-



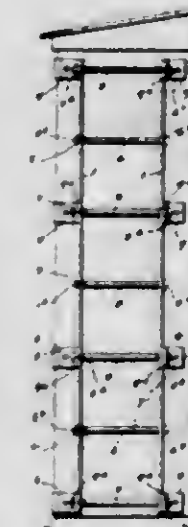
matic means including a weight and a lost motion connection from the weight to the member whereby the weight in falling jerks the member.

1,311,347. FLAX-HARVESTER. ALBERT O. HANSON, Ophelm, Mont. Filed Dec. 15, 1917. Serial No. 207,336. 4 Claims. (Cl. 56-93.)



1. An attachment for a mowing machine comprising a platform, a crank shaft extending transversely above the platform, rake elements having upper sections loosely connected with the crank extensions of the crankshaft, and lower sections pivotally connected with the upper sections, resilient means yieldably holding the lower sections against swinging movement in one direction, flexible means limiting swinging movement of the lower sections in the opposite direction, a standard carried by the platform, and rods loosely connected with the standard and with the upper sections above the crank shaft to guide the movement of the rake elements as the crank shaft rotates.

1,311,348. CAR-LADDER. ARTHUR W. HAWKINS, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 14, 1917. Serial No. 180,600. 5 Claims. (Cl. 228-49.)



1. A ladder structure including a bracket member, a stile member and a rung member removably associated

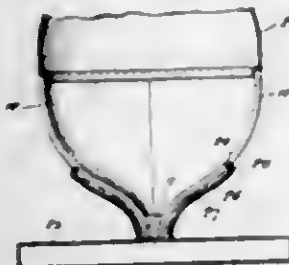
with said bracket and stile member to retain them in assembled relationship, and means for holding said rung member in position, said means being removable so as to permit the rung member to be removed to enable the dismantling of the stiles.

1,311,349. LIMIT GAGE. FRANK O. HOAGLAND, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 23, 1918. Serial No. 239,234. 15 Claims. (Cl. 33—113.)



1. A limit gage comprising in combination opposed minimum-distance measuring contacts in normally fixed relation to each other and opposed maximum-distance measuring contacts of which one is in the form of an adjustable spiral cam, the distance between the last said contacts having a normally fixed minimum value slightly greater than that between the minimum-distance contacts.

1,311,350. BOAT. PIOTA JASINSKI, Welland, Ontario, Canada, assignor of one-half to Wladyslaw Czerwinski, Welland, Ontario, Canada. Filed Mar. 30, 1918. Serial No. 225,615. Renewed June 10, 1919. Serial No. 303,252. 3 Claims. (Cl. 33—143.)



1. In combination with a boat, of a platform extending longitudinally therebelow, said platform having a greater sectional area than that of the boat, and means for securing said platform to said boat.

3. In a boat, the combination with the body thereof, seats secured therein, and a steering means comprising a handle and rudder, of a hollow platform arranged below the keel of said boat, recesses formed longitudinally in the sides of said body, plates rising from said platform engageable within said recesses, and a foot support for said steering rudder engaged with said platform.

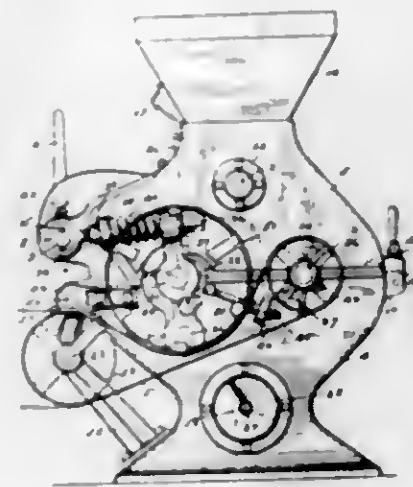
1,311,351. TOY AEROPLANE. WALTER JOHNSON, Middletown, Conn. Filed Feb. 6, 1919. Serial No. 275,368. 7 Claims. (Cl. 46—40.)



3. A toy aeroplane made of thin, stiff, sheet material having side pieces, main planes connecting the side

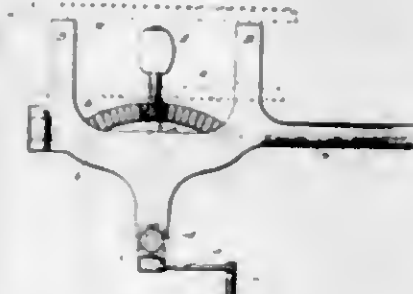
pieces, a plane connecting the side pieces at the nose, a plane connecting the side pieces at the tail, and adjustable means for retaining the main planes separated.

1,311,352. ROLLER-MILL. JOHN JONES, Minneapolis, Minn. Filed Mar. 3, 1917. Serial No. 152,240. 7 Claims. (Cl. 83—12.)



4. The combination with a casing comprising a base section and a displaceable top section having cooperating hinge lugs and a hinge pin connecting the same, of cooperating grinding rollers journaled in the casing, and means, including an eccentric on the hinge pin, for adjusting one of the grinding rollers toward and from the other thereof.

1,311,353. SHEET METAL WORKING TOOL. ROBERT R. KENNEDY, Los Angeles, Calif. Filed Nov. 14, 1918. Serial No. 262,490. 3 Claims. (Cl. 153—32.)



3. A device of the character disclosed, comprising two connected members adapted to embrace between them sheet metal work, means for causing said members forcibly to embrace the work, one of said members being provided with a roller adapted to directly engage the work and to transform the surface thereof, and means carried by one of the members for rotating said roller; said members being pivotally connected; said last named means comprising a shaft carried by one of said members, and a crank for the shaft; one member being provided with a rack, and said shaft being provided with a pinion cooperating therewith.

1,311,354. PASTE-EJECTOR. BERTELL W. KING, New York, N. Y. Filed Feb. 1, 1917. Serial No. 145,828. 5 Claims. (Cl. 221—69.)

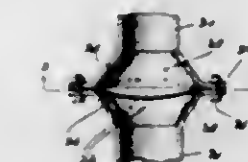
1. In a device of the character described, the combination with a receptacle, means for supporting a container therein, a shaft located within said receptacle, and adjacent to said container, means for controlling said shaft

from the exterior of said receptacle, a collar carried by said shaft and positioned to extend substantially to the



wall of said receptacle, and means for causing said collar to move downwardly in said receptacle.

1,311,355. STEAM-WHISTLE DIAPHRAGM. JOHN KUOPACZ, Rosedale, Alberta, Canada. Filed Nov. 2, 1918. Serial No. 260,822. 1 Claim. (Cl. 116—59.)



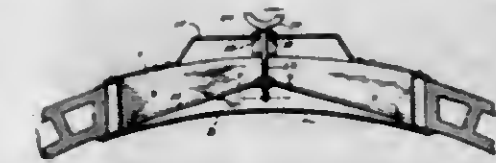
In a device of the class described, including a chamber having reversed conical walls, flanges connecting the faces of said conical walls rigidly together, a diaphragm disposed between said flanges, and a plurality of minute perforations in said diaphragm, said perforations being adapted to retard the passage of steam when at a low pressure and permit a high pressure steam to pass through.

1,311,356. SHOE CONSTRUCTION. SIMON JOSEPH FENTLER, Wausau, Wis. Filed Feb. 27, 1918. Serial No. 219,415. 1 Claim. (Cl. 26—16.)



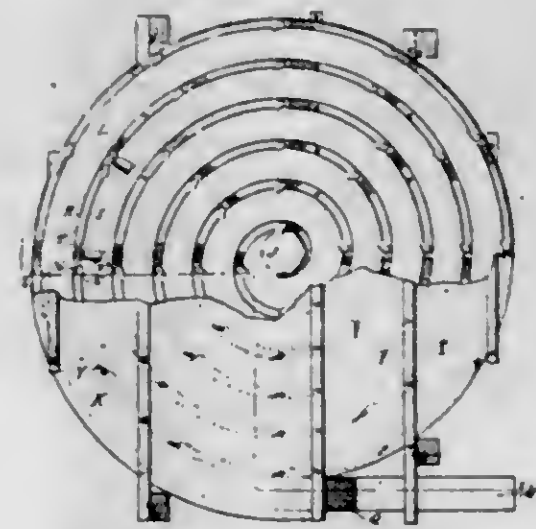
In a boot or shoe, an upper, a lining therein, a middle sole of comparatively thin and flexible material, a sock lining of thin and flexible material and smaller in size than the middle sole, an independent row of stitching securing each longitudinal edge of the shank of the sock lining to the shank of the middle sole to stiffen both the sock lining and middle sole and decrease their flexibility, the edge of the sock lining being equally spaced from the edge of the middle sole, the heel and toe portions of the former being free, means for securing the lower edge of the upper to the portion of the middle sole disposed outwardly of the edge of the sock lining, the lower edge of the lining of the upper being disposed beneath the edge portions of the sock lining, and an outer sole of the same size as the middle sole and secured thereto.

1,311,357. SILO-DOOR. GEORGE P. PIERCE, Kansas City, Mo. Filed May 22, 1917. Serial No. 170,297. 8 Claims. (Cl. 20—14.)



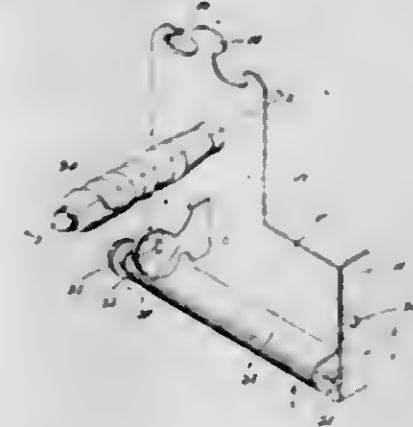
1. In a silo, an arcuately shaped door frame, a flexible door, and means for locking said door in said frame by bulging said door centrally against said frame to make it assume the frame contour.

1,311,358. PNEUMATIC SEPARATOR. HAROLD M. PLATON, St. Louis, Mo. Filed Feb. 17, 1919. Serial No. 277,623. 4 Claims. (Cl. 183—86.)



2. A pneumatic separator comprising a top wall, a bottom wall having tailings outlet openings, an interposed partition constituting a continuous passage under air suction from its inlet to its outlet for carrying particle-laden air, said partition consisting of an outer impermeable wall, and an inner wall having tailings outlet openings and forming a dead air space between them, and air tight compartments located below said bottom and communicating with said tailings outlets under air suction, substantially as described.

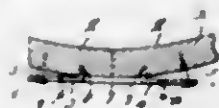
1,311,359. CURTAIN-HOLDER. JOHN SOWA, Kansas City, Kans. Filed Jan. 28, 1919. Serial No. 273,583. 1 Claim. (Cl. 156—24.)



In a window drapery holder of the character described, the combination of a plate, a T-shaped hollow metal casing extending across said plate, a covering for said casing, a

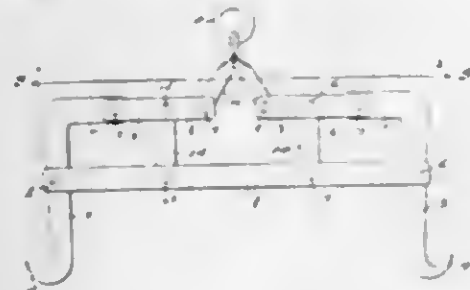
partition wall in said casing, a rod journaled in said partition wall and extending from side to side of the window, a collar on said rod in the vicinity of said partition, a knurled knob at the ends of said rod, a coiled compression spring secured to the inner surface of said collar, and a head for said casing to which the other end of said spring is secured, substantially as described, and for the purpose set forth.

1,311,350. **SILO-CLEAT.** MARTIN TAUCH, Manchester, Mich. Filed Mar. 24, 1919. Serial No. 284,833. 1 Claim. (Cl. 217-93.)



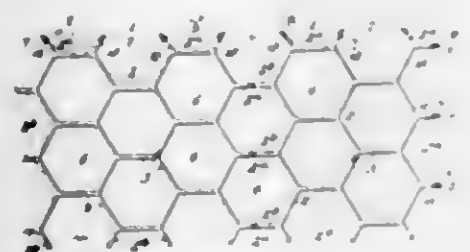
A cleat for securing the adjacent edges of silo staves comprising a metallic strip, said strip being normally straight and having prongs spaced apart and substantially centrally of the strip, said prongs being struck in from the ends of an elongated centrally disposed aperture, said aperture forming means to allow the easy bending of the strip when the ends of the strip are forced into engagement with the staves to cause the strip to conform to the curvature of the silo, said bending action causing the prongs when embedded in the adjacent edges of the staves to move toward each other thereby forcing the engaging edges of the staves into close engagement and eyes carried by the strip for the reception of a silo band.

1,311,351. **GAMBREL.** GEORGE VICKERS, Dayton, Ohio. Filed Nov. 27, 1918. Serial No. 264,400. 2 Claims. (Cl. 17-30.)



1. A gambrel comprising a horizontal bar, right angled arms for engaging the legs of a carcass pivoted to its ends, said right angled arms having their inner ends pivoted to rocking links, said links having their inner ends pivoted to supporting links and pivoted spacing links pivoted to the horizontal bar and the rockable links.

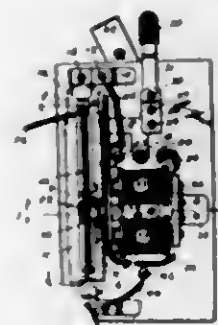
1,311,352. **METHOD OF PRODUCING IMITATIVE TILE FLOORING AND THE LIKE.** WILLIAM FRED WALLING, Los Angeles, Calif., assignor to The Cementograph Company, Los Angeles, Calif., a Copartnership. Filed May 31, 1917. Serial No. 171,947. 3 Claims. (Cl. 18-61.)



3. In the production of homogeneous or monolithic tile surfaces, forming a basic layer of suitable material,

then producing on the basic layer a covering layer with an extended series of web-like grooves with sharply defined edges in the same plane as the remainder of the surface of the layer containing them, applying a protecting coating to the layer containing the grooves, and finally filling the grooves with contrasting plastic material and trowelling it to a level with the tops of the grooves, whereby there is produced an extended tile-like surface with contrasting outlines and smoothed without the necessity of rubbing down, the junction of the contrasting filling with the surface at which it is exposed being sharply defined.

1,311,353. **SAFETY DEVICE FOR MOTION-PICTURE MACHINES.** HENRY E. WATSON, Richmond, Ind., assignor of one-half to Frank B. Thompson, Richmond, Ind. Filed Sept. 27, 1917. Serial No. 193,403. 2 Claims. (Cl. 88-17.)

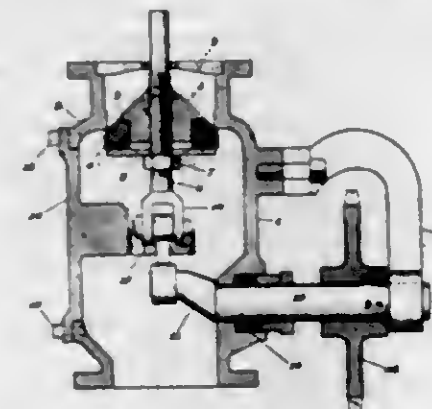


1. In combination with an electrically operated motion picture machine having a film operated thereby and having means for projecting light upon and through the film, a controlling mechanism located at a distance from said machine and comprising a case including a base adapted to contain a circuit breaker, the circuit breaker comprising an oblong vertical plate having reverse inclined edges forming flanges integral therewith but spaced therefrom and providing bifurcated channels at the edges of the plate, a plunger slidable in said channels and of substantially one-half the length of said plate, a finger secured to said base and located below the lower end of said plate, a second finger secured to the upper portion of said plunger, a helical spring connecting said fingers and adapted to normally pull the plunger downward with its lower end in contact with the first named finger, a tongue carried by the base and with which the upper end of said plunger is adapted to contact, an electro-magnet carried by the base, a movable armature for said magnet, a tongue extending out at right angles from the armature, a spring normally retaining the armature away from the poles of the magnet with the tongue of the armature in the path of said plunger whereby when the plunger is moved upward to its limit it will be supported by said tongue of the armature, an upper contact device for the film, a lower contact device for the film, electric circuits connecting said contact devices with the magnet whereby upon the breaking of the film, the current will be closed to cause the magnet to attract the armature and release the plunger thereby opening the circuits which operate the film and which supply the light which is directed upon the film, all substantially as shown and described.

1,311,354. **VALVE.** JOHN F. WHITE, London, Ontario, Canada. Filed Oct. 3, 1918. Serial No. 256,975. 3 Claims. (Cl. 251-156.)

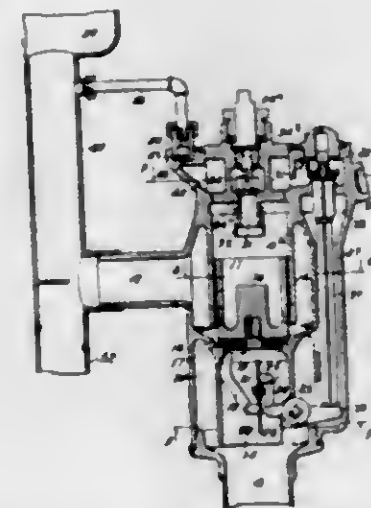
1. A valve for controlling the flow of pulverulent and granular material comprising a casing having a valve seat formed at one end; a valve disk adapted to engage the seat; a valve stem extending each way from the disk; a guide for the end of the stem adjacent the seat; a re-

movable side for the casing; a guide for the other part of the stem extending from said removable side; and



means extending through the side of the casing opposite the removable side for moving the stem to adjust the position of the valve.

1,311,355. **FLUSHING-VALVE.** WILLIAM SEARS WHITE, Denver, Colo., assignor to The White Flushing Valve Mfg. Co., Denver, Colo., a Corporation of Colorado. Filed June 25, 1918. Serial No. 241,789. 3 Claims. (Cl. 137-93.)



3. A flushing valve including a container having an inlet, and an outlet; a water chamber in communication with the said inlet and outlet, a vertically movable valve in said chamber controlling the inlet, an auxiliary chamber above the water chamber, an air chamber, passages establishing communication between said auxiliary chamber and the air chamber, means controlling communication through said passages, and means establishing communication between the auxiliary chamber and the water chamber, said means including a vertically slidable tubular member at the top of the water chamber, together with a member on the vertically movable valve to engage said vertically slidable member.

1,311,356. **SILO.** ERNEST F. WIEBERHOLDT, St. Louis, Mo. Filed July 12, 1915. Serial No. 39,396. 2 Claims. (Cl. 72-6.)



2. The herein-described silo having a wall composed of inner and outer courses of interlocked blocks, said wall being provided with an opening, posts at the sides of said opening, flanges on said posts, which flanges engage the

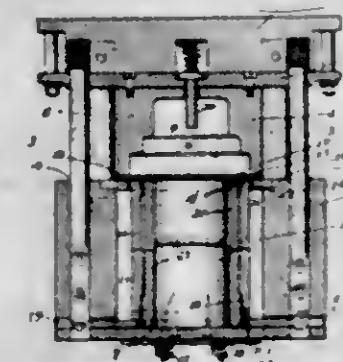
blocks immediately adjacent to the sides of the opening, and U-shaped members for tying the engaged blocks to said posts.

1,311,357. **BALING.** EDWARD H. ANGER, Framingham, Mass. Filed June 6, 1918. Serial No. 238,425. 6 Claims. (Cl. 100-14.)



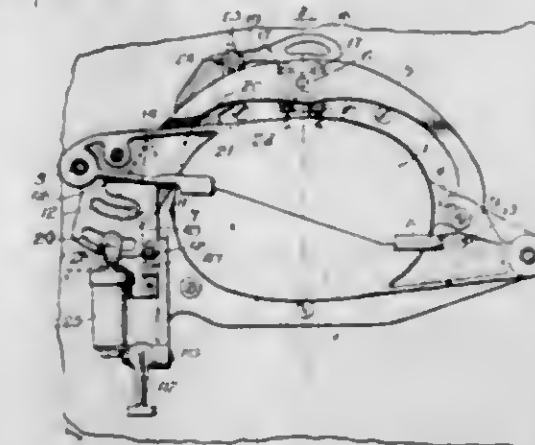
1. A baling press comprising a platform, a form telescoping therewith, yieldable means for holding the form in elevated position and a ram opposing the platform and adapted to engage the form.

1,311,358. **PROCESS AND APPARATUS FOR FORMING SHEET-METAL FORMS.** JAMES H. AUBLE and JAMES L. AUBLE, Cincinnati, Ohio, assignors to The Auble Die & Stamping Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 1, 1919. Serial No. 280,095. 12 Claims. (Cl. 113-49.)



1. A method of forming sheet metal which consists in forcing in one continuous operation a blank through a plurality of dies arranged in series, each die being adapted to collapse after it has served its purpose in the drawing operation to present the blank for the subsequent forming operations of the remaining dies.

1,311,359. **FURNACE-DOOR.** THOMAS G. AVERILL, Chicago, Ill. Filed Jan. 2, 1918. Serial No. 209,846. 9 Claims. (Cl. 110-177.)



1. A furnace door comprising two door sections, two pivotal connections one for each door, said pivotal con-

sections being on opposite sides of the door opening, a single connecting piece extending from one door section to the other and pivoted between its ends, said connection piece bent so that portions thereof are opposite said door sections, and a direct operative connection between said connecting piece and said door sections.

1,311,370. VEHICLE BOW TOP HOLDER. CLARENCE L. BARR, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., St. Joseph, Mich., a Corporation of California. Filed Feb. 21, 1917. Serial No. 150,068. 4 Claims. (Cl. 21-61.)



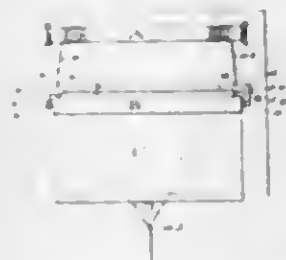
2. A relatively narrow and long arm, rigid support members projecting from the arm, and a strip of cushion material adjacent to the arm, there being on said cushion material bow lifts which are recessed so as to be internally supported by said projecting members on the arm, and interlocking parts on the arm and cushion material between the bow lifts securing the cushion to the arm.

1,311,371. CAR TRUCK. FRANKLIN I. BARBER and EDWIN W. WARR, Chicago, Ill., assignors to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 17, 1919. Serial No. 277,535. 11 Claims. (Cl. 105-195.)



1. In a car truck, the combination with a frame, of independent guides carried by the frame, displaceable hangers carried by said guides, and a bolster mounted between the guides and spring supported from said hangers.

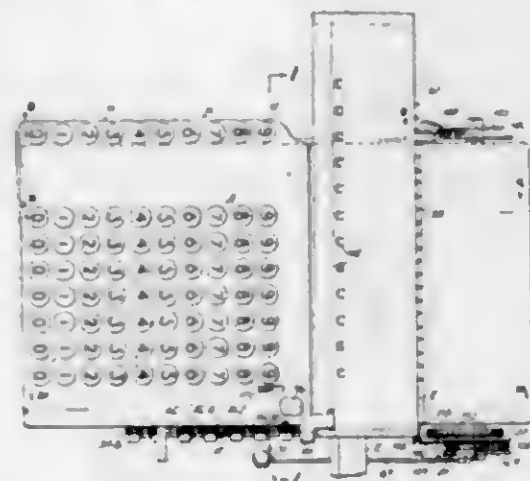
1,311,372. SHADE-ADJUSTER. OLIVER S. BARNUM, Alhambra, Calif. Filed June 30, 1916. Serial No. 106,817. 1 Claim. (Cl. 156-27.)



In a window shade adjuster of the class described, the combination of a fixed spring-actuated shade roller of the Hartsborn type; a plurality of flexible members depending therefrom and designed to be wound upon said roller by the action of said spring and unwound therefrom against the action of said spring; a traveling hanger held suspended by said flexible members and consisting of an ad-

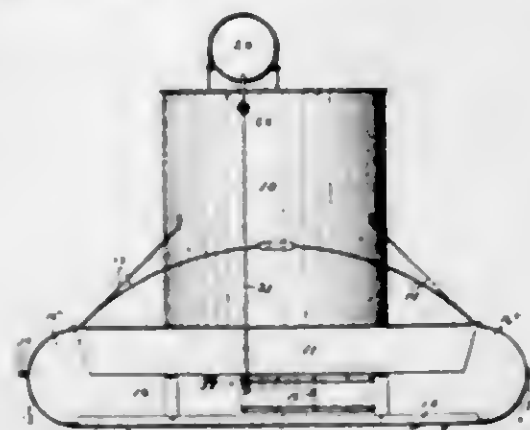
justable rod and terminal roller engaging members at each end thereof, each of said terminal members comprising a tightly fitting sleeve surrounding an end of said adjustable rod and a dependent portion formed to engage a spring-actuated shade carrying roller of the Hartsborn type; each of said flexible members being attached to said hanger by means of a perforation or passage transversely through a sleeve of a terminal member and part of said rod therein, through which said flexible member passes, and a transverse threaded hole with suitable set screw therein, said hole being at right angles to, opening into but not passing beyond said passage, allowing said set screw to impinge upon and compress said flexible member within said passage; said flexible members being united beyond said passages to form a pendent cord below said hanger.

1,311,373. COMPUTING-MACHINE. JOHN H. BARR, New York, N. Y. Filed Aug. 5, 1915. Serial No. 43,821. 74 Claims. (Cl. 235-60.)



1. A computing machine, comprising in combination a plurality of movable product-members, operating means for said members comprising gear members adapted to move said product-members to positions corresponding to various products, multiplicand receiving means comprising pinions of various gear ratios with respect to corresponding gear-members above mentioned, such gear ratios corresponding to various multiplicand digits, a main operating member, means whereby the setting up of a multiplicand operatively connects such operating member, through pinions corresponding to the digits of that multiplicand, to gear members corresponding to each pinion of the multiplicand, and multiplier receiving means arranged to cause such multiplicand pinions to move through distances corresponding to various multipliers, when operated by said main operating member.

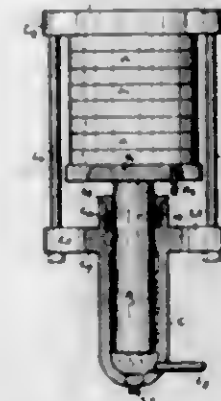
1,311,374. STOCK FOUNTAIN. DAVID BENSON, La Moille, Ill. Filed Oct. 3, 1916. Serial No. 123,473. 2 Claims. (Cl. 126-350.)



1. In a stock fountain having a drinking pan and runners carrying said pan in elevated position, the combina-

tion with said runners and pan of a heating pan removably and replaceably mounted on said runners and having its margins contiguous to said drinking pan and providing a substantially-enclosed space between said heating pan and the bottom and end portions of the drinking pan, there being a door provided in one wall of said heating pan for the passage of a heating device to said space beneath the drinking pan.

1,311,375. VULCANIZING-PRESS MOLD. JULIA H. BIRKENBUEHL, Portland, Oreg. Filed Dec. 16, 1918. Serial No. 267,048. 4 Claims. (Cl. 15-17.)



1. An apparatus for vulcanizing rubber tires to varying degrees of hardness, consisting of a mold having a heating jacket formed around the portion to be vulcanized most and having the portion of the mold which forms the part which is to be vulcanized least, exposed to a cooling medium contained in a central well, a means for sealing said well, a means for compressing said rubber within the molds, a means for supplying heat to said jacket, and a means for supplying a cooling medium to said well.

1,311,376. ELECTRIC-CONDUIT FITTING. CARL H. BIRNELL and ELDA G. SMITH, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed July 11, 1917. Serial No. 179,992. 1 Claim. (Cl. 247-12.)

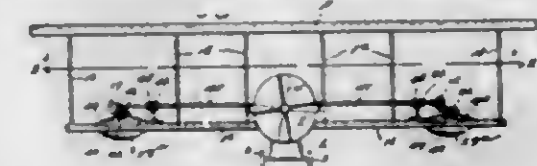


In an electric conduit fitting, the combination of an outlet box including a body having means for connection to a conduit enclosing the service wires, a main outlet opening in one of the walls of the box, and an auxiliary opening in another wall thereof, a casing detachably mounted on the exterior of the box and aligned with the main outlet opening, an auxiliary casing detachably mounted on the exterior of the box in alignment with the auxiliary opening, and main and auxiliary electrical receptacles carried in the casings respectively, and exposed to the interior of the box and having terminals for connection to the service wires therein, substantially as and for the purpose described.

1,311,377. STARTING, STOPPING, AND STABILIZING APPLIANCE FOR AEROPLANES. ERMANN M. BLACK-SHER, Brewton, Ala. Filed Sept. 12, 1918. Serial No. 253,780. 4 Claims. (Cl. 244-25.)

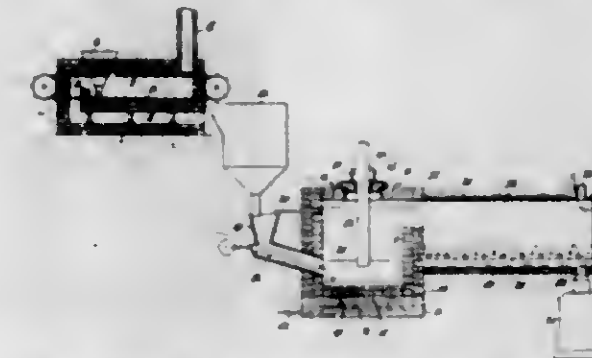
1. The combination with one of the main planes of an air craft provided with under concave turrets, of propellers mounted in and conforming to said turrets and oper-

able in opposite directions for stabilizing the air craft, and



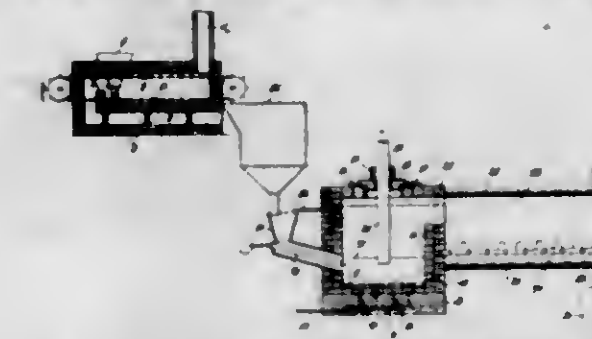
means in advance of the under part of said turrets for thrusting the head on resistance of air from the propellers.

1,311,378. PROCESS OF PRODUCING ALKALI-EARTH METALS. WARREN F. BLECKNER and WALTER L. MORRISON, Canonsburg, Pa., assignors to Electric Reduction Company, a Corporation of Delaware. Filed Oct. 19, 1915. Serial No. 56,734. 32 Claims. (Cl. 204-63.)



1. The improved process of producing magnesium which consists in heating magnesium oxid with a reducing agent to produce magnesium vapors and condensing them in an inert atmosphere to produce metallic magnesium.

1,311,379. APPARATUS FOR PRODUCING ALKALI-EARTH METALS. WARREN F. BLECKNER and WALTER L. MORRISON, Canonsburg, Pa., assignors to Electric Reduction Company, a Corporation of Delaware. Filed Oct. 19, 1915. Serial No. 56,735. 19 Claims. (Cl. 204-04.)



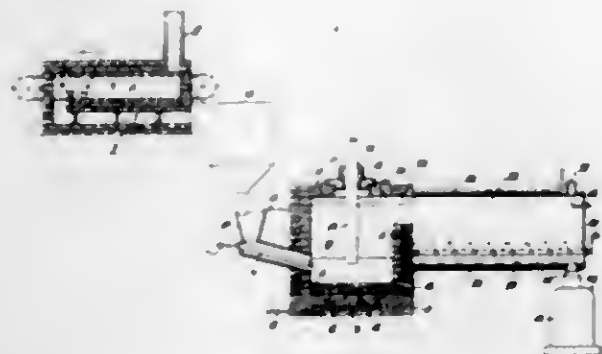
1. An apparatus of the class described having in combination an electromagnetic furnace adapted to produce therein a molten bath of alkali earth metal containing material with both electrodes in contact with the bath and at least one electrode in the furnace chamber, a condenser connected to said furnace, and means for introducing an inert gas whereby air may be excluded from said furnace and condenser to produce a non-oxidizing atmosphere therein.

1,311,380. ALKALI-EARTH-METAL MATERIAL. WARREN F. BLECKNER and WALTER L. MORRISON, Canonsburg, Pa., assignors to Electric Reduction Company, a Corporation of Delaware. Filed Oct. 19, 1915. Serial No. 56,736. 6 Claims. (Cl. 75-17.)

1. The improved magnesium material comprising a powder containing largely metallic magnesium in amorphous form.

2. The improved magnesium material comprising magnesium in the form of fine powder having the characteristic that it is nodular.

3. The improved magnesium material comprising magnesium in the form of a fine powder incapable of being fused together to form a liquid.



4. The improved magnesium material comprising magnesium in the form of a fine powder incapable of being fused together to form a liquid and having the characteristics that it is amorphous, nodular and has superficial impurities.

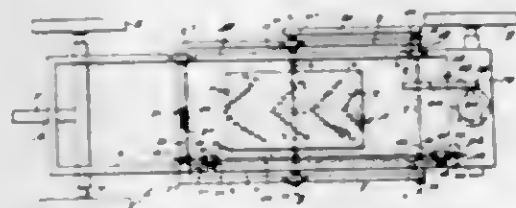
5. The improved alkali earth metal material comprising alkali earth metal in the form of a fine powder incapable of being fused together to form a liquid.

1,311,381. TOY. JULIUS CHAIN, Montclair, N. J. Filed May 24, 1919. Serial No. 299,620. 4 Claims. (Cl. 46-48.)



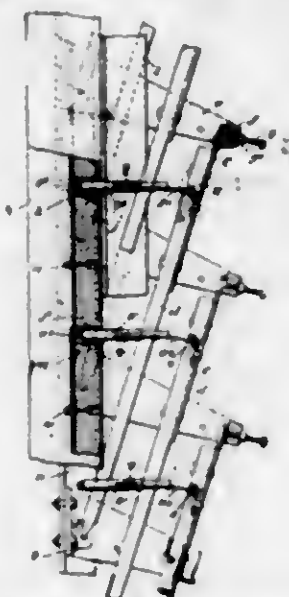
1. In a toy, the combination of a plate, a box thereon, a bell on the box, a hammer having a hook normally positioned adjacent the bell and seated in the plate, a lever fulcrumed in the side of the box and adapted to engage the hammer, a notch in the under edge of the lever and a lug on the upper edge of the lever to limit the movement thereof.

1,311,382. GRASS-HARVESTING MACHINE. RICHARD WALLACE CURETON, Lordsburg, N. Mex. Filed Jan. 25, 1918. Serial No. 213,672. 1 Claim. (Cl. 56-19.)



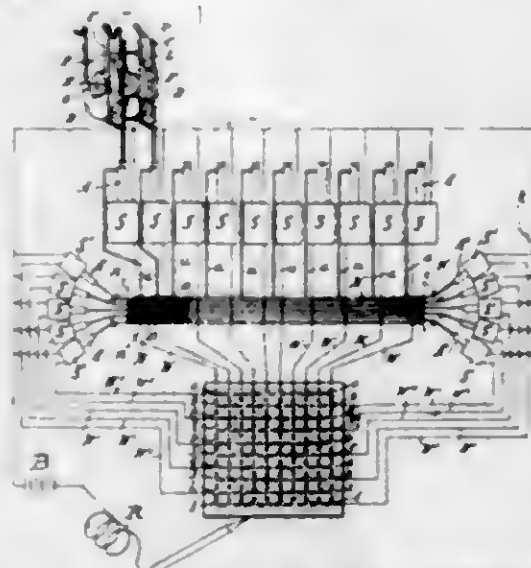
In combination with a wheel drum having a rim, a plurality of series of teeth on the peripheral surface of said rim, the teeth of each series being arranged V-shaped and in stepped relation, each tooth being angular, one arm of the angle extending radially from the rim, and the other arm substantially concentric with the rim, said other arm having its end beveled and provided with a serrated edge forming gripping teeth, the radial arm having a threaded connection to said rim, and means to prevent the radial arm from unscrewing.

1,311,383. CINEMATOGRAPHIC TARGET. GEORGE H. DRABKA, JR., Brooklyn, N. Y., assignor to Lydia B. Koch, New York, N. Y. Filed Oct. 17, 1917. Serial No. 197,036. 9 Claims. (Cl. 124-15.)



1. A cinematographic target embodying therein a back plate or shield structure consisting of a plurality of independently movable overlapping plates, a contact member carried by the frame of the target adjacent each of said plates, and electrically connected with one terminal leading from a source of electrical supply, a resilient contact member disposed between said first named contact member and its plate, and electrically connected with the other terminal from said source of supply, and an impact member carried by each of said plates adapted to operate to engage its cooperating resilient contact member, said contact members being normally spaced apart whereby the movement of any of said plates under the impact of a bullet therewith will close the electrical circuit, and the resiliency of said contact member will restore said plate to normal.

1,311,384. ELECTRIC KEYBOARD FOR CALCULATING-MACHINES, TYPE-WRITING MACHINES, AND THE LIKE. WILLIAM F. DREW, Oakland, Calif. Filed Apr. 30, 1918. Serial No. 231,700. 2 Claims. (Cl. 235-82.)



1. An electric keyboard for the described purpose, comprising multiple rows of the duplicated key-contacts; electrically operated means adapted for connection with the recording mechanism of the machine to which the key-board is applied; electric circuits including said rows of key contacts and operable means respectively; other electrically operated means; electric circuits including said duplicated key-contacts and said other operable means respectively; means operated by said other electrically operable means for variably limiting the oper-

tion of the first electrically operable means; and a free stylus included in the first named electric circuits adapted for selective electrical contact with any of said key-contacts.

1,311,385. DEVICE FOR UNSCREWING AND WITHDRAWING PIPE. HAROLD W. FLETCHER, Houston, Tex. Filed Oct. 29, 1918. Serial No. 260,117. 9 Claims. (Cl. 255-35.)



1. In a device of the character described, a bearing and locking sleeve, a rotatable operating shaft therein, an eccentric extension on said shaft, a gear rotatable thereon, a stationary annular gear outside of and meshing with said rotatable gear and means connected with said rotatable gear to communicate the rotation thereof to a pipe-gripping means.

1,311,386. METALLIC RAILROAD-TIE AND FASTENER. JOHN P. GARDNER, San Francisco, Calif. Filed Nov. 30, 1917. Serial No. 204,700. 2 Claims. (Cl. 238-65.)



1. A rail tie and fastener comprising a base adapted to support a rail, guide tongues formed on each side of the base and extending longitudinally of the same and arranged on each side of the rail, locking bolts slidably mounted between the tongues, certain of said tongues having the upper ends thereof bent inwardly toward each other to form retaining members, certain other of said tongues having aligned apertures formed therein, and transversely extending locking members slidably mounted in the apertures for engaging said locking bolts to hold the same in engagement with the rail.

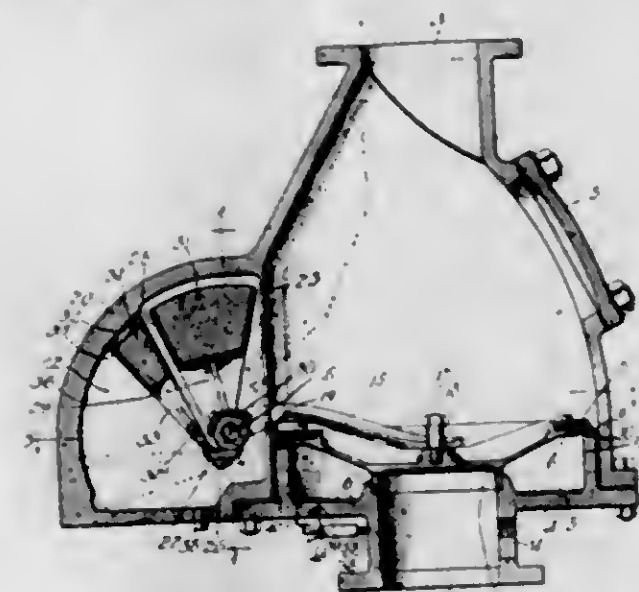
1,311,387. MOUNTING FOR SLASHER-SAWS. WALTER T. GLENN, Pine Bluff, Ark., assignor of one-half to Charles H. Murphy, Pine Bluff, Ark. Filed Jan. 7, 1919. Serial No. 269,998. 3 Claims. (Cl. 143-155.)



4. A mounting for slasher saws comprising shaft sections provided at their abutting ends with transversely-

apertured hub members formed with external shoulders, and removable saw-engaging rings or collars having internal shoulders engaging the hub shoulders and held thereby from movement in a direction away from the saw; the adjacent faces of the removable rings or collars being beveled outwardly to permit the saw to bend laterally over the bevels without breaking at the eye.

1,311,388. DRY-PIPE VALVE. ALLAN J. GAUSS, Chicago, Ill., assignor to John L. Kennedy, Chicago, Ill. Filed Nov. 2, 1914. Serial No. 869,948. 12 Claims. (Cl. 169-23.)



1. In a dry pipe valve of the kind described, the combination of a casing provided with an inlet and outlet, a valve controlling the passage of fluid through the casing, and mechanism for automatically locking the valve against a closing movement of any point throughout its opening movement, said mechanism including a stationary part, a movable locking member, and a connection between the valve and locking member whereby movement of the valve toward closed position acts to press the locking member into locking frictional engagement with the stationary part.

1,311,389. MEANS FOR STABILIZING AND CONTROLLING THE FLIGHT OF AERIAL MACHINES. JOHN H. GUEST, Oakland, Calif., assignor of one-half to Robert S. Stack and one-fourth to Grace M. Guest, San Francisco, Calif. Filed July 18, 1918. Serial No. 245,520. 5 Claims. (Cl. 244-25.)



1. A means for stabilizing and controlling the flight of an aerial machine, said means comprising elongated spindles oppositely projecting from each side of the middle line of the machine in a substantially horizontal plane, and means for rapidly independently rotating the spindles to move their undersides in the direction of flight.

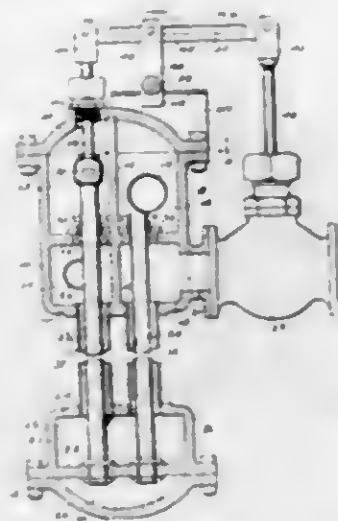
1,311,390. WIRE-STRETCHER. CARL A. HALL, Cynthiana, N. Y. Filed Nov. 22, 1917. Serial No. 203,420. 1 Claim. (Cl. 254-77.)



In a wire stretcher, an operating lever including an elongated bar having one end curved to provide an

arcuate portion, a fastening device carried at the terminal of the arcuate portion for receiving the wire, the said elongated bar being provided near the end of the straight portion thereof with a slot, and a series of longitudinally spaced notches opening into the slot; in combination with a fence post having a plate mounted thereon and carrying a pivot bolt extended through the said slot and adapted for reception in any of the said notches.

1,311,391. WATER HEATER. CHARLES C. HANSEN. New York, N. Y., assignor to Thermal Appliance Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 27, 1916. Serial No. 133,581. 2 Claims. (Cl. 257-2.)



1. In a water heater of the class described the combination of header structure having water and steam compartments, steam pipes connecting said steam compartments, water pipes connecting said water compartments and passing through said steam pipes, a valve for controlling the steam flow, a stuffing box on the top of said header, an expansible member anchored at one end and extending through one of said steam pipes and through said stuffing box, a lever pivoted at one end to said expansible member and at its other end to the stem of said valve, a transversely extending rib integral with said header top, said rib having guide grooves in its opposite sides, a bifurcated fulcrum post receiving said rib and having tongues in its opposite sides for engaging in the rib grooves, a bolt extending through said post for drawing the bifurcated ends thereof together to clamp said rib, said post at its upper end having pivotal connection with said lever.

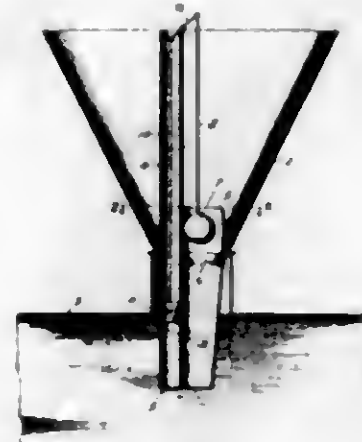
1,311,392. METHOD OF JOINING TUBES. ROBERT J. HARRISON, Chicopee Falls, Mass. Filed Oct. 13, 1916. Serial No. 125,925. 5 Claims. (Cl. 154-11.)

5. The method of telescopically lapping the ends of a tube of rubber or the like which consists in rolling back one end of the tube upon itself for a given distance, in fitting the other end thereagainst with a butt joint, in inflating the tube to form and in thereafter rolling back the rolled back portion over upon the outer periphery of the other end of the tube.

1,311,393. FUNNEL. FRED W. HATCH, Barrabett, Wis. Filed May 26, 1917. Serial No. 171,243. 2 Claims. (Cl. 220-33.)

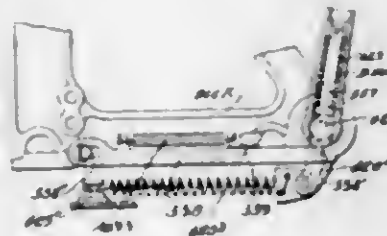
1. A funnel comprising a body portion and a spout, a lever pivoted adjacent the top of said body portion, a rod pivoted to each end of said lever and depending therefrom, a float secured to one rod and a ball valve secured to the other, an imperforate tube having open ends, being secured to the top of said spout and extending up into the body portion and arranged eccentrically of said spout, plates of suitable shape closing the space

between the tube and the inner walls of said body portion whereby all liquid passing through the spout must pass through said tube, and a ring secured to the inner periphery of said tube a substantial distance from the top



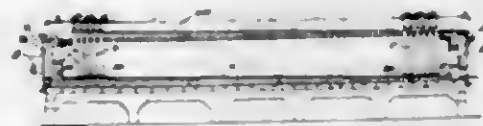
thereof to form a valve seat, whereby liquid being poured into the funnel is prevented from dislocating the ball valve when the receptacle to which the funnel is applied, is filled.

1,311,394. ACCOUNTING-MACHINE HANDLE. AMOS H. HAWLEY, Norwood, Ohio, assignor to International Money Machine Company, Reading, Pa. Original application filed Mar. 31, 1917, Serial No. 158,923. Divided and this application filed Sept. 24, 1917. Serial No. 192,985. 10 Claims. (Cl. 74-33.)



1. In combination, an operating shaft, a detachable handle therefor, means acting on the shaft for holding the handle in and returning the same to a normal position, a detent on the handle engaging the shaft to connect said parts for relative movement, and means other than said detent for holding the handle in its normal position relative to the shaft.

1,311,395. COOLING AND OXIDATION APPARATUS. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation of North Carolina. Original application filed Oct. 17, 1918, Serial No. 258,026. Divided and this application filed Apr. 7, 1919. Serial No. 287,983. 1 Claim. (Cl. 23-1.)



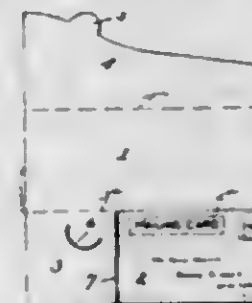
A cooling and oxidation apparatus for gases, comprising a series of horizontal cooling and oxidation chambers located side by side and communicating with each other, means for collecting the condensate in the chambers, water-cooled tubes depending into the cooling chambers, through the roofs thereof, and overflow troughs extending along above the said roofs and arranged to receive the overflow from the tubes.

1,311,396. COAL-DRILL. CHARLES F. HELFINGER, Durham, Wash. Filed Nov. 7, 1917. Serial No. 200,669. 1 Claim. (Cl. 255-46.)



In a coal drill, the combination of a pair of parallel bars formed along their edges with aligned perforations, a block at the ends of the parallel bars and connected thereto, the blocks having aligned openings, pointed pins extending through the aligned openings, means for adjusting the pins, a pair of parallel side frames extending across the outer surfaces of the side bars, each side frame having a hook at its front end to engage the front edges of the bars, inwardly extending logs on the side frames to engage the rear edges of the bars, resiliently supported stuts extending inwardly from the frame and engaging the aligned perforations in the bars, a rod connecting the rear ends of the side frames, and a drill mount supported on the rod.

1,311,397. FOLDING MAILING-CARD. RUDOLPH B. HERTER, New York, N. Y., assignor to Jones and Baker, New York, N. Y., a Partnership composed of William R. Jones and Jackson B. Selis. Filed Nov. 20, 1918. Serial No. 263,294. 3 Claims. (Cl. 120-74.)



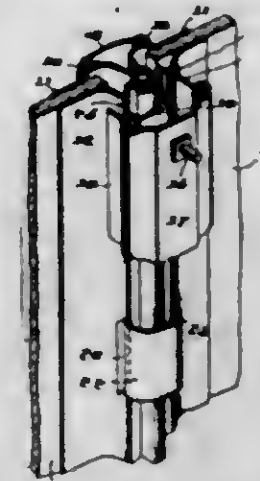
3. A folding mailing card formed of a substantially rectangular sheet having two longitudinally extending lines of fold to form a central body portion, an integral return post-card, an integral locking flap connected to the body part along one line of the fold, a protecting and covering flap formed integral with the body portion along the other line of fold, the return post-card and the locking flap being separated from each other by a transverse cut extending from the edge of the sheet inwardly to one of the lines of fold, and a locking tab formed integral with the covering flap and adapted to enter a slot formed in the locking flap to lock the covering and protecting flap over the return post-card and the locking flap.

1,311,398. CORNER AND DIVISION BAR FOR STORE-FRONT CONSTRUCTIONS. GEORGE C. HESTER, Chicago, Ill. Filed Aug. 29, 1916. Serial No. 117,420. 7 Claims. (Cl. 159-78.)

7. A glass clamping device comprising two pairs of glass-engaging plates that respectively engage outer and inner sides of the plates of glass, all of said plates being pivotally connected to each other on a common axis, means connecting the plates of each pair to enable them

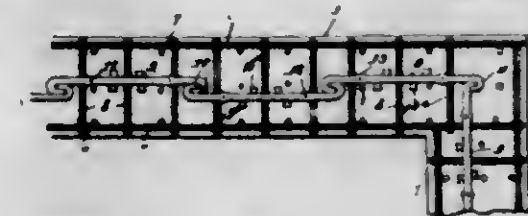
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to be handled as a unit while permitting rocking movement of the plates upon their pivotal connection, and



means for drawing the outer and inner glass-engaging plates of a pair toward each other to clamp the plates of glass therebetween.

1,311,399. BANK-VAULT. ARNOLD HINKENS, Chicago, Ill. Filed Feb. 21, 1918. Serial No. 218,536. 1 Claim. (Cl. 109-1.)



A bank vault having a reinforced concrete wall, and metal plates embedded therein and arranged to form a solid internal burglar-proof armor extending throughout the entire area thereof, said plates having interlocking ends, and being arranged in horizontal courses, with the plates of one course breaking joint with the plates of adjoining courses.

1,311,400. CONTROL-LEVER DETENT. GUY B. HUMES, Chicago, Ill. Filed Oct. 31, 1918. Serial No. 260,476. 3 Claims. (Cl. 74-81.)

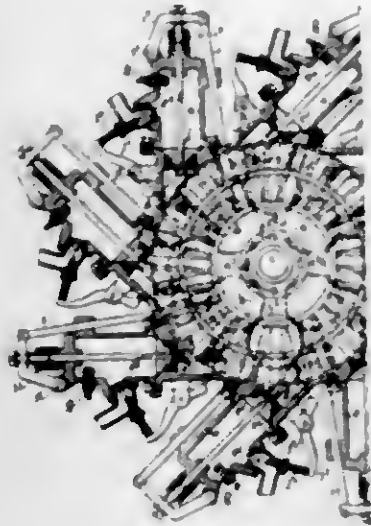


1. A control lever detent, including a plate, an arm pivotally secured to the plate, a laterally extending portion on the arm, a post rising from the laterally extending portion and adapted to be contacted to swing the arm and extending portion, a resilient element for restoring the arm to normal position, and a lateral projection on the arm providing a shoulder to engage a control lever.

1,311,401. ROTARY INTERNAL-COMBUSTION ENGINE. FRANCIS ALFRED JENNINGS, Harrow, England. Filed Mar. 3, 1919. Serial No. 280,466. 2 Claims. (Cl. 60-41.)

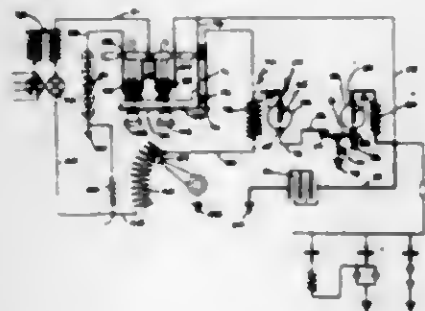
1. An improved rotary internal combustion engine having in combination a casing, a vane wheel within said casing, combustion chambers with their axes arranged

tangentially around said casing, conical inner ends to said combustion chambers, tangential passages leading from the conical ends into the combustion chamber, an inlet valve in each combustion chamber through which the explosive mixture is fed under pressure, an outlet valve in



the conical end of each combustion chamber, pivoted levers for operating each valve, a sliding rod for operating each lever, a gear wheel on the main shaft and cams for operating the sliding rods arranged around the main shaft, and driven from the gear wheel on the main shaft substantially as set forth.

1,311,402. ELECTRICAL SYSTEM FOR ENGINES. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Original application filed June 24, 1914, Serial No. 846,911. Divided and this application filed Feb. 19, 1916. Serial No. 79,339. 26 Claims. (Cl. 290—35.)

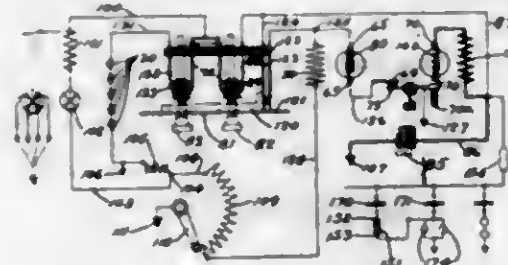


6. In an electrical system for combustion engines, the combination with a combustion engine and an ignition system therefor; of an electric machine operable as a generator adapted to be driven by said engine; a battery; circuit connections between the battery and the generator controlled by an ignition switch; and means for signaling when said ignition switch is operated to close the generator circuit and current is flowing from the battery to the generator.

1,311,403. ELECTRICAL SYSTEM FOR ENGINES. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed June 24, 1914, Serial No. 846,911. Renewed Dec. 3, 1917. Serial No. 205,897. 18 Claims. (Cl. 290—35.)

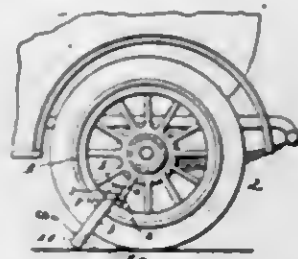
2. In a starting system for combustion engines, the combination with an engine; of a starting device comprising an electric machine operable as a motor, and as a generator; an accumulator; motor and generator circuit connections; an ignition system for said engine; and means

for bringing the ignition system into operation, and for closing the generator circuit; and an independent switch



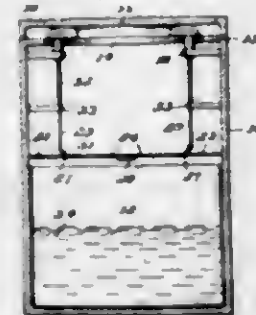
for bringing the machine into operation as a motor for starting purposes, by closing the motor circuit.

1,311,404. WHEEL-LOCK. LAWRENCE KLINER, San Francisco, Calif. Filed May 8, 1919. Serial No. 295,633. 3 Claims. (Cl. 70—90.)



1. A theft preventing device for automobiles, including a pair of complementary shackle bars pivotally connected at their inner ends and shaped to fit around the rim and tire of a wheel, the outer ends of the shackle bars terminating in heads arranged to project radially from the tread of the tire when the device is in position, locking means between the outer ends of the shackle bars, and spoke engaging arms projecting laterally from the inner ends of the shackle bars for engagement with one of the wheel spokes to hold the device against peripheral movement upon the wheel.

1,311,405. TOILET. WLADISLAW KOROL, Forestville, Conn. Filed Apr. 2, 1919. Serial No. 286,878. 2 Claims. (Cl. 4—20.)



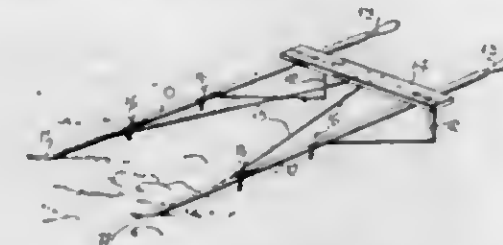
1. A cabinet having a top provided with a circular opening, normally horizontal hinged closing plates in the cabinet beneath said opening, means carried by the cabinet for limiting closing movement of said plates, a circular seat positioned adjacent the opening, bracket arms in vertical alignment carried interiorly of said cabinet and having opening therein, depending socket members carried by the seat and extending downwardly through the openings in the upper brackets, ears carried by said plates at the hinged sides, rods freely extending through the bracket openings and connected at their ends to the seat and ears, and with their upper ends received in said sockets, and coil springs surrounding the rods between the lower bracket and seat normally to hold the seat elevated when the plates are in their lowered closed positions.

1,311,406. TOOL-HOLDER AND REAMER. DE FOREST A. LAFHAM and ARTHUR M. LOUNOWAY, Syracuse, N. Y. Filed June 9, 1917. Serial No. 173,793. 3 Claims. (Cl. 77—72.)



1. A reamer having a lengthwise cutting edge and a channel arranged adjacent said edge, the bottom of the channel being formed with transverse ridges arranged at an inclined angle to the cutting edge, substantially as and for the purpose set forth.

1,311,407. HEMP-GATHERER. EDWARD LAWSON, El Dorado, Wis. Filed Feb. 1, 1919. Serial No. 274,450. 5 Claims. (Cl. 56—344.)



5. A hemp gatherer comprising downwardly and forwardly extending bars adapted at their forward ends to ride over the ground and beneath the spread hemp, the bars being formed with legs adjacent their rear ends, the rear ends of the bars constituting handles, means holding the bars in spaced relation to each other, and a plurality of catches mounted at intervals on each bar, the bars being slotted, and the catches extending through said slots and being pivoted to the bar and normally swinging into a vertical position, and means permitting the rotative movement of the catches in a direction to cause the upper ends of the catches to move downward and rearward but preventing a movement of the catches from a vertical position in the opposite direction.

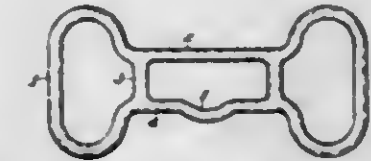
1,311,408. AUTOMOBILE-SIGNAL. CHARLES LOMBARDO, Waterford, N. J. Filed Dec. 12, 1916. Serial No. 136,523. 1 Claim. (Cl. 116—31.)



In a signal of the character described, a casing open at one end and having a slot in its opposite end extending for a portion of the height of said end, a lazy tong adapted to be projected through the open end of the casing, a link pivoted to one of the inner end levers of the tong, an operating handle pivoted in the casing for swinging movement through the slot interiorly and exteriorly of said casing, a rocking arm pivoted to the handle intermediate the ends of the arm and also pivoted to the link, a rod pivoted to the other inner end lever of the lazy tong and to the arm at its end remote from the link, a signaling element having loose connection with the outer levers of the lazy tong and supported vertically thereby, a coiled tension spring connected with the casing and with the first-named inner end lever of the lazy tong, the signaling element having arcuate slots, and

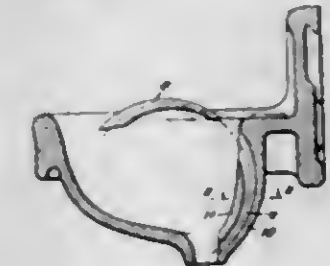
pins carried by the outer end levers of the tong and engaged in said slots for preventing rocking movement of the signaling element.

1,311,409. DRENCHING-BIT FOR ANIMALS. ROBERT L. MCALISTER, Shenandoah, Iowa, assignor to Shores-Mueller Company, Cedar Rapids, Iowa. Filed Feb. 10, 1919. Serial No. 276,130. 4 Claims. (Cl. 128—14.)



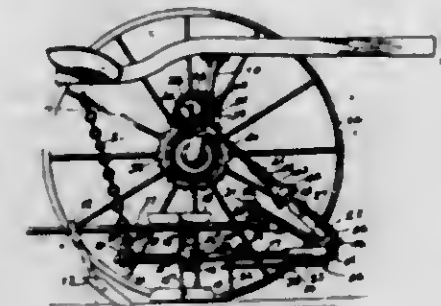
1. A drenching bit for animals, consisting of spaced bars integrally connected by cross-bars, one of the cross-bars being straight and having an outwardly directed medial projection.

1,311,410. PROCESS OF MOLDING CERAMICS. DANIEL W. MCNEIL, Cincinnati, Ohio, assignor to The John Douglas Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 19, 1917. Serial No. 135,715. 2 Claims. (Cl. 25—156.)



1. A method of molding ceramics having interior indirect passages, consisting in assembling the clay into embryonic form of the object to be molded, embedding loosely therein a core having regularly curved outlines, molding the clay around the core and to the shape of the article to be molded, removing the core, and firing the molded clay.

1,311,411. PLANT-CHOPPER. SILAS W. MARTIN, Oglesby, Tex. Filed Sept. 9, 1918. Serial No. 253,303. 3 Claims. (Cl. 97—46.)

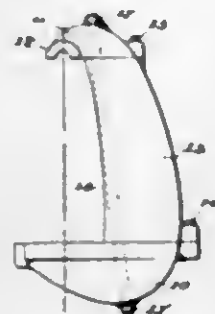


1. A plant chopper comprising a rotatable shaft armed with chopper blades, a pair of connected bearing members in one of which the aforesaid shaft is supported, a shaft supported by the other bearing member, and geared to the first mentioned shaft, a pivotal support for the bearing members to permit a rising and falling motion of the first mentioned shaft, and flexible driving means for the second mentioned shaft.

1,311,412. PRESS-FRAME. LUTHER C. MEYERS, Bridgeport, N. J. Filed Mar. 8, 1917. Serial No. 153,347. 2 Claims. (Cl. 164—47.)

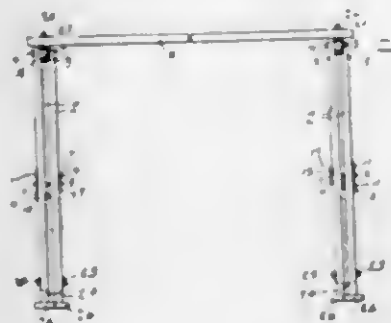
1. A press frame for open throated presses comprising base, head and body members made of separate pieces,

and a pair of tie rods, one at either side of the press, extending through and joining said pieces, said tie rods



being situated in rear of the line of thrust between head and base members and forward of the fulcrum point upon which said connected members tend to rock.

1,311,413. QUILTER-FRAME. WALKER P. ORR, Diana, Tenn. Filed May 31, 1919. Serial No. 300,959. 3 Claims. (Cl. 45-24.)

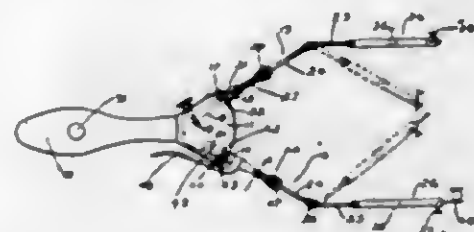


2. A collapsible frame comprising end bars, side bars and a pair of legs at each end of the frame, releasable means for connecting the members of each pair of legs together, releasable means for connecting the legs to the end bars, releasable means for securing the end bars and side bars together, said last means comprising a stirrup adapted to receive the end bar, a sleeve formed on said stirrup and adapted to project through the side bar, a bolt threaded in said sleeve and a washer adapted to cooperate with the head of the bolt for clamping the side bar on said stirrup, said bolt being adapted to also engage the end bar thereby to retain the same in the stirrup.

1,311,414. UNIVERSAL DENTIST'S AND JEWELER'S TOOL. JAMES C. OSHER, Anaheim, Calif. Filed Oct. 1, 1917. Serial No. 194,267. 3 Claims. (Cl. 81-7.)

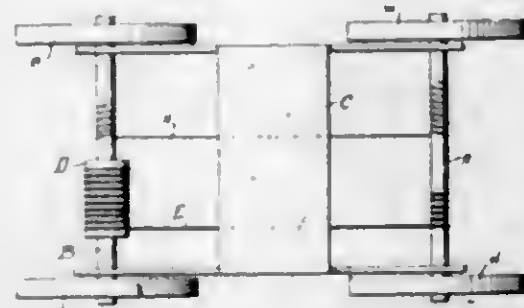
1. A tool comprising a handle, a pair of spaced fan-shaped plates extending rigidly from one end of the handle, a first and second shank pivotally mounted between the plates, an extension leading inwardly from the first shank, a set-screw for adjusting the extension, an adjustable arm connected to the first shank, a lock-screw carried by the second shank and extending through a slot in one

of the plates for holding the second shank in an adjusted position, a leaf spring fixed between the plates and en-



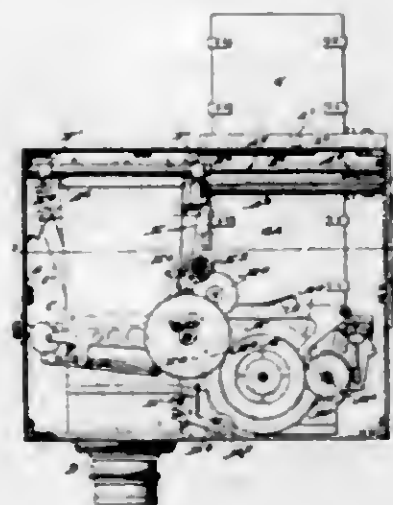
gaging the second shank to throw the outer end of the second shank inwardly, and an adjustable arm connected to the second shank.

1,311,415. PROPELLING MEANS. WALLER C. PARRISH, Kansas City, Mo. Filed Jan. 11, 1919. Serial No. 270,635. 2 Claims. (Cl. 46-48.)



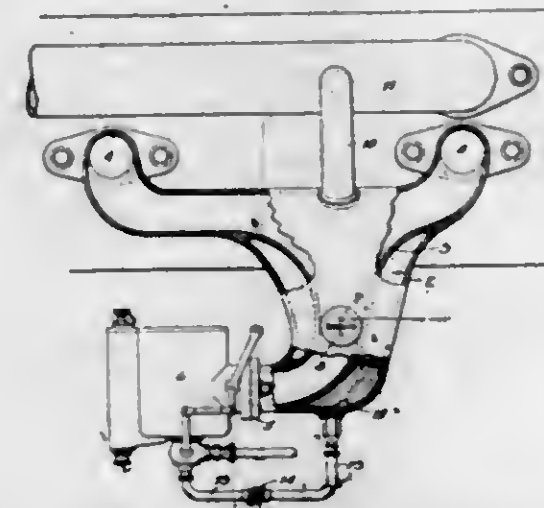
1. A propelling means of the class described comprising two spaced members supported for rotation, an elastic band connecting said members and winding therearound, and a non-elastic flexible member connecting the rotating members and adapted to wind therearound but in directions reverse to the windings of the elastic band on the same member.

1,311,416. AUTOMATIC PLATE-CAMERA. NIELS PEDERSEN, Philadelphia, Pa., assignor to Arthur Brock, Jr., Philadelphia, Pa. Filed Sept. 21, 1918. Serial No. 255,104. 5 Claims. (Cl. 88-10.)



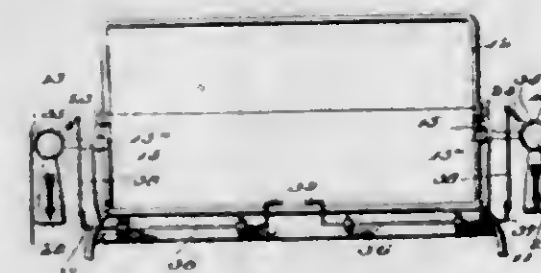
1. A camera having in combination reservoirs for unused and used plates placed in vertical alignment one above the other and to one side of the lens, a plate carrier reciprocally movable from a position in alignment with the lens to a position between the reservoirs, means for delivering unused plates to the carrier from the reservoir containing them and means for delivering used plates from the carrier to the other reservoir.

1,311,417. MANIFOLD-HEATER. MARTIN LUTHER ROTH, Wilkes-Barre, Pa. Filed Apr. 22, 1918. Serial No. 230,072. 4 Claims. (Cl. 123-122.)



3. In combination with an internal combustion engine having an intake pipe and an exhaust pipe, a heater comprising a chamber surrounding the intake and having an aperture for ignition of a charge of fuel therein, and a draft pipe connecting said chamber and the exhaust pipe.

1,311,418. TRAFFIC-SIGNAL FOR MOTOR-VEHICLES. WILLIAM H. ROWLING, Oakland, Calif. Filed May 28, 1918. Serial No. 237,019. 3 Claims. (Cl. 116-31.)



1. A traffic signal for motor vehicles including a supporting bracket having an arm, a bearing plate fixed against one side of the arm, a rod engaged with the arm and extending through said plate, the rod locking the plate against movement about the arm, a second bearing plate rotatably supported by the rod, a signal arm carried by the second plate, means for adjustably rotating the second plate to swing the signal arm, and coacting means between the plates for locking the second plate in adjusted position.

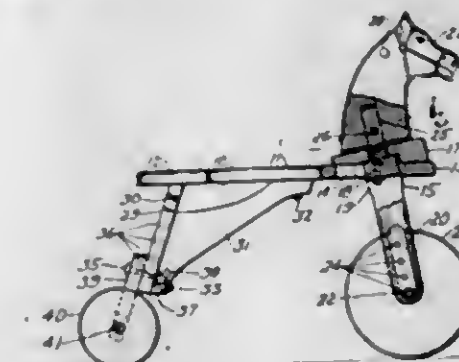
1,311,419. RECEPTACLE-CLOSURE. ROBERT A. RUSSELL, New York, N. Y., assignor to Paragon Metal Cap Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 2, 1917. Serial No. 146,186. 6 Claims. (Cl. 215-13.)



1. In combination, a receptacle and a closure therefor, the two having cooperative threads adapted, when mutu-

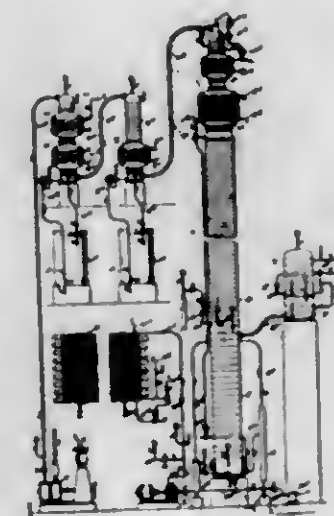
ally engaged, to enable the closure to be rotated into and out of sealing engagement with the receptacle, the thread on one of the two being temporarily distortable so that direct relative axial movement may be enforced without rupture or injury.

1,311,420. VEHICLE. HOWARD E. SAVAGE, Boston, Mass. Filed Mar. 17, 1919. Serial No. 283,005. 3 Claims. (Cl. 208-165.)



2. The combination in a child's vehicle of a steering post having a long bifurcation, adapted to receive a wheel of practically the same diameter as the length of said bifurcation, a series of equally spaced, transverse, round holes, passing through both prongs of the steering post, formed by the said bifurcation, adapted to receive an axle, upon which a wheel may revolve at any one of the several positions offered by said series of holes, in said prongs, and a rear body bolster having a series of equally spaced round holes, in two vertical rows, passing through it, adapted to receive two bolts projecting from a rear wheel carrier, at any one of the several positions offered by said series of holes in said bolster.

1,311,421. MANUFACTURE OF ETHYL ALCOHOL AND RESIDUE FROM BEVERAGE. JOSEPH SCHNEIDER, Chicago, Ill. Filed Nov. 21, 1918. Serial No. 263,613. 4 Claims. (Cl. 195-1.)

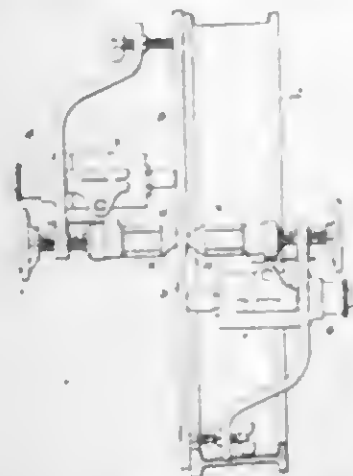


1. Manufacturing ethyl-alcohol and residue for beverage from fermented liquor, by distilling the liquor, freeing the high boiling products from the alcoholic vapors, exhausting the vapors of ethyl alcohol and low boiling-point products and withdrawing the residue of distillation containing the high-boiling point products for beverage.

1,311,422. METHOD OF WELDING PLATES. THOMAS J. SHEA, Portland, Oreg. Filed Apr. 5, 1919. Serial No. 287,789. 4 Claims. (Cl. 219-10.)

1. The method of joining plates, comprising scarfing the plates around all the edges thereof, the scarfs at opposite

edges being on opposite sides thereof, and electrically welding the scarfed edges of adjoining plates, the opposite



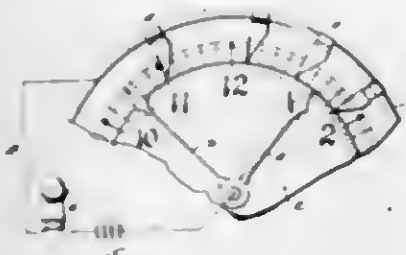
scarfed edges of each plate respectively underlapping and overlapping the meeting edges of the adjoining plates.

1,311,423. LEVEL. CECIL SHURTEN, Kingston, N. Y. Filed Oct. 25, 1917. Serial No. 198,366. 3 Claims. (Cl. 33-88.)



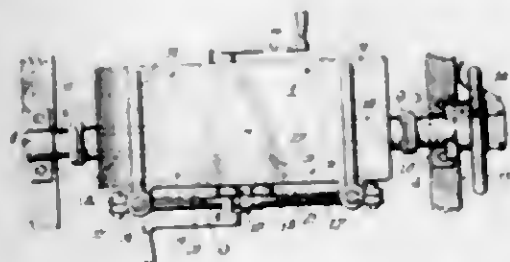
1. An article of the class described comprising a straight edge, an arm rigidly secured thereto at right angles to extend beyond the longitudinal face of the straight edge, an indicator carried by said arm in spaced relation to the straight edge, leveling means pivotally mounted upon the arm between the indicator and the straight edge, and means for retaining the straight edge in any desired angle to said leveling means.

1,311,424. ALARM. BENJAMIN H. M. SPANCO, Hawkeburn, Melbourne, Victoria, Australia. Filed Oct. 16, 1918. Serial No. 258,375. 2 Claims. (Cl. 38-19.)



1. In combination with a clock and an electric alarm including a hand of the clock, a contact having a tapering portion and adjustable to bring a greater or less extent of the contact into the path of the movable contact for regulating the period of the operation of the alarm.

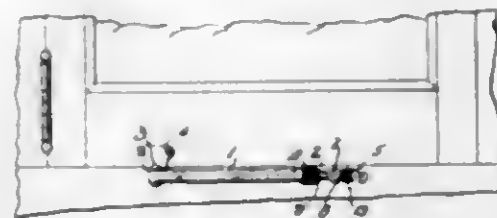
1,311,425. CORE-MACHINE. HARRY B. SWAN, Detroit, Mich. Filed Sept. 14, 1918. Serial No. 254,056. 10 Claims. (Cl. 22-10.)



1. A core molding machine comprising means for supporting and inverting a core box and core plate thereon.

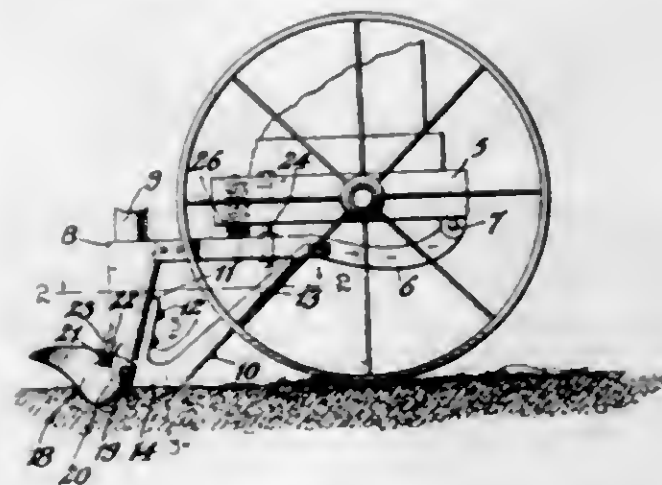
adjustable to bring the center of gravity of support and load into substantial coincidence with the axis of the motion of the support.

1,311,426. CASEMENT-WINDOW HOLDER. ERNEST L. TRICH, New Britain, Conn.; assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 22, 1919. Serial No. 291,901. 4 Claims. (Cl. 16-22.)



1. In a casement window holder, the combination of a rod and a casing constituting co-acting members relatively rotatable and adapted to slide longitudinally one upon the other, said casing having friction means engaging said rod, a wash plate and a sill plate each connected to one of said co-acting members, and a universal connection between one of said plates and the member to which it is connected, adapting the holder to be applied to either inwardly or outwardly opening casement windows.

1,311,427. METHOD OF AND APPARATUS FOR PLANTING GRAIN. WILLIAM R. TULLOCH, Washington, D. C. Filed June 27, 1918. Serial No. 242,146. 9 Claims. (Cl. 111-14.)



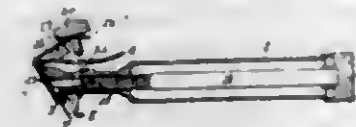
1. The method of planting which consists in first forming compressed parallel ridges in the soil and a drain channel at the outer side of each of said ridges, secondly, depositing the seed between the compressed ridges of soil, and finally, filling the space between said ridges over the seed with relatively loose soil.

8. In a seed planter, a soil depressing shoe operating to form a seed-receiving trench of compressed soil, said shoe having means to prevent lateral spreading of the soil displaced from the trench and forming a ridge of compressed soil at each side of the trench, means for depositing the seed in said trench, and means for excavating the soil at the outer side of each ridge to form a drainage channel and for directing the excavated soil into the trench and upon the seed.

1,311,428. SAFETY-RAZOR. WILLIAM B. WALKER, New York, N. Y. Filed Oct. 15, 1918. Serial No. 238,217. 3 Claims. (Cl. 30-12.)

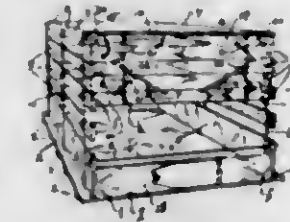
1. A safety razor comprising a handle, a head secured thereto adapted to receive and retain a blade, a guard on the head, a single means for moving the blade bodily

forward with respect to the guard and in parallelism therewith in combination with means for moving the



blade bodily outwardly or inwardly with respect to the guard whereby the distance between the cutting edge and the guard is increased or decreased.

1,311,429. ADJUSTABLE VEHICLE-BODY. DAVID H. WATA, Omaha, Nebr. Filed Dec. 21, 1918. Serial No. 267,778. 9 Claims. (Cl. 21-74.)



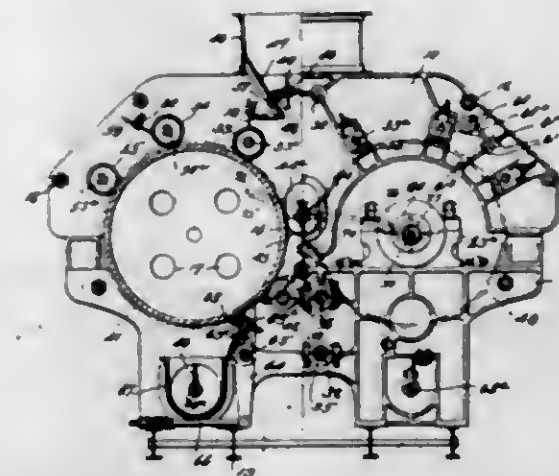
1. In an adjustable vehicle box, a platform rectangular in plan provided with upwardly projecting standards adjacent to two of its opposed edges, a pair of sections each including a plurality of horizontal strips adapted to be adjusted longitudinally of the standards, a second pair of sections normally connected with the first named sections, each second section including a plurality of horizontal strips disposed at right angles to the strips of the first named sections adjacent to the two remaining edges of the platform, and pairs of lugs mounted on the second sections for moving the strips thereof into contact or into spaced relation.

1,311,430. PORTABLE AUDIOPHONE-TRANSMITTER. CHARLES E. WILLIAMS, Chicago, Ill.; assignor to Williams Articulator Company, a Corporation of South Dakota. Filed Oct. 3, 1917. Serial No. 194,455. 3 Claims. (Cl. 179-107.)



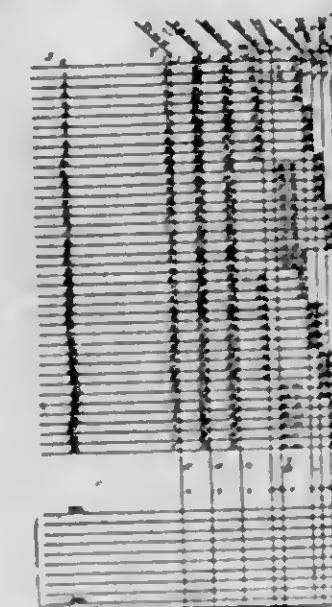
3. In a device of the kind described, the combination of a plurality of transmitters, a vibrating plate carrying said transmitters, a cover spaced from the plate and partially inclosing the transmitters, means uniting said plate to the cover in said spaced relation with a non-metallic cushioning material therebetween, said plate having a plurality of openings therethrough into the inclosure adjacent each transmitter to enable said plate to vibrate freely and to allow a flow of air into said inclosure formed by the plate and cover during such vibration.

1,311,431. DRIER. JOHN B. ADT, Baltimore, Md., assignor to John B. Adt Company, Baltimore, Md., a Corporation of Maryland. Filed Nov. 5, 1918. Serial No. 261,207. 5 Claims. (Cl. 257-96.)



2. In a drier, a heated rotary drying cylinder, means for depositing the material to be dried on the surface of the cylinder to adhere thereto, presser rollers in the path of the advancing adhering material for compressing the same into a relatively thin film on the cylinder surface, means for removing adhering material on the rollers and redepositing the same on the cylinder, and means for removing the finished product from the cylinder surface.

1,311,432. SYSTEM OF MULTIPLYING TRUNK-WIRES. WILLIAM AITKEN, London, England, assignor to The Relay Automatic Telephone Company, Limited, London, England. Filed Mar. 20, 1917. Serial No. 156,069. 21 Claims. (Cl. 179-16.)



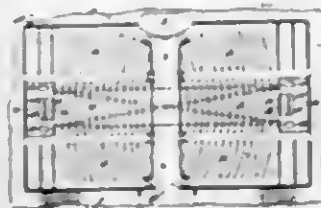
1. The combination of a group of lines and a smaller group of lines to which the first lines have access and which is divided into sub-groups, the number of sub-groups being equal to the number of lines to which each line of the first group is to have access and each sub-group containing a different number of lines.

1,311,433. AUDIOPTICON. CYRUS NEWTON ANDREWS, Yucalpa, Calif. Filed Nov. 18, 1914. Serial No. 872,853. 5 Claims. (Cl. 88-16.2.)

1. In combination, oppositely-arranged oscillatory screens mounted to oscillate on vertical axes and diagonally-arranged picture machines for projecting views on said screens.

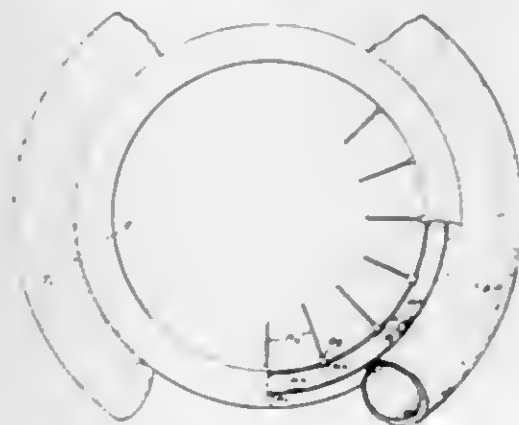
2. In combination, two oppositely arranged screens, a set of picture machines to project picture views on one

of said screens, a set of picture machines to project picture views on the other of said screens, oppositely-arranged sets of seats whereby pictures on one of the screens may be viewed by occupants of the seats arranged



therefor, over the heads of the occupants of the seats arranged for the other screen, and vice versa, and means to alternatively operate the picture machines of each set and to simultaneously operate the picture machines of different sets.

1,311,434. BICYCLE RIM. ARTHUR C. BAILEY, Vancouver, Wash. Filed Mar. 8, 1919. Serial No. 281,518. 1 Claim. (Cl. 152-20.)



A metal bicycle rim having a hollow cross section in combination with a tire, said hollow portion being adapted to contain heads of spoke nipples as well as heads of mushroom shaped buttons which project from the inner periphery of the tire, said rim having elongated openings formed in its outer surface, each opening having one end large enough to admit the head of a button, and the opposite end being adapted to engage the neck of said button and having a blunt edge at the end of said button engaging portion of said elongated hole which is adapted to prevent any cutting action by the rim against said button neck.

1,311,435. STACK-SEALING DEVICE. JOHN E. BELL, Brooklyn, N. Y. Filed Aug. 2, 1918. Serial No. 248,079. 10 Claims. (Cl. 122-7.)



1. In a stack, the combination with the stack wall of horizontal internal supports carried by the stack wall at opposite sides of the stack passage, said stack wall being formed with an opening above said supports, and a series of bars insertible in and removable from the stack through

said opening and adapted when inserted therein to rest at their ends upon said supports and form a partition extending across the stack passage.

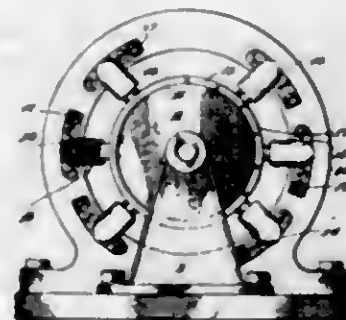
10. In a furnace system comprising a rotary kiln and a waste heat boiler section, the combination with a kiln of a kiln head into which one end of the kiln opens, a stack along side the kiln head, and communicating with the latter at its lower end, said kiln head having a separate valved outlet to the waste heat boiler section of the system, and stack being provided immediately above its connection with said kiln head with horizontal supports or shoulders at opposite sides of the stack passages, and with an opening in the stack wall adjacent the ends of said supports, and stack sealing bars insertible and removable through said opening and adapted to be placed on said supports and to seal said stack passage.

1,311,436. DAMPER. JOHN E. BELL, Brooklyn, N. Y. Original application filed Aug. 2, 1918, Serial No. 247,928. Divided and this application filed Aug. 2, 1918. Serial No. 248,080. 5 Claims. (Cl. 251-51.)



3. The combination with a conduit formed with a transverse kerf in its wall and having the outer portions of the side walls of the kerf inclined away from the plane of the kerf and made accessible for luting, and a plate like damper removably received in said kerf.

1,311,437. FLASHER. WADE C. CONELIN, Highland Park, Mich. Filed July 2, 1917. Serial No. 178,173. 2 Claims. (Cl. 200-10.)



1. In a flasher, a rotor, contact pieces carried by the periphery thereof and having beveled edges at one side of said rotor, stationary brush holders circumferentially of said rotor, rotatable brushes in said brush holders engaging the contact pieces of said rotor, and caps to revolve about the axes of said holders by said contact pieces engaging flat ends of said rotatable brushes at one side of the axis of each brush, and means adapted to revolve said rotor.

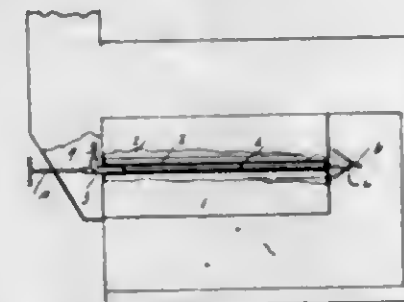
1,311,438. HAIR-CUTTING DEVICE. HENRY T. COPER, Detroit, Mich. Filed Jan. 2, 1919. Serial No. 269,216. 3 Claims. (Cl. 30-12.)



1. The combination of a comb, a blade thereon, said comb having a transverse slot at its inner end and a notch at its outer end, and a detachable metallic strap on said

blade having one end shaped to frictionally engage in the comb slot and its opposite end shaped to snap in the notch of said comb, its ends to retain said blade in engagement therewith.

1,311,439. FLUE-CLEANER FOR BOILERS. OTTO DAHL, Seattle, Wash. Filed Dec. 13, 1917. Serial No. 206,874. 2 Claims. (Cl. 137-97.)



1. In a device of the class described the combination of an internally chambered and normally stationary sleeve, a steam connection to the said chamber of the sleeve, a pipe arranged slidably and rotatably through the chamber of the said sleeve, a port through the said pipe in that portion of the pipe which is within the chamber of the sleeve, insertible discharge plugs screwed into and passing through the wall of said pipe and arranged at varying distances from the inner end of the said pipe and in staggered relationship to each other, backwardly extending angular discharge openings in the said plugs the inner ends of said openings communicating with the inside of the pipe and the outer ends communicating with the exterior of the pipe, whereby steam may be blown from the pipe backwardly and at an angle thereto.

1,311,440. INSULATING UNIT FOR RAIL JOINTS. CLARKSON A. DISBROW, New Rochelle, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Apr. 21, 1919. Serial No. 201,497. 11 Claims. (Cl. 238-159.)



1. An insulating unit for rail joints having a replaceable wear insert.

1,311,441. SHEET-LATHING. WILLIAM GENAERDTS, New York, N. Y. Filed June 19, 1918. Serial No. 104,361. Renewed Dec. 24, 1918. Serial No. 268,162. 6 Claims. (Cl. 20-13.)

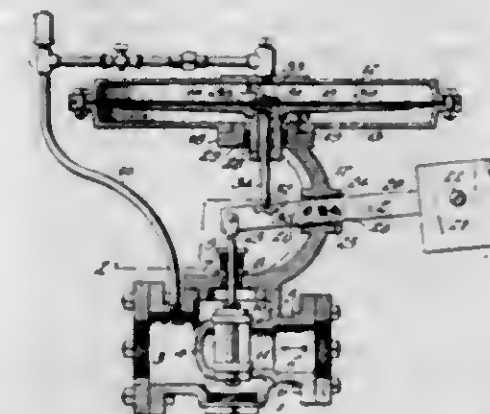


1. Sheet lathing consisting of two layers of paper having an adhesive between them, and transverse strengthening strips secured to one of the layers of paper by folds in the strengthening strips inclosing and clamping within them folds in the layer of paper.

1,311,442. AUTOMATIC PRESSURE-REGULATOR. FREDERIC C. GILFILLAN, Ebenezer, N. Y. Filed May 24, 1917. Serial No. 170,786. 4 Claims. (Cl. 50-27.)

1. An automatic pressure regulator comprising a valve body containing an inlet, an outlet and a partition between said inlet and outlet and provided with a port, a valve stem provided with a valve stopper adapted to open and close said port, a pressure chamber communicating with

the outlet side of the valve body and having a diaphragm, a shifting lever having an inner arm connected with said valve stem, a weight mounted on the outer arm of said lever, and motion transmitting means interposed between said lever and diaphragm, said means comprising a conical



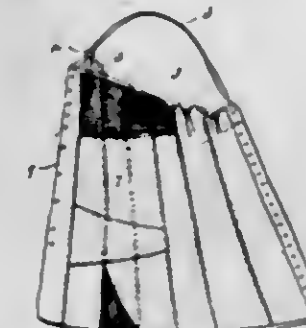
sent arranged centrally on the underside of said diaphragm, and a shifting rod provided with an upper conical end engaging with the seat on said diaphragm and a lower conical end engaging with a conical seat arranged on the inner arm of said lever between its fulcrum and said valve stem.

1,311,443. DEVICE FOR BURNING VAPOROUS OR GASEOUS FUEL. MANLY M. GILLAM, Flushing, N. Y. Filed Dec. 11, 1918. Serial No. 266,305. 4 Claims. (Cl. 158-28.)



1. In a device for vaporizing and burning liquid fuel, a vaporizer, a priming pan beneath the vaporizer, means for taking a portion of the vapor from the vaporizer and mixing it with air, means for burning the mixture under the vaporizer to heat it and thereby continue the generation of vapor after the initial heat of the priming pan has ceased to operate, means for discharging the remainder of the vapor in the vaporizer upwardly, an air preheater having an inlet below the above named burning means, a main mixing space above the vaporizer, said preheater outlet and vapor discharging means entering one end of said mixing space, and a burner cap at the other end of said mixing space for burning the said remainder, substantially as and for the purposes described.

1,311,444. CORSET. GENETIEVE HEILNER, New York, N. Y. Filed May 16, 1919. Serial No. 297,512. 2 Claims. (Cl. 2-73.)



1. The combination with a corset having its back section extended vertically above the upper edges of the

front and side sections, and elastic bust-reducing sections permanently secured to the upper edges of the said front and side sections and to the forward edge of the extensions of the back sections.

- 1,311,443. TOOL-HOLDER. GEORGE W. HENRY, New York, N. Y., assignor to Edgar Holstier, New York, N. Y. Filed July 20, 1918. Serial No. 245,597. Renewed June 11, 1919. Serial No. 303,471. 7 Claims. (Cl. 29-99.)



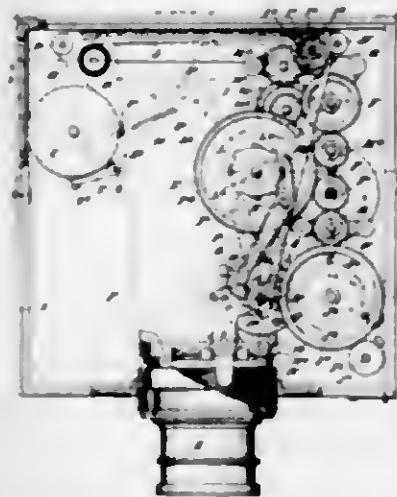
1. A tool holder consisting of a shank terminating in a head, a projecting rib on the lower side of the head, said head having a hole for a cutter extending lengthwise therethrough and another hole for a cutter extending transversely therethrough, which holes intersect and a clamp having a skirt depending from its side and facing the rib for clamping a parting tool said cutter being capable of being placed in the longitudinal hole or the transverse hole substantially as described.

- 1,311,446. BOAT-LAUNCHING CARRIAGE. HARRY R. HILLS, Riverton, N. J., assignor to Steward Davit and Equipment Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 22, 1918. Serial No. 263,671. 4 Claims. (Cl. 9-22.)



1. A boat launching carriage consisting of a continuous longitudinally extending buffer bar formed to fit against and over a considerable length of the side of the boat, in combination with wheels secured to the ends of the buffer bar and extending beyond its outer surface, and means for detachably securing the buffer bar to the side of the boat.

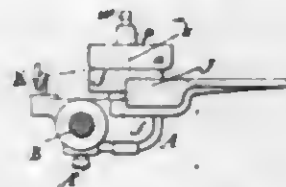
- 1,311,447. CAMERA MECHANISM. LOBEWYK J. R. HOLST and NIELS PEDERSEN, Philadelphia, Pa., assignors to Arthur Brock, Jr., Philadelphia, Pa. Filed Sept. 8, 1916. Serial No. 118,957. 7 Claims. (Cl. 101-26.)



4. In a camera, the combination with means for advancing the light sensitive material through the position

of exposure, of counterbalancing means automatically adjusted in response to the movement of the light sensitive material to compensate for the displacement of the latter with respect to the center of gravity of the camera and thus maintain said center of gravity substantially unchanged.

- 1,311,448. THREAD OR YARN TENSION DEVICE AND CLEARER. FRANK ASHWORTH HOLT, Rochdale, and GRINDROD KERRAW, Whitworth, England. Filed Oct. 25, 1915. Serial No. 57,769. 20 Claims. (Cl. 28-20.)



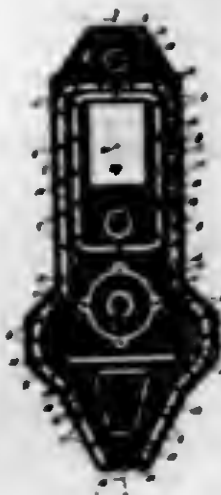
1. In a tension device, a support for a tension disk and a revoluble tension disk of unsymmetrical form carried thereby having its mass unsymmetrical in relation to its axis of revolution and so tending to lateral movement in revolution and being made movable athwart such axis, substantially as hereinbefore described.

- 1,311,449. METHOD OF MAKING CASTELLATED NUTS. FERNANDO OSCAR JACQUES, JR., Providence, R. I., assignor to one-half to Harold Caldwell Peckham, Cranston, R. I. Filed Jan. 9, 1919. Serial No. 270,420. 2 Claims. (Cl. 10-86.)



1. The method of making castellated nuts consisting in cutting out of sheet metal a blank having a body portion and radial arms on the body portion, forming the sheet metal blank into a cup having an open castellated end, condensing the cup into the form of a nut blank having a central hole, a closed bottom and a castellated end, punching out the closed bottom of the nut blank, and then screw-threading the central hole in the nut blank.

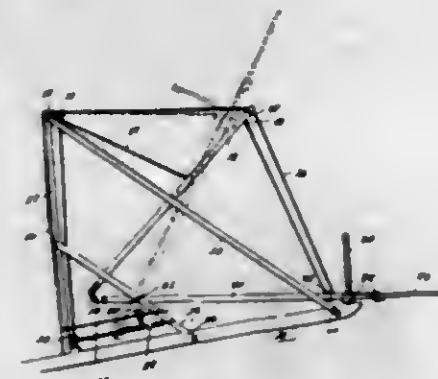
- 1,311,450. PACKING-HOLDER. FRED A. LARAWAY, Cleveland, N. Y. Filed May 21, 1919. Serial No. 298,712. 1 Claim. (Cl. 211-17.)



In an article of the character set forth, the combination with a base plate, of sets of packing holding pins projecting therefrom, said pins being spaced apart and

disposed in a relation to each other that corresponds to the standard bolt holes in the packing to be held and being furthermore adapted to engage in such bolt holes of such packing and maintain the packing in proper shape.

- 1,311,451. HAY-STACKER. IRA S. LEOGITT, Hallock, Minn. Filed Feb. 6, 1918. Serial No. 215,615. 1 Claim. (Cl. 214-131.)



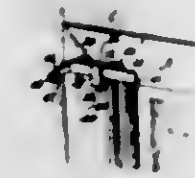
In a hay stacker, a frame, fork arms pivotally connected to the frame intermediate their lengths, a fork carried by the arms, supporting arms, means for pivotally connecting the supporting arms to the fork arms to the rear of the pivots of the fork arms, pulleys on the fork arms adjacent the fork, pulleys on the supporting arms adjacent the outer ends thereof, vertically extending braces forming a part of the frame and having pulleys disposed adjacent their upper extremities, flexible members having one of their ends connected to the respective supporting arms adjacent the outer ends thereof, said flexible members passing over the pulleys of the fork arms and over the pulleys of the supporting arms to the pulleys of the braces, to exert a pressure on the extreme ends of the fork arms through the supporting arms when the flexible members are operated.

- 1,311,452. MILLING-TOOL. FRED P. LOVEJOY, Springfield, Vt. Filed Aug. 30, 1918. Serial No. 252,197. 3 Claims. (Cl. 29-105.)



1. A rotary milling tool, comprising a disk-like body or holder, provided in its periphery with semi-cylindrical open sockets extending from face to face thereof, semi-cylindrical cutters arranged in said sockets and projecting beyond the periphery of the body, an associated complementary semi-cylindrical shoe for each cutter located in the socket therewith, and a key for locking each shoe and its associated cutter against endwise movement.

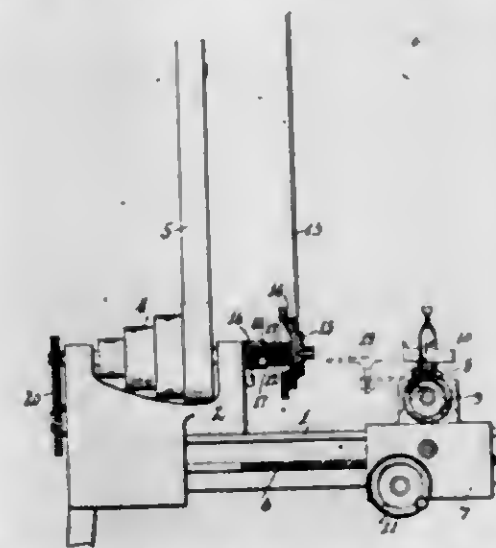
- 1,311,453. ADJUSTABLE SHADE OR CURTAIN BRACKET. JOSEPH A. METZGER, Buffalo, N. Y. Filed Jan. 19, 1917. Serial No. 143,265. 4 Claims. (Cl. 156-24.)



1. A shade bracket comprising a fixed member formed of a single piece of sheet metal and having a horizontal

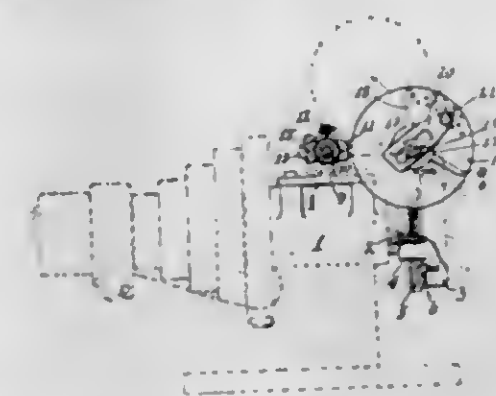
part with offset securing lugs at opposite ends and a notch formed at its upper edge midway between its ends, said horizontal part being provided with transverse slots extending upwardly from its lower edge and with a U-shaped incision between said slots, and a transverse part of which the metal between said U-shaped incision and said slots forms part, said transverse part being bent rearwardly from the upper edge of said slots and U-shaped incision and being directed downwardly a distance below the lower edge of said horizontal part, thence forwardly and upwardly in spaced relation to the lower edge and the front face of said horizontal part, thence rearwardly into the notch at the upper edge of said horizontal part and finally downwardly in contact with the rear face of said horizontal part, an elongated adjustable member fitting between said transverse part and said horizontal part and having a rearwardly extending flange in contact with the lower edge of said horizontal part, and a screw passing through the depending portion of said transverse member and bearing against the underside of said flange.

- 1,311,454. SUPPLEMENTARY HIGH-SPEED SPINDLES FOR ENGINE-LATHES. EDWARD N. MOOR, Oakland, Calif. Filed May 29, 1918. Serial No. 237,315. 5 Claims. (Cl. 82-2.)



5. In combination with the head-stock spindle, lead screw and apron of an engine or machine lathe, a supplementary spindle; a head carried thereby, the periphery of which is formed with a speed-varying pulley; a member in which said supplementary spindle is journaled, said member being screwed upon the head-stock spindle of the lathe; and a belt from a source of power independent of the lathe, to said pulley for independently driving the supplementary spindle.

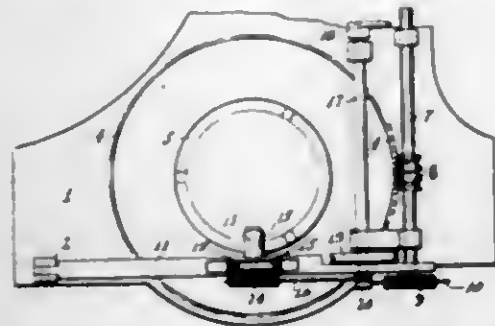
- 1,311,455. UNIVERSAL DIVIDING ATTACHMENT FOR LATHES. EDWARD N. MOOR, Oakland, Calif. Filed May 29, 1918. Serial No. 237,316. 2 Claims. (Cl. 90-57.)



1. A lathe attachment for the described purpose comprising a worm wheel with means for attaching it to the

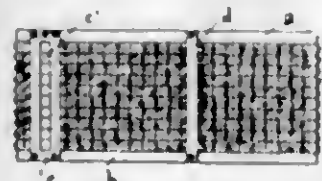
chuck or face-plate carried by the head stock spindle of the lathe; a worm-spindle engaging said worm-wheel to turn the chuck or face plate; a swinging arm mounted on the lathe and carrying the worm spindle, whereby the latter may be thrown into and out of engagement with the worm-wheel; means for longitudinally adjusting said arm to effect the accurate engagement of the worm spindle with the worm wheel; and means for turning said worm spindle.

1,311,456. INDEXING AND DIVIDING MACHINE. EDWARD N. MOON, Oakland, Calif. Filed May 29, 1918. Serial No. 237,317. 6 Claims. (Cl. 33—19.)



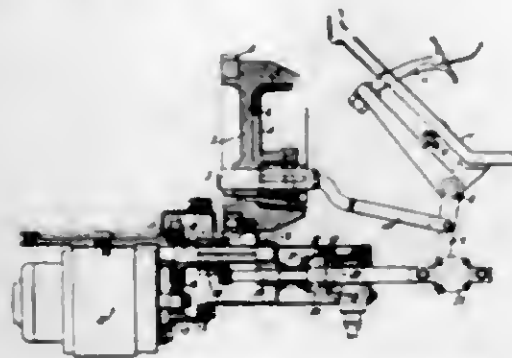
1. A machine for the described purpose, comprising a worm-wheel; means for holding the work on said wheel; a worm-spindle engaging said worm-wheel; a reciprocative tool holder; a tool carried by said holder for acting on the work as turned; a single drive-shaft; and means operated by said shaft for both intermittently turning the worm-spindle and reciprocating the tool-holder in conformity with the intermittent movement of the worm wheel and work.

1,311,457. CIPHER APPARATUS. LEON NICOLETTI, Rome, Italy. Filed Dec. 7, 1918. Serial No. 265,770. 4 Claims. (Cl. 35—13.)



1. Ciphering apparatus comprising, in combination, a frame having fixed reference means thereon; and a plurality of parallel bars slidably mounted in the frame for displacement individually with relation to said reference means, all of the different bars bearing an equal number of figures so as to furnish for each position of the bars determined in accordance with a selected numerical key a ciphering table which forms a guide for the breaking up of the message into definite groups of letters.

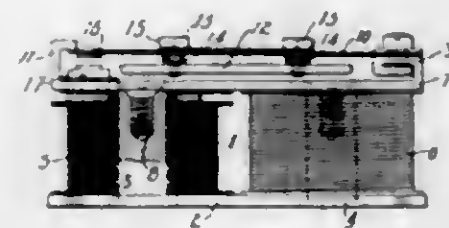
1,311,458. STARTING MECHANISM. JOHN P. NIXON, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 24, 1914. Serial No. 852,823. 7 Claims. (Cl. 290—28.)



2. In a starting mechanism, the combination with an engine shaft, an electric starting motor, and means for

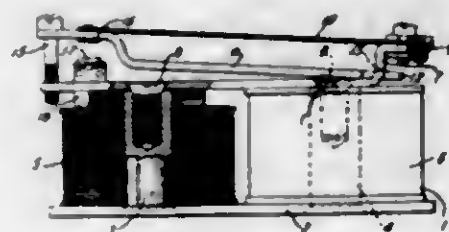
operatively connecting said motor to said shaft, said means comprising a slidable pinion, of a clutch lever normally disconnected from said pinion, means comprising a member for connecting said lever to said pinion, an electromagnet for controlling said member, and means for causing the operation of the electromagnet but not the motor.

1,311,459. CUT-OUT. FRANCIS H. PATTEN, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 11, 1914. Serial No. 837,737. 6 Claims. (Cl. 175—281.)



1. In a cut out, the combination with an electromagnet, of a movable member adjacent thereto, an armature member on said movable member, said armature being operated by the electromagnet, and means comprising a bolt and a spring between the movable member and the armature member for adjusting the position of said armature member relatively to said movable member and said electromagnet.

1,311,460. CUT-OUT. FRANCIS H. PATTEN, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 10, 1914. Serial No. 861,042. 13 Claims. (Cl. 175—281.)



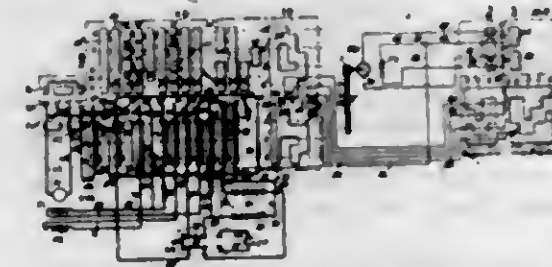
1. In a cut out, the combination with a pair of relatively movable cooperating contact members, of a laterally and longitudinally movable armature member for carrying one of said contact members, and means, comprising an electromagnet, for operating said armature member laterally and longitudinally and causing said contact members to have a substantial wiping or sliding engagement with one another.

1,311,461. INHALER OR RESPIRATOR. JOHN REYNARD, Omaha, Nebr. Filed Feb. 19, 1919. Serial No. 277,985. 1 Claim. (Cl. 128—198.)



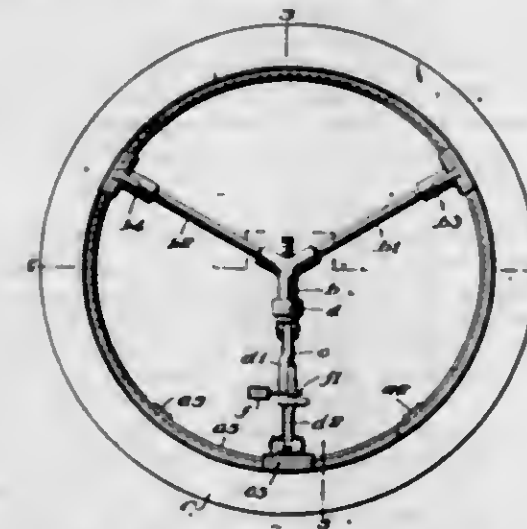
As a new article of manufacture, an inhaler or respirator, consisting of a pair of vertically disposed pads or sponges adapted to fit the nostrils, and a yoke having its ends formed with spirals adapted to screw into said pads and retain them in proper position.

1,311,462. CONTROL SYSTEM. LYNN G. RILEY, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 6, 1915. Serial No. 26,307. 9 Claims. (Cl. 172—179.)



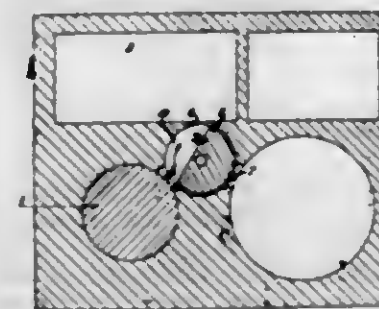
D. A controller for electric motors having seven running positions and having five cooperating control fingers, various combinations of said fingers being bridged by said segment in its "off" position and in said running position.

1,311,463. AUTO-TIRE CARRIER. LOUIS ROTHSCHILD, Philadelphia, Pa. Filed Feb. 24, 1919. Serial No. 279,017. 4 Claims. (Cl. 224—29.)



1. An auto-tire tube carrier, comprising a member having arms carrying clencher-shoes, a bolt passing through said member and carrying a means to adjust said member in positioning said shoes, a sleeve movable on said bolt and carrying a lever arm, a clencher-shoe connected with the lower end of said bolt, a second lever-arm pivoted to said first-named lever arm and provided with a clencher-shoe in connection with the clencher-shoe of said bolt and a lock-means to engage said lever-arms in a certain position thereof, substantially as and for the purposes described.

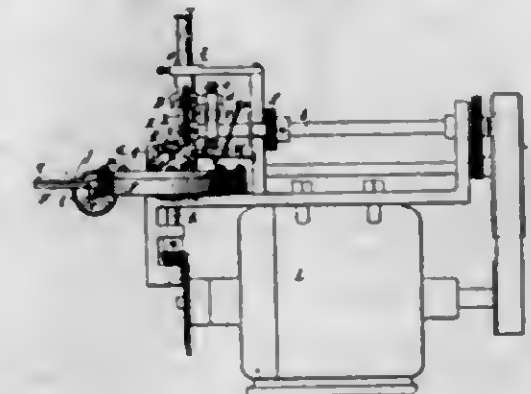
1,311,464. ELECTRIC HEAT-STORING APPARATUS. OSKAR SELIG and KRISTIAN PETERSEN, Sarpsborg, Norway. Filed Apr. 28, 1919. Serial No. 293,287. 2 Claims. (Cl. 219—35.)



1. In an electrically heated range or the like, a heat accumulating body, a case formed of insulating material

inclosing said body, a plurality of heating chambers located in said case, a heat transferring channel between the heat accumulating body and each of said heating chambers, and valve controlling said channels for regulating the supply of heat from the heat accumulating body to the several chambers.

1,311,465. CENTRIFUGAL GUN. ALOIS B. SALIGER, New York, N. Y., assignor to Intercontinental Company, a Corporation of California. Filed June 7, 1916. Serial No. 102,192. 13 Claims. (Cl. 89—10.)



1. A machine for propelling disks by centrifugal force including in combination a propelling device, a magazine and continuously moving means for positively forcing said disks along in said magazine.

1,311,466. COIL-RETAINING DEVICE. MICHAEL SANDFIELD, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1915. Serial No. 66,748. 0 Claims. (Cl. 171—206.)

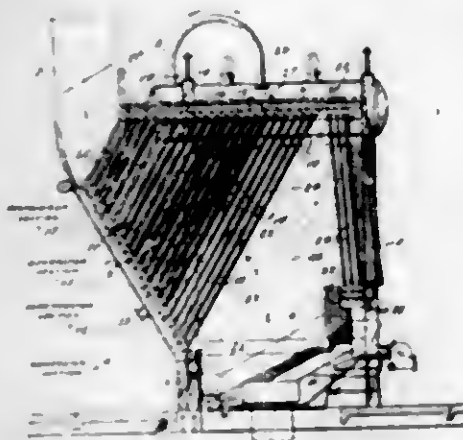


3. In a dynamo-electric machine, the combination with a magnetizable core member having a plurality of coil-containing slots, of devices for holding the coils in position, each of which comprises a continuous magnetizable strip and non-magnetizable key member for holding parallel portions of said strip against the walls of the slot, other portions of said strip being bent laterally at the ends of the slot to prevent movement of the device thereon.

1,311,467. WATER-TUBE BOILER. FREDERICK SARGENT and HERMAN C. HEATON, Chicago, Ill., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 14, 1916. Serial No. 91,003. 4 Claims. (Cl. 122—205.)

1. A water tube boiler having a bank of substantially parallel tubes arranged in rows, the length of the tubes of a given row being the same and the lengths of the tubes of successive rows from the furnace toward the gas outlet decreasing, the tubes nearest the furnace being generating tubes and said tubes succeeded by superheater tubes and economizer tubes, headers to which the ends of the tubes are connected, drums connected to the headers which in turn are connected to steam generating tubes, said drums

being also connected to certain of the economizer and superheater headers, a furnace discharging between the



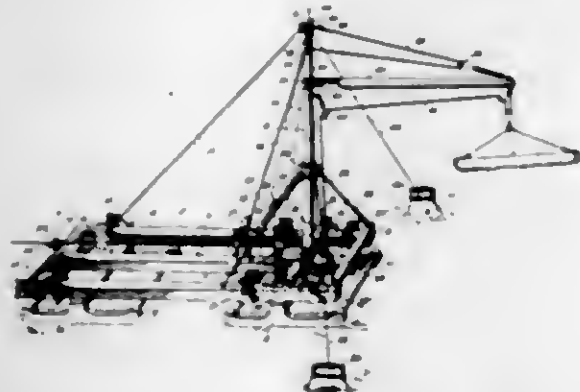
longer tubes, and a settling which, with the above arrangement of tubes, causes the gases to flow in one direction through decreasing flow areas.

1,311,468. WHEEL. RICHARD L. SAUNDERS, Hartford, Conn. Filed May 13, 1918. Serial No. 234,054. 8 Claims. (Cl. 21-69.)



1. A wheel comprising a circumferentially corrugated metallic tire section, and rings rigidly fastened in the grooves of said tire section.

1,311,469. COMBINED LOG LOADER AND DECKER. WILLIAM L. SMITH, Ontonagon, Mich. Filed Feb. 20, 1919. Serial No. 278,177. 5 Claims. (Cl. 212-59.)



1. In a device of the character described, a main-frame, a rotatable axle mounted transversely of the frame, a

mast having its lower end mounted rotatable in the axle, a boom mounted to rotate on said mast, supporting means secured to the frame and mast for rotatably supporting said mast between said boom and axle, and independent operating ropes for said boom and mast.

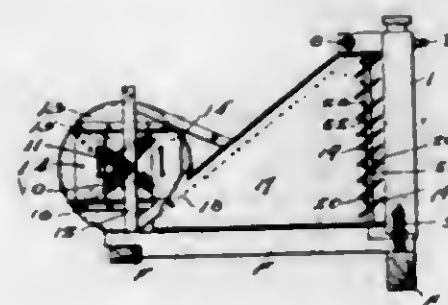
2. In a device of the character described, a main-frame, a rotatable axle mounted transversely of the frame, a mast having its lower end mounted rotatable in the axle, a boom mounted to rotate on the mast, said mast being also tiltable with respect to said axle, supporting means secured to the frame and mast for rotatably supporting said mast between said boom and axle, and separate operating ropes for said boom and mast, said operating ropes serving as guys when the mast is adjusted to its vertical position.

3. In a device of the character described, a main-frame, a rotatable axle mounted transversely of the frame, a mast having its lower end mounted rotatable in the axle, a boom mounted to rotate on the mast, supporting means secured to the frame and mast for rotatably supporting said mast between said boom and axle, said supporting means comprising a sleeve mounted around the mast below the boom, and adjustable trunk-guys connecting said sleeve with the main frame, and separate operating ropes for said boom and mast, the mast operating ropes serving as guys when the mast is adjusted to its vertical position.

4. In a device of the character described, a main-frame, a rotatable axle mounted transversely of the frame, a mast having its lower end mounted rotatable in the axle, a boom mounted to rotate on said mast, supporting means secured to the frame and mast for rotatably supporting said mast between said boom and axle, separate operating ropes for the boom and mast, and interchangeable ratchet-winches for said operating ropes, whereby the device can be changed from a loader to a decker.

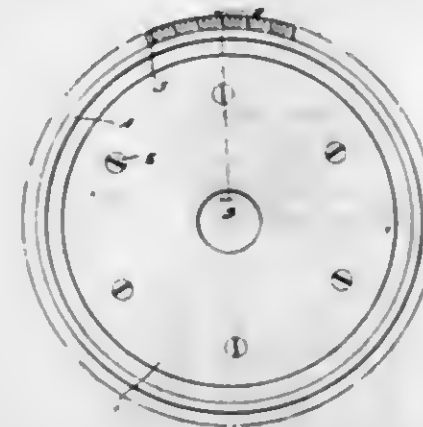
5. In a device of the character described, a main-frame, a rotatable axle having a mast receiving recess therein mounted on said frame, said recess being formed wider at its bottom than at its top to provide a contracted throat, a mast having a rounded lower end and a tenon projecting therefrom, said tenon adapted to extend through said throat into the recess and rest free from the sides and bottom of the recess whereby the mast can tilt on its seat, a boom mounted on the mast, means for rotatably supporting the mast between the boom and axle to allow the boom to swing over the sides of the frame from front to rear, and separate operating ropes for the mast and boom.

1,311,470. COOLING SYSTEM FOR MOTOR VEHICLES. WILBERT W. STAUFFER, Wilbur, Wash. Filed Sept. 11, 1918. Serial No. 253,567. 3 Claims. (Cl. 123-174.)



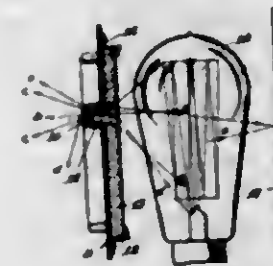
1. The combination in a cooling system as described including the motor, radiator and water circulation devices as described, of a fan and its casing and a chute connecting the casing with the radiator, and means within the chute operated by a thermostat in the cooling system for regulating the admission of air currents from the fan to the radiator.

1,311,471. ROTARY PLANE. HUBEN E. TEMPLETON and GEORGE T. ENGLAND, Westington Springs, S. D. Filed Feb. 4, 1919. Serial No. 274,981. 1 Claim. (Cl. 20-78.)



A rotary plane including a wheel, a metal band upon the periphery of the wheel, and a spiral series of planing studs extending through the band and from the wheel, each stud extending into the paths of the next adjoining studs in front and rear thereof.

1,311,472. ILLUMINATED SIGN. PAUL SCHOTLER VAN BLOOM, New York, N. Y. Filed Apr. 9, 1917. Serial No. 160,783. 6 Claims. (Cl. 40-183.)



1. A sign comprising in combination an opaque board or screen having an opening conforming in outline to a sign character; a light source placed behind said board; a plate of translucent refractive material placed behind said board and extending beyond the margins of the opening therein, said plate being formed with a continuous plane rear surface and bearing in relief on its front surface said character projecting through and filling said opening, the projecting sides of said character being substantially parallel to each other and perpendicular to the rear surface of said plate, and the front surface of said relief portion being formed to give a concentrated refraction of the light in one or more lines conforming to said character.

1,311,473. SPACING-WASHER. HENRY VONALE, Hartford, Conn., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed July 18, 1917. Serial No. 181,216. 1 Claim. (Cl. 85-50.)



An adjustable spacing washer made in two parts with a face of one out of the plane of the corresponding face of the other; one of said parts being frictionally supported by the other and relatively movable axially thereof.

1,311,474. GLASS-WORKING APPARATUS AND PROCESS. FRANK L. O. WADSWORTH, Pittsburgh, Pa., assignor to Ball Brothers Glass Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed Apr. 24, 1914. Serial No. 834,230. 11 Claims. (Cl. 40-55.)



1. That improvement in the art of glass working, which comprises the establishment of a downwardly flowing stream of glass from a source of supply into a receptacle, the cutting of said stream at a point below but closely adjacent the upper end of said stream, the application to said freshly produced end of a stream-embracing cooling element serving to produce, below but in conjunction with the chilled skin depending from the orifice, a temporarily chilled stream-supporting envelop for said freshly-produced end immediately preceding a cutting, and the withdrawal of the filled receptacle and presentation of a receptacle in the stream line.

4. A glass working machine comprising, cutting mechanism, and superposed stream-embracing members relatively movable to momentarily asymmetrically embrace a stream of glass to form a temporarily-chilled flow-retarding envelop for the stream without materially swelling, and to thereafter cut the same below the embracing means.

9. In a glass working machine, a stream-embracing member having an open bottom, a shear blade movable across said open bottom to shear a stream passing through said stream embracing member, a nozzle associated with said member and movable into alignment beneath the open bottom of the stream-embracing member subsequent to the traverse of the shear blade, and means for directing an upward blast of gas from said nozzle into the lower end of the stream-embracing member.

1,311,475. TIE-WIRE REMOVER. JOHN E. WEBB, Island, Falls, Me. Filed Sept. 11, 1917. Serial No. 190,792. 1 Claim. (Cl. 254-81.)

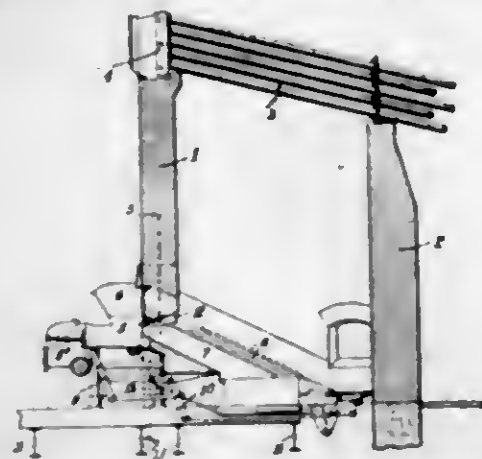


A wire stretcher comprising a lever having an enlarged fulcrum end portion, a pair of arms pivotally mounted on said fulcrum portion, a pair of blocks formed integrally with said arms at the distal ends thereof and offsetting from said arms, said blocks being of appreciable size and constructed with ledge portions, and a pair of cam blocks pivotally mounted on said blocks and co-operable with said ledges to form wire engaging members, said cam blocks being of the same width as said blocks whereby to lie flush with the sides thereof when the cam blocks are in closed position, and having extended portions of the same cross sectional dimensions as the blocks proper adapted to receive blows from an instrument to release the parts secured thereby, substantially as set forth.

1,311,476. SUPPORT FOR FURNACE-WALLS. HOBBA WEBSTER, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 22, 1915. Serial No. 62,747. 4 Claims. (Cl. 110-1.)

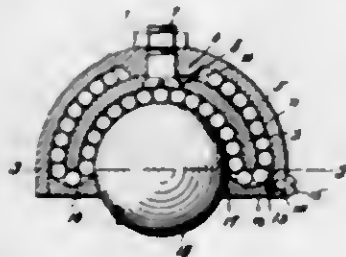
1. A steam boiler furnace having a front wall, an underfeed stoker mechanism upon a part of which said

wall rests, said stoker mechanism having alternate twyer boxes and retorts and means for feeding coal through the



retorts, and a plurality of struts underneath the stoker mechanism for supporting the same and the wall superimposed thereon.

1,311,477. BALL-BEARING CASTER. Isa Wason, Pueblo, Colo. Filed Apr. 26, 1919. Serial No. 292,903. 2 Claims. (Cl. 16-151.)



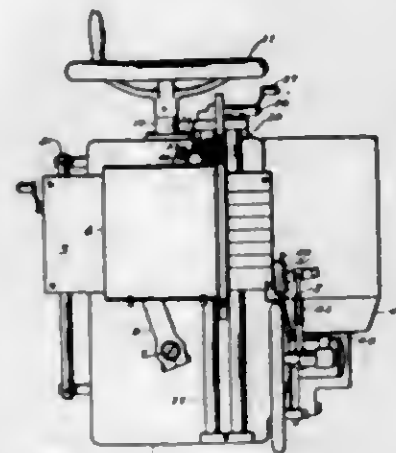
1. In an anti friction caster, a shell having an internal boss with a concave surface, an inverted cup secured to the said boss, the said cup being spaced from the shell to form a raceway, a face plate having a channel in its inner surface under the edge of the said cup to form a raceway around the edge of the cup, said face plate having a central aperture, a supporting ball in the said aperture and anti friction balls in the race way and in a space between the supporting ball and the under surface of the cup, and means for securing the face plate to the shell.

1,311,478. AMPLIFYING-HORN. RUSSELL A. WILLSON, Spokane, Wash., assignor of one-half to Emil Simon, Spokane, Wash. Filed July 11, 1918. Serial No. 244,381. 3 Claims. (Cl. 181-27.)



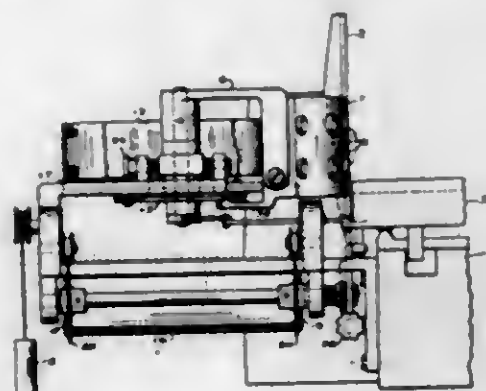
1. A sound conveyer of tortuous shape and rectangular in cross section having diverging walls with opposed reflecting surfaces for equalizing the length of the sound waves passing therethrough.

1,311,479. SLICING-MACHINE. WALLACE B. WOLFF, Chicago, Ill., and EUGENE K. HOOD, Indianapolis, Ind., assignors to American Slicing Machine Co., Chicago, Ill., a Corporation of New York. Filed Mar. 1, 1919. Serial No. 280,005. 8 Claims. (Cl. 17-24.)



1. In a slicing machine the combination of a base; a reciprocating carriage; a gear train adapted to actuate said knife and carriage; and a removable gear deck carrying said gear train without disassembling the same when said deck is removed substantially as and for the purpose set forth.

1,311,480. SLICE-STACKING DEVICE FOR SLICING-MACHINES. WALLACE B. WOLFF, Chicago, Ill., and EUGENE K. HOOD, Indianapolis, Ind., assignors to American Slicing Machine Co., Chicago, Ill., a Corporation of New York. Filed May 2, 1919. Serial No. 294,287. 11 Claims. (Cl. 17-24.)



1. In a slicing machine the combination of a rotating knife; a reciprocating carriage; and a pneumatic receiver adapted to hold the slice as it is produced substantially as and for the purpose set forth.

1,311,481. METHOD OF OBTAINING POTASSIUM CHLORIDE. NOAH WRINKLE and WALTER A. KUHNERT, San Francisco, Calif. Filed Dec. 26, 1918. Serial No. 268,291. 5 Claims. (Cl. 23-22.)

1. The method which consists in adding to a solution containing potassium chlorid and a boric compound a sufficient amount of magnesium oxid to effect the decomposition of the boric compound and cause the formation of a boric magnesium compound insoluble in the solution.

1,311,482. PACKAGE-TYING DEVICE. HARRY A. ZEH-ARNO, Portland, Oreg. Filed Nov. 26, 1915. Serial No. 68,521. 1 Claim. (Cl. 24-18.)

A package tying device consisting of a flat metal body with cord attaching means at one end and at its other end dish-shaped substantially as shown to give cord clearance under said body when placed on a flat surface, and having its

end turned slightly to facilitate the insertion of a cord thereunder, and a button like member on top of said body



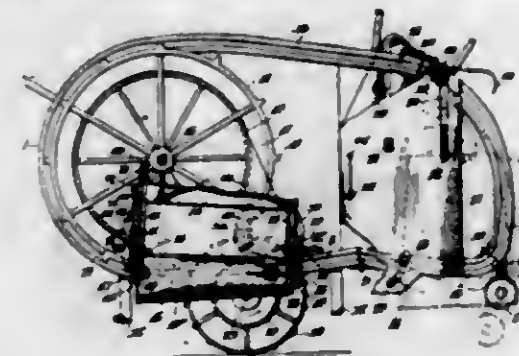
intermediate its ends to receive a cord therearound, between said button and said body, substantially as shown and described.

1,311,483. INSULATOR. FRANK AMOS, Wheeling, W. Va., assignor to Wheeling Tile Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Nov. 28, 1917. Serial No. 204,424. 5 Claims. (Cl. 173-314.)



1. An insulator, comprising in combination a body, and a cap-piece provided with alling bores, the body at its upper end being formed with a wire-receiving groove having a series of transverse ribs extending upwardly from the bottom thereof and likewise provided with a lug or teat extending outwardly from the upper face of the body, and said cap piece being provided with a centrally-disposed socket to receive the lug or teat and likewise with a series of radially-disposed ribs formed upon the under face of the cap, the ribs extending outwardly to a point adjacent the periphery of the cap and overlying the groove, said ribs being of a depth such that they project downwardly to substantially the under plane of the cap and contact with the wire which is placed within the groove and force the wire into contact with the ribs in the groove without bending the wire.

1,311,484. SHEAF-SHOCKER. HJALTI S. ANDERSON, Cypress River, Manitoba, Canada. Filed May 31, 1918. Serial No. 237,565. 11 Claims. (Cl. 56-424.)



1. A shocker consisting of a frame, comprising a pair of spaced endless tracks in a vertical plane, a plurality of collector baskets carried by the tracks with freedom to move therearound, doors on the end and side of the baskets, and means for simultaneously opening the said doors to dump the baskets.

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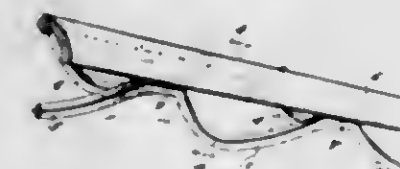
2. A shocker comprising a frame, consisting of a pair of spaced tracks in a vertical plane, each track being sectional toward the rear end, a collector basket mounted on the tracks with freedom to travel therearound, means for lowering the sectional rear end of the track when the basket collector is engaged therewith to dump the contents of the basket, and means for elevating and closing the sectional end of the track subsequent to dumping, whereby the basket is positioned to receive sheaves.

3. A shocker comprising a frame, consisting of a pair of spaced tracks, a basket mounted on the tracks with freedom to travel therearound, a plate adjustably mounted in the basket, a door in the side wall of the basket, cam means for opening and closing the door before and after the reception of a predetermined number of sheaves, and means for dumping the basket at the rear end of the tracks.

4. A shocker comprising a frame, consisting of a pair of spaced tracks in a vertical plane, a conical collector basket mounted on the tracks, a pair of doors on the basket adapted to open outwardly, a lever pivoted on the small end of the basket, links engaging with the lever and the said door, means for actuating the lever, doors on the large end of the basket, means for carrying the basket around the tracks, and means for opening the last said doors simultaneously with the first said doors to dump the sheaves in the basket.

5. A shocker comprising a frame, consisting of a pair of spaced tracks in a vertical plane, a basket carried by the tracks, means for moving the basket around the tracks, a pair of doors on the bottom of the basket, cam races on the doors, a T-bar carrying rollers engaging with the cams, a flexible member connected at one end to the T-bar, a slidably mounted bar connected to the other end of the flexible member, and means for actuating the bar to open the door and dump the sheaves in the basket.

1,311,485. CURB-BAR. EDWARD L. BENEDICT, Baltimore, Md., assignor of one-half to Orville O. Robinson, Baltimore county, Md. Filed Dec. 20, 1918. Serial No. 267,601. 1 Claim. (Cl. 94-32.)



A U-shaped curb bar comprising a metal strip having its marginal portions expanded into relatively long loops connected to the body of the bar by relatively short connecting portions, said connecting portions bent over at an angle to the adjacent portions of the body, and at the same side thereof, and forming, with the loops, the sides of the bar.

1,311,486. BUILDING STRUCTURE. EDWARD L. BENEDICT, Baltimore, Md., assignor of one-half to Orville O. Robinson, Baltimore county, Md. Filed Dec. 20, 1918. Serial No. 267,602. 2 Claims. (Cl. 189-34.)

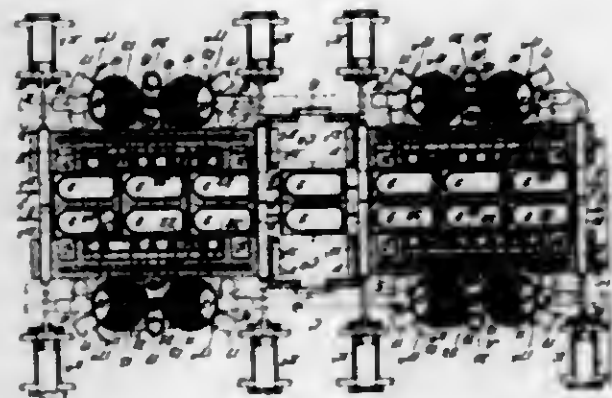


1. In a building structure, a T-beam comprising a sheet metal strip having its central portion folded upon itself and flattened to form a head and having its marginal portions bent outwardly, from the head, parallel with one another, to form a web, said marginal portions spaced apart to provide a channel therebetween, the head of the beam having a longitudinal slot in line with the channel adapted to receive the web of a similar beam.

2. In a building structure, a T-beam comprising a sheet metal strip having its central portion folded upon itself and flattened to form a head and having its marginal por-

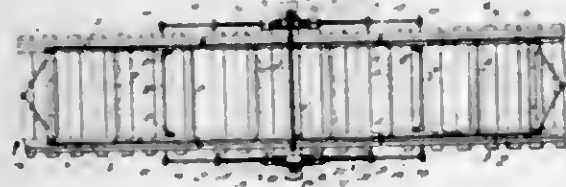
tions bent outwardly from the head, parallel with one another, to form a web, said marginal portions spaced apart to provide a channel therebetween, the head of the beam having a longitudinal slot in each end, said slots being in line with the channel and adapted to receive the webs of similar beams.

1,311,487. TUNNEL-KILN. GEORGE HILLARD BENJAMIN, New York, N. Y. Filed June 27, 1917. Serial No. 177,212. 11 Claims. (Cl. 25-142.)



1. In a kiln structure, the combination of a preliminary heating chamber, a secondary heating chamber and an interposed closed coating chamber.

1,311,488. MINE-DOOR-OPERATING MEANS. JOSEPH J. BODY, LEE LONG, and MARION L. JOHNSON, Dante, and CHARLES F. KILGORE and ALONZO BREVINS, Coburn, Va. Filed Jan. 16, 1919. Serial No. 271,432. 4 Claims. (Cl. 246-307.)

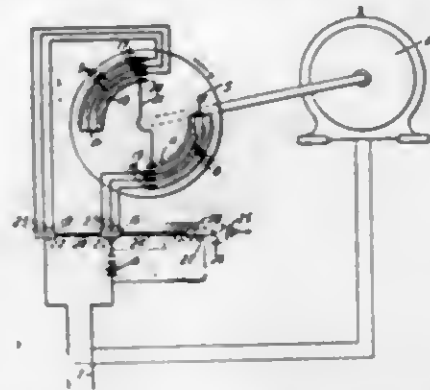


1. In combination with a door adapted to extend across a roadway, car-operated means adapted for disposition on said roadway, a longitudinal door-opening member, connecting means between said door-opening member and door for opening the latter in either direction, means for sliding said door-opening member in either direction upon operation of said car-operated means, according to the direction in which the car is traveling along the roadway, a pair of coiled springs mounted on said door-opening member and having one end arranged for movement bodily therewith, slides against which the other ends of said springs bear, said slides being carried by said door-opening member, and abutments against which said slides bear, said abutments being fixed with respect to said door-opening member; one slide being movable away from its respective abutment when the door-opening member slides in one direction and said member then moving with respect to the other slide, and vice versa.

1,311,489. MECHANICAL RECTIFIER. QUINCY A. BRACKETT, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1915. Serial No. 24,745. 4 Claims. (Cl. 175-364.)

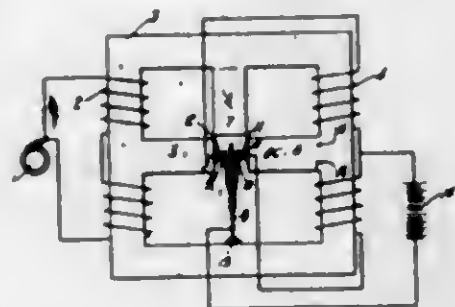
1. In a commutating rectifier, the combination with a rotatably mounted member, of means for rotating said member in synchronism with the frequency of the alternating current to be rectified, contact making means mounted upon said member and arranged to provide a plurality of contact making arc members of different

angular lengths, connections from said contact making means to one terminal of the source of alternating current to be rectified, means for periodically connecting any



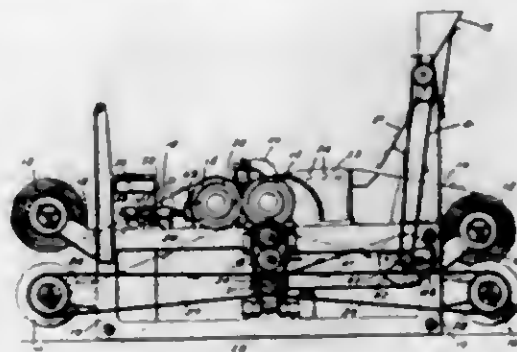
one of said contact making arc members to the other terminal of said alternating-current source, and a load in one of said connections.

1,311,490. VIBRATING RECTIFIER. QUINCY A. BRACKETT, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 14, 1915. Serial No. 28,072. 7 Claims. (Cl. 175-364.)



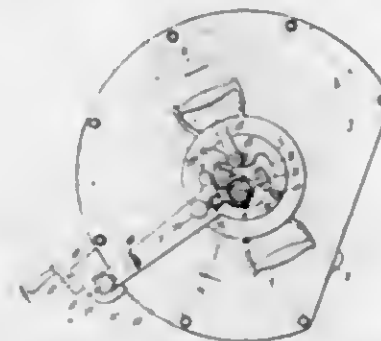
1. In a rectifier of the mechanical type, rectifying parts dependent for their operation upon the interaction of a unidirectional magnetic flux and an alternating magnetic flux, a transformer, and means for producing each of said magnetic fluxes as leakage fluxes of windings on said transformer.

1,311,491. METHOD OF AND APPARATUS FOR APPLYING SHELLAC AND THE LIKE TO SHEETS OF MATERIAL. ROBERT M. BROWN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 17, 1917. Serial No. 202,649. 12 Claims. (Cl. 91-70.)



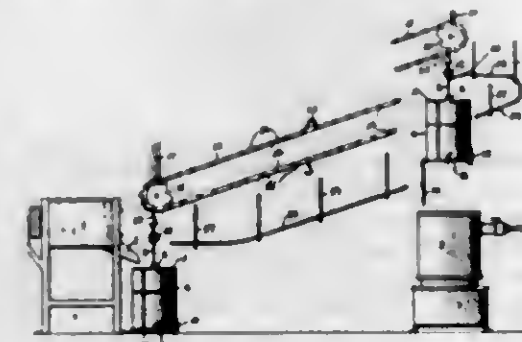
3. The method of coating sheets of material with shellac and the like which consists in progressively applying the shellac in solid form to the surface of the sheet, fusing the shellac, and distributing the same in an even layer on the sheet.

1,311,492. CENTRIFUGAL GUN. HERBERT A. HULLARD, San Francisco, Calif., assignor to Intercontinental Company, a Corporation of California. Filed Aug. 5, 1916. Serial No. 113,345. 10 Claims. (Cl. 89-10.)



1. A centrifugal gun for firing disk-shaped projectiles and giving them a spinning motion comprising a rotating projecting member and a rotating feeding member, the projecting member having a plurality of barrels and rotating faster than the feeding member and at a rate to bring different barrels into operation successively.

1,311,493. MEANS FOR CONVEYING MEAT TO BE STUFFED FROM MIXING TO STEFFING MACHINES. HENRY W. BERNHARDT, Jr., Dayton, Ohio. Filed Sept. 6, 1917. Serial No. 189,979. 3 Claims. (Cl. 214-1.)



1. Means for conveying meat to be stuffed, from a mixing to a stuffing machine, comprising a portable bucket, a sprocket wheel supported near said mixing machine, a second sprocket wheel positioned above the stuffing machine, an endless chain passing around said sprocket wheels, a swinging hook depending from said chain, a ball pivotally secured to said bucket terminating in an eyelet head adapted to receive said hook, by which said bucket may be carried from a position to receive a load from the mixing machine, in a position above the stuffing machine, means for easily emptying the bucket contents into said stuffing machine without touching them, a downwardly inclined track extending from a point below the second sprocket wheel to a point below the first one, and a pulley pivotally secured to the head of said ball, adapted to mount said track after the bucket is emptied to carry the latter along said track to its load-receiving position.

1,311,494. ELECTRICALLY-OPERATING SURGICAL-NEEDLE DEVICE. ERVIN M. CAMP, Denver, Colo. Filed Mar. 13, 1919. Serial No. 282,289. 5 Claims. (Cl. 174-177.)



1. In a surgical-needle-device; the combination of the electric current conductive chuck; a conductive flesh piercer

ing needle extending through and beyond both ends of said chuck; a set-screw threaded into said chuck and arranged to positively clamp said needle in said chuck in different projecting predetermined positions relative to said chuck and the length of said needle; with a non-conductive body member arranged to support said chuck, and a non-conductive cap member fitting over said chuck; and secured to said body member by a frictional pressure joint and through which the point of said needle projects.

1,311,495. EXTENSIBLE SUPPORTING STAND FOR MULTIPLE NUMBERS OF ELECTRICALLY-OPERATING SURGICAL NEEDLES. ERVIN M. CAMP, Denver, Colo. Filed Mar. 13, 1919. Serial No. 282,291. 1 Claim. (Cl. 174-177.)

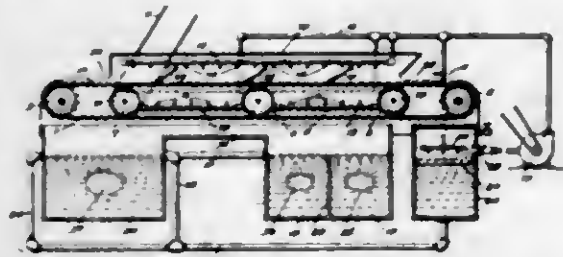


In a support for electrically operated surgical needles, the combination of the base adapted to be secured to a supporting member and provided with an aperture in its upper end, a short stem rotatably mounted in said base and provided with an annular groove within said base, and a screw threaded through said base into said groove whereby said short stem is free to rotate in said base said screw being adapted to secure said stem in adjusted positions against rotative movement, a pair of pivotal joint forming disks formed on the outer end of said stem, an arm provided with a disk shaped tongue fitting between the disks of said stem, and a hand grasping clamping screw extending loosely through one disk of said stem and through said tongue and threaded into the other disk of said stem, whereby said tongue is clamped between the disks of said stem in adjusted positions; a second arm pivotally connected in the outer end of the first named arm and provided with a clamping screw, a terminal arm pivotally connected to the end of the second arm by a ball joint provided with a clamping screw, a circuit wire connecting cross bar on said terminal arm, a plurality of circuit wires, a wire frame provided with a disk at the center of the upper wire of said frame, said disk being provided with an aperture, a clamping screw extending through the aperture in said disk and threaded into the end of said terminal arm, said wire frame having its lower wire bent into a continuous row of angular sided members having reversed curves at their opposite ends, said row of angular sided wire members being arranged to form interstices between them adapted to receive and support the circuit wires of the surgical needles.

1,311,496. VEGETABLE WASHER. JOSEPH J. CARTELLINI, Cincinnati, Ohio. Filed Jan. 26, 1918. Serial No. 214,003. 1 Claim. (Cl. 146-14.)

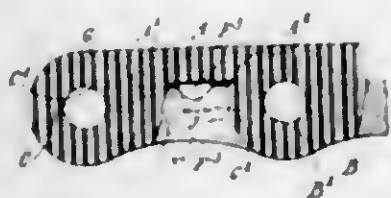
In a vegetable washer the combination of a conveyor adapted to receive at one end vegetables to be washed and at the opposite end to discharge the cleaned vegetables, sprayers adjacent to and adapted to project water upon the conveyor, a tank located beneath the conveyor at its receiving end, a tank located beneath the conveyor near its discharging end and a tank located beneath the conveyor intermediate said tanks, said tanks being adapted to receive water falling from the vegetables, means for

causing the water from the first tank to overflow into the intermediate tank and from the intermediate tank into



the last tank, a pipe connecting the last tank of the series with the sprayers and a pump for conveying water from the last tank to the sprayers.

1,311,497. LINK FOR CHAIN-GRATE STOKERS AND THE LIKE. WILLIE JAMES COLE, Aberdare, Wales, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 30, 1917. Serial No. 158,512. 7 Claims. (Cl. 110-40.)



1. A link for a chain-grate stoker comprising a flat fuel-receiving plate formed with a centrally-disposed depending lug at one end, opposed side lugs at the other end, and a flange forming a continuation of the central lug and connecting it to the said side lugs, said flange being provided with a transverse aperture adjacent the fuel-receiving plate.

1,311,498. WINDER. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners trading as Barber-Colman Company, Rockford, Ill. Filed May 12, 1916. Serial No. 96,978. 24 Claims. (Cl. 242-37.)



10. A winder having, in combination, a yarn-mass support; a yarn mass rotator; means to place the support in operative relation to the rotator; and yarn-mass guiding means arranged to lock the placing means against actuation.

1,311,499. HOOK. GEORGE E. DARR, Ontario, Oreg. Filed Jan. 19, 1917. Serial No. 143,262. 1 Claim. (Cl. 24-228.)

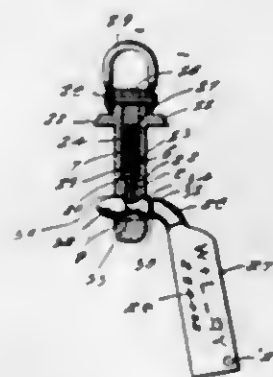
A hook formed of a single length of wire bent intermediate its ends to form a U-shaped tongue, said U-shaped tongue having its right portion curved outwardly to provide a guide, a pair of attaching arms extending from and parallel to the U-shaped tongue and having their

terminals provided with eyes, and a central arm extending from one of the eyes of said arms and extending between and beyond said first named arms and having its



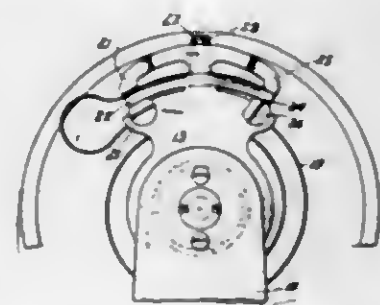
free end provided with an eye, said central arm being provided with a pair of humps forming a recess for receiving a coacting fastening element.

1,311,500. CAR-DOOR SEAL. CHARLES J. DRESSER, Toledo, Ohio. Filed May 8, 1917. Serial No. 167,291. 2 Claims. (Cl. 70-94.)



2. A car door seal including a barrel having longitudinal and transverse communicating openings, a pin arranged to said longitudinal opening, a spring for pressing the pin forwardly, a plug permanently arranged in said longitudinal opening for retaining the spring and pin in position, and a cylindrical locking bolt having an annular recess for receiving the locking pin, the rear end portion of said locking bolt being curved longitudinally for preventing the passage of the same through the transverse opening.

1,311,501. HAIR-SPRING AND BALANCE MOUNTING. FREDERIC ECACHERT, Brooklyn, N. Y. Filed Jan. 24, 1916. Serial No. 73,949. 15 Claims. (Cl. 58-115.)

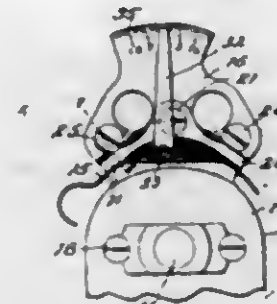


1. A time measuring apparatus comprising in combination a hair spring and balance wheel and an adjustment member for determining the effective length of said hair spring, said adjustment member comprising a pair of independently operative clamps spaced apart and adapted to engage the hair spring at two points outside of its operating portion.

1,311,502. HAIR-SPRING ADJUSTMENT. FREDERIC ECACHERT, New York, N. Y. Filed Oct. 31, 1917. Serial No. 199,476. 5 Claims. (Cl. 58-109.)

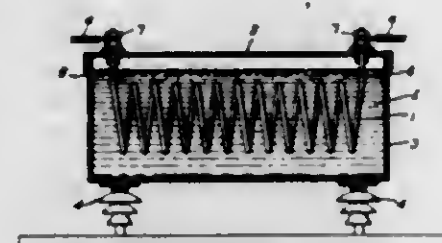
1. A hair spring adjustment comprising in combination, a hair spring, a pair of spaced-apart independently oper-

able clamps for securing the hair spring at two points beyond the effective length, and a lever device for



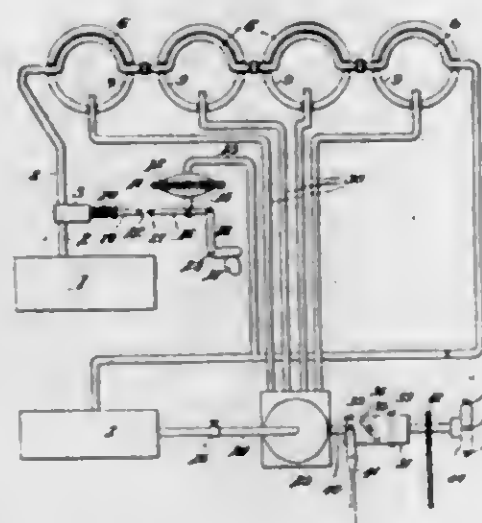
transversely deflecting the portion of hair spring extending between said clamps.

1,311,503. LIGHTNING-ARRESTER. CHARLES LE G. FOXTREUS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 14, 1917. Serial No. 154,756. 11 Claims. (Cl. 175-80.)



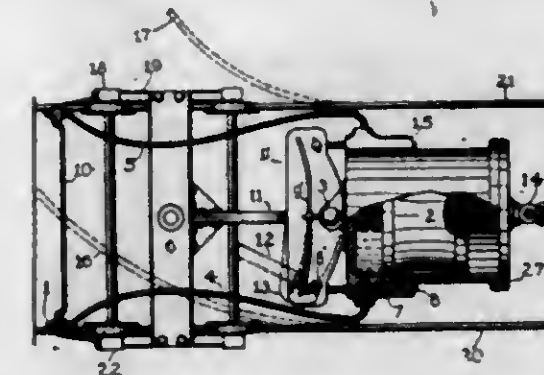
1. A protective device comprising a load-current-carrying inductance coil formed of a film-forming metal, and a body of electrolyte within which said coil is immersed.

1,311,504. INTERNAL-COMBUSTION ENGINE. EVERETT G. FORD, Glendale, Calif., assignor of one-third to Geo. W. Neill, Torrance, Calif., and one-third to A. H. Bartlett. Filed June 20, 1917. Serial No. 175,804. 13 Claims. (Cl. 123-34.)



1. An internal combustion engine comprising cylinders, a generator conduit having coil portions located within the cylinders and heated by the products of combustion, a gas holder connected with the generator conduit, and means for supplying fuel to the generator and conduit including a gas pressure regulator controlled by the pressure within the gas holder.

1,311,505. AUTOMATIC RAIL-LUBRICATOR. ERNEST THEODORE FRANKEN, Jamaica, N. Y. Filed Feb. 19, 1919. Serial No. 277,950. 6 Claims. (Cl. 184-3.)

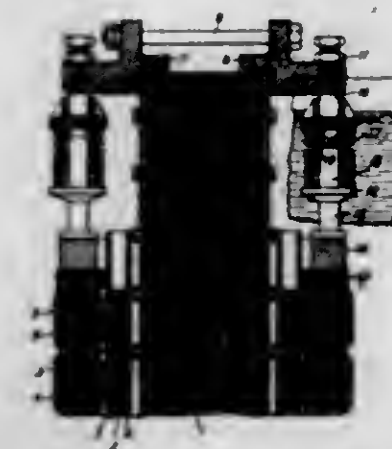


2. A rail lubricator including a car with swiveling trucks, a cam rod extending from one of said trucks under the body of said car, a lubricant container rigidly secured to said car provided with air valves upon one end with a pair of grease outlet valves upon the other end, a rocker cam plate centered in a portion of said container and engaged by said cam rod, valve pistons in said grease valves directly connected to said cam plate and tubes connecting said valves with grease applicators situated upon the said truck.

1,311,506. ELECTROLYSIS OF SOLUTIONS. VILHELM GRUNER, New York, N. Y., assignor to Norsk Hydro-Elektrisk Kvaestofaktieselskab, Solliqaten, Christiania, Norway. Filed Feb. 13, 1918. Serial No. 216,094. 3 Claims. (Cl. 204-1.)

3. In the electrolysis of aqueous solutions the method of protecting the anode from oxidation which comprises adding to the electrolyte water glass.

1,311,507. TRANSFORMER. GEORGE HARLOW, Altrincham, England, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 20, 1916. Serial No. 104,794. 5 Claims. (Cl. 175-356.)

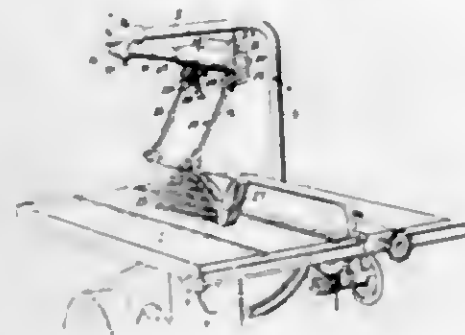


1. A transformer comprising a core member, current-carrying coils inductively related thereto, elastic means for normally holding and urging said coils together and means for substantially preventing yielding movement of said elastic means when sudden mechanical stresses are imposed on said coils.

1,311,508. SAW-GUARD. ELMER HANBOLD, Leetonia, Ohio, assignor to The Crescent Machine Company, Leetonia, Ohio, a Corporation of Ohio. Filed Feb. 18, 1916. Serial No. 79,093. 5 Claims. (Cl. 143-159.)

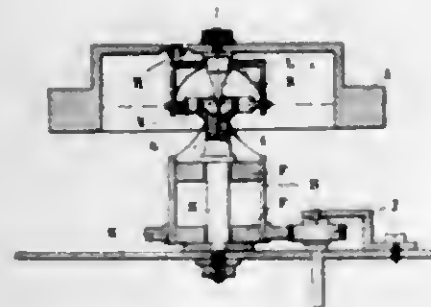
4. A saw-guard support, comprising a hanger having an opening therethrough for the reception of a support about

which it is adapted to rotate, means for mounting the hanger on said support to prevent endwise movement thereof, a pair of parallel bars pivotally connected to the hanger and the saw-guard and arranged to permit the



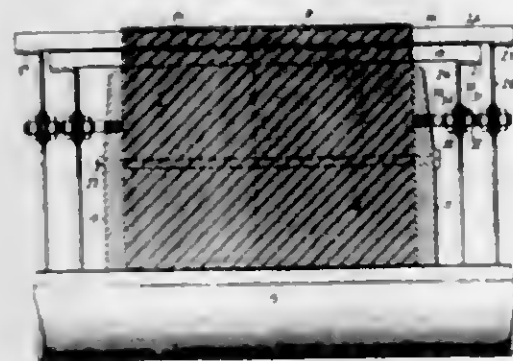
guard to be moved away from the saw by the work-piece, and a latch adapted to engage one of the parallel bars to lock the guard in an inoperative position, substantially as described.

1,311,509. DEVICE FOR TRANSMITTING MOTION TO GYROSCOPIC BODIES. HENRI FRANCIS HERRAUD, Paris, France. Filed Mar. 23, 1918. Serial No. 221,359. 10 Claims. (Cl. 74-78.)



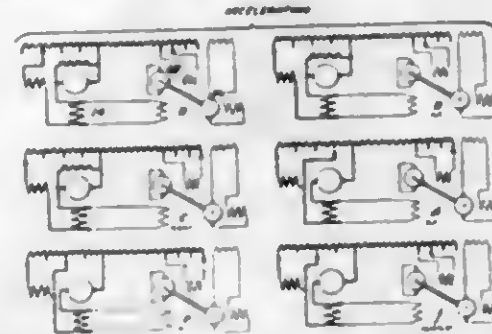
1. In a device of the character described, the combination of a gyroscopic body; and a transmission gear for rotating said body comprising a universally-mounted member, the center of oscillation of which is located near the center of oscillation of said body, and a driving clutch interposed between said member and said body.

1,311,510. DYNAMO-ELECTRIC MACHINE. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1915. Serial No. 29,994. 7 Claims. (Cl. 172-120.)



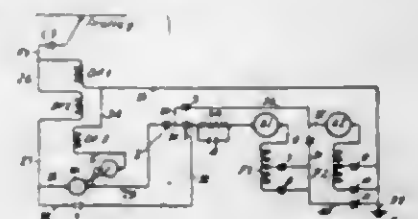
4. In a dynamo-electric machine of the induction type, the combination with a secondary core member, of a plurality of conductively independent short-circuited windings thereon of similar pole arrangement and of substantially equal resistance.

1,311,511. SYSTEM OF CONTROL. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1915. Serial No. 24,738. 5 Claims. (Cl. 172-276.)



3. The method of gradually increasing the internal electromotive force of an alternating-current dynamo-electric machine of the commutating type provided with main and cross field windings, supplied from a main source of alternating current provided with a plurality of voltage taps, and deriving a portion of the exciting current for its main field from an auxiliary source of alternating current of like frequency but of adjustable voltage and of displaced phase relation with respect to said main source, which comprises starting said machine with a short circuited armature and with the main and cross field windings connected in series relation across a portion of said source, increasing the voltage applied to the armature and cross field windings, increasing the voltage supplied by said auxiliary source, introducing an intermediate connection from the main source to a point between the cross field winding and the armature winding, opening the armature short-circuit, raising the voltage applied to the armature through this intermediate connection, and decreasing the voltage supplied by said auxiliary source to the main field winding.

1,311,512. SYSTEM OF CONTROL. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1916. Serial No. 82,094. 17 Claims. (Cl. 172-179.)

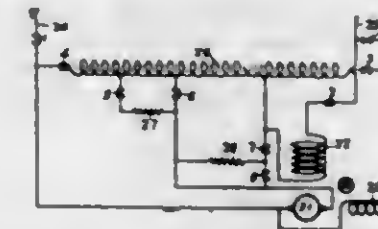


9. The method of effecting acceleration of a plurality of electric motors from a supply circuit in conjunction with a dynamotor having two substantially constant-voltage armature windings, that consists in initially employing one dynamotor armature winding in series relation with the motors and subsequently varying the interconnections of the dynamotor armature windings and the motors to effect predetermined increases of voltage upon said motors until substantially full supply-circuit voltage conditions obtain in each motor.

1,311,513. FIELD-CONTROL SYSTEM FOR DYNAMO-ELECTRIC MACHINES. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 9, 1916. Serial No. 119,266. 5 Claims. (Cl. 172-276.)

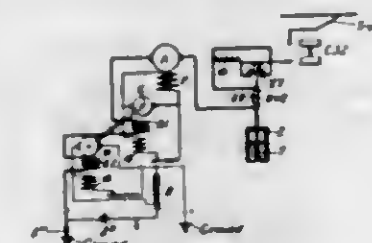
4. The method of operating a dynamo-electric machine in conjunction with supply mains and a transformer winding, said machine having at least one working circuit and a main field-exciting circuit that consists in making the following connections: for low speeds, connecting the

working circuit between selected points in the transformer winding and connecting the field-exciting circuit in series with one supply main and a portion of the transformer winding; and for higher speeds, connecting



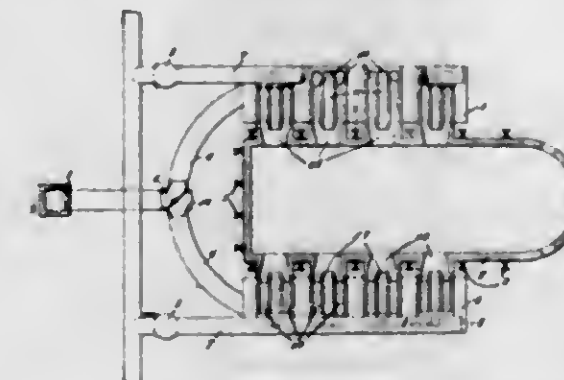
the working circuit in series relation with one of the other circuits, rendering the transformer inoperative and connecting the entire series circuit directly to the supply mains.

1,311,514. CONTROL SYSTEM. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Sept. 23, 1914, Serial No. 863,504. Divided and application filed Nov. 7, 1917, Serial No. 200,654. Divided and this application filed Jan. 5, 1918. Serial No. 210,526. 6 Claims. (Cl. 172-179.)



1. In a system of control, the combination with a supply circuit, and a main dynamo-electric machine having an armature and a field winding, of an auxiliary machine for exciting said field winding, a driving motor for said auxiliary machine, and means for maintaining the operation of said auxiliary machine in the event of relatively short interruptions of supply-circuit energy, said auxiliary machine and said driving motor both having field windings connected in series relation with the main machine.

1,311,515. GAS-BURNER FOR FURNACES. JOHN GEORGE HERR, Adamston, W. Va. Filed Mar. 22, 1919. Serial No. 284,280. 4 Claims. (Cl. 158-7.5.)



1. In a gas furnace having a combustion chamber and a plurality of checker chambers, a burner associated with each of said checker chambers and comprising a pair of vertical air flues communicating at their lower ends with the checker chamber and a vertical gas flue located between said air flues, said gas flue being closed at its lower

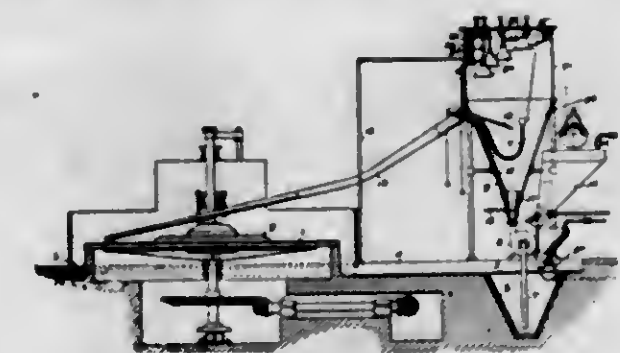
end and communicating at its upper end with a source of supply, whereby a pocket is formed adapted to trap the gas delivered from said supply and preheated by contact with the walls of the air flues, the gas and air flues associated with each checker chamber merging into a single port at the entrance to the combustion chamber.

1,311,516. FOUNTAIN-PEN ATTACHMENT. JOHN HILLINGER, Chicago, Ill. Filed Oct. 15, 1918. Serial No. 258,201. 2 Claims. (Cl. 120-84.)



1. The combination with a fountain pen clip; a receptacle mounted on the shank of the clip and extending in the direction of the length thereof, one end of the receptacle being free of the shank and spaced laterally therefrom, and a closure for said end of the receptacle.

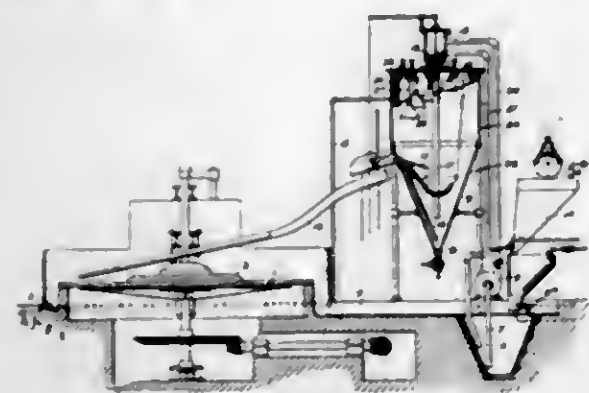
1,311,517. METHOD OF AND APPARATUS FOR APPLYING FINELY-DIVIDED MATERIAL TO GRINDING AND SMOOTHING MECHANISM. HALBERT K. HITCHCOCK, Pittsburgh, Pa. Filed Aug. 9, 1915. Serial No. 44,622. 28 Claims. (Cl. 51-11.)



1. The method described, consisting in separating abrading material mixed with a liquid in a vessel into different grades, withdrawing said grades in any desired sequence and conducting the same to grinding mechanism, returning the same to the grading vessel and introducing the same into said vessel at a level intermediate its bottom and the upper level of liquid therein, simultaneously eliminating surplus liquid from various levels in said grading vessel, and introducing liquid into said vessel below the level at which the abrading material is supplied thereto.

17. Apparatus of the character described, comprising in combination, grinding mechanism, a grading vessel, means for producing in said vessel an upward flow or travel of the liquid relative to the material to separate the material into grades, means for conducting different grades independently from said vessel to the grinding mechanism, and means for returning said material in suspension in a liquid from the grinding mechanism to said vessel and introducing the same thereto at a level intermediate the levels of the coarsest and finest grades withdrawn therefrom.

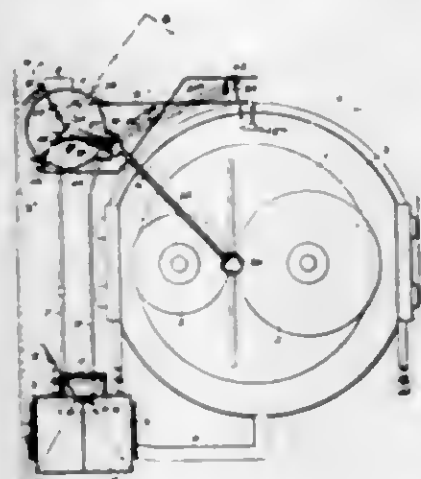
1,311,518. METHOD OF AND APPARATUS FOR APPLYING FINELY-DIVIDED MATERIAL TO GRINDING AND SMOOTHING MECHANISM. HALBERT K. HITCHCOCK, Pittsburgh, Pa. Original application filed Aug. 9, 1915, Serial No. 44,022. Divided and this application filed Aug. 9, 1915. Serial No. 44,023. 20 Claims. (Cl. 51-11.)



1. The method described, consisting in separating abrading material mixed with a liquid in a vessel into different grades, withdrawing said grades in any desired sequence and conducting the same to grinding mechanism, and returning the same to the grading vessel and introducing the same into said vessel in a downwardly moving stream of mixture at a level intermediate the coarsest and finest grades withdrawn therefrom.

13. Apparatus of the character described, comprising in combination, grinding mechanism, a grading vessel, means for producing in said vessel an upward flow or travel of the liquid relative to the material, means for withdrawing different grades from said vessel and conducting the same to the grinding mechanism, and means for returning said material in suspension in a liquid from the grinding mechanism to said vessel and including a downwardly extending conduit opening into said vessel at a level below the upper level of liquid therein, whereby the supply of material to said vessel is regulated by variations in the density in the body of mixture therein.

1,311,519. METHOD OF AND APPARATUS FOR APPLYING FINELY-DIVIDED MATERIAL TO GRINDING AND SMOOTHING MECHANISM. HALBERT K. HITCHCOCK, Pittsburgh, Pa. Filed Aug. 9, 1915. Serial No. 44,024. 27 Claims. (Cl. 51-11.)

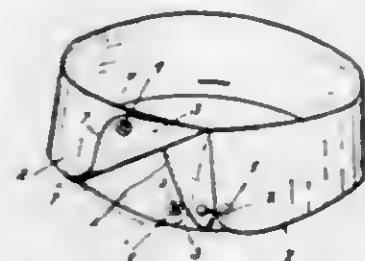


1. The method described, consisting in separating abrading material mixed with a liquid in a vessel into different grades, eliminating surplus liquid from various levels in said vessel, and withdrawing said grades and conducting the same to grinding mechanism.

18. The herein described method which consists in grading abrading material in a vessel while in suspension in a liquid to cause the grades to assume different levels, withdrawing some of the grades while in suspension in

the liquid from said grading vessel and conducting the same to grinding mechanism while leaving other grades in said vessel, and varying the grades so conducted to the grinding mechanism by imperceptible changes.

1,311,520. SOFT FOLD-COLLAR. HUBBARD F. HUAD, Troy, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Jan. 10, 1919. Serial No. 270,516. 4 Claims. (Cl. 2-67.)



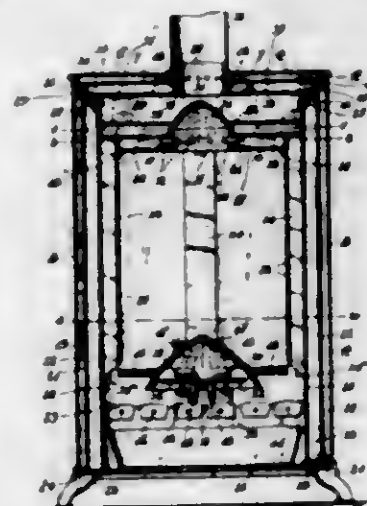
1. A fold-collar having a band and a folded-over top, said band being provided near one end with fastening means, and said top having near its corresponding end an attached fastening member cooperative with said fastening means of the band, said top being made of a plurality of plies of fabric with returned edge-portions, said fastening member being permanently attached to the rear facing-ply of the top, and both the front facing-ply of the top and its returned edge-portion extending over and covering the inner end of said attached fastening member.

1,311,521. PROJECTILE. ANDREW JOHNSON, Haskell, N. J. Filed Dec. 7, 1917. Serial No. 206,066. 4 Claims. (Cl. 102-29.)



1. In a projectile, a body having a charge-containing chamber, a closure therefor, said closure having a receiving space, a nipple extending thereinto, and a fuse in said space wrapped around the nipple, and said fuse extending into the chamber.

1,311,522. INCINERATOR. FREDERICK R. JONES, Buffalo, N. Y., assignor to Buffalo Co-Operative Store Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 29, 1915. Serial No. 24,718. 9 Claims. (Cl. 110-18.)



5. A refuse incinerator comprising a refuse receptacle, a burner within said receptacle, a concentrator serving as the top of said receptacle and including a perforated cone-shaped member and horizontal superposed passages leading to said cone-shaped member, means for introducing air to the lower of said superposed passages, and up-

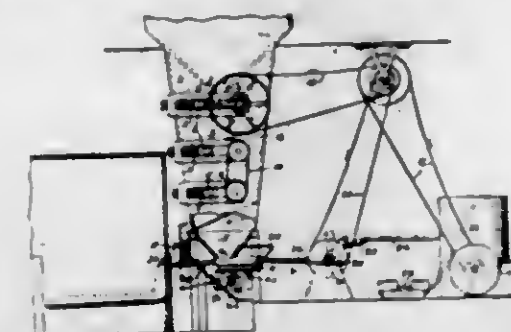
wardly extending passages between the burner and the upper of said superposed passages, said passages serving to concentrate the flames from the burner and the introduced air and direct the same into said concentrator.

1,311,523. HINGED LAST. CHARLES E. KRAHAW, Manchester, N. H. Filed Oct. 20, 1915. Serial No. 56,558. 3 Claims. (Cl. 12-136.)



1. A hinged last comprising a heel-part and a fore-part respectively having elongated concave hinge-journal seats extending transversely across the width of their opposed ends, and hinge-leaf mortises opening at the said seats, a hinge having an elongated cylindrical journal occupying said seats and also having leaves or straps occupying said mortises, and means engaging with the said leaves or straps and holding the seats and journal firmly engaged with one another at both sides of the journal and adapted for adjustably tightening up the fit of said journal and seats.

1,311,524. AUTOMATIC STOKER. HARRY G. LEE, Tacoma, Wash., assignor of one-half to Arthur G. Pritchard, Tacoma, Wash. Filed May 14, 1917. Serial No. 168,335. 13 Claims. (Cl. 110-105.)



1. In a mechanical stoker, a fuel pipe having a lateral fuel opening, a valve slidable on the pipe for closing the fuel opening thereof and completing the pipe, said pipe forming a straight barrel from the charge receiving portion to its discharge end, means for delivering a fuel feeding blast through the pipe at a point to rear of the charge, a valve for cutting off the blast and means for positively operating the valves in alternation to cut off the blast when the fuel is feeding to the pipe and to cut off the supply of fuel to the pipe when the blast is forcing the fuel charge from the pipe.

2. In a mechanical stoker, a fuel pipe having a lateral fuel opening, a valve slidable on the pipe for closing the fuel opening thereof, means for delivering a fuel feeding blast through the pipe, a valve for cutting off the blast, means for positively operating the valves, and a fuel agitator connected with the fuel valve and actuated thereby.

3. In a mechanical stoker, a fuel pipe forming a straight barrel, means for holding a supply of fuel communicating with the barrel for supplying a charge of fuel to the same, means for closing such communication, and means for introducing an expansive medium into the barrel in rear of the fuel whereby the charge is instantaneously blown into the furnace.

4. In a mechanical stoker, a hopper, a pipe leading to the furnace and having a lateral opening to receive fuel from the hopper, a valve slidable on the pipe over the opening thereof, an agitator operable in the hopper and connected with the valve, and means for delivering a fuel feeding blast through the pipe.

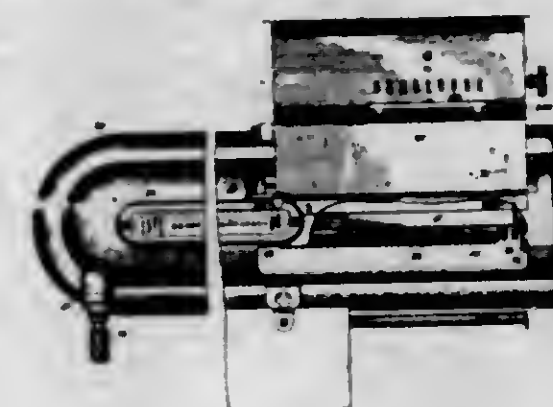
5. In a mechanical stoker, a movable deflector for distributing the fuel over the fuel bed, a rotary member, connecting means between the rotary member and the deflector having crank connection with the said rotary member for vibrating the deflector, a ratchet mechanism for advancing the rotary member, yieldable means normally tending to move the rotary member backward and a detent for preventing backward movement of the rotary member during its advance to a dead center position and admitting of a quick forward movement of the rotary member after the same has passed the dead center to return the deflector quickly to normal position after it has reached the limit of its movement in one direction.

1,311,525. PISTON CONSTRUCTION. HOMER E. MCKEE, Braddyville, Iowa. Filed Sept. 12, 1918. Serial No. 253,771. 2 Claims. (Cl. 74-85.)



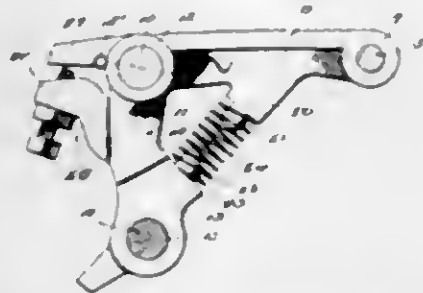
1. In a device of the class described, the combination of a piston, a pitman, a block releasably connected to said piston, said piston having internal grooves therein, webs carried by said piston, and a pin pivotally connecting said pitman to said block, said pin extending into said grooves and bearing upon the webs whereby said pin is reinforced.

1,311,526. COMPUTING MECHANISM FOR CHECK-WRITERS. GUSTAVE F. MATACH, Chicago, Ill., assignor, by mesne assignments, to Todd Protectograph Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 7, 1915. Serial No. 49,234. 59 Claims. (Cl. 235-58.)



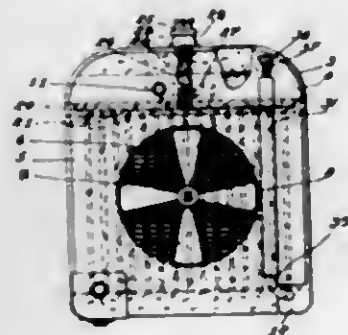
1. In a machine of the class described, the combination of means for printing selectively and successively various words denoting the digits of amounts and also in proper sequence words denoting the denominations of said digits, a storage device comprising differentially movable elements, devices whereby the differentially movable elements are moved to represent digits printed, an accumulator, and means for transferring values from the storage device to the accumulator as an incident to printing words denoting denominations.

1,311,527. FAN-BRACKET AND BELT-TIGHTENER. JOSEPH C. MILLER, St. Paul, Minn., assignor of one-half to John O'Brien, St. Paul, Minn. Filed June 1, 1918. Serial No. 237,814. 2 Claims. (Cl. 64-52.)



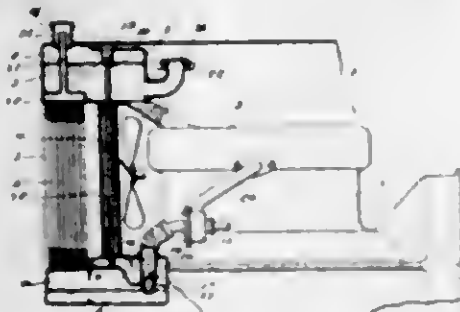
1. The combination with a cooling fan of a motor vehicle, a supporting shaft therefor, and a belt for rotating said shaft, of a right bracket, an arm pivotally carried by said bracket and rotatably supporting said shaft, a spring engaging said bracket and arm for normally urging the arm in a belt stretching position, an extension formed upon said arm, a set screw carried by said bracket and engaging said extension to limit the pivotal movement of the arm.

1,311,528. COOLING SYSTEM. WELLINGTON W. MUIR, Baltimore, Md. Filed Dec. 24, 1917. Serial No. 208,578. 21 Claims. (Cl. 123-174.)



1. A cooling system for internal combustion engines consisting of a radiator, a water jacket, a tank extending from the top of the radiator to a point near the bottom of the same, top and bottom connections from the tank to the water jacket, and from the bottom of the radiator to the water jacket, heat-controlled means normally preventing the flow of liquid through the top connection, permitting the flow of vapor and actuated by change of temperature above a certain point to admit liquid through said connection to the radiator, means for preventing back flow of liquid to the bottom of the radiator through the bottom connection.

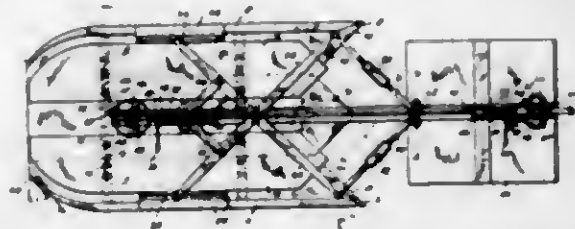
1,311,529. COOLING SYSTEM. WELLINGTON W. MUIR, Baltimore, Md. Filed June 14, 1918. Serial No. 236,991. 12 Claims. (Cl. 123-174.)



1. In a cooling system for internal combustion engines, a continuous circuit for the liquid, including a jacket and means for separating the vapor from the liquid, a con-

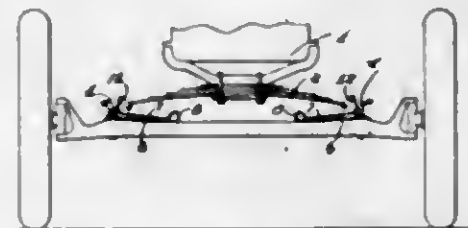
denser associated with the circuit to receive the vapor and return the condensed liquid to the circuit, and a vent to the atmosphere in direct communication with the condensed liquid.

1,311,530. PLOW. ANDREW SALTZER, Los Angeles, Calif. Filed Oct. 1, 1918. Serial No. 256,468. 6 Claims. (Cl. 97-12.)



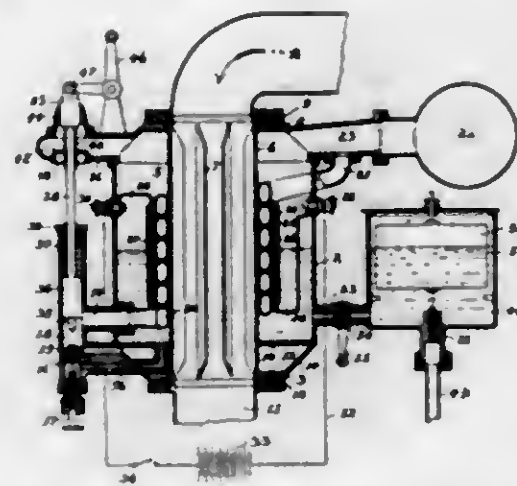
4. An adjustable trench digging plow comprising, a plow beam, a middle runner rigidly fixed thereto, two side runners parallel to said middle runner and equally spaced therefrom, said side runners having their forward ends tapered to a cutting edge, a series of overlapping longitudinally inclined cutting plates adjustably fixed between said side runners, and means for laterally adjusting said side runners with reference to each other and to the middle runner.

1,311,531. SHOCK-ABSORBER. NATHAN SCHACHTER, Chicago, Ill. Filed Sept. 4, 1917. Serial No. 189,584. 15 Claims. (Cl. 267-32.)



1. The combination with a pair of relatively movable vehicle parts of a shock absorber therefor comprising a pair of normally spaced members adapted to be frictionally engaged by relative movement of said vehicle parts, and means for imparting a relative sliding movement to the frictionally engaged members by additional relative movement of the said vehicle parts.

1,311,532. CARBURETER. ALBERT SCHMIN, Long Beach, N. Y. Filed June 12, 1918. Serial No. 239,685. 8 Claims. (Cl. 123-122.)



6. In a charge forming device for internal combustion engines, a fuel nozzle, a tortuous passage communicating therewith, means for electrically heating said passage, and a heat storage body of liquid arranged in contact with said electric heater.

1,311,533. COMPENSATING PUMP FOR PNEUMATIC VEHICLE TIRES. HARRY C. SCHROEDER, Berkeley, Calif. Filed June 20, 1918. Serial No. 246,932. 8 Claims. (Cl. 152-11.)



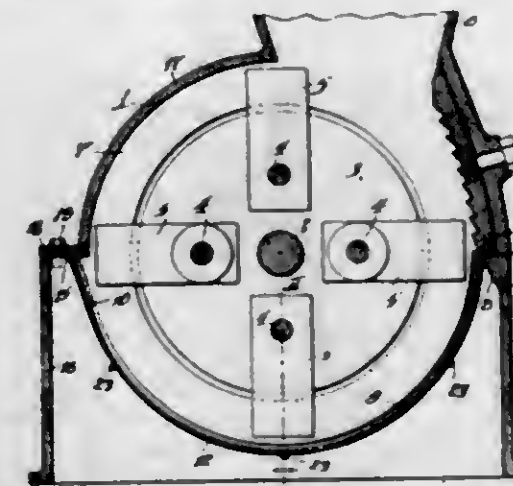
8. In combination with a pneumatic tire valve and a cap therefor, a tire pump arranged in said cap and provided with a flexible piston, and means whereby said pump is connected to the valve stem of a tire.

1,311,534. TOY. JOHN K. SKYMOOR, Elyria, Ohio, assignor of one-half to Winton W. McConnell, Elyria, Ohio. Filed Nov. 4, 1916. Serial No. 129,409. Renewed Dec. 30, 1918. Serial No. 268,863. 2 Claims. (Cl. 46-14.)



1. In a toy of the class described, the combination of a pair of equal-sized relatively heavy disks, a relatively short pin rigidly connecting said disks at their centers and spacing them apart, said pin provided with an opening passing through said pin on a diameter thereof and midway between said disks, the ends of said opening being flared and a cord passing through said opening provided with a hand loop on each end and a third loop substantially midway its ends.

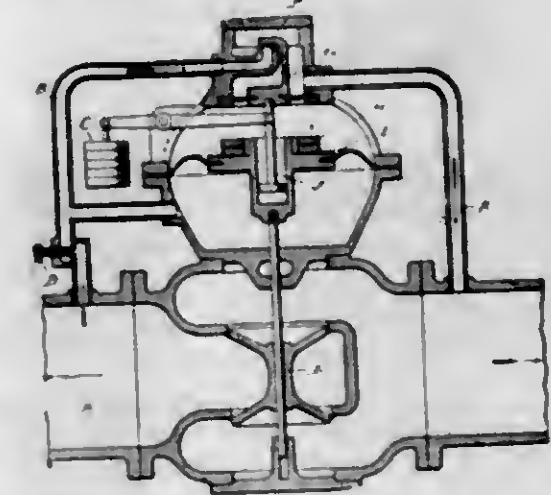
1,311,535. PULVERIZER. HARRY J. SHELTON, St. Louis, Mo. Filed Oct. 31, 1917. Serial No. 199,594. 2 Claims. (Cl. 83-11.)



1. A pulverizer having a casing formed with side and end portions, said side portions having curved recesses in

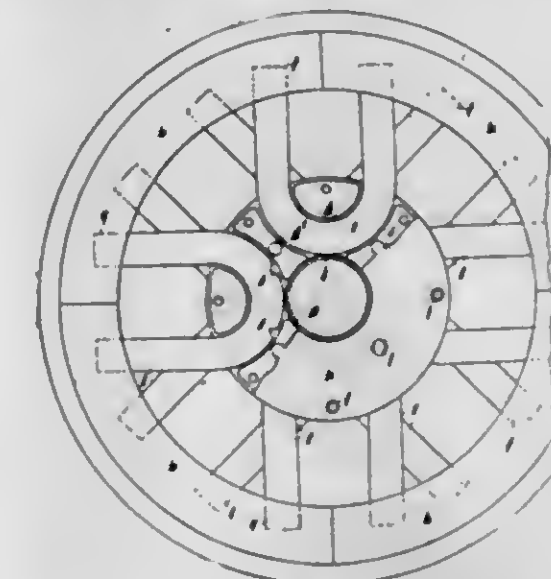
their inner faces and one of said end portions having a projecting portion with an upwardly inclined face, a breaker plate secured to said end portion and a screen guided in said curved recesses and abutting against said breaker plate and projecting portion.

1,311,536. FLUID-CONTROL VALVE. CHARLES H. SMOOT, South Orange, N. J., assignor to The Rateau, Battu, Smoot Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1918. Serial No. 266,037. 4 Claims. (Cl. 50-11.)



1. A fluid pressure regulator comprising in combination a control valve for the fluid, a pressure responsive actuating means therefor, means for admitting a restricted supply of operating fluid to said actuating means, a relief valve exposed to the lifting effect of the operating fluid and permitting a measured escape thereof, to control the pressure on the said actuating means, and a yielding interconnection between said relief valve and said actuating means to transmit a retarding force to the movement of one in response to the other.

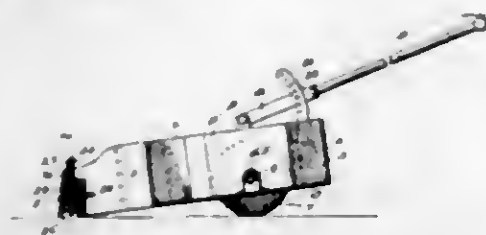
1,311,537. WHEEL OF VEHICLES, DRIVING-PULLEYS, AND THE LIKE. THOMAS DANIEL STAGG, London, England. Filed July 16, 1918. Serial No. 245,246. 3 Claims. (Cl. 21-69.)



1. A wheel structure of the compression spoke type consisting of a hub element having a series of curved recesses arranged around same, a series of spoke elements of wood of substantially U shape firmly inserted into said recesses, a felly into which the outer ends of the spokes are engaged, recesses in said felly for receiving the outer ends of said spokes lateral supporting means for holding said spokes in the recesses in the hub element and bonding means disposed about said felly for forcing the felly

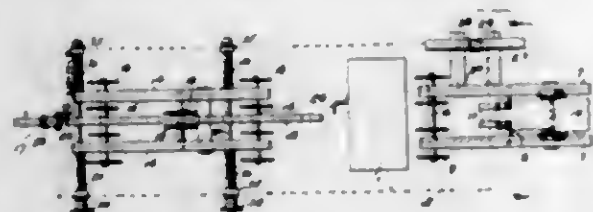
against the ends of the spokes and the curved portion of the spokes into the hub recesses and thus consolidating the whole structure, substantially as described.

1,311,538. FLAVOR-SCRAPER. CHARLES TACT, Havana, N. Y. Filed Mar. 28, 1918. Serial No. 225,333. 1 Claim. (Cl. 145-47.)



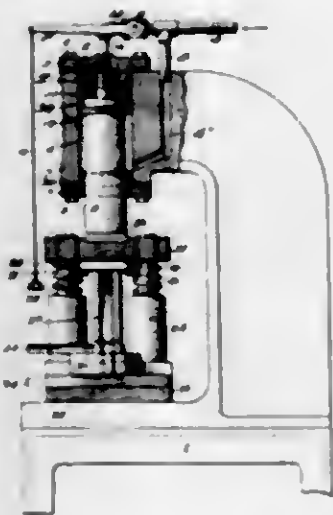
In a floor scraper, the combination of a frame, a knife carrier mounted in front of said frame, said knife carrier comprising a vertical socket, a pair of scraping knives adapted to pass through said socket and project out below thereof, a wedge in said socket and interposed between said knives, an adjustable clamping plate adapted to clamp said knives and wedge in place in said socket.

1,311,539. PUNCHING MACHINERY. GEORGE P. THOMAS, Glenshaw, Pa. Filed Aug. 30, 1918. Serial No. 252,071. 5 Claims. (Cl. 164-116.)



1. The combination with a punch for perforating structural blanks, and spacing and work-supporting tables on opposite sides of said punch, of a spacing carriage on said spacing table adapted to engage the forward end of a blank, a tail carriage on said work-supporting table adapted to engage the rear end of a blank, and a supplementary tail guide on the spacing table side of said punch, said guide comprising means for engaging a blank and for holding said blank in punching alignment after said tail carriage has been released from the blank.

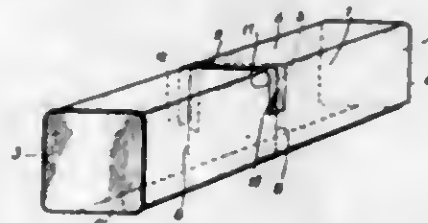
1,311,540. HYDRAULIC PRESS FOR SIZING TURBINE-BLADES. HARRY JOHN THOMAS, San Francisco, Calif., assignor to Bethlehem Shipbuilding Corporation, Ltd., Bethlehem, Pa., a Corporation of Delaware. Filed Dec. 31, 1918. Serial No. 269,151. 8 Claims. (Cl. 138-10.)



1. In a hydraulic press for sizing turbine blades, a base plate, guides supported thereon, a bead movable on said

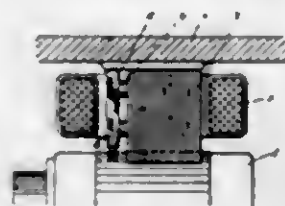
guides, a former carried by said bead, means for limiting the upward and downward movement of said bead, and means for accelerating the upward movement of said bead after the completion of the sizing operation.

1,311,541. BISCUIT-CONTAINER. ROY E. TOMLINSON, Montreal, N. J., and HENRY H. HUNTERROAD, Chicago, Ill., assignors to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed June 26, 1918. Serial No. 241,932. 2 Claims. (Cl. 220-68.)



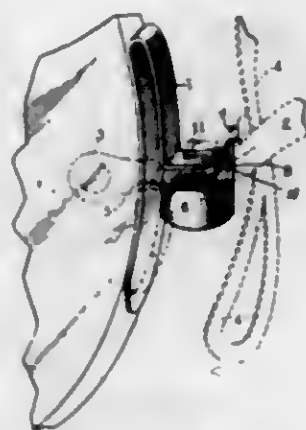
1. A container for food products, comprising an elongated continuous casing, entirely closed and tight when filled, having a slit extending partway around the same, intermediate its end portions, and a thin strip secured along its edges to the casing to cover said slit, said strip having an unattached end by which the strip may be pulled off, and said casing being adapted to swing open about a line in alignment with said slit, when pressure is applied on opposite sides of said slit.

1,311,542. DYNAMO-ELECTRIC MACHINE. WILLIAM A. TURBATNE, Niagara Falls, N. Y., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Jan. 25, 1917. Serial No. 144,463. 4 Claims. (Cl. 171-252.)



4. In a dynamo electric machine, in combination, a field pole piece, an armature in proximity thereto, a permanent magnet in proximity to said pole piece and said armature, the magnetic reluctance between said permanent magnet and said armature being less than between said permanent magnet and said pole piece.

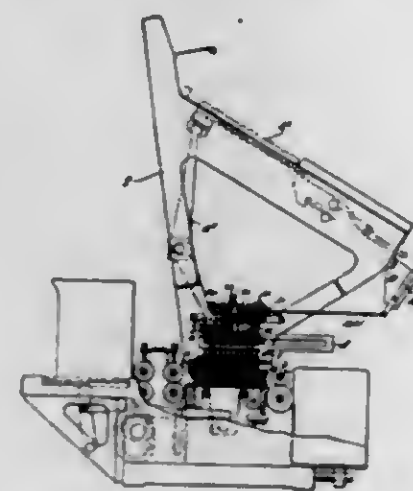
1,311,543. EYEGLASS-MOUNTING. WILLIAM R. CHLEMAN, Chicago, Ill. Filed Mar. 19, 1917. Serial No. 155,863. 3 Claims. (Cl. 88-47.)



1. In a finger piece eyeglass mounting, an operating spring comprising a coiled strip spring, one convolution of which has a tangential extension adapted for operative

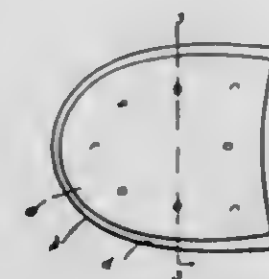
engagement with a nose grip carrying lever, another convolution of which is formed with a bridge engaging formation, one of the convolutions of the spring having an extension bent to form a resilient brace for an eyeglass lens, substantially as set forth.

1,311,544. PERFORATING-MACHINE. ROBERT NEIL WILLIAMS, London, England, assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1915. Serial No. 60,632. 13 Claims. (Cl. 164-112.)



1. In a punching device, the combination of a group of operable punches; a single supplemental punch associated with the group; and means for bringing about the operation of the supplemental punch whenever any one of the punches of the group is operated.

1,311,545. COMPOSITE HEEL. HARRY R. ABBOTT, Brockton, Mass., assignor to Brockton Heel Company, Inc., Brockton, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1919. Serial No. 271,157. 1 Claim. (Cl. 36-35.)

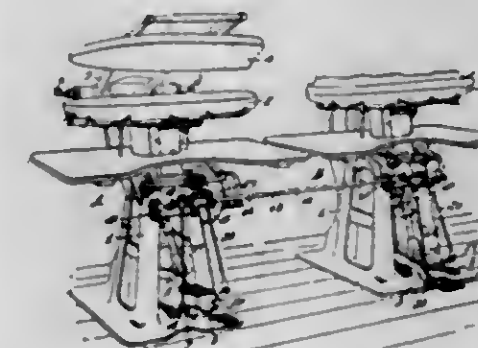


A composite heel blank comprising a relatively incompressible portion, having its upper surface of the area and shape of the finished heel seat, and gradually increasing in width from its upper to its lower face, and a resilient tread portion permanently united to the lower face of said incompressible portion, and having both faces of substantially the same peripheral contour and of less area than the lower face of the incompressible portion.

1,311,546. KICK-OFF DEVICE FOR GARMENT-PRESSER. WILLIAM E. ANDREX, Chicago, Ill., assignor to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Nov. 1, 1917. Serial No. 199,657. 4 Claims. (Cl. 68-9.)

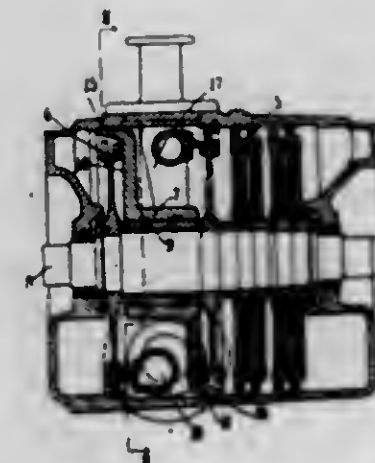
1. Apparatus of the character described, comprising two pressing machines, each embodying relatively mov-

able pressing members, a treadle for producing relative pressing movement of said members, and a release treadle,



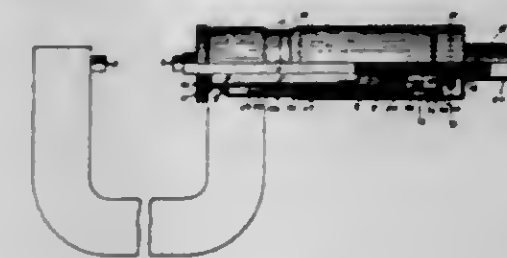
and means operatively connecting the pressure treadle of one machine to the release treadle of the other.

1,311,547. STEAM-TURBINE ESPECIALLY APPLICABLE TO THE PROPULSION OF MARINE VESSELS. KARL BAUMANN, Umston, England, assignor to The British Westinghouse Electric and Manufacturing Company, Limited, a Company of Great Britain. Filed Jan. 10, 1918. Serial No. 211,252. 2 Claims. (Cl. 253-70.)



1. A steam turbine for the propulsion of marine vessels having both ahead and astern portions and a partition for separating the ahead from the astern portion comprising a central tubular portion surrounding the shaft and at either end thereof a segmental diaphragm located in a plane perpendicular to the turbine axis, said segmental diaphragms being connected together by webs or the like extending from the central tubular portion along the edges of the segmental diaphragms to their periphery so that the nozzle boxes for the admission of steam to both the ahead and astern portions may be located in approximately a single plane perpendicular to the turbine axis.

1,311,548. MICROMETER. ANORA T. BLUSH, Erie, Pa. Filed Aug. 1, 1918. Serial No. 247,573. 8 Claims. (Cl. 33-164.)



1. In a micrometer, the combination of a frame provided with two points one of which is movable relatively

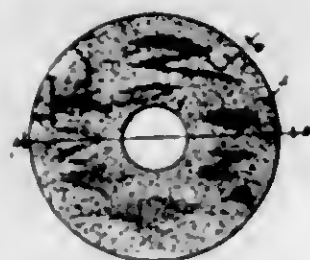
to the frame; a screw actuating the movable point; an indicating sleeve actuating said screw; and a screw controlling the movement of the sleeve, the screws having different pitches.

1,311,549. RADIATOR. EDWIN JAMES BOWMAN, Birmingham, England, assignor of one-third to Percy William Wade, Birmingham, England. Filed Dec. 7, 1917. Serial No. 296,048. 6 Claims. (Cl. 257-129.)



1. In a radiator the combination of an upper tank; a lower tank; a resilient member independently mounted in each of said upper and lower tanks and extending from back to front thereof; a tube connecting said upper and lower tanks and having its extremities disposed within said resilient members; and means for individually and separately compressing said resilient members so as to establish a water-tight joint between said tube and tanks.

1,311,550. PROCESS OF FORMING ABRASIVE DISKS. SAMUEL M. BULLOCK, Chicago, and HARRY S. LLOYD, Oak Park, Ill. Filed Sept. 10, 1915. Serial No. 49,983. 2 Claims. (Cl. 51-1.)



1. The process of forming an abrasive disk which consists in coating a fabric with dry calcined magnesite and applying a cementitious mixture of calcined magnesite, abrasive, and magnesium chloride thereon.

1,311,551. TUBULAR HINGE-GRADE. WILLIAM A. CAMPBELL, Bellefontaine, Ohio. Filed Feb. 5, 1918. Serial No. 215,493. 4 Claims. (Cl. 129-162.)



1. In a tubular hinge grade of the nature described in combination, a grate composed of a rim provided with oppositely disposed apertures spaced apart and with hinge means thereon, of parallel tubes the ends inserted in the said apertures, means for locking the tubes to the said rim; a chain secured to the said rim, pulleys suitably mounted on the stove and casing walls with which said chain may operate, a lock hook suitably mounted on the said walls to secure the said chain, of hinge means formed or fitted on the fire chamber, the hinge means on the said rim and said chamber having operative connection and with the said chain and pulleys and lock hook, whereby the said grate may be positioned and operated as and for the purposes set forth.

1,311,552. LADDER-TRUCK. WALTER CHRISTIE, Weehawken, N. J. Filed Nov. 21, 1917. Serial No. 293,207. 4 Claims. (Cl. 228-6.)



1. A ladder truck comprising front and rear wheels, a ladder, a pivotal support therefor near the front end of the truck, raising and lowering mechanism for swinging the ladder about its pivotal support, a steering gear for the rear wheels comprising a frame adapted to extend transversely across the ladder, a pivotal support for said frame at one side of the ladder, and means for swinging said frame about its pivotal support.

1,311,553. WALKING TOY. FRANK CIENT, Shreveville, Pa. Filed Dec. 12, 1918. Serial No. 266,454. 3 Claims. (Cl. 46-40.)



1. A toy embodying a pair of legs adapted to frictionally engage a base and so connected to the body as to permit the forward and backward swinging thereof, a rocking device mounted on the body and having its opposite ends held in engagement with the legs, whereby as the body is drawn along, the oscillation of the said device operates to swing the legs oppositely, and mechanism connected to the said rocking device to simultaneously cause the oscillation of another member of the toy.

1,311,554. ANTISKID DEVICE FOR VEHICLE-WHEELS. ISAAC W. GLAZNER, Brooklyn, N. Y. Filed Aug. 24, 1917. Serial No. 187,941. 1 Claim. (Cl. 152-16.)

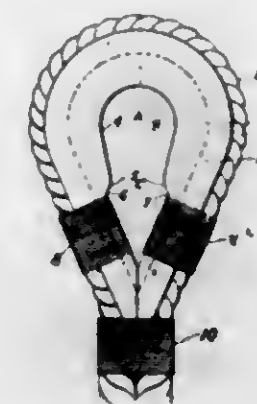


In a device of the character set forth, a series of peripheral plates and side plates loosely linked together, and the peripheral plates having lugs adapted to engage in a peripheral groove in a tire to hold the same in line circumferentially, and adjustable means on the side plates for holding the plates together to form a band.

1,311,555. CABLE-THIMBLE. MAX M. GOLDMAN, Somerville, and MICHAEL J. CONNELLY, Boston, Mass. Filed Apr. 11, 1919. Serial No. 289,468. 1 Claim. (Cl. 114-114.)

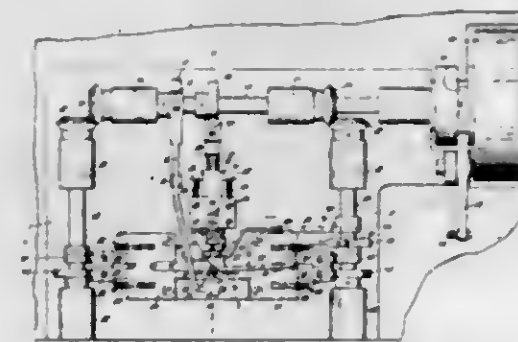
A cable thimble consisting of a grooved shell portion bent into substantially oval shape with the free ends ad-

acent each other and a reinforcing member extending along the bent portion of the inside of said shell, said



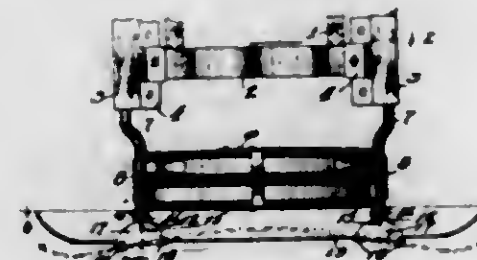
thimble having an open space between the ends of the reinforcing member and the said free ends of the shell for the reception of marine strands.

1,311,556. MACHINE FOR APPLYING STRAP-FER-RIFLES. MARVIN A. GRAYSON, Cincinnati, Ohio. Filed Sept. 12, 1918. Serial No. 253,823. 8 Claims. (Cl. 153-1.)



1. In a machine of the class described, a base, a clamp for gripping the work therebetween mounted on said base, oppositely disposed reciprocated plunger dies for compressing a portion of the work protruding from one side of the clamp, and means for applying a thimble upon the compressed end of said work.

1,311,557. BUMPER. WALTER R. GREEN, Chicago, Ill. Filed Jan. 2, 1918. Serial No. 209,918. 10 Claims. (Cl. 293-55.)



3. An automobile bumper comprising pivotally mounted supports, and a resilient bumper member frictionally held in position thereby.

1,311,558. REINFORCED BATTERY-BOX. HENRY S. HAYWARD, Jr., Spring Lake, N. J. Filed Dec. 11, 1912. Serial No. 780,097. 5 Claims. (Cl. 206-2.)

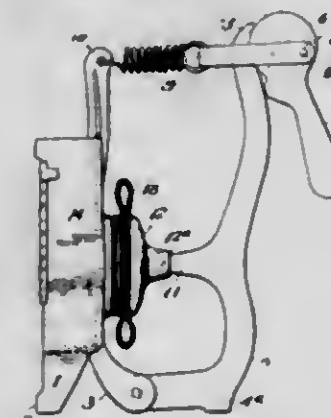


1. In an article of the class described, a rubber wall comprising a layer of hard rubber, a layer of soft rubber attached thereto, and a metal reinforcement attached to the layer of soft rubber.

1,311,559. PROCESS OF RESUSCITATING SPENT DRY CELLS. KAZUO HOANI, Hokkaido, Japan. Filed May 29, 1918. Serial No. 237,335. 5 Claims. (Cl. 204-38.)

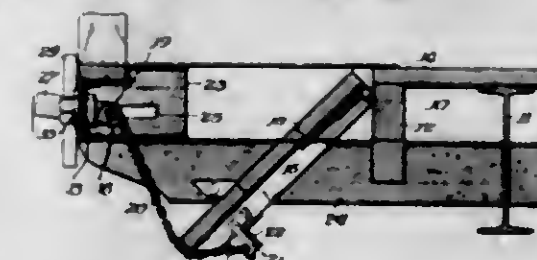
2. A process for resuscitating spent dry cells, consisting in boring a hole in a spent dry cell, filling the said hole with aqueous solution of chlorid of ammonium, chlorid of sodium, and oxalic acid, heating the cell till vapor is emitted, and then cooling the cell by plunging the same into water, thus causing water to penetrate into the cell, substantially as and for the purposes herebefore set forth.

1,311,560. VULCANIZER. EDGAR T. HORSEY, Cleveland, Ohio. Filed July 7, 1916. Serial No. 107,809. 6 Claims. (Cl. 18-18.)



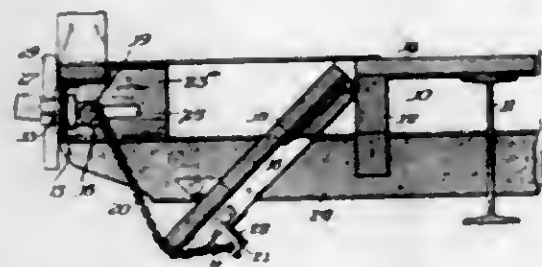
1. A vulcanizing apparatus comprising a base member, a hot plate carried by the base member, means for heat insulating said hot plate from the base, a plurality of fingers of heat conducting material secured to the hot plate, means for supplying heat to the said fingers, a presser plate, and means for holding said presser plate in proper position with respect to the hot plate.

1,311,561. DOOR-LOCK MECHANISM. WILLIAM JOSEPH HORCEIT, Chicago, Ill. Filed Oct. 25, 1917. Serial No. 198,441. 23 Claims. (Cl. 105-287.)



9. In a railway car, the combination of a door movably mounted in the floor of the car, a door movably mounted on a side of the car, and separate interlock mechanism between said doors.

1,311,562. LOCKING MECHANISM FOR DOORS. WILLIAM JOSEPH HOSCHKE, Chicago, Ill. Filed Oct. 25, 1917. Serial No. 198,442. 12 Claims. (Cl. 105-287.)

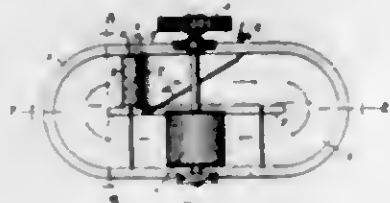


12. In a railway car, a plurality of door retaining shafts, and a single latch the ends of which are operatively associated with said shafts for locking all of said shafts in a given position.

1,311,563. METHOD OF REMOVING PRINTERS' INK FROM PAPER STOCK. THOMAS JESPERSEN, Neenah, Wis. Filed Dec. 11, 1916. Serial No. 136,132. 5 Claims. (Cl. 92-3.)

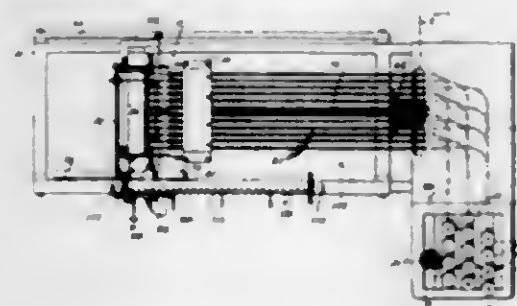
1. The process of removing ink from waste paper stock as specified comprising treating said stock with calcium hydroxide, substantially as and for the purpose described.

1,311,564. DEVICE FOR REMOVING PRINTERS' INK FROM PRINTED MATTER. THOMAS JESPERSEN, Neenah, Wis. Filed July 1, 1918. Serial No. 242,721. Renewed Apr. 19, 1919. Serial No. 291,412. 4 Claims. (Cl. 92-23.)



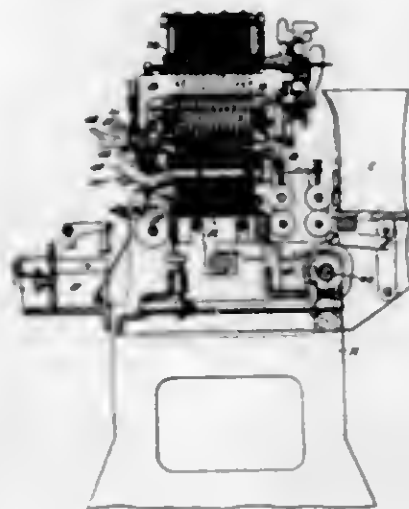
1. In a heater engine for washing pulped printed paper, a strainer disposed to intercept the upper strata of the circulating pulp mixture so as to hold back the pulp particles, a barrier placed behind the strainer to pile up the oil and ink film which has passed through the strainer and means for drawing off the piled-up ink and oil.

1,311,565. FLEXIBLE CONNECTION. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1916. Serial No. 116,957. 26 Claims. (Cl. 164-112.)



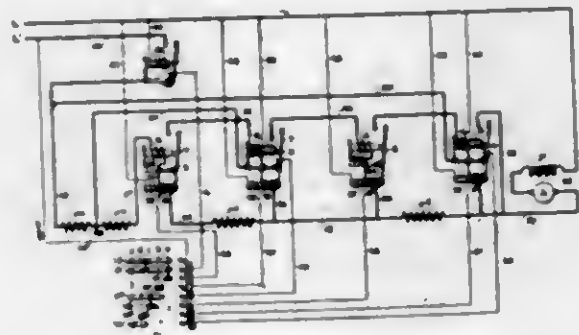
1. In a device of the character described, the combination of a support; setting members thereon; keys movably mounted on said support; a carriage movable on said support relative to said keys; and bendable flexible connections each comprising a pair of relatively movable parts, one of said parts being operatively connected to said keys and setting members, the other of said parts being secured to said support and carriage respectively.

1,311,566. FLEXIBLE SET-BAR ACTION FOR PERFORATING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1917. Serial No. 140,338. 6 Claims. (Cl. 164-112.)



1. In a perforator having means for supporting a card, punches, setting pins for cooperating with said punches to perforate the cards, means for normally maintaining said pins in raised position, means for setting said setting pins, there being recesses in the sides of said pins, shutters for cooperating with said recesses to anchor said pins in depressed position when so set, and cams for facilitating the cooperation of said shutters with said setting pins.

1,311,567. MOTOR-CONTROLLER. WILMAR F. LENT, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1915. Serial No. 19,885. 11 Claims. (Cl. 172-179.)

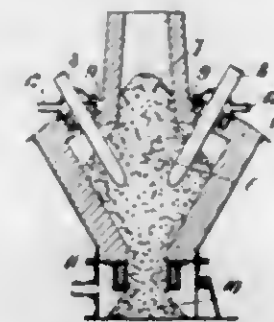


1. In a motor controller, the combination with a series wound accelerating switch acting upon response thereof to shunt its operating winding, of means controllable at will and independently of said operating winding to restrain said switch against response and to hold said switch after response thereof.

1,311,568. PROCESS AND APPARATUS FOR PRODUCING NITROGEN COMPOUNDS, ESPECIALLY NITRIDS. AXEL RUDOLF LINDBLAD, Stockholm, Sweden. Filed May 14, 1918. Serial No. 234,507. 7 Claims. (Cl. 204-31.)

1. An electric furnace, for producing nitrogen compounds such as nitrids and the like, comprising a furnace chamber, having an opening for introducing a charge into the same, said chamber being of such a form that a free space exists between certain portions of the chamber and the charge in the chamber, electrodes extending through

the wall of the furnace chamber and into the same at places where the charge is not in contact with the cham-



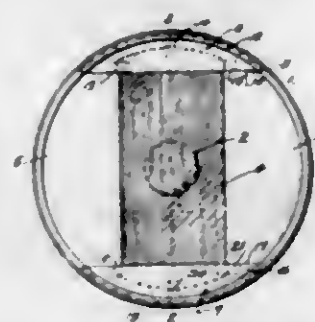
ber, said chamber being formed with an outlet at its lower end, and means for supplying nitrogenous gases to said chamber.

1,311,569. OIL-BURNER FOR CHURCH LAMPS. DALMACIO PEREZ LOPEZ, San Nicolas, Habana, Cuba. Filed Feb. 14, 1919. Serial No. 276,898. 4 Claims. (Cl. 67-36.)



1. An oil burner for church lamps, comprising an independent base, a vertical stem movably secured to said base and terminating at one end in a handle, a case, a wick contained in said case, which case rests on said base, a wick tube on said case, a strainer, disposed above the case provided with a tube, in which the wick tube loosely fits.

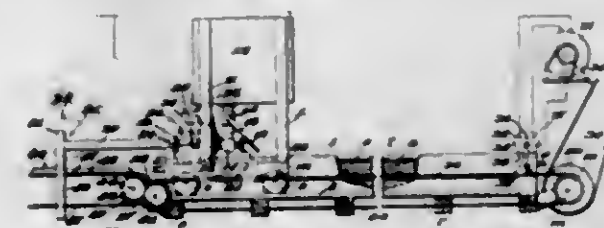
1,311,570. HEADLIGHT-LENS. WILLIAM H. MORSE-HORSE, Pasadena, Calif., assignor to Samuel Slade and Marshall Stuart Marsh, Chicago, Ill. Filed Feb. 8, 1919. Serial No. 275,891. 3 Claims. (Cl. 240-48.4.)



3. The combination with a circular transparent headlight lens, of a straight light absorbing strip extending vertically and diametrically across the lens thereby leaving transparent portions at the sides of the strip, said light absorbing strip comprising a plate of semi-transparent glass cut rectangular in plan and having mountings at its upper and lower ends, each of said mounting being formed of thin sheet metal plates having straight inner edges and curved outer edges and having Z-shaped pieces secured at their outer ends to the back sides of the plates and engaging the ends of the glass, said mountings being placed against the rear face of the transparent lens and mounted in the frame along with the transparent lens.

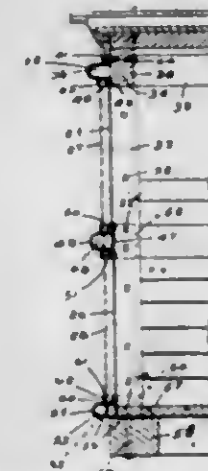
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1,311,571. MACHINE FOR MAKING SHEET-GLUE. ROY MORGAN, St. Louis, Mo. Filed Nov. 21, 1918. Serial No. 263,570. 9 Claims. (Cl. 18-15.)



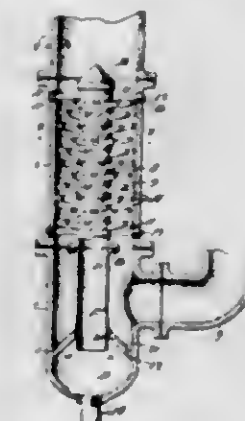
1. In a machine for making sheet glue, in combination with a table, a tank movable forward and rearward thereover and provided with a spreader for depositing glue upon the table in the rearward movement of the tank, a roller movable with said tank in its rearward movement in frictional engagement with the layer of glue deposited on the table, and a scraper also movable with said tank and operating in the rearward movement thereof to lift the sheet of glue and turn it into contact with said roller.

1,311,572. SHEET-METAL END STRUCTURE FOR RAILWAY-CARS. WALTER P. MURPHY, Chicago, Ill. Filed Aug. 29, 1913. Serial No. 787,331. 26 Claims. (Cl. 105-410.)



1. The combination with a railway car, of a sheet metal end structure comprising an end sheet formed with vertical corrugations and with vertical flanges adapted to be secured to the side of the car, and girth members overlapping each of the horizontal edges of said sheet and provided with angular flanges adapted to be secured to the side of the car.

1,311,573. STEAM-SEPARATOR. CARL O. NEWBACH, Rockford, Ill., assignor of one-half to Arthur C. Johnson, Rockford, Ill. Filed Oct. 17, 1918. Serial No. 258,598. 7 Claims. (Cl. 183-106.)



3. A steam separator of the character described comprising a steam pipe line having a removable section open from end to end, the steam passage through said section

being uninterrupted except for an axial conduit closed at the inlet end of the passage and leading at its opposite end to a trap or drain, and a plurality of separator blades communicating with the central conduit and extending outwardly therefrom and in spiral rows thereabout at a comparatively high or steep pitch whereby to extract foreign matter from the steam and deliver such matter into the central conduit without appreciably lowering the steam pressure.

1,311,574. SAFETY-CLIP. MARTIN J. PALMER, Seattle, Wash. Filed Feb. 18, 1919. Serial No. 277,752. 3 Claims. (Cl. 24—11.)



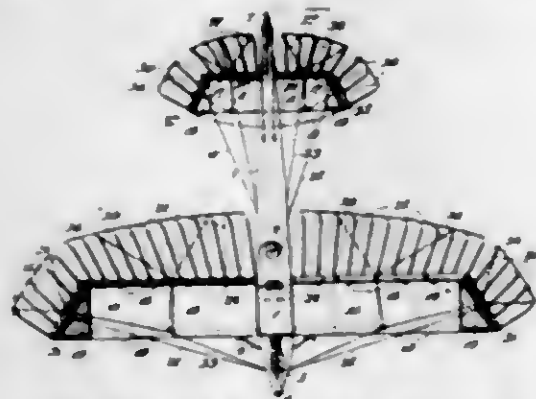
1. A safety clasp adapted to be secured upon a fabric edge comprising two opposed fingers adapted to pass at opposite sides of the fabric, one of said fingers having fabric engaging points and a spring-releasing finger fixed at one point and extending between said other fingers and having holes through which said points normally project.

1,311,575. OIL-BURNER. WILLIAM T. PALMER and FRANK E. ARBOTT, Conninga, Calif. Filed Mar. 28, 1919. Serial No. 285,919. 2 Claims. (Cl. 158—74.)



1. A device of the character described comprising an oil tube, a steam pipe surrounding the same, an oil supply pipe, a chamber of larger diameter than the oil tube between the latter and the oil supply, a port of materially smaller diameter than the oil tube leading to said chamber from the oil supply pipe, a steam supply pipe in advance of the oil supply pipe and a port establishing communication between the latter and said chamber, said port being of materially smaller diameter than the oil tube.

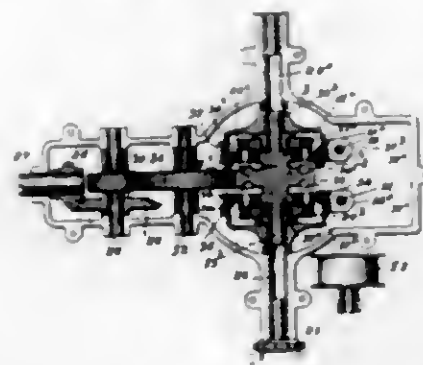
1,311,576. AEROPLANE. LOUIS S. PETCHON, Philadelphia, Pa. Filed Dec. 4, 1918. Serial No. 265,291. 14 Claims. (Cl. 244—29.)



1. A flying machine of the class described, which comprises in combination:—a fuselage or body,—a motor,—

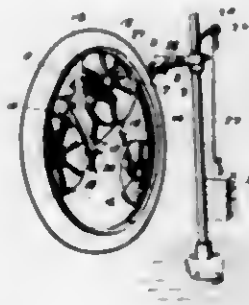
wings,—double assemblages of pluralities of feathers mounted in frames tiltably connected with the trailing edges of the wings,—and means for tilting said frames.

1,311,577. TRACTOR. ALBERT V. RACKSTRAW, Bedford, Ohio. Filed Mar. 30, 1918. Serial No. 225,694. 7 Claims. (Cl. 180—9.)



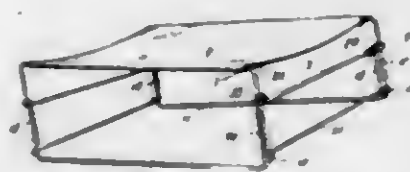
3. In a tractor, the combination of a gear casing, two oppositely extended aligned tubular drive shafts rotatably mounted in said gear casing, two brake drums which are respectively mounted to rotate on the drive shafts, internal gears provided in said brake drums, means for applying brake pressure to said drums, a trio of spur gears operative in unison arranged between the two aligned shafts and provided with trunnions adapted to rotate respectively in the bores of said shafts, the intermediate gear of said trio being driven by a train of gears from a motor provided therefor, the other two gears of the trio being in mesh with two pairs of twin gears mounted respectively on the aligned shafts in fixed relation to said shafts and in mesh with the internal gears of the brake drums.

1,311,578. DEVICE FOR SUPPORTING WHEEL-TIRES. HENRY A. STILSON, Dubuque, Iowa, assignor to Henry F. Trenk, Dubuque, Iowa. Filed Sept. 23, 1918. Serial No. 255,405. 7 Claims. (Cl. 51—5.)



1. A device for supporting wheel tires, comprising a frame provided with revoluble supports arranged to fit within the interior of a tire for sustaining the tire, and a support with which the frame has a swiveled connection.

1,311,579. COT. MAMATOSHI TAKEUCHI, Seattle, Wash. Filed Feb. 18, 1919. Serial No. 277,699. 1 Claim. (Cl. 5—5.)



A folding cot comprising a fabric cover having hemmed side edges, side bars in said hems and turned down at

each end to form supporting legs, and a bracing frame at each end pivoted upon a leg of one side bar and provided at its swinging end with two vertically separated hooks, the upper one engaging the inner side of the leg of the opposite side and the lower engaging the outer side of the same leg.

1,311,580. CHILD'S SLIDE. MARY E. TRUNER, Minneapolis, Minn. Filed Feb. 28, 1919. Serial No. 279,927. 5 Claims. (Cl. 40—37.)



1. A children's slide comprising a ladder-like wall bracket, and a body member having a sliding space and also having at one end a hook-like bracket engageable with the rungs of the wall bracket to support the body member at different inclinations.

1,311,581. BRUSH-HANDLE ATTACHMENT. CHARLES W. WAGNER, Milwaukee, Wis. Filed July 15, 1918. Serial No. 245,032. 1 Claim. (Cl. 287—11.)



A handle attachment for brush heads comprising a plate arched and slotted longitudinally and transversely to provide angularly disposed side and end portions in which are disposed the end portions of its slots, a handle socket bolt selectively extending through one of the slots, a clamping nut threaded on the bolt at the inner portion of the plate, an enlargement at the inner end of the bolt forming a retainer for the nut whereby said nut, plate and handle socket bolt are permanently connected, and angular shoulders at the ends of the slots, said shoulders being open toward their respective slots for the reception of the nut whereby said nut is held against rotation when moved to the end of the slot.

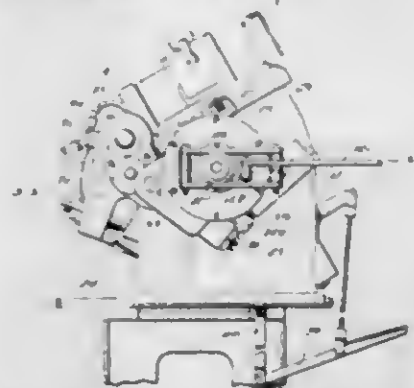
1,311,582. WIND-SHIELD CONSTRUCTION. FRANK E. WATTS, Detroit, Mich., assignor to Hupp Motor Car Corporation, Richmond, Va., a Corporation of Virginia. Filed May 13, 1918. Serial No. 234,272. 2 Claims. (Cl. 21—148.)



1. A windshield construction, comprising a pair of glasses having edge portions adapted to overlap in one position thereof, a channel shaped strip fitted over one of said overlapping edge portions, said strip being formed at one side thereof with a channel shaped retainer, and a channel shaped yieldable strip having one edge portion

engaged in said retainer, said strip forming a cushion to absorb the impact shock of the glasses and constituting a closure for the opening between the same when they are in overlapped relation.

1,311,583. SEMI-AUTOMATIC ROLLER-RETAINER MILLING-MACHINE. THEODORE ZETTELUND, Milwaukee, Wis., assignor to Harley-Davidson Motor Company, Milwaukee, Wis. Filed Oct. 3, 1918. Serial No. 256,714. 18 Claims. (Cl. 90—15.)



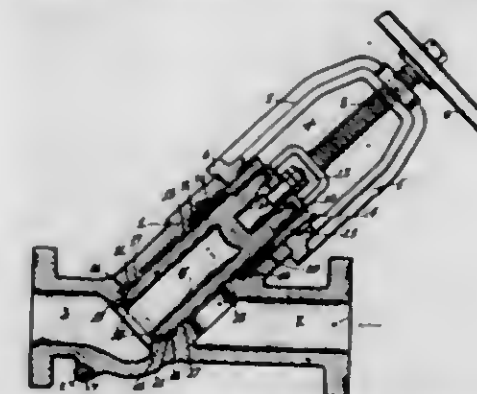
1. A milling machine including a shiftable cutter member, a rotatable turret, a plurality of rotatable work carrying members carried by the turret and selectively movable upon rotation of the turret into opposition to the cutter member, and means engageable by the work holding member in opposition to the cutter member for imparting a series of successive rotative steps to each work holding member when in opposition to the cutter member.

1,311,584. RIFLING-MACHINE. CARL G. ALLGUNN, Rochester, N. Y. Filed Oct. 1, 1918. Serial No. 256,460. 9 Claims. (Cl. 90—28.1.)



1. A rifling tool having a shank, a rifling bar capable of coupling to said shank, said bar and shank having a common key way therein, a key for fastening said shank and bar together, and a centering sleeve sliding over said key on said rifling bar.

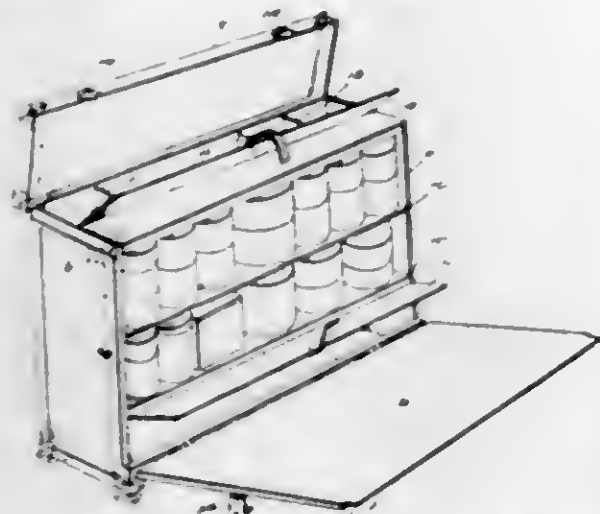
1,311,585. VALVE. FRANK BAIRD, San Francisco, Calif., assignor to Pacific Foundry Company, San Francisco, Calif., a Corporation of California. Filed Nov. 15, 1918. Serial No. 262,643. 4 Claims. (Cl. 251—77.)



2. A valve structure comprising a body-member having an inlet and an outlet and having also a seat, an annular liquid seal depression in advance of said seat and an annular seal ring in advance of the depression, said seat, depression and ring lying within the zone of communication between the inlet and outlet, said body member having also above said communication a second annular seal ring and following it a chamber for a packing instru-

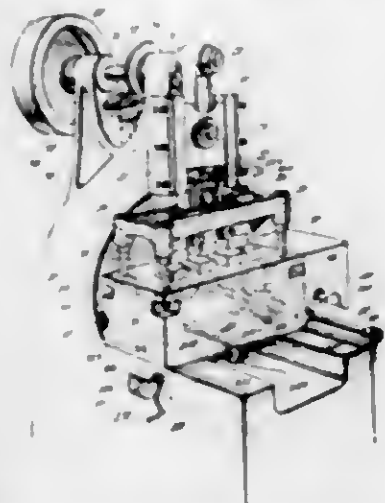
mentality; and a reciprocative valve-plug member having a push-fit in both seal rings of the body member and having also an extremity adapted to coact with the seat of said body member to open and close the valve and a tapered portion in advance of said extremity to lie opposite the liquid-seal depression of the body member when the plug-member is seated.

1,311,586. DEMONSTRATING CASE AND CARRIER FOR COMMERCIAL SALESMEN. EDWARD BRACHER, St. Louis, Mo., assignor to Indian Packing Company, Green Bay, Wis. Filed May 2, 1919. Serial No. 294,141. 1 Claim. (Cl. 100-10.)



A combined carrier and demonstrating case comprising a body portion having stationary back and ends, a series of shelves adjacent the front of the case extending longitudinally thereof, a storage compartment below said shelves and hinged front thereof, a series of transversely and longitudinally disposed partitions arranged in the rear of said shelves and forming storage compartments between them, a hinged cover for said last mentioned compartments affording access thereto when raised, a hinged cover forming the top of the case, and a hinged front in said case exposing said longitudinally extending shelves when lowered.

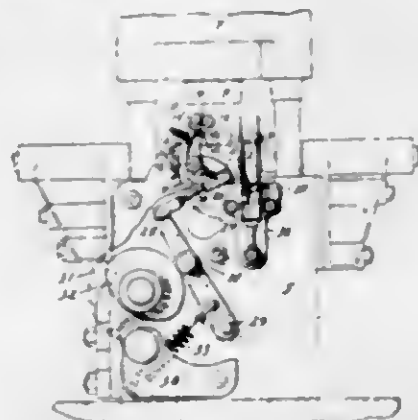
1,311,587. APPARATUS FOR AUTOMATICALLY FORMING AND CONNECTING HINGE MEMBERS ON THE LIDS AND BODIES OF SHEET-METAL RECEPTACLES. GEORGE W. HEBBY, Rose Bay, near Sydney, New South Wales, Australia, assignor to The Wireless Hinge Manufacturing Company Limited, Sydney, Australia. Filed Feb. 15, 1917. Serial No. 148,707. 31 Claims. (Cl. 113-38.)



1. An apparatus for forming hinge members on and connecting the lids and bodies of sheet metal receptacles, the combination with a frame, and a die carrying head mounted in the frame to have vertically reciprocating

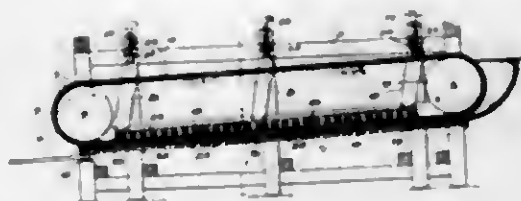
movement, of a base slidably mounted on the frame below the head carrying dies complementary to the dies carried by the head; means for securing the die base to the frame below the head; a driving shaft mounted in the frame and operatively connected to the die carrying head to actuate the same; a horizontal shaft mounted on the side of the frame and operatively connected to the driving shaft; and means operative from the horizontal shaft to intermittently and progressively feed lids and bodies to the dies on the die base; said die base with the feeding means for the lids and bodies being movable from beneath the die carrying head and the feeding means for the lids and bodies maintained in operative connection with the horizontal shaft during such movement of the die base for the purpose specified.

1,311,588. DELIVERY MEANS FOR SHEET-METAL PRESSES. GEORGE W. HEBBY, Rose Bay, near Sydney, New South Wales, Australia, assignor to The Wireless Hinge Manufacturing Company Limited, Sydney, New South Wales, Australia. Filed Oct. 8, 1917. Serial No. 195,261. 4 Claims. (Cl. 113-1.)



1. In an apparatus for automatically forming and connecting hinge members on the lids and bodies of sheet metal receptacles the combination with a guideway for the bodies, of a bracket at one side of the guideway, springs for supporting a lid approximately at right angles to a body in the guideway, an arm pivoted to and projecting upwardly from the bracket, a bell-crank pivoted to the arm, rollers on a forwardly projecting arm of the bell-crank, a resilient connection between the opposite arm of the bell-crank and the pivoted arm, and means for imparting an oscillating movement to the pivoted arm.

1,311,589. OLIVE-PITTER. GOTTLIEB WM. REYERLE, Denver, Colo. Filed Apr. 23, 1918. Serial No. 230,273. 3 Claims. (Cl. 146-0.)

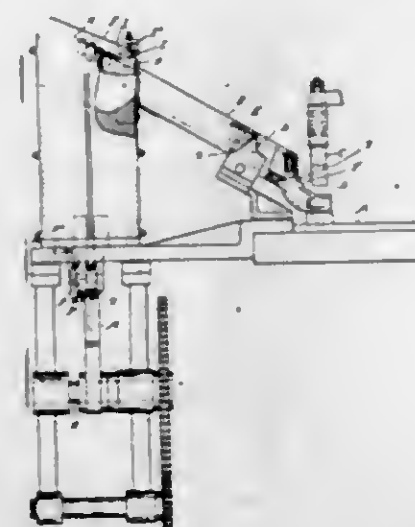


1. A device of the character described comprising a trough element having a facing of continuous cushion-like yielding friction material, a belt movable longitudinally therein having a friction surface opposed to that of the trough, means for so moving the belt, and rigid means for holding the belt in a predetermined spaced relation to the trough facing for the purposes described.

1,311,590. FEED MECHANISM. JEREMIAH BINGHAM, Toledo, Ohio, assignor to The Bock Beating Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 17, 1917. Serial No. 197,133. 6 Claims. (Cl. 193-1.)

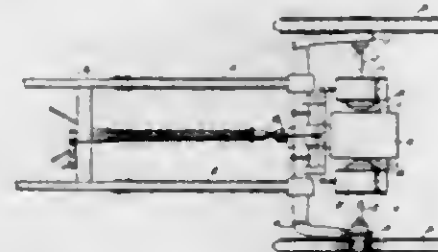
1. The combination with a hopper for containing an irregularly-arranged mass of headed rollers or similar

articles, of an assorting member vertically movable through said hopper, adapted to receive a plurality of



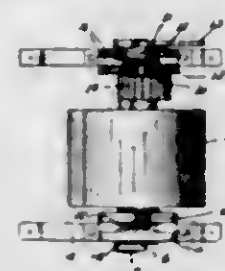
aligned rollers, a chute for receiving said rollers from said assorting device, and means for locking said assorting member from movement when said chute is full.

1,311,591. MOTOR-VEHICLE. WILLIAM E. BOCK, Toledo, Ohio. Filed July 11, 1913. Serial No. 778,494. 3 Claims. (Cl. 180-73.)



1. In a motor vehicle, the combination with a frame, of a drive shaft extending longitudinally thereof, drive wheels upon opposite sides of said frame, independently yieldable connections between said drive wheels and frame, aligned rotary members having an axis transverse to said frame and in fixed relation thereto, non-yielding torque connections between said drive wheels and the respective rotary members, a brake applied to each of said rotary members, a transmission mechanism driven by said longitudinal shaft, and yieldable torque connections between said transmission mechanism and each of said rotary members.

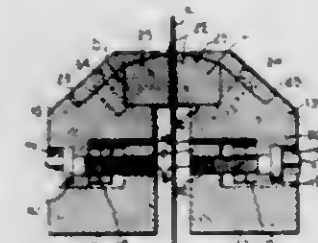
1,311,592. FRICTIONAL TRANSMISSION MECHANISM. MORRIS R. BROWN and WILLIAM L. MARTIN, Minneapolis, Minn., assignors to Minnesota Tractor Company, Minneapolis, Minn., a Corporation of South Dakota. Filed Aug. 1, 1917. Serial No. 183,867. 1 Claim. (Cl. 74-26.)



In a reversible transmission mechanism, the combination with laterally spaced horizontally shiftable bearings and laterally spaced vertically shiftable bearings, of a crank shaft having eccentric portions journaled in said

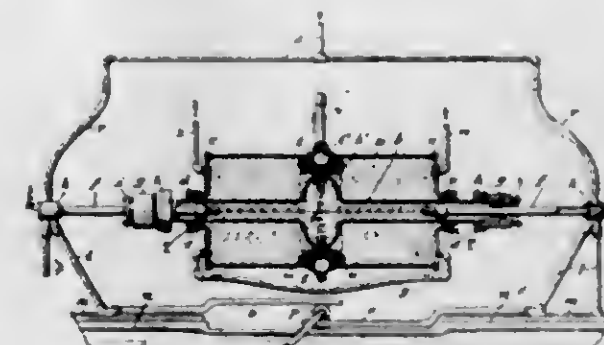
horizontally shiftable bearings and having its body portion journaled in said vertically shiftable bearings, a pair of cooperating friction wheels, one of which is journaled on the crank shaft and thereby movable into and out of contact with the other of said wheels, and a belt running over said two friction wheels and arranged to be thrown into action, when said wheels are separated.

1,311,593. ADJUSTABLE GUIDE FOR BAND-SAWS. JOSEPH W. CAUSEY and AMASA HARVEY, Charleston, S. C. Filed May 25, 1918. Serial No. 230,630. 4 Claims. (Cl. 143-160.)



1. A guide for hand saws comprising oppositely disposed spaced base members, supporting blocks slidably mounted upon the base members for movement toward or from each other, means for adjusting the supporting blocks, guide blocks detachably mounted upon the upper ends of the supporting blocks and extending inward thereof, and clamps mounted upon the upper faces of the supporting blocks and extending over the guide blocks and detachably held to the supporting blocks.

1,311,594. PROCESS OF AND APPARATUS FOR OBTAINING OXIDES OF NITROGEN FROM ATMOSPHERIC AIR. FRANCIS I. DU PONT, Wilmington, Del., assignor to Delaware Chemical Engineering Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 26, 1915. Serial No. 17,116. 18 Claims. (Cl. 204-31.)



1. The process of forming oxides of nitrogen from mixtures of oxygen and nitrogen which consists in forming an electric arc, passing the gases to be acted upon in two streams flowing along the arc toward each other, causing the gases at the juncture of the two streams to escape outwardly, maintaining the walls of the reaction chamber non-conducting up to the point of escape for the gases, and cooling the gases during their outward flow away from the arc at the junction of the two streams.

1,311,595. OIL-PROOF-PAPER CONTAINER AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J. Filed Jan. 23, 1918. Serial No. 213,381. 5 Claims. (Cl. 91-68.)

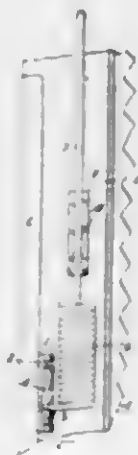
4. A container for oils, fats and the like which comprises a fibrous structure oil-proofed with sulfate waste liquor solids and a hygroscopic agent.

1,311,596. UNITARY PRINTER'S BLANKET. FRANK E. ELLIS, Revere, Mass. Filed Apr. 28, 1917. Serial No. 165,148. 7 Claims. (Cl. 154—54.5.)



1. A unitary printer's blanket or impression cylinder packing comprising a body having resilience and elasticity, a strengthening layer having greater tensile strength than said body and being flexible, united thereto, and a face layer on the outer surface of said body, said face layer being tough and flexible, nonadhesive to ink, and being smooth and homogeneous as to its outer surface; said blanket being adapted for use as the sole packing of a printing press impression cylinder and to be so used with the said face layer uppermost.

1,311,597. WINDOW-LOCK. EMORY S. ENSIGN, East Orange, N. J., assignor to Rose Ensign, East Orange, N. J. Filed Jan. 14, 1918. Serial No. 211,893. 1 Claim. (Cl. 16—18.)

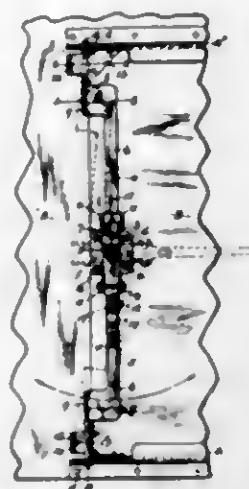


The combination of a window casing and a window operatively mounted therein, with a flexible window lock comprising a close-coiled spiral spring; and means for exteriorly mounting said spring in a vertical position against said casing, said means comprising a tongue at one end of said spring that is horizontally disposed when said spring is so mounted, a socketed fixture provided with a slot communicating with the socket, said slot being adapted for the passage therethrough of said tongue when in register therewith, a second fixture, means for removably securing the opposite end of said spring to said second fixture, and means for rigidly attaching said fixtures to said casing and window; one to each, with said slot vertically disposed.

1,311,598. CAR-DOOR LOCK. CHARLES B. FINK, East Syracuse, N. Y. Filed May 24, 1919. Serial No. 296,515. 5 Claims. (Cl. 16—63.)

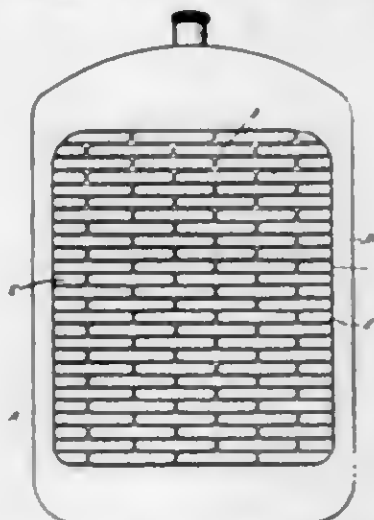
1. A car door lock comprising lower and upper guide flanges for the door, said guide flanges having vertically aligned openings near the rear edge of the closed door, a plate secured to the door near its rear edge, a rock arm pivoted intermediate its ends upon the plate, and having each end provided with a pair of outwardly projecting lugs in spaced relation, locking bars pivoted at one end to opposite ends of said rock-arm and having their other ends offset across the rear edge of the door and provided with bolts movable into and out of said openings as the

rock-arm is moved in reverse directions, and a hand lever pivoted coaxially with said rock-arm and normally disposed between the lugs of one pair for turning the rock-arm and thereby simultaneously moving both locking bars in reverse directions.



posed between the lugs of one pair for turning the rock-arm and thereby simultaneously moving both locking bars in reverse directions.

1,311,599. RADIATOR CONSTRUCTION. ALEXANDER W. FINLAYSON, Detroit, Mich. Filed July 5, 1917. Serial No. 178,560. 4 Claims. (Cl. 257—125.)



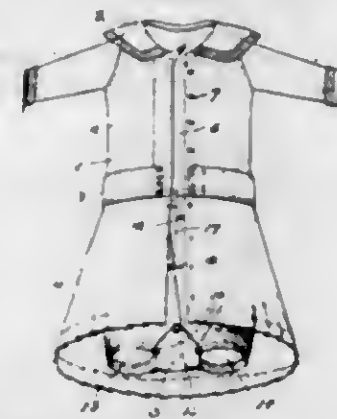
1. In a radiator, a unit comprising an integral cast metallic member having a central longitudinally extending portion formed with a series of enlargements therein and sheet-metal baffle plates respectively located within said enlargements.

2. In a radiator, a unit comprising an integral central longitudinally extending portion having a series of enlargements therein, baffle plates located respectively within said enlargements and a member arranged within the central portion of said unit and connecting said baffles in a fixed relation.

3. A radiator, comprising top and bottom headers, a plurality of units connecting said headers having open ends registering with openings in said headers, nipples extending through said openings and detachably engaging the ends of said units, the lower face of the lower header and the top face of the upper header being apertured in registration with said units giving access through the headers to said nipples whereby said units are independently detachable.

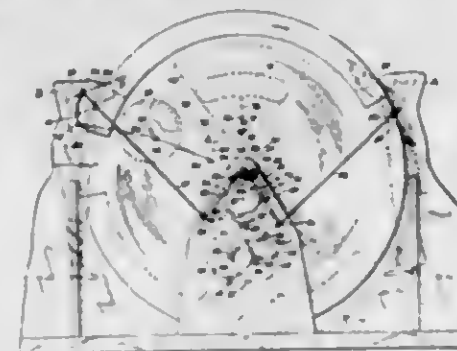
4. A radiator, comprising top and bottom headers, a plurality of units connecting said headers and having open threaded ends registering with openings in said headers, threaded nipples extending through said openings and engaging the threaded ends of said units, the lower face of the lower header and the top face of the upper header being apertured in registration with said units to give access through said headers to said nipples to permit of separately detaching said units from said headers.

1,311,600. COMBINATION-GARMENT. LETTERIO FLOAN, New York, N. Y. Filed Apr. 6, 1917. Serial No. 160,251. 2 Claims. (Cl. 2—144.)



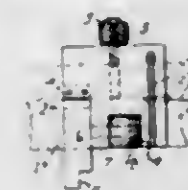
1. A garment comprising a waist and skirt open throughout its length, a leg covering secured to said garment at a point approximating the waistline, said leg covering having an opening extending from the upper to the lower edges thereof, and means for detachably closing the leg covering whereby leg openings are formed therein.

1,311,601. DISPLAY DEVICE. JOSEPH GARANI, Newark, N. J., assignor of one-half to Sara Steiner, New York, N. Y. Filed Aug. 26, 1918. Serial No. 231,462. 7 Claims. (Cl. 40—40.)



5. In a display device of the character described, the combination of a face-plate provided with movable elements, a pair of rotatable disks arranged behind said face-plate in parallelism therewith to display matter above the top edge of said face-plate, mechanism for intermittently rotating said disks in opposite directions, and means connected with said movable elements and operated by said mechanism by which to actuate said movable elements in timed relation with respect to each other and with respect to the rotation of said disks.

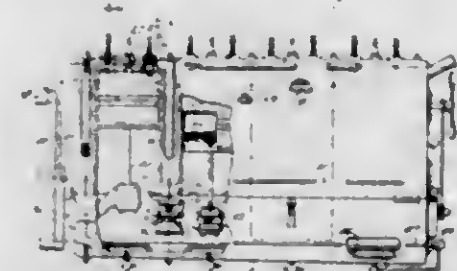
1,311,602. MICROMETER-SCALE GAGE. FRANK E. HARTER, Seattle, Wash. Filed Jan. 21, 1918. Serial No. 213,056. 2 Claims. (Cl. 33—173.)



1. In a device of the character described, the combination of a slotted block formed with a transverse channel, a machinist's rule formed with graduation notches and fitting in said slot, a micrometer actuated slide mounted within the block and longitudinally movable with respect to the scale, and locking means mounted within said transverse channel in the block, whereby the block is positioned with respect to the scale by the engagement of the locking means with the graduation notches on the

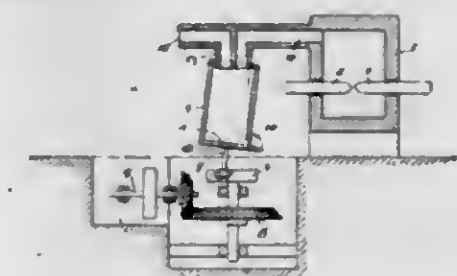
scale, said locking means including a lever pivoted in the block and having a beveled knife edge passing through the slot in the block and adapted to engage said graduation notches.

1,311,603. INTERNAL-COMBUSTION ENGINE. CHARLIE D. HIGGINS, Dallas, Tex., assignor of one-half to E. W. Dickie, Dallas, Tex. Filed Apr. 26, 1918. Serial No. 230,058. 2 Claims. (Cl. 123—59.)



1. The combination in an internal combustion engine of a crank case, a cast cylinder block, cylinder sleeves engaging in the block and removable therefrom, crankshaft bearings mounted in the crank case, a crankshaft mounted in said bearings, valve cages mounted in the head of the block and communicating with the interior of the cylinder sleeves, valves carried in said cages, means for operating the valves, and spark plug cages mounted in the head of the block and communicating with the interior of the cylinder sleeves.

1,311,604. CONDENSER FOR ZINC VAPORS. SVEN HULDT, Stockholm, Sweden, assignor to Norsk Elektrisk Metallindustri Aktieselskab, Sarpsborg, Norway. Filed Apr. 3, 1917. Serial No. 159,510. 8 Claims. (Cl. 266—19.)



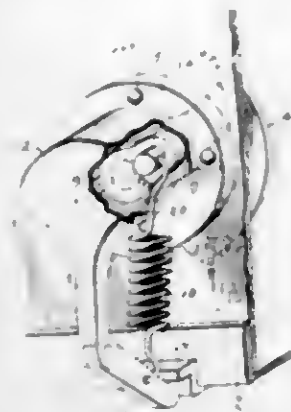
1. In a condenser for zinc vapors, means for imparting motion to the condenser and means for movably connecting the condenser with the distillation chamber.

1,311,605. CEMENTING-MACHINE. IRVING L. KEITH, Haverhill, Mass. Filed Apr. 11, 1917. Serial No. 161,141. 3 Claims. (Cl. 91—47.)



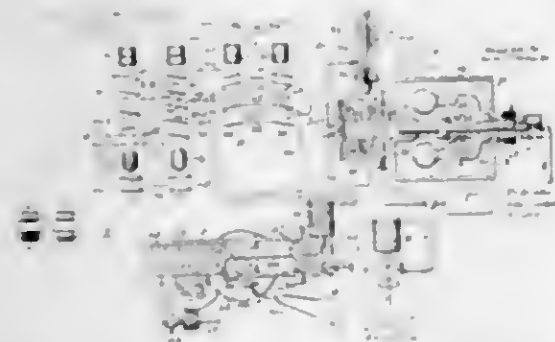
1. In a machine for applying an adhesive, a support therefor; a reservoir for the adhesive; an instrumentality adapted to bear an adhesive comprising a frame, a plurality of members arranged in spaced relation, said members having their respective ends secured to the frame, means extending transversely of the frame and secured thereto, means on said transverse means to engage said members to reinforce and to retain them in said spaced relation; and means for reciprocating said instrumentality into and out of submerged position in the adhesive.

1,311,606. LOCK. WILLIAM J. KUHLS, Dayton, Ohio. Filed Dec. 20, 1918. Serial No. 267,617. 7 Claims. (Cl. 70—82.)



1. The combination with two relatively movable members to be interengaged, of a locking lever carried by one member and movable into and out of engagement with the other member, a revoluble actuating member and a resilient link eccentrically connected with the revoluble actuating member at one end and engaged with the locking lever at its opposite end, said resilient link being placed under tension to retain the lever in locking position by the rotation of the actuating member.

1,311,607. RAILWAY TRAFFIC CONTROLLING APPARATUS. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1917. Serial No. 189,044. 5 Claims. (Cl. 246—47.)



4. Railway traffic controlling apparatus comprising a run-down device carried on a vehicle and arranged to change progressively toward an ultimate condition, speed-controlling means governed by said run-down device and set into operation after the run-down device reaches its ultimate condition to impose a gradually reducing speed limit, and means located at intervals in the trackway for resetting said run-down device away from ultimate condition.

1,311,608. RAILWAY TRAFFIC CONTROLLING APPARATUS. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1917. Serial No. 189,045. 4 Claims. (Cl. 246—180.)



1. Railway traffic controlling apparatus for a train made up of a plurality of vehicles, comprising a train-governing magnet on each vehicle having a pick-up wind-

ing and a holding winding, a circuit for the holding winding of each magnet including a circuit controller on the same vehicle biased to closed position, a continuous conductor extending throughout the train, the pick-up winding of each magnet being connected across said conductor and ground, and means located in the trackway for opening the said circuit controller on each vehicle and for connecting a source of current with said continuous conductor and ground.

1,311,609. BOX-PARTITION-ASSEMBLING MACHINE. WILLIAM J. McMILLAN, Philadelphia, Pa. Filed Oct. 7, 1918. Serial No. 257,205. 2 Claims. (Cl. 93—37.)



1. The combination, in a machine of the character described, of reservoirs for the members of the partition structure, one of said reservoirs having a series of compartments in each of which the members are disposed edgewise, one above another, the other reservoir having the members disposed flatwise one above another therein, and a conveyor for receiving the latter members in succession from their reservoir and feeding them into engagement with the other members as the latter are delivered from their reservoir.

1,311,610. PIPE-WRENCH. HARRY ALVIN MICHAEL, Beaver Falls, Pa. Filed Sept. 19, 1918. Serial No. 254,792. 3 Claims. (Cl. 84—173.)



1. A pipe wrench comprising a handle, a jaw fixed thereto, another jaw associated with the first-named jaw and provided with a shank, an adjusting screw pivoted to the jaw end of the handle and extending away therefrom and connected to the shank of the movable jaw to constitute a support and pivot for said movable jaw, and a spring on the handle engaging the rear of the shank of the movable jaw at a point closer to the jaw-carrying end of the handle than the pivot end of the adjusting screw.

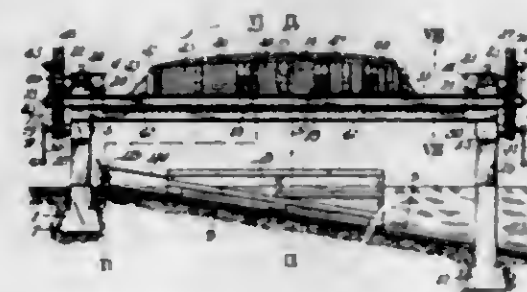
1,311,611. AIR-HEATER FOR FURNACES. CHARLES E. MORGAN, Chicago, Ill. Filed Jan. 27, 1919. Serial No. 273,240. 2 Claims. (Cl. 110—75.)

1. An air supply and heating device consisting of side and end walls, a top and a separable base arranged to

form a shell provided with a chamber, said chamber provided with inlets positioned in the end walls of the shell adjacent to said base, and with outlets positioned on the upper face of said base and consisting of grooves the bottoms whereof are inclined downward from the inlet ends thereof, in combination with baffle plates in said chamber, some thereof arranged to direct air flowing thereinto to above the remainder thereof, and said remainder of said baffle plates disposed in said chamber to direct air in the upper portion of the chamber downward to said outlets and underneath the one of said side walls which is positioned over said outlets, said outlets arranged so that air flows therefrom, and from said chamber, at substantially right angles to the flow thereof in said chamber.

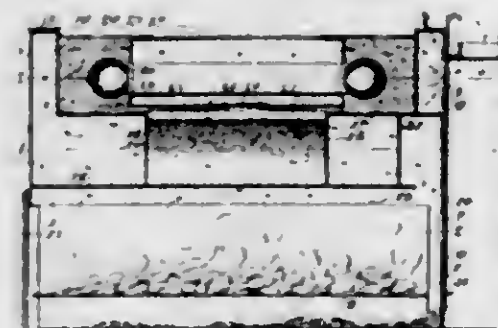


1,311,612. MEANS FOR AND METHOD OF BUILDING CONCRETE BOATS. CHARLES O. MORATA, Indianapolis, Ind. Filed Nov. 14, 1918. Serial No. 262,506. 27 Claims. (Cl. 25—130.)



1. Means, for building concrete boats, including a rotary platform, an internal form mold secured to the platform, external form molds, and means for adjustably supporting the external form molds in proximity to the sides of the internal form mold.

1,311,613. TIRE-VULCANIZER. MELVIN LE ROY MUNGER, Pittsburgh, Pa., assignor to Everett B. Sawyer, Lincoln, Nebr. Filed Dec. 23, 1918. Serial No. 267,951. 12 Claims. (Cl. 15—6.)



1. A vulcanizer comprising a housing having a heat generating chamber and a chimney box, a partition unit within the housing comprising a lower partition wall, an intermediate partition wall and a top ring, a water reservoir between the lower and intermediate walls, an annular wall between the intermediate wall and the top ring embracing a vulcanizing chamber with which the water reservoir communicates, means whereby a circulation of heat may be created from the generating chamber up between the lower and intermediate walls around the water reservoir and up between the intermediate wall and the top ring around the vulcanizing chamber, said hous-

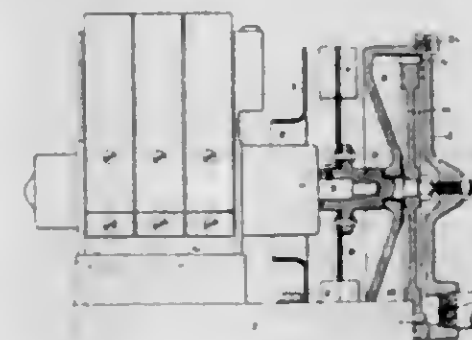
ing having a heat escape port from the heat generating chamber to the chimney box and another port from the space above the intermediate wall to the chimney box, and a gate for controlling said ports.

1,311,614. GRINDING-MILL. ALBERT G. NEWMAN, Stahope, Iowa. Filed Nov. 19, 1915. Serial No. 62,352. 2 Claims. (Cl. 83—8.)



1. A grinding mill comprising a female bur consisting of a hollow frusto-conical body and an annular flange, a drive shaft extending axially through said body and rotatable with relation thereto, a male bur consisting of a frusto-conical body mounted on said shaft within the female body and a disk head mounted upon said shaft in engagement with said flange, a bolt securing said head to said shaft against axial and rotary movement with relation thereto, the head securing the male body against axial movement with relation to the female body and shaft, and a breakable pin connecting said male body and shaft for simultaneous rotation, said male body member being separate from and movable independently of said head when said pin is broken.

1,311,615. STEAM-TURBINE. JOHANN F. M. PATITZ, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 24, 1913. Serial No. 757,261. 2 Claims. (Cl. 290—52.)



1. In combination, an electric generator having a shaft, bearings for said shaft on opposite sides of said generator, a single bucket wheel associated with an overhanging end of said shaft, and a fan associated with said overhanging shaft end and located closely adjacent said bucket wheel, said fan automatically causing the resistance to the rotation of said shaft to vary as the load on said generator varies and constituting the sole means for automatically controlling the speed of said bucket wheel.

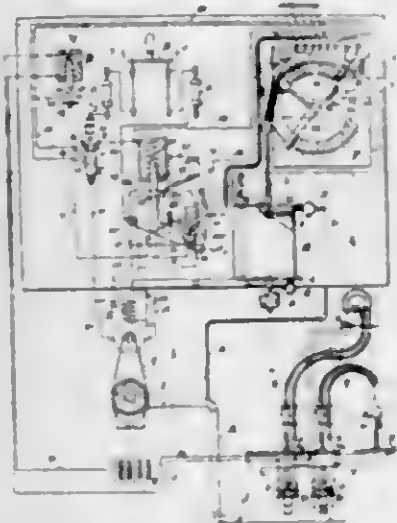
1,311,616. STRING-CUTTER. THOMAS PATTIE, Ponsonby, Auckland, New Zealand. Filed Feb. 4, 1918. Serial No. 215,295. 1 Claim. (Cl. 30—14.)



In a cutter of the character described, in combination with a support a holder comprising a body the inner portion of which is fixed to the support while the under surface of the outer portion of the body slopes up-

wardly toward the outer end to leave a space, the outer portion of the body being provided with a recess opening at one side and the top of the body, the inner longitudinal wall of the recess sloping upwardly toward the upper surface of the body, the under surface of the body being also formed with a recess communicating with the first recess and having an upwardly sloping longitudinal wall and a cutting blade fixed in the last mentioned recess and having its cutting edge parallel to the adjacent side edge of the arm.

1,311,617. PNEUMATIC DESPATCH TUBE APPARATUS. ALBERT W. FARNALL, Lowell, Mass., assignor to The Lamson Company (formerly Lamson Consolidated Store Service Company), Boston, Mass., a Corporation of New Jersey. Filed Aug. 30, 1912. Serial No. 717,533. 29 Claims. (Cl. 243-7.)



1. In a pneumatic despatch tube apparatus, the combination of an electric motor having a field circuit, a pump, an electro-magnetically operated device for starting said motor, co-acting means for insuring the motor being started with said field circuit relatively strong, fluid actuated means for varying the conditions in said field circuit whereby to vary the speed of said motor, and pressure fluid controlled means for stopping said motor when said pump produces a predetermined pneumatic pressure which is in excess of that required for transmission purposes.

1,311,618. TOBACCO-EXTRACTOR. HARRY J. PENN, Madison, N. C. Filed Apr. 12, 1919. Serial No. 289,648. 2 Claims. (Cl. 131-59.)

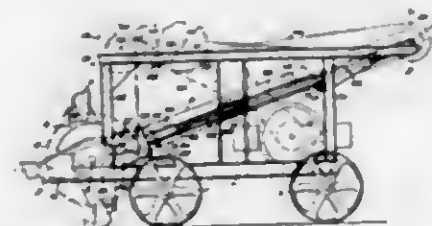


1. A device for extracting tobacco plugs from a container, comprising a shank provided with a laterally projecting hook; and a projection extending from one side of the shank and spaced from the hook longitudinally of the shank, the projection being disposed substantially at right angles to the hook, the projection constituting a plug engaging stop serving to locate the hook with respect to the plug to be extracted, the opposite side of the shank being smooth and unencumbered to facilitate the insertion of the shank and the hook between the plug and the container and to permit a rotation of the shank whereby to engage the hook with the plug to be extracted.

1,311,619. [WITHDRAWN.]

1,311,620. [WITHDRAWN.]

1,311,621. EXCAVATING AND LOADING MACHINE. EDWIN G. RURT, Philadelphia, Pa. Filed Jan. 4, 1919. Serial No. 269,555. 14 Claims. (Cl. 37-29.)



1. The combination of an endless belt conveyor; a bucket operative to discharge material thereon; with mechanism for moving one of said elements alternately into and out of the path of movement of the other to permit the conveyor to receive the material discharged by the bucket and thereafter allow passage of said bucket.

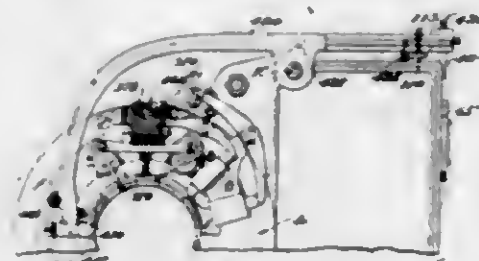
1,311,622. COAL-CHUTE. CLARENCE SCHOCK, Mount Joy, Pa. Filed May 25, 1917. Serial No. 170,976. Renewed Mar. 16, 1918. Serial No. 222,984. 13 Claims. (Cl. 193-42.)



mit the conveyor to receive the material discharged by

1. A vertical spiral chute with downward lateral slope from its axis, the spiral pitch of the chute at its axial edge being greater than the natural angle of flow of the material conveyed, and the spiral pitch of the chute at its periphery being less than the natural angle of flow of the material conveyed.

1,311,623. TUCK-STITCH MECHANISM FOR KNITTING MACHINES. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed July 25, 1914. Serial No. 533,053. 7 Claims. (Cl. 66-21.)



3. A knitting machine having needles, a rotary needle cylinder, and means for driving said cylinder comprising a rotary gear having a cam thereon running at a rate slower than that of said cylinder, in combination with tucking means including a supplemental cam and means for moving said cam toward and away from the needle cylinder to render it operative and inoperative, consist-

ing of a lever carrying said cam having its fulcrum between and extending between said cylinder and the cam on said gear.

1,311,624. WASHBOARD. GEORGE W. SHOEMAKER, Dalton, Pa. Filed Sept. 13, 1918. Serial No. 253,923. 2 Claims. (Cl. 68-29.)



1. A wash board including side strips having recesses therein, a stationary soap holder supported between the side strips, a rubbing board supported between and extending into the recesses within the side strips and having an opening into which the held soap will project, and adjustable means for holding the rubbing board against backward movement within the recesses.

1,311,625. TOOTH-PICK HOLDER. STEPHEN G. SINGLETON, Burke, Idaho. Filed Mar. 26, 1919. Serial No. 285,304. 2 Claims. (Cl. 206-21.)



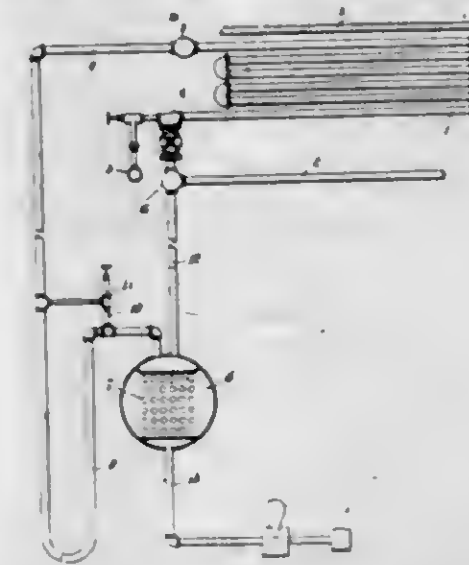
1. A tooth pick holder in the nature of a shaker, consisting of a casing having a cover at one end provided with openings admitting of passage of the tooth picks therethrough, and means in connection with said cover to yieldingly hold the tooth picks in position partially through the cover openings during the discharge of the tooth picks, said last named means consisting of an apertured disk of an elastic material supported along the inner surface of the cover and protected by the latter.

1,311,626. BORING-MACHINE. HARRY S. STAGNACH, Tacoma, Wash. Filed Mar. 18, 1918. Serial No. 223,207. 12 Claims. (Cl. 144-113.)



1. In a boring machine, the combination of a shaft having threads on its outer surface and a support for holding the shaft on a fixed axial line, said support having means to bear on the bottom of the thread.

1,311,627. ABSORPTION APPARATUS. HENRY TORRANCE, New York, N. Y. Filed July 19, 1916. Serial No. 116,032. 2 Claims. (Cl. 261-76.)



1. Absorption apparatus comprising a constricted primary absorber, means for passing absorbing liquid and gas to be absorbed at high velocity through such absorber, a secondary absorber located at a lower level than the primary absorber, a conduit for conveying strong liquor of the primary absorber to the secondary absorber and a conduit for supplying gas to be absorbed to the secondary absorber, the difference in level of the two absorbers being such as to create a hydrostatic head compensating for loss of pressure between the inlet and the outlet of the primary absorber, the said conduit connecting the outlet of the primary absorber with the secondary absorber comprising a trap preventing back flow.

1,311,628. LIQUID DISPENSER. JOSEPH A. WALSH, West New York, N. J. Filed June 16, 1919. Serial No. 304,474. 4 Claims. (Cl. 248-52.)



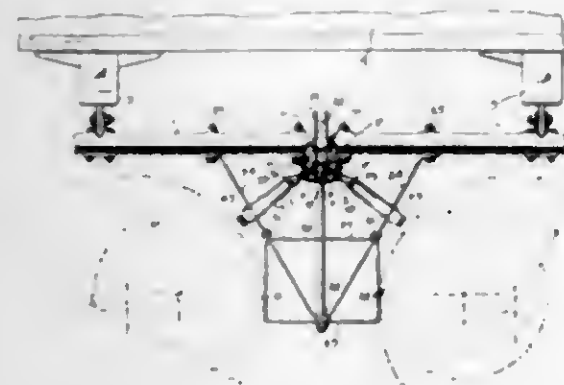
1. A soap dispenser comprising a container having dents in its exterior, a band secured around the container over the dents, and a supporting frame having arms provided with end portions pivotally connected with the band and hinged on the inner surface thereof opposing said dents.

1,311,629. RECOIL-CHECK. JOHN W. WATSON, Wayne, Pa. Filed Dec. 1, 1915. Serial No. 64,302. 8 Claims. (Cl. 267-3.)



1. A recoil check comprising a non-revolving drum adapted for attachment to a part of a vehicle, a flexible member passing around said drum and having one end adapted for attachment to a part of the vehicle relatively movable with respect to said first-mentioned part, and means adjacent the other end of said flexible member operative to maintain said flexible member at substantially constant tension.

1,311,630. BOMB-CARRYING GEAR. HARRY D. WEED, U. S. Army. Filed June 7, 1919. Serial No. 302,586. 7 Claims. (Cl. 244-1.) (Filed under the act of Mar. 3, 1883, 22 Stat. L. 625.)



1. In a bomb carrying gear, a rib element, means for detachably engaging a bomb with said rib element and a bearing element for the side of a bomb, positioned below and to one side with relation to said rib, so that the weight of the bomb causes the side thereof to bear against said bearing element.

1,311,631. BOILER-FEEDING INJECTOR. BELVIN T. WILLIATON, Somerville, Mass., assignor to The United Injector Company, Boston, Mass., a Corporation of New York. Filed Jan. 7, 1918. Serial No. 210,631. 8 Claims. (Cl. 162-1.)



7. In a boiler feeding injector, the combination with the final overflow valve, of a water supply closure valve, and connections between the two said valves to insure the closing of one as the other is opened, and vice versa, a lost motion device in said connections to accommodate changes in positional relationship of members associated with said connections, and an elastic member inserted directly in said system between the operating end of the system and the final overflow valve, to exert persistent closure stress upon said final overflow valve.

1,311,632. CASE CLAMP. OLMELO C. WYSONG, Greensboro, N. C.; Fannie I. Wysong executrix of said Olmelo C. Wysong, deceased. Filed Dec. 10, 1917. Serial No. 206,421. 8 Claims. (Cl. 144-291.)

1. A case clamp comprising a supporting frame, a pair of supporting heads, one of which is adjustable with respect to the other, a pair of rotatable platens carried by said heads, manually controlled means for adjusting one

of said platens in its head toward and away from the other, and power actuated means for moving the other of



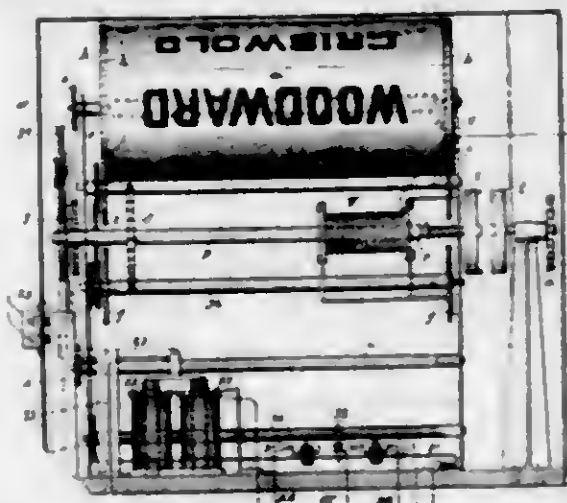
said platens in its head toward and away from the first-named platen.

1,311,633. SHINGLE-MAKING MACHINE. FRANK ZELEPUCHAN, Worcester, Mass. Filed July 25, 1918. Serial No. 246,702. 3 Claims. (Cl. 144-176.)



1. A shingle cutter comprising a stationary horizontal circular platform having a central hub portion and provided with radially arranged tapered sockets in the top face thereof adjacent its periphery adapted for receiving blocks to be cut, block retaining wedges and spikes carried by the platform at the opposite ends of each of said sockets, and a cutting member pivoted upon said hub portion projecting outwardly of the platform and arranged for swinging movement in a circular path above and substantially parallel with the platform during the cutting operation.

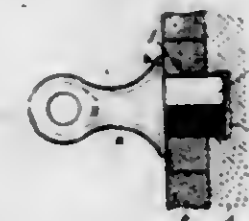
1,311,634. ANNUNCIATOR. HENRY J. APPLETON, Detroit, Mich. Filed Dec. 4, 1918. Serial No. 265,314. 8 Claims. (Cl. 40-56.)



1. In an annunciator, a belt carrying signs, driving mechanism for said belt, a continuously running driving

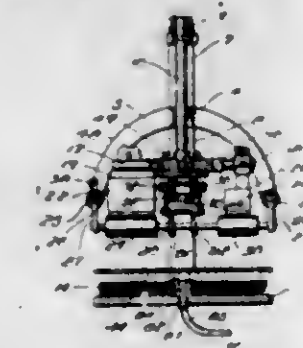
member, a clutch between the driving mechanism and the driving member, a trip switch for contact with obstacles along the way, the said trip switch being of a character to remain tripped after having come in contact with one of said obstacles, connections between the trip switch and the clutch for maintaining the clutch parts in engagement as long as the trip switch remains tripped, and a switch operated by the belt driving mechanism for electro-magnetically returning the trip to its normal open position when the belt has been advanced the desired distance.

1,311,635. WALL-FIXTURE ELEMENT. STEPHEN D. BAKER, New York, N. Y. Filed Dec. 16, 1916. Serial No. 137,334. 2 Claims. (Cl. 72-101.)



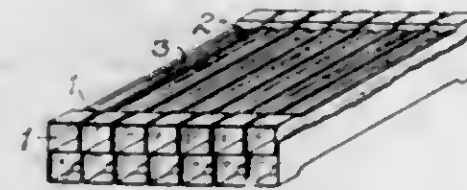
1. In combination, with a wall having a recess in the face thereof, a fixture element having a flat rear face bearing against the said face of the wall and a relatively short adhesion-plug projecting from the rear face of said element into said recess and formed thick relatively to its length in any transverse dimension thereof, said recess closely conforming to the plug as to both the transverse and longitudinal sections thereof in both shape and size, and a thin layer of adhesive interposed between the surfaces of said plug and recess.

1,311,636. PATCH-BOX FOR ENVELOPE-MAKING MACHINES. EUGENE BERTHAM BERKOWITZ, Kansas City, Mo. Filed Jan. 29, 1918. Serial No. 214,316. 11 Claims. (Cl. 93-61.)



1. In a machine for making open face envelopes, the combination with an envelop forming blank support and a picker head for applying glue to the blanks, of a patch box fixed to said head from which patches are fed and affixed to the said blanks simultaneously with the gluing of the blank.

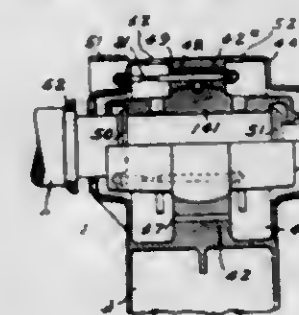
1,311,637. METHOD OF METAL-BENDING INTO LOOPED FORMATION. KINDERMAN M. BORLETT, Toledo, Ohio. Filed Oct. 1, 1914. Serial No. 864,503. 3 Claims. (Cl. 113-116.)



1. The method of producing a body of the character described consisting in forming in the material operated

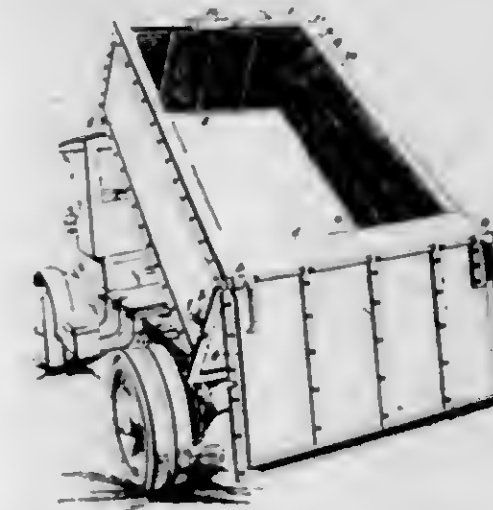
upon a substantially U shaped bight the arms of which are of unequal length and subsequently bending the transverse portion of the bight to bring the end of the short arm into proximity with the long arm, and continuing the alternate forming and bending operations.

1,311,638. DYNAMO-ELECTRIC MACHINE. ARTHUR J. BAOWN, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 2, 1914. Serial No. 822,565. 1 Claim. (Cl. 64-10.)



In combination with a machine comprising a rotatable part mounted on a shaft, a bearing housing, a bearing for said shaft within said housing, said shaft and said bearing being held against appreciable relative longitudinal movement, and means comprising a plurality of bolts disposed within said housing and having frangible portions for preventing movement of said bearing relative to said housing and permitting only axial movement of said shaft and said bearing on the occurrence of excessive end thrust on said shaft.

1,311,639. SETTLLING AND SEPARATING TANK. ERNEST O. CARTWRIGHT, Springfield, Ohio, assignor to Charles F. Gardner, Springfield, Ohio. Filed Apr. 4, 1919. Serial No. 287,627. 14 Claims. (Cl. 210-16.)



1. A separating tank comprising an outer impervious shell, transverse and longitudinal screen partitions within said shell dividing the same into an outer water compartment and an inner solids compartment into which latter compartment the material to be separated is placed, said shell having a discharge end, a tall gate over the discharge end for closing the adjacent ends of the water compartment and also the center compartment substantially as shown and described.

1,311,640. GUTTER AND SCRAPER THEREFOR. RUSSEL CHAFFEE, Withee, Wis. Filed Sept. 6, 1918. Serial No. 262,835. 5 Claims. (Cl. 119-15.)

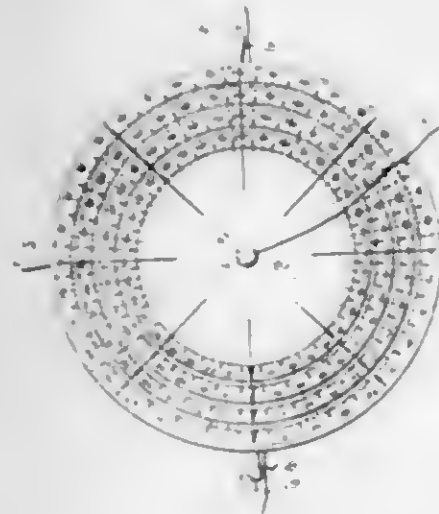
1. The combination with a stable floor having an opening therein, of an elongated gutter supported under the opening, a scraper extending longitudinally of the gutter,

a rock shaft arranged parallel to the gutter, crank arms projecting from the rock shaft, and an operative connec-



tion between the crank arms and the scraper for moving the scraper transversely of the gutter to discharge the contents of the gutter over the longitudinal edges thereof.

1,311,641. AUTOMATIC COURSE AND DEVIATION FINDER. RICHARD M. CHRISTENSEN, New York, N. Y. Filed Oct. 25, 1918. Serial No. 259,735. 9 Claims. (Cl. 33-1.)



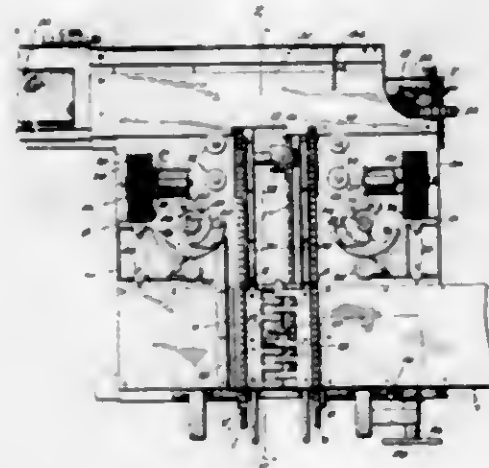
1. An automatic course and deviation finder comprising the following instrumentalities: a base, a plurality of graduated compass cards concentrically pivoted on said base, means for independently setting and independently locking said cards on the base, and a direction finder or indicator overlying all the cards and radially extensible in any direction from the center thereof.

1,311,642. CHECK-VALVE. HANS GUNTAR JOACHIM DRISNER, Big Spring, Tex. Filed Dec. 29, 1917. Serial No. 208,130. 2 Claims. (Cl. 277-65.)



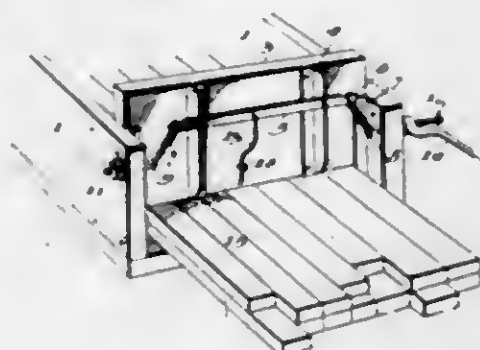
2. A valve comprising a casing having a valve seat at its outlet end and a passage leading to said seat from the inlet end of the casing, a check valve engageable with the seat, a nipple opposite the outlet end of the first-mentioned casing, a second valve casing connected to the nipple and having a shut-off valve, a guide for the check valve held between the end of the first-mentioned casing and the adjacent end of the nipple, and a coupling member connecting the nipple and the first-mentioned casing.

1,311,643. LABELING-MACHINE. HERMANN O. FISCHER, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 10, 1917. Serial No. 141,700. 17 Claims. (Cl. 216-53.)



1. In a machine for affixing labels to packages, the combination with a magazine for the labels, of a rotary label-applying device constructed and arranged to mechanically grasp a label in the magazine and through its rotative movement to pull the label out of the magazine, said device being operative thereafter to apply said label to a package.

1,311,644. END-GATE. ANDREW K. FLOM, Montevideo, Minn. Filed Dec. 21, 1918. Serial No. 207,825. 3 Claims. (Cl. 21-21.)

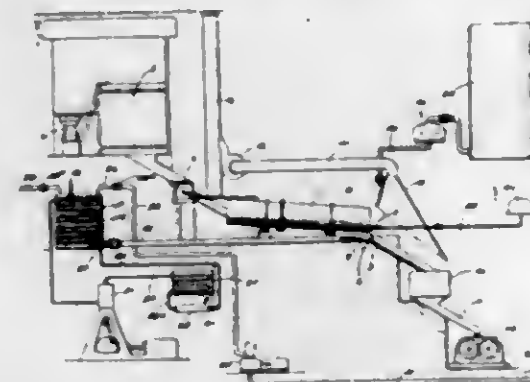


1. In a wagon box, the combination with side boards having guides at their ends, an end gate slidable in the guides, of means for clamping the side boards on the gate, with the gate in closed or partly open position, part of said means being carried by the gate and part by the side boards, and the said parts being detachably connected, said means comprising a bar mounted to slide longitudinally on the gate, eye bolts passing through the side boards, nuts engaging the outer ends of the eye bolts, and a plurality of links connected with each eye bolt, each end of the bar having a hook for engagement by the links, and means for limiting the movement of the bar with respect to the end gate and releasable from the bar.

1,311,645. ORE-REDUCING PROCESS. BENJAMIN Q. P. FOSS, Chicago, Ill., assignor to The Foss International Ore Reduction Company, Chicago, Ill., a Corporation of Arizona. Filed June 25, 1911. Serial No. 634,926. 8 Claims. (Cl. 75-61.)

1. The process of reducing hard materials to a friable condition, which consists in first breaking said materials into pieces of small size, then exposing said pieces to a gas flame for a time sufficient to drive out moisture and volatile substances, said flame being produced by the com-

bustion of fuel gas generated immediately before its arrival at and adjacent to said flame, and then suddenly



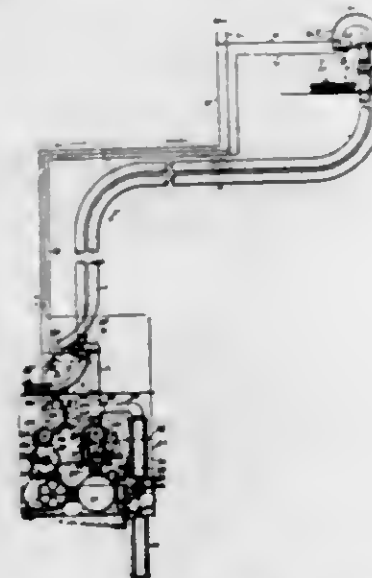
submerging said materials in a continuously flowing cooling medium before a fusing or softening effect has been produced in said materials.

1,311,646. SOCKET OR DEVICE FOR RECEIVING OR BEARING SCREWS SUCH AS ARE EMPLOYED FOR FASTENING PURPOSES. JOHN CHARLES GORDON, Birmingham, England. Filed Nov. 21, 1918. Serial No. 202,528. 1 Claim. (Cl. 72-105.)



A socket or device for receiving a screw, composed of a helix or spiral of wire furnished with a series of integral projections or distance parts which are so located that the helix or spiral may be positioned centrally or axially in a hole in which it is adapted to be received, said projections being adapted to form retaining portions for the socket when the part of the hole around the socket is filled with cement, lead, or other appropriate filling.

1,311,647. CARRIER-DESPATCH APPARATUS. CHARLES P. HINSON, Brookline, Mass., assignor to The Lamson Company, Boston, Mass., a Corporation of New Jersey. Filed Feb. 27, 1914. Serial No. 821,534. 31 Claims. (Cl. 243-9.)



8. A pneumatic despatch system comprising a transmission conduit having a despatching and a receiving

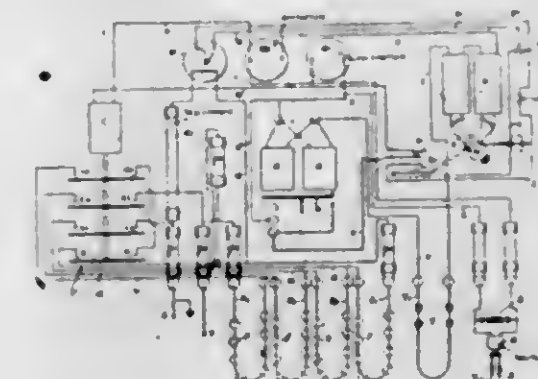
station for carriers, means movable in a determined manner to establish a carrier propelling flow of air through said conduit, a controlling element having a tendency to stop said flow, pressure-sensitive mechanism responsive to the departure from a determined pressure in the flowing air resulting from the obstruction of said flow due to the presence of a carrier in said conduit, means controlled by said pressure-sensitive mechanism for preventing said element from acting to stop said flow until said pressure-sensitive mechanism permits of such stoppage following its subjection to said determined pressure, and means to prevent mere momentary fluctuations of pressure in said conduit from causing a stoppage of said flow through the action of said mechanism.

1,311,648. RELAY. RICHARD M. HOPKINS, New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 15, 1917. Serial No. 174,835. 1 Claim. (Cl. 175-323.)



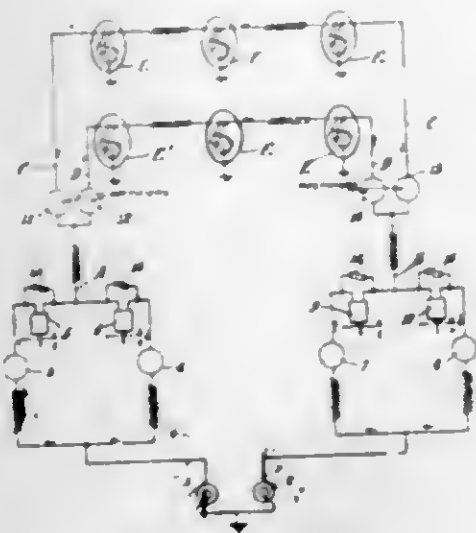
In a relay, the combination with a magnet, of an armature therefor, a base, spring-support means for said armature comprising short flexible strips clamped to said base and to said armature, and contact points, one carried by said armature and located between the point of attachment of said springs to said base and the center of effort of the magnet on the armature, the other arranged to make contact with said first-mentioned contact point when the armature moves toward the magnet.

1,311,649. SIGNALING SYSTEM. RICHARD M. HOPKINS, Rutherford, N. J., assignor to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 13, 1918. Serial No. 222,078. 4 Claims. (Cl. 177-360.)



1. In a signaling system the combination of a transmitter circuit comprising one or more transmitters, a signal giving circuit entirely separate from said transmitter circuit and comprising one or more signal giving devices, independent sources of current supply for said two circuits, a main controlling relay and a delay action relay in said transmitter circuit, a further relay and a circuit therefor, said further relay controlling the signal giving circuit and controlled through its circuit by said main relay and arranged when operated by said main relay to close the signal giving circuit, said delay action relay having contacts arranged to break the circuit of said further relay in the event of prolonged breakage of the transmitter circuit.

1,311,650. SIGNAL SYSTEM. CLARENCE C. JOHNSON and JOSEPH F. D. HOGG, New York, N. Y., assignors to American District Telegraph Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 15, 1917. Serial No. 174,867. 2 Claims. (Cl. 177-352.)



1. A signaling system comprising outgoing and return main circuit conductors, two branch circuit conductors connecting said main circuit conductors and each provided with a transmitter or transmitters, opposite unidirectional rectifiers interposed between each main circuit conductor and said branch circuit conductors, and arranged as to polarity to permit passage of positive impulses only through one said branch circuit and to permit passage of negative impulses only through the other branch circuit, and two signal receiving means and corresponding opposite unidirectional rectifiers connected to each main circuit conductor and arranged as to polarity to permit passage of positive impulses only through one receiving means and to permit passage of negative impulses only through the other companion receiving means.

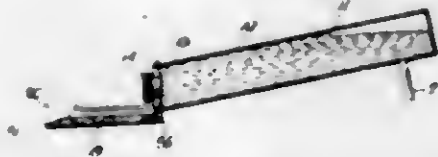
1,311,651. HINGE. JACOB KANTER, Newark, N. J., assignor of one-third to Thomas J. Walsh and one-third to Frank Walsh, Newark, N. J. Filed Nov. 27, 1917. Serial No. 204,119. 3 Claims. (Cl. 16-104.)



3. A struck up sheet metal hinge, one of the members whereof comprises a surface plate and a pintle socket and two separate integral tangs extending at right angles to the surface plate, one of said tangs being adjacent to the pintle socket and struck out of the material of the face plate and leaving an opening therein, and the other being at the end of the face plate remote from the pintle socket, said tangs having substantially aligned openings therein adapted to receive a nail driven substantially parallel to the face plate, and the other member whereof comprises a surface plate, a web and a tang, the tang extending substantially parallel to the surface plate, and said surface plate and tang being provided with substantially aligned openings therein to receive a nail driven substantially at right angles to the surface plate, and said member having a pair of pintle sockets between which the pintle socket

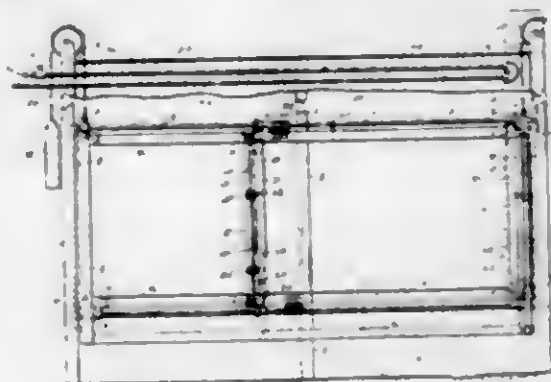
on the other member of the hinge is adapted to be received, and a pintle passing through the aligned pintle sockets.

1,311,652. MEANS FOR SUPPLYING MOISTURE. HAZEL C. KENDALL, Allston, Mass., assignor to Alfred Hall, Boston, Mass. Filed Oct. 24, 1916. Serial No. 127,483. 8 Claims. (Cl. 91-54.4.)



1. A moistening device of the character described comprising a fluid container and a moistening pad located below said container, said container having two conduits leading from the interior thereof to said moistening pad, said conduits so arranged and constructed as to maintain said moistening pad in a constant state of saturation by moisture supplied through one of said conduits.

1,311,653. CURTAIN STRETCHER. PAUL H. KERR, Pittsburgh, Pa. Filed June 14, 1918. Serial No. 239,960. 2 Claims. (Cl. 45-24.)



1. A stretcher for lace curtains and similar articles, comprising a rectangular frame, a vertically adjustable curtain-carrying rail mounted thereon, a means for locking the same, a longitudinally adjustable telescopic-rail intermediate of the top rail of the frame and said curtain carrying rail, a means for locking the same, separate shafts or rods mounted on each of said carrying rails, shafts or rods mounted upon the top rail of said frame and upon one of the end rails of the same, a series of rings threaded on each of said shafts, and a pointed hook attached to each of said rings for engagement with a curtain.

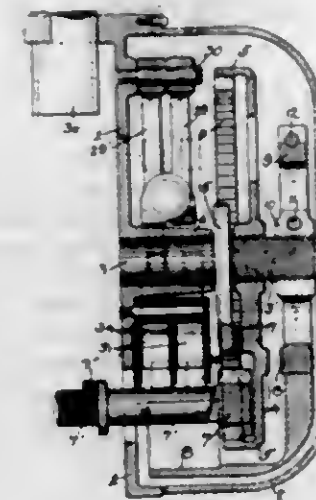
1,311,654. RADIO METHOD AND APPARATUS. FREDERICK A. KOLSTER, Washington, D. C. Filed Mar. 31, 1916. Serial No. 87,914. 57 Claims. (Cl. 250-20.)



1. The method of translating electro-radiant energy, which consists in absorbing from the natural media substantially the entire received radiant energy directly in

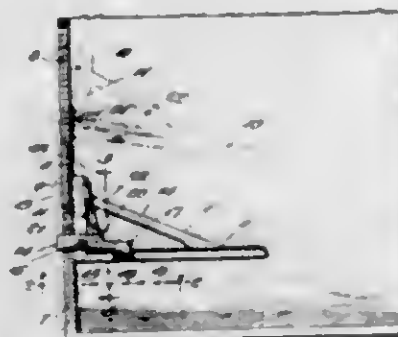
a lumped inductance in a path whose distributed inductance is substantially all attuning the path of the oscillations in said inductance to the frequency of said electro-radiant energy, and translating said oscillations.

1,311,655. STOP-MOTION APPARATUS. DAVID C. LARSON, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 16, 1916. Serial No. 120,437. 6 Claims. (Cl. 74-46.)



4. In a stop mechanism, the combination of a rotatable threaded shaft, a nut threaded thereon and free to turn axially thereon and also to move axially of the shaft, and having means adapting it to be turned by power, an arm, fast on the shaft to one side of the nut, to effect an engagement between the nut and the arm, and a stop-mechanism element proper, fast on the shaft to the other side of the nut, and means to effect an engagement between the said element and the nut.

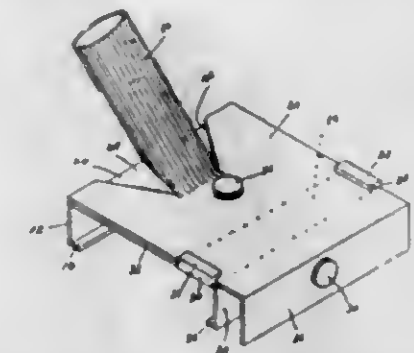
1,311,656. ADJUSTABLE GUARD FOR PRINTERS' GALLEYS. JEROME E. LATSCHE and GEORGE N. MARKEE, Lincoln, Neb. Filed Dec. 23, 1918. Serial No. 268,014. 2 Claims. (Cl. 276-43.)



1. The combination with a printer's galley having a rim provided with an overhanging flange, said rim being further provided with spaced openings arranged beneath the flange, of a guard arranged within the galley and provided at one end with a foot disposed at substantially a right angle thereto and adapted to contact with the inner side of the rim, a pin secured to the foot near its free end and adapted to enter a selected opening, a reciprocating bolt carried by the guard near the opposite end of the foot and having an outer hooked end to engage beneath the overhanging flange, and a cam pivoted upon the bolt and arranged to contact with the inner side of the foot.

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1,311,657. HOLDER. HARRY R. LEVINS, Minneapolis, Minn. Filed Apr. 21, 1919. Serial No. 291,629. 2 Claims. (Cl. 15-54.)



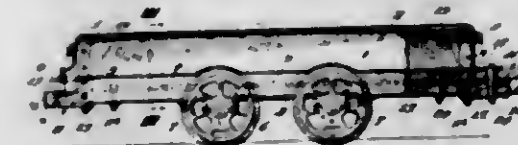
1. A holder comprising spaced clamping jaws, means for moving said jaws relatively toward and away from each other, a follower mounted above the space between said jaws, and means for moving said follower parallel with the plane of said jaws.

1,311,658. ANIMAL STANCHION. JOHN MASON BOTTS, Lewis, Lynchburg, Va. Filed Apr. 19, 1918. Serial No. 229,597. 9 Claims. (Cl. 119-150.)



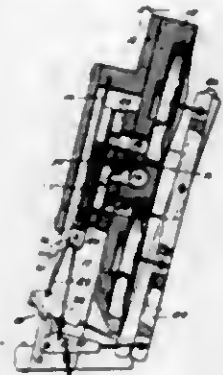
4. In apparatus of the character described, a support, a stanchion loop for receiving the neck of the animal therein arranged near the same and comprising oppositely arranged side members, each side member of the loop including upper and lower arms, means to pivotally connect the adjacent ends of each pair of upper and lower arms, means disposed near each pivot means to lock each pair of upper and lower arms against swinging movement upon the pivot means, and means for connecting the upper end of the stanchion with the support.

1,311,659. MINING CAR. JOHN C. H. LUKKEN, Westmont borough, Pa. Filed June 17, 1918. Serial No. 240,312. 8 Claims. (Cl. 105-364.)



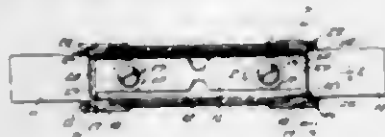
1. The combination with a metal car body of a wooden longitudinal center sill partially surrounded by and secured thereto and adapted to strengthen and reinforce the same against stresses.

1,311,660. MOTOR-VALVE CONSTRUCTION. FRANK G. LYNDE, Newark, N. J., assignor to Lauter Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 28, 1917. Serial No. 193,650. 13 Claims. (Cl. 230—36.)



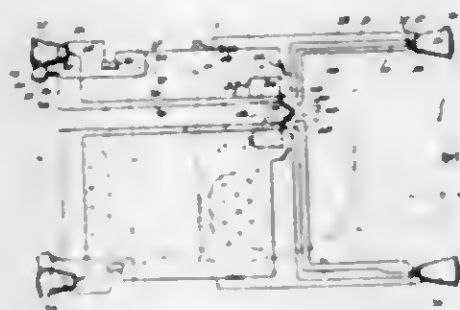
1. In a pneumatic motor, the combination of a guide plate having a working face provided with a plurality of openings therethrough, a slide block mounted for reciprocatory movement and having a working face engaging said working face on the guide plate to control said apertures and means for guiding the slide block parallel to said apertured working face, one of said working faces being flexible thereby to adhere closely to the other face as it is slid across the same and thus minimize leakage between the faces.

1,311,661. REFILLABLE CARTRIDGE-FUSE. CLARENCE T. McDONALD, Chicago, Ill., assignor to Malti Refillable Fuse Company, Chicago, Ill., a Corporation of Illinois. Filed May 28, 1917. Serial No. 171,359. 22 Claims. (Cl. 175—273.)



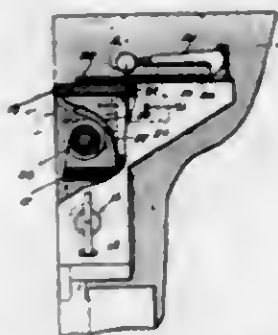
1. A refillable cartridge fuse having in combination, a tubular shell, an inwardly projecting transversely disposed web rigidly secured to an end of said shell, a unitary fuse device extending through said shell and having a portion directly engaging said web, a washer, an abutment on said washer engaging the inner edge of said web to hold the washer against rotation with relation to the shell, and means to secure all of said parts together.

1,311,662. SIGNAL APPARATUS. CHARLES MCKEEVER, Jersey City, N. J., assignor of one-third to William H. Dickinson and one-third to Clem R. Mears, New York, N. Y. Filed Mar. 2, 1916. Serial No. 81,585. 4 Claims. (Cl. 177—337.)



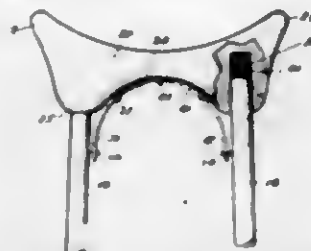
2. A vehicle signal apparatus comprising a front lamp, a rear lamp, a tail lamp, electrical connections, a switch for closing the circuit to the tail lamp, and a unitary device operative when the switch in the tail lamp circuit is closed, for closing the circuit to a light in the front lamp, and also for simultaneously closing the circuit to another light in the front lamp and a light in the rear lamp.

1,311,663. PLAYER-PIANO AND PHONOGRAPH. ELIZABETH C. MECHLING, New York, N. Y., assignor to Melville Clark Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1915. Serial No. 55,549. 11 Claims. (Cl. 84—193.)



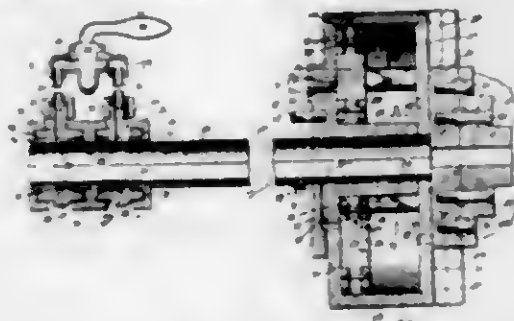
5. In a combined player piano and phonograph, the combination of a piano casing, a structure for supporting within said casing the tracker and spools of the player mechanism, said structure comprising a forwardly open front chamber containing the tracker and spools, and a rear chamber constituting the phonograph horn, and an apertured partition between said two chambers.

1,311,664. CRUTCH. EUGENE PEARL, New York, N. Y. Filed Oct. 7, 1918. Serial No. 257,085. 3 Claims. (Cl. 135—52.)



2. A crutch comprised of a pair of support staffs spaced at their cylindrical upper ends, a head bored to slidably receive the ends of said staff, compression springs in said bored openings against which the upper ends of said staffs abut, a metallic strap suited to the bottom of said head, means for fastening said strap to said head, ends formed with said strap extending downward closely adjacent to said staff, slots in said ends, and screws passing through said slots into said straps holding said springs in compression and permitting a limited independent movement of said head relative to each of said staffs.

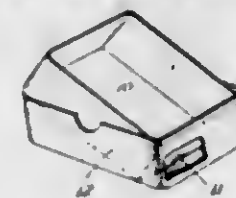
1,311,665. REVERSE-JAW EXPANSION-CHUCK. WILLIAM H. PECK, Chicago, Ill. Filed Mar. 5, 1919. Serial No. 280,837. 7 Claims. (Cl. 279—4.)



1. The combination with a main shaft having a pair of longitudinal conduits adapted for communication with a supply of fluid under pressure, of a cylinder mounted on said shaft and having ports communicating with said conduits and provided at one of its ends with a plurality of radial guideways, a plurality of shafts journaled in the ends of the cylinder on corresponding sides of said guideways and each having a pair of opposed and spirally extended grooves, a pinion on each of said shafts, a rack bar slidably mounted in each guideway in mesh with said pinions, a jaw mounted on each of said rack bars, a piston mounted in the cylinder between the ports thereof

and having openings for said shafts, a ball located in each of the grooves of each of the pinion carrying shafts, means communicatively connecting the said conduits with a supply of fluid under pressure, and a controlling valve located in said means.

1,311,666. SELF-DRAINING SOAP-CONTAINER. FRANK E. PARKINS, Hartford, Conn. Filed Dec. 14, 1917. Serial No. 207,033. 2 Claims. (Cl. 45—28.)



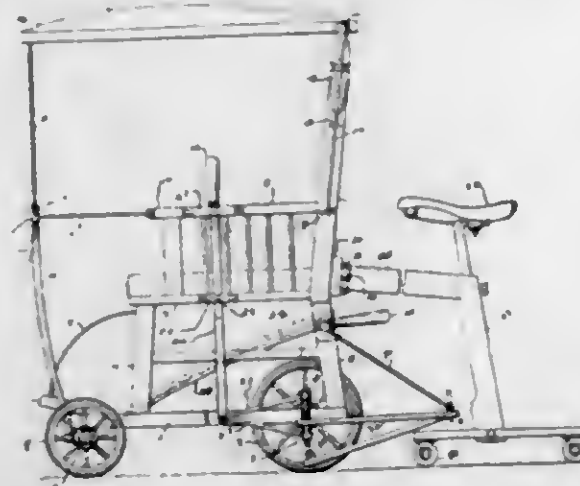
1. A container for soap or the like having a bottom and walls rising straight upward therefrom, one of said walls having a draining aperture substantially at one lower edge, in combination with a cover-basin adapted either to cover said container and aperture, or, when inverted, to support the container securely in an inclined draining position.

1,311,667. ROTARY DRIER. WILLIAM E. PRINDLE, London, Ohio, assignor, by mesne assignments, to The Bockeye Dryer Company, Columbus, Ohio, a Corporation. Filed Sept. 2, 1914. Serial No. 859,889. 4 Claims. (Cl. 34—6.)



1. A rotary drier comprising an outer cylinder provided adjacent its front end with a hot air outlet, means for feeding material into the front end of said cylinder, a hot air producer, an inner cylinder within and in communication with said outer cylinder and communicating at its rear end with said producer, a refractory lining for said inner cylinder, said inner cylinder extending into the rear portion only of said outer cylinder a distance to prevent direct contact of the heated gases with the material after it has passed through said outer cylinder a distance to be in a comparatively dry state, and a suction device connected to said hot air outlet to cause a flow of hot air in a direction opposite to the travel of the material through said outer cylinder.

1,311,668. CARRIER. JOHN STRAND, Chicago, Ill. Filed Nov. 6, 1918. Serial No. 201,353. 4 Claims. (Cl. 208—33.)



1. In a carrier, a wheeled chair, propelling means operatively connected to the wheels of said chair, said means

including a pair of hand levers fulcrumed to the chair seat, a rod connecting two of the chair legs, and a steering rod for the chair wheels, said steering rod being adapted for frictional engagement with the said connecting rod.

1,311,669. CAN-SERVER. CARL VALL, Rochester, N. Y. Filed Apr. 7, 1919. Serial No. 288,073. 5 Claims. (Cl. 65—61.)



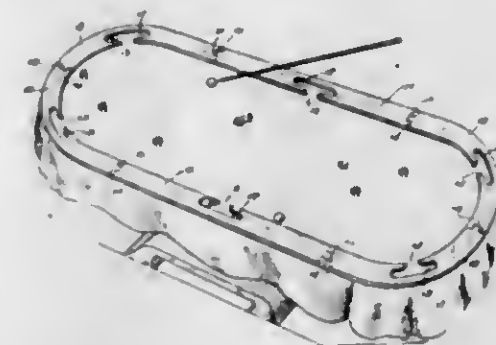
1. In a can server, the combination with a band of resilient material adapted to embrace a can and having separable end portions, of a relatively rigid pouring spout fixed to the outside of the band and having a knife at its base on the inside of the band adapted to puncture the can when the band is compressed against the latter.

1,311,670. CHIN-REST FOR VIOLINS. HENRY C. WATSON, New York, N. Y. Filed Sept. 12, 1918. Serial No. 253,672. 3 Claims. (Cl. 84—74.)



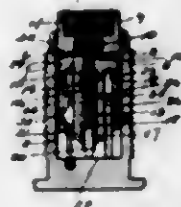
1. The chin-rest described having a base adapted to lie upon a violin and support the tail-piece thereof, to be held in place thereon in engagement therewith by said tail-piece and the tail-piece gut of such instrument, said base having grooves upon its outer face for the reception of said gut.

1,311,671. SECTIONAL RAIL FOR POOL-PLAYING. HERBERT WILLIAM WOODS, New York, N. Y. Filed Aug. 22, 1918. Serial No. 250,944. 2 Claims. (Cl. 40—12.)



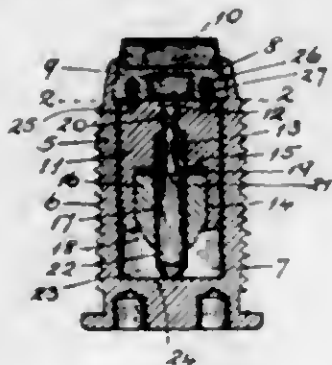
1. A rail for pool playing comprising curved corner sections and straight side sections, the inner sides of all of said sections midway between their ends being provided with cut-in pockets, the ends of each section having means for inter-locking with the contiguous ends of adjoining sections, whereby relative movement of the sections is prevented.

1,311,672. SAFETY PERCUSSION-FUSE. ARTHUR S. BALDWIN, Baltimore, Md. Filed Jan. 9, 1917. Serial No. 141,098. 12 Claims. (Cl. 102—39.)



1. In a safety fuse device for shells or projectiles the combination with a case having a chamber therein, of an explosive element; firing devices in said chambers; means for restraining the said firing devices against movement to an armed position and locking means for engaging the firing devices when they move to the armed position and prevent movement of the same to the explosive element.

1,311,673. PERCUSSION-FUSE. ARTHUR S. BALDWIN, Baltimore, Md. Filed Feb. 7, 1917. Serial No. 147,111. 5 Claims. (Cl. 102—39.)



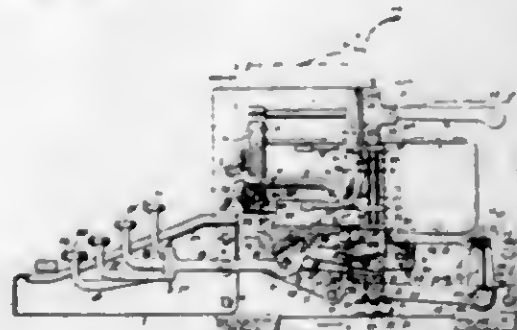
1. In a fuse device the combination with a case having a chamber, of an explosive element; a plunger in said chamber and having a passage therethrough; a bushing body in the plunger and having a passage coincident with the plunger passage; a firing stem extending through the bushing body passage and projecting into the plunger passage; means between the bushing body and plunger and engaging the firing stem and yielding means to hold the stem against creeping toward the explosive element during flight of the shell.

1,311,674. SAFETY-FUSE. ARTHUR S. BALDWIN, Baltimore, Md. Filed Mar. 2, 1917. Serial No. 151,904. 3 Claims. (Cl. 102—39.)



2. In a fuse device the combination with a case having a chamber therein, of an explosive element; a plunger having a plug section and a socket section the socket section having connecting passages of different diameters; a plate interposed between the plug section and the larger of the socket-section passages and a firing pin having one end seated against the plug section and provided with a reduced stem that extends through said plate into said passage of the socket section whereby to hold the two sections in a separated condition.

1,311,675. TYPE-WRITING MACHINE. JOHN H. BARR, New York, N. Y., assignor to Remington Typewriter Company, Ill., N. Y., a Corporation of New York. Filed Mar. 31, 1917. Serial No. 158,913. 21 Claims. (Cl. 197—22.)



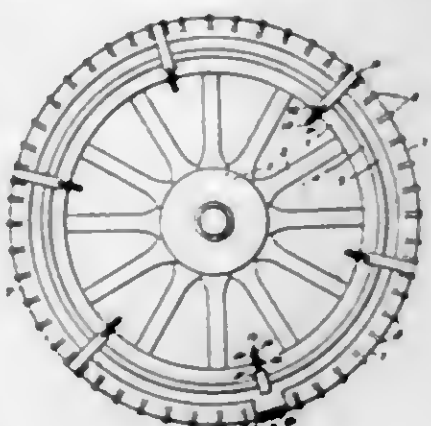
1. In a front strike typewriting machine, the combination of a set of type bars rotatable about fixed centers, a set of bell cranks directly connected to said type bars and having their longer arms extending normally substantially parallel with said type bars and their shorter arms in radial planes, keys, and connections between said keys and said bell cranks, said connections comprising links extending under said longer arms substantially parallel therewith and connected to said shorter arms.

1,311,676. CAMERA. ALVIN HECK, Rochester, N. Y., assignor of one-half to Harold S. Simms, Rochester, N. Y. Original application filed May 10, 1915, Serial No. 27,000. Divided and this application filed Apr. 17, 1916. Serial No. 91,601. 17 Claims. (Cl. 95—1.1.)



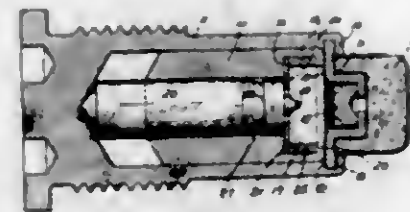
1. A film pack embodying a rasing formed with an exposure chamber and a storage chamber, films in said exposure chamber, and means for directing the films to cause them to occupy the same order within the storage chamber as they occupied in the exposure chamber with their faces relatively reversed.

1,311,677. VEHICLE-WHEEL TIRE. SILVESTRE A. BRADDA, Detroit, Mich. Filed Apr. 9, 1917. Serial No. 160,621. 2 Claims. (Cl. 152—16.)



2. In a device of the character described, the combination with a vehicle wheel and a resilient tire mounted thereupon, of an armor for said tire comprising an annular series of concavo-convex metallic sections embracing the tread portion of the tire and formed with transverse ribs, and a radially yieldable connection between each section and the rim of the wheel for clamping the sections to the tire, said connections being engaged between ribs of the sections to prevent circumferential movement of the sections relative to the connections.

1,311,678. PERCUSSION-FUSE FOR SHELLS. DAVID J. CARTWRIGHT, Easton, Pa., assignor, by mesne assignments, to Liberty Ordnance Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1917. Serial No. 195,265. 8 Claims. (Cl. 102—39.)



1. In a percussion fuse, a hollow casing; a cap supporting member carried by said casing; a plunger unconnected with and located within, and movable longitudinally of said casing; a firing pin unconnected with said plunger or casing, and the rear end of which abuts against the end wall of said casing, so that said plunger may move rearward relative to said firing pin; a resilient combined safety and locking member carried by said plunger and adapted to prevent the firing pin from striking a cap carried by said cap supporting member, and to yield in a direction substantially parallel with the direction of movement of said plunger; and means cooperating with said combined safety and locking member for locking said firing pin and plunger together after said plunger has moved rearwardly, as aforesaid, to thereby arm the fuse.

1,311,679. UNIVERSAL JOINT. EMIL W. CHALIFOUS, Chicago, Ill. Filed Mar. 1, 1919. Serial No. 280,010. 8 Claims. (Cl. 64—91.)



1. In a universal joint, a ball member, a socket member fitting over it and thereby resisting tension between the two members, the ball member having a socket which is polyangular in cross section taken on a plane perpendicular to the axis of said ball member, the socket member having a polyangular head fitting in the socket in the ball member for transmitting the torque, the sides of the head being cylindrical with radii centering at the axis of the socket member, and means for resisting thrust of one of said members toward the other.

1,311,680. HORSESHOE. CARL DANIELSON, Chicago, Ill. Filed Feb. 21, 1917. Serial No. 150,041. 1 Claim. (Cl. 108—32.)



In a horseshoe, a master plate formed with recessed and perforated lobes, calks with heads formed thereupon for passage into and out of the recessed portions of said lobes, apertured screws adapted for insertion into perforated portions of said lobes for engagement with said

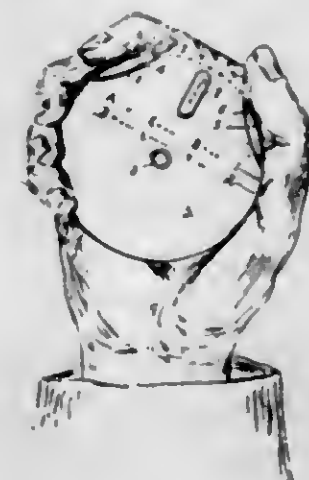
calks, and screws adapted for insertion into perforated portions of said lobes and passage through the apertured portions of the first-named screws to retain the same in adjusted position with relation to the said calks.

1,311,681. LAMP. WILLIAM J. DOEPKER, Akron, Ohio. Filed June 13, 1918. Serial No. 239,744. 1 Claim. (Cl. 240—41.)



A device of the class described comprising a body member approximately parabolically-shaped in longitudinally cross section, a reflector positioned in said body member, a lamp positioned at the focal center of said reflector, said body member provided with a U-shaped coupling flange extending partially around the marginal edge of the open end thereof, a light deflector comprising a hollow fan-shaped structure having an open end and the marginal portion of which is fashioned to interlock with the flange on said body member for coupling said deflector and body member together, the upper wall of said deflector being inclined downwardly at an angle approximating 30°, said upper wall provided with a hollow projection in the general form of a dormer window, the front open end thereof provided with a pane of translucent material, the lower portion of said deflector being open to permit the rays of light from said lamp to project abruptly downwardly and forwardly within well defined lines and immediately in advance of the entire structure.

1,311,682. POCKET SIGNAL-CHART. LEONARD S. DREW, New York, N. Y., assignor to Joseph G. Williams, Boston, Mass. Filed Oct. 31, 1917. Serial No. 199,578. 3 Claims. (Cl. 35—12.)



1. In a device of the character described, a disk having a series of characters arranged radially thereon near its edge and a cover therefor to which the disk is rotatably secured having a series of similar characters with their signification arranged thereon, said cover having its main lower part circular and concentric with the disk and of greater diameter and having a portion projecting beyond the disk at the top to form a hold for the thumb, the cover being provided with a recess on each side of said projection, whereby a portion of the disk is exposed to engagement by the finger to rotate the disk, and a slit between said recesses adapted to exhibit the characters on the disk as the disk is rotated relative to the cover.

1,311,683. TREAD ATTACHMENT FOR WHEEL-RIMS. HENRY N. EORNS, New Holstein, Wis., assignor to John Lanson Manufacturing Company, New Holstein, Wis. Filed July 6, 1918. Serial No. 243,510. 6 Claims. (Cl. 21-213.)



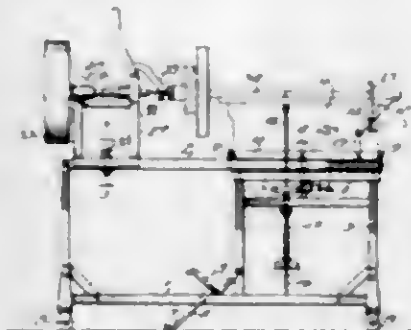
1. In combination with a wheel rim, an attachment comprising a tracking flange, a rim extension adapted to form a wedge between the tracking flange and wheel rim, and means for drawing the extension upon the rim.

1,311,684. STEERING WHEEL AND METHOD OF MAKING SAME. BENJAMIN C. FITCH, Detroit, Mich. Filed Apr. 24, 1919. Serial No. 292,504. 1 Claim. (Cl. 22-202.)



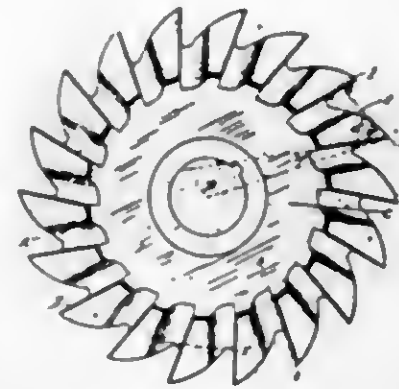
The method of making a steering wheel, consisting in placing a non-metallic rim, having recesses to receive the ends of a metallic supporting spider and hub portion in a suitable die adapted to form a metallic hub with spider arms extending into the respective recesses in the non-metallic rim, pouring fluid metal into said die, under pressure, whereby it may be forced throughout the die and into the rim to form a metallic supporting spider, with only the ends of its spokes extending into the non-metallic rim, and then forcing a suitable core or plunger through the hub portion while the metal is still in a fluid state, whereby a central bore is provided in the hub portion to receive a shaft.

1,311,685. WORK STAND FOR AUTOMOBILE ENGINES. HANS PETER FARRIS, Brayton, Nebr. Filed Sept. 19, 1918. Serial No. 254,798. 5 Claims. (Cl. 20-89.)



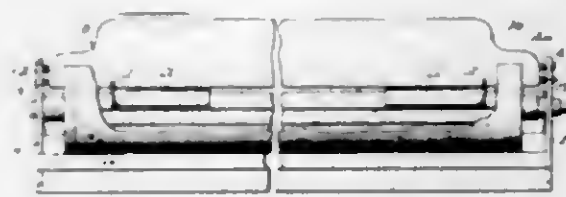
1. In a work stand for automobile engines, a wheeled frame, locking means for said frame, a pulley block adjustably carried by said frame, a shafted pulley carried by said pulley block, a lever carried by said pulley block, a motor block carried by said frame and adapted for adjustment at right angles to the plane of adjustment of said pulley block, and manually operable means for adjusting said motor block upon said frame.

1,311,686. MILLING-CUTTER. ARCHIBALD N. GODDARD, Detroit, Mich. Filed Jan. 2, 1919. Serial No. 269,204. 5 Claims. (Cl. 29-103.)



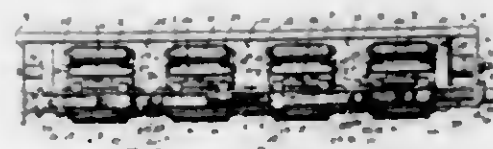
1. In a milling cutter, a tooth having portions thereof adjacent to the clearance space at different angles connected by a curve to which the respective portions are tangents.

1,311,687. PAPER-GUIDE. JOHN A. HAGERSTROM, Scranton, Pa., assignor to Victor Typewriter Company, Scranton, Pa., a Corporation of New York. Filed Sept. 29, 1917. Serial No. 191,077. 3 Claims. (Cl. 197-142.)



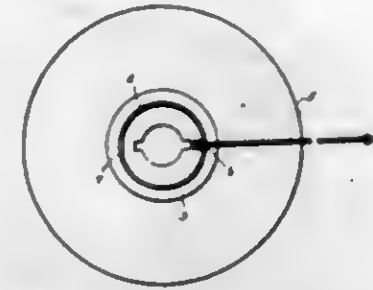
1. In a typewriter, a carriage provided with end frames, a platen journaled in said end frames, a paper table trunnioned in said end frames, a plate extending between said end frames, said plate being provided with a rearwardly presented flange, and a side gage slidable on said plate, said side gage being provided with means extending around said flange and yieldably engaging said plate.

1,311,688. PAPER-FEEDING DEVICE. JOHN A. HAGERSTROM, Scranton, Pa., assignor to Victor Typewriter Company, Scranton, Pa., a Corporation of New York. Filed Nov. 1, 1917. Serial No. 199,741. 9 Claims. (Cl. 197-138.)



1. In a typewriting machine, the combination with a platen, of front and back feed rolls operatively disposed with respect to said platen, a cradle having forwardly and rearwardly presented pairs of arms for supporting said feed rolls, a transversely arcuated paper apron provided with hooks engaging one pair of said arms, and a leaf spring having its ends seated on said pair of arms and its middle portion bearing against said paper apron for yieldably holding said cradle and apron in predetermined relative positions.

1,311,689. RIBBON-ATTACHING MEANS FOR TYPE-WRITERS. JOHN A. HAGERSTROM, Scranton, Pa., assignor to Victor Typewriter Company, Scranton, Pa., a Corporation of New York. Original application filed July 10, 1917, Serial No. 179,665. Divided and this application filed Sept. 9, 1918. Serial No. 253,254. 5 Claims. (Cl. 242-74.)



5. A typewriter spool comprising axially spaced flanges, one of said flanges being provided with a central aperture, a hollow drum concentric with said aperture and extending between said flanges, said drum being provided with an axially extending slot, and a ribbon attaching tape, having means on one end for anchoring it to the edges of said slot.

1,311,690. TROMBONE-WHISTLE. GEORGE HAKIDA, Toledo, Ohio. Filed May 5, 1919. Serial No. 295,033. 5 Claims. (Cl. 46-46.)



1. A device of the character described comprising a whistle tube, a tube slidably mounted on said whistle tube, a guide rigidly supported from the whistle tube, a tube slidable on said guide, and means for connecting the tube slidably mounted on the whistle tube with the tube slidably mounted on the rigid guide.

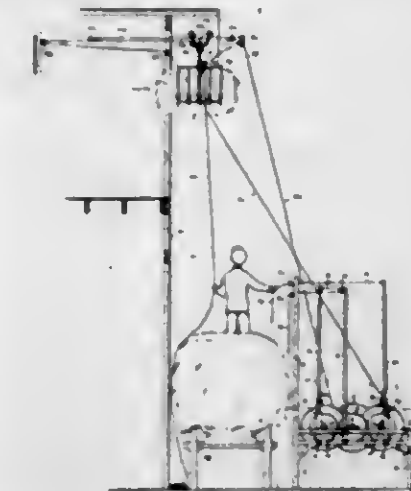
1,311,691. FEED-AGITATOR FOR FEED-TROUGHS. JACOB S. HAMILTON, Harlan, Iowa. Filed Apr. 29, 1919. Serial No. 293,487. 2 Claims. (Cl. 119-53.)



1. The combination with a feed trough having an inclined bottom and with a feed bin having an inclined bottom leading into said trough; of a feed agitator comprising an agitator body and lever having a handle formed with said lever, said handle extending over and near the bottom of said trough; mounting means whereby said agitator body is oscillatably mounted on the bottom of said bin; anti-tilting means secured on the bottom of said bin and extending over the free end of said agitator body; said anti-tilting means having a slot formed therethrough; and a feed agitator formed with said body, said agitator being extended from said body at practically a right angle thereto and through said slot, said agitator having an eye formed through its upper portion; an agitator rod

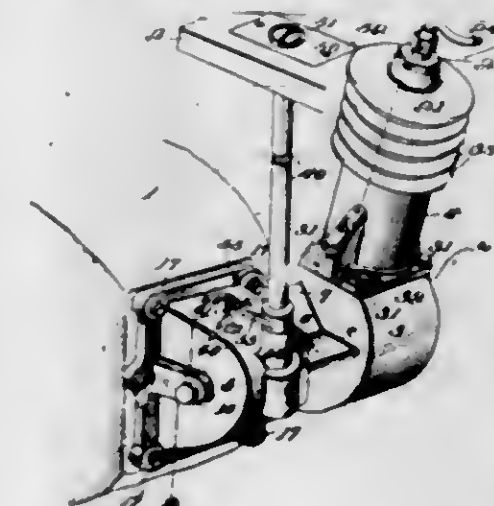
having its lower end loosely connected through said eye with said agitator, said rod being bent to conform with the alignment of the adjacent front wall of said bin; and a loose fitting eye secured on said wall in which eye the intermediate portion of said rod is slidably and oscillatably mounted.

1,311,692. HOISTING AND CONVEYING APPARATUS. STEPHEN C. HARPER, Hampton, Miss. Filed Aug. 10, 1917. Serial No. 186,458. 1 Claim. (Cl. 212-91.)



In an unloading and conveying apparatus, a supporting frame, a power shaft mounted therein and provided with a friction wheel, a drum shaft upon each side of said power shaft having one end mounted in a pivoted bearing, a drum upon each of said drum shafts, vertically disposed levers pivotally mounted in the frame below said drum shafts in which the other ends of said shafts are rotatably mounted, a friction wheel carried by each drum shaft for engagement with the friction wheel on the power shaft, a fixed operating standard at one side of the frame, a centrally disposed fixed standard, an operating cable extending from the free end of one lever and over a pulley upon said central standard to said operating standard, and an independent operating cable extending from the free end of the other lever to said operating standard.

1,311,693. AUTOMOBILE-TIRE PUMP. GEORGE EDGAR HAZARD, Rochester, N. Y., assignor to Kellogg Manufacturing Co., Rochester, N. Y. Filed Jan. 14, 1918. Serial No. 211,892. 10 Claims. (Cl. 230-27.)

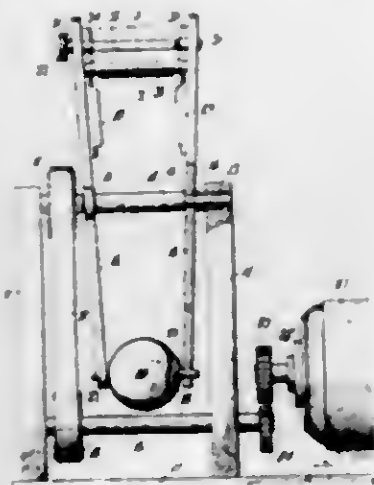


1. An automobile tire pump comprising a crank-case and a cylinder mounted thereabove, the crank-case having an air-inlet opening and an open oil-outlet in its bottom, the platen having a valved air-inlet and the head of the cylinder having a valved air-outlet, the lower end of the cylinder enlarged to receive an oil saturated pad, an oil

saturated pad partially within the cylinder enlargement and extending inward in the path of and engaged by the lower end of the piston, and means for supplying oil to the pad independent of the crank case.

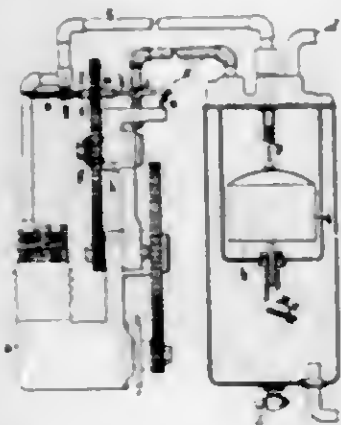
7. An automobile driven tire pump, comprising a gear case having an open side adapted to be attached to and in communication with an automobile gear case and receive lubrication from the latter case, a crank case closed against communication with both said gear cases to prevent receiving lubrication therefrom, a cylinder mounted on the crank case and in communication therewith, a piston in the cylinder, a crank shaft operatively connected with the piston and extending into the pump gear case, and means located at the lower part of the cylinder for lubricating the piston, for the purpose described.

1,311,694. PROJECTING DEVICE. GARABED HAZAR VARTIAN, Brooklyn, N. Y. Filed Feb. 3, 1917. Serial No. 140,472. 5 Claims. (Cl. 124-1.)



1. In a projectile impelling device, a rotatable element including a pair of relatively movable members adapted to support the projectile upon and therebetween, resilient means for urging the members out of such engagement, and a trigger mechanism for retaining the members in such engagement, and means operable during rotation of the elements to release the trigger mechanism to permit the projectile to be impelled.

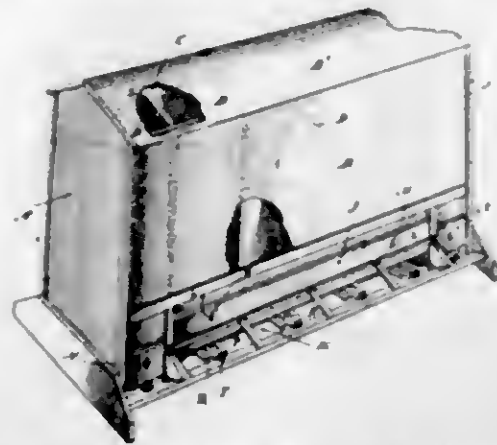
1,311,695. LIQUID FUEL SUPPLY SYSTEM OF INTERNAL COMBUSTION ENGINES. JOSEPH HIGGINSON and HUBERT ARNDT, Stockport, England. Filed Jan. 19, 1918. Serial No. 212,787. 4 Claims. (Cl. 158-36.)



1. In liquid fuel supply apparatus for internal combustion engines, in combination, a vessel into which fuel is drawn by suction and from which it is discharged by gravity, a float controlled valve in said vessel regulating the amount of fuel drawn into the vessel, a source of vacuum, positively timed means controlling communication between said source of vacuum and said vessel, and means restoring atmospheric pressure in the intervals between the suction periods, as set forth.

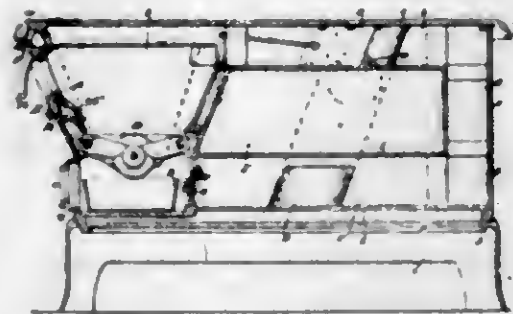
tion between said source of vacuum and said vessel, and means restoring atmospheric pressure in the intervals between the suction periods, as set forth.

1,311,696. AUTOMATIC STOCK-FEEDING MACHINE. WILLIAM M. HOANBECK, Peoria, Ill. Filed Mar. 28, 1917. Serial No. 157,017. 7 Claims. (Cl. 110-53.)



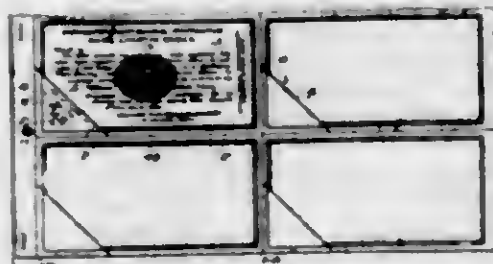
1. As an article of manufacture, an agitator for a feeding machine comprising a flat frame arranged to pivot between its ends within the machine upon its floor, said frame being rounded at one of its ends and having substantially straight parallel extensions each projecting from said rounded part outside the wall of said machine, the outer marginal edges of the latter and the parallel extensions being thinner than their inner edges, the said frame at its end outside the said machine having a portion extending perpendicularly to the plane thereof.

1,311,697. STOVE. JANAR JACUET, East Chicago, Ind. Filed Nov. 8, 1917. Serial No. 200,942. 1 Claim. (Cl. 126-1.)



In a stove of the character described a smoke discharge member, a fire chamber in communication with the smoke discharge member, a grate arranged at the bottom of said fire chamber, a door arranged in one side of the fire chamber extending longitudinally of the grate, and a pivotally mounted protecting plate connected with said door and normally overhanging part of said grate.

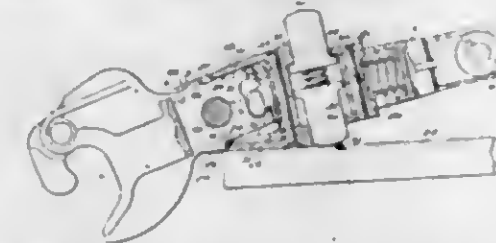
1,311,698. COMMERCIAL CERTIFICATE. NELSON R. JESSE, Stamford, Conn., assignor to Merchants Profit Sharing Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1915. Serial No. 61,686. 2 Claims. (Cl. 283-51.)



1. A bank coupon savings certificate comprising a bank coupon check, a coupon carried thereby and detachable from the bank coupon check, an element provided with spaces in which the coupons may be aggregated, said element constituting a bankable certificate of predetermined value when the spaces thereon are filled with coupons and said coupon bearing characters designating a currency value representing a discount or a sale, and said bank coupon check constituting a receipt for a purchase when the coupon is detached therefrom.

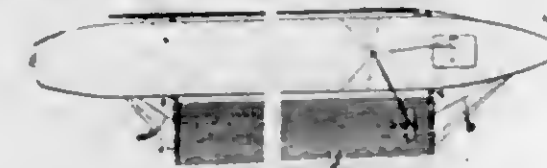
from the bank coupon check, an element provided with spaces in which the coupons may be aggregated, said element constituting a bankable certificate of predetermined value when the spaces thereon are filled with coupons and said coupon bearing characters designating a currency value representing a discount or a sale, and said bank coupon check constituting a receipt for a purchase when the coupon is detached therefrom.

1,311,699. DRAFT-RIGGING MECHANISM. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1918. Serial No. 260,180. 18 Claims. (Cl. 213-42.)



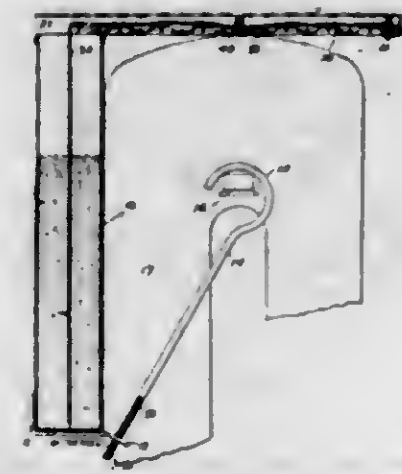
1. In draft rigging mechanism, the combination with a coupler stem, of a coupler head, and means for pivotally connecting said stem and head, said stem having spaced arms adapted to receive a portion of said head between them and being provided rearwardly of the point of pivotal connection of said head and stem with means for rigidly connecting said spaced arms, said last named means also serving to limit the pivotal movement of said head with respect to said stem.

1,311,700. AEROPLANE AND APPARATUS FOR LAUNCHING AND RECEIVING SAME. FREDERICK WILLIAM LANCHESTER, London, England. Filed Jan. 18, 1919. Serial No. 271,931. 4 Claims. (Cl. 244-2.)



1. An aeroplane adapted to alight on a track and provided with a runner designed to engage the track, and brake means located on the runner and operable upon engagement of the runner with the track for clamping the track.

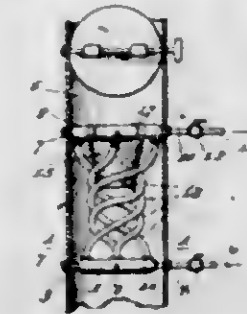
1,311,701. HUMIDIFIER. DORA F. LOUDON, New York, N. Y. Filed Mar. 25, 1919. Serial No. 285,007. 3 Claims. (Cl. 237-78.)



3. A humidifier, comprising a receptacle open at the top and adapted to contain water, adjustable brackets adapted to support the said receptacle on a radiator, a perforate plate adapted to rest on the top of the radiator and on the top of the said receptacle, a foraminous support mounted on the under side of the said plate, and a piece of absorbent material having a portion stretched over the said support below the plate and having another portion extending into the said receptacle.

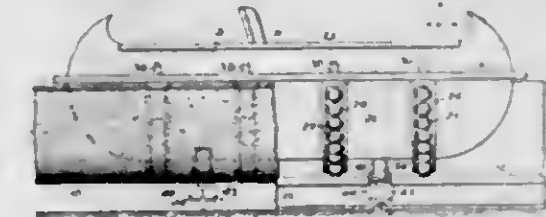
adapted to support the said receptacle on a radiator, a perforate plate adapted to rest on the top of the radiator and on the top of the said receptacle, a foraminous support mounted on the under side of the said plate, and a piece of absorbent material having a portion stretched over the said support below the plate and having another portion extending into the said receptacle.

1,311,702. WATER-HEATING ATTACHMENT FOR FLUES. PAUL MATTHEW, Brooklyn, N. Y. Filed Mar. 28, 1918. Serial No. 225,302. 5 Claims. (Cl. 257-229.)



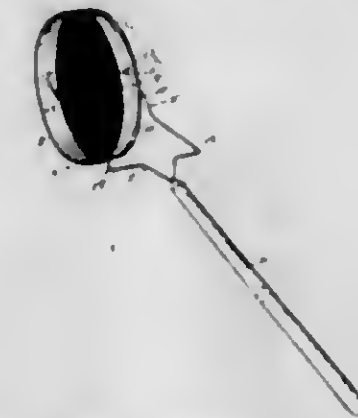
3. A water heating appliance of the character described, comprising a pair of water circulating rings spaced apart, one of said rings being of less diameter than the other, securing means projecting from the rings, a plurality of tubes connecting the rings for conveying the water from the smaller to the larger tube, and means for connecting water pipes with the rings.

1,311,703. PLEASURE RAILWAY. PETER FREDERIC MEYER, Brooklyn, N. Y. Filed Apr. 22, 1919. Serial No. 291,858. 11 Claims. (Cl. 104-85.)



1. In a pleasure railway, a trough-like track having a sinuous guideway, and a car mounted to travel on the said track and having means engaging the said guideway to rock the car transversely during its forward movement.

1,311,704. FLYCATCHER. THEODORE C. NORTHCOTT, Luray, Va. Filed Feb. 23, 1918. Serial No. 218,805. 2 Claims. (Cl. 43-1.)



1. An insect catcher comprising an annular body having a perforated partition extending fully over the interior of the same to one side of the central diameter thereof and at a distance inwardly from opposite side edges of the body to provide trapping receptacles of different depths for alternate use, and a spring ball embodying arms loosely and pivotally engaging diametrically.

opposite portions of the center of said body and having a resilient frictional binding action on opposite portions of the edge of the body, the said arms being yieldable laterally to permit rotation of the body within and between the arms to bring different sides of the catcher into operative position without detaching the ends of the ball from the body.

1,311,705. STOVE ATTACHMENT. JOHN J. OLSON, Belview, Minn. Filed Oct. 29, 1917. Serial No. 198,629. 1 Claim. (Cl. 126-275.)



A device of the character described including an oven housing having spaced burner receiving seats formed to its bottom, flanged inverted cone-shaped deflectors pivoted to said bottom and capable of being swung downwardly over the burner receiving seats, a duct connected to and communicating with said oven by way of one of the walls thereof at spaced points throughout the same, dampers interposed in the connections between said duct and the wall of said housing whereby to control the exhaust of heat and gases from the housing.

1,311,706. UNION FOR ATTACHMENT OF STRUTS ON FRAMES IN AIRCRAFT. FREDERICK HANDLEY PAGE, London, England. Filed May 29, 1919. Serial No. 300,014. 3 Claims. (Cl. 244-31.)



1. A union for receiving struts in V form, comprising a sheet-metal blank bent into an approximately conical box-form joined together at the edges and having faces at right angles to said struts and sockets on such faces for receiving said struts, the apex of the box being adapted to receive a joint-pin for attachment to the aircraft.

1,311,707. BILLIARD CUE-TIP HOLDER. GIUSEPPE PALLADINO, Allentown, Pa. Filed Dec. 31, 1918. Serial No. 269,128. 1 Claim. (Cl. 46-9.)



The combination with a billiard cue having its end reduced, of a sleeve received on said reduced end, a portion of the reduced end within the sleeve being further reduced, a spring collet inserted in the sleeve and closely surrounding the said latter reduced portion which is formed with a conical end, the collet jaws being formed

with under-faces engaging upon said conical end and being further formed with lips for engaging a cue tip and with a seat for the bottom of the tip, and a tip mounted on said seat and clasped by said lips.

1,311,708. WINDOW-LOCK. JAMES EDWIN PHILLIPS, New York, N. Y. Filed Feb. 6, 1919. Serial No. 275,421. 4 Claims. (Cl. 16-30.)

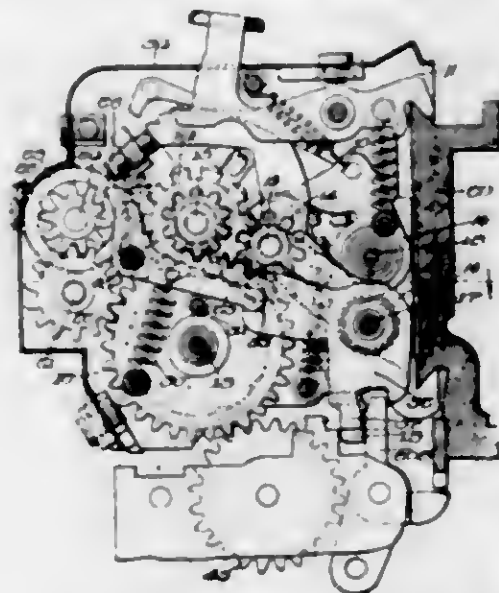


3. In a locking device for windows the combination with upper and lower sashes of a window of a locking bar arranged exteriorly of said sash formed with a central section adapted to fit against the top of the lower sash, and a pair of end sections, one end section extending along the upper sash and the other end section along the lower sash, a socket member overlapping the end of the locking member extending along the upper sash, means connecting the socket member with said upper sash, and a hook normally overlapping the end of the locking member extending along the lower sash.

1,311,709. MEANS FOR PREVENTING FORMATION OF MOLD. GERALD P. PLAINANCE, St. Louis, Mo., assignor to Ralston Purina Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 18, 1918. Serial No. 223,065. 1 Claim. (Cl. 99-1.)

Solid, substantially dry, finely divided granular or pulverulent food material, having added thereto acetic acid in the proportion of approximately less than one per cent.

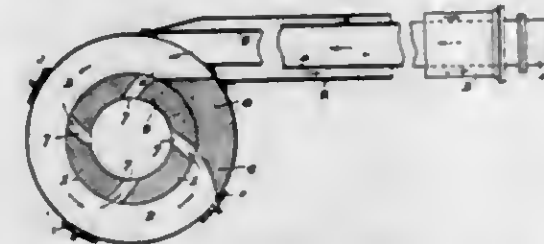
1,311,710. CALCULATING-MACHINE. ARTHUR F. POOLE, Chicago, Ill., assignor to Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 31, 1913. Serial No. 757,934. 36 Claims. (Cl. 235-59.)



32. In a recording calculating machine, the combination of a totalizer, a set of numeral keys adapted to insert numbers in said totalizer, a type bar adapted to be actuated by one of said numeral keys, said type bar hav-

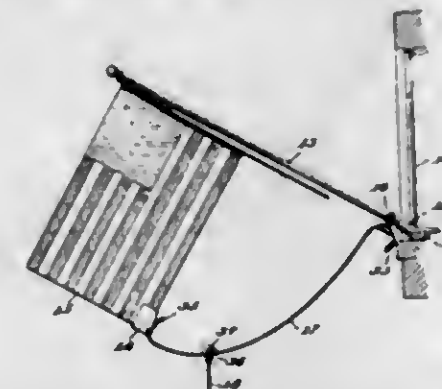
ing a normal and a shift position and being adapted to print one character when in its normal position and a second character when in its shift position, mechanism individual to said totalizer for locking said type bar and means for rendering said locking mechanism ineffective when said totalizer stands at zero.

1,311,711. SMELTING FURNACE OR CUPOLA. ANDREW POULSON, Hough Green, near Widnes, and WILLIAM CHARLES AUGUSTUS MATE, Garstang, England, assignors to Charles Joseph Hourke, Cheshire Hulme, Manchester, England. Filed Oct. 15, 1917. Serial No. 196,751. 3 Claims. (Cl. 266-30.)



2. A smelting furnace or cupola, comprising; a chamber surrounding the cupola to which the blast is delivered, a series of twyer holes leading from the chamber tangentially into the furnace, a jacket surrounding the blast inlet to the chamber to which jacket a portion of the hot gases from the cupola is led, and means for positively inducing the flow of hot gases through the jacket in a direction opposite to that of the air blast.

1,311,712. NON-FURLING DEVICE FOR BANNERS. THOMAS W. POWEN, Washington, D. C. Filed June 12, 1919. Serial No. 303,547. 14 Claims. (Cl. 110-12.)

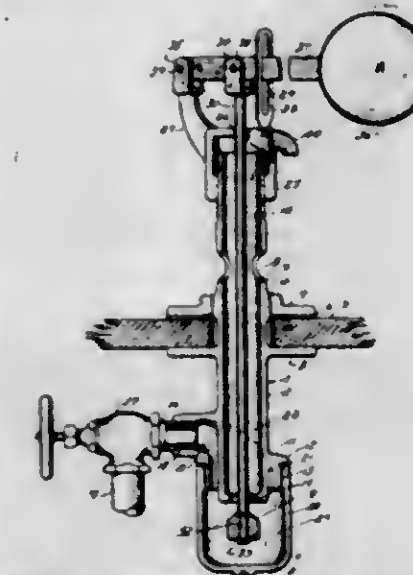


1. A non-furling device for banners comprising a flexible connection loosely suspended between the free end portion of the banner and a fixture.

1,311,713. AUTOMATIC INLET-VALVE MECHANISM FOR FLUSH-TANKS AND THE LIKE. ARTHUR P. RICHARDSON, Los Angeles, Calif. Filed Jan. 31, 1919. Serial No. 274,234. 2 Claims. (Cl. 137-104.)

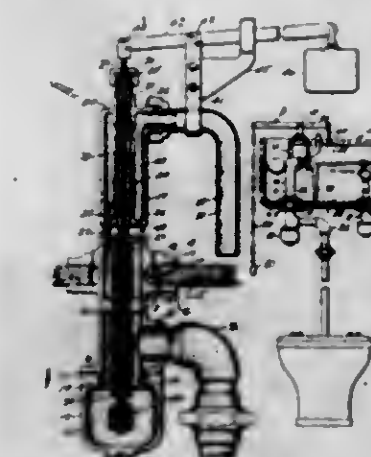
1. An automatic inlet valve mechanism comprising a water column casting having a tubular neck formed integral with a clamping flange and extending downwardly from the flange, an externally screw threaded portion extending upwardly from the flange, a tubular portion extending upwardly from the externally screw threaded portion and having discharge openings, an externally screw threaded portion extending upwardly from the said tubular portion, a valve seat head extending downwardly from the tubular neck and having an outwardly extending horizontal flange, an externally screw threaded nipple extending downwardly from the last named flange, an internally screw threaded nipple extending laterally from the upper part of the head above the said last named flange, there being a passage leading from the internally screw threaded nipple downwardly through the externally screw threaded nipple, a valve seat formed in the lower

face of the valve seat head; a cap screwed down upon the externally screw threaded portion, there being a central opening through the cap; a pivot bracket extending outwardly and upwardly from the cap; a guide bracket extending upwardly from the cap at the opposite side of the opening from the pivot bracket, said guide bracket having a vertical slot; a valve stem inserted downwardly through the opening and through the water column casting; a valve upon the lower end of the valve stem in position to engage the valve seat; a bifurcated head upon



the upper end of the valve stem; a second bifurcated head upon the upper end of the pivot bracket; a float lever connected to the second bifurcated head and to the first bifurcated head and inserted through the slot in the guide bracket; a float upon the float lever; and a cap screwed upon the externally screw threaded nipple of the valve seat head and covering the valve seat and the valve and connecting the passage from the internally screw threaded nipple to the interior of the water column casting through the valve seat.

1,311,714. FLUSH-TANK SIPHON MECHANISM. ARTHUR P. RICHARDSON, Los Angeles, Calif. Filed Feb. 24, 1919. Serial No. 278,798. 2 Claims. (Cl. 4-5.)



1. A flush tank siphon mechanism comprising the combination with a flush tank box having a large opening formed through its bottom, of a casting having a flange fitting upwardly against the lower face of the bottom, a neck extending downwardly from the flange, an internally screw threaded boss extending laterally from the lower end of the neck, a second flange extending outwardly from the lower end of the neck below the boss, an externally screw threaded nipple extending downwardly from the second flange, a neck extending upwardly from the first flange loosely through the opening in the bottom of the box, an externally screw threaded enlargement extending upwardly from the neck, an extension extending upwardly from the enlargement, a web extending part way

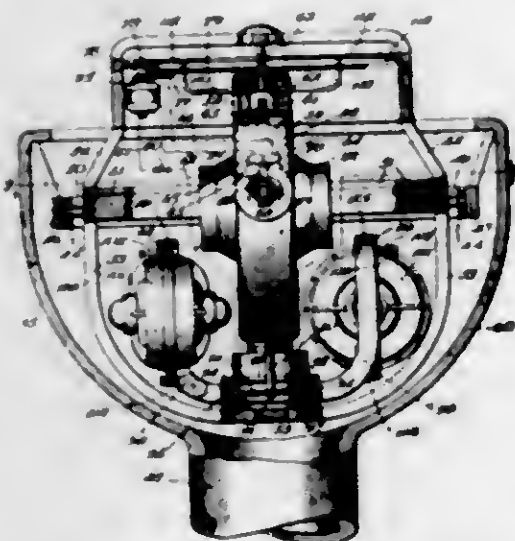
across the upper end of the extension, an externally screw threaded nipple extending upwardly from the web, an externally screw threaded union member extending laterally from the upper end of the extension below the web, there being a passage through the union member and downwardly from the web to the lower end of the first nipple, a pipe extending from the web and from the nipple downwardly to the lower end of the first externally screw threaded nipple, and hollow braces connecting the pipe to the wall of the extension; a cap having a large chamber and a reducing flange at the upper end of the chamber, the reducing flange being screwed upon the first externally screw threaded nipple against the second flange; an outlet pipe connected to the boss and leading downwardly; an intake pipe connected to the union member and extending downwardly to a point just above the bottom; a cap screw seated upon the nipple above the web and having a central opening; a valve stem mounted through the cap and extending through the pipe to the cap chamber; a valve seat at the lower end of the pipe; and a valve upon the valve stem to the cap chamber to fit the valve seat.

1,311,715. FIREARM. WALDO E. ROSENTHAL, Appleton, Wis. Filed Nov. 19, 1917. Serial No. 202,747. 20 Claims. (Cl. 42-3.)



1. In a hand firearm, the combination of a barrel, a barrel receiver in which the barrel is removably held, a main frame on which the forward end of the barrel receiver is mounted to swing, and a back strap mounted to swing on the main frame and engaging the rear end of the said barrel receiver to lock the latter in place on the main frame.

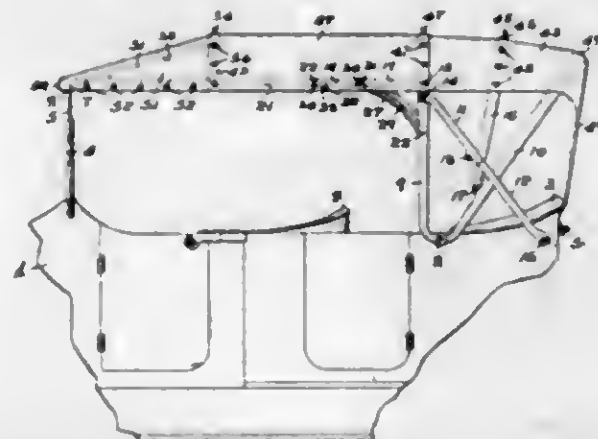
1,311,716. GYROSCOPIC COMPASS. GEORGE A. ROSENTHAL, Brooklyn, N. Y., assignor to The Carle Gyroscopic Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1918. Serial No. 215,512. 38 Claims. (Cl. 74-78.)



1. In a gyroscopic compass adapted to be carried on an unsteady platform, the combination of a weighted gyroscopic directive element; pendulous supporting means therefor adapted to rotate around a vertical axis; means adapted to compensate for errors due to friction while

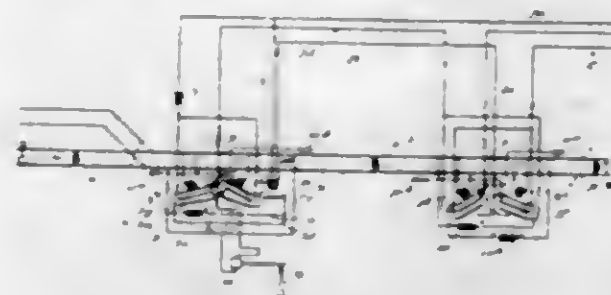
said supporting means is moving around said axis; and stabilizing means adapted to suppress precessional movements due to motions of said platform substantially as described.

1,311,717. TOP OR HOOD FOR VEHICLES. WILLIAM M. SCHLIER, Orange, N. J. Filed Mar. 16, 1918. Serial No. 222,834. 6 Claims. (Cl. 21-02.)



1. A top or hood for vehicles, comprising a collapsible supporting frame-work, top or cover elements mounted respectively upon the rear portion and the front portion of said frame-work, and an interdisposed cover-section adapted to be detachably mounted upon said frame-work, whereby the top or hood may be used as a cover above the front and rear seats of the vehicle when said cover-section is attached, and may be used merely over a single seat when said cover-section is detached, an attaching means connected with one of said top or cover-elements, independent of the means to which said interdisposed cover-section is to be attached, and means connected with and extending from the lower surface-portion of said detachable cover-section to which said attaching means is adapted to be attached.

1,311,718. ABSOLUTE AND PERMISSIVE BLOCK-SIGNALING SYSTEM. JUDSON SHYECRAFT, Eskridge, Kans. Filed Aug. 16, 1917. Serial No. 186,557. 7 Claims. (Cl. 240-33.)

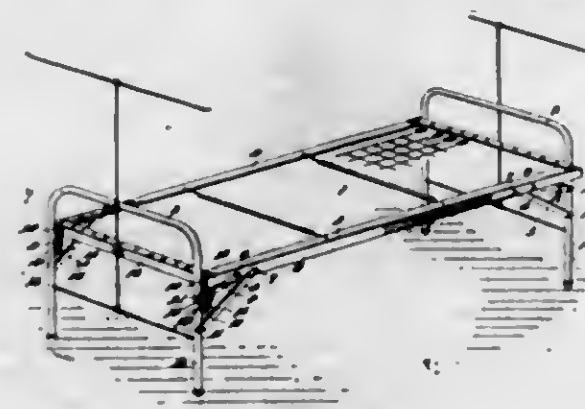


1. In a block signaling system, a pair of track rails, said rails being divided up into a series of sections, each section being divided up into a plurality of blocks, the blocks of each section being insulated from one another, a ramp at each end of each block, all of said ramps being normally electrified, and means for cutting off the current from the ramp at one end of the section when a train enters the opposite end of the section.

1,311,719. FOLDING BED. FRANK F. SIMPSON, U. S. Army. Filed Dec. 9, 1918. Serial No. 265,921. 5 Claims. (Cl. 5-0.)

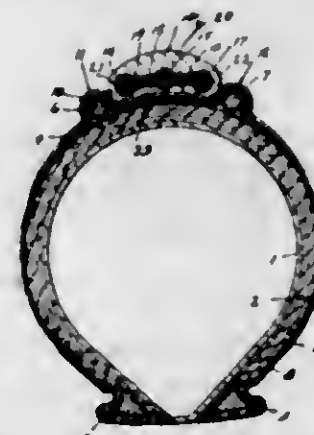
1. A folding bed including a bed spring frame, head and foot sections, links for awingingly connecting said sections respectively to the bed spring frame and limiting the movement of said sections when in normal position

for supporting the frame, hooks carried by the bed spring frame, and cams cooperating with the hooks and adapted



to cause an upward pressure of the links, whereby said sections are rigidly connected to said frame when in supporting position.

1,311,720. DETACHABLE AUTOMOBILE-TIRE TREAD. LEONARD T. SINTZEL, Los Angeles, Calif. Filed Oct. 4, 1918. Serial No. 250,821. 2 Claims. (Cl. 152-17.)



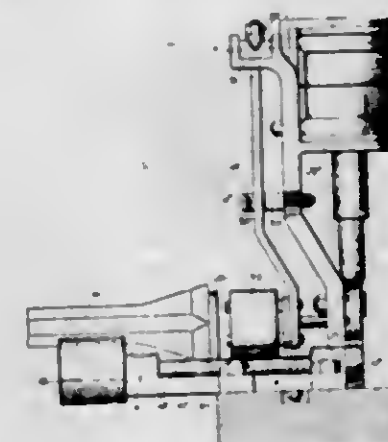
1. In a pneumatic tire casing, a removable tread comprising, a middle cable of wire, two side cables one on each side of the middle cable, canvas wrapped around the cables, and a covering of rubber applied to the canvas.

1,311,721. SCRAPER-BAR SUPPORT FOR PASTING-MACHINES. WALTER THOMAS SMITH, Cornell, Wis., assignor to Cornell Wood Products Company, Cornell, Wis., a Corporation. Original application filed Apr. 25, 1918, Serial No. 230,770. Divided and this application filed Apr. 28, 1919. Serial No. 293,270. 2 Claims. (Cl. 91-53.)



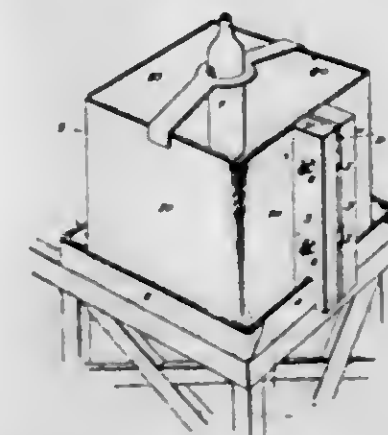
1. The combination with the four-sided scraper bar of a pasting machine, of a pair of inclined hanger bars for said scraper bar, the upper ends of said hanger bars being adapted for attachment to the pasting machine, while their lower ends are bent laterally at right angles to the inclined portions of said bars and then upwardly in parallel relation with said inclined portions, thus forming hook-shaped poly-sided sockets receiving the ends of said scraper bar, and bolts passing through said upwardly bent bar ends and through the inclined body portions of said bars, above said scraper bar, for clamping the latter tightly in place.

1,311,722. AUTOMATIC TEMPERING-MACHINE FOR TOOLS. CLARENCE ORRIN STEE and KARL HOLGER KOLBEDE, Cerro de Pasco, Peru. Filed June 10, 1918. Serial No. 239,227. 4 Claims. (Cl. 148-10.)



1. An apparatus of the character described including a movable support for heated articles to be tempered, magnetic means subject to the influence of the heated article, a latch for normally holding the said support against movement, electrical means for releasing the latch and including a pair of normally spaced contacts, and means in connection with said magnetic means for causing engagement of said contacts when the magnetic means move under the influence of the heated article.

1,311,723. ICE-FORMER DEVICE. THEODORE SWANSON, Lynn Center, Ill. Filed Jan. 18, 1918. Serial No. 212,436. 1 Claim. (Cl. 02-110.)



As a new article, a knock-down ice cake former comprising a flat square shaped resilient metal plate whose corners are split inwardly to a bending line, whereby, when the edges of the said bottom plate are bent up, the said bottom plate assumes a trough shape, the body plate having such length relatively to the bottom plate, whereby when bent to form four sides to constitute the body form, the said body form can be loosely set within the bottom trough, the said body plate including end extensions, each formed with edge notches and a notch in the bottom end, the said extensions being foldable against each other and adapted to rest over the upper edge of one of the trough sides, and a pair of clamping strips, each having a notch in the lower end for fitting onto the upper edge of the aforesaid trough sides and having bolt apertures that align the edge notches in the body extensions, when the parts are assembled for use, and nut and bolt devices for clamping the strips and the end extensions of the body together, the lower edge of the said clamping strips constituting a means for holding the formed body spaced from the sides of the trough shaped body, as specified.

1,311,724. WRENCH. SAMUEL K. SWEITZER, New Freedom, Pa. Filed June 29, 1918. Serial No. 242,651. 2 Claims. (Cl. 81—53.)



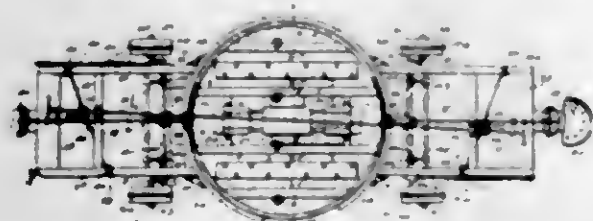
2. A wrench of the class described comprising a body portion, a relatively stationary jaw carried thereby, a movable jaw carried by the body portion and coacting with the first named jaw, the said movable jaw being formed with a leg slidably engaging the body portion, a handle pivotally connected with the body portion, and a pair of intermeshing tooth sectors carried in the body portion, the one being operatively connected with the handle and the other with the movable jaw, whereby the exercise of pressure of the handle in one direction may serve to lock the jaw while pressure on the handle in a reverse direction releases the jaw for the purpose specified.

1,311,725. SECONDARY COIL. SHOUJIRO TAKASAKI and JUTARO MIYAMOTO, Shiga-Ken, Japan. Filed Mar. 14, 1917. Serial No. 154,897. 2 Claims. (Cl. 175—362.)



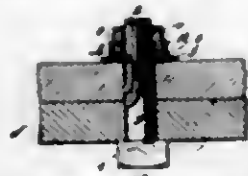
1. A secondary coil including a number of units, each unit comprising a disk of insulating material formed with an opening through its center for the reception of a primary coil, a single piece of wire embedded in the faces of said disk and entering the same at its periphery and extending in gradually narrowing spirals to a point adjacent the opening in said disk, then bridging through to the other face of said disk and extending in gradually widened spirals to a position adjacent the outer periphery of said disk and disks of insulating material placed between each unit.

1,311,726. TRACTOR. FRANCISCO TEREIRO, Unión de Reyes, Cuba. Filed Dec. 8, 1917. Serial No. 209,217. 3 Claims. (Cl. 180—21.)



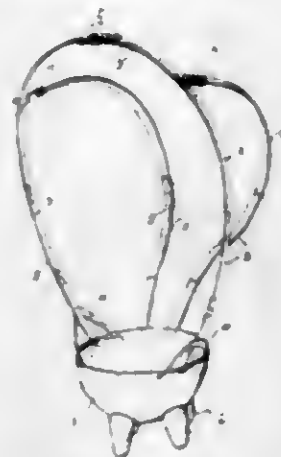
1. A tractor including an inner and an outer frame connected together, horizontal bars rotatably mounted in said outer frame, arms secured to said shaft, wheels, horizontal bars connecting said wheels, links interposed between the horizontal bars and arms, and means for rotating the shafts.

1,311,727. NUT-LOCK. STEPHEN THOMAS, New York, N. Y. Filed Aug. 30, 1918. Serial No. 252,076. 4 Claims. (Cl. 151—3.)



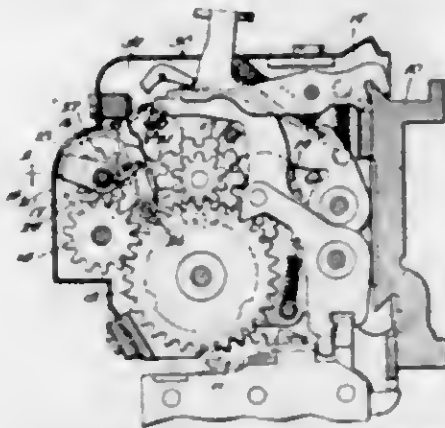
2. In combination with a bolt having a key-slot, a nut lock comprising a washer-like body made of an outer piece of metal and an inner piece of metal secured together, the inner piece being of harder metal than the outer piece and being provided with a key for moving in the key-slot, the outer piece having its periphery free to permit bending into engagement with a nut mounted on the bolt.

1,311,728. SANITARY UDDER-PROTECTOR. FLORENCE A. THORNTON, Corsicana, Tex. Filed Mar. 20, 1918. Serial No. 223,604. 1 Claim. (Cl. 119—146.)



In a device of the class described, a sack composed of thin flexible rubber shaped to encompass and snugly fit the udder of a cow and having integral test pockets, side straps secured to the upper edge of said sack at diametrically opposite points, bearing straps connected at one end with said sack on opposite sides of said side straps at points spaced therefrom and connected at their other ends to said side straps, rear straps secured at one end to the sack between the side straps at points spaced from each other and from the straps and detachably connected at their other ends to the side straps near the upper ends thereof, and longitudinally yieldable inserts arranged intermediately of the ends of both the side and rear straps.

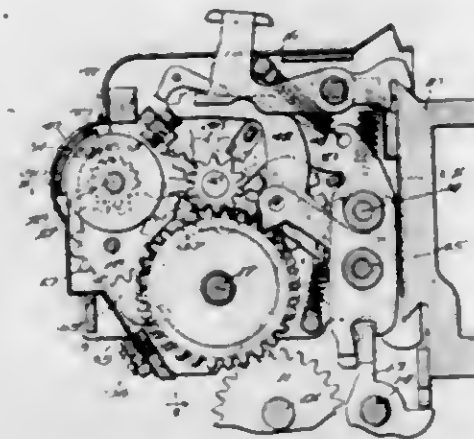
1,311,729. CALCULATING-MACHINE. JOHN C. WAHL, Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 25, 1916. Serial No. 122,000. 11 Claims. (Cl. 235—59.)



11. In a calculating machine, the combination with a series of indicating devices, means for actuating the

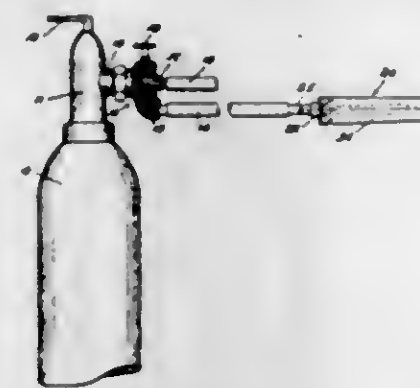
same, a signal common to said devices, and operating means between said devices and said signal whereby the latter is displayed upon said indicating devices assuming a predetermined relative position, said operating means being adapted to permit the indicating devices to shift to a new position and coincidentally throw the signal to non-indicating position.

1,311,730. CALCULATING-MACHINE. JOHN C. WAHL, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 20, 1917. Serial No. 187,106. 5 Claims. (Cl. 235—59.)



5. In a calculating machine, the combination of a totalizer, a number wheel therein, said wheel having thereon numbers arranged in two rows, an oscillating shutter cooperating with said number wheels, said shutter having openings adapted to display figures in one or the other of said rows, a gear arranged to operate said number wheel, a cam rigid to said gear, and means operated by said cam to shift said shutter to alternate positions.

1,311,731. ACETYLENE-BURNER. GEORGE P. WARRINER, Los Angeles, Calif. Filed Nov. 14, 1918. Serial No. 262,540. 4 Claims. (Cl. 158—101.)



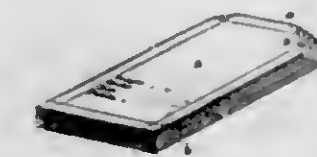
1. An acetylene burner comprising a circular base casting provided with an internally threaded central boss adapted to connect with a delivery pipe, said base casting having a central bore and a circular series of inwardly converging holes, said circular series of holes being concentric with said central bore, a nozzle fixed in said central bore, said nozzle having a tapered end which has a primary central vent and having a series of outwardly diverging secondary vents around and back of said central vent, and an enveloping sleeve attached to said base casting with its open end extending beyond said nozzle so as to deflect the gases issuing from said diverging vents toward the nozzle axis, said enveloping sleeve having a series of equally spaced air inlet holes near said base casting.

1,311,732. DETONATING-FUSE. CHARLES P. WATSON, Philadelphia, Pa., assignor to Watson Arms Company, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 23, 1916. Serial No. 121,815. 6 Claims. (Cl. 102—39.)



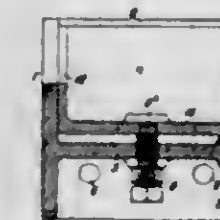
1. The combination, in a percussion fuse, of a body supporting a firing pin longitudinally movable relative to the said body, and pivotally supported means movable when acted upon by centrifugal force and arranged to act on the firing pin and cause it to be moved longitudinally into armed position when the said means move due to centrifugal force.

1,311,733. FAN-FOLDED BOOK. WILLIAM FRANKLIN WILMOT, Zion City, Ill. Filed May 2, 1917. Serial No. 165,941. 3 Claims. (Cl. 283—36.)



1. A fan folded book comprising a sheet folded alternately in reverse directions to form a series of superposed connected leaves, the first leaf and each succeeding pair of leaves being cut away at one corner and increasing progressively in length at one side to the said cut away corners, and the leaves of each pair being of the same length so that a portion of each alternate leaf is exposed by cut away corners of the next preceding pair of leaves.

1,311,734. LOCOMOTIVE AXLE-BOX. CLIFFORD ETCHER WINBY, Sutton, St. Helens, England. Filed Oct. 7, 1916. Serial No. 124,359. 3 Claims. (Cl. 64—10.)

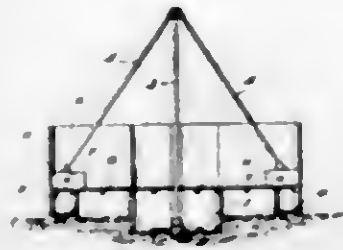


1. In a locomotive axle box, a sponge box having a bottom, sides, and end and one end formed open, said bottom being provided with a recess at the open end; a tray removably mounted within the sponge box and adapted to be removed therefrom through the open end, said tray having openings formed in the lower surface of its bottom and provided at its outer end and in its bottom with a notch adapted to be placed at the recess; and bolts having screw threaded engagement with the bottom of the sponge box and provided at their upper ends with smooth extensions which enter the openings in the bottom of the tray.

1,311,735. BOAT WITH STABILIZING-PONTOONS. CHARLES L. WOODS, Pensacola, Fla. Filed Apr. 24, 1917. Serial No. 164,208. 1 Claim. (Cl. 114—123.)

In a boat, a hull, a deck of greater width but of less length than the hull having its upper sides disposed laterally of said hull, pontoons disposed longitudinally of the outer portions of said deck and secured to the lower fare thereof, supplemental air chambers on the deck over said pontoons, braces connected to the bow and stern por-

tions of said hull and the extremities of the deck, certain of the braces being adjustable, standards arranged in the hull having their upper ends interconnected, oblique trusses connected to the upper ends of said standards and



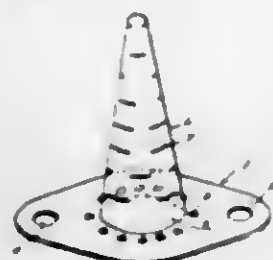
extending laterally therefrom into engagement with said supplemental air chambers, and other oblique trusses connected to the upper ends of said standards disposed longitudinally of the hull and connected at their free ends to the opposite ends of the bottom of the hull.

1,311,736. ANIMAL-TRAP. CHARLES A. WOOLLEY, Greenville, Tenn. Filed Oct. 12, 1917. Serial No. 196,215. 4 Claims. (Cl. 43-23.)



1. In an attachment for traps, the combination with a line bent at a point to provide a laterally extending eye, an apertured keeper mounted on said line, and a rivet passing through the apertures of the keeper and through said eye for fixedly connecting the keeper to said line.

1,311,737. HOMOGENIZER. CHARLES S. ALLEN, Los Angeles, Calif. Filed Mar. 31, 1919. Serial No. 286,472. 2 Claims. (Cl. 48-180.)



1. A homogenizer comprising a flange plate having bolt holes and a central opening and a row of holes around the central opening; and a conical mixer extending from the flange plate around the central opening inside of the row of holes and having horizontal slots.

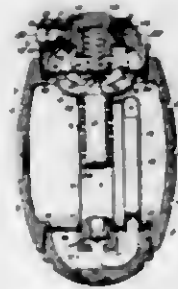
1,311,738. METHOD OF MAKING PUNCTURE-PROOF TIRE-TUBES. GEORGE F. ARMSTRONG, Rutherford, N. J. Filed May 11, 1918. Serial No. 233,962. 2 Claims. (Cl. 154-14.)



1. The herein described process of forming a pneumatic tire tube of an endless seamless construction, the same comprising (1) the rolling of sheet rubber upon a straight mandrel of a length slightly greater than the circumference of the finished tube until a sufficient mass

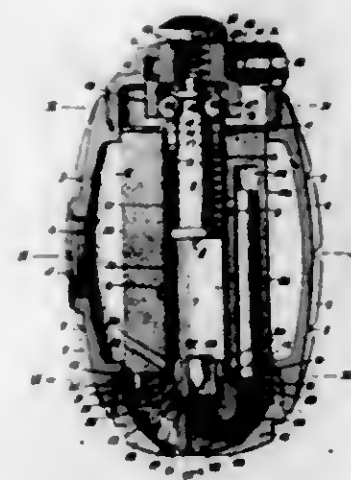
of rubber is produced to form the innermost section of the tube; (2) then applying longitudinally on one side of this roll in successive layers of unequal width a mass of semi-liquid viscous composition; (3) then rolling on the outside of the innermost section and composition more sheet rubber to form the outermost section of the tube; (4) then removing the tubular structure from the mandrel and bending the same into annular form and substantially uniting the ends thereof, and (5) vulcanizing the entire mass under heat and pressure.

1,311,739. HAND-GRENADE. HARRY E. ARBURY, Philadelphia, Pa. Filed May 9, 1916. Serial No. 96,336. 17 Claims. (Cl. 102-29.)



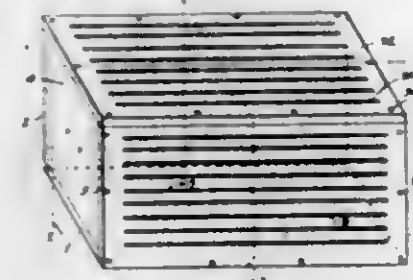
1. The combination with an explosive shell such as a hand grenade and explosive means within such shell, of a cocking device manually movable in the end of the shell and comprising a shouldered member having inwardly and outwardly projecting portions; said cocking device being designed for outward movement to release parts controlling the firing of the explosive means, and radially movable retaining means carried by the shell and movable in the wall of said manually operable from the exterior of the same to engage the shoulder of the cocking device; said retaining means being movable at right angles to the line of movement of the cocking device and holding the latter to maintain said explosive firing parts inactive when in engagement with its shoulder.

1,311,740. HAND-GRENADE. HARRY E. ARBURY, Philadelphia, Pa. Filed June 15, 1917. Serial No. 174,890. 9 Claims. (Cl. 102-29.)



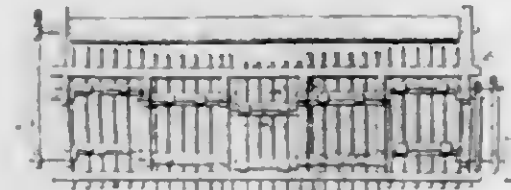
3. In a hand grenade, the combination with a shell having a detonating cap, a firing pin, and means for actuating said firing pin, of removable closures for the ends of said shell, one of said closures being apertured, a recessed block located within the apertured closure, and a time fuse carried by the block within its recess; said fuse being carried by said block in position open to the atmosphere through the apertured closure whereby complete venting of defective ignition of such fuse may be effected.

1,311,741. BEE-SHIPPING BOX. EMERSON J. ATCHLEY, Riverside, Calif. Filed May 31, 1918. Serial No. 237,614. 1 Claim. (Cl. 6-10.)



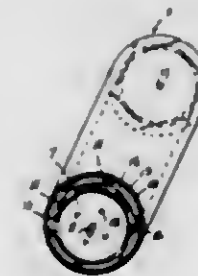
A bee shipping box comprising a rectangular container provided with longitudinal ventilating slits and provided with a removable cover, a central clustering bar, a closed liquid food receptacle in said box having means for feeding liquid food to the exterior of said receptacle by capillary attraction.

1,311,742. HEMP-BREAKER. JOHN L. BARNES, Lexington, Ky. Filed Apr. 2, 1919. Serial No. 286,877. 4 Claims. (Cl. 13-6.)



1. A hemp breaker including a frame structure, superposed series of bars movably supported in the frame structure, the bars of each series being arranged side by side and in groups, means connecting the bars of each group, crank shafts supported in the upper portion of the frame, means connecting the crank pins of the shaft with the groups of the upper series whereby movement is transmitted thereto, and means for actuating the bars of the lower groups.

1,311,743. RESILIENT SANDPAPER-DRUM. MICHAEL L. BEAL, Pasadena, Calif. Filed Aug. 15, 1918. Serial No. 250,033. 3 Claims. (Cl. 51-1.)



1. A resilient sandpaper drum comprising a cylinder; a facing of sponge rubber applied to the periphery of the cylinder; a sheet metal backing applied to the sponge rubber; and sandpaper applied to the sheet metal backing.

1,311,744. TRANSMISSION LEVER-LOCK. JOHN HENNET, Chicago, Ill., assignor to H. H. Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 17, 1918. Serial No. 98,060. 16 Claims. (Cl. 70-128.)

7. A lock for controlling levers, comprising a mounting for the transmission provided in its upper end with a socket, a non-slidable casing on the control lever, pro-

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vided with means at its lower end to frictionally cooperate with the upper end of said mounting, a locking



element vertically slidable in said casing and designed to operate with the socket in said housing, when the control lever is in locked position.

1,311,745. BUNG ATTACHMENT FOR WASHTUBS. BLANCHE E. HEERMANN, Brighton, Mich. Filed May 31, 1917. Serial No. 171,995. 1 Claim. (Cl. 217-99.)



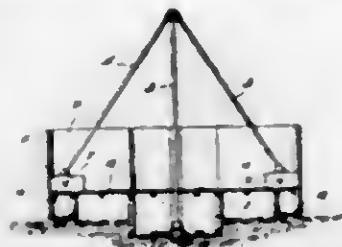
The combination with a tub provided with a circular opening adjacent its bottom, of a bung comprising a cylindrical body fitting snugly into said opening so as to form a fluid tight closure therewith, said body being provided with a longitudinally extending radially disposed groove extending from the inner end thereof and of less length than the body, the outer end of said groove being closed by a straight wall extending radially of the body whereby, when the bung is secured in the opening with the wall at the outer end of said groove positioned inside of the outer surface of the tub it will serve as a closure member for said opening and, when the bung is pulled outwardly so as to bring said wall beyond the outer face of the tub and is turned so as to direct the groove downwardly, the contents of the tub will be discharged therefrom through said groove and downwardly in a vertical stream so as to prevent spraying or splashing of the liquid being discharged, said bung being held rigidly in either of its two positions by frictional contact with the interior of the opening.

1,311,746. WEAVING OF CRIMPED OR WIRE-MESH WORK MATERIAL. DANIEL STEWART HIRRELL and GEORGE SMITH, Warrington, England. Filed June 7, 1918. Serial No. 238,763. 5 Claims. (Cl. 139-39.)



1. In a machine for weaving crimped or waved wire mesh-work material or fabric, guiding means comprising

tions of said hull and the extremities of the deck, certain of the braces being adjustable, standards arranged in the hull having their upper ends interconnected, oblique trusses connected to the upper ends of said standards and



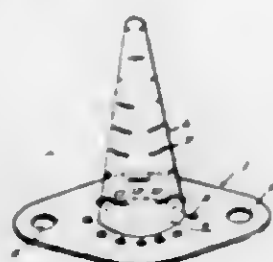
extending laterally therefrom into engagement with said supplemental air chambers, and other oblique trusses connected to the upper ends of said standards disposed longitudinally of the hull and connected at their free ends to the opposite ends of the bottom of the hull.

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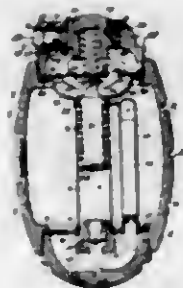
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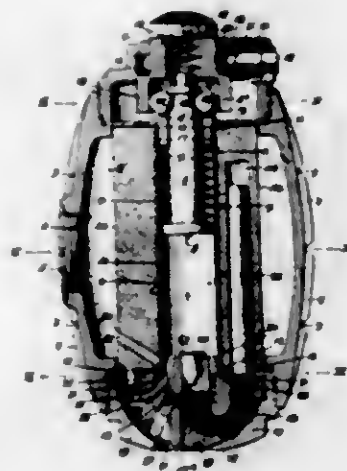
of rubber is produced to form the innermost section of the tube; (2) then applying longitudinally on one side of this roll in successive layers of unequal width a mass of semi-liquid viscous composition; (3) then rolling on the outside of the innermost section and composition more sheet rubber to form the outermost section of the tube; (4) then removing the tubular structure from the mandrel and bending the same into annular form and substantially uniting the ends thereof, and (5) vulcanizing the entire mass under heat and pressure.

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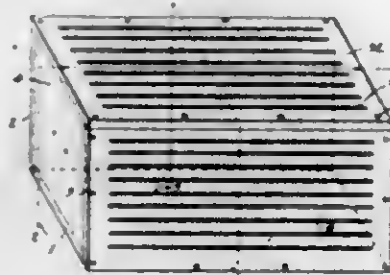
1. The combination with an explosive shell such as a hand grenade and explosive means within such shell, of a cocking device manually movable in the end of the shell and comprising a shouldered member having inwardly and outwardly projecting portions; said cocking device being designed for outward movement to release parts controlling the firing of the explosive means, and radially movable retaining means carried by the shell and movable in the wall of and manually operable from the exterior of the same to engage the shoulder of the cocking device; said retaining means being movable at right angles to the line of movement of the cocking device and holding the latter to maintain said explosive firing parts inactive when in engagement with its shoulder.

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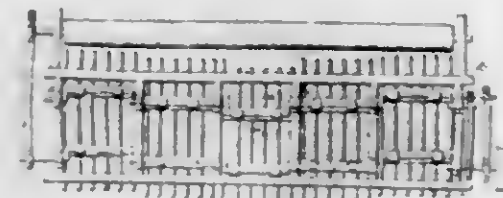
3. In a hand grenade, the combination with a shell having a detonating cap, a firing pin, and means for actuating said firing pin, of removable closures for the ends of said shell, one of said closures being apertured, a recessed block located within the apertured closure, and a time fuse carried by the block within its recess; said fuse being carried by said block in position open to the atmosphere through the apertured closure whereby complete venting of defective ignition of such fuse may be effected.

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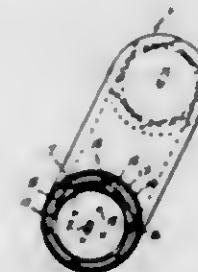
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vided with means at its lower end to frictionally cooperate with the upper end of said mounting, a locking



element vertically slidable in said casing and designed to operate with the socket in said housing when the control lever is in locked position.

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The combination with a tub provided with a circular opening adjacent its bottom, of a bung comprising a cylindrical body fitting snugly into said opening so as to form a fluid tight closure therewith, said body being provided with a longitudinally extending radially disposed groove extending from the inner end thereof and of less length than the body, the outer end of said groove being closed by a straight wall extending radially of the body whereby, when the bung is secured in the opening with the wall at the outer end of said groove positioned inside of the outer surface of the tub it will serve as a closure member for said opening and, when the bung is pulled outwardly so as to bring said wall beyond the outer face of the tub and is turned so as to direct the groove downwardly, the contents of the tub will be discharged therefrom through said groove and downwardly in a vertical stream so as to prevent spraying or splashing of the liquid being discharged, said bung being held rigidly in either of its two positions by frictional contact with the interior of the opening.

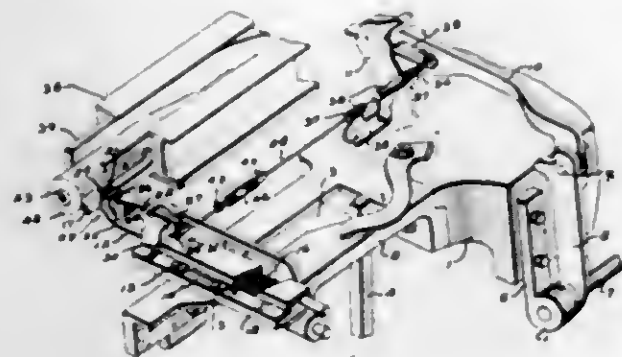
1,311,746. WEAVING OF CRIMPED OR WIRE-MESH WORK MATERIAL. DANIEL STEWART BIRRELL and GEORGE SMITH, Warrington, England. Filed June 7, 1918. Serial No. 238,763. 5 Claims. (Cl. 139-39.)



1. In a machine for weaving crimped or waved wire mesh-work material or fabric, gaging means comprising

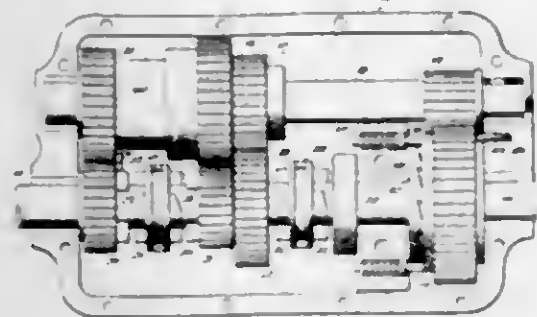
upper and lower rotatable elements embodying annular sets of tapered teeth to enter the meshes of the fabric, said annular sets of teeth having spaces at the roots of the teeth for receiving the weft of the fabric.

1,311,747. FEELER-MOTION FOR LOOMS. ALFRED BLONIS, Holyoke, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 23, 1918. Serial No. 259,372. 7 Claims. (Cl. 139—85.)



1. In a feeler motion for looms, the combination of a feeler member, an actuator and operating member, a rock shaft extending between the actuator and feeler members and having a projection, a controller having an end portion normally maintained for movement in a path above the projection from the rock shaft when a working supply of filling is present in the shuttle and movable into position to intercept the projection and turn the rock shaft and then ride over and bear upon the depressed projection when the filling is substantially exhausted on a detecting beat, and connections between the rock shaft and actuator.

1,311,748. ELECTRICALLY-CONTROLLED TRANSMISSION MECHANISM. ROY A. BONHAM, Springfield, Mo. Filed June 12, 1918. Serial No. 239,627. 8 Claims. (Cl. 74—59.)

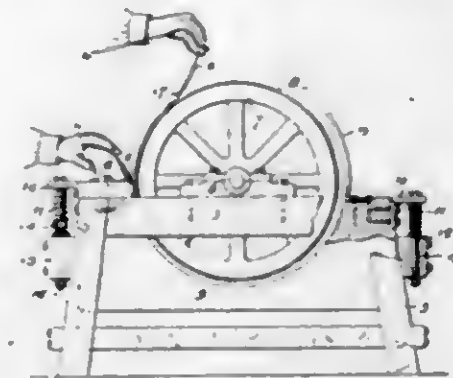


1. In a device of the class described, the main shaft, a plurality of gear wheels loosely mounted thereon, a driven shaft, a counter-shaft and a plurality of gear wheels rigidly mounted thereon, and means for rotating the driven shaft directly from the main shaft and rotating the driven shaft from the main shaft through the counter-shaft, said means including a gear wheel and a core therefor on the driven shaft and devices for effecting rotation of the driven shaft through the gear wheel and core and independently of the core.

1,311,749. LEATHER-WORKING MACHINE. ANTHONY D. BORLANDER, JR., Ridgewood Park, N. J. Filed Oct. 10, 1918. Serial No. 257,648. 9 Claims. (Cl. 149—15.)

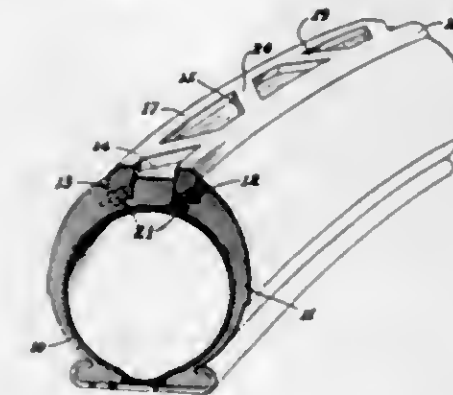
6. A machine for working hide strips, comprising a high speed working wheel having a frictional gripping surface, a yieldably supported cradle partially surrounding the wheel periphery but spaced therefrom to admit a

folded hide strip, and a hand grip at one end of the cradle and adjacent the wheel for holding a strip end



while the remainder of the strip is drawn about the wheel between the periphery of the latter and the cradle in a progressive fold, substantially as described.

1,311,750. TIRE. ANNA A. BRASHEAR, Santa Barbara, Calif. Filed Dec. 14, 1916. Serial No. 136,950. 1 Claim. (Cl. 152—14.)



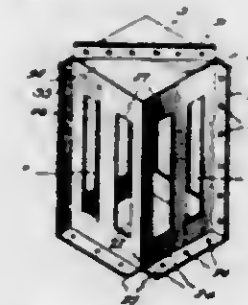
In a detachable tread tire, a pneumatic casing having parallel circumferential tread grooves and channels connecting said grooves, and a detachable tread adapted to fit in said grooves and having cross pieces adapted to fit in said channels, said detachable tread adapted to project beyond the periphery of the casing and having circumferential wires embedded in position to be within the grooves and inside of the periphery of the casing.

1,311,751. SPRING REINFORCEMENT. GEORGE F. BARNET, Weiser, Idaho. Filed Jan. 13, 1919. Serial No. 270,920. 2 Claims. (Cl. 267—37.)



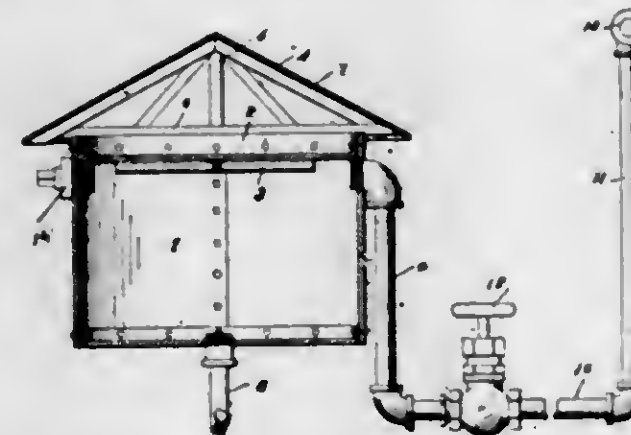
1. A securing device comprising a yoke formed with two spaced parallel flanges and a plate bolted with the flanges and having a plane surface adjoining the parallel opposing surfaces of the flanges and being at right angles to said opposing surfaces, one of said flanges being relatively short and having a triangular apertured and screw-threaded end, the base of the triangle being substantially parallel with the said plane surface, the other flange being relatively long and having its longitudinal edges disposed at an acute angle to said plane surface, said relatively long flange having an aperture therethrough to receive a bolt or the like, and a set screw in the aperture of said relatively short flange.

1,311,752. ACCORDION REED-BOX. ZENO BURCH, El Centro, Calif. Filed Nov. 29, 1916. Serial No. 132,430. 4 Claims. (Cl. 84—1.)



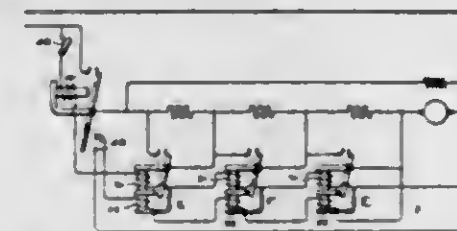
1. A reed box for accordions, including a pair of sections right-angular in cross section arranged together to provide a rectangular body, said sections each having a plurality of openings therein for receiving a plurality of reeds, and detachably connected flanges carried by the sections.

1,311,753. OIL-TANK. JOSEPH A. BUTCHER, Sulphur, La. Filed July 27, 1915. Serial No. 42,220. 2 Claims. (Cl. 220—4.)



1. In a roofed oil tank having vent means and an outlet opening arranged in the upper portion thereof, crossed supports arranged in the upper portion of the tank and having their respective ends secured to the walls of the tank, a water receptacle of a contour similar to the contour of the tank having its walls snugly engaged with the inner surface of the walls of the tank and its bottom resting on the supports so that the upper edges of the walls of the receptacle lie flush with the upper edges of the walls of the tank, and means for securing the walls of the receptacle and tank together.

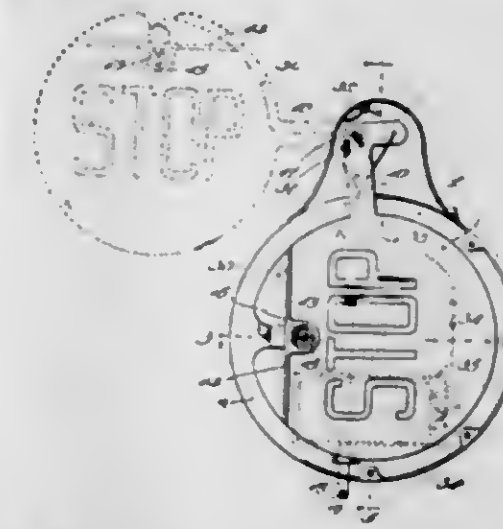
1,311,754. CONTROL FOR ELECTRIC MOTORS. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1917. Serial No. 164,269. 7 Claims. (Cl. 172—288.)



7. The combination with an electric motor and a supply circuit therefor, of an electromagnetic switch for starting the same comprising a switch member normally in open position, a winding energized from the supply circuit, a magnetic structure energized by said winding to hold the switch member in closed position and a second winding acting on the switch member to cause it to close only when the counter-electromotive force of the

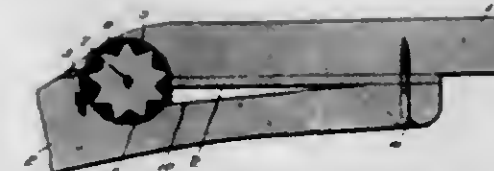
motor reaches a maximum value which varies in accordance with the energy of the winding connected to the supply circuit.

1,311,755. TRAFFIC SIGNAL DEVICE. LAURENCE SIDLEY CARLETON and ROBERT GARDNER CARLETON, Davenport, Iowa. Filed Dec. 3, 1917. Serial No. 205,158. Renewed June 17, 1919. Serial No. 304,920. 3 Claims. (Cl. 40—87.)



1. A traffic signal device for automobiles comprising a hollow casing supported at the front portion of the automobile and provided with an opening in its outer edge, a signal arm pivoted within the casing adapted to swing out of and into said casing and having a transverse opening formed through the peripheral portion of said signal arm, reflecting flanges mounted on both sides of said arm, a lamp disposed within said opening with portions extending under the flanges, a depending guard disposed in the front and the rear of said lamp, whereby the lamp will throw the light downwardly and illuminate substantially the entire area of both faces of the arm at the same time.

1,311,756. TOY GUN. FRANK EVERHART CARTER, Huntington, W. Va. Filed Sept. 3, 1918. Serial No. 252,309. 3 Claims. (Cl. 46—46.)



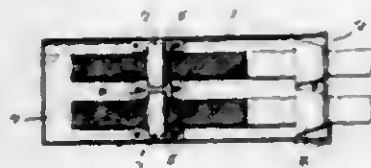
1. A toy gun designed to produce an effect in similitude with that of a machine gun, comprising a gun body having a stock and a barrel portion and having at its intermediate portion a spring operated tongue, and a toothed wheel engaging the said tongue and incased within the body of the gun and having a crank outside the gun for rotating the wheel, substantially as set forth.

1,311,757. TOBACCO-LATH. CALEB COOPER, Sumfield, Conn. Filed Apr. 19, 1919. Serial No. 291,236. 1 Claim. (Cl. 131—21.)



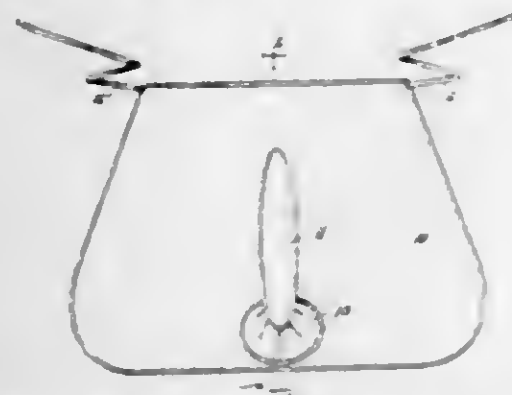
A tobacco lath comprising a bar provided in one face throughout its length with a series of transverse V-shaped notches extending entirely thereacross, a second bar, links pivotally connected with the ends of said bars and hingedly connecting them, and a series of pins extending from one face of said second named bar and adapted to enter said notches.

1,311,755. TICKET-HOLDER. CHARLES H. COWAN, JR., Stonington, Conn. Filed Apr. 7, 1919. Serial No. 288,115. 1 Claim. (Cl. 211-37.)



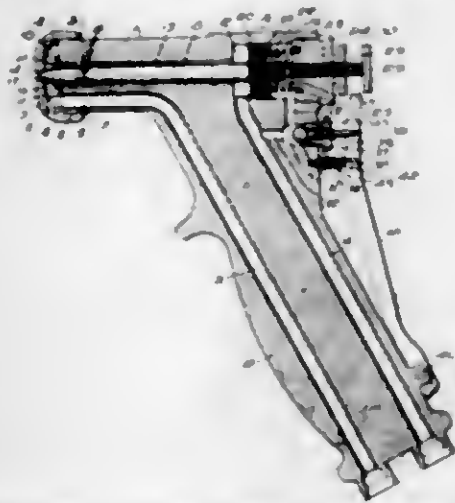
A device of the class described comprising a case, a door therefor having a slot therein, a removable base in said case, uprights secured to said base, said uprights being of channel form to provide guideways, a shaft having its ends engaging said guideways to support a roll of scrip and a guide for the end of the scrip located on the end of the base adjacent the slot in the door.

1,311,759. SANITARY APRON. ARCHIBALD C. DAVIS, Newark, Ohio. Filed Nov. 3, 1918. Serial No. 261,307. 1 Claim. (Cl. 4-18.)



A sanitary protector comprising an apron adapted to be worn by the user, at the back, and to be secured at its upper portion, said apron having an area to be sat upon by the wearer and presenting an elongated approximately central opening terminating short of the top and bottom of the apron, to permit the apron to be given a divided form beneath the wearer when the latter assumes a sitting posture, together with an auxiliary protector on said apron at the outer side at the lower end of the opening therein, the material of the apron below the opening extending beneath said protector, and said protector being adapted to project forwardly beneath the toilet seat at the center, while the adjacent portion of the apron lies on top of said seat.

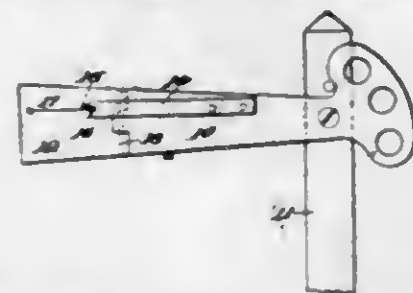
1,311,760. MEANS FOR AND METHOD OF APPLYING COATING. HARRY O. DAVIS, Ipswich, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1918. Serial No. 268,910. 24 Claims. (Cl. 91-45.)



1. Means for applying coating comprising a body member having passages for coating material and for a motive

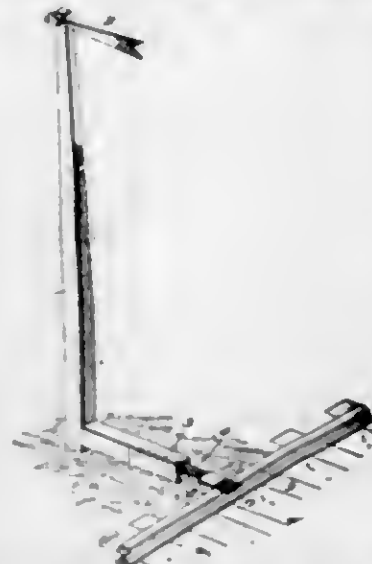
fluid under pressure, and valve means controlling the flow of motive fluid, and thereby to actuate a valve positively to control the flow of the coating material.

1,311,761. AUTOMATIC TRAIN-STOP. HENRY J. DOOLAN, Washington, D. C. Filed Oct. 10, 1918. Serial No. 258,824. 8 Claims. (Cl. 246-185.)



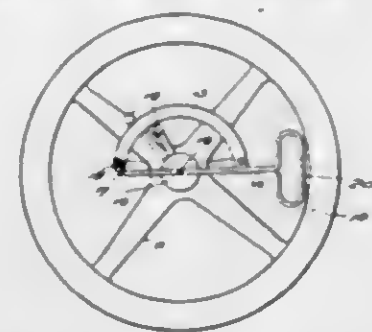
1. In an automatic train stop, the combination with a movably mounted semaphore arm, a trip-section pivoted to one end of said semaphore arm and free to swing from side to side, and means connected to the sides of the semaphore arm for limiting the sidewise swinging movement of the trip-section in either direction, of a vehicle provided with a valve-operating member arranged to engage said trip-section.

1,311,762. RAILWAY SIGNAL-TORPEDO. FRANK DUTCHMAN, Versailles, Pa., assignor to Central Railway Signal Company, Pittsburgh, Pa. Filed Jan. 23, 1918. Serial No. 213,299. 2 Claims. (Cl. 246-487.)



1. The combination of a railway signal torpedo and a holder therefor, one end of the holder and the torpedo having respectively slots and interlocking tongues, the other end projecting from the torpedo for the purpose described.

1,311,763. CIRCUIT-CLOSER OPERATOR. WILLIAM D. EATON, Glen Echo, Md. Filed Sept. 4, 1918. Serial No. 252,555. 1 Claim. (Cl. 175-366.)



In combination with a column, a steering post, a steering wheel carried on the post, a circuit closer located

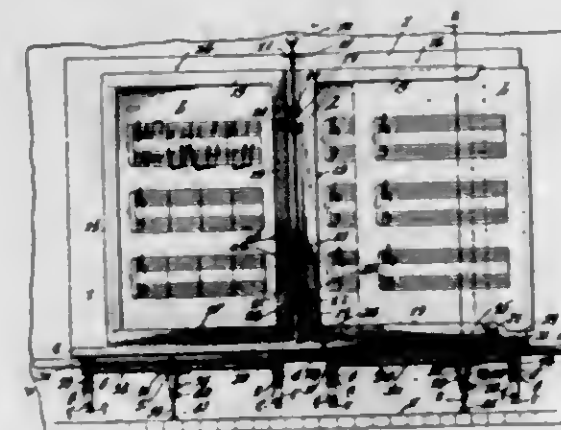
centrally of the wheel, and a segment rigid relative to the column, a flexible bar disposed across the circuit closer and above the wheel and having one end bent angularly and secured to the segment, means for fastening the bar to the circuit closer so that the bar will normally hold the circuit closer in open position, and a handle formed on the other end of the bar and positioned near the rim of the wheel to permit depression of the bar whereby to close the circuit.

1,311,764. PACKAGE-TIE. WILLARD C. EVERITT, Knoxville, Pa. Filed Aug. 10, 1915. Serial No. 44,768. 5 Claims. (Cl. 24-18.)



3. A package tie comprising a wire bent so as to form an angle, cord-securing means at the free end of one of the legs of said angle, a hook at the apex of the angle and in the plane of the other leg of the angle, another hook on said leg at a distance from the first-mentioned hook and in the same plane thereof and directed toward said first-mentioned hook, the free end of the hook-containing leg of the angle being substantially parallel to the hook and to said leg and slightly spaced from the hook and the leg.

1,311,765. MUSIC-LEAF TURNER. ANTHONY P. FEEN, Dunkirk, N. Y. Filed Oct. 25, 1918. Serial No. 259,666. 4 Claims. (Cl. 84-135.)

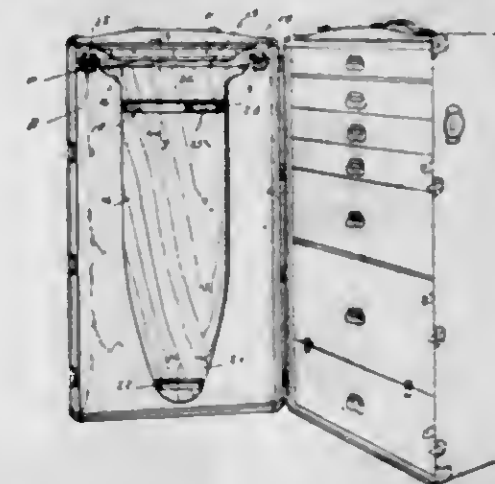


1. A music leaf turner comprising a supporting base having a laterally extending flange, leaf carriers pivotally mounted on said base, spring pressed catches positioned to engage said carriers to hold them against turning, means for automatically turning said carriers when said catches are released, vertically movable horizontally disposed rods connected with said catches, and means for lowering said rods to release said catches.

1,311,766. COMBINATION CLOTHES-HANGER AND IRONING-BOARD. FLORINDA GARDNER, Salt Lake City, Utah. Filed Nov. 25, 1918. Serial No. 264,062. 2 Claims. (Cl. 190-13.)

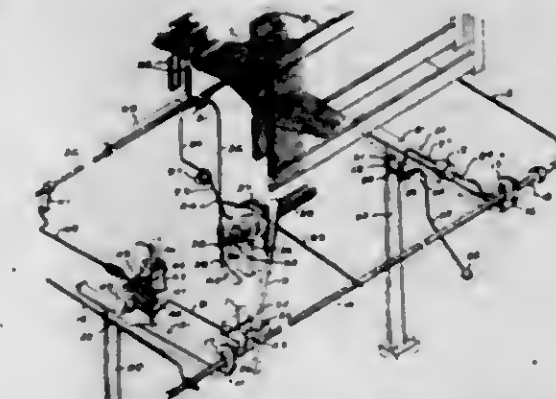
1. A combined ironing board and clothes hanger, comprising an ironing board member, cross cleats fixed trans-

versely on one side of said board member, and a hanger fixed to one end of said board member, said hanger having



hooks adapted to engage with supporting rods such as are used in wardrobe trunks.

1,311,767. HARNESS STOP-MOTION FOR LOOMS. RAPHAEL H. GELINAS, South Hadley Falls, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 19, 1918. Serial No. 258,784. 14 Claims. (Cl. 130-82.)



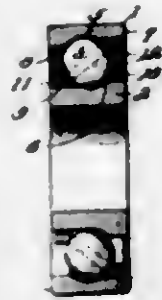
9. In a loom, the combination of the harness, a shaft having arms extending beneath the harness, means for stopping the loom when the shaft is moved from a normal to an abnormal position by a dropped harness, and means acting automatically to lock the shaft in abnormal position after it has been moved by a dropped harness.

1,311,768. GYROSTATIC APPARATUS. JOHN GRAY, London, England, and JAMES GORDON GRAY, Glasgow, Scotland. Filed Oct. 22, 1918. Serial No. 259,261. 8 Claims. (Cl. 74-78.)



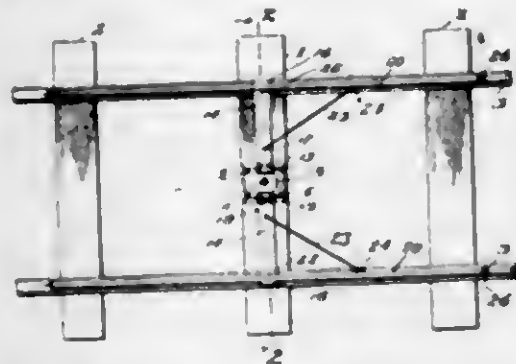
1. The herein-described gyrostatic device comprising, in combination, a system of gimbals, a gyrostic comprising a casing mounted therein and a spinning element rotatable around a vertical axis relatively to said casing, and an erecting device comprising a propelling element rotatable around a vertical axis, and masses movable with and relatively to said propelling element and adapted on the rotation of said spinning element to dispose themselves relatively to the gimbal axes in positions such as to establish equilibrium of said gyrostic and erecting device with the axis of rotation of said spinning element vertical.

1,311,760. BALL-BEARING. JOHAN ARSABHAM OHLSSON, Stockholm, Sweden, assignor to Klostern Aktie Bolag, Stockholm, Sweden, a Corporation of Sweden. Filed Nov. 14, 1918. Serial No. 262,571. 3 Claims. (Cl. 64—59.)



1. A ball bearing comprising an inner ring having a plurality of concentrically arranged cylindrical outer surfaces with an annular circumferential groove located between the same, the cylindrical surface of the circumference on one side of the groove being a less distance away from the axis of the ring than the cylindrical surface of the circumference on the other side of the groove, an outer ring provided on its inner surface with an annular groove, said outer ring having a plurality of concentrically arranged cylindrical inner surfaces and an annular groove located between the same, the cylindrical surface of the inner circumference of the outer ring, at one side of the groove, being a less distance away from the ring axis than the cylindrical surface of the inner circumference at the other side of the outer ring, a ball cage located between the rings and having radial openings, and balls located in said openings and engaging the walls of said grooves.

1,311,770. PORTABLE LEVER OR HAND-CAR TURN-TABLE. WILLIAM R. H. PUGHAM, Elkin, N. C. Filed Mar. 29, 1919. Serial No. 286,059. 7 Claims. (Cl. 104—45.)

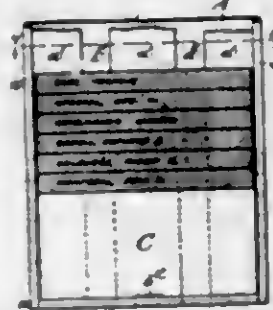


1. In an apparatus of the class described, the combination of a primary support provided with a central aperture and a central socket, an auxiliary support provided with a central aperture and a central concave-convex portion fitting into said central socket of the primary support, fastening means extending through the apertures of the primary and auxiliary supports securing the same together, rails positioned contiguous to said auxiliary support, and means connecting said rails to said auxiliary support.

1,311,771. INDEX. JAMES H. RAND, Newton, Mass. Filed Oct. 10, 1917. Serial No. 195,700. 19 Claims. (Cl. 120—16.)

1. A card index comprising a frame having inwardly facing guide channels, and a series of index elements having laterally extending ears which fit into the guide channels, and supporting tabs projecting substantially flatwise from the body of the index elements adapted respectively to engage the edges of the next adjacent elements and to hold the index elements in overlapped, spaced relation,

the back of the frame having lengthwise extending grooves to receive the supporting tabs.



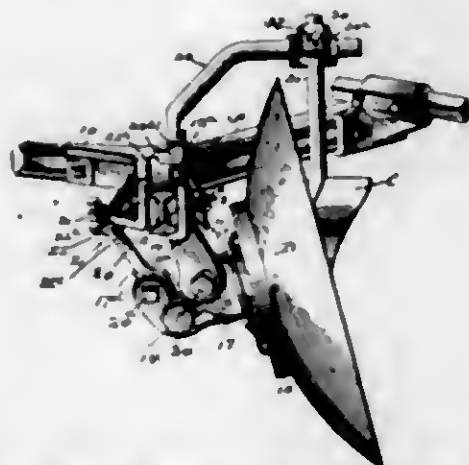
10. A card holder comprising a body of sheet material having laterally projecting ears, card retaining means, one or more recesses in one margin, and a supporting and spacing tab or tabs projecting from the body of the card holder near the inner edge or edges of the recess or recesses.

1,311,772. POULTRY-DIPPING APPARATUS. ALVA F. RANDOLPH, Bloomfield, Iowa. Filed Mar. 27, 1917. Serial No. 157,685. 2 Claims. (Cl. 119—153.)



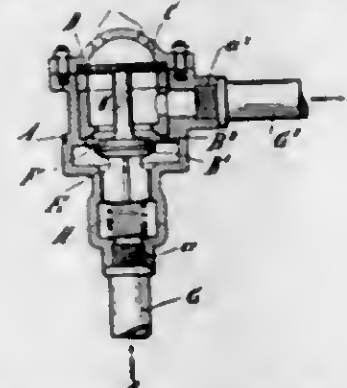
1. A dipping apparatus adapted to be arranged at one side of the opening of an inclosure including a tank, a pair of spaced supporting members secured to the tank and extending rearwardly of the same, a platform pivoted to said supporting members, an obstructing plate pivoted to the rear end of said platform, and a transverse strip secured to the rearwardly extending portions of said supporting members and supporting the rear end of said platform when in a horizontal position and engaging said obstructing plate when raised for retaining the same vertical, and over the opening of said inclosure.

1,311,773. DISK PLOW. CHARLES T. RAY, Louisville, Ky., assignor to H. F. Avery & Sons, Louisville, Ky., a Corporation of Kentucky. Filed Aug. 15, 1916. Serial No. 115,013. 14 Claims. (Cl. 97—40.)



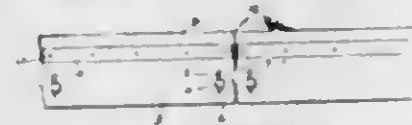
2. In a tillage implement, the combination of a frame, a support secured thereto, a disk carrier pivoted upon said support, the pivot of the carrier being disposed so that the carrier is tolerumed upon a horizontal axis which is oblique to the line of draft of the implement, a soil working disk rotatably mounted on said carrier and means pivoted to that end of the carrier remote from the disk for rocking the carrier with relation to said support and upon said pivot and for securing the carrier in its changed positions about said pivot.

1,311,774. SAFETY DEVICE. PAUL A. RITTER, Kiel, Germany, assignor to Fried. Krupp Aktiengesellschaft, Germanlawerft, Kiel-Gaarden, Germany. Filed Mar. 8, 1915. Serial No. 12,022. Renewed Dec. 12, 1918. Serial No. 266,515. 9 Claims. (Cl. 48—192.)



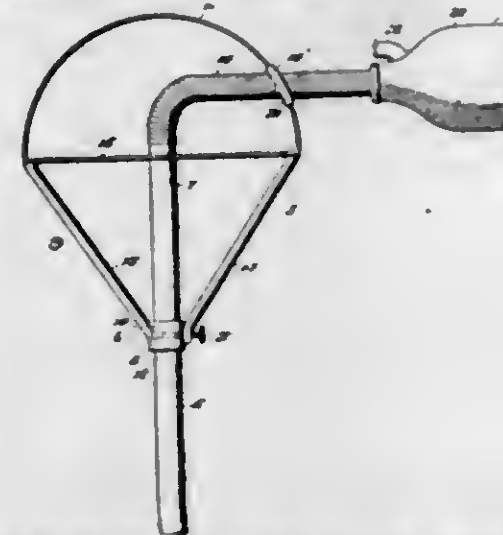
9. A safety device adapted for use in fluid conveying conduits, including a valve, a closure on the delivery side of the conduit normally preventing direct discharge of fluid from the conduit to the atmosphere and normally holding the valve in open position, said closure adapted to open upon a predetermined back pressure on the delivery side of the valve and when opened permitting the movement of the valve to closed position upon the relief of the back pressure, thereby preventing direct escape to the atmosphere of fluid from the supply side of the valve.

1,311,775. SEALING MEANS FOR DOORS, WINDOWS, AND THE LIKE. FREDERICK W. RUBIN, Indianapolis, Ind. Filed Mar. 11, 1918. Serial No. 221,875. 1 Claim. (Cl. 20—69.)



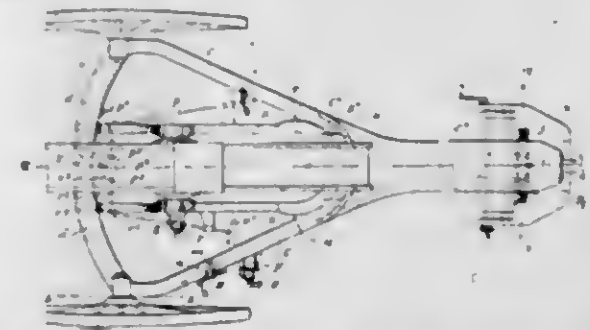
In a sealing means for closures, the combination with a casing, and a closure therefor, of a plurality of strips placed end to end and lying flat upon the casing, whereby heavy loads may be moved thereover without affecting said strips, one end of each strip having a curved recess and a projection on the opposite end of each strip adapted to interlock with the recess of the abutting strip for holding said ends in relation with each other, means to adjustably secure the strips to the casing and maintain them in their adjusted position constantly, and flexible means carried by the strips for engagement with the face of the closure.

1,311,776. GLOBE-MANIPULATOR. OSCAR RODRIGUEZ, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,253. 9 Claims. (Cl. 240—101.)



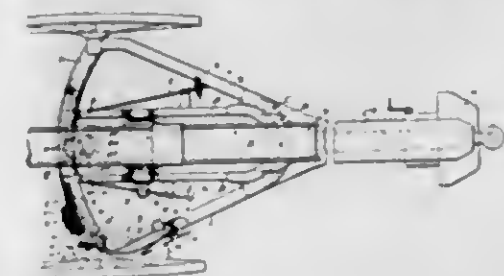
1. A manipulator of fragile articles embodying a support, and a compressible member provided with a series of suction cups having connection with the support and with which the article engages.

1,311,777. FIELD-GUN CARRIAGE. EUGENE SCHNEIDER, Le Creusot, France, assignor to Schuelder & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed July 3, 1916. Serial No. 107,392. 5 Claims. (Cl. 89—40.)



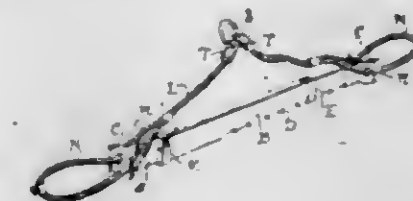
1. In combination, a field gun carriage comprising an upper gun-supporting frame and a lower carriage frame on which said upper frame is adapted to train about a virtual vertical axis in a horizontal plane of said carriage frame, and a sighting device supported on said carriage frame and having its line of sight passing through said axis, and means for keeping the sight of said sighting device set along a predetermined base or auxiliary sighting line through said axis for indirect aiming of the gun in reference to said base line.

1,311,778. FIELD-GUN CARRIAGE. EUGENE SCHNEIDER, Paris, France, assignor to Schuelder & Cie., Paris, France. Original application filed July 3, 1916, Serial No. 107,392. Divided and this application filed Mar. 31, 1919. Serial No. 286,481. 2 Claims. (Cl. 89—40.)



1. In a field gun carriage, the combination of a lower carriage frame having a curved wheeled axle portion, a curved track movable along said curved axle and provided with a bracket arm adapted to receive a sighting device, an upper gun-supporting frame supported on said lower frame and having operating connections with said track for training the gun about a center common to said curved axle and curved track, and means for shifting said track to keep the sight of said sighting device set along a predetermined base or auxiliary sighting line through said common center.

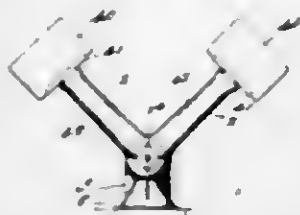
1,311,779. ADJUSTABLE HANGER. IRVIN F. SHANK, Agency, Iowa. Filed May 15, 1919. Serial No. 297,373. 1 Claim. (Cl. 17—30.)



An adjustable hanger, consisting of two extensible bars, and means for holding the same in different relative adjusted positions, the outer end of each bar having a concave portion adapted to engage the convex part of an article and provided with a plurality of apertures

one on either side of the bar, loops passing through said apertures and adapted to engage the articles and hold the same against the concave portion.

1,311,780. DEPTH-CHARGE PROJECTOR. ANDREW J. STONE, New London, Conn. Filed Sept. 19, 1917. Serial No. 192,130. 10 Claims. (Cl. 89—1.)



1. A bomb projector for use on marine vessels, comprising a gun support fixedly mounted on the deck of the vessel, a double barreled gun, the two barrels being set at an angle to each other, the axis of both barrels being substantially in the same vertical plane, and an explosion chamber communicating with the breech of each of said barrels, all mounted on said gun support, with means for injecting gas under high pressure into said explosion chamber, substantially as described.

1,311,781. BOMB OR SUBMARINE MINE. OSCAR I. STRAUB and MEADE WILDRICK, U. S. Army. Filed Nov. 6, 1917. Serial No. 200,533. 4 Claims. (Cl. 102—3.)

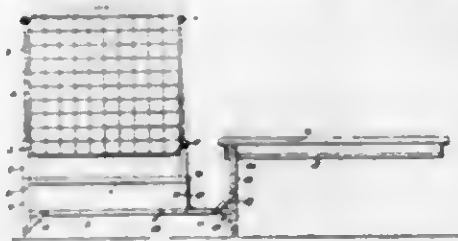


1. In a bomb, the combination with a shell provided with a main chamber adapted to contain high explosive material, and a water chamber separable by a partition wall from said main chamber, and provided with one or more water inlets opening outward therefrom, with removable stoppers closing said inlets, of firing mechanism for said bomb comprising a tube closed at its lower end and passing through said shell, and carrying a bursting charge, an electric battery, an electric primer connected thereto and inclosed in said bursting charge, an inner tube having a flanged head screwed into the upper end of said first mentioned tube, both of said tubes being provided with one or more ports to admit water from said water chamber, a circuit closer mounted in said inner tube and connected to said primer, and an adjustable hollow stem provided with a series of perforations, slidably mounted in said inner tube, and controlling the flow of water through the ports therein, substantially as described.

1,311,782. HARVEY CRIB. NIELS PETER SPENDSEN, Calgary, Alberta, Canada. Filed Oct. 15, 1918. Serial No. 258,130. 1 Claim. (Cl. 5—59.)

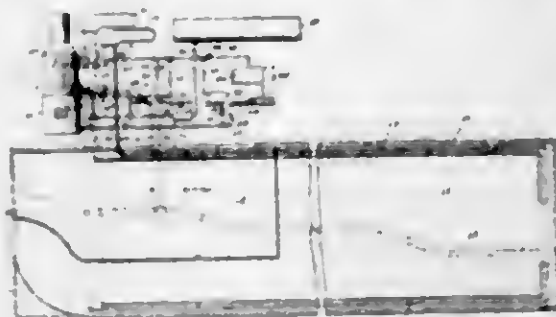
A crib of the class described comprising a frame consisting of a pair of side rails and end rails connected with the side rails, a leg connected with each end of the frame at one side thereof and having a portion projecting above the frame, a pair of strips detachably connected with the other side of the frame and when placed

vertically forming legs and when placed horizontally forming extensions of the end rails, depending pieces adjustably and detachably connected with the ends of the



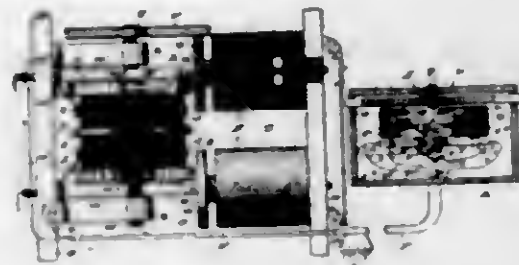
strips when the same are in their horizontal position, means for slidably connecting said depending pieces to the bottom of a bed and a crib hinged to said frame.

1,311,783. SYSTEM OF HEAT GENERATION AND DISTRIBUTION FOR RAILWAY-CARS. HENRY H. VAUGHAN, Montreal, Quebec, Canada. Filed Nov. 29, 1915. Serial No. 64,007. 21 Claims. (Cl. 237—37.)



14. The combination with a railway car and steam train pipe, of the following instrumentalities located in the car, namely, a water circulatory system, a local steam generator, a heating device for heating the water of the water circulatory system which employs steam as its heating medium, a separate steam circulatory system, and means whereby steam may be supplied to said heating device or to said steam circulatory system, or to either of them, either from the local steam generator or from the train pipe, as desired.

1,311,784. CONTROLLER. LOUIS ALFRED WHITE, Brooklyn, N. Y. Filed Dec. 18, 1914. Serial No. 877,994. 5 Claims. (Cl. 172—239.)



6. In a controller of the character described, reversible setting mechanism, actuating mechanism, and means for initially operating the setting mechanism and for subsequently operating the actuating mechanism, said last mentioned means including regulating mechanism adapted on its initial movement to carry a contact closing device for operating the setting mechanism and in its subsequent movement to operate the actuating mechanism.

1,311,785. AERIAL TORPEDO OR MINE. MEADE WILDRICK, U. S. Army, assignor of one-half to Oscar I. Straub, Fort Howard, Md. Filed Jan. 27, 1917. Serial No. 144,968. 4 Claims. (Cl. 102—29.)

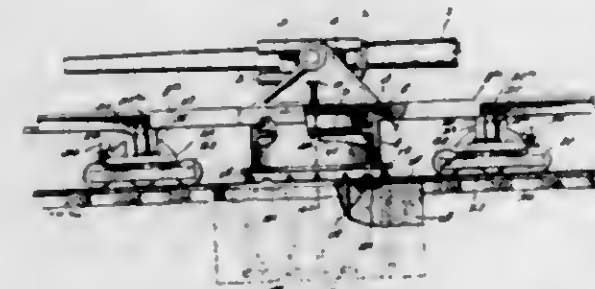
1. In a projectile adapted to be dropped from aircraft, the combination with a shell containing high explosive,

of means for exploding said high explosive when the movement of said shell is suddenly arrested, comprising a percussion primer, a plunger, and means for normally holding said plunger in the safety position, and for automatically releasing same after the projectile has traveled part of its flight through the air, with an electric primer, a source of electricity, and an electric circuit for exploding said high explosive by electricity, all contained in said shell, the said electric circuit including resilient



contact strips adapted to yieldingly support said plunger above said primer when released, but to permit said plunger to strike said primer when the movement of the projectile is suddenly arrested, the said plunger also forming electrical connection between said contact strips, and means automatically controlled by the pressure of the water for closing said electric circuit when the projectile reaches a predetermined depth in the water, substantially as described.

1,311,786. MOBILE MOUNT FOR HEAVY ARTILLERY. MEADE WILDRICK, U. S. Army, assignor of one-half to Oscar I. Straub, Fort Howard, Md. Filed Feb. 24, 1917. Serial No. 150,780. 21 Claims. (Cl. 89—40.)

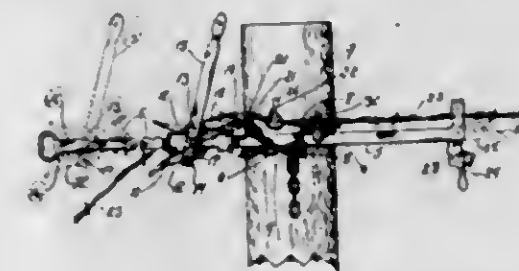


1. The combination with a gun of a gun carriage provided with a downwardly projecting central portion and raised ends projecting forward and rearward, of trucks adapted to pass beneath and support said raised ends of the carriage, and means for raising and lowering said carriage while supported on said trucks, substantially as described.

1,311,787. WIRE-STRETCHER. CHARLES M. ZARTMAN, Montrose, Colo., assignor of one-third to James W. Calloway and one-third to Anthony Hoban, Montrose, Colo. Filed July 29, 1916. Serial No. 112,157. 1 Claim. (Cl. 254—72.)

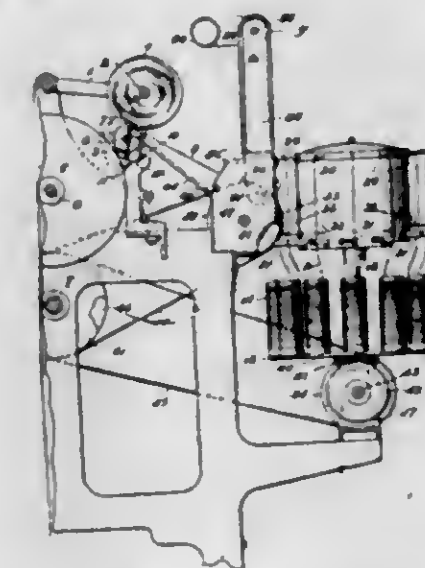
A barbed wire stretcher comprising a bar equipped approximately midway of its length with a guide for the wire to maintain it in alignment with a plane passed vertically through the bar parallel with its opposite sides during the wire stretching operation, said guide comprising a forked member, and the upper portions of the

fork arms being spaced to allow the barbs to pass freely, while the lower extremities of the arms approach each



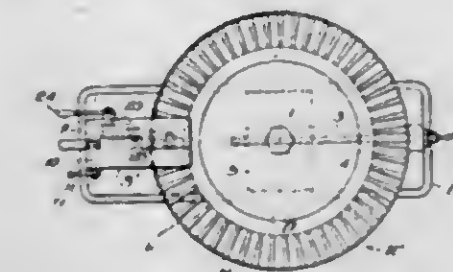
other, to prevent the passage of the barbs when in the lowermost position in the guide, thus serving the additional function of a clamping device.

1,311,788. SLUB-REMOVER. EDWARD JAMES ABBOTT, Wilton, N. H. Original application filed Jan. 28, 1914. Serial No. 815,088. Divided and this application filed Nov. 11, 1918. Serial No. 261,973. 13 Claims. (Cl. 242—44.)



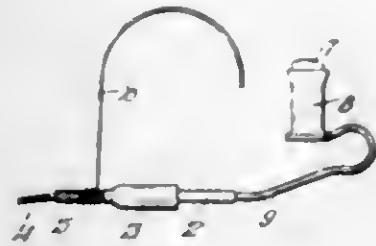
2. In combination, winding mechanism, a supply of material to be wound, a slub detector between the winding mechanism and supply, and mechanism operated by the slub detector adapted automatically to sever the slub from the material and to attach together again the severed ends.

1,311,789. WELDING APPARATUS. WILLIAM GEORGE ABBOTT, Jr., Wilton, N. H. Filed Feb. 5, 1918. Serial No. 215,438. 8 Claims. (Cl. 219—4.)



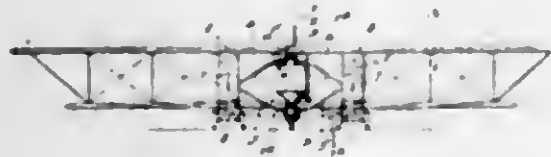
1. Apparatus for welding radial members to the rim of a wheel comprising means for rotatably supporting the wheel to rotate about its axis, terminal means adapted to be moved transversely of the plane of rotation of the wheel into contact with a radial member, a terminal member arranged to contact with the rim at the end of the radial member, and means for producing relative movement between said wheel and terminal member along the line of said radial member.

1,311,790. ILLUMINATING APPLIANCE. MILTON ALDEN, Springfield, Mass., assignor to Dental Electric Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 12, 1917. Serial No. 201,718. 4 Claims. (Cl. 128—23.)



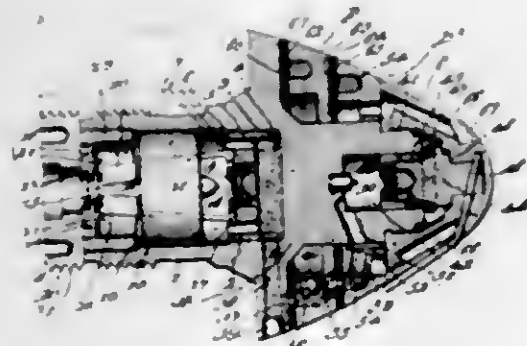
1. A mouth illuminating appliance, comprising, an electric lamp, a lamp supporting means having a part adapted to be positioned within the mouth and another part bent backwardly upon the first-named part in spaced relation therewith and adapted to be positioned adjacent the cheek and extend rearwardly thereof, and means adapted to suspend the last-named part from the ear.

1,311,791. AERIAL ARTILLERY. CLELAND DAVIS, U. S. Navy. Filed Mar. 16, 1917. Serial No. 153,294. 2 Claims. (Cl. 244—1.)



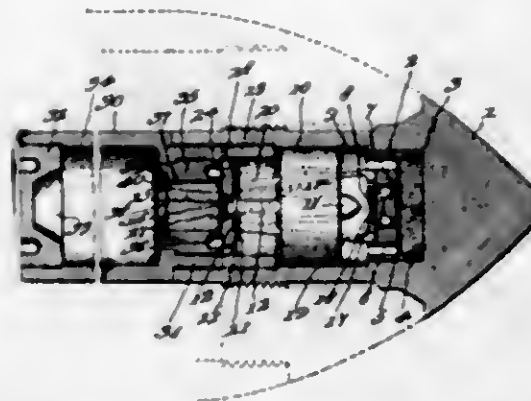
1. A frame-work for aeroplanes including a non-recoil gun tube as a main girder.

1,311,792. COMBINATION PERCUSSION AND TIME FUSE. LOUIS L. DATOGA, New York, N. Y. Filed Jan. 2, 1917. Serial No. 140,183. 3 Claims. (Cl. 102—37.)



1. The combination with a fuse stock, of a primer and an igniting charge carried in said fuse stock, a plunger mounted in said fuse stock and adapted to explode said primer, the said plunger being provided with a passage therethrough for the flame from the primer, a spring clip having weighted resilient arms normally locking said plunger in the safety position but thrown out of engagement therewith when the shell is spun up, automatic means for locking said spring clip in the disengaged position after it has been acted upon by centrifugal force, comprising inclined spring catches adapted to be pressed backward by said weighted arms as they are thrown outward by centrifugal force but to lock said arms against returning inward when said centrifugal force decreases, due to the slowing down of the rotary motion of the projectile, and a time powder train mounted on the forward end of said fuse stock and connected to said igniting charge, substantially as described.

1,311,793. PERCUSSION-FUSE FOR SHELLS. LOUIS L. DATOGA, New York, N. Y. Filed Jan. 2, 1917. Serial No. 140,182. 3 Claims. (Cl. 102—39.)



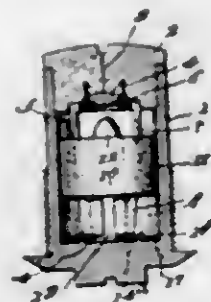
1. The combination with a fuse stock and a tube connected to the base thereof, with a detonating charge carried in said tube, of a primer carried in said fuse stock, one or more chambers containing powder adapted to be ignited by said primer, and connected with said tube, a plunger adapted to explode said primer, a spring clip having weighted resilient arms normally locking said plunger in the safety position but thrown out of engagement therewith when the shell is spun up, and automatic means for locking said spring clip in the disengaged position after it has been acted upon by centrifugal force, comprising inclined spring catches adapted to be pressed backward by said weighted arms as they are thrown outward by centrifugal force but to lock said arms against returning inward when said centrifugal force decreases, due to the slowing down of the rotary motion of the projectile, substantially as described.

1,311,794. PERCUSSION-FUSE. LOUIS L. DATOGA, New York, N. Y. Filed Oct. 10, 1917. Serial No. 197,461. 10 Claims. (Cl. 102—39.)



1. In a percussion fuse for projectiles, the combination with a fuse stock and a primer mounted therein, of a plunger mounted in said fuse stock and provided with a firing pin, locking bars pivotally attached to said plunger, and adapted to engage an abutment carried by the fuse stock, and a spring clip also carried by said plunger and adapted to hold said bars in the locking position in engagement with said abutment except when the shell is spun up, substantially as described.

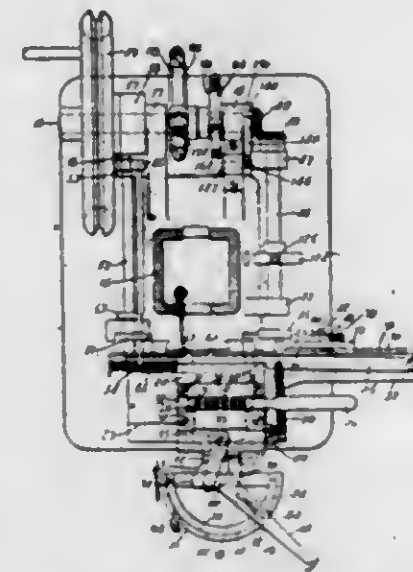
1,311,795. SHELL-FUSE. LOUIS L. DATOGA, New York, N. Y. Filed Jan. 2, 1917. Serial No. 140,181. 2 Claims. (Cl. 102—39.)



1. In a percussion fuse for shells, the combination with a fuse stock and a primer carried thereby, of a plunger

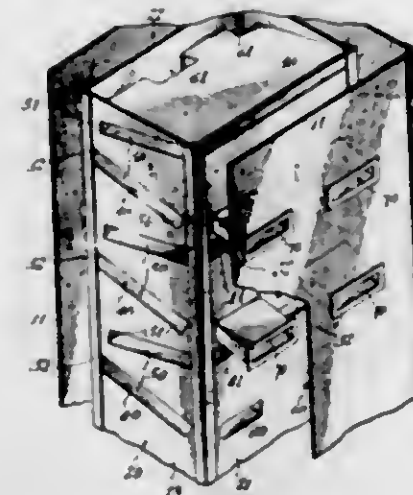
slidably mounted in said fuse stock and provided with a heavy body portion having parallel grooves in opposite sides thereof, a firing point carried by said body portion, and a flanged stem projecting rearwardly from said body portion, a spring clip having resilient arms adapted to pass freely in said grooves, and weights carried by said arms adapted to normally engage said flanged stem, but to fly clear thereof due to centrifugal force when the shell is spun up, and means for automatically holding said arms in the distended position after the shell is spun up, said means comprising yielding spring catches adapted to be pressed back by said weights on their outward movement, but to lock the same against return movement inward as the centrifugal force decreases due to the slowing down of the rotary motion of the shell, substantially as described.

1,311,796. BRUSH-MAKING MACHINE. DANIEL L. CHANDLER, Fitchburg, Mass., assignor to The Cellset Brush Company, a Corporation of Massachusetts. Filed Dec. 11, 1916. Serial No. 136,136. 24 Claims. (Cl. 15—7.)



1. A brush making machine having, in combination, means for holding a bunch of bristles, means for inserting a bunch of bristles longitudinally of said bristles into said holding means, and means adapted to feed a plug against said bunch of bristles and to insert said bunch of bristles in a brush back.

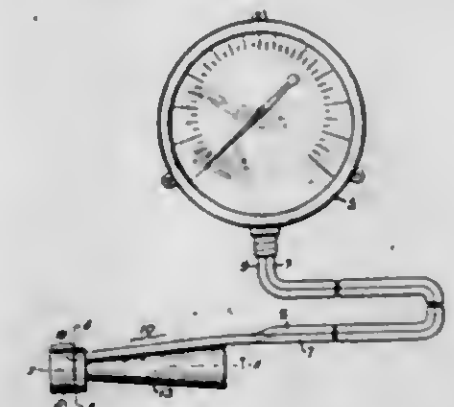
1,311,797. RADIATOR. DAVID M. BOWEN, Los Angeles, Calif. Filed Dec. 13, 1916. Serial No. 130,799. 4 Claims. (Cl. 126—90.)



1. An air heater comprising a rectangular box composed of sheet iron; a burner in the bottom of said box; a flue in the top of said box; a series of inserts set into

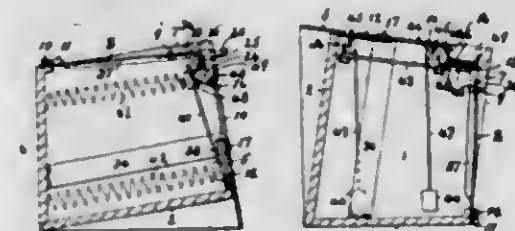
open slots in said box, said inserts being open at one side and at each end to the space surrounding the box, said inserts making a continuous gas tight joint with the ends and sides of said box; a series of hot air flues, each flue connecting the inner end of one of said inserts with the space on the side of the box opposite the mouth of the insert; a shell having openings formed in the lower end thereof through which cold air is admitted to the heating space between said shell and said rectangular box; means for taking air from said heating space; and a series of cold air flues each extending through an opening in said shell and connecting with the outer end of one of said hot air flues.

1,311,798. NOZZLE FOR PRESSURE-SENSITIVE DEVICES. EDGAR H. BRISTOL, Foxboro, Mass., assignor to Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1918. Serial No. 219,365. 12 Claims. (Cl. 73—2.)



1. A nozzle for fluid pressure sensitive devices comprising a Venturi tube, a duct opening to the constricted portion thereof, a housing inclosing the forward end of the tube and spaced from the margin thereof to provide an admission opening presented toward the front of the tube and a duct opening to said housing.

1,311,799. PAPER-DISPENSING CABINET. GIROLAMO COTTINI, Springfield, and GIROLAMO COTTINI, Ludlow, Mass., assignors to Michael T. Foley, Springfield, Mass. Filed May 15, 1918. Serial No. 234,826. 17 Claims. (Cl. 211—29.)

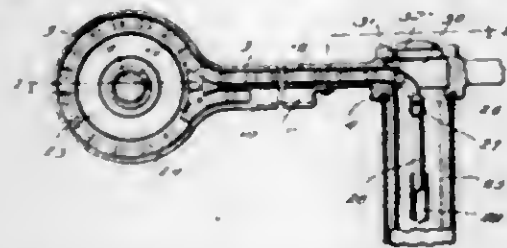


2. In a paper-dispensing cabinet, a receptacle having an opening in one of its surfaces, a reciprocable member covering such opening at all times, and having therein a delivery slot for the passage of one end of a paper sheet, when said member is actuated out of initial position, and means to support the paper, with the exception of a loose part of the sheet in position for immediate delivery out of contact with said movable member, such loose part being the part that enters said slot.

1,311,800. GAS CONTROL FOR MOTOR-VEHICLES. ALBERT FRANK BEAUREGARD, West De Pere, Wis. Filed Mar. 27, 1919. Serial No. 285,519. 11 Claims. (Cl. 64—30.)

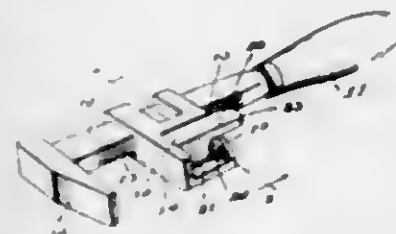
1. In a motor vehicle control, a steering wheel having a hollow spoke, a rotary handle on the exterior of the

outer end of said hollow spoke with its axis extending in the general direction of the wheel rim, a sliding control



member in said spoke for operating a control of the motor, and means for sliding said control member when said handle is operated.

1,311,801. WRENCH. FRANK W. DROWN, Willmar, Minn. Filed Apr. 22, 1919. Serial No. 291,812. 1 Claim. (Cl. 51-138.)



A wrench comprising a shank having a toothed surface, a fixed jaw, a movable jaw slidably mounted on the shank and provided with a pocket, a locking element movably arranged within said pocket and having teeth to cooperate with the teeth of the shank to hold said jaw in a given position on the shank, a lever extended transversely of the sliding jaw, and pivoted between the walls of said pocket, a cam forming an integral part of said lever and offset therefrom at one end, said cam being arranged within said pocket and operable, a pair of links freely pivoted at corresponding extremities to the opposite end portions of said cam, the opposite ends of said links being freely pivoted to the adjacent ends of said locking element, whereby the latter is lifted and lowered toward and away from the shank in said pocket when the lever is swung upon its pivot in reverse direction.

1,311,802. DUST-PAN. MARTIN H. REMEDY, Mohawk, N. Y. Filed Apr. 7, 1919. Serial No. 288,160. 1 Claim. (Cl. 65-20.)

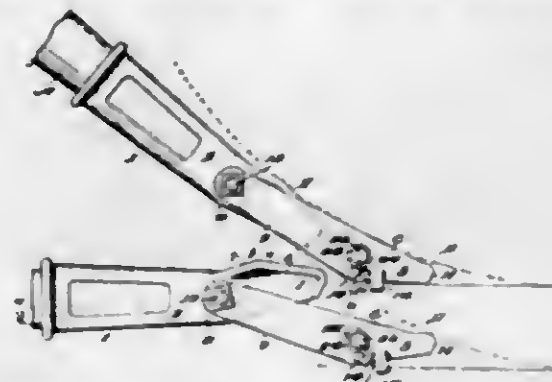


A dust pan of general triangular outline with side walls and a housing over a portion thereof, a handle having arms each of which is bent to form a coil with ends journaled in apertures in the sides of the pan, portions of the coil designed when the handle is tilted to frictionally engage the inner surface of the sides of the pan to hold the handle at an inclination.

1,311,803. CAR-MOVING TOOL. WALTER A. DORSEY, Columbus, Ohio, assignor to The Honney Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 3, 1917. Serial No. 205,190. 3 Claims. (Cl. 251-38.)

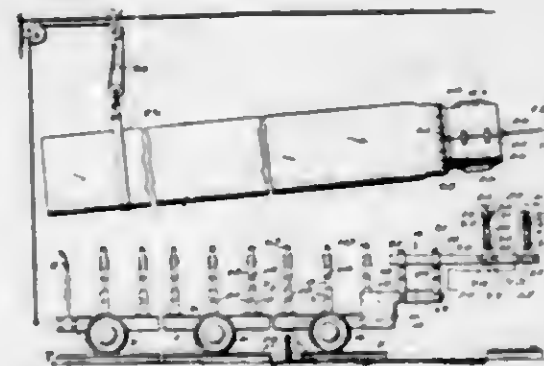
1. In a car-moving tool, the combination with the main lever, of the pinch bar hinged thereto and having

the solid forward end part 5 formed with a transverse socket which is approximately square in cross section and with a slot through the lower surface communicating with the said socket, and a series of hardened cubing



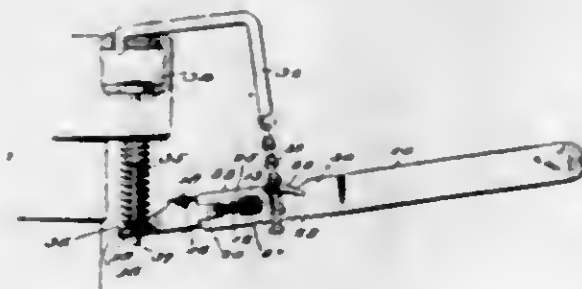
cal fulcrum blocks each adapted to be inserted along either of three axes into the said socket and to be fitted tightly therein in either of four positions relatively to each of said axes, and means for locking the said fulcrum cubes in the socket substantially as set forth.

1,311,804. GLASS APPARATUS. CHARLES DONALDSON, JOHN J. BLOXOM, and JOHN K. BROOKS, Brookville, Pa., assignors of one-fourth to Elmer E. Myers, Brookville, Pa. Filed Apr. 20, 1917. Serial No. 164,774. 1 Claim. (Cl. 49-17.1.)



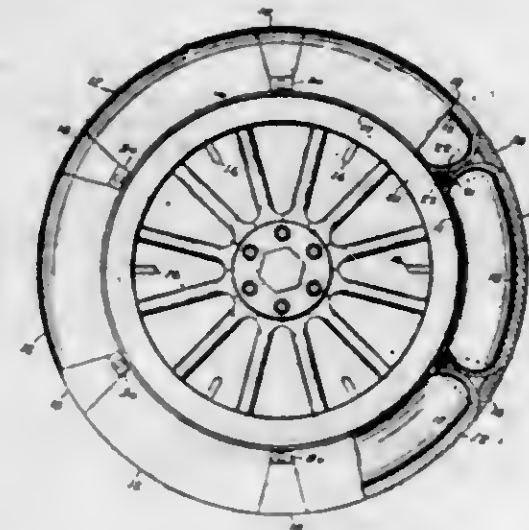
In apparatus of the class described, a cylinder supporting horse, supporting members mounted at one end of the horse, bearing socket members mounted upon the supporting members, standards vertically movably mounted in the socket members, springs yieldably supporting the standards against downward movement, and ball supporting heads mounted at the upper ends of the said standards.

1,311,805. VALVE-SPRING LIFTER. LLEWELYN J. DAVIES, Medford, Ore. Filed May 7, 1918. Serial No. 233,126. 5 Claims. (Cl. 29-87.1.)



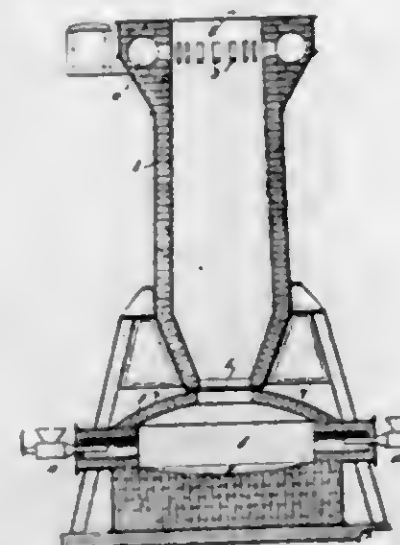
2. A valve spring lifter including a body bar, coating work engaging jaws pivoted thereon, arms projecting from the jaws at their inner end edges, and means shiftable upon the bar and engaging between the arms for positioning the jaws toward each other.

1,311,806. SECTIONAL PNEUMATIC TIRE. HENRY B. COATS, Veedersburg, Ind. Filed June 26, 1916. Serial No. 105,967. 3 Claims. (Cl. 152-22.)



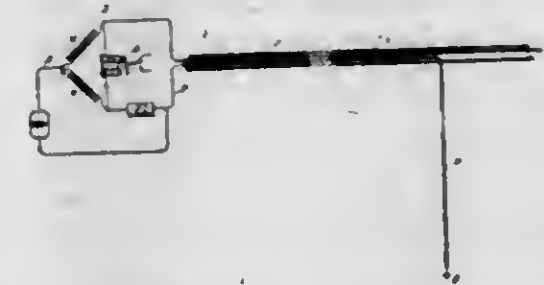
3. The combination with a vehicle wheel having a clencher rim, of a tire composed of flexible cushions with their ends abutting successively, the ends of said sections having transverse beads, a filler overlapping the meeting ends of the cushions, the rim engaging ends of said filler having outwardly projected beads, a plate between the ends of each pair of cushions and interlocking therewith, ears projecting outwardly from said plate, blocks bearing against the free ends of said filler and substantially triangular in cross section, the apex of each block having a channel for engagement with the bead of the filler, and a bolt extending transversely through said block, filler and ears on the plate and exteriorly of said beads.

1,311,807. COMBUSTION PROCESS AND APPARATUS FOR PRACTICING THE SAME. ULYSSES A. GARRED, New York, N. Y., assignor to Garred-Cavara Corporation, New York, N. Y., a Corporation of New York. Filed May 25, 1917. Serial No. 170,833. 10 Claims. (Cl. 266-29.)



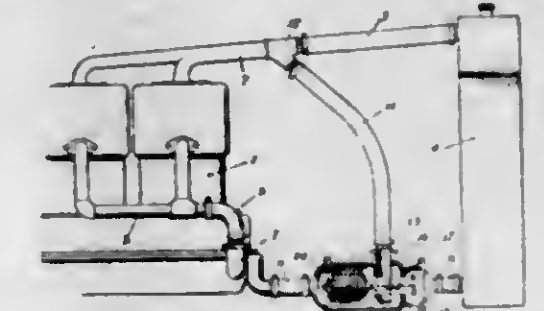
1. A process for use in smelting ores and the like, comprising arranging the material in a vertical piled mass upon a suitable bottom support and within a suitable shaft, providing suitable space for combustion by supplementing the interstices between the particles of the material by a space adjoining the lower portion of said mass, forcing into said adjoining space air under pressure carrying pulverized fuel and igniting the same therein, and forcing said ignited stream directly against and into the lower portion of the mass to effect the melting thereof.

1,311,808. METHOD AND MEANS FOR AVOIDING INTERFERENCE. BANCROFT GHERARDI, Bayhead, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 5, 1918. Serial No. 265,457. 7 Claims. (Cl. 178-63.)



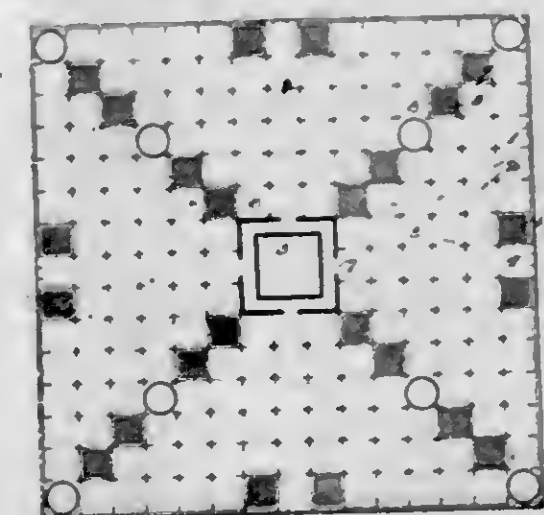
5. In a signaling system, a transmission line and a ground return connection for said line, comprising an insulated conductor having its end grounded at a distance from all metallic conductors carrying extraneous currents, sufficient to cause a potential drop in disturbing currents passing from such conductors to the ground point, which is substantial with reference to the potential of the disturbing currents.

1,311,809. COOLING SYSTEM FOR INTERNAL-COMBUSTION ENGINES. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Company, Knoxville, Tenn., a Corporation of Maine. Filed Aug. 16, 1916. Serial No. 114,245. 7 Claims. (Cl. 123-170.)



1. In a cooling system for internal combustion engines, the combination of a radiator, a by-pass around said radiator, valve mechanism regulating the flow of cooling medium through said radiator and by-pass, and a by-pass around the valve mechanism regulating flow of the cooling medium through said radiator whereby a circulation of cooling medium may be maintained through the radiator at all times.

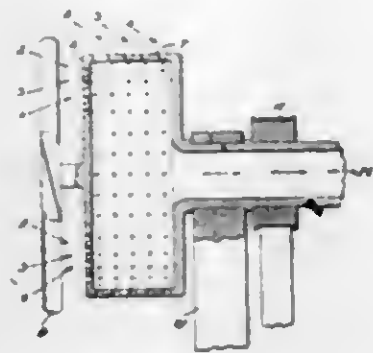
1,311,810. GAME APPARATUS. EDWARD J. GILMORE, New York, N. Y. Filed Sept. 7, 1918. Serial No. 253,088. 2 Claims. (Cl. 40-21.)



1. A game board having a square checkered playing area, a goal at its center, four lines of checks radiating

from said goal being specially designated and constituting barriers dividing said area into four triangular players' fields, each having an entrance to said goal, and certain checks in said lines being specially designated differently from the others and constituting gates in the barriers.

1,311,811. SEPARATOR. ACHILLES C. GOUGH, Pocatello, Idaho. Filed June 21, 1918. Serial No. 241,178. 5 Claims. (Cl. 183—77.)



1. A separator comprising a rotary screen of hollow structure its wall or walls being substantially smooth on the inside and on the outside and provided with apertures of outwardly divergent form, means for causing a flow of air into the screen through the apertures, whereby when the screen is rotated the heavier particles are centrifugally rejected by the divergent openings.

1,311,812. SEPARABLE FASTENER. PAUL R. GURRAN, Waterbury, Conn., and MORRIS SELLIG, New York, N. Y. Filed Mar. 20, 1917. Serial No. 156,134. 3 Claims. (Cl. 24—223.)



2. A separable fastener comprising an eye member having relatively yieldable leg portions, and a second member having at one end a hook adapted to detachably engage and fulcrum on said eye member and also having a rib extending from the hook with seats in its sides to detachably receive the terminals of the leg portions when the rib is inserted therebetween.

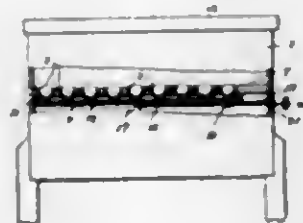
1,311,813. GARMENT-FASTENER. PAUL R. GURRAN, Waterbury, Conn., and MORRIS SELLIG, New York, N. Y. Filed Mar. 20, 1917. Serial No. 156,135. 1 Claim. (Cl. 24—228.)



A separable fastener comprising an eye member having yieldable leg portions with attaching ends outside of the latter, and a second member formed from a single length of wire that is bent upon itself, the resultant end por-

tion adjacent the bend being then directed angularly to provide a hook and the remaining portions being then bent at the reverse angle and extended in parallel contacting relation with terminals directed laterally and oppositely looped to provide attaching eyes disposed in a plane offset from said parallel portions, said hook being arranged to detachably engage in the eye member and fulcrumed thereon to position said parallel portions between the yieldable legs and be frictionally held by the attaching ends of said yieldable leg portions.

1,311,814. EGG-TURNER. RUSSELL R. GULLION, Sheldon, Iowa. Filed Nov. 9, 1917. Serial No. 201,100. 2 Claims. (Cl. 119—44.)



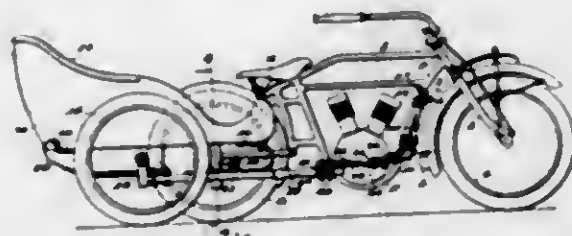
1. An incubator including rails, an egg retaining tray located above the rails, an egg supporting tray slidably mounted upon the rails, angularly arranged and intersecting brace bars secured to the supporting tray, a rod section secured to said brace bars at their points of intersection, and a second rod section detachably connected to the first section and passing through and beyond one side wall of the incubator.

1,311,815. BLOWPIPE-BURNER. JOHN HARRIS, Cleveland, Ohio. Filed Oct. 20, 1915. Serial No. 56,988. 28 Claims. (Cl. 159—27.4.)



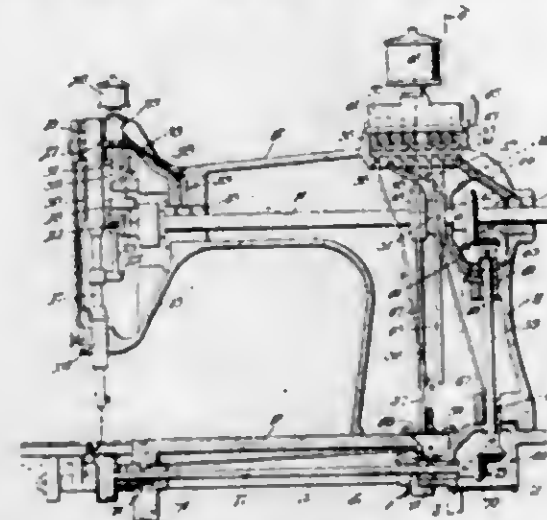
1. In a torch of the character described, a head having combustion and cutting gas pipes leading thereinto, a nozzle arranged within said head and having communication with said cutting gas pipe and a tip connected to said head and surrounding the discharge end of said nozzle, said tip being adjustable during operation.

1,311,816. VEHICLE ATTACHMENT FOR MOTOR AND OTHER CYCLES. OTTO L. HEINTZ, Buffalo, N. Y. Filed Aug. 30, 1915. Serial No. 47,956. 20 Claims. (Cl. 208—45.)



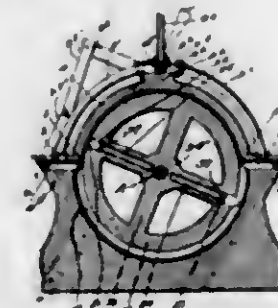
1. A vehicle attachment for motor and other cycles comprising a wheeled frame, and flexible means for connecting said frame at its front end with a motor cycle and constructed to permit free vertical movement of said wheeled frame and the motor cycle relatively to each other but holding said members against horizontal lateral movement relatively to each other.

1,311,817. OILING SYSTEM FOR SEWING-MACHINES. RICHARD K. HOHMANN, Sioux City, Iowa. Filed Nov. 3, 1916. Serial No. 129,404. 14 Claims. (Cl. 112—29.)



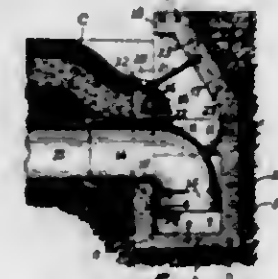
2. In a sewing machine, a hollow head formed with a lubricant chamber at the top thereof, an aperture for the needle bar in the upper wall and a lubricant duct in the wall leading from the chamber to the aperture.

1,311,818. ROTARY STEAM-ENGINE. ROSA W. HONAN-BACK, Gardner, Colo. Filed Feb. 6, 1918. Serial No. 215,719. 1 Claim. (Cl. 121—74.)



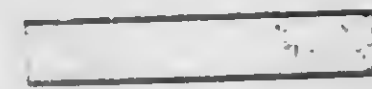
A rotary engine including a casing having oppositely disposed abutments therein and ports leading there-through, a rotor mounted in the casing and including a rim and spokes, two of said spokes and the rim being formed with diametrically arranged aligning bores, the periphery of the rotor being formed with recesses at the ends of the bores, pistons movable into and out of the recesses, stems carried by the pistons and slidable through said bores, and springs on the stems within the recesses for normally projecting the pistons outward.

1,311,819. STORM SEWER-INLET. WILLIAM HUTTON and WILLIAM JORGENSEN, Omaha, Nebr. Filed May 7, 1917. Serial No. 167,126. 2 Claims. (Cl. 182—10.)



1. A monolithic combined curb, catch basin and trap provided at its upper portion at the front with a horizontal inlet opening and having its front wall forwardly offset at the lower edge of the inlet opening and its rear wall inclined upwardly and forwardly opposite the said opening and upwardly, and rearwardly inclined bars having their ends embedded in the offset front wall and the inclined rear wall to form a grating.

1,311,820. METALLIC BUILDING STRUCTURE. JOSEPH WARREN JONES, St. Louis, Mo. Filed Apr. 26, 1916. Serial No. 93,585. 3 Claims. (Cl. 189—38.)



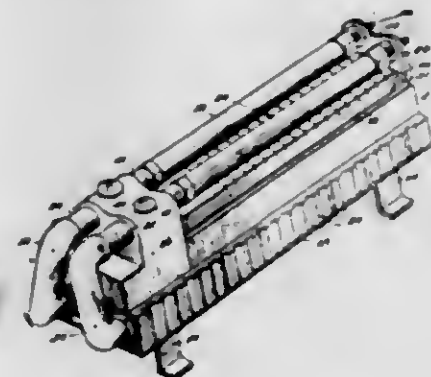
1. A metallic structural element comprising side bars or load carrying members, said members having web portions oppositely disposed, a series of tongues cut from said web portions and laterally deflected into cooperative relation and joined together to form spacing and bracing connections between the load carrying members.

1,311,821. COLLAR-HOLDER. FRANK J. LE CLAIR, Attleboro, Mass., assignor to Freeman-Danghaday Company, Chertley, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1918. Serial No. 207,530. 1 Claim. (Cl. 24—81.)



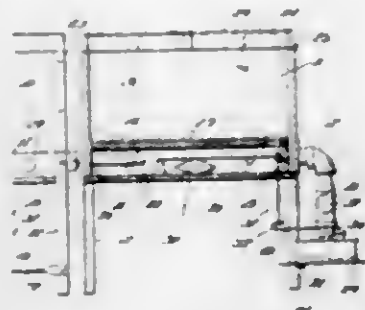
A collar holder comprising a pair of oppositely disposed cooperating bars connected together at their middle, one of said bars being resilient and having both of its opposite ends folded back upon itself with its extremity turned outwardly on an angle inclined toward the middle of the bar forming a biting tooth to rest upon the inner face of the opposite bar with spring pressure thereby forming an open mouth between said bars at their ends to provide a ready entrance for the fabric.

1,311,822. HYDROCARBON-BURNER. JOHN O. KING, Los Angeles, Calif. Filed Feb. 13, 1919. Serial No. 270,835. 4 Claims. (Cl. 158—61.)



1. In a hydrocarbon burner, a rectangular base plate having a longitudinally extending raised central portion comprising spaced side walls and a connecting top wall, a burner-cap seating on said base plate having side, end and top walls with vertical kerfs in its side walls and a pair of rows of transverse kerfs in its top wall, a dependent longitudinally extending rib on the underside of the top wall of said burner-cap between the rows of transverse kerfs seating on the top wall of the raised portion of the base plate and dividing the space within the burner-cap into two compartments, a housing seating on said burner-cap at one end thereof to which air is admitted from the underside of the base plate, a pair of parallel generator tubes extending over the rows of transverse top kerfs slidably extending into said housing, a pair of intake tubes extending into said housing in alignment with said generator tubes and spaced therefrom and a pair of downturned conduits forming communication between said intake tubes and the two compartments within the cap.

1,311,823. HEAT-REGULATOR FOR DOUGH-RAISERS. AUGUST KNUTSON, Mapleton, Minn. Filed Feb. 8, 1919. Serial No. 275,750. 2 Claims. (Cl. 67-72.)



1. The combination with the wick tube of a lamp burner, of a vertically slidable member disposed in embracing relation to the wick tube, an open ended frusto-prismatic member spaced outwardly from the slidable member and secured to and movable therewith, and a crank shaft carried by the burner and engaging in supporting relation beneath the frusto-prismatic member for raising and lowering the same.

1,311,824. PROCESS FOR THE MANUFACTURE OF ETHYL ALCOHOL FROM ACETALDEHYDE. THEODORE LICHTENHAHN, Basel, Switzerland, assignor to Elektrizitätswerk Lenz, Gampel, Switzerland. Filed Apr. 25, 1918. Serial No. 230,731. 1 Claim. (Cl. 23-24.)

A manufacture of ethyl alcohol from acetaldehyde by reducing the latter with hydrogen in presence of a catalyst, wherein the hydrogen is used in at least six times the theoretical proportion, so that the heat of reaction is so far conducted away by the hydrogen, that the temperature in the reaction chamber is kept at that favorable for a smooth reaction without decomposition of the acetaldehyde.

1,311,825. RAILWAY RIGHT-OF-WAY-MOWING DEVICE. WILLIAM H. McALLISTER, Gainesville, Tex. Filed Oct. 16, 1918. Serial No. 258,341. 2 Claims. (Cl. 56-16.)

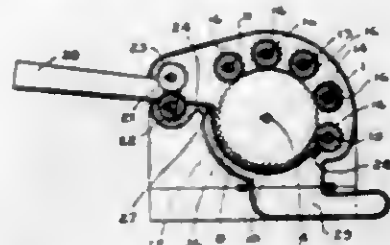


1. In a device of the class described the combination with a wheeled support, a motor arranged on said support, and a shaft driven by said motor; of mower blades positioned beyond both sides of the support, shaft sections having their opposite ends universally connected to one end of each of the mower blades and the first named shaft, and means for yieldingly holding the said blades in engagement with the ground.

1,311,826. FEED CUTTING MILL. LOBBEN R. McCARGAN, Kansas City, Mo., assignor to Walter P. Fulkerson, St. Joseph, Mo. Filed Mar. 19, 1919. Serial No. 281,069. 6 Claims. (Cl. 83-6.)

1. A mill comprising a centrally located rotary cutter unit, complementary cutters rotatably mounted about the

first named cutter, said rotary cutter unit and complementary cutters having spaced serrated peripheral cutting portions



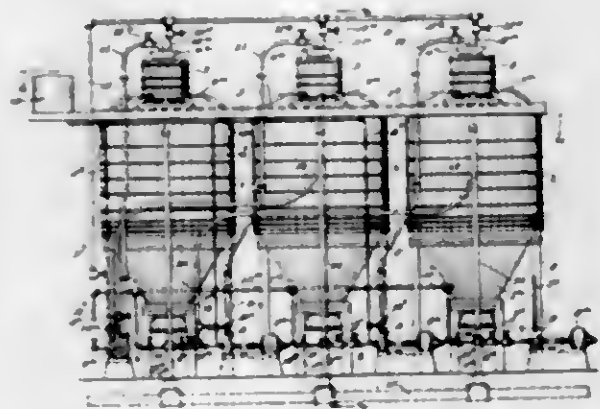
intergearing the rotary cutter unit with the complementary cutters, and means for operating the cutters.

1,311,827. PAINTING APPARATUS. ALAN B. McDOLLE, Buffalo, N. Y. Filed May 5, 1919. Serial No. 294,780. 6 Claims. (Cl. 91-57.)



2. A painting apparatus, comprising a pressure-tank adapted to contain liquid paint and having a discharge pipe, a screen applied to the mouth of said pipe, and current-inducing devices arranged in the tank adjacent to opposite sides of said screen and both trending toward the same.

1,311,828. TREATING AND SEPARATING SYSTEM. WILLIAM R. MACLEND, Chicago, Ill. Filed Jan. 23, 1917. Serial No. 143,992. 8 Claims. (Cl. 23-31.)

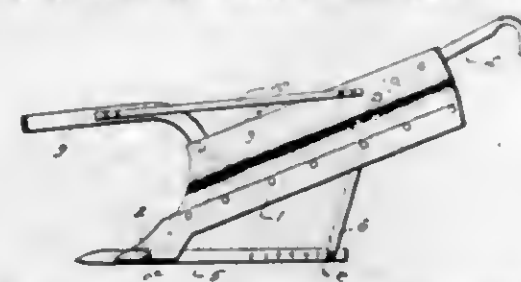


1. A liquid treating and separating process, consisting in (1) simultaneously passing and repassing the material carrying liquid vehicle and treating liquid into and out of a plurality of treating units in sequential order, and (2) impregnating said material carrying liquid vehicle with a separate chemical treating fluid in its passages and repassings between said treating units.

1,311,829. DITCHING-PLOW. SCOTT D. MARTIN, Lamar, Colo. Filed July 5, 1918. Serial No. 243,343. 2 Claims. (Cl. 97-12.)

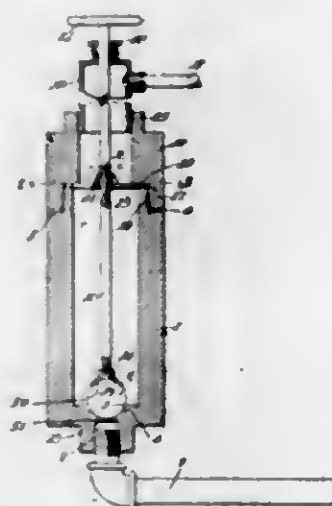
2. A plow of the character described, comprising a longitudinally disposed running bar having a plurality of transverse openings at different points along the same, divergently-disposed mold boards having a pivotal connection with the running bar adjacent to its front end, said

mold boards being capable of vertical movement with respect to the running bar, depending brace rods pivotally secured to the mold boards and having their free ends mor-



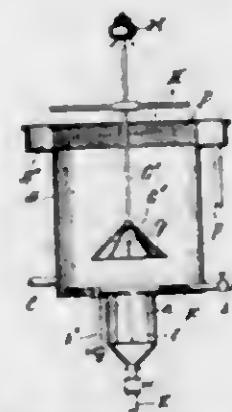
able to different positions longitudinally along the running bar, and fastening means for the said ends of the brace rods arranged to engage in the different openings of the running bar.

1,311,830. WATER-CUT-OFF VALVE. WILLIAM D. MOITA, Baldwin, Iowa. Filed Aug. 11, 1917. Serial No. 185,680. 1 Claim. (Cl. 251-139.)



In a device of the class described, a tubular body comprising a lower end wall having an opening, the end wall being provided, about the opening, with a seat which slants downwardly to the opening; a rod mounted in the body for longitudinal movement; a foot having a concavity in its lower surface; and a free ball cooperating with the opening, with the seat, and with the concavity of the foot, the ball being of greater diameter than the distance between the periphery of the foot and the inner wall of the body, the foot being swiveled to the rod for rotation and for tilting movement, whereby when the ball is raised by the liquid, the ball and the foot may move laterally, thereby disposing the ball to one side of the axis of the opening.

1,311,831. APPARATUS FOR SEPARATING IMPURITIES FROM CANE-JUICE OR OTHER LIQUIDS. IRVING H. MORSE, New Orleans, La. Filed Jan. 24, 1919. Serial No. 272,904. 8 Claims. (Cl. 210-5.)

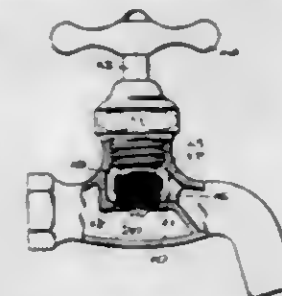


1. Apparatus for separating solid particles from liquid, comprising a main tank, a well at the bottom thereof, a

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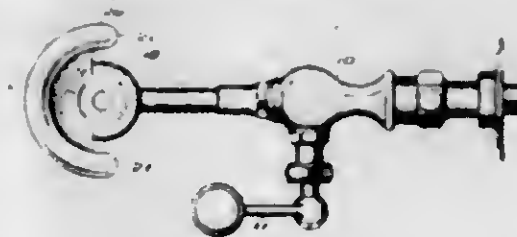
sieve at the upper end of said tank, a trough exterior to said sieve, means for supplying liquid to said tank and for drawing off the filtered liquid from said trough, means for drawing off the solid particles from said well, and means for imparting a rotary motion to the liquid in said tank, substantially as described.

1,311,832. SEAT-WASHER AND STEM. PHILIP MUELLER, Decatur, Ill. Filed Aug. 11, 1916. Serial No. 114,403. 2 Claims. (Cl. 251-44.)



1. In combination, a valve-stem having upon its end a serrated rib, and a valve-head fixedly carried by said stem and having its opposite ends beveled to form seating surfaces, said rib being spaced radially from said seating surfaces of the head to prevent mutilation thereof.

1,311,833. SANITARY DRINKING-FOUNTAIN. PHILIP MUELLER, Decatur, Ill. Filed Aug. 22, 1916. Serial No. 116,342. 10 Claims. (Cl. 137-110.)



10. A bubbler head for sanitary drinking fountains, comprising a spherical body portion of vitreous material having a drinking stream passage therethrough, an imperforate guard formed integral with said body portion and extending outwardly and upwardly from one side thereof, and a connecting member secured to the bottom of said body portion, said member having therethrough a drinking stream passage and provided with a cone shaped projection at its bottom to collect and solidify the waste water coming from the bubbler head.

1,311,834. SERVICE-BOX. ROBERT H. MUELLER, Decatur, Ill. Filed Apr. 30, 1917. Serial No. 165,534. 10 Claims. (Cl. 137-13.)



10. A service box member comprising a pipe-like section, a socketed head having a through bore coupled there-

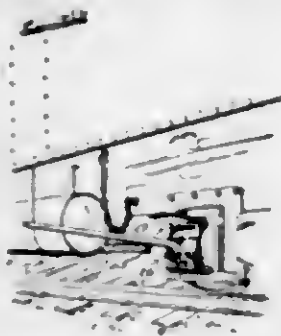
with, said head having a circular groove in its outer wall, and a contractile spring loosely mounted in said groove and of greater diameter than the diameter of said groove.

1,311,835. PERCUSSION-FUSE. Lewis Nixon, New Brunswick, N. J. Filed Mar. 29, 1917. Serial No. 158,280. 3 Claims. (Cl. 102-39.)



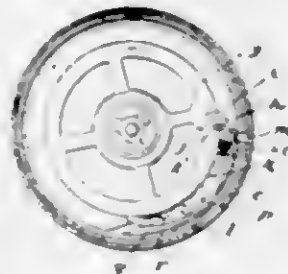
1. In a fuse for projectiles of the character described, the combination with a fuse stock and a primer mounted therein, the said fuse stock having a chambered head, and a cap loosely mounted on said head, of a spring impressed plunger mounted in said fuse stock and having its stem projecting into said chambered head, a trigger engaging said stem, a locking pin normally holding said trigger in engagement with said stem, and means for holding said locking pin in engagement with said trigger and for automatically releasing same, comprising a spring normally tending to throw said locking pin out of engagement with said trigger, and a flexible strip wound over said head and said locking pin and having its outer end secured to said cap, substantially as described.

1,311,836. TOOL FOR ADJUSTING JOURNALS. WILLIAM E. NORMAN, Washington, D. C. Filed Nov. 13, 1918. Serial No. 202,303. 4 Claims. (Cl. 234-131.)



4. A tool for the purpose stated comprising a lever member provided at one end with a transversely extending head the forwardly presented face of which is rounded in a vertical direction whereby the head may have rocking engagement against a wall of a journal box, and spaced arms pivotally connected at their rear ends with the lever member adjacent the said head, the said arms at their forward ends being provided with inwardly presented lips for engagement with the collar of a journal end.

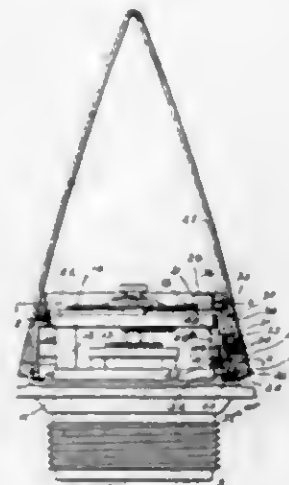
1,311,837. SETTING DEVICE FOR MECHANICAL TIME-FUSES. OLUF OHLSON, Newton, Mass., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1917. Serial No. 152,798. 10 Claims. (Cl. 102-38.)



1. In a time fuse the combination with an adjustable setting member and an adjustable timing member, of a

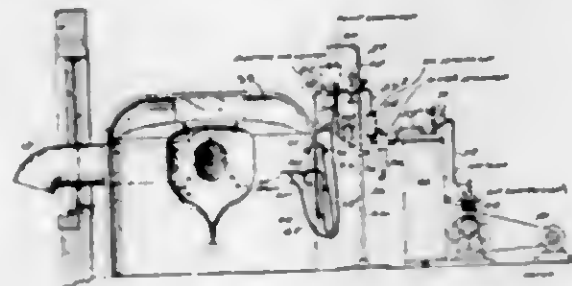
coupling between said members, said coupling being normally under stress tending to disengage it from one of the members, and a retainer for holding the same in such engagement, adapted to be displaced prior to the firing of the gun in which the projectile equipped with the fuse is loaded.

1,311,838. LOCKING DEVICE FOR TIME-FUSES. OLUF OHLSON, Newton, Mass., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed May 23, 1917. Serial No. 170,421. 12 Claims. (Cl. 102-36.)



1. In a time fuse the combination with an adjustable timing member and an adjusting element, of a releasable coupling between said member and element, said coupling being also an abutment for the timing member when released, a lock for securing the adjusting member against displacement, and means for simultaneously securing said lock and releasing said coupling.

1,311,839. PNEUMATIC COATING APPARATUS. JENS A. PAASCH, Chicago, Ill. Filed Sept. 23, 1915. Serial No. 52,139. 9 Claims. (Cl. 91-45.)



3. A pneumatic coating apparatus having, in combination, a device for applying coating material, means for supplying coating material to said device, means for supplying air to said device, and a single means for heating the air and the coating material before they arrive at said device.

1,311,840. METHOD OF DISTRIBUTING LIQUID. LEE H. PARKER, Boston, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1917. Serial No. 207,417. 9 Claims. (Cl. 137-84.)

1. That method of distributing liquid over an extended area which consists in simultaneously producing an inner jet and one or more surrounding jets physically unconfined along their adjacent edges, in causing said jets to traverse a confined space toward an outlet and in causing

said surrounding jet or jets when in proximity to said outlet to flow markedly and with substantial abruptness



toward said inner jet thereby to effect a marked mixing action within said confined space in proximity to said outlet.

1,311,841. METHOD OF DISTRIBUTING LIQUID. LEE H. PARKER, Boston, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Dec. 17, 1917. Serial No. 207,417. Divided and this application filed June 24, 1919. Serial No. 306,303. 12 Claims. (Cl. 137-84.)

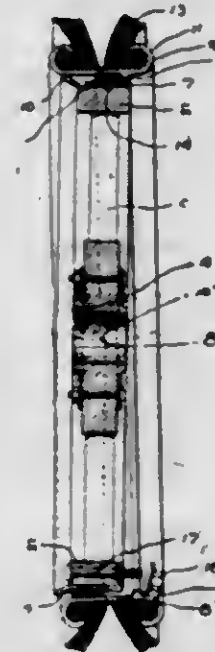


1. That method of producing a spray of substantially uniform homogeneity which comprises directing a portion of a stream of liquid into one or more paths substantially spiral but outward with respect to the direction of flow of said stream, and directing another portion of said stream in an outward direction that is, throughout at least a portion of its length, at one side of the longitudinal axis of said stream, while permitting the surface contact of said portions of said stream, in causing said several portions of the stream to meet within a confined space, whereby the flow of the first mentioned portion of the stream is modified by that of the second portion, and whereby all portions of the stream issue from said confined space in a spray of substantially uniform homogeneity.

1,311,842. VEHICLE-WHEEL. CHARLES F. RUBIN, Brooklyn, N. Y. Filed Feb. 5, 1918. Serial No. 215,420. 8 Claims. (Cl. 152-21.)

1. A vehicle wheel comprising a wheel body having a peripheral portion, a removable rim for said wheel body, means associated with said wheel body and rim for permitting the latter to be swung into position on the former about a portion of the wheel body as a pivot, said means comprising a plurality of raised substantially cylindrical segmental bearing means interposed between said rim

and wheel body, said segmental bearing means occupying portions of complementary arcs, one of said arcs includ-



ing that portion of the felly about which the rim may be swung as a pivot.

1,311,843. FOOD COMPOSITION AND PROCESS OF PREPARING SAME. SYDNEY MAKEPEACE WOOD, Upper Montclair, N. J. Filed Mar. 19, 1919. Serial No. 283,511. 5 Claims. (Cl. 99-11.)

1. A liquid food composition made up in the proportion of approximately one pound of cocoa to eleven pounds of invert sugar syrup, in which syrup the associated proportions of the dextrose and levulose to the sucrose are substantially equal.

2. A liquid food composition made up of invert sugar syrup and cocoa, in which the associated proportions of the dextrose and levulose to the sucrose in the syrup are substantially equal, and the proportion of the cocoa is substantially ten per cent. of the entire mass.

3. A liquid food composition made up of invert sugar syrup and cocoa, in which the associated proportions of the dextrose and levulose to the sucrose in the syrup are substantially equal, and the proportion of the cocoa is substantially ten per cent. of the entire mass, and wherein the proportion of water in the mass is substantially twenty per cent.

4. The process of making a food product which consists of inverting sugar to such an extent that the dextrose and levulose are substantially equal to the sucrose, then mixing the invert syrup with cocoa in the proportion of substantially one pound of cocoa to eleven pounds of syrup, then heating the mixture to substantially the boiling point, stirring said mixture during the heating, and then cooling the mixture.

5. The process of making a food product which consists of inverting sugar to such an extent that the dextrose and levulose are substantially equal to the sucrose, then mixing the invert syrup with cocoa in the proportion of substantially one pound of cocoa to eleven pounds of syrup, then heating the mixture and maintaining said heat for at least three minutes, stirring said mixture during the heating, and then cooling the mixture.

1,311,844. FOOD COMPOSITION AND IN PROCESS OF PREPARING SAME. SYDNEY MAKEPEACE WOOD, Upper Montclair, N. J. Filed Mar. 19, 1919. Serial No. 283,512. 4 Claims. (Cl. 99-11.)

1. A food composition of paste consistency made up of a mixture of invert sugar syrup and cocoa, in which the proportions of levulose and dextrose to the syrup to-

gether are substantially seventy per cent. of the solids in the syrup and the proportion of cocoa to the syrup is substantially one pound of cocoa to eleven pounds of invert syrup.

2. A food composition of pasty consistency made up of a mixture of invert sugar syrup and cocoa in which the proportions of levulose and dextrose in the syrup together are substantially seventy per cent. of the solids in the syrup, and wherein the proportion of cocoa to the syrup is substantially one pound of cocoa to eleven pounds of invert syrup, and wherein the proportion of water in the mass is substantially twenty per cent.

3. The process of making a food product which consists of inverting sugar to such an extent that the dextrose and levulose together in the syrup are substantially seventy per cent. of the solids in the syrup, then mixing said invert syrup with cocoa in the proportion of substantially one pound of cocoa to eleven pounds of syrup, then heating the mixture to substantially the boiling point, stirring the mixture during the heating, and then cooling it.

4. A process of making a food product which consists of inverting sugar to such an extent that the dextrose and levulose together in the syrup are substantially seventy per cent. of the solids in the syrup, then mixing the said syrup with cocoa in the proportion of substantially one pound of cocoa to eleven pounds of syrup, then heating the mixture and maintaining such heating for a period of at least three minutes, stirring the mixture during the heating and then cooling it.

1,311,845. PAPER CHEST-PROTECTOR. CLIFFORD E. ALBERT, Cincinnati, Ohio, assignor to The U. S. Playing Card Company, Norwood, Ohio, a Corporation of Ohio. Filed Dec. 19, 1917. Serial No. 207,927. 1 Claim. (Cl. 2-59.)



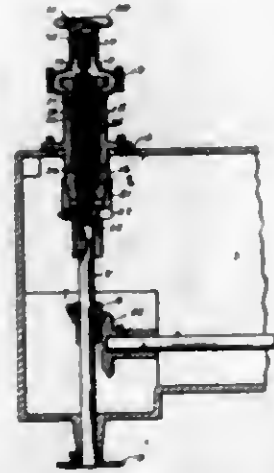
A one-piece paper chest protector, comprising a back, shoulder strap and chest covering portions, in one continuous sheet, having a medial neck opening, the chest and shoulder portions having scored folding lines, enabling the chest part to be laterally inverted when adjusting the protector to the body to make a three-ply overlap around and over the upper parts of the chest.

1,311,846. COLLIMATING DEVICE AND METHOD OF SIGHTING. HENRI CHRISTIAN, Nice, France. Filed May 1, 1919. Serial No. 294,077. 8 Claims. (Cl. 88-22.)



1. The combination of an ordnance piece with a sighting device therefor comprising a casing, a lens system having magnifying power of unity and including a known emblem in said casing, and means for erecting the image transmitted through the first member of said system.

1,311,847. SLICING-MACHINE. ERNEST K. HOOD, Indianapolis, Ind., assignor to The American Slicing Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1919. Serial No. 269,637. 2 Claims. (Cl. 74-7.)

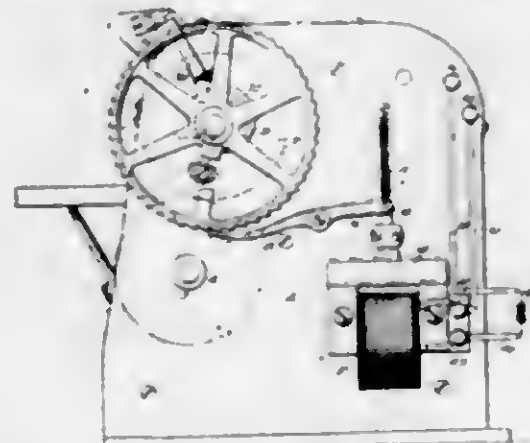


1. In a slicing machine: a friction clutch and gear reduction consisting of a shaft; a member of said clutch being splined to said shaft, a quill mounted on said shaft and carrying the other member of said clutch; a gear carried by the other end of said quill; a rod extending through said shaft and connected to the splined member of the clutch; and means for operating said rod longitudinally substantially as and for the purpose set forth.

1,311,848. PROCESS OF SEPARATING METAXYLENE FROM XYLENE SUBSTANCES. PIERRE LEPAGE, Lyon, France. Filed Apr. 23, 1919. Serial No. 292,161. 1 Claim. (Cl. 23-24.)

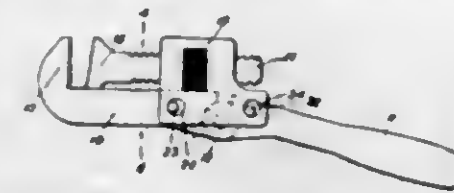
A process of separating metaxylene contained in xylene substances consisting in sulfonating the metaxylene exclusive of the two other isomeric substances contained in said xylene substances, by means of sulfuric acid of a strength of about 75% of SO_3H , in the presence of metaxylene sulfonic acid, separating the metaxylene sulfonic acid thus produced from the nonsulfonated isomeric xylenes and then desulfonating the metaxylene sulfonic acid obtained.

1,311,849. COUPON-COUNTING MACHINE. BEAT MONTOS SNAPP, Balboa, Canal Zone. Filed Sept. 28, 1918. Serial No. 256,041. 5 Claims. (Cl. 235-92.)



1. A counting machine of the class described comprising a driving roll, a counting roll adapted to be driven by the first roll by the interposition of a strip-like element, a ratchet wheel connected with the counting roll, a pawl for engaging the ratchet wheel to prevent the ratchet wheel from turning, a spring for disengaging the pawl from the ratchet wheel, an electromagnet having its armature connected with the pawl and normally holding the pawl in engagement with the ratchet wheel, and means operated by the strip-element for controlling the electromagnet.

1,311,850. WRENCH. CHARLES M. WILKERSON, Middlefield, Ohio. Filed Apr. 16, 1919. Serial No. 290,435. 2 Claims. (Cl. 81-126.)



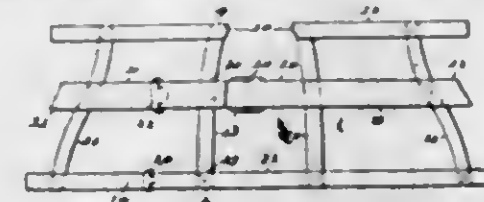
2. In a wrench, a rigid jaw, a plurality of pins projecting from opposite sides thereof, a handle pivotally secured to said rigid jaw, a plurality of pins carried by the opposite sides of said handle, a housing provided with apertures adapted for receiving the pins of the rigid jaw and the pivoted handle, said apertures being of greater dimensions than the pins received therein, and a jaw adjustably carried by said housing.

1,311,851. SAW-OILER. OSCAR F. WILKERSON, Durham, N. C. Filed Dec. 29, 1917. Serial No. 209,554. Renewed Dec. 28, 1918. Serial No. 268,707. 1 Claim. (Cl. 145-35.)



A saw oiler comprising a container located in the saw handle and provided with flanges engaging said handle, an inlet tube extending through said handle and having its lower end extending into and adjustably connected with the container, no outlet tube adjustably connected with the container, a valve located in said inlet tube, a spring in said tube for normally holding said valve with its end closing the outlet tube, a lever and a connection including a spring passing through the inlet tube and connecting the valve with the lever.

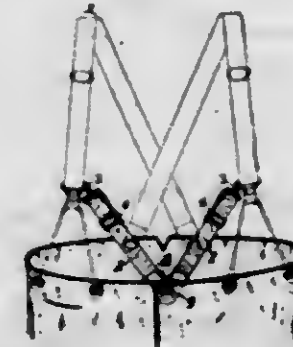
1,311,852. SKIRT-SUPPORTER. ISAAC YABLON and CHARLES WRIA, Lancaster, Pa. Filed Aug. 23, 1918. Serial No. 251,153. 1 Claim. (Cl. 241-8.)



A skirt supporter comprising a plurality of similar connected sections, each consisting of a centrally arranged horizontal band, an upper horizontal band, a lower horizontal band, uprights connecting said central, upper and lower bands, a front extension formed by the front end of the central band of one of the sections, a similar front extension formed by the front end of the central band of the other section, a buckle on one of said extensions for connection with the other extension, a rear extension formed by the rear end of the central band of one of the sections, a loop on the rearmost upright of the other section and having the rear extension loosely passed therethrough and a clasp slidable on the central band of the other section and connected to the rear extension beyond the loop, an extension formed by the end of the lower band of one of

the sections, a loop on the rearmost upright of the other section, and a clasp on said last mentioned extension and having sliding engagement with the lower band of the other section beyond the last mentioned loop.

1,311,853. SUSPENDER ATTACHMENT. EDWARD BENDHEIM, San Francisco, Calif. Filed May 14, 1917. Serial No. 168,407. 1 Claim. (Cl. 241-12.)



In suspenders, the combination with front links supporting the lower end of the suspenders having an inner projection with an opening for securing extra supports for the trousers thereto, of a pair of extensible straps, each of said straps being connected to one of said links and being attachable forwardly and centrally to the waistband of the trousers in alignment with the crutch.

1,311,854. ENGINE STARTING DEVICE. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company, a Corporation of Delaware. Filed July 7, 1914. Serial No. 849,443. 3 Claims. (Cl. 290-38.)



1. In a motor vehicle, the combination with an internal combustion engine, an electric starting motor, a battery, a resistance, a unitary switch contact, connecting means for said motor and engine, and a single actuating member for successively operating said contact to start said motor with the resistance in circuit, for moving said connecting means into operation, and for moving said contact to cut out said resistance.

1,311,855. TELESCOPIC ROD WITH EXTENSIBLE SHEATH. LEONIE COINCE-CHEVREY, Le Raincy, France. Filed Apr. 11, 1919. Serial No. 289,367. 2 Claims. (Cl. 150-19.)



1. A telescopic rod for wind-screens, curtains, etc., covered by a sheath of plaited or other extensible fabric which can extend or contract at the same time as the rod, in such a manner as to cover the said rod throughout in all the positions of the latter.

1,311,856. RUBBER-SHOE-SOLE-MAKING APPARATUS. PETER DE MATTIA and RICHARD DE MATTIA, Clifton, N. J. Filed June 20, 1918. Serial No. 240,995. 3 Claims. (Cl. 18-34.)

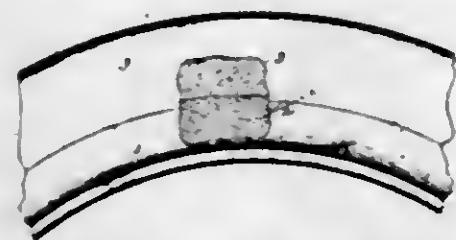
1. An apparatus as characterized comprising a plurality of circular ring molds having inner and outer raised flanges forming the periphery of said molds, and inner and outer

sections of different thicknesses, and said sections being connected by an inclined section extending from the level of the thicker section to the level of the thinner section.



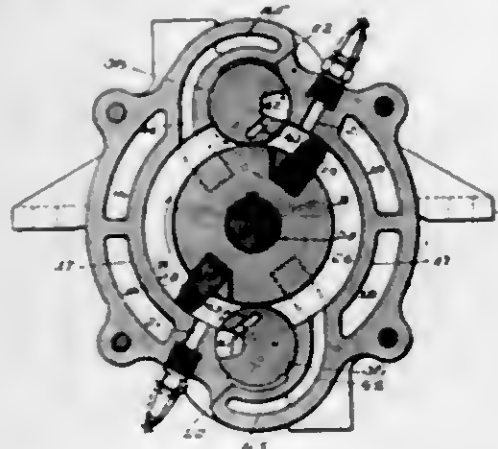
said ring molds being adapted to be assembled to form a vertical pile, the center of said pile forming a cylindrical opening.

1,311,857. LAMINATED FABRIC FOR TIRE-CASINGS. CHARLES M. DOOLIN, San Antonio, Tex. Filed Jan. 16, 1918. Serial No. 212,027. 1 Claim. (Cl. 154—52.)



A laminated fabric for tire casings and the like whereof each lamina is a strip composed of soft rubber and loose asbestos fibers embedded therein in parallelism with each other but oblique to the length of the strip, the laminae being vulcanized together with the strips in superposed relation and the fibers in contiguous strips extending in opposite directions.

1,311,858. ROTARY ENGINE. LOUIS G. FISCHER, Camp Hill, Pa. Filed June 13, 1918. Serial No. 230,023. 4 Claims. (Cl. 60—15.)

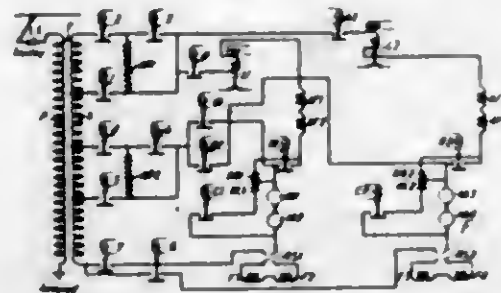


1. A rotary engine comprising a plurality of connected sections constituting a casing; a driving shaft mounted therein; a plurality of disk-members in spaced relation mounted upon said driving shaft; partitions separating said disk-members and dividing said casing into a plurality of chambers; oppositely-disposed paddles arranged on said circular disk-members and dividing the chambers into compartments; valve members rotatably mounted within said casing and having a portion bearing upon the surface of the circular disk-members, each valve being provided with slotted portions for the reception of the paddles, and with a duct leading from one chamber into the next succeeding chamber; and means for connecting the valves and the driving shaft.

1,311,859. SYSTEM OF CONTROL. RUDOLF E. HELLMUND, Pittsburgh, and IRAN T. MOSAHE, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,744. 8 Claims. (Cl. 172—276.)

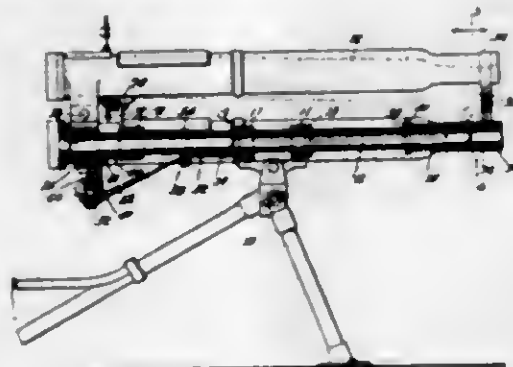
1. The combination with a source of energy and an electric motor, of means for producing connections there-

between corresponding to two different ranges of operation, means for normally effecting the transition from the one range to the other at a certain stage of the motor



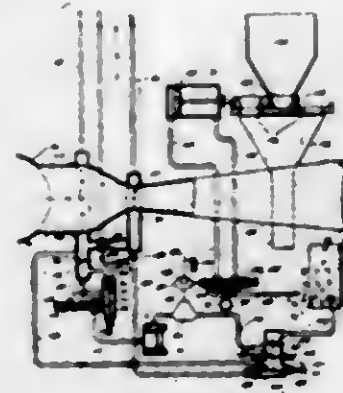
acceleration, and means responsive to relatively heavy-load conditions for delaying the identical transition till a later stage.

1,311,860. MULTIPLE GUN. EDWARD HOLZWARTH, Miller, S. D. Filed Mar. 27, 1918. Serial No. 224,950. 10 Claims. (Cl. 89—1.)



2. In a multiple gun, a plurality of machine guns, a sighting tube, the machine guns and sighting tube adjustably mounted relatively to each other and said guns grouped around the sighting tube, the said machine guns in one position having their axes parallel, and in another position convergent, and controlling means under the control of an operator, mounted on the said sighting tube and connected with the said guns to adjust the latter at will.

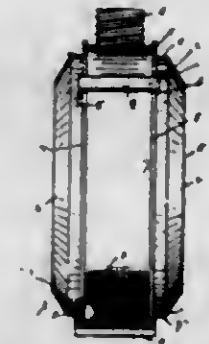
1,311,861. HYDRAULIC SYSTEM AND METHOD. GEORGE GOODSELL EARL, New Orleans, La., assignor of one-third to Charles Arthur Brown, Lorain, Ohio, and one-third to Albert Baldwin Wood, New Orleans, La. Filed Apr. 15, 1916. Serial No. 91,449. 31 Claims. (Cl. 73—167.)



1. The method of actuating apparatus functionally to a first fluid flow, which flow is itself functional to a difference between two initial fluid pressures, which method consists in producing a separate fluid flow from the higher to the lower of said fluid pressures through a tube of venturi form and utilizing the lower pressure pro-

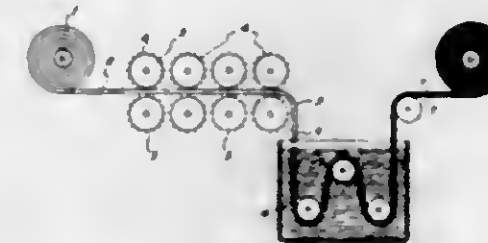
REISSUES.

14,095. CONTAINER. WILLIAM J. BOYLE, Sr., Los Angeles, Calif. Filed Apr. 11, 1919. Serial No. 289,446. Original No. 1,230,459, dated June 19, 1917. Serial No. 100,504, filed July 15, 1916. 6 Claims. (Cl. 220—71.)



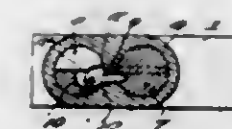
1. A canteen or like container, including an annular sheet metal body, side plates formed with peripheral outwardly opening channels of which the outer side walls telescope within the edges of the annular sheet metal body, the edges of the side plates and sheet metal body being connected by continuous seams, and keepers extending transversely across the annular sheet metal body and having the ends thereof returned and secured within the peripheral channels of the side plates.

1,311,862. PROCESS OF NAPPING AND SATURATING FELT, AND PRODUCT THEREOF. FLOYD W. ADAMS, Hudson Heights, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed June 29, 1918. Serial No. 242,611. 9 Claims. (Cl. 91—68.)



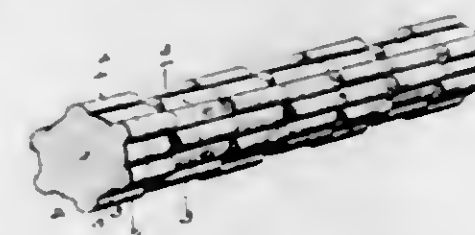
1. As an article of manufacture, a sheet of napped felt saturated with waterproofing material.
2. As an article of manufacture, a sheet of napped paper saturated with asphalt.
3. The process of producing a construction material which comprises the steps of napping the surface of a building felt and applying waterproofing material to the napped felt.

1,311,863. FUEL-LOCK. ISAAC ELVIN DEADMOND, Newkirk, Okla. Filed Nov. 16, 1917. Serial No. 202,343. 1 Claim. (Cl. 251—6.)



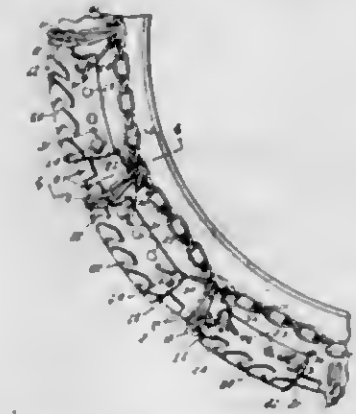
In combination with the fuel feed pipe of a motor, a valve casing interposed therein, a casing arranged on the valve casing having a plurality of vertically disposed bores therein, one of said bores receiving a valve spindle thereto, said valve spindle having a keeper therein, a rotatable barrel in the remaining bore having a recessed portion, a locking pin formed with a curved bearing head pivoted to the barrel and having said bearing head engaged in the recessed portion thereof, and a spring engaged with the curved bearing head normally tending to move the free end of the locking pin outwardly through a bore communicating with said vertically disposed bores into the first bore and in engagement at times with said keeper upon rotation of the barrel.

1,311,864. REINFORCING-BAR. PAUL KUNZ, Birmingham, Ala. Filed Oct. 1, 1918. Serial No. 256,413. 1 Claim. (Cl. 72—111.)



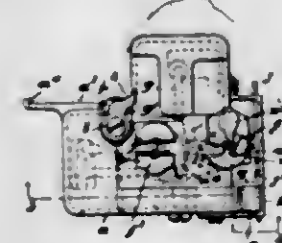
A reinforcing bar comprising a cylindrical body portion provided on its periphery with spaced apart longitudinal projections, each projection being semi-circular in cross section and flat at its ends, each succeeding set of projections terminating in circumferential alignment with the beginning of the adjacent projections, and the projections of one set being disposed in line with the spaces between the projections of the adjacent set.

14,096. NON-SKID TIRE-PROTECTOR. LINCOLN C. CUMMINGS, Brookline, Mass. Filed May 14, 1919. Serial No. 297,017. Original No. 1,285,634, dated Nov. 26, 1918. Serial No. 223,411, filed Mar. 19, 1918. 6 Claims. (Cl. 152—16.)



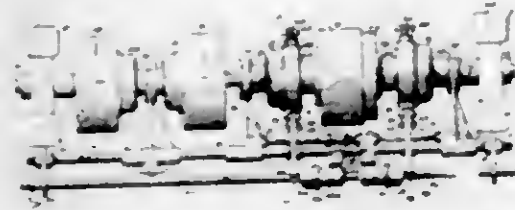
1. A non-skid tire protector having, in combination side chains, cross chains and treads between the cross chains, the treads being held on the tire with greater pressure than the cross chains.

14,097. KNOT-TYING DEVICE. ARTHUR B. EDMONDS, Pawtucket, R. I. Filed Aug. 2, 1916. Serial No. 112,855. Original No. 1,112,367, dated Sept. 20, 1914. Serial No. 765,463, filed May 5, 1913. 59 Claims. (Cl. 289—3.)



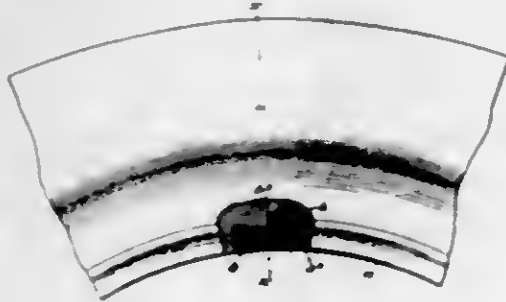
39. A knot tying device comprising in combination, knot tying means including a pair of needles, and means against which one of said needles clamps its thread end during the tightening of the knot.

14,698. POWER-TRANSMITTING DEVICE. WILLIAM T. McCULLOUGH, Chicago, Ill. Filed Apr. 28, 1919. Serial No. 293,291. Original No. 1,283,243, dated Oct. 29, 1918. Serial No. 226,812, filed Apr. 5, 1918. 11 Claims. (Cl. 74-34.)



1. A power transmitting mechanism comprising a driving and a driven member; a sun gear rotatable about the axis of said driving member; an internal gear independently rotatable about the axis of said members; intermediate planetary gears rotatable with the driven member; a clutch for the sun gear to connect it to the driving member; a clutch for the internal gear to connect it to the driving member; a brake for each member to hold the respective members to prevent rotation and means for coincidentally operating the clutch of one member and the brake of the other member, alternately.

14,699. TELLTALE DEVICE FOR TIRES. HENRY H. ROBERTS, JR., Philadelphia, Pa., assignor to John W. Watson, Wayne, Pa. Filed May 13, 1918. Serial No. 231,339. Original No. 1,208,659, dated Dec. 12, 1916. Serial No. 65,152, filed Dec. 4, 1915. 9 Claims. (Cl. 235-1.)



1. A mileage indicator for tires including means adapted to be associated with a tire to cause a member to wear during movement of the tire and thereby afford an indication of the extent of tire travel.

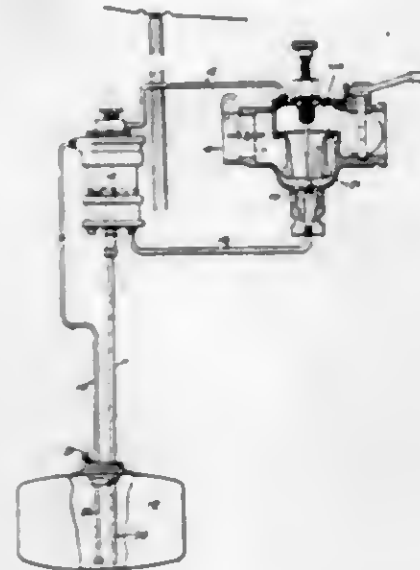
14,700. DRIVING PINION. EDWIN G. STAUBE, Minneapolis, Minn. Filed May 31, 1919. Serial No. 301,069. Original No. 1,300,786, dated Apr. 15, 1919. Serial No. 133,452, filed Nov. 25, 1916. 2 Claims. (Cl. 74-41.)



1. The combination, with an axle spindle, of a pinion hub fitting thereon and having flanged ends and pins mounted in said flanges to form a lantern pinion, the inner flange of said hub having an annular web radiating

therefrom terminating in a flanged portion which extends in a direction parallel substantially with the axis of said hub and having a friction surface.

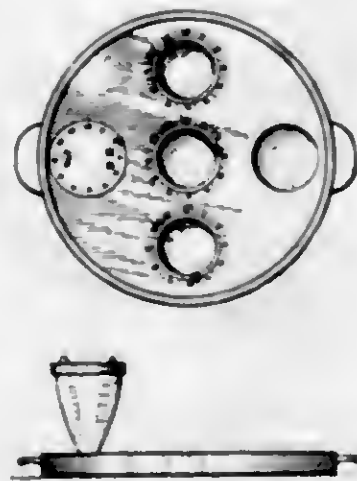
14,701. VACUUM LIQUID-FEEDING APPARATUS AND METHOD THEREFOR. CHARLES LAWRENCE STOKES, Los Angeles, Calif. Filed June 6, 1919. Serial No. 302,334. Original No. 1,230,832, dated June 19, 1917. Serial No. 91,303, filed Apr. 15, 1916. 24 Claims. (Cl. 158-36.)



1. The combination of a low level oil tank, a high level oil feed reservoir, a vacuum connection from said reservoir adapted to be fitted to the induction system of an internal combustion engine, an ascension pipe and a down flow pipe connecting said reservoir and tank and forming an oil circulation loop, and means for admitting air into said ascension pipe.

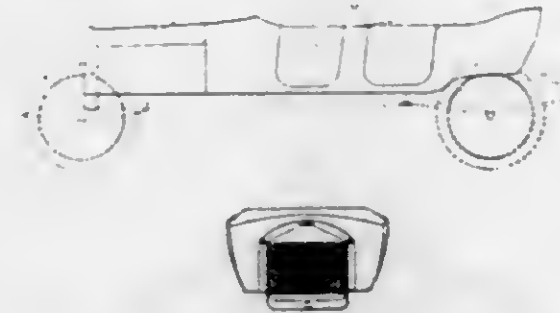
DESIGNS.

53,651. MEDICINE-TRAY. EDWIN B. ADAMS, Marion, Ind. Filed Mar. 5, 1919. Serial No. 280,809. Term of patent 7 years.



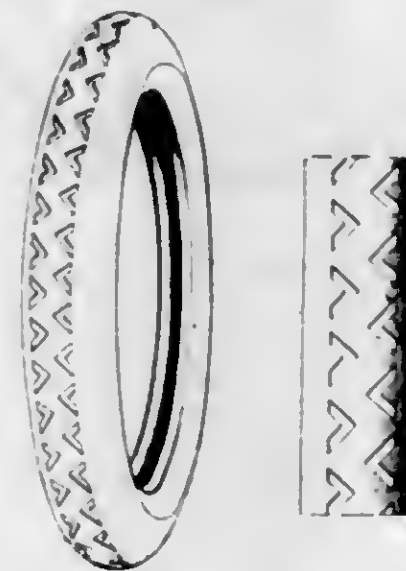
The ornamental design for a medicine tray, as shown in the accompanying drawing.

53,652. COMBINED AUTOMOBILE BODY, HOOD, AND RADIATOR. ALBERT C. BASLEY, Streator, Ill. Filed Oct. 31, 1916. Serial No. 128,796. Term of patent 7 years.



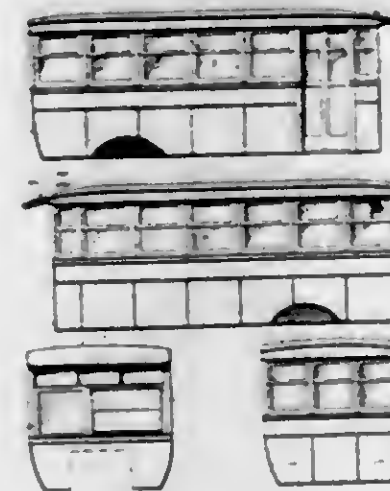
The ornamental design for a combined automobile body, hood, and radiator as shown.

53,653. TIRE. WARREN B. ROCKLEY, Washington, D. C. Filed May 10, 1919. Serial No. 296,248. Term of patent 3 1/2 years.



The ornamental design for a tire, as shown.

53,654. AUTOMOBILE-BODY. BARNEY BURSTEIN, Newark, N. J. Filed Apr. 29, 1919. Serial No. 293,577. Term of patent 14 years.



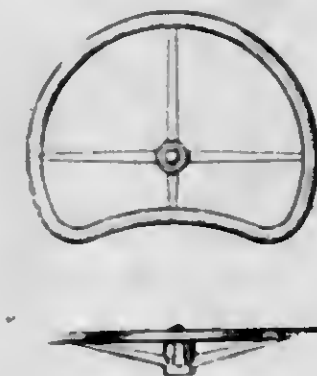
The ornamental design for an automobile body, as shown.

53,655. WRIST-WATCH CASE. FREDERICK G. GRUEN, Cincinnati, Ohio. Filed Mar. 19, 1919. Serial No. 283,676. Term of patent 7 years.



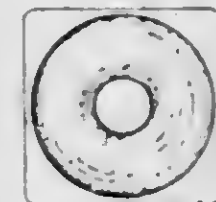
The original design for a wrist watch case as shown.

53,656. AUTOMOBILE STEERING-WHEEL. EMERY EASTMAN HARDY, Bayside, N. Y. Filed Aug. 12, 1916. Serial No. 114,652. Term of patent 14 years.



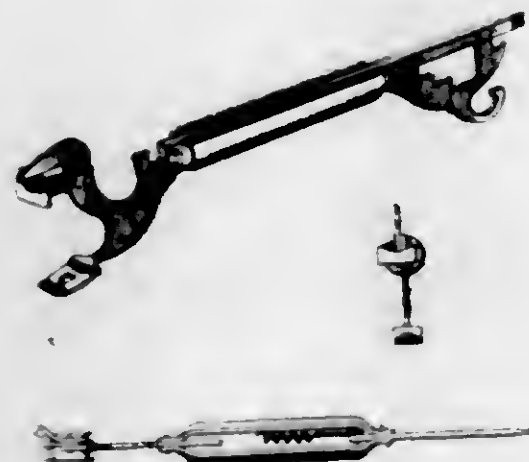
The ornamental design for an automobile steering wheel, as shown.

53,657. CANDY TABLET OR SIMILAR ARTICLE. JOSEPH F. HOLLWOOD, Brooklyn, N. Y. Filed Mar. 22, 1919. Serial No. 284,505. Term of patent 14 years.



The ornamental design for a candy tablet or similar article, substantially as shown.

53,658. COMBINATION TOOL. JOSEPH J. HOLSEN, Manitowoc, Wis. Filed Mar. 20, 1919. Serial No. 283,932. Term of patent 7 years.



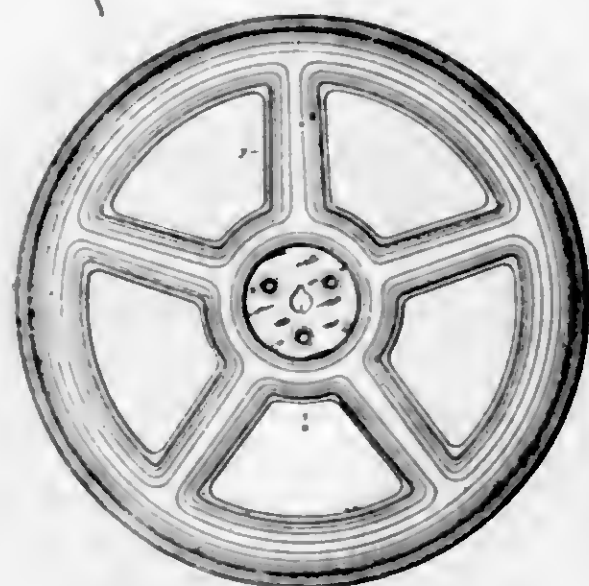
The ornamental design for a combination tool, substantially as shown.

53,659. SPOON, FORK, OR SIMILAR ARTICLE. BARTON P. JENKS, Attleboro, Mass., assignor to The Watson Company, Attleboro, Mass. Filed May 10, 1919.



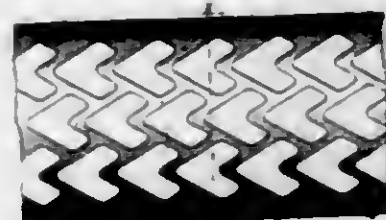
Serial No. 296,249. Term of patent 14 years.
The ornamental design for a spoon, fork, or similar article as shown.

53,660. FRAME FOR FILM-REELS. CHARLES A. KATS and JOSEPH WILHELM, McKees Rocks, Pa. Filed Mar. 11, 1919. Serial No. 282,042. Term of patent 14 years.



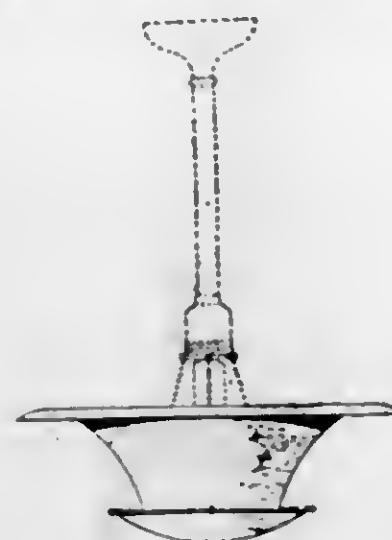
The ornamental design for frame for film reels, as shown.

53,661. PNEUMATIC TIRE. JOHN H. KOHNEN, Kenmore, Ohio, assignor to The Oldfield Tire Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1919. Serial No. 282,755. Term of patent 14 years.



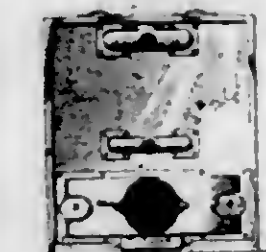
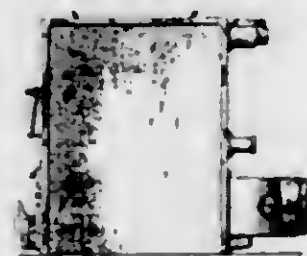
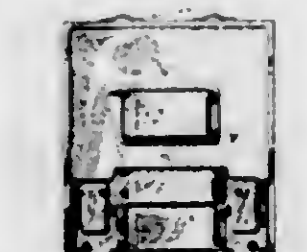
The ornamental design for a pneumatic tire as shown.

53,662. BOWL FOR LIGHTING-FIXTURES. FREDERICK W. MATHIEU, New York, N. Y. Filed Dec. 4, 1918. Serial No. 265,300. Term of patent 7 years.



The ornamental design for a bowl for lighting fixtures, as shown in full lines in the drawing.

53,663. BOILER. ANDRE M. MERTZANOFF, Buffalo, N. Y., assignor to Amerless Radiator Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 7, 1918. Serial No. 248,813. Term of patent 14 years.



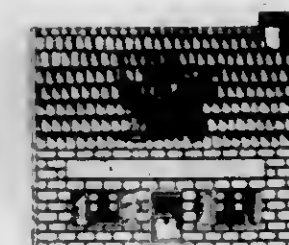
The ornamental design for a boiler as shown.

53,664. AUTOMOBILE-HOOD. CHARLES W. MCKINLEY, Toledo, Ohio. Filed Aug. 2, 1917. Serial No. 184,157. Term of patent 14 years.



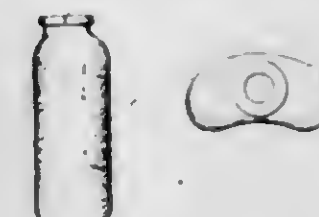
The ornamental design for an automobile hood as shown.

53,665. CAN. ROBERT POINTER MOSSON, El Paso, Tex. Filed Apr. 7, 1919. Serial No. 288,393. Term of patent 7 years.



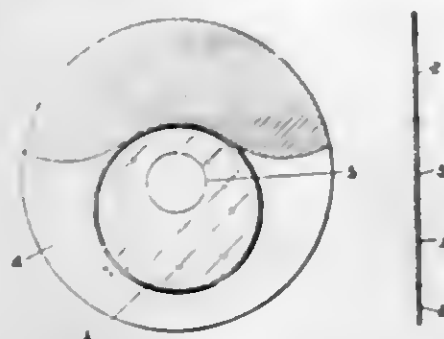
The ornamental design for a can as shown.

53,666. BOTTLE. OSCAR O. R. SCHWIDETZKY, Hasbrouck Heights, N. J., assignor to Becton Dickinson & Co., Rutherford, N. J., a Corporation of New Jersey. Filed Nov. 27, 1918. Serial No. 264,460. Term of patent 14 years.



The ornamental design for a bottle as shown.

53,667. FRONT GLASS FOR AUTOMOBILE HEADLIGHTS. BERTON H. SULLS, Toronto, Ontario, Canada. Filed Dec. 5, 1917. Serial No. 205,674. Term of patent 7 years.



The ornamental design for a front glass for automobile headlights as shown.

53,668. VEHICLE-BODY. ANTHONY J. STUMPF, Chicago, Ill. Filed Aug. 29, 1918. Serial No. 251,997. Term of patent 7 years.



The ornamental design for a vehicle body, as shown.

53,669. FLOWER-HOLDER. GEORGE E. M. STUMPF and KARL KAHMANN, Southampton, N. Y. Filed Mar. 12, 1919. Serial No. 262,218. Term of patent 7 years.



The ornamental design for a flower holder, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 29, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 94,456. (CLASS 39. CLOTHING.) RICHMOND HOSIERY MILLS, Rossville, Ga. Filed Apr. 15, 1916.

IROQUOIS

Particular description of goods.—Hosiery.
Claims use since May, 1911.

Ser. No. 98,710. (CLASS 12. CONSTRUCTION MATERIALS.) THE THOMAS AND ARMSTRONG CO., London, Ohio. Filed Oct. 16, 1916.

BUCKEYE

Particular description of goods.—Corn-Crubs, Corn-Rins, Silo-Roofs, Silo-Chutes, Barn-Roof-Ridging Ventilators, Metal Shingles.
Claims use since about Jan. 1, 1911.

Ser. No. 107,523. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JEAN HEPPEL, Newark, N. J. Filed Nov. 22, 1917.



Particular description of goods.—Prepared and Cut Loach Packed and Delivered in Boxes. Consisting of Sandwiches, Cake, Pastry, and Fresh Fruit.
Claims use since Oct. 25, 1917.

Ser. No. 109,169. (CLASS 32. FURNITURE AND UP-HOLSTERY.) BEANSTEIN MANUFACTURING COMPANY, Philadelphia, Pa. Filed Feb. 23, 1918.

KOMFO

Particular description of goods.—Recliners.
Claims use since about Oct. 1, 1917.

Ser. No. 109,170. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CANEDY-OTTO MFG. CO., Chicago Heights, Ill. Filed Feb. 23, 1918.

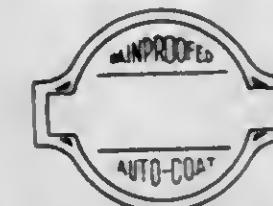


Consisting of the representation of the earth or world encircled by a band or belt, the letter "C" being displayed in red above and the letter "O" in red below said band or belt, the drawing being lined to indicate said color.

Particular description of goods.—Portable Blowers, Drill-Presses, Punch-Presses, Shears for Hand and Foot Power, Machines for Shrinking Metal Wheel-Tires and other Metal Parts, and Lathes.

Claims use since on or about Nov. 1, 1917.

Ser. No. 109,653. (CLASS 39. CLOTHING.) THE MILLER CLOAK CO., Cleveland, Ohio. Filed Mar. 19, 1918.



The right to the exclusive use of the words "Rain-Proofed" and "Auto-Coat," except in connection with the rest of the mark shown, is hereby disclaimed.

Particular description of goods.—Auto-Coats, Rain-Coats, Dress-Coats, Utility-Coats.

Claims use since Feb. 8, 1918.

Ser. No. 110,474. (CLASS 39. CLOTHING.) FELDER SING MFG. CO., Seattle, Wash. Filed Apr. 27, 1918.



Particular description of goods.—Boots and Shoes Made of Leather.

Claims use since Oct. 1, 1917.

Ser. No. 111,150. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) DUPAC Young Optical Company, Southbridge, Mass. Filed May 23, 1918.

NO-GLARO

Particular description of goods.—Frames and Mountings for Spectacles and Eyeglasses.
Claims use since the 13th day of April, 1918.

Ser. No. 111,802. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) HYUM W. VALENTINE, Brigham, Utah, and Celina, Ohio. Filed June 25, 1918.



Particular description of goods.—Phonographs and Pianos.
Claims use since Feb. 1, 1918.

Ser. No. 112,262. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE NIPPON CAUCIAL COMPANY, LIMITED, Toyotama-Gun, Tokyo-Fu, Japan. Filed July 22, 1918.



Particular description of goods.—Graphite Crucibles.
Claims use since Mar. 17, 1911.

Ser. No. 112,367. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SCHAFER ENGINEERING & EQUIPMENT CO., TIND, Ohio. Filed July 27, 1918.

POIDOMETER

Particular description of goods.—Material-Handling Machinery for Receiving, Conducting, and Conveying Materials—Namely, Hoppers, Chutes, Ducts, Ways, Conveyers, and Parts Thereof.
Claims use since as early as Jan. 16, 1914.

Ser. No. 113,136. (CLASS 39. CLOTHING.) ARMOR-CLAD BOY'S CLOTHES CO., New York, N. Y. Filed Sept. 12, 1918.

ARMOR-CLAD

Particular description of goods.—Children's and Boys' Clothes—Namely, Suits, Overcoats, and Pants.
Claims use since June 1, 1918.

Ser. No. 113,630. (CLASS 2. RECEPTACLES.) INTERSTATE BAG CO., Walden, N. Y. Filed Oct. 9, 1918.

CARRYALL

Particular description of goods.—Half-Bags Provided with Paper-Cord or Cord Handles.
Claims use since on or about July 29, 1912.

Ser. No. 113,891. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) ALFRED SPEAR, Providence, R. I. Filed Oct. 25, 1918.

"VICTORY"

Particular description of goods.—Emblems and Badges, All Made Wholly or in Part of Precious Metal.
Claims use since Oct. 21, 1917.

Ser. No. 113,970. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) EDWARD B. LEDERER, Providence, R. I. Filed Oct. 31, 1918.

"VICTORY"

Particular description of goods.—Base-Metal Key-Chains and Identification-Tag Chains.
Claims use since July 1, 1918.

Ser. No. 114,206. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. H. COCHRANE CO., Portage, Wis. Filed Nov. 18, 1918.

HICKORY

The trade-mark consisting of the word "Hickory."
Particular description of goods.—Field and Garden Seeds.
Claims use since Nov. 4, 1918.

Ser. No. 114,207. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. H. COCHRANE CO., Portage, Wis. Filed Nov. 18, 1918.

GOLDEN RULE

The trade-mark consisting of the words "Golden Rule."
Particular description of goods.—Alfalfa-Seed.
Claims use since about Jan. 2, 1910.

Ser. No. 114,208. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. H. COCHRANE CO., Portage, Wis. Filed Nov. 18, 1918.

ELM

Consisting of the word "Elm."
Particular description of goods.—Field and Garden Seeds.
Claims use since Nov. 4, 1918.

Ser. No. 114,209. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. H. COCHRANE CO., Portage, Wis. Filed Nov. 18, 1918.

CEDAR

The trade-mark consisting of the word "Cedar."
Particular description of goods.—Field and Garden Seeds.
Claims use since Nov. 4, 1918.

Ser. No. 114,208. (CLASS 39. CLOTHING.) JULIA KATSKA & CO., New York, N. Y. Filed Nov. 21, 1918.

ITALIAN

Particular description of goods.—Fabric Gloves.
Claims use since 1906.

Ser. No. 114,448. (CLASS 39. CLOTHING.) WILLIAM HURRELL, Norwich, England. Filed Dec. 2, 1918.

CINEMA

Particular description of goods.—Infants', Girls', Boys', and Ladies' Boots, Shoes, and Slippers Made of Leather and Also Made of a Combination of Leather and other Suitable Material.
Claims use since the 28th of January, 1911.

Ser. No. 114,470. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) HUGO BRITE CO., Ottawa, Ohio. Filed Dec. 3, 1918.

Rugo Brite



No claim being made to the words "Rugo Brite" and the words "Before" and "After" apart from the mark shown in the drawing, the picture of the man shown in the drawing being fanciful.

Particular description of goods.—A Compound for Cleansing and Scouring Rugs and Carpets.
Claims use since November, 1914.

Ser. No. 114,592. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES A. WEEKS, Philadelphia, Pa. Filed Dec. 10, 1918.

CHLORLYPTUS

Particular description of goods.—Germicide Solution.
Claims use since some time in the month of August, 1918.

Ser. No. 115,122. (CLASS 39. CLOTHING.) J. A. MIGEL, INC., New York, N. Y. Filed Jan. 11, 1919.

MOON-GL°

Particular description of goods.—Women's and Misses' Wearing-Apparel—Namely, Suits and Skirts for Outer Wear, Shirt-Waists, Silk Gloves, Trimmed and Untrimmed Hats, Bonnet-Caps, Corsets, Nightgowns, Bath Robes, Dressing-Gowns, Petticoats, Bloomers, Hosiery, Brassières, Kilt Underwear, and Silk Underwear—Namely, Drawers and Corset-Covers.
Claims use since June 19, 1918.

Ser. No. 115,562. (CLASS 31. FILTERS AND REFRIGERATORS.) THE ALARKA REFRIGERATOR COMPANY, Muskegon Heights, Mich. Filed Feb. 1, 1919.

Frost King

Particular description of goods.—Refrigerators.
Claims use since Nov. 1, 1900.

Ser. No. 115,573. (CLASS 39. CLOTHING.) NAVY KNITTING MILLS, INC., New York, N. Y. Filed Feb. 1, 1919.



No claim is made for the exclusive use of the word "Knit" apart from the trade-mark shown in the accompanying drawing.

Particular description of goods.—Sweaters, Bathing-Suits, Underwear, and Hosiery, All Made of Knitted Material.

Claims use since August, 1917.

Ser. No. 115,727. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) GENERAL GAS ELECTRIC CO., Hanover, Pa. Filed Feb. 10, 1919.

Genco Light

The word "Light," standing alone, is disclaimed.
Particular description of goods.—Electric Light and Power Generating Plants and Parts Thereof, Each Plant Comprising an Internal-Combustion Engine Coupled to an Electric Motor-Generator and other Electrical Elements, All Being Mounted on a Single Base.
Claims use since Nov. 7, 1916.

Ser. No. 115,846. (CLASS 27. HOROLOGICAL INSTRUMENTS.) EUGENE ROTHMAN, New York, N. Y. Filed Feb. 13, 1919.

REFLEKTOR

Particular description of goods.—Watches, Clocks, Alarm-Clocks.
Claims use since Dec. 2, 1918.

Ser. No. 115,920. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) HENRY A. LOWE, Cleveland, Ohio. Filed Feb. 17, 1919.

LAST WORD

Particular description of goods.—Machinists' and Tool-Makers' Test-Indicators.
Claims use since February, 1914.

Ser. No. 115,943. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT JOSEPH BYRON, Seattle, Wash. Filed Feb. 18, 1919.



My trade-mark consists of five characters from Shakespeare's comedy, the Midsummer Night's Dream, the names of the characters being Bottom, the Weaver, Titania, Puck, Oberon, and one of the fairies, the setting being in group formation, inclosed by an oval-shaped border, with the title of "Midsummer Night's Dream Lotion." The words "Trade Mark, Reg. U. S. Pat. Off." found upon the drawing and specimens submitted are hereby expressly disclaimed, and I also expressly disclaim any exclusive appropriation of the word "Lotion" found upon the drawing and specimens submitted.

Particular description of goods.—Facial Creams and Lotions.
Claims use since about July 15, 1915.

Ser. No. 116,079. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE CLAXO COMPANY, Iowa City, Iowa. Filed Feb. 24, 1919.

Claxco

Particular description of goods.—Portable Electric Fans or Blowers for Causing the Circulation of Air.
Claims use since approximately Nov. 15, 1918.

Ser. No. 116,097. (CLASS 44. DENTAL MEDICAL, AND SURGICAL APPLIANCES.) BERTIE MAT, INC., New York, N. Y. Filed Feb. 24, 1919.

NIOBÉ

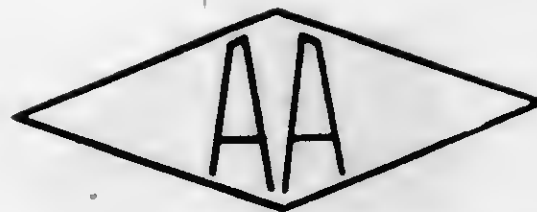
Particular description of goods.—Obstetric Belts.
Claims use since Mar. 1, 1915.

Ser. No. 116,161. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARINELLO COMPANY OF ILLINOIS, Chicago, Ill. Filed Feb. 26, 1919.



Particular description of goods.—Tissue-Cream, Motor-Cream, and Lettuce-Brand Cream, which are Facial Creams; Whitening-Cream, Acne-Cream, Acne-Lotion; Methine Liquid and Ointment, which is a Compound of Thuja and Essential Oils to Decrease Vascular Condition of the Skin; Foot-Lotion, Foot-Ointment, Foot-Powder, Deodorizer Foot-Lotion, Deodorant, Nail-Bleach, Nail-Cream, Nail-Polish, Lily-White Hand-Lotion, Gecanium-Jelly and Rose-Leaf Hand-Lotions, Scalp-Pomade, Gray-Hair Tonic, Hair-Whitener, Dry-Scalp Hair-Tonic, Oily-Scalp and Dandruff Astringent Hair-Tonic, Astringent Cream; Medicated Powder, which is Face-Powder Mixed with a Little Carbolic Salve; Face-Powder, Lavender Lotion, Facial Lotion, Acacia Balm, Antiseptic and Bleaching Lotion, Wave-Tight Curling Fluid, Medicated Colloidion, Antiseptic Oil, Astringent Lotion, Tar Tonic, Follicle-Lotion Hair Tonic, Talcum Powder, Sachet, Perfume, Deplumatory Powder, Toilet Water, and Rouge.
Claims use since 1901.

Ser. No. 116,195. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE R. SEABOLDY CORPORATION, New York, N. Y. Filed Feb. 27, 1919.



Particular description of goods.—Standard Measuring-Wires for Use in Testing the Precision of Thread-Gages and other Threaded Instruments.
Claims use since May, 1917.

Ser. No. 116,342. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) LIBERTY STARTERS CORPORATION, New York, N. Y. Filed Mar. 6, 1919.

LIBERTY

The word "Liberty."
Particular description of goods.—Electric Starting Mechanisms for Gasoline or Oil Engines.
Claims use since May, 1918.

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Ser. No. 116,493. (CLASS 30. MUSICAL INSTRUMENTS AND SUPPLIES.) LESTER PIANO COMPANY, Philadelphia, Pa. Filed Mar. 12, 1919.



The trade-mark consisting of the portrait of the composer Charles François Gounod, associated with the word "Gounod."

Particular description of goods.—Pianos.
Claims use since Feb. 4, 1919.

Ser. No. 116,534. (CLASS 37. PAPER AND STATIONERY.) THE DENNEY TAG COMPANY, West Chester, Pa. Filed Mar. 13, 1919.

PURITY

Particular description of goods.—Shipping-Tags.
Claims use since Feb. 26, 1919.

Ser. No. 116,536. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ESSANDEE CORPORATION, Chicago, Ill. Filed Mar. 13, 1919.

ESSANDEE

Consisting of the word "Essandee."
Particular description of goods.—Complete Self-Contained Electric-Power Generating and Electric-Lighting Systems.
Claims use since Oct. 1, 1917.

Ser. No. 116,564. (CLASS 37. PAPER AND STATIONERY.) THE DENNEY TAG COMPANY, West Chester, Pa. Filed Mar. 14, 1919.

ECONOMY

Particular description of goods.—Shipping-Tags.
Claims use since Feb. 26, 1919.

Ser. No. 116,617. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Mar. 15, 1919.

DEXTER

Particular description of goods.—Horseshoe-Nails.
Claims use since Apr. 7, 1911.

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Ser. No. 116,648. (CLASS 37. PAPER AND STATIONERY.) THE DENNEY TAG COMPANY, West Chester, Pa. Filed Mar. 17, 1919.

VICTORY

Particular description of goods.—Shipping-Tags.
Claims use since Feb. 26, 1919.

Ser. No. 116,649. (CLASS 37. PAPER AND STATIONERY.) THE DENNEY TAG COMPANY, West Chester, Pa. Filed Mar. 17, 1919.

IMPERIAL

Particular description of goods.—Shipping-Tags.
Claims use since Feb. 26, 1919.

Ser. No. 116,681. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WALLIS DORE COMPANY, New York, N. Y. Filed Mar. 18, 1919.



Particular description of goods.—Toy Furniture.
Claims use since Dec. 16, 1918.

Ser. No. 116,705. (CLASS 30. MUSICAL INSTRUMENTS AND SUPPLIES.) DIXIE PHONOGRAPH COMPANY, High Point, N. C. Filed Mar. 19, 1919.

DIXIE

Particular description of goods.—Talking-Machines, Sound-Boxes, and Record-Ejectors.
Claims use since about Mar. 15, 1919.

Ser. No. 116,715. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) IRON CITY PRODUCTS COMPANY, Pittsburgh, Pa. Filed Mar. 19, 1919.



No claim is made to the exclusive use of the word "Jack" apart from the mark as shown in the drawing.
Particular description of goods.—Jacks.
Claims use since Jan. 22, 1919.

Ser. No. 116,756. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MASSACHUSETTS CHOCOLATE COMPANY, BOSTON, MASS. Filed Mar. 21, 1919.



Particular description of goods.—Chocolate. Both Sweetened and Unsweetened; Chocolate Liqueur; Milk-Chocolate; Chocolate Nut-Bars; Chocolate Coatings; Cocoa, Sweetened and Unsweetened; and Cocoa-Butter. Claims use since Aug. 23, 1911.

Ser. No. 117,045. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHARLES A. EATCKRON, Chicago, Ill. Filed Mar. 31, 1919.



The lining appearing on the drawing does not express color, but represents shading only. No claim is made to the exclusive use of the words "Check" and "Punch" apart from the mark shown in the drawing.

Particular description of goods.—Combination Check Holders and Punches for Use in Restaurants and the Like. Claims use since about Mar. 14, 1918.

Ser. No. 117,064. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ROYAL EMBROIDERY WORKS, NADAY & FLEISCHER, New York, N. Y. Filed Mar. 31, 1919.

MIGNONETTE

Consisting of the word "Mignonette."
Particular description of goods.—Artificial-Silk Fabrics. Claims use since Sept. 20, 1918.

Ser. No. 117,071. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BURTON E. TURNER, Bridgeport, Conn. Filed Mar. 31, 1919.

Solvex

Particular description of goods.—Dental Creams. Claims use since Mar. 3, 1919.

Ser. No. 117,134. (CLASS 39. CLOTHING.) THE CAMPE CORPORATION, New York, N. Y. Filed Apr. 3, 1919.

FITRITE

Particular description of goods.—Knitted Underwear in One and Two Piece Garments. Claims use since June, 1909.

Ser. No. 117,140. (CLASS 37. PAPER AND STATIONERY.) CHANE & Co., Dalton and Westfield, Mass. Filed Apr. 4, 1919.



Particular description of goods.—Writing-Paper. Claims use since about Jan. 1, 1875.

Ser. No. 117,311. (CLASS 37. PAPER AND STATIONERY.) AMERICAN WRITING PAPER CO., Holyoke, Mass. Filed Apr. 10, 1919.

CHEVRON BOND

No claim being made for the word "Bond" apart from the mark shown in said drawing.

Particular description of goods.—Printing and Writing Paper. Claims use since Mar. 21, 1919.

Ser. No. 117,318. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) GEORGE BONGFELDT & Co., New York, N. Y. Filed Apr. 10, 1919.

Tiss-me

Particular description of goods.—Dolls and Table-Favors. Claims use since Jan. 18, 1919.

Ser. No. 117,327. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN E. GILSON, Port Washington, Wis. Filed Apr. 10, 1919.

LIBERTY

Particular description of goods.—Cultivators and Weeders. Claims use since Aug. 28, 1917.

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Ser. No. 117,367. (CLASS 39. CLOTHING.) BERTEX DISTRIBUTING CO., INC., New York, N. Y. Filed Apr. 11, 1919.

BERTEX

Particular description of goods.—Knitted and Woven Undershirts and Drawers, Knitted and Woven Union-Suits, Dress-Shirts, Negligée and Work Shirts, Pajamas, Hosiery, Overalls, Work-Pants, Knitted and Woven Night-Shirts, Ladies' and Men's Suits and Dress-Suits and Top-Coats, Ladies' Waists, Ladies' and Men's Soft and Stiff Collars, and Neckties.

Claims use since Mar. 22, 1919.

Ser. No. 117,428. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) WENT & DODGE COMPANY, Boston, Mass. Filed Apr. 10, 1919.



No claim is made to the words "Thread Gauge Specialists" apart from the mark as shown in the drawing.

Particular description of goods.—Thread-Gages. Claims use since Jan. 15, 1919.

Ser. No. 117,471. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WILLIAMS PATENT CRUSHER & PULVERIZER CO., St. Louis, Mo. Filed Apr. 14, 1919.

**WORLD
2 IN 1
BEATER**

The word "Beater" is not claimed apart from the mark shown in the drawing.

Particular description of goods.—Material-Reducing Machines Using Rotary Pivoted Cushioned Hammers, Adapted for Crushing and Pulverizing Cement Raw Materials, Cement-Clinker, Coal, and Rock and Material Used in Road and Building Construction and in Fertilizing Soil, also for Pulverizing Such other Material as the Machine is Adapted to Reduce.

Claims use since Apr. 5, 1919.

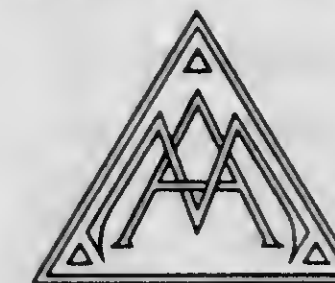
Ser. No. 117,475. (CLASS 37. PAPER AND STATIONERY.) AMERICAN WRITING PAPER COMPANY, Holyoke, Mass. Filed Apr. 15, 1919.

HANDCRAFT TEXT

Particular description of goods.—Printing and Writing Paper. Claims use since Apr. 8, 1919.

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Ser. No. 117,497. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MANNING ABRASIVE CO. INC., Troy, N. Y. Filed Apr. 15, 1919.



Speed-grits

No claim is made to the word "Grits" apart from the mark as shown.

Particular description of goods.—Paper, Cloth, and Paper Cloth, All Coated with the Following Abrasives, Namely: Garnet, Flint, and Emery.

Claims use since Mar. 27, 1919.

Ser. No. 117,559. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) THE CLEVELAND OSBORN MANUFACTURING COMPANY, Cleveland, Ohio. Filed Apr. 17, 1919.



Particular description of goods.—Household, Factory, Foundry, Painters', Paperhangers', Butchers', Dairy, Horse, Automobile, Bakers', Flue, Scrubbing, Window, Wire Scratch, Wheel, Platers', Brewers', and Dry-Cleaners' Brushes, and Household, Warehouse, Mill, Factory, Stable, and Street-Sweeping Brooms.

Claims use since Jan. 1, 1911.

Ser. No. 117,577. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SECURITY SEWING MACHINE COMPANY, Minneapolis, Minn. Filed Apr. 17, 1919.



Particular description of goods.—Sewing-Machines. Claims use since Jan. 23, 1919.

Ser. No. 117,579. (CLASS 39. CLOTHING.) SMITH & BUTLER, INC., Haverhill, Mass. Filed Apr. 17, 1919.



"Treat 'Em Ruff"

No claim being made for the words "Treat 'Em Ruff" apart from the trade-mark shown.

Particular description of goods.—Overalls, Jumpers, Union-Overalls, Shop-Coats, and Aprons. Claims use since Mar. 10, 1919.

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Ser. No. 117,595. (CLASS 37. PAPER AND STATIONERY.) WILLARD AUSTIN HOGAN, New York, N. Y. Filed Apr. 18, 1919.

WHITE ORCHID

Particular description of goods.—Writing and Printing Paper.
Claims use since Oct. 23, 1917.

Ser. No. 117,602. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) NATHAN AND COHEN CO. Inc., New York, N. Y. Filed Apr. 18, 1919.

SEDANETTE

Particular description of goods.—Cotton Piece Goods.
Claims use since Apr. 1, 1919.

Ser. No. 117,610. (CLASS 9. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AMERICAN DRUG & BLESS ASSOCIATION, Decatur, Iowa. Filed Apr. 19, 1919.

PERLE KISS

Particular description of goods.—Perfumes, Toilet Waters, Talcum Powders, Face-Powders, Toilet Creams.
Claims use since July, 1915.

Ser. No. 117,691. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OXNARD CITRUS ASS'N, Hueneme and Oxnard, Calif. Filed Apr. 21, 1919.

SEA SIDE

Particular description of goods.—Fresh Citrus Fruits—Namely, Lemons.
Claims use since Oct. 15, 1918.

Ser. No. 117,692. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OXNARD CITRUS ASS'N, Hueneme and Oxnard, Calif. Filed Apr. 21, 1919.

GORKER

Particular description of goods.—Fresh Citrus Fruits—Namely, Lemons.
Claims use since Oct. 15, 1918.

Ser. No. 117,721. (CLASS 37. PAPER AND STATIONERY.) ANGIER MECHANICAL LABORATORIES, Framingham, Mass. Filed Apr. 22, 1919.

RIPPLEKRAFT

The word "Ripplekraft."
Particular description of goods.—Wrapping and Lining Paper.
Claims use since Feb. 27, 1919.

Ser. No. 117,726. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARTMANN BROS., INCORPORATED, New York, N. Y. Filed Apr. 22, 1919.



Aid-o-Mist
Hair Net

No claim is made to the exclusive use of the words "Sanitary Human Hair" or the words "Hair Net" apart from the mark shown in the drawing.
Particular description of goods.—Hair-Nets.
Claims use since Mar. 15, 1919.

Ser. No. 117,768. (CLASS 9. EXPLOSIVES, FIRE-ARMS, EQUIPMENTS, AND PROJECTILES.) AUTO-ORDNANCE CORPORATION, New York, N. Y. Filed Apr. 23, 1919.



Particular description of goods.—Pistols, Rifles, Machine-Guns, Submachine-Guns, Field Cannon, Siege-Guns, Sea-Coast Guns, Naval Guns, Magazines for Any of Said Guns, and Bayonets.
Claims use since Mar. 28, 1919.

Ser. No. 117,792. (CLASS 37. PAPER AND STATIONERY.) WILLIAM M. AYDELOTTE, New York, N. Y. Filed Apr. 24, 1919.

"AID-A-LOT"

Particular description of goods.—Temporary Letter-Files and Loose-Leaf Binders and Sheet-Holding Attachments Therefor.
Claims use since Apr. 19, 1919.

Ser. No. 117,858. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN FLOUR CORPORATION, New York, N. Y. Filed Apr. 26, 1919.

CORONADO

Particular description of goods.—Wheat-Flour.
Claims use since Feb. 1, 1919.

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Ser. No. 117,861. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN FLOUR CORPORATION, New York, N. Y. Filed Apr. 26, 1919.

AMIGO

Particular description of goods.—Wheat-Flour.
Claims use since Jan. 24, 1919.

Ser. No. 117,890. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FRANK MULLEN, Ramey, Pa. Filed Apr. 26, 1919.

Mullen

The mark consisting of my surname in my own handwriting.
Particular description of goods.—Tongs for Lifting Ice-Cream Cans.
Claims use since the 16th day of April, 1919.

Ser. No. 117,897. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MAUD W. PARKER, New York, N. Y. Filed Apr. 26, 1919.

ARMISTICE

Particular description of goods.—Silk Goods in the Piece.
Claims use since Jan. 15, 1919.

Ser. No. 117,906. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Apr. 26, 1919.

MARVEL

Particular description of goods.—Sewing-Machines and Attachments Therefor.
Claims use since Oct. 28, 1898.

Ser. No. 117,910. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Apr. 26, 1919.

Helping Hand

Particular description of goods.—Sewing-Machines and Attachments Therefor.
Claims use since May 23, 1902.

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Ser. No. 117,988. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LANE MANUFACTURING COMPANY, Montpelier, Vt. Filed Apr. 28, 1919. Under ten-year proviso.

LANE

Particular description of goods.—Wood and Stone Working Machinery—Namely, Sawmills, Planers, Shingle-Machines, Water-Wheels, Edgers, Clippers, Drag-Saws, Swing-Saws, Clapboard and Lathe Machines, Cranes, Derricks, Grinding and Polishing Machines.
Claims use since 1863.

Ser. No. 117,978. (CLASS 39. CLOTHING.) THE JUVENILE SHOE CORPORATION OF AMERICA, St. Louis, Mo. Filed Apr. 29, 1919.

Footogs

Particular description of goods.—Boots, Shoes, and Sandals of Kid, Leather, and Canvas.
Claims use since Apr. 17, 1919.

Ser. No. 117,979. (CLASS 39. CLOTHING.) THE JUVENILE SHOE CORPORATION OF AMERICA, St. Louis, Mo. Filed Apr. 29, 1919.

CRADLE STEPPERS

Particular description of goods.—Boots, Shoes, and Sandals of Kid, Leather, and Canvas.
Claims use since Apr. 15, 1919.

Ser. No. 118,064. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) POIRIER AND LINDEMAN CO., New York, N. Y. Filed May 1, 1919.

"BESS TEST"

Consisting of the words "Bess Test."
Particular description of goods.—Hair-Nets.
Claims use since May 10, 1918.

Ser. No. 118,094. (CLASS 39. CLOTHING.) PARKER, HOLMES & CO., Boston, Mass. Filed May 2, 1919.

PAHOCO

Particular description of goods.—Leather Boots and Shoes for Men, Women, and Children.
Claims use since Apr. 21, 1919.

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Ser. No. 118,098. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE TORRINGTON COMPANY, Torrington, Conn. Filed May 2, 1919.



The mark consists of the fanciful figure of an individual in uniform standing within a representation of the French letter "T." No claim is made to the geographic term "Torrington" nor to the word "Uniform" except as they are specifically arranged on the scroll and lower portions, respectively, of the letter "T."

Particular description of goods.—Phonograph-Needles. Claims use since Apr. 10, 1919.

Ser. No. 118,195. (CLASS 39. CLOTHING.) HEBURN THOMPSON COMPANY, Salem, Mass. Filed May 5, 1919.



Particular description of goods.—Gloves. Claims use since Apr. 24, 1919.

Ser. No. 118,224. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FETAL & HURSTER, St. Louis, Mo. Filed May 7, 1919.

PARABOL

Particular description of goods.—Hog-Cholera Preventive. Claims use since Apr. 26, 1919.

Ser. No. 118,311. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CHARLES W. KENNARD, Baltimore, Md. Filed May 9, 1919.

WEIRD-A

Particular description of goods.—A Game-Board. Claims use since Jan. 2, 1919.

Ser. No. 118,498. (CLASS 17. TOBACCO PRODUCTS.) THE WEIDEMAN CO., Cleveland, Ohio. Filed May 14, 1919.

31

Particular description of goods.—Cigarettes. Claims use since January, 1904.

Ser. No. 118,681. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HENRY LOCHTE CO., LTD., New Orleans, La. Filed May 19, 1919.

MAID OF ORLEANS

Particular description of goods.—Coffee. Claims use since July, 1913.

Ser. No. 118,690. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MARATHON FISHING & PACKING CO., Seattle, Wash. Filed May 19, 1919.

PAPOOSE

Particular description of goods.—Canned Salmon. Claims use since Apr. 18, 1919.

Ser. No. 118,713. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) UNITED CANNERS COMPANY OF CALIFORNIA, Oakland, Calif. Filed May 19, 1919.

HIS MAJESTY

Particular description of goods.—Canned Peaches and Canned Tomatoes with Purée from Trimmings. Claims use since July, 1918.

Ser. No. 118,801. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

XX

Particular description of goods.—Lubricating-Oils. Claims use since about the year 1909.

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Ser. No. 118,802. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

LXIII

Particular description of goods.—Lubricating-Oils. Claims use since about the year 1909.

Ser. No. 118,803. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

LXXIII

Particular description of goods.—Lubricating-Oils. Claims use since about the year 1909.

Ser. No. 118,804. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

LXX

Particular description of goods.—Lubricating-Oils. Claims use since about the year 1909.

Ser. No. 118,805. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

XLVI

Particular description of goods.—Cutting and Lubricating Oils. Claims use since about the year 1909.

Ser. No. 118,806. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

XLV

Particular description of goods.—Cutting and Lubricating Oils. Claims use since about the year 1909.

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Ser. No. 118,807. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

LV

Particular description of goods.—Lubricating-Oils. Claims use since about the year 1909.

Ser. No. 118,872. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BASIC PRODUCTS CORPORATION, New York, N. Y. Filed May 24, 1919.



Particular description of goods.—Solidified Alcohol. Claims use since on or about the 6th day of March, 1910.

Ser. No. 118,875. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLARENCE A. CRANE, Cleveland, Ohio. Filed May 24, 1919.



Particular description of goods.—Candy. Claims use since Dec. 27, 1917.

Ser. No. 119,025. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CAITINE BAY COMPANY, Castine, Me. Filed May 29, 1919.

ASBACO

Particular description of goods.—Sardines. Claims use since May 10, 1919.

Ser. No. 119,048. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPOHN'S, Chicago, Ill. Filed May 29, 1919.

Hope Chest

Particular description of goods.—Candles. Claims use since September, 1918.

Ser. No. 119,066. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) JOSEPH E. SEE, New York, N. Y. Filed May 31, 1919.

Pom-Ora

Consisting of the words "Pom-Ora."
Particular description of goods.—Marmalades.
Claims use since May 14, 1919.

Ser. No. 119,168. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) DAVID SCHWARTZ CO., INC., New York, N. Y. Filed June 3, 1919.

6-9-8

Particular description of goods.—Chambrays and Tick-lugs.
Claims use since Dec. 22, 1915.

Ser. No. 119,170. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) DAVID SCHWARTZ CO., INC., New York, N. Y. Filed June 3, 1919.

90⁹/₈

Particular description of goods.—Chambrays and Tick-lugs.
Claims use since Dec. 22, 1915.

Ser. No. 119,171. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) DAVID SCHWARTZ CO., INC., New York, N. Y. Filed June 3, 1919.

9⁹/₈

Particular description of goods.—Chambrays and Tick-lugs.
Claims use since Dec. 22, 1915.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 29, 1919.

126,118. ARTIFICIAL LEATHER. FREDERICK MUNDEN ALLSOPP, Leitchworth, England.
Filed February 5, 1919. Serial No. 115,032. PUBLISHED APRIL 1, 1919.

126,119. CERTAIN NAMED ALUMINUM UTENSILS FOR HOUSEHOLD USE. ALUMINUM WARE MANUFACTURING CO. INC., Elmira, N. Y.
Filed July 13, 1918. Serial No. 112,090. PUBLISHED MARCH 18, 1919.

126,120. CANS, BOXES, AND CARTONS OF PAPER OR FIBER. AMERICAN CAN COMPANY, New York, N. Y.
Filed August 19, 1918. Serial No. 112,793. PUBLISHED APRIL 22, 1919.

126,121. FLEXIBLE STAY-BOLTS. AMERICAN LOCOMOTIVE COMPANY, New York, N. Y.
Filed December 28, 1918. Serial No. 114,543. PUBLISHED MARCH 25, 1919.

126,122. SOLID CHEMICAL COMPOUND FOR EXTRACTING COPPER AND OTHER METALS FROM ORES AND THE LIKE. AMERICAN NICANIDE COMPANY, Los Angeles, Calif.
Filed March 3, 1919. Serial No. 116,246. PUBLISHED APRIL 22, 1919.

126,123. METAL AIR-VALVES FOR GENERAL USE. THE AMERICAN PIN COMPANY, Waterbury, Conn.
Filed January 13, 1919. Serial No. 115,134. PUBLISHED MARCH 25, 1919.

126,124. POPPING-CORN. AMERICAN POP CORN COMPANY, Sioux City, Leeds, and Schaller, Iowa.
Filed February 10, 1919. Serial No. 115,711. PUBLISHED MARCH 25, 1919.

126,125. CERTAIN NAMED METALS AND METAL CASTINGS AND FORGINGS. AMERICAN SHEET & TIN PLATE COMPANY, Pittsburgh, Pa.
Filed January 8, 1919. Serial No. 115,039. PUBLISHED MARCH 25, 1919.

126,126. CIGARS, CIGARETTES, STOGIES, LITTLE CIGARS, AND ALL-TOBACCO CIGARETTES. WALTER ARNHEIM, Pittsburgh, Pa.
Filed December 24, 1918. Serial No. 114,796. PUBLISHED FEBRUARY 25, 1919.

126,127. HIGH-SPEED TOOL-STEEL. BECKER STEEL CO. OF AMERICA, Charleston, W. Va., and New York, N. Y.
Filed December 12, 1918. Serial No. 114,604. PUBLISHED MARCH 4, 1919.

126,128. PACKING MADE UP OF COMPOSITE MATERIALS. THE BELDAM PACKING & ROSSER COMPANY LIMITED, London, England.
Filed February 5, 1918. Serial No. 108,818. PUBLISHED MARCH 25, 1919.

126,129. BLACK STEEL AND GALVANIZED STEEL. THE BERGER MANUFACTURING COMPANY, Canton, Ohio.
Filed August 27, 1917. Serial No. 105,886. PUBLISHED MARCH 4, 1919.

126,130. STEEL OFFICE EQUIPMENT AND FURNITURE—NAMELY, FILING CASES, BOOKCASES, CUPBOARDS, WARDROBES, DRAWERS, LOCKERS AND SHELVING. THE BERGER MANUFACTURING COMPANY, Canton, Ohio.
Filed August 27, 1917. Serial No. 105,888. PUBLISHED MARCH 25, 1919.

126,131. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 20, 1919. Serial No. 116,021. PUBLISHED APRIL 1, 1919.

126,132. RUBBER BELTING. BOSTON WOVEN ROSE & RUBBER CO., Cambridge, Mass.
Filed January 28, 1919. Serial No. 115,477. PUBLISHED MARCH 18, 1919.

126,133. ROUGE. A. BOURJOIS & CO., INC., New York, N. Y.
Filed March 4, 1919. Serial No. 116,284. PUBLISHED APRIL 22, 1919.

126,134. HYDROGEN AND OXYGEN GAS. THE BURDETT OXYGEN COMPANY, Denver, Colo.
Filed May 17, 1918. Serial No. 110,945. PUBLISHED APRIL 15, 1919.

126,135. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed February 18, 1918. Serial No. 109,979. PUBLISHED APRIL 15, 1919.

126,136. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed February 18, 1918. Serial No. 109,980. PUBLISHED APRIL 15, 1919.

126,137. CERTAIN NAMED ARTICLES MADE OF PYROXYLIN. THE CELLULOID COMPANY, New York, N. Y.

Filed May 6, 1918. Serial No. 110,070. PUBLISHED APRIL 15, 1919.

126,138. CAST-IRON-WELDING METAL. CENTRAL STEEL & WIRE COMPANY, Chicago, Ill.

Filed February 25, 1918. Serial No. 109,192. PUBLISHED MARCH 25, 1919.

126,139. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. CHAIN BELT COMPANY, Milwaukee, Wis.

Filed December 11, 1918. Serial No. 114,595. PUBLISHED MARCH 4, 1919.

126,140. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. CHAIN BELT COMPANY, Milwaukee, Wis.

Filed December 11, 1918. Serial No. 114,596. PUBLISHED MARCH 11, 1919.

126,141. CERTAIN NAMED MALT BEVERAGES, EXTRACTS, AND LIQUORS. CREAM CITY BREWING CO., Milwaukee, Wis.

Filed March 16, 1918. Serial No. 109,580. PUBLISHED APRIL 8, 1919.

126,142. CERTAIN NAMED MALT BEVERAGES EXTRACTS, AND LIQUORS. CREAM CITY BREWING CO., Milwaukee, Wis.

Filed March 16, 1918. Serial No. 109,585. PUBLISHED APRIL 8, 1919.

126,143. DOLLS. DOROTHY M. CROSBY, Duluth, Minn.
Filed February 11, 1919. Serial No. 115,756. PUBLISHED APRIL 15, 1919.

126,144. MEDICINAL PREPARATION FOR TREATMENT OF TYPHOID FEVER, MALARIA OR CHILLS, AND LA GRIPE OR INFLUENZA. ALVIN H. DAVIS, Santa Maria, Calif.

Filed February 10, 1919. Serial No. 115,722. PUBLISHED APRIL 15, 1919.

126,145. TABULATING-MACHINES. DENOMINATOR ADDING MACHINE COMPANY, Brooklyn, N. Y.

Filed January 25, 1918. Serial No. 108,630. PUBLISHED MARCH 19, 1919.

- 126,146. SPARK-PLUG-FIRING INDICATORS. DETROIT ACCESSORIES CORPORATION, Detroit, Mich. Filed December 7, 1918. Serial No. 114,530. PUBLISHED MARCH 4, 1919.
- 126,147. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y. Filed February 12, 1919. Serial No. 115,804.
- 126,148. DESICCATED MILK. THE DRY MILK COMPANY, New York, N. Y., and elsewhere. Filed February 12, 1919. Serial No. 115,805.
- 126,149. CANDY. MARIE DUTCH, Calais, Me. Filed September 29, 1917. Serial No. 100,500. PUBLISHED APRIL 8, 1919.
- 126,150. PORTLAND CEMENT. THE EDISON PORTLAND CEMENT COMPANY, West Orange, N. J. Filed February 13, 1919. Serial No. 115,830. PUBLISHED APRIL 15, 1919.
- 126,151. PORTLAND CEMENT. THE EDISON PORTLAND CEMENT COMPANY, West Orange, N. J. Filed February 13, 1919. Serial No. 115,835. PUBLISHED APRIL 15, 1919.
- 126,152. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. ENTERPRISE CHEMICAL CO., St. Louis, Mo. Filed May 27, 1918. Serial No. 111,212. PUBLISHED APRIL 15, 1919.
- 126,153. HEATING VESSELS FOR PRESERVING AND CANNING FRUITS, VEGETABLES, AND OTHER FOODS. OLIVER M. FAGLEY, Philadelphia, Pa. Filed July 19, 1917. Serial No. 105,112. PUBLISHED NOVEMBER 19, 1918.
- 126,154. SNAIL-FASTENERS AND PLACKET-FASTENERS. FEDERAL SNAP FASTENER CORPORATION, New York, N. Y. Filed December 21, 1918. Serial No. 114,763. PUBLISHED FEBRUARY 25, 1919.
- 126,155. COMPOUND FOR IMPROVING COMBUSTION OF COAL AND COAL-FIRINGS. JAMES F. FERRIS, Collingdale, Pa. Filed March 6, 1919. Serial No. 110,333. PUBLISHED APRIL 22, 1919.
- 126,156. LUBRICATING OILS AND GREASES. FISKE BROTHERS REFINING CO., New York, N. Y. Filed January 24, 1919. Serial No. 115,401. PUBLISHED MARCH 18, 1919.
- 126,157. PREPARATION FOR THE TREATMENT OF PYORRHEA. HARRY G. FITZGERALD, Columbus, Ohio. Filed December 9, 1918. Serial No. 114,562. PUBLISHED APRIL 15, 1919.
- 126,158. WOOLEN PIECE GOODS. FORBAYMAN & HOFFMAN CO., Passaic, N. J. Filed February 19, 1919. Serial No. 115,976. PUBLISHED APRIL 1, 1919.
- 126,159. TOY DOLLS. JEAN L. FRIEDMAN, New York, N. Y. Filed March 14, 1918. Serial No. 109,558. PUBLISHED MARCH 4, 1919.
- 126,160. CANDY COUGH-DROPS. WILLIAM GATES, Norfolk, Va. Filed January 23, 1919. Serial No. 115,385. PUBLISHED APRIL 15, 1919.
- 126,161. CIGARS, LITTLE CIGARS, CHEROOTS, AND CIGARETTES. GENERAL CIGAR CO. INC., New York, N. Y. Filed February 19, 1919. Serial No. 115,978. PUBLISHED APRIL 8, 1919.
- 126,162. VACUUM TUBE DISCHARGE DEVICES—NAMELY, THOSE COMMONLY KNOWN AS N-RAY TUBES. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed January 2, 1919. Serial No. 114,950. PUBLISHED MARCH 4, 1919.

- 126,163. FOOT-SOAPS. THOMAS GILL SOAP COMPANY, INC., Brooklyn, N. Y. Filed February 19, 1919. Serial No. 115,979. PUBLISHED APRIL 22, 1919.
- 126,164. ELECTRICALLY-INSULATED LOCOMOTIVE-HEADLIGHT WIRE. HARRISAW ELECTRIC CABLE COMPANY, INC., New York, N. Y. Filed December 10, 1918. Serial No. 114,580. PUBLISHED MARCH 4, 1919.
- 126,165. NURSING-NIPPLES. HARRIS AND BRENTZ CO., Philadelphia, Pa. Filed March 6, 1918. Serial No. 109,398. PUBLISHED MARCH 25, 1919.
- 126,166. RAILROAD-TIE PLATES. HERBERT H. HART, Evanston, Ill. Filed December 10, 1918. Serial No. 114,570. PUBLISHED MARCH 25, 1919.
- 126,167. NON-ALCOHOLIC MALTLESS CEREAL BEVERAGE SOLD AS A SOFT DRINK. P. HONOROFF, Gary, Ind. Filed March 12, 1918. Serial No. 109,522. PUBLISHED DECEMBER 3, 1918.
- 126,168. ROPE OF MANILA, SISAL, ISTLE, AND HEMP. THE HOOVEN & ALLISON COMPANY, Xenia, Ohio. Filed August 20, 1918. Serial No. 112,880. PUBLISHED APRIL 8, 1919.
- 126,169. AUTOMOBILE-FRAMES. THE HYDRAULIC PRESSED STEEL COMPANY, Cleveland, Ohio. Filed January 25, 1919. Serial No. 115,423. PUBLISHED APRIL 1, 1919.
- 126,170. CONCRETE-FORMS. THE HYDRAULIC PRESSED STEEL COMPANY, Cleveland, Ohio. Filed January 25, 1919. Serial No. 115,424. PUBLISHED APRIL 8, 1919.
- 126,171. KNITTING-MACHINES. JENCKES KNITTING MACHINE CO., Pawtucket, R. I. Filed December 12, 1918. Serial No. 114,609. PUBLISHED MARCH 4, 1919.
- 126,172. DRILLS, DIES, SCREW-THREAD-CUTTING TOOLS, AND CERTAIN NAMED MACHINE-TOOLS AND PARTS THEREOF. CARL EDVARD JOHANSSON, Eskilstuna, Sweden. Filed January 22, 1918. Serial No. 108,588. PUBLISHED MARCH 25, 1919.
- 126,173. LUBRICANTS, CONSISTING OF OILS AND GREASES. KEYSTONE LUBRICATING COMPANY, Philadelphia, Pa. Filed January 10, 1919. Serial No. 115,105. PUBLISHED MARCH 4, 1919.
- 126,174. TONIC TO BUILD UP THE HUMAN SYSTEM. JAMES WILLIAM KIDD, Fort Wayne, Ind. Filed August 20, 1918. Serial No. 112,804. PUBLISHED APRIL 8, 1919.
- 126,175. FACE-CREAM. MICHAEL H. KIRCHBAUM, Sioux City, Iowa. Filed August 19, 1918. Serial No. 112,786. PUBLISHED APRIL 15, 1919.
- 126,176. COTTON PIECE GOODS. LANCASTER MILLS, Clinton, Mass. Filed December 20, 1918. Serial No. 114,741. PUBLISHED APRIL 15, 1919.
- 126,177. CIGARETTES. LEDGER SONS & CO., London, England. Filed August 2, 1918. Serial No. 112,475. PUBLISHED APRIL 15, 1919.
- 126,178. LEAF-TOBACCO. LUCKETT-WAKE TOBACCO CO., Louisville, Ky. Filed November 21, 1918. Serial No. 114,269. PUBLISHED APRIL 22, 1919.
- 126,179. OLEAGINOUS COMPOUND, A SUBSTITUTE FOR LARD. MAGNOLIA PROVISION COMPANY, Houston, Tex. Filed March 23, 1918. Serial No. 109,750. PUBLISHED JANUARY 21, 1919.

- 126,180. KNITTED, NETTED, AND TEXTILE UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. MARKOVITZ BROS., Philadelphia, Pa. Filed July 9, 1918. Serial No. 112,015. PUBLISHED OCTOBER 8, 1918.
- 126,181. COMPOUND FOR PREVENTING ACCUMULATION OF DUST OR MOISTURE UPON WINDSHIELDS AND WINDOWS. HOREA A. MASON, Taunton, Mass. Filed December 5, 1918. Serial No. 114,498. PUBLISHED FEBRUARY 25, 1919.
- 126,182. TOY VEHICLES. FLETCHER E. MAXWELL, Dallas, Tex. Filed December 27, 1917. Serial No. 108,185. PUBLISHED MARCH 25, 1919.
- 126,183. GAMES. MCLOUGHLIN BROTHERS, INCORPORATED, Brooklyn, N. Y. Filed May 8, 1918. Serial No. 110,769. PUBLISHED AUGUST 13, 1918.
- 126,184. COTTON CRASH TOWELING AND TOWELS. BOOTT MILLS, Lowell, Mass. Filed October 26, 1918. Serial No. 113,893. PUBLISHED MARCH 25, 1919.
- 126,185. COTTON DRILLS. BOOTT MILLS, Lowell, Mass. Filed October 26, 1918. Serial No. 113,894. PUBLISHED APRIL 15, 1919.
- 126,186. FRUIT EXTRACTS FOR NON-ALCOHOLIC BEVERAGES. PETER MAGGINI, Lyndhurst, N. J. Filed February 19, 1919. Serial No. 115,991. PUBLISHED APRIL 8, 1919.
- 126,187. BURLAP BAGS. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed January 30, 1919. Serial No. 115,527. PUBLISHED APRIL 22, 1919.
- 126,188. SALVE FOR COUGHS, COLDS, CROUP, SORE THROAT, LA GRIFFE, WOUNDS, AND SORES. ULYSSES G. MAON, Birmingham, Ala. Filed February 3, 1919. Serial No. 115,597. PUBLISHED APRIL 15, 1919.
- 126,189. OUTFITS OF TOY SOLDIERS AND PISTOLS AND GAMES PLAYED BY MEANS OF SUCH OUTFITS. MILTON BRADLEY CO., Springfield, Mass. Filed January 5, 1917. Serial No. 100,444. PUBLISHED MARCH 18, 1919.
- 126,190. CANNED VEGETABLES AND FRUITS, COFFEES, AND SPICES. MINER, READ & TULLOCK, New Haven, Conn. Filed January 13, 1919. Serial No. 92,110. PUBLISHED FEBRUARY 5, 1918.
- 126,191. PYROPHORIC ALLOYS OR SPARKING METAL ALLOYS. NEW PROCESS METALS CO., INC., New York, N. Y. Filed January 17, 1919. Serial No. 115,253. PUBLISHED MARCH 4, 1919.
- 126,192. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. PARAGON TOOL COMPANY, Seattle, Wash. Filed December 10, 1918. Serial No. 114,587. PUBLISHED MARCH 25, 1919.
- 126,193. DRESSING TO BE APPLIED TO LEATHER AND BELTING. JOSEPH C. PAULUS AND COMPANY, Philadelphia, Pa. Filed January 25, 1919. Serial No. 115,421. PUBLISHED APRIL 22, 1919.
- 126,194. SKINNING APPARATUS COMPRISING MECHANICALLY-OPERATED DISK-SHAPED BLADES FOR SEVERING THE SKIN OF KILLED ANIMALS. WILLY PREFFERKORN, Zug, Switzerland. Filed October 31, 1918. Serial No. 113,984. PUBLISHED MARCH 25, 1919.
- 126,195. BOLT AND RIVET CLIPPERS. HENRY K. PORTER, Brookline and Everett, Mass. Filed November 25, 1918. Serial No. 114,348. PUBLISHED MARCH 25, 1919.
- 126,196. NON-ALCOHOLIC MALTLESS BEVERAGES NOT OF A CEREAL NATURE SOLD AS SOFT DRINKS. PUBLIC BOTTLING WORKS, New York, N. Y. Filed June 14, 1918. Serial No. 111,573. PUBLISHED APRIL 8, 1919.
- 126,197. READY-MIXED PAINTS AND VARNISHES. R. RAYMOND, St. Paul, Minn., assignor to Mutual Paint Company, St. Paul, Minn. Filed January 6, 1919. Serial No. 115,019. PUBLISHED MARCH 4, 1919.
- 126,198. MINERAL-SURFACE ASPHALT SHINGLES. RICHARDS & CO. INCORPORATED, Boston, Mass. Filed December 28, 1918. Serial No. 114,866. PUBLISHED MARCH 18, 1919.
- 126,199. HARDWARE AND FITTINGS FOR DOORS, CONSISTING OF HINGES, SPRINGS, AND PULLS. ROCKWELL MANUFACTURING COMPANY, Camden, Ark. Filed May 7, 1917. Serial No. 103,612. PUBLISHED MARCH 11, 1919.
- 126,200. PLUSHES. LOUIS ROEDEL & CO., New York, N. Y. Filed March 11, 1918. Serial No. 109,509. PUBLISHED MARCH 25, 1919.
- 126,201. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. DAVID ROSENBERG, Brooklyn, N. Y. Filed July 17, 1918. Serial No. 112,191. PUBLISHED MARCH 25, 1919.
- 126,202. BOLTS, NUTS, RIVETS, AND METAL WASHERS. RUSSELL, BURDALL & WARD HOLT & NUT CO., Port Chester, N. Y. Filed December 2, 1918. Serial No. 114,456. PUBLISHED MARCH 4, 1919.
- 126,203. HAIR-PINS. SAMSTAD & HILDER BROS., New York, N. Y. Filed January 21, 1919. Serial No. 115,358. PUBLISHED APRIL 1, 1919.
- 126,204. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. SAN ANTONIO DRUG CO., San Antonio, Tex., and New York, N. Y. Filed December 30, 1918. Serial No. 114,888. PUBLISHED APRIL 8, 1919.
- 126,205. DIAL-THERMOMETERS. THE SCHAEFFER AND BUDENZER MFG. CO., Brooklyn, N. Y. Filed January 8, 1919. Serial No. 115,054. PUBLISHED MARCH 25, 1919.
- 126,206. GAGE-GLASSES. THE SCHAEFFER AND BUDENZER MFG. CO., Brooklyn, N. Y. Filed January 8, 1919. Serial No. 115,053. PUBLISHED MARCH 25, 1919.
- 126,207. PATCH-KITS, INCLUDING CEMENT AND RUBBER PATCHES FOR REPAIRS OF INNER TUBES FOR AUTOMOBILE-TIRES. SCHLESER BROTHERS, St. Louis, Mo. Filed February 10, 1919. Serial No. 115,739. PUBLISHED MARCH 25, 1919.
- 126,208. OINTMENT FOR TREATING CERTAIN NAMED AILMENTS. FRANK L. SELB, Philadelphia, Pa. Filed December 7, 1918. Serial No. 114,546. PUBLISHED APRIL 8, 1919.
- 126,209. LATHES AND PARTS THEREOF. THE SEBECA FALLS MANUFACTURING CO. INC., Sebeca Falls, N. Y. Filed September 17, 1918. Serial No. 113,219. PUBLISHED MARCH 18, 1919.
- 126,210. WHEAT-FLOUR. SHANE BROS. & WILSON CO. INC., Minneapolis, Minn. Filed August 5, 1918. Serial No. 112,540. PUBLISHED APRIL 5, 1919.
- 126,211. CERTAIN NAMED HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES. SHERRER-GILLET COMPANY, Chicago, Ill. Filed July 18, 1918. Serial No. 112,207. PUBLISHED MARCH 25, 1919.

- 126,212. SHINGLES. THE SHINGLE AGENT OF BRITISH COLUMBIA, Vancouver, British Columbia, Canada. Filed July 12, 1918. Serial No. 112,001. PUBLISHED MARCH 18, 1919.
- 126,213. TONIC OR MEDICINAL BEVERAGE FOR THE RELIEF OF COLDS, DEBILITY, AND MEASLES. DANIEL FRIEST, Cleveland, Ohio. Filed December 20, 1918. Serial No. 114,753. PUBLISHED APRIL 15, 1919.
- 126,214. GALVANIZED-IRON BASKETS. SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed March 15, 1919. Serial No. 116,626. PUBLISHED APRIL 22, 1919.
- 126,215. MEDICINAL PREPARATION FOR INFLUENZA AND PNEUMONIA. H. V. SMITH & COMPANY, Wadsworth, Ohio. Filed January 28, 1919. Serial No. 115,486. PUBLISHED APRIL 15, 1919.
- 126,216. HAIR-DRESSING TO PROMOTE THE GROWTH OF HAIR AND REMOVE DANDRUFF. ADDIE E. SOMERS, Washington, D. C. Filed December 16, 1918. Serial No. 114,682. PUBLISHED APRIL 8, 1919.
- 126,217. WHITE MINERAL OIL USED BY CONFECTIONERS AS SLAB-OIL TO PREVENT CANDY ADHERING THEREON. STANDARD OIL COMPANY, Bayonne, N. J. Filed December 18, 1918. Serial No. 114,706. PUBLISHED MARCH 18, 1919.
- 126,218. WATERPROOFED FABRICS FOR ROOFING, FLOORING, HEAT AND COLD INSULATION, BUILDING AND SHEATHING PURPOSES. THE STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y. Filed January 15, 1919. Serial No. 115,215. PUBLISHED MARCH 18, 1919.
- 126,219. WATERPROOFED FABRICS FOR ROOFING, FLOORING, HEAT AND COLD INSULATION, BUILDING AND SHEATHING PURPOSES. THE STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y. Filed January 15, 1919. Serial No. 115,214. PUBLISHED MARCH 18, 1919.

- 126,220. PAPER BAGS. STANDARD PAPER COMPANY, Indianapolis, Ind. Filed January 27, 1919. Serial No. 115,468. PUBLISHED APRIL 8, 1919.
- 126,221. ELECTRIC POWER AND LIGHT SYSTEMS COMPRISING GENERATORS, MOTORS, GOVERNORS, BATTERIES, SWITCH-BOARDS, AND ASSOCIATED PARTS. SWARTZ ELECTRIC COMPANY, Indianapolis, Ind. Filed December 23, 1918. Serial No. 114,780. PUBLISHED MARCH 4, 1919.
- 126,222. CERTAIN-NAMED NON-ALCOHOLIC BEVERAGES SOLD AS A SOFT DRINK. THE TALLERDAY MEDICINE CO., Belvedere, Ill. Filed February 1, 1919. Serial No. 115,578. PUBLISHED APRIL 8, 1919.
- 126,223. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. UNION TWIST DRILL CO., Athol, Mass. Filed June 1, 1917. Serial No. 104,205. PUBLISHED MARCH 15, 1919.
- 126,224. VARNISH-STAINS, COLOR-VARNISHES, CLEAR VARNISHES, READY-MIXED PAINT, VARNISH-ENAMELS. VALENTINE & COMPANY, New York, N. Y. Filed January 2, 1919. Serial No. 114,964. PUBLISHED MARCH 25, 1919.
- 126,225. GRASS RUGS. WHITE GRASS CARPET COMPANY, Oshkosh, Wis. Filed December 16, 1918. Serial No. 114,683. PUBLISHED APRIL 15, 1919.
- 126,226. CINEMATOGRAPHIC FILMS. WORLD FILM CORPORATION, New York, N. Y. Filed October 22, 1917. Serial No. 106,902. PUBLISHED MARCH 4, 1919.
- 126,227. CHEMICAL COMPOUND FOR REMOVING OR DESTROYING SOOT. VERNON WRIGHT, Detroit, Mich. Filed February 19, 1919. Serial No. 115,746. PUBLISHED APRIL 15, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

- 16,874. WATCH-MOVEMENTS. AMERICAN WALTHAM WATCH COMPANY, Waltham, Mass.; Waltham Watch Company, assignee. Registered July 30, 1889. Renewed July 30, 1919.
- 17,105. WATCH-MOVEMENTS. AMERICAN WALTHAM WATCH COMPANY, Waltham, Mass.; Waltham Watch Company, assignee. Registered October 15, 1889. Renewed October 15, 1919.

- 17,054. MACHINERY PARTS. GREENE, TWEED & CO., New York, N. Y.; Greene, Tweed & Co., (corporation) assignee. Registered September 24, 1889. Renewed September 24, 1919.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE ELLIS.

Decided June 20, 1919.

APPLICATION—CONTINUATION IN PART—NO INDORSEMENT ON THE FILE WRAPPER.

Where an application is filed which is a continuation in part only of a prior application, no indorsement should be placed on the file wrapper. Such an indorsement should be placed thereon only when the application is a division or a continuation of or substitute for a previously-filed application.

ON PETITION.

BINDING AGENT AND METHOD OF MAKING SAME.

Mr. A. B. Foster for the applicant.

NEWTON, Commissioner.

This is a petition requesting that the Examiner be instructed to indorse "continuation in part" on the file wrapper of this application, so that the statement will appear in the printed heading of the patent.

Order No. 2071, on which the petition is based is as follows:

When an application is filed which in the opinion of the Examiner is a continuation of, or a substitute for, a previously filed application, the Examiner will not require applicant to insert a reference to the prior application in the specification, it being regarded as sufficient if this reference appears somewhere in the record of the application. The Examiner will make the appropriate entry upon the face of the file wrapper. The heading of the printed patent will conform to this entry.

There seems to be no question but that this application is a "continuation in part" only of applicant's prior cases and the specification of the instant case contains a statement that this application "contains matter derived from my copending applications Serial No. . . ."

The practice is well established by the foregoing order that, when an application is filed which in the opinion of the Examiner is a division or continuation of or a substitute for a previously-filed application, the Examiner will make the appropriate entry on the face of the file wrapper, and this entry will be subsequently printed as a part of the heading of the patent when issued.

It will be noted that applicant has already stated in the body of the specification that this application is a "continuation in part" of the prior cases. It only becomes important then to make the appropriate indorsement on the file wrapper in order that the Assignment Division of this Office may

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attach to the continuation any assignments that have been made of the prior applications; but applicant has not assigned all the invention of the present application, and if this application results in a patent the patent should not issue to the assignee of the parent cases, even though a request is embodied in the assignment of the prior cases that the patent issue to the assignee, because the present application contains matter not disclosed in the prior cases, and therefore not assigned by the assignment in the prior cases.

Applicant has called attention to other patents wherein "continuation in part" was indorsed on the file wrapper, and hence printed in the heading of the patent, and I find that there is some confusion in the practice of the Office in making these indorsements.

The Examiner in his statement suggests that applicants be required to state which claims cover matter in the prior case and which cover the new matter; but to follow this suggestion would result in more or less controversy between applicants and the Office, and the resultant benefit obtained therefrom would not warrant the work required. It is believed to be sufficient to put the public on notice that the present application is a "continuation in part" of the prior applications, leaving it to be determined when necessary what matter is disclosed in the prior cases and what matter is new to those disclosures.

It follows from the foregoing that the proper practice to follow is to make the appropriate indorsement on the face of the file wrapper only when an application is a division, a continuation of, or substitute for a prior case. When the application is a "continuation in part" only, some statement to that effect should be required in the specification of the application, but no indorsement should be made on the file wrapper, and applicant's petition is denied.

EX PARTE WEBER AND WOODFORD.

Decided July 3, 1919.

1. APPLICATION—CLAIMS COPIED FROM PATENT—TIME LIMIT FOR REPLY OR APPEAL.

Where claims copied from a patent are rejected for any reason, the Examiner should set a time limit for reply or appeal, and a similar limit should be set by the Examiners-in-Chief where the rejection is affirmed.

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2. SAME—SAME—DECLARATION OF INTERFERENCE.

Where some of the claims copied from a patent are found allowable, but others not, the interference should be promptly declared without waiting to determine the applicant's right to the rejected claims.

PETITION for rehearing.

CONVEYER SYSTEM.

Mr. Paul Carpenter for the applicants.

WHITEHEAD, First Assistant Commissioner:

A petition has been filed in this case for a rehearing of the appeal which was decided June 22, 1918.

Obviously if there was thought to be a manifest error in that decision a petition for rehearing should have been filed promptly and not have been delayed until the end of the year thereafter. However, the petition has been considered, but no reason is found for changing the decision heretofore rendered.

The petition is accompanied by an amendment canceling the claims as to which the decision of the Examiners-in-Chief was affirmed, and the Examiner is directed to enter that amendment and take such further action as the condition of the case requires.

It appears from the record, although attention was not called to that fact either in the Examiner's statement or in the brief on the appeal, that claims were copied from certain prior patents, and it was alleged that the invention covered by these claims was disclosed in a prior application of these applicants, the filing date of which was prior to the filing date of the applications upon which the patents were granted. No other evidence of invention prior to the filing dates of the applications on which the patents were granted was offered.

In all cases where claims which are copied from a patent are refused on any ground the withdrawal or overruling of which would lead to an interference with the patent the Examiner should set a time limit for reply or appeal, as is done under Rule 86 when claims are suggested for the purpose of interference. If on appeal the decision is affirmed, a similar time limit should be set by the Examiners-in-Chief. Such a time limit should also be set where claims are rejected on a prior patent on the ground that the applicant can make certain claims thereof and can establish his right to a patent only by an interference. (*Ex parte Card and Card*, 112 O. G., 460.) It is obviously only fair to the patentee that the question whether there is to be an interference be decided promptly, and where the applicant is seeking such an interference he cannot complain if he is required to act promptly in establishing his right thereto.

For the same reason when some of the claims which are copied from a patent are found to be allowable to the applicant, but others not, the interference should be declared without waiting to determine the applicant's right to the remaining claims. If necessary the applicant can bring up that question by motion under Rule 100.

In the present case if the allowance of certain claims by the Examiners-in-Chief necessitated the

declaration of an interference it should have been declared promptly thereafter. As it is more than two years have elapsed since their decision.

The petition for rehearing is denied.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

DERR v. GLEASON.

Decided June 2, 1919.

1. INTERFERENCE—REDUCTION TO PRACTICE—ATTACHMENT TO MACHINE OPERATED IDLY.

The construction and operation of an attachment to a gear-cutting machine, which attachment was designed to cut a curved gear-tooth, but which was operated idly, no attempt being made to cut a gear-tooth, does not constitute a reduction to practice. The demonstration might have supplemented proof of a prior actual test, but could not take the place of such a test.

2. SAME—DILIGENCE—WORK ON MACHINE FOR USE OF GOVERNMENT.

Where the inventor conceived the invention in 1911 and claims to have completed and successfully reduced it to practice at that time, at which time he might have applied for a patent, his lack of diligence up to the time of an unquestioned reduction to practice may not be excused on the ground that he was working on a large and unusual machine for use in work for the Government.

3. SAME—SAME—ACTIVITY DUE TO KNOWLEDGE OF WORK OF RIVAL.

Evidence considered and held to show that G. was not exercising diligence when D. entered the field and that he was spurred to activity only by knowledge that D. was in the field.

4. SAME—APPEAL—WEIGHT GIVEN TO CONCURRENT DECISION OF PATENT OFFICE.

"While, ordinarily, much weight is accorded concurrent decision of the Patent Office, we ought not to hesitate to overrule them where we are convinced that an incorrect conclusion has been reached." (*Arbetter v. Lewis*, 34 App. D. C., 491.)

Mr. Milton Tibbells and Mr. Frank Parker Davis for the appellant.

Mr. Melville Church and Mr. H. E. Stonebroker for the appellee.

Itcan, J.:

Appeal from concurrent decisions of the Patent Office tribunals in an interference proceeding awarding priority of invention to the junior party Gleason, the ground of the decision being that Gleason had shown priority of conception and diligence.

The invention is a method for cutting curved gear-teeth, (gears of that character now being very generally used in the rear axles of automobiles), and a machine for practicing the method. The issue is expressed in a number of counts but counts 1 and 12, here reproduced, are sufficiently illustrative:

1. The method of forming the side face of a curved gear tooth, consisting in causing a cutter to describe a curved path across the face of the blank and simultaneously producing relative rolling motion between the blank and cutter along the plane of the curved path of movement of the cutter.

12. A gear cutting machine, comprising a cutter, means for moving said cutter in a curved path in a plane, and means for rolling a blank along the plane of the curved path of movement of said cutter.

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The curved gear-teeth covered by this invention are alleged to possess certain advantages over the straight teeth of the prior art, such as improved power-transmitting capacity and reduced friction. Prior to this invention there were two well-known types of machines for making or "generating" the straight-tooth bevel-gears,—the "Gleason" and the "Bilgram." The Gleason Works, a corporation of which appellee was vice-president, manufactured and sold the former, in which two reciprocating knives or tools would cut alternately upon opposite sides of the same tooth. Appellee was the patentee of that machine and during the winter of 1910-11 designed and caused to be constructed for it an attachment that in June of 1911 was applied to the machine and which, it is said, caused the single knife of the attachment to trace a curved path at each reciprocation of the knife. Strange to say, however, no attempt was made to cut a gear. Gleason contends that the construction and idle operation of this one tool or knife attachment constituted reduction to practice. Each of three tribunals of the Patent Office held that it did not, and of the correctness of their ruling we entertain no doubt. After this partial and, in view of the nature of the invention, unconvincing operation of the attachment, it was removed from the machine and not replaced until this interference was in progress, when it was operated. As the Examiners-in-Chief well suggested, the demonstration then made might have supplemented proof of a prior actual test but could not take the place of such a test.

In January of 1912 a wooden model of a supposed improved arrangement was completed by Gleason, and from that time until after Derr's entry into the field there was a period of total inactivity on the part of Gleason, a circumstance to which we shall advert later.

In May of 1912, or about four months after Gleason's activity entirely had ceased, Derr, a tool-maker in the factory of the Packard Automobile Company, entered the field and by May 25th had completed drawings which the Patent Office tribunals found disclosed this invention. These drawings covered an attachment for the type of Bilgram machine in use by the Packard Company. Before June 20, 1912, the attachment had been constructed and gears responding to the issue actually generated. On June 20th a test of these gears was started in the Packard plant and on July 28th, following, a Packard car equipped with curved gears was sent from Detroit to the Pacific coast as a further practical test. The trip was made and demonstrated the success of the invention. The Patent Office tribunals question whether it was clearly shown that the curved gears which were in this car were produced on the Derr machine. Witnesses have testified that they were, however, and it would be a rather violent assumption that they were not, for at that time no other machine for

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producing such gears was in existence. But the question is of no particular importance, for drawings were started shortly after this test was made and Derr's application was filed on October 11, 1912. It thus appears that within a period of about five months Derr designed, constructed, and successfully operated his machine and filed application thereon. Not only that, but the Packard Company immediately commenced equipping its Bilgram machines with Derr's attachment and thousands of curved gears were turned out and used in Packard cars.

In July of 1912 Gleason directed two of his draftsmen to design what is now known as the "1912 special generator." Mr. Gleason now says that this generator, which admittedly was a mere improvement upon the Gleason machine of the prior art, was to be equipped with an attachment for making curved teeth. Derr meets this contention with the observation that actions speak louder than words, and hence that Gleason's intent should be deduced from what he did, rather than from what he now says he intended to do. It is undisputed that the earliest date of any drawing disclosing Mr. Gleason's purpose thus to equip this special generator was January 17, 1913. All the drawings prior to that date were for a machine admittedly incapable of performing this invention. The tribunals of the Patent Office have been at a loss to understand why the 1912 generator was designed at all unless it was intended to equip this generator with the device for cutting curved teeth. The draftsmen who designed the special generator thought they were designing an improved generating-machine, and so testified. This testimony, which evidently was overlooked by the Patent Office, offers a reasonable explanation for the designing of the 1912 machine. Moreover, other facts and circumstances irresistibly lead to the same conclusion, namely, that it was not until a much later period that Gleason determined to equip this special generator with the device of the issue. In November of 1912 Mr. Gleason learned of Derr's activity. He admitted, under cross-examination, that he then—

heard that Packard was doing something in the line of spiral bevel gears.

To a manufacturer of automobile-gears and a man so highly skilled in the art as was Mr. Gleason, that information was quite sufficient, and we are satisfied that it accounts for the renewal of his activity. The time intervening between this discovery of Derr's activity and the date of Gleason's drawings for an attachment embodying the invention was just about sufficient for the production of such drawings. Even then, Gleason did not file an application for patent until May 26, 1913, after he had devised a rotary cutter which was capable of producing curved gears with as great rapidity as prior machines could produce straight gears, and here, we think, is the real secret of Mr. Gleason's

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long delay. He was not desirous of giving his invention to the world unless and until he could produce a machine that would enable him to monopolize the manufacture of automobile-gears,—a machine that would practically displace the machines of the prior art. This statement is made in the brief filed for him in this court:

The key to the history of the development of Gleason's invention in interference, which must be constantly kept in mind, is his effort to produce a curved tooth bevel gear generator which the Gleason Works could manufacture and sell to the trade, and that such a machine must necessarily be as fast and economical in operation as his standard two foot straight tooth bevel gear generator on which 90% of such bevel gears were being cut. Gleason knew while "Exhibit 11" (the attachment partially operated in June of 1911) was being designed and built that it would be too slow for adoption as a commercially salable machine.

It thus appears that, after a period of almost a year's somnolence, Mr. Gleason was stirred into activity by knowledge that Derr was in the field. He testified that in 1911 he received an order for a large and unusual machine for use in producing gears for the Panama Canal gates, and that this work interfered with the completion of the invention of the issue. We are unable to accept this excuse. In the first place, Mr. Gleason now contends that he had completed his invention by successfully reducing it to practice in June of 1911. Certainly, he might have applied for a patent at that time. Assuming, therefore, that he had conceived the specific invention of the issue prior to Derr's entry into the field, we are constrained to hold that he has not sustained the burden of proof resting upon him as the junior party on the question of diligence. While, ordinarily, much weight is accorded concurrent decisions of the Patent Office, we ought not to hesitate to overrule them—

Where we are convinced that an incorrect conclusion has been reached. (*Arbeter v. Lewis*, 34 App. D. C., 491.)

A limited monopoly under the patent law is granted that the public may be benefited, and he who slumbers on his rights does so at his own risk. In the present case, when Derr entered the field it was open, and, as he in good faith proceeded promptly to give the world the benefit of his discovery, we are convinced that under the law he is the prior inventor. (*Hubbard v. Berg*, 40 App. D. C., 577; *Broen v. Campbell*, 41 App. D. C., 499.)

The decision is reversed and priority awarded the senior party Derr.

Mr. Chief Justice SMYTH dissents.
Reversed.

U. S. Circuit Court of Appeals—Second Circuit.

FLIGEL et al. v. SEARS, ROEBUCK & Co.

Decided November 13, 1918.

[254 Fed. Rep., 698.]

1. PATENTS — PATENTABILITY — INVENTION — WATERPROOF GARMENT.

Patent No. 1,099,031, for a waterproof garment, including a cape and hood, with the hood having a front band capable of folding forward to constitute a vizor when the hood is up and capable of contraction and fastening to give the appearance of a military collar

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when the hood is down, Held valid, since the conception of a convertible collar and band as a desirable adjunct to a rain-cape and the inserting of an elastic where it could be applied to a rain-cape embodied inventive thought.

2. SAME—CONSTRUCTION—INFRINGEMENT.

Patent No. 1,099,031, for a waterproof garment, including a cape and hood, Held not infringed.

APPEAL from the District Court of the United States for the Southern District of New York.

Bill by Bernard I. Fligel and Mitchell Fligel, co-partners doing business as Fligel & Son, against Sears, Roebuck & Co. From a decree dismissing the bill, complainants appeal. Affirmed.

Messrs. Mann, Anderson & Mann (Mr. T. Hart Anderson of counsel) for the appellants.

Messrs. Duell, Warfield & Duell (Mr. C. H. Duell, Mr. F. P. Warfield, and Mr. L. A. Watson of counsel) for the appellees.

Before WARD, ROGERS, and MANTON, Circuit Judges.
MANTON, Cir. J.:

(1) The patent in suit, No. 1,099,031, was for a waterproof garment, including a cape and hood, with the hood having a front band capable of folding forward to constitute a vizor when the hood is up, and capable of contraction and fastening to give the appearance of a military collar when the hood is down. The defendant, a large mail-order house, does not manufacture, but sold the alleged infringing garments, which were manufactured by another. The district judge held there was no invention and no infringement. We disagree with his conclusion that there was no invention but agree with him that the defendant's garment, as made up and sold, did not infringe the plaintiffs' patent.

The testimony showing the various devices of the prior art does not indicate a hood provided with a convertible collar, which, when the hood is over the head, provides a shade, or, when allowed to fall in a dependent position at the back, constitutes a finish having the effect of a military collar. The patentee placed on this hood a band, which, when the hood is down, is used as a standing collar about the neck, which had never been applied to hoods attached to capes. This band has been referred to in the trade as the "Billey Burke" band. The type of hoods on rain-coats used theretofore, when attached to the cape, were elastic about the front edge, and this so as to accommodate the size of the head and make the cape adjustable therefor. It was not practical to have the attached collar, as provided by the patent in suit, entirely elastic, for this would destroy the appearance and the idea of its function as a collar. It resulted in the patentee making the collar shorter than the hood, and for the space between the ends of the band or collar and the edge of the hood were inserted elastic sections. This afforded a smooth collar, which could provide for the military effect when down, and at the same time retain the elasticity of the hood and thus secure the fit. There was this novelty pre-

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sented, and the inventor, during the period of three years, sold many thousands of these garments. While this construction is within a limited scope and may be of minor importance, yet it added this novelty and resulted in considerable sales. Its ingenuity and popularity warrants the sustaining of the patent.

In *Greenwald Bros. v. La Vogue Petticoat Co.* (226 Fed., 449; 141 C. C. A., 278) this court sustained a patent for a petticoat, where the novelty consisted only in the application of an elastic waist-band and a knitted hip portion to a woven skirt portion. And again in *Witzel v. Bernina* (212 Fed., 734; 129 C. C. A., 344) this court sustained a patent for a wire mattress having along its longitudinal edges a spring-guard to hold the upper mattress in place. And in *David et al. v. Harris* (206 Fed., 902; 124 C. C. A., 477) a patent for improvements in sweaters, consisting of an attachment to a low-necked sweater of two enfolding lapels and a collar which could be turned up to convert it into a high-necked sweater, was sustained. These cases follow the reasoning and law in the case of the *Borbed Wire Patent* (143 U. S., 275; 12 Sup. Ct., 443, 450; 30 L. Ed., 154.)

(2) The conception of a convertible collar and band as a desirable adjunct to a rain-cape, and the inserting of an elastic whereby it could be applied to a rain-cape, embodied inventive thought. The defendant's rain-apes do not comprise a convertible military collar; indeed, it is in no way made apparent that it was ever the intention of the defendant to use the collar and hood as such. The band upon the defendant's cape is sewed down and fastened by buttons, and, in order to bring forward the hand, it would be necessary to unstitch and alter the structure of the garment. The band appears to be a piece of decorative trimming, and, in its condition when sold, does not seem capable of manipulation to serve either the function of drawing forward to extend the hood as a bonnet, or of so contracting it when let down at the shoulders as to provide a military collar. It would require some strap, either of elastic or cloth, to bring the ends of the band together about the front of the neck, so as to hold the collar upright and tend to give the military effect.

No such strap or band is sold with the garment, and no instructions seem to have been given that such use might be made of the defendant's garment, or result produced, and no evidence is adduced that any such use was ever made of it. The defendant's present garment, as marketed by it, omits these features which give novelty and popularity. The band about the hood of defendant's garment constitutes decorative trimming and serves no functional purpose. It is a type of rain-proof garment which was old in the art, and at least not such an article of wearing-apparel as infringes the complainants' patent.

Judgment affirmed.

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Supreme Court of the United States.

THE T. H. SYMINGTON COMPANY v. THE NATIONAL MALLEABLE CASTINGS Co. et al. (No. 31.)

On writ of certiorari to the United States Circuit Court of Appeals for the First Circuit.

WILLIAM H. MINER v. THE T. H. SYMINGTON COMPANY. (No. 24.)

On writ of certiorari to the United States Circuit Court of Appeals for the Seventh Circuit.

Decided June 9, 1919.

1. PATENTS — CLAIMS — CONSTRUCTION — BROAD AND RESTRICTED CLAIMS.

Where in a patent for a railway draft-rigging one claim calls specifically for an integral pocket, while other claims do not indicate that the pocket is to be integral, such difference in terms points persuasively to a difference in purpose, and, in view of the description, which states that "the pocket may be cast in a single piece," Held that the broader claims cover a pocket made of separate parts.

2. SAME — PRIORITY OF INVENTION — ORAL TESTIMONY TAKEN LONG AFTER THE EVENTS.

Oral testimony tending to show prior invention as against existing Letters Patent is, in the absence of models, drawings, or kindred evidence, open to grave suspicion, particularly if the testimony be taken after the lapse of years from the time of the alleged invention. The oral testimony of a rival inventor and two other witnesses taken fifteen years after the date of the alleged invention Held to disclose no more than a "mental conception in process of development which occasionally was outlined on scraps of paper and then committed to the waste basket and was roughly worked into a wooden model four or five inches long with a pen knife," which is insufficient to overcome the *prima facie* evidence of priority arising from the granting of a prior patent.

Mr. McElrath Church, Mr. Gilbert P. Ritter, and Mr. Ernest F. Mecklin for T. H. Symington Company.

Mr. Charles Neave for National Malleable Castings Co. et al.

Mr. Charles C. Linthicum and Mr. George I. Haight for Miner.

Mr. Justice VAN DEVANTER delivered the opinion of the Court.

These cases are so related that they may be disposed of together. Each is a suit to enjoin the infringement of a patent. One was begun in the district of Maine and is based on Letters Patent granted May 7, 1901, to Jacob J. Byers on an application filed April 21, 1900. The other was begun in the northern district of Illinois and is based on Letters Patent granted February 18, 1902, to William H. Emerick on an application filed May 24, 1901. Both patents cover an improvement in draft-rigging for railroad-cars. In each suit it became necessary to compare the patents, determine whether the invention of one was anticipated by the other, and ascertain which of the patentees was the original and first inventor. Ultimately the suits reached the circuit courts of appeals for the circuits in which they were brought. In the Maine suit the court held that Byers was the prior inventor and that claims 3, 5 and 6 of the patent to him were valid and infringed. (230 Fed., 821; 234 Fed., 343.) In the Illinois suit the court held that Emerick was

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the prior inventor and that claims 1, 2, 3 and 4 of the patent to him were valid and infringed. (229 Fed., 730.) These conflicting decisions led to the allowance of the present writs of certiorari.

While the discussion at the bar and in the briefs has taken a wide range, only two points need be considered.

One of the elements called for by the claims in the Byers patent which were sustained is a "pocket" or housing, which is to hold other parts in place. The corresponding element of the Emerlek patent is described as "counterpart castings" and is in two parts. Whether the Byers pocket was to be integral or might be in two or more parts is a matter about which the two courts differed. In the Maine suit it was held that the claims were not limited to an integral pocket, but in the Illinois suit the ruling was the other way. The former view, as it seems to us, is the right one. There is nothing in Byers's claims which were sustained indicating that the pocket is to be integral, while there is a distinct call for such a pocket in claim 9. The difference in terms points persuasively to a difference in purpose, and the specification does even more, for it says "the pocket may be cast in a single piece." This is the common form of designating an admissible alternative in such instruments. Of course, the other alternative is casting it in a plurality of pieces. When this is done and the pieces are assembled they form a pocket and serve in the same way as if there were but one.

The courts differed also as to who was the prior inventor. Presumptively it was Byers, for his application and patent were both prior to Emerlek's application. Recognizing this, the parties claiming under Emerlek sought by proof to carry his invention back to an earlier date, and to that end produced the testimony of three witnesses, Emerlek being one. All three testified in both suits, their testimony being substantially the same in both. In the Maine suit the court pronounced this testimony too equivocal and uncertain to establish priority as against Byers's application and patent, but in the Illinois suit the court, although regarding the testimony as hardly satisfactory, gave effect to it. On reading it we are persuaded that it was clearly insufficient.

This Court has pointed out that oral testimony tending to show prior invention as against existing Letters Patent is, in the absence of models, drawings or kindred evidence, open to grave suspicion; particularly if the testimony be taken after the lapse of years from the time of the alleged invention. (*Deering v. Winona Harvester Works*, 155 U. S., 283, 300.) And it has said:

A conception of the mind is not an invention until represented in some physical form, and unsuccessful experiments or projects, abandoned by the inventor, are equally destitute of that character. (*Clark Thread Co. v. Wilmontie Co.*, 140 U. S., 451, 459.)

Here the evidence was oral. No model, drawing or kindred exhibit was produced. Fifteen years had elapsed since the date as of which invention was being claimed. The testimony was not direct and strong, but weak and uncertain and in some respects contradictory. At most it only disclosed a mental conception in process of development which occasionally was outlined on scraps of paper and then committed to the waste-basket and was roughly worked into a wooden model four or five inches long with a penknife. The first real model or drawing was made about the time of the actual application for a patent and there was no attempt at reduction to practice until after the patent was issued. Such proof under the rule just stated does not suffice.

Decree in No. 31 affirmed.

Decree in No. 24 reversed.

ADJUDICATED PATENTS.

(U. S. D. C. Wis.) The Brown and Gaines patent, No. 1,153,672, of September 14, 1915, for a rail-clamp for traveling bridges. *Held* not infringed. *Heyl & Patterson v. M. A. Hanna Coal & Dock Co.*, 257 Fed. Rep., 97.

(U. S. C. C. A. Ill.) The Cowles patent, No. 705,042, for a fire-escape, claims 1 and 2 *Held* infringed, claim 3 *Held* not infringed. *Joseph Halsted Co. v. United States Fire Escape Counterbalance Co.*, 257 Fed. Rep., 95.

(U. S. C. C. A. Ind.) The Green patent, No. 1,180,030, for a biscuit-cutter, claims 29, 30, 40-45, inclusive, *Held* valid and infringed. *Toggari Baking Co. v. Green*, 257 Fed. Rep., 87.

(U. S. C. C. A. Ohio.) The Seiberling and Stevens patent, No. 702,501, for a machine for making casings for automobile-tires, claim 1 *Held* not infringed, claims 2 and 14 *Held* invalid. *Firestone Tire & Rubber Co. v. Seiberling*, 257 Fed. Rep., 74.

(U. S. C. C. A. Ohio.) The State patent, No. 941,062, for a machine for making casings for automobile-tires, *Held* invalid. *Firestone Tire & Rubber Co. v. Seiberling*, 257 Fed. Rep., 74.

(U. S. C. C. A. Ill.) The Stockart patent, No. 1,030,210, for a sharpening device on meat-slicing machines, *Held* not infringed. *United States Slicing Mach. Co. v. Wolf, Sayer & Heller*, 257 Fed. Rep., 93.

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DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

JULY, 1919.

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OF THE DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

JULY, 1919.

Decisions of the Court of Appeals of the District of Columbia are indicated by one star (*), of the United States Circuit Court of Appeals by the letter A, and of the Supreme Court of the United States by two stars (**).

<p style="text-align: center;">ACTION OF THE COURTS.</p> <p>See Concurrent Decisions of the Tribunals of the Patent Office.</p> <p style="text-align: center;">ALLEGATIONS.</p> <p>See Construction of Statutes, 1, 2; Jurisdiction of the Federal Courts, 2.</p> <p style="text-align: center;">ANTICIPATION.</p> <p>See Particular Patents, 2.</p> <p style="text-align: center;">ANTITRUST ACT.</p> <p>See Construction of Statutes, 3.</p> <p style="text-align: center;">APPEAL.</p> <p>See Claims; Concurrent Decisions of the Tribunals of the Patent Office.</p> <p style="text-align: center;">BOOKS OF REFERENCE.</p> <p>See Judicial Notice.</p> <p style="text-align: center;">BROAD AND NARROW CLAIMS.</p> <p>See Construction of Specifications and Patents, 5.</p> <p style="text-align: center;">CLAIMS.</p> <p>See Construction of Specifications and Patents, 1, 2, 3, 5; Declaration of Interference; Diligence, 1; Particular Patents, 3, 4; Renewal of Forfeited Applications.</p> <p>COPIED FROM PATENT—TIME LIMIT FOR REPLY OR APPEAL. Where claims copied from a patent are selected for any reason, the Examiner should set a time limit for reply or appeal, and a similar limit should be set by the Examiners-in-Chief where the rejection is affirmed. [<i>Ex parte</i> Weber and Woodford, 863.]</p> <p style="text-align: center;">COMBINATION.</p> <p>See Construction of Specifications and Patents, 3.</p> <p style="text-align: center;">COMMERCIAL SUCCESS.</p> <p>See Particular Patents, 2.</p>	<p style="text-align: center;">CONCEPTION OF INVENTION.</p> <p>See Construction of Specifications and Patents, 4; Diligence, 1.</p> <p style="text-align: center;">CONCURRENT DECISIONS OF THE TRIBUNALS OF THE PATENT OFFICE.</p> <p>APPEAL—INCORRECT CONCLUSIONS—ACTION OF COURT. "While, ordinarily, much weight is accorded concurrent decisions of the Patent Office, we ought not to hesitate to overrule them where we are convinced that an incorrect conclusion has been reached." (<i>Arbiter v. Lewis</i>, 134 O. O., 516; 34 App. 11, C., 491.) [<i>ex parte</i> Derr v. Gleason, 864.]</p> <p style="text-align: center;">CONDITIONS EXISTING BY REASON OF A STATE OF WAR.</p> <p>See Disclaimer.</p> <p style="text-align: center;">CONFUSION OF THE PUBLIC.</p> <p>See Goods of the same Descriptive Properties, 1; Unfair Competition.</p> <p style="text-align: center;">CONSTRUCTION OF CLAIMS.</p> <p>See Particular Patents, 3.</p> <p style="text-align: center;">CONSTRUCTION OF SPECIFICATIONS AND PATENTS.</p> <p>See Invention; Particular Patents.</p> <p>1. CLAIMS—ARE WELL DEVELOPED. Where a patentee comes so late into the art that his discovery rests upon a prior art so fully developed that it was clear from the record that approach was being made slowly but more and more nearly to the result which he reached and the final step taken by him was not a long one, the patent must be construed strictly, but candidly and fairly, to give to the patentee the full benefit, but not more, of the disclosure of his discovery which is to become a part of the public stock of knowledge upon the expiration of the patent period and which was the consideration for the grant of the patent monopoly. [<i>ex parte</i> Minerals Separation, Limited, <i>et al.</i>, v. Butte and Superior Mining Company, 701.]</p> <p>2. SAME—PATENTEE BOUND BY HIS CLAIMS. The courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office. As patents are procured <i>ex parte</i>, the public is not bound by them, but the patentees are, and the latter cannot show that their invention is broader than the terms of their claim, or, if broader, they must be held to have surrendered the surplus to the public. (<i>Keynote Bridge Co. v. Phoenix Iron Co.</i>, 12 O. O., 980; 95 U. S., 274; <i>Wake v. Dunbar</i>, 37 O. O., 1002; 119 U. S., 47; <i>Motion Picture Patents Co. v. Universal Film Co.</i>, 238 O. O., 311; 243 U. S., 502.) [<i>ex parte</i> Id.]</p>
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2. INFRINGEMENT—ONE CONCENTRATION PROCESS—INCREASING AMOUNT OF LESS EFFICIENT OIL TO EXCEED TOTAL AMOUNT DESCRIBED AS NECESSARY.

The use of a more efficient oil in combination with a less efficient oil of the Sulman, Heard, and Ballot patent, No. 835,120, for an ore-concentration process, does not constitute infringement where the former is used in an amount within the limits of the claims, but the combined amount is in excess of such limit, and when the amount of the more efficient oil used would probably produce better results from the process than are produced with the combination of oils, particularly where the specification gave no notice to the public, and it is nowhere particularly pointed out in the claims, that some oils or combination of oils having a preferential affinity for metalliferous matter are more useful than others in the process, or that some may be used successfully and some not, or that some are "frothing oils," a designation not appearing in the patent, and that some are not. [*Id.]

4. PATENTABILITY—INVENTION—WATERPROOF GARMENT.

Patent No. 1,099,031, for a waterproof garment, including a cape and hood, with the hood having a front band capable of folding forward to constitute a visor when the hood is up and capable of contraction and fastening to give the appearance of a military collar when the hood is down, *Held* valid, since the conception of a convertible collar and band as a desirable adjunct to a rain-cape and the inserting of an elastic where it could be applied to a rain-cape embodied inventive thought. [4 Fligel et al. v. Sears, Roebuck & Co., 866.]

3. CLAIMS—BROAD AND RESTRICTED CLAIMS.

Where in a patent for a railway draft-rigging one claim calls specifically for an integral pocket, while other claims do not insist that the pocket is to be integral, such difference in terms points persuasively to a difference in purpose, and, in view of the description, which states that "the pocket may be cast in a single piece," *Held* that the broader claims cover a pocket made of separate parts. [The T. H. Symington Company v. The National Malleable Castings Co. et al., 867.]

CONSTRUCTION OF STATUTES.

1. PATENTS—ACT OF JUNE 25, 1910—JURISDICTION OF THE COURT OF CLAIMS.

Where the bill of complaint filed in the Court of Claims alleged that the patentee completed his invention while in the employ of the Government, *Held* that under the third proviso of the act of June 25, 1910, the Court of Claims was without jurisdiction. [Moore v. The United States, 160.]

2. SAME—SAME—SAME.

Where it appears from the bill filed in the Court of Claims under the act of June 25, 1910, that the patentee at the time he completed his invention was an employee of the Government, the allegation that he confined his work on the invention to the hours when he was not actually on duty is immaterial. To give effect to this allegation would be to amend the statute, not to construe it. [*Id.]

3. MONOPOLIES—COMBINATION AND RESTRAINT OF TRADE—ANTI-TRUST ACT.

The manufacturer of products shipped in interstate trade is not subject to criminal prosecution under the Sherman Antitrust Act of July 2, 1890, because he specifies the resale prices and refuses to deal with any one who fails to maintain the same. [United States of America v. Colgate & Company, 346.]

CONTINUATION OF APPLICATION.

IN PART—NO ENDORSEMENT ON THE FILE-WRAPPER.

Where an application is filed which is a continuation in part only of a prior application, no endorsement should be placed on the file-wrapper. Such an endorsement should be placed thereon only when the application is a division or a continuation of or substitute for a previously-filed application. [Ex parte Ellis, 563.]

CONTRACT.

See Jurisdiction of the Federal Courts, 2.

CRIMINAL PROSECUTION.

See Construction of Statutes, 3.

DAMAGES AND PROFITS.

See Jurisdiction of the Federal Courts, 2.

DECISION OF THE SUPREME COURT OF THE UNITED STATES.

See Disclaimer.

DECISIONS OF THE COURT OF APPEALS.

See Similarity of Marks, 1.

DECLARATION OF INTERFERENCE.

REJECTED CLAIMS.

Where some of the claims copied from a patent are found allowable, but others not, the interference should be promptly declared without waiting to determine the applicant's right to the rejected claims. [Ex parte Weber and Woodford, 863.]

DECREE.

See Jurisdiction of the Federal Courts, 2.

DELAY IN FILING APPLICATION.

See Diligence.

DELAY IN FILING DISCLAIMER.

See Disclaimer.

DESCRIPTION.

See Construction of Specifications and Patents, 5.

DILIGENCE.

1. WORK ON MACHINE FOR USE OF GOVERNMENT.

Where the inventor conceived the invention in 1911 and claims to have completed and successfully reduced it to practice at that time, at which time he might have applied for a patent, his lack of diligence up to the time of an unquestioned reduction to practice may not be excused on the ground that he was working on a large and unusual machine for use in work for the Government. [Derr v. Gleason, 864.]

2. ACTIVITY DUE TO KNOWLEDGE OF WORK OF RIVAL.

Evidence considered and *Held* to show that G. was not exercising diligence when D. entered the field and that he was spurred to activity only by knowledge that D. was in the field. [*Id.]

DISCLAIMER.

DELAY IN FILING—EVASIVENESS.

A disclaimer filed on March 28, 1917, after a decision of the United States Supreme Court on December 11, 1916, holding certain claims of the Sulman, Heard, and Ballot patent, No. 835,120, invalid, *Held* not to have been "unreasonably neglected and delayed," having regard to the fact that the owners of the patent resided in a foreign country and to the wartime conditions of communication then prevailing. Also *Held* that the disclaimer was not so evasive as to be invalid. While bordering on *specie*, it cannot be interpreted as giving any rights under the patent greater than may be legitimately obtained under certain claims held valid. [Minerals Separation, Limited, et al. v. Hutte and Superior Mining Company, 701.]

DISCLOSURE OF INVENTION.

See Construction of Specifications and Patents, 1; Particular Patents, 2; Renewal of Forfeited Applications.

DISCOVERY.

See Construction of Specifications and Patents, 1; Invention, 1; Jurisdiction of Federal Courts, 2.

DIVISION OF APPLICATIONS.

See Continuation of Application.

ELECTION OF CLAIMS.

See Renewal of Forfeited Applications.

EMPLOYEE OF THE GOVERNMENT.

See Construction of Statutes, 1, 2; Diligence, 1.

EVASIVENESS OF DISCLAIMER.

See Disclaimer.

EVIDENCE.

See Diligence, 2; Judicial Notice; Priority of Invention; Unfair Competition.

EXAMINERS-IN-CHIEF.

See Claims.

FILE-WRAPPERS.

See Continuation of Application.

FOREIGN OWNERS.

See Disclaimer.

FORMER DECISIONS CITED.

See Concurrent Decisions of the Tribunals of the Patent Office; Construction of Specifications and Patents, 2.

GOODS OF THE SAME DESCRIPTIVE PROPERTIES.

See Similarity of Marks, 3, 4.

1. TRADE-MARKS—TEST.

In determining whether the goods of two parties are of the same descriptive properties the fact that the goods of the first to adopt the word have been used for the same purpose as the goods of the second is not important if it appears that the goods can be put to the same use, since "the likelihood of confusion depends as much upon the probabilities of the future as upon the experience of the past." [Wadsworth, Howland & Co., Inc., v. Trussed Concrete Steel Co., 161.]

3. SAME—LIQUID CONCRETE-HARDENING MATERIAL AND VARNISH.

Held that a liquid concrete-hardening material constitutes goods of the same descriptive properties as varnish, since it appears that the latter is capable of being used for the same purpose as the former. [*Id.]

GRANT OF PATENT.

See Construction of Specifications and Patents, 1; Priority of Invention.

INFRINGEMENT.

See Construction of Specifications and Patents, 2; Particular Patents, 1, 2, 3, 5.

INTERFERENCE.

See Declaration of Interference; Priority of Invention; Reduction to Practice.

INVENTION.

See Construction of Specifications and Patents, 2, 4; Construction of Statutes, 1, 2; Particular Patents, 2; Priority of Invention.

1. DISCOVERY.

Young's thought that a line might be made to record a master's interpretation of a musical composition and that any one who follows that line physically can reproduce the music of the master was not his invention. That was his discovery. It was, however, the soul of his invention. The very simple means of a pointer connected with the controller and extending over the music-sheet to the line, by which his discovery was brought into action, did not, when standing alone, involve invention; but when this means, simple though it was, was employed to bring into being and put to use the substance of the discovery the two together, the great and the little thing, constitute invention. [Cunningham Piano Company v. Aeolian Co., 157.]

T & D—2

2. PATENTABILITY—USE OF ANIMAL HAIR FOR OIL-PRESS MATS.

The application, in the extraction of cotton-seed oil, of mats made of horsehair or other long animal hair, woven in a manner designated, but without improvement in the art of weaving, *Held* not invention, but merely mechanical adaptation of familiar materials and methods. [Werk et al. v. Parker et al., 159.]

JUDICIAL NOTICE.

PATENTABILITY—EVIDENCE—BOOKS OF REFERENCE.

The use of horsehair mats for extracting oil, as abundantly shown in standard and easily-accessible books of reference, may be noticed judicially. [Werk et al. v. Parker et al., 159.]

JURISDICTION OF THE COURTS.

See Construction of Specifications and Patents, 2.

JURISDICTION OF THE COURT OF CLAIMS.

See Construction of Statutes, 1, 2.

JURISDICTION OF THE FEDERAL COURTS.

1. CASES ARISING UNDER THE PATENT LAWS.

To constitute a suit under the patent laws, the plaintiff must set up some right, title, or interest under the patent laws or at least make it appear that some right or privilege will be defeated by one construction or sustained by an opposite construction of these laws. [Odell v. F. C. Farnsworth Company et al., 534.]

3. SAME.

Where the bill of complaint alleged that the patent had been assigned by the plaintiff to the defendant, that the latter had agreed to pay certain royalties, and that they had not been paid and the prayer was for a discovery of the number of articles covered by the patent which the defendants had sold and for a decree that they account for and pay to the plaintiff the royalties thereon, *Held* that the case was not one arising under the laws, but merely a suit for royalties based on the contract. [*Id.]

LIMIT OF TIME.

See Claims.

LIMITATION OF CLAIMS.

See Construction of Specifications and Patents, 2.

MECHANICAL SKILL.

See Judicial Notice.

MONOPOLY.

See Construction of Specifications and Patents, 1; Construction of Statutes, 3.

NAME OF CORPORATION.

See Similarity of Marks, 1, 2.

ORAL TESTIMONY.

See Priority of Invention.

ORIGINAL APPLICATIONS.

See Renewal of Forfeited Applications.

PARTICULAR PATENTS.

See Construction of Specifications and Patents, 3, 4, 5; Disclaimer; Invention.

1. FLIGEL—No. 1,099,031—WATERPROOF GARMENT—INFRINGEMENT.

Patent No. 1,099,031, for a waterproof garment, including a cape and hood, *Held* not infringed. [4 Fligel et al. v. Sears, Roebuck & Co., 866.]

2. HOWE—No. 13,765 (REISSUE)—BOX-STRAPPING—VALIDITY AND INFRINGEMENT.

The Howe reissue patent, No. 13,765, (original No. 1,043,771), for box-strapping, is not invalid, as containing new matter, was not anticipated, and discloses invention, evidenced in part by its great commercial success in an old art; also *Held* infringed.
[¹ Stanley Works v. Twisted Wire & Steel Co., 354.]

3. SULMAN, PICARD, AND BALLOT—No. 835,120—PROCESS OF CONCENTRATING ORES—VALIDITY AND INFRINGEMENT.

The Sulman, Picard, and Ballot patent, No. 835,120, for a process of concentrating ores, known as the air-filtration process, employing oil having an affinity for the ore particles, claims 9, 10, and 11 *Held* valid; claims 1, 2, 3, 4, and 12 construed and *Held* not infringed by a process employing more than a fraction of 1 per cent. of oil on the ore.

[¹ Minerals Separation, Limited, et al. v. Butte and Superior Mining Co., 701.]

4. WEBB—Nos. 758,574 and 758,575—OIL-PRESS MATH—VALIDITY. Patents Nos. 758,574 and 758,575, to Robert F. Webb, relating to oil-press math for use in extracting cotton-seed oil, *Held* invalid as to certain claims. [¹ Webb et al. v. Parker et al., 159.]

5. YOUNG—No. 602,918—PIANO-PLAYER—VALIDITY AND INFRINGEMENT.

The Young patent, No. 602,918, for controller for mechanical musical instruments, *Held* valid and infringed.
[¹ Cunningham Piano Company v. Eolian Co., 157.]

PATENTABILITY.

See Construction of Specifications and Patents, 4; Invention, 2; Judicial Notice.

PRACTICE IN THE COURTS.

See Concurrent Decisions of the Tribunals of the Patent Office.

PRIOR PATENTS.

See Priority of Invention.

PRIORITY OF ADOPTION AND USE.

See Goods of Same Descriptive Properties, 1; Similarity of Marks, 3, 4.

PRIORITY OF INVENTION.

ORAL TESTIMONY TAKEN LONG AFTER THE INVENT.
Oral testimony tending to show prior invention as against existing Letters Patent is, in the absence of models, drawings, or kindred evidence, open to grave suspicion, particularly if the testimony is taken after the lapse of years from the time of the alleged invention. The oral testimony of a rival inventor and two other witnesses taken fifteen years after the date of the alleged invention *Held* to disclose no more than a "mental conception in process of development which occasionally was outlined on scraps of paper and then committed to the waste basket and was roughly worked into a wrosten model four or five inches long with a penknife," which is insufficient to overcome the *prima facie* evidence of priority arising from the granting of a prior patent.
[¹ The T. H. Symington Company v. The National Malleable Castings Co. et al., 86.]

PROCESS.

See Construction of Specifications and Patents, 3; Particular Patents, 3.

PROOF.

See Reduction to Practice.

REDUCTION TO PRACTICE.

See Diligence, 1.

INTERFERENCE—ATTACHMENT TO MACHINE OPERATED IDLY.
The construction and operation of an attachment to a gear cutting machine, which attachment was designed to cut a curved gear-tooth, but which was operated idly, no attempt being made to cut a gear-tooth, does not constitute a reduction to practice. The demonstration might have supplemented proof of a prior actual test, but could not take the place of such a test.
[¹ Deerr v. Gleason, 86.]

REGISTRATION OF TRADE-MARKS.

See Similarity of Marks.

REJECTION OF CLAIMS.

See Claims; Declaration of Interference.

RENEWAL OF FORFEITED APPLICATIONS.

APPLICANT NOT BOUND BY ELECTION IN ORIGINAL APPLICATION.
Held that "an applicant may ordinarily make a new election in a renewal application and prosecute claims to a species other than that originally elected, provided, of course, that such species is fully disclosed in the original application."
[*Ex parte* Prouty, 533.]

RESTRAINT OF TRADE.

See Construction of Statutes, 3.

RIVAL INVENTORS.

See Diligence, 2; Priority of Invention.

ROYALTIES.

See Jurisdiction of the Federal Courts, 2.

SCOPE OF PATENT.

See Construction of Specifications and Patents, 2.

SIMILARITY OF MARKS.

1. **"SIMPLEX"—NAME OF CORPORATION.**
The word "Simplex" *Held* properly refused registration as a trade-mark, in view of the decision of the court of appeals, on the ground that it is a mere name of a corporation.
[*Ex parte* American Steel Foundries, 353.]

2. **SAME—SAME.**
The word "Simplex" *Held* properly refused registration as a trade-mark on the ground that it is a mere name of a corporation.
[*In re* American Steel Foundries, 354.]

3. **USE OF VARIOUS MARKS BY PRIOR USER.**
Where it appeared that the opposer was organized by combining several minor companies, each of which had used as a trade-mark a flag bearing a distinguishing-letter, and after the merger these flags were continued to be used to designate different brands of salmon, *Held* that such use would not prevent the registration by another of the words "Our Flag" as a trade-mark for the same goods.
[*Alaska Packers Association v. Getz Bros. & Co.*, 534.]

4. **"PREMIUM" AND "PREMIER."**
The word "Premium" *Held* properly refused registration as a trade-mark for canned salmon in view of the prior use of the word "Premier" as a trade-mark for the same kind of goods.
[*Getz Bros. & Co. v. Alaska Packers Association*, 534.]

SPECIFICATION.

See Construction of Specifications and Patents, 3.

STATE OF THE ART.

See Construction of Specifications and Patents, 1.

SUBSTITUTE APPLICATIONS.

See Continuation of Application.

SUITS UNDER PATENT LAWS.

See Jurisdiction of the Federal Courts.

TEST.

See Goods of Same Descriptive Properties, 1; Reduction to Practice.

TRIBUNALS OF THE PATENT OFFICE.

See Concurrent Decisions of the Tribunals of the Patent Office.

UNFAIR COMPETITION.

DECEPTION OF THE PUBLIC.
Evidence which does not show that the public was deceived by believing defendant's product to be that of complainant does not warrant a finding of unfair competition.
[¹ Stanley Works v. Twisted Wire & Steel Co., 354.]

VALID PATENTS.

See Construction of Specifications and Patents, 4; Particular Patents, 2, 3, 4, 5.

VALIDITY OF DISCLAIMERS.

See Disclaimer.

VOID PATENTS.

See Particular Patents, 3, 4.

WITNESSES.

See Priority of Invention.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 1ST DAY OF JULY, 1919.

- Abtmeier, Theodore, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Perculator. No. 1,308,023; July 1; v. 264; p. 3.
- Acker, George C., Jacksonville, Fla. Attachment for locomotives. No. 1,308,467; July 1; v. 264; p. 84.
- Adams, Perle, Newton, Ga. Aircraft. No. 1,308,153; July 1; v. 264; p. 27.
- Aeolin Company, The. (See Kelly, George B., assignor.)
- Aktiebolaget Svenska Kullagerfabriken. (See Hultgren, Axel G. E., assignor.)
- Allard, George G., St. Paul, Minn. Surgical instrument. No. 1,308,728; July 1; v. 264; p. 132.
- Allen, William H., Moline, Ill. Assignor of one-third to E. A. Kramer, Grant Park, Ill. Brick-carrier. No. 1,308,021; July 1; v. 264; p. 3.
- Alliance Machine Company. (See Kendall, David, assignor.)
- Alsop, Thomas, and W. W. Sibson, assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Drying-machine. No. 1,308,024; July 1; v. 264; p. 3.
- Aluminum Castings Company, The. (See Amick, Clair J., assignor.)
- Aluminum Castings Company, The. (See Parkhurst, Frederic A., assignor.)
- American Atmos Corporation. (See Lucha, Friedrich M., assignor.)
- American Can Company. (See Gray, James A., assignor.)
- American Manganese Steel Company. (See Brinton, Walter, assignor.)
- American Metal Cap Company. (See Hammer, Charles, assignor.)
- American Optical Company. (See Blanchard, William N., assignor.)
- American Optical Company. (See Day, George H., assignor.)
- American Pulley Company, The. (See Bowen, Russell H., assignor.)
- American Sleeve-Valve Motor Company. (See Williams, Martin L., assignor.)
- American Toy Shop, The. (See Otto, Adolph O., assignor.)
- American Steel & Wire Company of New Jersey, The. (See Merkt, Gustav A., assignor.)
- American Telephone and Telegraph Company. (See Demarest, Charles S., assignor.)
- American Telephone and Telegraph Company. (See Toomey and Demarest, assignors.)
- Amet, Edward H., Redondo Beach, Calif. Reticulated motion-picture curtain. No. 1,308,468; July 1; v. 264; p. 84.
- Amet, Edward H., assignor of one-half to C. J. Funk, Redondo Beach, Calif. Drain-pipe cleaner. No. 1,308,469; July 1; v. 264; p. 84.
- Amick, Clair J., assignor to The Aluminum Castings Company, Cleveland, Ohio. Mold. No. 1,308,156; July 1; v. 264; p. 27.
- Anchorstar Anna M., New York, N. Y. Attachment for corsets. No. 1,308,025; July 1; v. 264; p. 3.
- Anderson, Edwin C., assignor to The Buck's Shoe & Range Company, St. Louis, Mo. Ash-spraying device for furnaces and boilers. No. 1,308,615; July 1; v. 264; p. 111.
- Anderson, Emil C., Denver, Colo. Lock-bolt. No. 1,308,626; July 1; v. 264; p. 4.
- Ankers, Morris C., Newark, Ohio. Poultry-brooder. No. 1,308,470; July 1; v. 264; p. 84.
- Appelgren, Knut. (See Gustafson and Appelgren.)
- Arlington Company, The. (See Crane, Jasper E., assignor.)
- Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,308,320; July 1; v. 264; p. 57.
- Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,308,321; July 1; v. 264; p. 57.
- Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Banding-machine. No. 1,308,322; July 1; v. 264; p. 57.
- Arnold, Jacob P., Belle-rue, Ohio. Table. No. 1,308,652; July 1; v. 264; p. 118.
- Aspinwall, Louis M. (See Simmon and Aspinwall.)
- Auel, Carl B. and D. C. Pultney, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Safety-guard for machine-tools. No. 1,308,027; July 1; v. 264; p. 4.
- Automatic Carburetor Company. (See Church, Edmund S., assignor.)
- Automatic Electric Company. (See Martin, Talbot G., assignor.)
- Automatic Electric Company. (See Powell, Winfred T., assignor.)
- Automatic Electric Company. (See Smith, Arthur B., assignor.)
- Beattie, John E., assignor to The Carrie Gyroscopic Corporation, New York, N. Y. Compass-corrector. No. 1,308,692; July 1; v. 264; p. 125.
- Beattie, John E., assignor to The Carrie Gyroscopic Corporation, New York, N. Y. Dampening device for gyroscopic compasses. No. 1,308,693; July 1; v. 264; p. 126.
- Backmyer, Christopher F., Chicago, Ill. Snap-fastener. No. 1,308,140; July 1; v. 264; p. 25.
- Balley, Charles A., Cromwell, Conn. Toy pistol. No. 1,308,141; July 1; v. 264; p. 25.
- Balley, Charles A., Cromwell, Conn. Toy pistol. No. 1,308,143; July 1; v. 264; p. 25.
- Balrd, James, Ardmore, Papakura, New Zealand. Automatic candle-extinguisher. No. 1,308,215; July 1; v. 264; p. 38.
- Baker, David C., East Orange, N. J. Awning-hook. No. 1,308,519; July 1; v. 264; p. 93.
- Baker, Walter C., Lakewood, assignor to The Standard Parts Company, Cleveland, Ohio. Brake mechanism. No. 1,308,142; July 1; v. 264; p. 25.
- Balcells, Juan, and J. Servitje, Mexico, Mexico. Panning-machine. No. 1,308,216; July 1; v. 264; p. 39.
- Baldock, John S., Clayton, Ind. Power transmission. No. 1,308,614; July 1; v. 264; p. 11.
- Bell Grain Explosives Company. (See Du Pont, Francis I., assignor.)
- Bell Grain Explosives Company. (See Du Pont, Francis I. and E. P., assignors.)
- Bell Grain Explosives Company. (See Du Pont, Ernest, assignor.)
- Bell, Lawrence, Brazil, Ind. Pulling attachment for motor-driven vehicles. No. 1,308,613; July 1; v. 264; p. 111.
- Balogh, George W., and L. Poski, Buffalo, N. Y. Transparent sign. No. 1,308,157; July 1; v. 264; p. 28.
- Banning, Katharine S., Los Angeles, Calif. Comfort-bag. No. 1,308,028; July 1; v. 264; p. 4.
- Barker, James, Ann Arbor, Mich. Index arrangement. No. 1,308,471; July 1; v. 264; p. 84.
- Barkwell, William H., Akron, Ohio. Milling-machine. No. 1,308,029; July 1; v. 264; p. 4.
- Barnaby, Charles W., New York, N. Y. Type-writer. No. 1,308,386; July 1; v. 264; p. 60.
- Barnes Manufacturing Company. (See Gorman, James C., Jr., assignor.)
- Barnum, Ernest H., North Bangor, N. Y. Direction-indicator. No. 1,308,223; July 1; v. 264; p. 58.
- Barrell, William L., Lawrence, Mass. Wet-replenishing loom. No. 1,308,144; July 1; v. 264; p. 25.
- Barreller, Charles, Paris, France. Hand-propelled vehicle. No. 1,308,270; July 1; v. 264; p. 48.
- Barratt Company, The. (See Swenson, George E., assignor.)
- Barratt, William, Coburg, Victoria, Australia. Atmospheric gas-burner. No. 1,308,472; July 1; v. 264; p. 84.
- Bauer, Charles G., Brooklyn, N. Y. Compound air-pump. No. 1,308,387; July 1; v. 264; p. 60.
- Bausch & Lomb Optical Company. (See Grebe, Albert, assignor.)
- Baylis, Everett A., El Paso, Tex. Centrifugal separator. No. 1,308,271; July 1; v. 264; p. 48.
- Beattie, James M. (See Spear and Beattie.)
- Beaver, Charles J., Hale, A. F. W. Richards, Brooklands, and E. A. Claremont, High Legh, England. Defective and protective device for electric cables. No. 1,308,388; July 1; v. 264; p. 60.
- Beaver, Charles J., Hale, A. F. W. Richards, Brooklands, and E. A. Claremont, High Legh, England. Sheath-con- piling for electric cables. No. 1,308,390; July 1; v. 264; p. 70.
- Beck, John V., Cleveland, Ohio. Box for electric meters. (Reissue.) No. 14,677; July 1; v. 264; p. 136.
- Beeman Garden Tractor Co. (See Phelps, Spencer H., assignor.)

Belghe, Earl H. (See Weiss, Alexander, assignor.)
 Bell, George H., deceased, Brooklyn, N. Y.; H. L. Bell, executor. Vaporizer. No. 1,308,571; July 1; v. 264; p. 103.
 Bell, Harriet L., executrix. (See Bell, George H.)
 Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated. Distributing system. No. 1,308,391; July 1; v. 264; p. 70.
 Bell, Joseph D., San Francisco, Calif. Combined bed and seat. No. 1,308,030; July 1; v. 264; p. 4.
 Bell, Mark J., assignor to Leo Shapiro & Company, Incorporated. Minneapolis, Minn. Display-rack. No. 1,308,631; July 1; v. 264; p. 5.
 Bellard, Paul M., assignor to Compagnie D'Applications Mechaniques, Ivry Port, France. Device for gaging circular work. No. 1,308,324; July 1; v. 264; p. 35.
 Belzian, Valentine, Los Angeles, Calif. Adjustable piano-bench. No. 1,308,729; July 1; v. 264; p. 132.
 Bendelari, Arthur E. (See De Mier, Fred, assignor.)
 Benfield, Bernard, assignor to Traders Metal Goods Co., Inc., New York, N. Y. Flash-light. No. 1,308,032; July 1; v. 264; p. 5.
 Benjamin Electric Manufacturing Company. (See Harlow, Clarence H., assignor.)
 Bern, Alonzo N., Chicago, Ill. Safety-razor. No. 1,308,730; July 1; v. 264; p. 133.
 Benton, Frank W., Wilson, N. C. Parachute. No. 1,308,033; July 1; v. 264; p. 5.
 Berglund, John L., assignor to The Smith & Hoge Manufacturing Company, Bridgeport, Conn. Punch. No. 1,308,272; July 1; v. 264; p. 49.
 Betzner, Edmund J., Vincennes, Ind. Demountable-rim fastener. No. 1,308,616; July 1; v. 264; p. 111.
 Beason, Pedro J., New York, N. Y. Shutter-controlling mechanism for film-camera. No. 1,308,617; July 1; v. 264; p. 111.
 Bibby, James, London, England. Electric furnace. No. 1,308,273; July 1; v. 264; p. 49.
 Bin, John M. (See Liedtke and Bin.)
 Bixler-Wattersco Co., The. (See Wertman, Milton A., assignor.)
 Bigham, Thomas J., Kansas City, Mo. Curtain-pole. No. 1,308,217; July 1; v. 264; p. 39.
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 Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company. Electrical apparatus. No. 1,308,158; July 1; v. 264; p. 28.
 Bijur, Joseph, New York, N. Y., assignor to The Safety Car Heating and Lighting Company. Railway lighting apparatus. No. 1,308,274; July 1; v. 264; p. 49.
 Bird, Milton W., Weatohchee, Wash. Door-knob. No. 1,308,323; July 1; v. 264; p. 35.
 Bjernerud, Earl S., Calmar, Iowa. Letter-opener. No. 1,308,218; July 1; v. 264; p. 39.
 Black, James L., Alexandria, Minn. Internal-combustion engine. No. 1,308,326; July 1; v. 264; p. 58.
 Blanchard, William N., assignor to American Optical Company, Southbridge, Mass. Goggles. No. 1,308,477; July 1; v. 264; p. 60.
 Black Steel Construction Company. (See Venable, William M., assignor.)
 Blumenthal, Alexandre and J. Paris, France. Machine for fixing claps. No. 1,308,327; July 1; v. 264; p. 58.
 Blumenthal, Jack. (See Blumenthal, Alexandre and J.)
 Blunt, Joseph D., et al. (See Tolles and Ernsberger, assignors.)
 Bobban, Johan, Southwest, Pa. Rail-joint. No. 1,208,618; July 1; v. 264; p. 112.
 Bocking, Frederick W., Van Buren, Ark. Rabbit and chicken-breaker. No. 1,308,653; July 1; v. 264; p. 118.
 Boehringer, Louis V., and H. Thomassen, Dayton, Ohio. Door-lock. No. 1,308,473; July 1; v. 264; p. 85.
 Bodner, Douglas E., New York, N. Y. Flocking cover, top, awning, and the like. No. 1,308,392; July 1; v. 264; p. 71.
 Bonfield, West B., Ottumwa, Iowa. Red-supported table. No. 1,308,034; July 1; v. 264; p. 5.
 Booth, Eugene T. (See Kilpatrick and Booth.)
 Bopst, Samuel P., Washington, D. C. Lumber-rule. No. 1,308,654; July 1; v. 264; p. 118.
 Borger, Henry E., assignor to Splitdorf Electrical Company, Newark, N. J. Automatic cut-out for electric generators. No. 1,308,275; July 1; v. 264; p. 49.
 Boswell, Roscoe C., Washington, D. C. Combination-tool. No. 1,308,634; July 1; v. 264; p. 126.
 Bowen, Russell H., assignor to The American Pulley Company, Philadelphia, Pa. Metal pulley and manufacture thereof. No. 1,308,035; July 1; v. 264; p. 5.
 Bort, Florence E., Leola, N. C. Fruit and vegetable drier. No. 1,308,036; July 1; v. 264; p. 6.
 Bradford, Robert, Calgary, Alberta, Canada. Running-gear for vehicles. No. 1,308,220; July 1; v. 264; p. 39.
 Brady, James H., assignor, by mesne assignments, to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Measuring-tank. No. 1,308,572; July 1; v. 264; p. 103.
 Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Gasoline-tank. No. 1,308,573; July 1; v. 264; p. 103.
 Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Indicator. No. 1,308,574; July 1; v. 264; p. 103.
 Brand, George P., New York, N. Y. Unit action for pneumatic musical instruments. No. 1,308,159; July 1; v. 264; p. 28.

Brewster, Charles W., New York, N. Y. Electrically-operated brake mechanism. No. 1,308,610; July 1; v. 264; p. 112.
 Brewster Film Corporation. (See Brewster, Percy D., assignor.)
 Brewster, Percy D., East Orange, assignor to Brewster Film Corporation, Newark, N. J. Color positive film. No. 1,308,538; July 1; v. 264; p. 97.
 Bridgwater, Herbert E., Syracuse, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,308,328; July 1; v. 264; p. 59.
 Bridgwater, Herbert E., Syracuse, assignor to Remington Typewriter Company, Ilion, N. Y. Process and apparatus for treating type-bars for type-writing and like machines. No. 1,308,329; July 1; v. 264; p. 59.
 Broad, Charles E., assignor to Stanley Motor Carriage Company, Newton, Mass. Water-level indicator. No. 1,308,630; July 1; v. 264; p. 112.
 Brown, Bertrand E., New Haven, Conn. Electrical heating device for watchmakers' use. No. 1,308,635; July 1; v. 264; p. 118.
 Brown, Kirk, Montclair, assignor to Condensite Company of America, Bloomfield, N. J. Composite molding. No. 1,308,330; July 1; v. 264; p. 59.
 Brown, Blanche W. (See Brown, Gideon P., assignor.)
 Brown, Harry E. (See Penwell and Brown.)
 Brown, William H., Cleveland, Ohio. Oil-cup. No. 1,308,331; July 1; v. 264; p. 59.
 Brown, William H., Chicago, Ill. Differential mechanism. No. 1,308,520; July 1; v. 264; p. 93.
 Brinton, Walter, Wilmington, Del. assignor to American Manganese Steel Company, Augusta, Me. Sectional gear. No. 1,308,160; July 1; v. 264; p. 28.
 Brown, Gideon P., assignor to B. W. Brown, Lake Bluff, Ill. Hand-hole scraper. No. 1,308,221; July 1; v. 264; p. 39.
 Brown, Gideon P., Lake Forest, assignor to B. W. Brown, Lake Bluff, Ill. Hand-hole scraper. No. 1,308,222; July 1; v. 264; p. 40.
 Brownlee, Roy H., Pittsburgh, Pa. Treating hydrocarbon oils. No. 1,308,161; July 1; v. 264; p. 28.
 Brucker, Ferdinand F., Akron, Ohio. Valve-fishing tool. No. 1,308,219; July 1; v. 264; p. 39.
 Bruntton, David W., Denver, Colo. Apparatus for locating snipers and for other purposes. No. 1,308,474; July 1; v. 264; p. 85.
 Buchek, Joseph, Oak Park, Ill. Safety-valve mechanism and pressure-gage. No. 1,308,037; July 1; v. 264; p. 6.
 Buck's Stove & Range Company, The. (See Anderson, Edwin C., assignor.)
 Buell, William H., New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Priming charge. No. 1,308,593; July 1; v. 264; p. 71.
 Buell, William H., New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Charge for primers. No. 1,308,594; July 1; v. 264; p. 71.
 Bullington, Frank A. (See Combs and Bullington.)
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Cutting apparatus for mowing-machines. No. 1,308,162; July 1; v. 264; p. 29.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Corn-planter. No. 1,308,163; July 1; v. 264; p. 29.
 Burke, Alfred W., Wynnewood, Pa. Excess-demand meter. No. 1,308,656; July 1; v. 264; p. 118.
 Burnett, Ira A., Chicago, Ill. Dental-amalgam mixer. No. 1,308,038; July 1; v. 264; p. 6.
 Burnett, Thomas H., Eschiquer, Calif. Internal-combustion engine. No. 1,308,621; July 1; v. 264; p. 112.
 Burchoughs, Charles F., East Orange, N. J. Tilling head for molding-presses. No. 1,308,475; July 1; v. 264; p. 85.
 Bushy, Nahum J., Sr., Boston, Mass. Adjustable and interchangeable cravat and bow. No. 1,308,731; July 1; v. 264; p. 133.
 Buschkovski, John, American Expeditionary Forces. Picture-frame. No. 1,308,695; July 1; v. 264; p. 126.
 Butter, Francis J., Wolverhampton, assignor to Chubb and Son's Lock and Safe Company, Limited, London, England. Permutation-lock. No. 1,308,521; July 1; v. 264; p. 93.
 Byron, Kenneth M., Detroit, Mich., assignor to O. E. Byron, Washington, D. C. Draft and steering gear. No. 1,308,476; July 1; v. 264; p. 85.
 Byron, Orra E. (See Byron, Kenneth, assignor.)
 Cable Company, The. (See Pollard, Willard L., assignor.)
 Cabot, Samuel, assignor to Samuel Cabot, Inc., Canton, Mass. Coating composition. No. 1,308,575; July 1; v. 264; p. 104.
 Cadden, Frank, Chicago, Ill. Collar-button. No. 1,308,696; July 1; v. 264; p. 126.
 Cadieux, Louis E. (See Hanson, Harry, assignor.)
 Cadillac Motor Car Company. (See Folz, William E., assignor.)
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 Cadillac Motor Car Company. (See Waldon, Sidney D., assignor.)
 Cadillac Motor Car Company. (See White, D'Orsay M., assignor.)

Cadman, Addi B., Beloit, Wis., assignor to Warner Manufacturing Company, South Beloit, Ill. Means for transporting logs or the like. No. 1,308,039; July 1; v. 264; p. 6.
 Cadmus, Alfred B., New York, N. Y. Locking device. No. 1,308,697; July 1; v. 264; p. 126.
 Caldwell, John A., Vancouver, British Columbia, Canada. Enamelled or granite ware cooking utensil. No. 1,308,622; July 1; v. 264; p. 112.
 Calkins, Harriette and Z. M., Varysburg, N. Y. Flower-holder. No. 1,308,623; July 1; v. 264; p. 112.
 Calkins, Zelma M. (See Calkins, Harriette and Z. M.)
 Calthrop, Everard R., London, England. Parachute. No. 1,308,478; July 1; v. 264; p. 88.
 Calvert, Robert P., and O. L. Thomas, assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Production of methyl borate and boric acid from crude sodium nitrate. No. 1,308,576; July 1; v. 264; p. 104.
 Calvert, Robert P., and O. L. Thomas, assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Obtaining boric acid from mixtures containing borates. No. 1,308,577; July 1; v. 264; p. 104.
 Campbell, Duncan R., Boston, assignor to F. Rumrill, Newton, Mass. Trimming-machine for rubber articles. No. 1,308,479; July 1; v. 264; p. 86.
 Campbell, Henry, Logan, Utah. Aeroplane. No. 1,308,657; July 1; v. 264; p. 119.
 Cameron, William W. (See Davis and Cameron.)
 Camp, Ernest, San Diego, Calif. Night storage-battery tester. No. 1,308,223; July 1; v. 264; p. 40.
 Campbell, William M., Jr., Baltimore, Md. Dog-controlling means. No. 1,308,332; July 1; v. 264; p. 59.
 Caouette, Marcel, Clinton, N. Y. Fire-escape. No. 1,308,480; July 1; v. 264; p. 86.
 Cardona, Antonio J. (See Creek, Allen B., assignor.)
 Carpenter, Alexander, assignor to National Tractor and Plow Company, Carey, Ohio. Gang-plow. No. 1,308,744; July 1; v. 264; p. 135.
 Carr, William E., Seattle, assignor to Police Traffic Signal Company, Ltd., King county, Wash. Street-crossing signal. No. 1,308,658; July 1; v. 264; p. 119.
 Carrie Gyroscopic Corporation, The. (See Beattie, John E., assignor.)
 Carrie Gyroscopic Corporation, The. (See Rossiter, George A., assignor.)
 Case, Jesse A., assignor of one-third to E. F. Copeland, Brockton, Mass. Wooden-bottomed shoe. No. 1,308,395; July 1; v. 264; p. 71.
 Castle, John H. (See Underwood and Castle.)
 Cedarstrom, Charles W., Westwood, Calif. Stock-gage. No. 1,308,650; July 1; v. 264; p. 119.
 Central Tool Company, The. (See Jacques, Fernando O., Jr., assignor.)
 Chappell, Howard F., New York, N. Y. Protecting refractory furnace-linings. No. 1,308,481; July 1; v. 264; p. 86.
 Charvat, Alois, Gladin, Kans. Stock-releasing device. No. 1,308,224; July 1; v. 264; p. 40.
 Chatfield, Franklin, Minneapolis, Minn., assignor to Northwestern Knitting Company. Undergarment. No. 1,308,396; July 1; v. 264; p. 71.
 Chauviere, Lucien, assignor to Societe Anonyme l'Helice Integrale (Anciens Etablissements L. Chauviere), Paris, France. Aeroplane. No. 1,308,164; July 1; v. 264; p. 29.
 Chicago Miniature Lamp Works. (See Gast, Adolph W., assignor.)
 Choma, John, Pittsburgh, Pa., assignor of one-half to B. Merenko, Passaic, N. J. Automatic wardrobe. No. 1,308,333; July 1; v. 264; p. 60.
 Christensen, Tyvald, Port Richmond, N. Y. Motor-bicycle. No. 1,308,022; July 1; v. 264; p. 3.
 Chubb and Son's Lock and Safe Company. (See Butter, Francis J., assignor.)
 Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Liquid-heating method and apparatus. No. 1,308,046; July 1; v. 264; p. 6.
 Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Method of and apparatus for producing asymmetric potential waves. No. 1,308,041; July 1; v. 264; p. 7.
 Church, Edmund S., assignor to Automatic Carburetor Company, Chicago, Ill. Fuel-regulating device for gas-piston-engines. No. 1,308,145; July 1; v. 264; p. 25.
 Church, Edmund S., assignor to Automatic Carburetor Company, Chicago, Ill. Fastener. No. 1,308,146; July 1; v. 264; p. 26.
 City Trust Company. (See Porzel, Joseph, assignor.)
 Claremont, Ernest A. (See Beaver and Claremont.)
 Claremont, Ernest A. (See Beaver, Richards, and Claremont.)
 Clark, Charles M., Boston, Mass. Collapsible wheel. No. 1,308,660; July 1; v. 264; p. 110.
 Clark, George H., Cambridge, assignor to Crosby Steam Gage & Valve Company, Boston, Mass. Spring. No. 1,308,165; July 1; v. 264; p. 29.
 Clay, Harry C., Columbus, Ind., assignor to Emerson Brantingham Company, Rockford, Ill. Balling-press. No. 1,308,397; July 1; v. 264; p. 71.
 Clark, James R., New York, N. Y., assignor to A. W. Mackintosh, Elizabeth, N. J. Physician's straddle-stand. No. 1,308,661; July 1; v. 264; p. 120.

Clausen, Henry P., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y. Number-indicating means. No. 1,308,539; July 1; v. 264; p. 97.
 Clewe, William F., et al. (See Pagendam, John F., assignor.)
 Clinton, James S., Chicago, Ill. Device for lining tins or other receptacles. No. 1,308,540; July 1; v. 264; p. 97.
 Coalten, Louis, Wolverhampton, England. Lubrication of cam-shafts for internal-combustion engines. No. 1,308,225; July 1; v. 264; p. 40.
 Coates, Henry, Watford, England. Electric-arc furnace. No. 1,308,624; July 1; v. 264; p. 113.
 Code, George, Malden, Mass. Power-generating apparatus. No. 1,308,732; July 1; v. 264; p. 133.
 Coffey, Timothy J., East Providence, R. I. Automobile signaling device. No. 1,308,662; July 1; v. 264; p. 120.
 Cogran, Henry M., Brooklyn, N. Y. Fuse for electric circuits. No. 1,308,042; July 1; v. 264; p. 7.
 Cohen, Thomas. (See Smock, Howard A., assignor.)
 Cohn, Albert, and J. H. Debs, Chicago, Ill. Culinary utensil. No. 1,308,482; July 1; v. 264; p. 80.
 Coll, William D., Moncie, Ind. Egg-case filler. No. 1,308,578; July 1; v. 264; p. 164.
 Coin Controlled Lock Company. (See Farnsworth, William S., assignor.)
 Combs, Albert B., and F. A. Bullington; said Bullington assignor of one-half of the right to E. G. Smith, Portland, Ore. Cylinder-grinding machine. No. 1,308,166; July 1; v. 264; p. 29.
 Commercial Utilities Manufacturing Company. (See Gullborg, Arthur V., assignor.)
 Compagnie D'Applications Mechaniques. (See Bellard, Paul M., assignor.)
 Condensite Company of America. (See Brown, Kirk, assignor.)
 Conover, George W., Harrisburg, Ill. Screen-sash. No. 1,308,625; July 1; v. 264; p. 113.
 Continental Can Company. (See Flinnigan, Eugene E., assignor.)
 Cook, Joel R., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Controller. No. 1,308,043; July 1; v. 264; p. 7.
 Cooney, John T., Denver, Colo. Milk-bottle top. No. 1,308,226; July 1; v. 264; p. 40.
 Cooper, Frank E., Oakland, Calif. Flash-light cabinet. No. 1,308,334; July 1; v. 264; p. 60.
 Cooper, J. Courtland. (See Cooper, William C., assignor.)
 Cooper, Peter P., Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric locomotive. No. 1,308,044; July 1; v. 264; p. 7.
 Cooper, Peter P., Philadelphia, Pa., assignor to Westinghouse Electric and Manufacturing Company. Storage-battery locomotive. No. 1,308,045; July 1; v. 264; p. 7.
 Cooper, William A., Montreal, Quebec, Canada. Sleeping-car ladder. No. 1,308,147; July 1; v. 264; p. 28.
 Cooper, William C., assignor of one-half to J. C. Cooper, Chicago, Ill. Valency-chart. No. 1,308,167; July 1; v. 264; p. 29.
 Copeland, Ellis F. (See Case, Jesse A., assignor.)
 Cornell, Andrew J., assignor to Empire Air Metal Co., Inc., College Point, N. Y. Metallic door-frame hook and trim-fastening. No. 1,308,276; July 1; v. 264; p. 49.
 Corrigan, John H., Prior Lake, Minn. Animal-trap. No. 1,308,277; July 1; v. 264; p. 49.
 Coulson, William T., Anerley, London, England. Diver's lantern. No. 1,308,579; July 1; v. 264; p. 101.
 Coulston, Earl V., Rock Island, Ill. Heating system. No. 1,308,335; July 1; v. 264; p. 60.
 Courvoisier, Andrew, Huguenot Park, N. Y. Pantoon for raising ships. No. 1,308,168; July 1; v. 264; p. 30.
 Cox, Millard F., Louisville, Ky. Reversible brake-beam fulcrum. No. 1,308,046; July 1; v. 264; p. 7.
 Craig, Richard M., San Antonio, Tex. Automatic electric advertising sign. No. 1,308,698; July 1; v. 264; p. 126.
 Crishead, Thomas G., Seattle, Wash. Stocking. No. 1,308,483; July 1; v. 264; p. 87.
 Cram, Marshall M., North Mankato, Minn. Profile measuring and recording device. No. 1,308,580; July 1; v. 264; p. 104.
 Crane, Jasper E., Newark, assignor to The Arlington Company, Arlington, N. J. Purifying camphor. No. 1,308,398; July 1; v. 264; p. 72.
 Crane, Peter H., Long Lake, Minn. Deep-tilling machine. No. 1,308,169; July 1; v. 264; p. 30.
 Crawley, Harriett A., Brookville, assignor of one-half to O. Cummins, Falmouth, Ky. Milk-can. No. 1,308,047; July 1; v. 264; p. 7.
 Creek, Allen B., assignor of one-half to A. J. Cardozo, San Francisco, Calif. Card-case. No. 1,308,336; July 1; v. 264; p. 60.
 Crichton, Leslie N., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electrical device. No. 1,308,048; July 1; v. 264; p. 8.
 Cronk, Harrison T., assignor to Crouk-Salter Company, New York, N. Y. Fluid-conduit in closet-bowls. No. 1,308,581; July 1; v. 264; p. 105.

- Cronk, Harrison T., assignor to Cronk-Salter Company, New York, N. Y. Destructible closet-trap. No. 1,308,382; July 1; v. 264; p. 104.
- Cronk-Salter Company. (See Cronk, Harrison T., assignor.)
- Crosby Steam Gage & Valve Company. (See Clark, George H., assignor.)
- Crouse-Hinds Company. (See Olley, Edwin A., assignor.)
- Crowell, William J., Jr., Wyncote, Pa. Ratio indicating and recording meter. No. 1,308,626; July 1; v. 264; p. 113.
- Cruikshank, James W., assignor to J. W. Cruikshank Engineering Company, Pittsburgh, Pa. Glass-carrying rod for glass-annealing leers. No. 1,308,337; July 1; v. 264; p. 60.
- Colley, Walter E., assignor to Simonds Manufacturing Company, Fitchburg, Mass. Separable-tooth saw. No. 1,308,541; July 1; v. 264; p. 97.
- Cummins, Cyril. (See Crawley, Harriett A., assignor.)
- Cummings, Thomas W. (See Rohan, James J., assignor.)
- Curle, Charles W., San Francisco, Calif. Linotype-slugsawing machine. No. 1,308,733; July 1; v. 264; p. 133.
- Cusick, Wilfred L., Follansbee, W. Va. Combined level, plumb, and gage. No. 1,308,690; July 1; v. 264; p. 126.
- Cutter, George A., Dedham, Mass., assignor to Thomson Electric Welding Company. Electric metal-working apparatus. No. 1,308,399; July 1; v. 264; p. 72.
- D'Aix, Fritz C. L., Brooklyn, N. Y. Internal-combustion engine. No. 1,308,400; July 1; v. 264; p. 72.
- Dalby, William E. (See Wilson and Dalby.)
- Davidson, William H., Huddersfield, England. Gas and liquid contact apparatus. No. 1,308,338; July 1; v. 264; p. 60.
- Deak, Frank H., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeder-motion for looms. No. 1,308,227; July 1; v. 264; p. 40.
- Deak, Frank E., and W. W. Cameron, assignors to La Crosse Flour Company, La Crosse, Wis. Flour. No. 1,308,228; July 1; v. 264; p. 41.
- Dag, Albert V. T., New Rochelle, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa. Traffic-controlling system. No. 1,308,401; July 1; v. 264; p. 72.
- Dag, George H., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,308,484; July 1; v. 264; p. 87.
- Debay, George C., Springdale, assignor to Universal Glass Company, New Kensington, Pa. Glass-ball. No. 1,308,278; July 1; v. 264; p. 50.
- Debnam, Henry G., London, England. Rotary internal-combustion engine. No. 1,308,339; July 1; v. 264; p. 61.
- Debs, Louis H. (See Cohn and Debs.)
- Delbel, Christopher S., and L. E. Lawlor, Youngstown, Ohio. Flag-boiler. No. 1,308,340; July 1; v. 264; p. 61.
- De Laval Steam Turbine Company. (See Peterson, Per A., assignor.)
- De Laval, Edmitri S., New York, N. Y. Fluid power transmission. No. 1,308,170; July 1; v. 264; p. 30.
- Delmar, Evald, Stockholm, Sweden. Self-adjusting ball-bearing. No. 1,308,522; July 1; v. 264; p. 94.
- Demarest, Charles S. (See Toomey and Demarest.)
- Demarest, Charles S., Flatbush, N. Y., assignor to American Telephone and Telegraph Company. Relay-selecting circuit for artificial lines. No. 1,308,664; July 1; v. 264; p. 120.
- Demuth, Alfred M., San Francisco, Calif., assignor to J. A. Kelly, Chicago, Ill. Cooker. No. 1,308,485; July 1; v. 264; p. 87.
- De Mier, Fred, assignor to himself and A. E. Bendelari, Picher, Okla. Apparatus for concentrating ore. No. 1,308,649; July 1; v. 264; p. 8.
- Dennis, Arthur C., Glacier, British Columbia, Canada. Tunneling. No. 1,308,583; July 1; v. 264; p. 103.
- Detroit-Cadillac Motor Car Company. (See Zanes, Delaney D., assignor.)
- Deutsch, Edward I., Cincinnati, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Motor-control system. No. 1,308,229; July 1; v. 264; p. 41.
- De Vaughn, Harry E., assignor to W. A. Jones, Morgantown, W. Va. Flattening oven. No. 1,308,341; July 1; v. 264; p. 61.
- Dick, James E., Denver, Colo. Hand-transit. No. 1,308,050; July 1; v. 264; p. 8.
- Dickinson, Frank T., Toledo, Ohio. Brake-shoe. No. 1,308,402; July 1; v. 264; p. 72.
- Diller, Samuel, Iowa, Moine, Iowa. Storage battery. No. 1,308,230; July 1; v. 264; p. 41.
- Di Salvo, Antonio, Washington, Pa. Hair-cleaning device. No. 1,308,685; July 1; v. 264; p. 124.
- Dishrow, Reuben B., St. Paul, Minn. Milking apparatus. No. 1,308,051; July 1; v. 264; p. 8.
- Dishrow, Reuben B., St. Paul, Minn. Valve mechanism for milking apparatus. No. 1,308,052; July 1; v. 264; p. 8.
- Dishrow, Reuben B., St. Paul, Minn. Milking apparatus. No. 1,308,053; July 1; v. 264; p. 9.
- Donaher, Patrick. (See Kuehn and Donaher.)
- Donnar, Louis, Hercul, Ore. Producing dehydrated mineral salts. No. 1,308,403; July 1; v. 264; p. 72.
- Dorey, George B., Montreal, Quebec, Canada. Shock-absorber. No. 1,308,171; July 1; v. 264; p. 30.
- Dorr Company, The. (See McAfee, Daniel S., assignor.)
- Douglas & Rudd Manufacturing Company. (See Douglas, Harry A., assignor.)
- Douglas, Harry A., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich. Circuit-connector. No. 1,308,172; July 1; v. 264; p. 31.
- Douglas, Walter W., Savannah, Ga. Magazine for firearms. No. 1,308,665; July 1; v. 264; p. 120.
- Downie, Robert O., Minneapolis, Minn. Flying-machine. No. 1,308,054; July 1; v. 264; p. 9.
- Downs, George F., Buffalo, N. Y. Open-hearth furnace. No. 1,308,404; July 1; v. 264; p. 73.
- Drager, Lloyd H., assignor to T. L. Smith Company, Milwaukee, Wis. Discharge-spout for concrete-mixers. No. 1,308,148; July 1; v. 264; p. 26.
- Draper Corporation. (See Davis, Frank H., assignor.)
- Draper Corporation. (See Ferguson, Thomas, assignor.)
- Draper Corporation. (See Lacey, Fred, assignor.)
- Draper Corporation. (See Rhoads, Alonzo E., assignor.)
- Draper Corporation. (See Simpson, Edward S., assignor.)
- Drussel, Oskar. (See Heymann, Dressel, Kotbe, and Osenbeck.)
- Drews, Edward H. (See Morrick and Drews.)
- Dreyfus, Henry, Basel, Switzerland. Manufacture of acetic acid from acetaldehyde. No. 1,308,173; July 1; v. 264; p. 31.
- Duckworth, Thomas E., Colfax, La. Wheeled scoop. No. 1,308,660; July 1; v. 264; p. 120.
- Dunnuck, Alonzo G., Concordia, Kans. Road-working machine. No. 1,308,174; July 1; v. 264; p. 31.
- Du Pont, Eleuthere P. (See Du Pont, Francis I. and E. P.)
- Du Pont, Ernest, assignor to Hall Grain Explosives Company, Wilmington, Del. Making explosive black powder. No. 1,308,342; July 1; v. 264; p. 61.
- Du Pont, Francis I., assignor to Hall Grain Explosives Company, Wilmington, Del. Smokeless powder and coating same. No. 1,308,343; July 1; v. 264; p. 61.
- Du Pont, Francis I., assignor to Hall Grain Explosives Company, Wilmington, Del. Making smokeless powder. No. 1,308,344; July 1; v. 264; p. 61.
- Du Pont, Francis I., assignor to Hall Grain Explosives Company, Wilmington, Del. Explosive charge for the central tubes of shrapnel-shells. No. 1,308,345; July 1; v. 264; p. 62.
- Du Pont, Francis I., Wilmington, and E. P. Du Pont, Montebauin, assignors to Hall Grain Explosives Company, Wilmington, Del. Making smokeless powder. No. 1,308,340; July 1; v. 264; p. 62.
- Du Pont, Francis I., assignor to Hall Grain Explosives Company, Wilmington, Del. Preparing explosive charges for shells. No. 1,308,347; July 1; v. 264; p. 62.
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- Dyer, Frank L., Montclair, N. J. Assembly voting-machine. No. 1,308,279; July 1; v. 264; p. 60.
- Dyer, Richard F., Providence, R. I., assignor to G. H. Cobb, Bloomfield, Conn. Artificial leather and producing it. No. 1,308,231; July 1; v. 264; p. 41.
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- E. I. du Pont de Nemours and Company. (See Calvert and Thomas, assignors.)
- E. I. du Pont de Nemours and Company. (See Houlehan, Arthur E., assignor.)
- E. W. Illia Company. (See Leavitt, Frank M., assignor.)
- E. W. Carpenter Manufacturing Company. (See Lund, Charles W., assignor.)
- Earle, George H., Valparaiso, Ind. Automobile-heater. No. 1,308,480; July 1; v. 264; p. 87.
- Eastman, Floyd K., Indianapolis, Ind. Radiator-cover. No. 1,308,056; July 1; v. 264; p. 9.
- Eaton, Fred L., Row, Pa. Permutation-padlock. No. 1,308,487; July 1; v. 264; p. 87.
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- Educational Motion Picture Machine and Film Company. (See O'Hara, Joseph G. R., assignor.)
- Edwards, James L., Birmingham, England. Fastening for detachable wheels. No. 1,308,488; July 1; v. 264; p. 87.
- Edwards, William J., Floranna, Tex. Antislipping device for tires. No. 1,308,057; July 1; v. 264; p. 9.
- Ehrhart, Raymond A., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Means for withdrawing non-condensable vapors from condensers. (Reissue.) No. 1,4678; July 1; v. 264; p. 136.
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- Emerson Brantingham Company. (See Clay, Harry C., assignor.)
- Empire Art Metal Co. (See Cornell, Andrew J., assignor.)
- End, George E., Svenson, Ore. Vehicle. No. 1,308,232; July 1; v. 264; p. 41.
- Engleman, Christian, Vancouver, Wash. Mechanical billiard-player. No. 1,308,405; July 1; v. 264; p. 73.
- Engleman, Christian, Vancouver, Wash. Sanitary water-closet seat. No. 1,308,406; July 1; v. 264; p. 73.
- Erleson, Albert, Oakland, Calif. Music-leaf turner. No. 1,308,348; July 1; v. 264; p. 62.
- Erllinger, George, assignor of one-half to A. O. Trostel, Milwaukee, Wis. Firing apparatus. No. 1,308,233; July 1; v. 264; p. 42.
- Ermold, Edward, New York, N. Y. Bottle-labeling machine. No. 1,308,280; July 1; v. 264; p. 50.
- Ernsberger, George H. (See Tolles and Ernsberger.)
- Erlington, George A., assignor of sixty per cent. to W. E. Waterman and twenty per cent. to M. E. Waterman, Buffalo, N. Y. Check-writing machine. No. 1,308,149; July 1; v. 264; p. 26.
- Everhart, Albert M., et al. (See Rombach, Fred, assignor.)
- Evers, Arthur J., Chicago, Ill. Pasteboard box and manufacture. No. 1,308,058; July 1; v. 264; p. 6.
- Ewing, Floyd C., Jeromesville, Ohio. Pedal. No. 1,308,700; July 1; v. 264; p. 127.
- Ewoldt, Henry, Grand Island, Neb. Cable-guide. No. 1,308,667; July 1; v. 264; p. 121.
- Fairbanks, Morse & Co. (See Goff, Glidden, and Mahana, assignors.)
- Farler, Bert T., Paris, Tex. Safety-crank. No. 1,308,701; July 1; v. 264; p. 127.
- Farnsworth, Willis S., assignor to Coin Controlled Lock Company, San Francisco, Calif. Lock-guard. No. 1,308,734; July 1; v. 264; p. 133.
- Fedayna, Feiko, New York, N. Y. Flying-machine. No. 1,308,175; July 1; v. 264; p. 31.
- Feldman, Edward D., Chester, N. Y. Penholder. No. 1,308,349; July 1; v. 264; p. 62.
- Fellheimer, Alfred, New York, N. Y. Ticket-seller's booth. No. 1,308,702; July 1; v. 264; p. 127.
- Ferguson, Thomas, Lowell, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeder device for dilling-replenishing looms. No. 1,308,234; July 1; v. 264; p. 42.
- Fernald, Benjamin G., New York, and J. L. Moore, assignors to The Kerr Turbine Company, Wellsville, N. Y. Turbine bleeder-valve. No. 1,308,407; July 1; v. 264; p. 73.
- Field, Thomas H., Archbold, Ohio. Stock center and chuck. No. 1,308,176; July 1; v. 264; p. 31.
- Finnegan, Eugene E., Chicago, Ill. Assignor to Continental Can Company, Incorporated, Syracuse, N. Y. Cover-opener for receptacles. No. 1,308,627; July 1; v. 264; p. 118.
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- Folk, Joseph. (See Luscha and Folk.)
- Folts, William E., Detroit, assignor to Cadillac Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,308,489; July 1; v. 264; p. 88.
- Fotland, Tormod R., Haugevund, Norway. Separation of molybdenum ores. No. 1,308,735; July 1; v. 264; p. 134.
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- Fortuna-Werke Spezialmaschinenfabrik, G. m. b. H. (See Klager, Hermann, assignor.)
- Fowler, Jonathan O., New York, N. Y. Convertible table, bed, and settle. No. 1,308,523; July 1; v. 264; p. 94.
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- Franch, Hans A., New York, N. Y. Dyestuff. No. 1,308,060; July 1; v. 264; p. 10.
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- Funk, Charles J. (See Amet, Edward H., assignor.)
- Funk, Frank M., Detroit, Mich. Stud-driver. No. 1,308,490; July 1; v. 264; p. 88.
- Gabb, George H. (See Dyer, Richard F., assignor.)
- Gajan, Joseph, New York, N. Y. Non-skid attachment for wheels. No. 1,308,705; July 1; v. 264; p. 128.
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- Gas and Oil Combustion Company. (See Lucke, Charles E., assignor.)
- Gast, Adolph W., assignor to Chicago Miniature Lamp Works, Chicago, Ill. Process and apparatus for making glass-plate letters. No. 1,308,408; July 1; v. 264; p. 73.
- Gay, Verner M., Danbury, Conn. Foldable table. No. 1,308,350; July 1; v. 264; p. 62.
- Geeraard, Evariste, Prestwich, assignor to G. J. Stanfield, Manchester, England. Electrolytic cell for production of oxygen and hydrogen. No. 1,308,704; July 1; v. 264; p. 127.
- Geist, Harry F., assignor, by mesne assignments, to Webster Electric Company, Marine, Wis. Ignition mechanism for internal-combustion engines. No. 1,308,235; July 1; v. 264; p. 42.
- Gelling, John W., Mexico, Mexico. Wheel-vehicle. No. 1,308,409; July 1; v. 263; p. 73.
- General Chain Company. (See Spidel, Eugen, assignor.)
- General Railway Signal Company. (See Howe, Winthrop K., assignor.)
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- Gibbs, Edward F. G., Washington, D. C. Tool-post-boring-bar holder. No. 1,308,281; July 1; v. 264; p. 50.
- Gibbs, Edward F. G., Washington, D. C. Reversible boring-bar holder. No. 1,308,282; July 1; v. 264; p. 50.
- Gifford, Thomas L. (See Stockstill, Herman A., assignor.)
- Gilkey, Sallie S., Marion, N. C. Rake attachment. No. 1,308,706; July 1; v. 264; p. 128.
- Gilson, John E., assignor to Gilson Manufacturing Company, Port Washington, Wis. Gas-engine-controlling mechanism. No. 1,308,061; July 1; v. 264; p. 10.
- Gilson Manufacturing Company. (See Gilson, John E., assignor.)
- Gilson Co. (Leicester), Limited. (See Spencer and Kelly, assignors.)
- Giovanna, George, New York, N. Y. Illuminated ornamental effect. No. 1,308,584; July 1; v. 264; p. 105.
- Gird, Christian, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Spring-testing machine. No. 1,308,410; July 1; v. 264; p. 74.
- Glass, James A., Walkerville, Ontario, Canada. Ventilator. No. 1,308,236; July 1; v. 264; p. 42.
- Gleiche, Carl, assignor to Stock Motorpflug Gesellschaft mit beschränkter Haftung, Berlin, Germany. Traction-wheel. No. 1,308,062; July 1; v. 264; p. 10.
- Glidden, Earl D. (See Goff, Glidden, and Mahana.)
- Goff, Leo D., E. D. Glidden, and C. G. Mahana, Three Rivers, Mich., assignors, by mesne assignments, to Fairbanks, Morse & Co., Chicago, Ill. Internal-combustion engine. No. 1,308,237; July 1; v. 264; p. 42.
- Goling, George G., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,308,411; July 1; v. 264; p. 74.
- Gorman, James C., Jr., assignor to Barnes Manufacturing Company, Mansfield, Ohio. Double-cylinder pump. No. 1,308,238; July 1; v. 264; p. 43.
- Gorzelt, Thomas, Detroit, Mich. Grater and slicer. No. 1,308,668; July 1; v. 264; p. 121.
- Graham, George H., Jersey City, N. J. Printing mechanism. No. 1,308,628; July 1; v. 264; p. 114.
- Granberry, Edgar H., Jacksonville, Ark. Excavating-machine. No. 1,308,351; July 1; v. 264; p. 63.
- Gray, James A., assignor to American Can Company, San Francisco, Calif. Can-end-sorting apparatus. No. 1,308,063; July 1; v. 264; p. 10.
- Grob, Albert, assignor to Rausch & Lomb Optical Company, Rochester, N. Y. Telescope-prism mounting. No. 1,308,233; July 1; v. 264; p. 51.
- Greeley, Earl R., assignor to Pierce, Butler & Pierce Manufacturing Corporation, Syracuse, N. Y. Heater. No. 1,308,669; July 1; v. 264; p. 121.
- Green, James W., Portland, Ore. Rotary gas-engine. No. 1,308,352; July 1; v. 264; p. 63.
- Greenwood, Guyon F., Georgetown, Quebec, Canada. Expanded-metal railway or track. No. 1,308,177; July 1; v. 264; p. 31.
- Grenon, Arzidas J., New Haven, Conn. Smoke-hood for cooking utensils. No. 1,308,412; July 1; v. 264; p. 74.
- Griffith, Israel L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Collapsing device. No. 1,308,064; July 1; v. 264; p. 10.
- Griffiths, Francis H., Handsworth, Birmingham, England. Manufacture of headed bolts, rivets, or the like. No. 1,308,629; July 1; v. 264; p. 114.
- Gross, Herman, La Fayette, Ind. Carburetor-adjusting attachment. No. 1,308,707; July 1; v. 264; p. 128.
- Guggenbuhl, Marcus, Basel, and E. Hug, Riehen, near Basel, Switzerland, assignors to The Hoffman-La Roche Chemical Works, New York, N. Y. Making ethanol-trialkyl-arsonium hydrides. No. 1,308,413; July 1; v. 264; p. 74.
- Guggenbuhl, Marcus, Basel, and E. Hug, Riehen, near Basel, Switzerland, assignors to The Hoffman-La Roche Chemical Works, New York, N. Y. Ethanol-trialkyl-arsonium hydride and making the same. No. 1,308,414; July 1; v. 264; p. 74.
- Gulbransen, Marcus, Basel, and E. Hug, Riehen, near Basel, Switzerland, assignors to The Hoffman-La Roche Chemical Works, New York, N. Y. Ethanol-trialkyl-arsonium hydride and making the same. No. 1,308,414; July 1; v. 264; p. 74.
- Gulbransen, Axel G. and C., assignors to Gulbransen-Dickinson Company, Chicago, Ill. Player-piano. No. 1,308,736; July 1; v. 264; p. 134.
- Gulbransen, Christian. (See Gulbransen, Axel G. and C.)
- Gulbransen-Dickinson Company. (See Gulbransen, Axel G. and C., assignors.)
- Gulf Refining Company. (See King and Roberts, assignors.)
- Gulberg, Arthur V., assignor to Commercial Utilities Manufacturing Company, Chicago, Ill. Illuminated advertising device. No. 1,308,415; July 1; v. 264; p. 74.
- Gunn, Charles H., Emeryville, Calif. Tire construction for vehicle-wheels. No. 1,308,416; July 1; v. 264; p. 74.
- Gustafson, Carl, Södertelje, and K. Appelgren, Ljusne, Sweden. Force-feed lubricator. No. 1,308,417; July 1; v. 264; p. 75.
- Guth, Edwin F., assignor to Luminous Unit Company, St. Louis, Mo. Lighting fixture. (Reissue.) No. 1,4680; July 1; v. 264; p. 137.
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- Haman, John D., Wilmington, Del. Pipe-wrench. No. 1,308,453; July 1; v. 264; p. 63.
- Hamburger, Aron, Mayfair, London, England. Color photography. No. 1,308,708; July 1; v. 264; p. 128.
- Hamburger, Aron, Mayfair, London, England. Treating cinematograph-films. No. 1,308,709; July 1; v. 264; p. 128.
- Hamburger, Aron, Mayfair, London, England. Developing, coloring, and washing tank for two-sided photographic films. No. 1,308,710; July 1; v. 264; p. 128.
- Hamellus, Edouard, Marseille, France. Forming and foundry-cores and substance for use therein. No. 1,308,524; July 1; v. 264; p. 94.

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 Hammer, Charles, Queens, assignor to American Metal Cap Company, Brooklyn, N. Y. Scallop cap. No. 1,308,745; July 1; v. 264; p. 135.
 Hammer, Charles, Queens, assignor, by direct and mesne assignments, to American Metal Cap Co., Brooklyn, N. Y. Scallop cap. No. 1,308,746; July 1; v. 264; p. 135.
 Hanson, Harry, Watertown, assignor of one-half to L. E. Cadieux, Boston, Mass. Hat, coat, and cane holding device. No. 1,308,070; July 1; v. 264; p. 121.
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 Harley, William S., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Case-hardening materials. No. 1,308,230; July 1; v. 264; p. 43.
 Harlow, Clarence B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Circuit-closer. No. 1,308,711; July 1; v. 264; p. 129.
 Harrington, Clinton O., Edgewood borough, assignor to The Union Switch & Signal Company, Switvale, Pa. Method and apparatus for adjusting armatures of electromagnet devices. No. 1,308,585; July 1; v. 264; p. 105.
 Harris, Dorothy J. (See Rutter, Sydney E., assignor.)
 Harrison, Charles L., Richmond, Va. Car-ventilator. No. 1,308,735; July 1; v. 264; p. 124.
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 Hatch, Delford, Alta, Iowa. Adjustable level-stand. No. 1,308,030; July 1; v. 264; p. 114.
 Haulala, Emil, Bruce Crossing, Mich. Speed-indicator for separators. No. 1,308,071; July 1; v. 264; p. 121.
 Hayes, Robert D., assignor to Index Visible, Incorporated, New Haven, Conn. Index or file. No. 1,308,580; July 1; v. 264; p. 106.
 Hayes, Rollie R., Peoria, Ill. Paint-bucket hanger. No. 1,308,090; July 1; v. 264; p. 11.
 Heap, Jesse J., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Folder for sewing-machines. No. 1,308,631; July 1; v. 264; p. 114.
 Hecht, Louis E. (See Hilton, George A., assignor.)
 Hecht, Arthur H., Chicago, Ill., assignor to The Ludlow Typographic Company, Cleveland, Ohio. Making typographic matrices. No. 1,308,097; July 1; v. 264; p. 11.
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 Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, System of control. No. 1,308,068; July 1; v. 264; p. 11.
 Hellmund, Rudolf E., Switvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, System of control. No. 1,308,069; July 1; v. 264; p. 11.
 Hellmund, Rudolf E., Switvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, System of control. No. 1,308,070; July 1; v. 264; p. 11.
 Hemmery, Kenneth B., South Bethlehem, Pa. Supporting structure. No. 1,308,419; July 1; v. 264; p. 75.
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 Henry, Aaron E., Brown Valley, Minn. Planting stand. No. 1,308,673; July 1; v. 264; p. 122.
 Herbert, William J. S., Orreille, Ohio. Bedstead. No. 1,308,674; July 1; v. 264; p. 122.
 Herzog, John, Saginaw, Mich. Cabinet for talking-machines. No. 1,308,420; July 1; v. 264; p. 75.
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 Heuser, Herman, Chicago, Ill. Apparatus for making carbonated beverages. No. 1,308,587; July 1; v. 264; p. 100.
 Hensen, Herman, Chicago, Ill. Preparation of alcohol-reduced beer. No. 1,308,588; July 1; v. 264; p. 100.
 Heymann, Bernhard, Wiesdorf-on-the-Rhine, O. Dressel, Mülheim-on-the-Rhine, R. Kothe, Vohwinkel, near Elberfeld, and A. Dassenbeck, Cologne-on-the-Rhine, Germany, assignors to Synthetic Patents Co., Inc., New York, N. Y. Ureids of substituted antimonaphthol substances. No. 1,308,071; July 1; v. 264; p. 12.
 Heywood, Vincent E., Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass. Envelope machinery. No. 1,308,354; July 1; v. 264; p. 63.
 Hill, Homer A., Lebanon, Tenn. Flying-machine. No. 1,308,632; July 1; v. 264; p. 114.
 Hillman, Edward D., Larchmont, N. Y., assignor to R. A. Hegman, Jr., North Plainfield, N. J. Hopper-car. No. 1,308,073; July 1; v. 264; p. 12.
 Hillman, Edward D., Larchmont, N. Y., assignor to R. A. Hegman, Jr., North Plainfield, N. J. Hopper-car. No. 1,308,121; July 1; v. 264; p. 75.
 Hilton, George A., assignor of one-half to L. E. Hecht, Irkutsk, N. J. Hanger for brushes. No. 1,308,074; July 1; v. 264; p. 12.
 Hinkel, David, Chicago, Ill. Railway-car-door control mechanism. No. 1,308,422; July 1; v. 264; p. 76.
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 Hoffins, De Buyer M., New York, N. Y. Roller writing guide and rest. No. 1,308,355; July 1; v. 264; p. 64.

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 Hooper, James O., and F. R. Hobley, Van, near Lland-lloes, Wales. Electrical indicator and like apparatus. No. 1,308,500; July 1; v. 264; p. 106.
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 Horne, James A., Washington, D. C. Resilient tire. No. 1,308,623; July 1; v. 264; p. 114.
 Hornig, Frederick H., assignor to Swire Magneto Company, Chicago, Ill. Starting-coupling for high-tension magnetos. No. 1,308,076; July 1; v. 264; p. 13.
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 Lambert, Henry H., Chicago, Ill. Column-clamp. No. 1,308,084; July 1; v. 264; p. 14.
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 Olson, Magnus, Golden, British Columbia, Canada. Cutter-head. No. 1,308,297; July 1; v. 264; p. 53.
 O'Meara, Thomas J. (See Shank, Thomas M., assignor.)
 Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Picot-edging machine. No. 1,308,608; July 1; v. 264; p. 110.
 Otero Chemical Company. (See Wood, John H., assignor.)
 Ossenbeck, Anton. (See Heymano, Dressel, Kothe, and Ossenbeck.)
 Otto, Adolph G., Oak Park, assignor to The American Toy Shop, Chicago, Ill. Toy building-block. No. 1,308,254; July 1; v. 264; p. 45.
 Package Machinery Company. (See Armstrong, Harry Y., assignor.)
 Pagendarm, John F., San Francisco, assignor of seventy per cent. to J. W. Shannon, Sao Rafael, ten per cent. to W. Von Nach, ten per cent. to W. C. R. Taylor, and ten per cent. to P. F. Clewe, Sonoma, Calif. Rotary-valve gas-engine. No. 1,308,722; July 1; v. 264; p. 131.
 Papish, Jacob. (See Mathers and Papish.)
 Parish, Le Grand, New York, N. Y. Locomotive-fire-box construction. No. 1,308,102; July 1; v. 264; p. 18.
 Parker, Harold, Hartford, Wis. Nut-lock. No. 1,308,505; July 1; v. 264; p. 90.
 Parkhurst, Frederic A., assignor to The Aluminum Castings Company, Cleveland, Ohio. Mold and method of casting. No. 1,308,103; July 1; v. 264; p. 18.
 Parsons, Harold K., Southbridge, Mass. Eye-protector. No. 1,308,360; July 1; v. 264; p. 65.
 Parsy, Paul Y., Paris, France. Crucible-furnace for melting metals. No. 1,308,100; July 1; v. 264; p. 34.
 Parsons, George K., Detroit, Mich. Alternating rotary drive for washing-machines. No. 1,308,104; July 1; v. 264; p. 18.
 Peets, Frank R., Merrill, N. Y. Automatic brake. No. 1,308,105; July 1; v. 264; p. 18.
 Penwell, Tim, and H. E. Brown, El Dorado, Kans. Trap. No. 1,308,255; July 1; v. 264; p. 45.
 Perfect Vacuum Canning Company. (See Norton, Edwin, assignor.)
 Perkins, Laurence M., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,308,106; July 1; v. 264; p. 18.
 Perrine, Emmett R., Minneapolis, Minn. Pneumatic-despatch-tube system. No. 1,308,101; July 1; v. 264; p. 34.
 Perron, Alexander J., Sparta, Wis. Spark-plug. No. 1,308,107; July 1; v. 264; p. 18.
 Peterson, John N., assignor of one-half to C. F. Zanzig, Milwaukee, Wis. Hobbin-winding mechanism. No. 1,308,529; July 1; v. 264; p. 95.
 Peterson, Per A., assignor to De Laval Steam-Turbine Company, Trenton, N. J. Centrifugal pump. No. 1,308,108; July 1; v. 264; p. 19.
 Penzh, Ray L., Oklahoma, Okla. Knee-protector. No. 1,308,109; July 1; v. 264; p. 19.
 Phelps, Spencer H., assignor to Reeman Garden Tractor Co., Minneapolis, Minn. Plow-hitch for walking tractors. No. 1,308,445; July 1; v. 264; p. 79.
 Philadelphia Drying Machinery Company, The. (See Allsop and Silson, assignors.)
 Philadelphia Metal Drying Form Company. (See Von Stetten and Pressman, assignors.)
 Pierce, Butler & Pierce Manufacturing Corporation. (See Greeley, Earl R., assignor.)
 Pierce, Raymond T., assignor to Westinghouse Electric & Manufacturing Company, Wilkinsburg, Pa. Arc-extinguishing device. No. 1,308,250; July 1; v. 264; p. 45.
 Pieters, Julien, Paris, France. Charging apparatus for continuous vertical ovens, more particularly coke and gas ovens. No. 1,308,641; July 1; v. 264; p. 116.
 Pilcher, John A., Roanoke, Va. Car-truck side frame. No. 1,308,192; July 1; v. 264; p. 34.
 Pitman, Henry L., East Orange, N. J., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,308,506; July 1; v. 264; p. 91.
 Plancheault, Alexandre G., Cortesville, N. J., assignor to National Clasp Co. Inc., New York, N. Y. Clasp. No. 1,308,446; July 1; v. 264; p. 80.
 Podufaly, Joseph, Detroit, Mich. Automobile-lock. No. 1,308,298; July 1; v. 264; p. 53.
 Police Traffic Signal Company. (See Carr, William E., assignor.)
 Pollard, Willard L., Evanston, assignor to The Cable Company, Chicago, Ill. Musical instrument. No. 1,308,110; July 1; v. 264; p. 19.
 Poliochill, Frank, Henwood, W. Va. Sewing-machine construction. No. 1,308,679; July 1; v. 264; p. 123.
 Poor, Charles L., Perring Harbor, Shelter Island, N. Y. Navigation instrument. No. 1,308,745; July 1; v. 264; p. 130.
 Porzel, Joseph, assignor to City Trust Company, Buffalo, N. Y. Vulcanizing machine. No. 1,308,111; July 1; v. 264; p. 19.

Powell, Winfred T., assignor to Automatic Electric Company, Chicago, Ill. Telephone-exchange system. No. 1,308,553; July 1; v. 264; p. 99.
 Pratt, Hartley H. (See McKeehan and Pratt.)
 Prefontaine, Harry F., Brooklyn, N. Y. Shutter-operating attachment for cameras. No. 1,308,642; July 1; v. 264; p. 116.
 Pressman, Harry J. (See Von Stetten and Pressman.)
 Price, Austin E., Decatur, Ill. Knockdown sign. No. 1,308,680; July 1; v. 264; p. 123.
 Pridaux, Clarence R., Forest Hill, London, England. Tool-holder. No. 1,308,681; July 1; v. 264; p. 123.
 Pultney, David C. (See Axel and Pultney.)
 Pusk, Ladislav. (See Balogh and Pusk.)
 Pyrene Manufacturing Company. (See Lee, Robert W., assignor.)
 Quass, Ralph L., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Call-distributing system. No. 1,308,634; July 1; v. 264; p. 100.
 Quigley Furnace Specialties Co. (See Renkin, William O., assignor.)
 R. Hoe and Co. (See Hoezen, Oscar, assignor.)
 Raver, Harvey C., Salem, Ill. Valve for explosive-engines. No. 1,308,112; July 1; v. 264; p. 19.
 Read, Henry L., et al. (See Richardson, Eddison, and Read.)
 Reagan, Robert P., et al. (See Rombach, Fred, assignor.)
 Reed, John G., Los Angeles, Calif. Musical turner. No. 1,308,555; July 1; v. 264; p. 100.
 Remington Typewriter Company. (See Bridgwater, Herbert E., assignor.)
 Renkin, William O., Oradell, N. J., assignor to Quigley Furnace Specialties Co. Inc. Apparatus for handling pulverized fuel. No. 1,308,387; July 1; v. 264; p. 65.
 Renkin, William O., Oradell, N. J., assignor to Quigley Furnace Specialties Co. Inc. Combined air and pulverized-fuel control. No. 1,308,368; July 1; v. 264; p. 66.
 Renkin, William O., Oradell, N. J., assignor to Quigley Furnace Specialties Co. Inc. Apparatus for storing and handling pulverized fuel. No. 1,308,369; July 1; v. 264; p. 66.
 Renkin, William O., Oradell, N. J., assignor to Quigley Furnace Specialties Co. Inc. Yielding supporting and vertically-guiding apparatus. No. 1,308,370; July 1; v. 264; p. 66.
 Reuther, Gustav, Sayville, N. Y. Controlling wireless-telegraph transmitters. No. 1,308,530; July 1; v. 264; p. 95.
 Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Feeder-motion for looms. No. 1,308,193; July 1; v. 264; p. 34.
 Richards, Arthur E. W. (See Beaver, Richards, and Claremont.)
 Richards, Lambert B., Shields, Pa., and C. P. Watkins, Louisville, Ky., assignors to Tate-Jones & Co., Pittsburgh, Pa. Furnace. No. 1,308,743; July 1; v. 264; p. 135.
 Richardson, Charles E., New York, W. B. Eddison, Irvington, and H. J. Read, assignors to The Surface Combustion Company, New York, N. Y. Method of burning explosive gaseous mixtures. No. 1,308,739; July 1; v. 264; p. 134.
 Hicketts, Forrest E., Baltimore, Md. Arc-extinguisher. No. 1,308,257; July 1; v. 264; p. 46.
 Ricks, Floyd K., Canton, Ill. Dump-box and frame. No. 1,308,507; July 1; v. 264; p. 91.
 Riber, Claus N., assignor to Norsk Alkali A. S., Trondheim, Norway. Purification of alkali-metal-chloride solutions. No. 1,308,609; July 1; v. 264; p. 110.
 Riley, Lynn G. (See Simon and Riley.)
 Rinehardt, Carlton C., Loveland, Ohio. Corn-harvesting machine. No. 1,308,643; July 1; v. 264; p. 116.
 Ritchie, George W., Oak Hill, Fla. Foldable crate. No. 1,308,682; July 1; v. 264; p. 122.
 Rittase, Ephraim N., Baltimore, Md. Cigar-holder. No. 1,308,113; July 1; v. 264; p. 20.
 Roach, Flula E., Chicago, Ill. Lawn-sprinkler. No. 1,308,371; July 1; v. 264; p. 66.
 Roberts, Gerald I. (See King and Roberts.)
 Rockwell, Byrd C., Camden, Ark. Wooden-structure joint. No. 1,308,372; July 1; v. 264; p. 67.
 Rockwell, Herbert O. (See Sutherland, Alexander K., assignor.)
 Roedel, Otto, Jersey City, N. J. Plating-hook. No. 1,308,508; July 1; v. 264; p. 91.
 Roosen, Oscar, assignor to R. Hoe and Co., New York, N. Y. Inking mechanism for plate-printing machines. No. 1,308,114; July 1; v. 264; p. 20.
 Rohan, James J., assignor of one-half to T. W. Cummings, St. Louis, Mo. Car-heater. No. 1,308,194; July 1; v. 264; p. 34.
 Roll, Edward E., Cleveland, Ohio. Retarder. No. 1,308,644; July 1; v. 264; p. 116.
 Rombach, Fred, Tonawanda, assignor of one-fourth to R. P. Reagan and one-fourth to A. M. Eberhart, North Tonawanda, N. Y. Internal-combustion engine. No. 1,308,373; July 1; v. 264; p. 67.
 Romback, Henry A., Chicago, Ill. Cashier's ticket. No. 1,308,115; July 1; v. 264; p. 20.
 Rose, William H., Jersey City, N. J. Liquid-soap dispenser. No. 1,308,258; July 1; v. 264; p. 46.
 Ross, Mark A., Chicago, Ill. Steam-turbine. No. 1,308,116; July 1; v. 264; p. 20.

Roadster, George A., assignor to The Carre Gyroscopic Corporation, New York, N. Y. Gyroscopic compass. No. 1,308,683; July 1; v. 264; p. 124.

Roth, Miss J., Brooklyn, N. Y. Tooth-brush. No. 1,308,374; July 1; v. 264; p. 67.

Rowan, James, et al. (See Loveless, Fred H., assignor.)

Ruchly, Alexander K., Cincinnati, Ohio. Automatic safety valve. No. 1,308,684; July 1; v. 264; p. 124.

Rude, James M., Lexington, Ky. Receptacle-cleaning apparatus. No. 1,308,195; July 1; v. 264; p. 35.

Rudin, Karl V., Stockholm, Sweden. Revolving-counting mechanism for calculating machines. No. 1,308,510; July 1; v. 264; p. 91.

Rumrill, Frank. (See Campbell, Duane R., assignor.)

Rutter, Sydney E., assignor to D. J. Harris, London, England. Mechanism for stropping or honing razor blades. No. 1,308,198; July 1; v. 264; p. 35.

Saulburg, Charles W., Richmond Hill, assignor to Multicolor Intaglio Press Company, New York, N. Y. Transferring carbon-tissue prints. No. 1,308,531; July 1; v. 264; p. 95.

Safety Car Heating and Lighting Company, The. (See Bijur, Joseph, assignor.)

Sage, Ralph V., Philadelphia, Pa. Metal car. No. 1,308,229; July 1; v. 264; p. 54.

Sage, Ralph V., Philadelphia, Pa. Car construction. No. 1,308,390; July 1; v. 264; p. 54.

Sakagawa, Masanosuke, Oakland, Calif. Toilet-flushing device. No. 1,308,391; July 1; v. 264; p. 54.

Samuel Cabot Inc. (See Cabot, Samuel, assignor.)

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Phonograph-stap. No. 1,308,447; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Rectifying alternating currents. No. 1,308,448; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Electric motor and governing mechanism therefor. No. 1,308,449; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Phonograph. No. 1,308,450; July 1; v. 264; p. 80.

Sandow, Eugen, London, England. Spring-grip dumb-bell. No. 1,308,259; July 1; v. 264; p. 46.

Sargent & Company. (See Volght, Henry G., assignor.)

Satre, Kante S., Hecla, S. D. Parachute. No. 1,308,375; July 1; v. 264; p. 67.

Say, William, London, England. Hit. No. 1,308,609; July 1; v. 264; p. 110.

Scharhat, Abraham, Brooklyn, assignor to Slocum, Avram & Slocum Laboratories, Inc., New York, N. Y. Sine-bar. No. 1,308,451; July 1; v. 264; p. 81.

Schillinger, Linus J., Syracuse, N. Y. Means for locking car-covers. No. 1,308,197; July 1; v. 264; p. 35.

Schlichten, George W., San Diego, Calif. Means for treating fiber-bearing plants. No. 1,308,376; July 1; v. 264; p. 67.

Schumacher, John, Los Angeles, Calif. Machine for making plaster-board and the like. No. 1,308,723; July 1; v. 264; p. 131.

Schumacher, John, Los Angeles, Calif. Plaster-board lath. No. 1,308,724; July 1; v. 264; p. 132.

Schuppe, Max, Brooklyn, N. Y., assignor to Wales Adding Machine Company, Wilkes-Barre, Pa. Calculating-machine. No. 1,308,117; July 1; v. 264; p. 20.

Seullin, Michael J., Newark, N. J. Glass-cutter. No. 1,308,260; July 1; v. 264; p. 46.

Seavright Co. (See Wright, Wilbur L., assignor.)

Seattle Astoria Iron Works. (See Troyer, Nelson, assignor.)

Servtje, Junn. (See Haeckels and Servtje.)

Shane, Roy H., Quinter, Kans. Valve. No. 1,308,118; July 1; v. 264; p. 21.

Shank, Thomas M., Ridwell, assignor of one-half to T. J. O'Meara, Cincinnati, Ohio. Driving mechanism for phonographs. No. 1,308,556; July 1; v. 264; p. 100.

Shannon, John W., et al. (See Pageclarm, John F., assignor.)

Sharp, James A., assignor, by mesne assignments, to International Harvester Company, Springfield, Ohio. Balancing press. No. 1,308,645; July 1; v. 264; p. 117.

Shaw, Benson R., Dayton, Ohio. Climb-indicator for aircraft. No. 1,308,537; July 1; v. 264; p. 100.

Shaw, William, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electrode-threading apparatus. No. 1,308,302; July 1; v. 264; p. 54.

Shea, John A., Wilkes-Barre, Pa. Direction-signal for automobiles. No. 1,308,168; July 1; v. 264; p. 35.

Sherrwood, William E., Canastota, N. Y. Velocipede. No. 1,308,577; July 1; v. 264; p. 87.

Shetkin, George, Portland, Ore. Foldable table and case therefor convertible into benches. No. 1,308,727; July 1; v. 264; p. 132.

Shuck, George W., Lawrence, Kans. Flour sifter and scale. No. 1,308,303; July 1; v. 264; p. 54.

Shoenberger, Jay G., and L. Whitright, Lodi, Ohio. Mail-bag-delivering device. No. 1,308,261; July 1; v. 264; p. 46.

Shuman, Clev G., Chicago, Ill., assignor to Gyp Steel Products Company. Building structures and plaster-board anchorage means. No. 1,308,199; July 1; v. 264; p. 35.

Sibson, Walter W. (See Allsop and Sibson.)

Simmen, Paul J., Buffalo, N. Y. Automatic moving-vehicle control. No. 1,308,558; July 1; v. 264; p. 100.

Simmon, Karl A., Edgewood Park, and L. G. Riley, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Casing for control apparatus. No. 1,308,119; July 1; v. 264; p. 21.

Simmon, Karl A., Edgewood Park, and L. M. Asplawall, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Protective device for trolley systems. No. 1,308,120; July 1; v. 264; p. 21.

Simmonds, Francis N., San Francisco, Calif. Counterbore. No. 1,308,304; July 1; v. 264; p. 55.

Simmonds Manufacturing Company. (See Calley, Walter E., assignor.)

Sipher, Edmund F., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Operating mechanism for valves. No. 1,308,262; July 1; v. 264; p. 40.

Sir W. G. Armstrong-Whitworth and Company. (See Wilson and Dalby, assignors.)

Slocum, Avram & Slocum Laboratories. (See Schachet, Abraham, assignor.)

Small, Thomas W., Cleveland, Ohio. Display apparatus. No. 1,308,200; July 1; v. 264; p. 36.

Smith, Allen W., New York, N. Y. Carrying and drag bag. No. 1,308,263; July 1; v. 264; p. 47.

Smith & Egge Manufacturing Company, The. (See Berglund, John L., assignor.)

Smith, Andrew, Chicago, Ill. Propelling device or shooter for toys. No. 1,308,201; July 1; v. 264; p. 36.

Smith, Arthur H., assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,308,749; July 1; v. 264; p. 130.

Smith, Earl G. (See Combs and Buntington, assignors.)

Smith, Joel W., Ardmore, Okla. Locking means for freight-car doors. No. 1,308,646; July 1; v. 264; p. 117.

Smith, Orland V., Bridgeport, Conn. Bank deposit-book. No. 1,308,532; July 1; v. 264; p. 95.

Smith, William J., Portage, La. Prairie, Manitoba, Canada. Ventilator. No. 1,308,264; July 1; v. 264; p. 47.

Smock, Howard A., assignor of one-fourth to T. Cohen, Indianapolis, Ind. Kerosene blow-torch. No. 1,308,452; July 1; v. 264; p. 81.

Smolarski, Jan, Omaha, Nebr. Vessel-hd. No. 1,308,533; July 1; v. 264; p. 95.

Snelling, Walter O., Allentown, Pa. Fertilizing method and material. No. 1,308,453; July 1; v. 264; p. 81.

Socio, Andrew, Altoona, Pa. Tensioning device for looms. No. 1,308,121; July 1; v. 264; p. 21.

Societe Anonyme l'Helice Integrale (Anciens Etablissements L. Chauviere). (See Chauviere, Lucien, assignor.)

Societe Lorraine des Anciens Etablissements de Dietrich & Cie. De Lunerville. (See Maire, Auguste, assignor.)

Somes, Walter F., Boston, Mass. Packing for turbine-shafts and the like. No. 1,308,454; July 1; v. 264; p. 81.

Spear, John R., Winnipeg, Manitoba, and J. M. Beattie, Calgary, Alberta, Canada. Building-clip. No. 1,308,265; July 1; v. 264; p. 47.

Speldel, Eugen, Forzheim, Germany, assignor, by mesne assignments, to General Chalm Company, Providence, R. I. Soldering chain-links. No. 1,308,741; July 1; v. 264; p. 135.

Spencer, Frank J., and W. J. Kelly, assignors to Gimson Co. (Leicester), Limited, Leicester, England. Motor-driven machine for the manufacture of boots and shoes. No. 1,308,305; July 1; v. 264; p. 55.

Spiegel, Joseph P., Toronto, Ontario, Canada. Steam-generating plant. No. 1,308,122; July 1; v. 264; p. 21.

Spirek, David, Fort Dodge, Iowa. Device for turning eggs. No. 1,308,686; July 1; v. 264; p. 124.

Spittorf Electrical Company. (See Berger, Henry E., assignor.)

Spoehrer, Gregory J., East Orange, assignor of one-half to C. E. Van Vleck, Montclair, N. J. Internal-combustion engine. No. 1,308,123; July 1; v. 264; p. 22.

Spreckels, John D. Jr., and H. Laborda, San Francisco, Calif. Sugar packing and boxing machine. No. 1,308,266; July 1; v. 264; p. 47.

Stark, John, Chicago, Ill. Toy. No. 1,308,124; July 1; v. 264; p. 22.

Standard Parts Company, The. (See Baker, Walter C., assignor.)

Standard Parts Company, The. (See Gird, Christian, assignor.)

Stanfield, George J. (See Geeraerd, Evariste, assignor.)

Stanley Motor Carriage Company. (See Broad, Charles E., assignor.)

Staples, Albert F., Boston, Mass. Control mechanism. No. 1,308,559; July 1; v. 264; p. 101.

Stark, Gara R., El Campo, Tex. Spring-clip tool. No. 1,308,687; July 1; v. 264; p. 125.

Steele, Charles R., New York, N. Y. Convertible car. No. 1,308,511; July 1; v. 264; p. 92.

Stets, Oscar C. (See Kell, Otto W., assignor.)

Stewart, Charles F., Walla Walla, Wash. Decorative-machine. No. 1,308,267; July 1; v. 264; p. 48.

Stewart, Peter M., assignor to G. F. Stewart, New York, N. Y. Composite glass for building purposes. No. 1,308,309; July 1; v. 264; p. 55.

Stewart, Gertrude F. (See Stewart, Peter M., assignor.)

Stimpson, Edward S., assignor to Draper Corporation, Hopedale, Mass. Filling-catcher for looms. No. 1,308,202; July 1; v. 264; p. 36.

Stock Motorpfug Gesellschaft mit beschränkter Haftung. (See Gleiche, Carl, assignor.)

Stockstill, Herman A., Toledo, Ohio, assignor of one-half to T. L. Gifford, Metal the. No. 1,308,203; July 1; v. 264; p. 30.

Stokes, Charles L., Milling, via Young, New South Wales, Australia. Internal-combustion engine. No. 1,308,560; July 1; v. 264; p. 101.

Storey, John W., Attalla, Ala. Shaft-coupling. No. 1,308,307; July 1; v. 264; p. 55.

Strat, Wilfred O., St. Paul, Minn. Dirigible headlight. No. 1,308,204; July 1; v. 264; p. 30.

Stroth, Irwin C., Wellston, Ohio. Antiskid device. No. 1,308,455; July 1; v. 264; p. 81.

Stuck, Everett, assignor to The O. M. Edwards Company, Incorporated, Syracuse, N. Y. Sectional cabinet. No. 1,308,647; July 1; v. 264; p. 117.

Sullielma Aktiebolag. (See Westly, Jens, assignor.)

Sullivan, Edward F., Oakland, Calif. Tractor-chain. No. 1,308,308; July 1; v. 264; p. 55.

Sullivan, James J., St. Thomas, Minn. Blotter. No. 1,308,688; July 1; v. 264; p. 125.

Sumbling, William H., Toronto, Ontario, Canada. Rectifying-machine for shafts. No. 1,308,125; July 1; v. 264; p. 22.

Swenson, George E., assignor to The Barrett Company, Philadelphia, Pa. Flashing-receptacle. No. 1,308,205; July 1; v. 264; p. 37.

Surface Combustion Company. (See Richardson, Addison, and Read, assignors.)

Sutherland, Alexander K., assignor of one-half to H. O. Rockwell, New Britain, Conn. Milk-bottle carrier. No. 1,308,742; July 1; v. 264; p. 135.

Swiss Magneto Company. (See Hornung, Frederick H., assignor.)

Synthetic Patents Co. (See Heymann, Dressel, Kothe, and Osenbeck, assignors.)

Syracuse Chilled Pipe Company. (See Lee, William H., assignor.)

T. L. Smith Company. (See Draeger, Lloyd H., assignor.)

Talanen Seito, Kauhishki Kaisha. (See Nagashima, Hajime, assignor.)

Tate-Jones & Co. (See Richards and Watkins, assignors.)

Taylor, Charles H., Toronto, Ontario, Canada. Metal-cutter. No. 1,308,126; July 1; v. 264; p. 22.

Taylor, Charles K., et al. (See Pageclarm, John F., assignor.)

Taylor, George, Roxborough, Pa. Rail-joint. No. 1,308,689; July 1; v. 264; p. 125.

Taylor, Henry F., New York, N. Y. Means for determining color combinations. No. 1,308,512; July 1; v. 264; p. 92.

Taylor, Herbert B., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Contact-shoe for automatic train-control systems. No. 1,308,534; July 1; v. 264; p. 96.

Taylor, Herbert B., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Contact-shoe for automatic train-control systems. No. 1,308,535; July 1; v. 264; p. 96.

Taylor, William O., Montreal, Quebec, Canada. Motor-support for sewing-machines. No. 1,308,456; July 1; v. 264; p. 81.

Teeters, Bert C., Balleich, Minn. Life-preserving raft. No. 1,308,561; July 1; v. 264; p. 101.

Ternquist, John, and E. Tragardh, Minneapolis, Minn. Safety watch-pocket. No. 1,308,378; July 1; v. 264; p. 68.

Thomas, Otto L. (See Calvert and Thomas.)

Thomassen, Harold. (See Roehlinger and Thomassen.)

Thompson, Arthur A., Oakland, Calif. Velocipede. No. 1,308,300; July 1; v. 264; p. 55.

Thomson Electric Welding Company. (See Cutter, George A., assignor.)

Thornton, Frank, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Terminal device for electrical appliances. No. 1,308,127; July 1; v. 264; p. 22.

Thornycroft, Tom, assignor to John I. Thornycroft & Co., Westminster, England. Internal-combustion engine. No. 1,308,562; July 1; v. 264; p. 101.

Tidd Recording Clock Company. (See Tidd, Walter J., assignor.)

Tidd, Walter J., Springfield, Mass., assignor to Tidd Recording Clock Company. Time-recorder. No. 1,308,128; July 1; v. 264; p. 22.

Tjerman, Martin F. (See Wallace and Tjerman.)

Tillson, William H., Quincy, Ill. Overshoe attachment. No. 1,308,206; July 1; v. 264; p. 37.

Todd, Lihannus M., assignor, by mesne assignments, to Todd Photocopying Company, Rochester, N. Y. Check-writer. No. 1,308,648; July 1; v. 264; p. 117.

Todd Photocopying Company. (See Todd, Lihannus M., assignor.)

Toller, Harry A., and G. H. Ernsharner, Florence, Colo., assignors of one-half to J. D. Blant and H. A. Headick. Method and apparatus for producing motion-pictures. No. 1,308,267; July 1; v. 264; p. 47.

Toomey, John F., New York, and C. S. Demarest, Flatbush, N. Y., assignors to American Telephone and Telegraph Company. Selective-circuit for artificial lines. No. 1,308,745; July 1; v. 264; p. 132.

Toomey, John F., New York, and C. S. Demarest, Flatbush, N. Y., assignors to American Telephone and Telegraph Company. Means for controlling artificial lines. No. 1,308,726; July 1; v. 264; p. 132.

Townsend, Charles R., Birmingham, England. Endless-band grinding and polishing machine. No. 1,308,610; July 1; v. 264; p. 110.

Traders Metal Goods Co. (See Benedict, Bernard, assignor.)

Tragardh, Emil. (See Ternquist and Tragardh.)

Trostel, Albert O. (See Erlinger, George, assignor.)

Troyer, Nelson, assignor to Seattle Astoria Iron Works, Seattle, Wash. Compound applying and drying machine. No. 1,308,208; July 1; v. 264; p. 37.

Trumbly, James G., Chicago, Ill. Automatic top. No. 1,308,209; July 1; v. 264; p. 37.

Trump, Elno H., Akron, Ohio. Making pneumatic-tire casings. No. 1,308,379; July 1; v. 264; p. 68.

Tucker, Joseph P., Seattle, Wash. Garment-fastener. No. 1,308,611; July 1; v. 264; p. 110.

Tully, Francis W., Brookline, Mass. Garment. No. 1,308,457; July 1; v. 264; p. 82.

Twedy, Edmund F., Glenbrook, Conn. Heater. No. 1,308,380; July 1; v. 264; p. 68.

U. S. Shoring Machine Company. (See Luschka and Folk, assignors.)

Underwood Computing Machine Company. (See Pittman, Henry L., assignor.)

Underwood Computing Machine Company. (See Whiting, Horatio, assignor.)

Underwood, Weedon B., and J. H. Castle, assignors to Willmot Castle Company, Rochester, N. Y. Receptacle. No. 1,308,563; July 1; v. 264; p. 101.

Union Special Machine Company. (See Heap, Jesse J., assignor.)

Union Special Machine Company. (See Onderdonk, Lansing, assignor.)

Union Switch & Signal Company, The. (See Day, Albert V. T., assignor.)

Union Switch & Signal Company, The. (See Harrington, Clinton O., assignor.)

United Shoe Machinery Corporation. (See Latham, Albert, assignor.)

United Shoe Machinery Corporation. (See Loomer, Henry M., assignor.)

United Shoe Machinery Corporation. (See Merrill, Frank E., assignor.)

United States Envelope Company. (See Haywood, Vincent E., assignor.)

Universal Electric Welding Company. (See Lachman, Laurence K., assignor.)

Universal Glass Company. (See Debye, George C., assignor.)

Universal Machinery Company, The. (See Maw and McLean, assignors.)

Van Deuren, William A., Cleveland, Ohio. Flushing apparatus. No. 1,308,362; July 1; v. 264; p. 68.

Van Vleck, Charles E. (See Spoehrer, Gregory J., assignor.)

Venable, William M., Pittsburgh, Pa., assignor to Elaw Steel Construction Company, Excavating-bucket. No. 1,308,150; July 1; v. 264; p. 26.

Vickers Limited. (See McKeeble and Pratt, assignors.)

Vickers Limited. (See Webb, George W. C., assignor.)

Vieau, Osmir J. (See Wagner, Hormel, and Vieau.)

Viable Measure Gasoline Dispenser Company of America. (See Brady, James H., assignor.)

Vogel, Friedrich, Bern, Switzerland. Traction-wheel. No. 1,308,513; July 1; v. 264; p. 92.

Vogel, Frederick, Wyeth, Ore. Track-lining jack. No. 1,308,210; July 1; v. 264; p. 35.

Vogel, George, Washington, D. C. Griddle. No. 1,308,151; July 1; v. 264; p. 27.

Volght, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,308,458; July 1; v. 264; p. 82.

Volght, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,308,459; July 1; v. 264; p. 82.

Von Arco, Georg, and A. Melasner, Berlin, Germany. Transmitting apparatus for wireless telegraphy and telephony. No. 1,308,514; July 1; v. 264; p. 92.

Von Hacht, William, et al. (See Pageclarm, John F., assignor.)

Von Stetten, Julius O., and H. J. Pressman, Philadelphia, Pa., assignors to Philadelphia Metal Drying Form Company, New Castle, Del. Garment-drying apparatus. No. 1,308,581; July 1; v. 264; p. 98.

Wachter, Louis E. F., New York, N. Y. Watch-bow. No. 1,308,210; July 1; v. 264; p. 37.

Wachter, Louis E. F., New York, N. Y. Watch crystal and bezel. No. 1,308,690; July 1; v. 264; p. 125.

Wagner, Charles, Grantwood, N. J., A. Hormel, New York, and C. J. Vieau, Brooklyn, N. Y. Container. No. 1,308,268; July 1; v. 264; p. 48.

Walte, Osaian T., Oshkosh, Wis. Grass-wine machine. No. 1,308,536; July 1; v. 264; p. 106.

Walden, Edward, Kansas City, Mo. Electric heater. No. 1,308,211; July 1; v. 264; p. 38.

Waldon, Sidney D., assignor to Cadillac Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,308,460; July 1; v. 264; p. 82.

Wales Adding Machine Company. (See Schuppe, Max, assignor.)

Wales, Rowland T., Swaren, N. J. Mold for concrete construction. No. 1,308,269; July 1; v. 264; p. 48.

Walker, Frederick G., Detroit, Mich. Universal joint. No. 1,308,212; July 1; v. 264; p. 38.

Wallace, Charles F., Tompkinsville, and M. F. Tiernan, Jamaica, N. Y. Method of and apparatus for pumping corrosive liquids. No. 1,308,515; July 1; v. 264; p. 92.

Walling, Carl H., Cat Spring, Tex. Clothes-rack. No. 1,308,564; July 1; v. 264; p. 102.

Walraven, Albert T., Dallas, Tex. Adjustable book-cover. No. 1,308,461; July 1; v. 264; p. 82.

Wanstrath, Theodore, New Point, Ind. Ensilage-packer. No. 1,308,129; July 1; v. 264; p. 23.

Ward, Harry L., Washington, Iowa. Eaves-trough protector. No. 1,308,311; July 1; v. 264; p. 56.

Warman, Percy S., Roselle, N. J. Mold for concrete ships. No. 1,308,565; July 1; v. 264; p. 102.

Warner Manufacturing Company. (See Cadman, Addie B., assignor.)

Waterman, Maude E., et al. (See Errington, George A., assignor.)

Waterman, Willis E., et al. (See Errington, George A., assignor.)

Watkins, Arthur G., Philadelphia, Pa. Water-power plant. No. 1,308,049; July 1; v. 264; p. 117.

Watkins, Charles P. (See Richards and Watkins.)

Watkins, Charles D., Newark, N. J. Shoe-polisher. No. 1,308,462; July 1; v. 264; p. 83.

Watson, John W., Wayne, Pa. Recall check. No. 1,308,130; July 1; v. 264; p. 23.

Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Towing device. No. 1,308,537; July 1; v. 264; p. 96.

Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)

Webb, George W. C., Hartford, assignor to Vickers Ltd. Ltd., Westminster, England. Incendary composition. No. 1,308,063; July 1; v. 264; p. 83.

Wider, Anton, Oakland, Calif. Display-case. No. 1,308,312; July 1; v. 264; p. 56.

Webster Electric Company. (See Geist, Harry E., assignor.)

Webster, John E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Pad for sheet separating machines. No. 1,308,131; July 1; v. 264; p. 23.

Weinstein, Leon, St. Louis, Mo. Lace-dipping tool. No. 1,308,516; July 1; v. 264; p. 92.

Wells, Alexander, assignor to one-half to E. H. Beighlee, Cleveland, Ohio. Means for lubricating films. No. 1,308,385; July 1; v. 264; p. 69.

Welton, Harry A., and H. J. Hoyt, Detroit, Mich., assignors to Morgan & Wright. Attachment for plastic-mixing mills. No. 1,308,132; July 1; v. 264; p. 23.

Wertman, Milton A., Toledo, assignor to The Briggs-Watson Co., Cleveland, Ohio. Machine-tool. No. 1,308,132; July 1; v. 264; p. 27.

Western Electric Company. (See Bell, John H., assignor.)

Western Electric Company. (See Clausen, Henry P., assignor.)

Western Electric Company. (See Quass, Ralph L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Abtmerer, Theodore, assignor.)

Westinghouse Electric and Manufacturing Company. (See And and Putney, assignors.)

Westinghouse Electric and Manufacturing Company. (See Chubb, Lewis W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Cook, Joel R., assignor.)

Westinghouse Electric and Manufacturing Company. (See Cooper, Peter P., assignor.)

Westinghouse Electric and Manufacturing Company. (See Critchton, Leslie N., assignor.)

Westinghouse Electric and Manufacturing Company. (See Deenich, Edward I., assignor.)

Westinghouse Electric and Manufacturing Company. (See Ehrhart, Raymond A., assignor.) (Reissue.)

Westinghouse Electric and Manufacturing Company. (See Fortescue, Charles L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Griffith, Israel L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Helmund, Rudolf W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Huey, George W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Little, George M., assignor.)

Westinghouse Electric and Manufacturing Company. (See MacLachlan, Paul, assignor.)

Westinghouse Electric and Manufacturing Company. (See Mardis and Hall, assignors.)

Westinghouse Electric and Manufacturing Company. (See Meyer, Friedrich W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Peckles, Laurence M., assignor.)

Westinghouse Electric and Manufacturing Company. (See Pierce, Raymond T., assignor.)

Westinghouse Electric and Manufacturing Company. (See Slinnon and Aspinwall, assignors.)

Westinghouse Electric and Manufacturing Company. (See Slinnon and Riley, assignors.)

Westinghouse Electric and Manufacturing Company. (See Sipher, Edmund F., assignor.)

Westinghouse Electric and Manufacturing Company. (See Thornton, Frank, Jr., assignor.)

Westinghouse Electric and Manufacturing Company. (See Webster, John E., assignor.)

Westly, Jena, Lyaker, near Christiania, Norway, assignor to Sullitelma Aktiebolag, Helsingborg, Sweden. Apparatus for pneumatic conveyance of materials. No. 1,308,464; July 1; v. 264; p. 83.

Wheat, Levi M., Woodville, Tex. Wheel-tread. No. 1,308,153; July 1; v. 264; p. 27.

White, D'Orsay M., assignor to Cadillac Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,308,465; July 1; v. 264; p. 82.

Whitehouse, John N., assignor to Wm. Demuth & Co., New York, N. Y. Tobacco-pipe. No. 1,308,612; July 1; v. 264; p. 110.

Whiting, Horatio, assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,308,133; July 1; v. 264; p. 23.

Whitney, William M., Winchendon, Mass. Rotary cutter. No. 1,308,313; July 1; v. 264; p. 56.

Whitright, Lee. (See Sholenberger and Whitright.)

Wickham, Walter M., Chicago, Ill. Road grading and excavating machine. No. 1,308,383; July 1; v. 264; p. 68.

Wilcox, Howard, Washington, D. C. Front and rear driven motor-vehicle. No. 1,308,314; July 1; v. 264; p. 56.

Wilcox, Howard, Washington, D. C. Motor-driven-vehicle train. No. 1,308,315; July 1; v. 264; p. 56.

Wiley, Roy H., assignor, by mesne assignments, to Flexline Sign Company, Buffalo, N. Y. Illuminated sign. (Reissue.) No. 1,308,579; July 1; v. 264; p. 137.

Wilfert, Christian J., Dorchester, assignor to one-half to himself, and one-half to G. F. Wilfert, Jamaica Plain, Mass. Sound-reproducing apparatus. No. 1,308,506; July 1; v. 264; p. 102.

Wilfert, George F. (See Wilfert, Christian J., assignor.)

Williams, Alexander E., U. S. Army. Combined motor tractor and cultivator. No. 1,308,691; July 1; v. 264; p. 125.

Williams Foundry and Machine Company, The. (See Williams, John K., assignor.)

Williams, John K., Akron, Ohio, assignor to The Williams Foundry and Machine Company, Akron, Ohio. Vulcanizer. No. 1,308,517; July 1; v. 264; p. 93.

Williams, Martin L., South Bend, Ind., assignor, by mesne assignments, to American Sleeve-Valve Motor Company, Engine. No. 1,308,466; July 1; v. 264; p. 83.

Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Cage for reducing-machines. No. 1,308,384; July 1; v. 264; p. 69.

Williams Patent Crusher and Pulverizer Company. (See Williams, Milton F., assignor.)

Wilmut Castle Company. (See Underwood and Castle, assignors.)

Wilson, Baxter C., West Marlon, S. C. Gasket-cutter. No. 1,308,650; July 1; v. 264; p. 117.

Wilson, James M., Newark, N. J. Magnetic inductor. No. 1,308,567; July 1; v. 264; p. 102.

Wilson, John S., Westminster, and W. E. Dalby, Ealing, London, assignors to one-third to Sir W. G. Armstrong-Whitworth and Company Limited, Newcastle-upon-Tyne, England. Sighting of guns and apparatus for use thereon. No. 1,308,134; July 1; v. 264; p. 24.

Winchell, Frank, Waterloo, Iowa. Hydrocarbon heater for carburetors. No. 1,308,135; July 1; v. 264; p. 24.

Wm. Demuth & Co. (See Whitehouse, John N., assignor.)

Wolf, Andrew. (See Maloney, Edward J., assignor.)

Woolley, Walton D., Chicago, Ill., assignor to Killark Electric Manufacturing Company, St. Louis, Mo. Fuse-plug. No. 1,308,518; July 1; v. 264; p. 93.

Wones, Raymond O., Maplewood, Ohio. Manifold-lock. No. 1,308,154; July 1; v. 264; p. 27.

Wood, John H., Chicago, Ill., assignor to Osro Chemical Company. Paste calcimine. No. 1,308,136; July 1; v. 264; p. 21.

Woodbridge, James L., Decatur, Tex. Mote-board for cotton-gins. No. 1,308,651; July 1; v. 264; p. 118.

Workman, Morris, New York, N. Y. Motor-car. No. 1,308,316; July 1; v. 264; p. 56.

Wreiser, Peter J., Basel, Minn. Swing. No. 1,308,568; July 1; v. 264; p. 102.

Wright, Wilbur L., Baltimore, Md., assignor to Sealright Co., Inc., Fulton, N. Y. Paper can and other container. No. 1,308,317; July 1; v. 264; p. 56.

Wronski, Stanley, Cleveland, Ohio. Infant-rocker. No. 1,308,318; July 1; v. 264; p. 57.

Wylie, Thomas B., Pittsburgh, Pa. Apparatus for measuring gas and other fluids. No. 1,308,569; July 1; v. 264; p. 102.

Yingling, Frank B., Hamilton, Ohio. Tie-press. No. 1,308,213; July 1; v. 264; p. 38.

Young, Charles D., Altoona, Pa. Apparatus for using powdered fuel. No. 1,308,137; July 1; v. 264; p. 24.

Young, Charles D., Altoona, Pa. Feed-water heater. No. 1,308,138; July 1; v. 264; p. 24.

Young, Wilbur H., Keyport, N. J. Electrical connection. No. 1,308,214; July 1; v. 264; p. 38.

Zadorozny, Wasyl, Mencham, Saskatchewan, assignor of one-half to T. Zygiel, Hamilton, Ontario, Canada. Padlock. No. 1,308,319; July 1; v. 264; p. 57.

Zagelmeyer, Frank, Bay City, Mich. Camping outfit. No. 1,308,139; July 1; v. 264; p. 24.

Zanes, Delaney D., Irvington, N. J., assignor to Detroit-Cadillac Motor Car Company, New York, N. Y. Device for taking up slack in sprocket-chains. No. 1,308,570; July 1; v. 264; p. 103.

Zanzig, Charles F. (See Peterson, John N., assignor.)

Zygiel, Tony. (See Zadorozny, Wasyl, assignor.)

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Maasfield, Etta, New York, N. Y. Doll. No. 53,480; July 1; v. 264; p. 137.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Berkowitz & Lobel, assignors to H. Berkowitz, New York, N. Y. Suspenders. Nos. 125,887-8; July 1; v. 264; p. 153.

Berkowitz, Herman. (See Berkowitz and Lobel, assignors.)

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Armour and Company, Chicago, Ill. "Sylvan Carnation Toilet Soap." (For Toilet Soap.) No. 21,280; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Sylvan Heliotrope Toilet Soap." (For Toilet Soap.) No. 21,281; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Sandalwood." (For Toilet Soap.) No. 21,282; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Heliotrope." (For Toilet Soap.) No. 21,283; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Sylvan Rose Toilet Soap." (For Toilet Soap.) No. 21,284; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Rose." (For Toilet Soap.) No. 21,285; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Carnation." (For Toilet Soap.) No. 21,286; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Sylvan Lilac Toilet Soap." (For Toilet Soap.) No. 21,287; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Lilac." (For Toilet Soap.) No. 21,288; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Sylvan Sandalwood Toilet Soap." (For Toilet Soap.) No. 21,289; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Natural Odor Violet." (For Violet Soap.) No. 21,290; July 1; v. 264; p. 154.

Armour and Company, Chicago, Ill. "Sylvan Violet Toilet Soap." (For Toilet Soap.) No. 21,291; July 1; v. 264; p. 154.

Baker, J. Harve, Portales, N. Mex. "Baker's Foot Base." (For Foot-Powder.) No. 21,293; July 1; v. 264; p. 154.

Bell, Claude A., Lowell, Mass. "Harvard Bronchial Syrup." (For Bronchial Syrup.) No. 21,294; July 1; v. 264; p. 154.

Bell, Claude A., Lowell, Mass. "Bell's Sarsaparilla." (For Sarsaparilla.) No. 21,295; July 1; v. 264; p. 154.

Bell, Claude A., Lowell, Mass. "Bell's Extract of Spices." (For Extract of Spices.) No. 21,296; July 1; v. 264; p. 154.

Bell, Claude A., Lowell, Mass. "Bell's Lung Balsam." (For Lung-Balsam.) No. 21,297; July 1; v. 264; p. 154.

Betsy Ross Candy Shops, Indianapolis, Ind. "Betsy Ross Candies." (For Candy.) No. 21,298; July 1; v. 264; p. 154.

Brookton Rand Company, Brookton, Mass. "Barbour Grooved Endless Welling." (For Welling.) No. 21,300; July 1; v. 264; p. 154.

C. E. and B. M. De Croes, Indianapolis, Ind. "De Croes Hair Stimulant and Dandruff Remedy." (For a Hair-Tonic.) No. 21,307; July 1; v. 264; p. 154.

Chateau Bottling Co., New York, N. Y. "Chateau." (For Soft Drinks.) No. 21,301; July 1; v. 264; p. 154.

Christian Moerlein Brewing Company, The, Cincinnati, Ohio. "Moerlein." (For a Non-Intoxicating Cereal Beverage.) No. 21,302; July 1; v. 264; p. 154.

Crutcheid & Woolfolk, Pittsburgh, Pa. "Cactus Brand Cantaloupes." (For Cantaloupes.) No. 21,304; July 1; v. 264; p. 154.

Cumberland Macaroni Mfg. Co., Cumberland, Md. "L'Aquila Alpina Brand." (For Semolina Macaroni.) No. 21,303; July 1; v. 264; p. 154.

Czajkowski, Joseph F., Chicago, Ill. "Liberty Bling." (For Bling.) No. 21,305; July 1; v. 264; p. 154.

D. Auerbach & Sons, New York, N. Y. "Auerbach Finest Lemon Drops." (For Candy.) No. 21,292; July 1; v. 264; p. 154.

Davis & Geck, Inc., Brooklyn, N. Y. "Sterile Surgical Sutures." (For Sterile Surgical Sutures and Ligatures.) No. 21,306; July 1; v. 264; p. 154.

Dechant, William H., Toledo, Ohio. "Champion." (For Hair-Tonic.) No. 21,308; July 1; v. 264; p. 154.

El Reno Wholesale Grocery Co., Oklahoma, Okla. "Over-The-Top." (For Coffee.) No. 21,309; July 1; v. 264; p. 154.

F. E. Booth Co., San Francisco, Calif. "Comet." (For Canned Sardines.) No. 21,299; July 1; v. 264; p. 154.

Food Products Co., The, Binghamton, N. Y. "Egg Cream." (For Egg Substitute.) No. 21,310; July 1; v. 264; p. 154.

Freedman, Louis J., Baltimore, Md. "Victory Boys' Wash Suits." (For Boys' Wash-Suits.) No. 21,311; July 1; v. 264; p. 154.

Garland Co., The, Cleveland, Ohio. "Permalite." (For Glazing Compounds.) No. 21,312; July 1; v. 264; p. 154.

Glenn, William B., New York, N. Y. "Par." (For Cigarettes.) No. 21,313; July 1; v. 264; p. 154.

Guss Company, Vidalia, Ga. "Guss." (For a Soft Drink.) No. 21,314; July 1; v. 264; p. 154.

Jones & Pettigrew, San Francisco, Calif. "Poppy Brand." (For Fresh Asparagus.) No. 21,315; July 1; v. 264; p. 154.

Kachel Lenhart Company, Ephrata borough, Pa. "It Wears and Wears." (For Healers.) No. 21,316; July 1; v. 264; p. 154.

Keele, Nellie T., New York, N. Y. "Pasco." (For Canned Pimientos.) No. 21,317; July 1; v. 264; p. 154.

Koop, Fred, Westmont, N. J. "Koop's Lightning." (For Hair-Renewer.) No. 21,318; July 1; v. 264; p. 154.

La Sierra Heights Canning Company, Los Angeles, Calif. "Twin Bottles." (For Canned Tomatoes.) No. 21,319; July 1; v. 264; p. 154.

Leavitt, Michael L., Philadelphia, Pa. "Lev-I-Tone." (For Eye-Lotion.) No. 21,320; July 1; v. 264; p. 154.

Lion Brewing Company, Wilkes-Barre, Pa. "Buck-O." (For a Non-Intoxicating Cereal Beverage.) No. 21,321; July 1; v. 264; p. 155.

Lyons Chemical Works, Chicago, Ill. "Tru-Ble." (For Bling.) No. 21,322; July 1; v. 264; p. 155.

McLoughlin Bros., Incorporated, New York and Brooklyn, N. Y. "The Pretty Village." (For Toy Villages.) No. 21,323; July 1; v. 264; p. 155.

Mills, Harry, New York, N. Y. "Ioriana." (For Cigars.) No. 21,324; July 1; v. 264; p. 155.

Milwaukee Paper Box Company, Milwaukee, Wis. "Lace Design." (For Boxes Containing Candy.) No. 21,325; July 1; v. 264; p. 155.

Milwaukee Paper Box Company, Milwaukee, Wis. "Peanut Border." (For Candy.) No. 21,326; July 1; v. 264; p. 155.

- Miner Products Company, Inc., New York, N. Y. "Cough Drop Life Savers, The Candy Mint With The Hole, a Delightful Confection." (For Medicinal Candies.) No. 21,327; July 1; v. 264; p. 155.
- Moco Laboratories, Inc., Oklahoma, Okla. "Moco Monkey Grip." (For Patches for Automobile-Tires.) No. 21,328; July 1; v. 264; p. 155.
- National Sulfur Soap Co., The, Denver, Colo. "Sulfur Soap." (For Soap.) No. 21,329; July 1; v. 264; p. 155.
- Narragansett Dairy Co. Ltd., Providence, R. I. "Nut-Butter Brand Nut Margarine." (For Margins.) No. 21,330; July 1; v. 264; p. 155.
- Narragansett Dairy Co. Ltd., Providence, R. I. "Guernsey Brand Oleomargarine." (For Oleomargarine.) No. 21,331; July 1; v. 264; p. 155.
- Mellin, Means N., Rockford, Ill. "M N Peanut Fluff." (For Candy Confection.) No. 21,332; July 1; v. 264; p. 155.
- Nevins, Thomas F., New York, N. Y., and Merritt, Fla. "Indian River Fruits, Nevins Merritt's Island Brand." (For Fruits.) No. 21,333; July 1; v. 264; p. 155.
- North Ontario Packing Co., Los Angeles, Calif. "Glen Rosa Brand." (For Orange Marmalade.) No. 21,334; July 1; v. 264; p. 155.
- Pennsylvania Chocolate Company, Pittsburgh, Pa. "Chocolate Supérieur." (For Chocolate.) No. 21,335; July 1; v. 264; p. 155.
- Perfektone Corporation, The, Philadelphia, Pa. "Perfektone." (For Talking-Machines.) No. 21,336; July 1; v. 264; p. 155.
- Pickert, J. M., St. Louis, Mo. "Bone Dry Brand." (For Weatherproof Clothing.) No. 21,337; July 1; v. 264; p. 155.
- Ralo Toy Company, Worcester, Mass. "Rallie-Stone Blocks." (For Toy Building-Blocks.) No. 21,338; July 1; v. 264; p. 155.
- Robins, Max, Chicago, Ill. "Neo." (For Nasal Jelly.) No. 21,339; July 1; v. 264; p. 155.
- Royal Worcester Corset Co., Worcester, Mass. "Serviceable Adjusto Corsets, Comfortable." (For Corsets.) No. 21,340; July 1; v. 264; p. 155.
- Royal Worcester Corset Co., Worcester, Mass. "Fashionable Royal Worcester Corsets, Graceful." (For Corsets.) No. 21,341; July 1; v. 264; p. 155.
- Rubin, Mayer, Hammond, Ind. "Old Taylor Bourbon." (For a Non-Alcoholic Distilled Beverage.) No. 21,342; July 1; v. 264; p. 155.
- Saeed, John, Allentown, Pa. "Tan-Sav." (For Preparations for Relief of Colds and Catarrh.) No. 21,343; July 1; v. 264; p. 155.
- Stern, Paul J., Milwaukee, Wis. "It's Quality." (For Bread.) No. 21,344; July 1; v. 264; p. 155.
- Stuart Fish Products Co., Inc., Seattle, Wash. "Pacific." (For Canned Fish Balls.) No. 21,345; July 1; v. 264; p. 155.
- Terels, John, Lebanon, Pa. "Terels." (For White Dye Bleach for Panamas and Straw Hats.) No. 21,346; July 1; v. 264; p. 155.
- Virginia Fruit Juice Company, Inc., Norfolk, Va. "A Pip-pin of a Drink." (For Pure Apple-Juice.) No. 21,347; July 1; v. 264; p. 155.
- Wallis Dorr Company, New York, N. Y. "Pig-Me." (For Toy Furniture.) No. 21,348; July 1; v. 264; p. 155.
- Well Color and Chemical Company & Well and Company, New York, N. Y. "Beat Everyway Milk." (For Condensed Milk.) No. 21,349; July 1; v. 264; p. 155.
- Wilson, Charles A., New York, N. Y. "Wilson Sun-Beam Auto Polish." (For a Liquid to Polish Bodies of Automobiles, Musical Instruments, Furniture, and Fixtures.) No. 21,350; July 1; v. 264; p. 155.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

- American Chic Company, New York, N. Y. "Sen-Sen makes my chic taste like a 25¢ Perfecto!" (For Sen-Sen Tablets.) No. 5,107; July 1; v. 264; p. 156.
- American Druggists Syndicate, Long Island City, N. Y. "A. D. S. Cold and Grippe Tablets." (For Cold and Grippe Tablets.) Nos. 5,108-10; July 1; v. 264; p. 156.
- American Druggists Syndicate, Long Island City, N. Y. "A. D. S. Beef Iron and Wine." (For Beef, Iron, and Wine.) Nos. 5,111-13; July 1; v. 264; p. 156.
- California Paint Company, Oakland, Calif. "Pacific Coast Stacks." (For Stack-Paints.) No. 5,114; July 1; v. 264; p. 156.
- Johnson, Chase O., Sioux City, Iowa. "The Pickwick Service Stores." (For Self-Service Stores.) No. 5,115; July 1; v. 264; p. 156.
- McKinnis, Henry, Pittsburgh, Pa. "Have you Max-Well Known Round Stove With a Flue?" (For Gascoons, Liquid, and Solid Fuel Burning Stoves and Heaters, Not Electrical.) No. 5,116; July 1; v. 264; p. 156.
- Perfektone Corporation, The, Philadelphia, Pa. "Perfektone." (For Talking-Machines.) No. 5,117; July 1; v. 264; p. 156.
- Stern, Paul J., Milwaukee, Wis. "It's Quality." (For Bread.) No. 5,118; July 1; v. 264; p. 156.
- Sunbeam Chemical Company, Chicago, Ill. "New Colors for Your Walats." (For Dye-Soap.) No. 5,119; July 1; v. 264; p. 156.
- Sunbeam Chemical Company, Chicago, Ill. "Fashionable Colors Instantly." (For Dye-Soap.) No. 5,120; July 1; v. 264; p. 156.
- Sunbeam Chemical Company, Chicago, Ill. "Don't Buy New Corsets." (For Dye-Soap.) No. 5,121; July 1; v. 264; p. 156.
- Sunbeam Chemical Company, Chicago, Ill. "Cleanse and Colors Instantly." (For Dye-Soap.) No. 5,122; July 1; v. 264; p. 156.
- Sunbeam Chemical Company, Chicago, Ill. "Dye It the Easiest Way." (For Dye-Soap.) No. 5,123; July 1; v. 264; p. 156.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

- A. J. Churchill Co. Inc., Portland, Oreg. Sphagnum-moss sanitary napkins. No. 116,988; July 1; v. 264; p. 146.
- Aaron Feyer & Sons, St. Louis, Mo., and Omaha, Nebr. Oil and grease wiping and cleaning cloths. No. 108,769; July 1; v. 264; p. 146.
- Alvey Manufacturing Company, St. Louis, Mo. Conveyers, elevators, &c. No. 115,584; July 1; v. 264; p. 144.
- American Bosch Magneto Corporation, Springfield, Mass. Ignition and starting apparatus for internal-combustion engines, &c. No. 116,984; July 1; v. 264; p. 146.
- American Branch & Machine Co., Ann Arbor, Mich. Branching-machines, branches, &c. No. 115,751; July 1; v. 264; p. 144.
- American Can Co., New York, N. Y. Sheet metal ornamented with a decorative coating. No. 94,635; July 1; v. 264; p. 139.
- Anglo-American Pharmaceutical Corporation, New York, N. Y. Menthol and wintergreen cream for scintles, neuralgia, &c. No. 117,791; July 1; v. 264; p. 150.
- Baldwin Perfumery Company, Chicago, Ill. Complexion-cream. No. 116,073; July 1; v. 264; p. 145.
- Ben Wiener & Co., New York, N. Y. Boys' high-school boys', juveniles' and young men's suits and overcoats. No. 116,804; July 1; v. 264; p. 146.
- Berger, L. D., Philadelphia, Pa. Adjustable elbows for stovepipes, and duns. No. 115,871; July 1; v. 264; p. 145.
- Bukolt, John J., Stevens Point, Wis. Pedalling-cart on three wheels for boys. No. 117,172; July 1; v. 264; p. 147.
- Bump, Joseph, Anna, Ill. Non-alcoholic beverage and syrup for making the same. No. 109,125; July 1; v. 264; p. 140.
- Hunte Brothers, Chicago, Ill. Confectionery—namely, chocolates. No. 117,001; July 1; v. 264; p. 146.
- Harrington Blanket Company, Harrington, Wis. Insoles for footwear. No. 113,958; July 1; v. 264; p. 142.
- Harrington Vinegar & Pickle Works, Harrington, Iowa. Sauce for meats, fish, salads, &c. No. 112,928; July 1; v. 264; p. 142.
- C. M. Kimball Company, Winthrop, Mass. Silver, stove, and metal polisher. No. 115,749; July 1; v. 264; p. 144.
- Cable Draper Baking Co., Detroit, Mich. Bread. No. 116,406; July 1; v. 264; p. 145.
- Chicago Electric Manufacturing Co., Chicago, Ill. Electric appliances. No. 117,614; July 1; v. 264; p. 149.
- Cleveland Chain & Mfg. Co., Cleveland, Ohio. Antiskid-chains. No. 114,022; July 1; v. 264; p. 142.
- Cleveland Tractor Company, Euclid, Ohio. Tractors and parts thereof. No. 114,091; July 1; v. 264; p. 142.
- Columbia Cheese Co., Newark, N. J. Eggs. No. 117,177; July 1; v. 264; p. 147.
- Commander Mill Co., Minneapolis, Minn. Wheat-flour. No. 108,321; July 1; v. 264; p. 140.
- Craddock-Terry Company, Lynchburg, Va. Ladies' shoes. No. 117,775; July 1; v. 264; p. 150.
- De Long Hook and Eye Company, Philadelphia, Pa. Safety and toilet pins, snap fasteners or buttons. No. 100,576; July 1; v. 264; p. 139.
- Diercke, Ed E., Mineral Wells, Tex. Mineral water. No. 108,487; July 1; v. 264; p. 140.

(REGISTRATION APPLIED FOR.)

- Doermann-Roecher Company, Cincinnati, Ohio. Beltting, hose, and machinery packing. No. 113,785; July 1; v. 264; p. 142.
- Dolcibella, Gaspare, San Francisco, Calif. Hair-tonic. No. 112,974; July 1; v. 264; p. 142.
- Dunham Company, Berea, Ohio. Soil-tilling machines. No. 112,870; July 1; v. 264; p. 142.
- Duplicator Manufacturing Company, Chicago, Ill. Duplicating-rolls for duplicating machines. No. 117,644; July 1; v. 264; p. 149.
- Duplicator Manufacturing Company, Chicago, Ill. Duplicating-machines. No. 117,645; July 1; v. 264; p. 149.
- Eastern Production Company, Detroit, Mich. Hydraulic presses and pumps, &c. No. 117,297; July 1; v. 264; p. 148.
- Ellis Grove Milling Company, Ellis Grove, Wis. Wheat-flour. No. 114,666-7; July 1; v. 264; p. 143.
- Empire Bottling Works, El Paso, Tex. Non-intoxicating, non-alcoholic beverage. No. 118,660; July 1; v. 264; p. 151.
- Empire Silk Company, Wilmington, Del., and New York, N. Y. Silk piece goods. No. 115,526; July 1; v. 264; p. 143.
- Everbright Manufacturing Company, San Francisco, Calif. Polish for metal and metal bodies. No. 112,289; July 1; v. 264; p. 141.
- Excelsior Tire & Rubber Co., Philadelphia, Pa. Rubber tires and inner tubes for tires. No. 117,223; July 1; v. 264; p. 148.
- Farber, Simon W., Brooklyn, N. Y. Portable electric lamps. No. 117,489; July 1; v. 264; p. 148.
- Franklin Harp Equipment Co., Monticello, Iowa. Over-head carriers. No. 117,008; July 1; v. 264; p. 147.
- Gardner-Bryan Company, Cleveland, Ohio. Metal-working taps and dies. No. 115,658; July 1; v. 264; p. 144.
- Glenside Textile Co., New York, N. Y. Vellings, nettings, chiffons, &c. No. 117,525; July 1; v. 264; p. 148.
- Goldberg, David N., Chicago, Ill. Non-alcoholic beverage. No. 118,666; July 1; v. 264; p. 151.
- Hass Brothers, New York, N. Y. Wool piece goods. No. 117,103; July 1; v. 264; p. 147.
- Hartogena, Samuel A., New York, N. Y. Collar and neck sleeve buttons made wholly or in part of precious metal. No. 115,559; July 1; v. 264; p. 143.
- Holt Manufacturing Company, Stockton, Calif. Monthly periodicals. No. 117,330; July 1; v. 264; p. 148.
- Joel Bailly Davis Company, Philadelphia, Pa. Leather, knitted, and woven gloves, shirts, &c. No. 98,321; July 1; v. 264; p. 139.
- John Wasmaker, Philadelphia, Pa. Dresses for women, misses, and children. No. 111,253; July 1; v. 264; p. 141.
- Julius Wile Sons & Co., New York, N. Y. Leather boots and shoes. No. 117,288; July 1; v. 264; p. 148.
- L. Heller & Son, Inc., New York, N. Y. Pearls and pearl necklaces, precious, semiprecious, and imitation stones. No. 116,052; July 1; v. 264; p. 145.
- Leggett & Brother, Incorporated, New York, N. Y. Insecticides and fungicides. No. 117,020; July 1; v. 264; p. 149.
- Lever, Victor, Attles, Ind. Cigars. No. 118,266; July 1; v. 264; p. 151.
- Lewis, Charles T., Dallas, Tex. Cleaning and polishing preparation for woodwork, &c. No. 116,386; July 1; v. 264; p. 145.
- Louis Rockwell & Co., New York, N. Y. Silk piece goods. No. 116,275; July 1; v. 264; p. 145.
- Marshall Ventilated Mattress Company, Chicago, Ill. Mattresses and cushions. No. 114,346; July 1; v. 264; p. 142.
- Meyer Bros. Coffee and Spice Co., St. Louis, Mo. Teas, mustard, coffee, &c. No. 116,720; July 1; v. 264; p. 145.
- Motor Car Supply Co., Chicago, Ill. Pneumatic tire and tube patches. No. 102,319; July 1; v. 264; p. 139.
- Nashville Roller Mills, Nashville, Tenn. Wheat-flour. No. 117,685; July 1; v. 264; p. 149.
- National Commodities Co., Philadelphia, Pa. Sanitary human-hair nets. No. 111,821; July 1; v. 264; p. 141.
- National Fruit Juice Company, La Fayette, Ind. Non-alcoholic beverage. No. 117,686; July 1; v. 264; p. 149.
- National Shirt Shops, Inc., New York, N. Y. Coats, vests, trousers, house-gowns, &c. No. 117,498; July 1; v. 264; p. 148.
- Northwestern Chemical Co., Marietta, Ohio. Valve-grinding and neat's-foot clutch and brake compounds, &c. No. 110,492; July 1; v. 264; p. 141.
- Northwestern Chemical Co., Marietta, Ohio. Powdered talc and mica. No. 110,487; July 1; v. 264; p. 141.
- Offerding, Henry T., Washington, D. C. Cigars. No. 111,856; July 1; v. 264; p. 141.
- Pacific Mills, Lawrence and Boston, Mass. Cotton piece goods. No. 107,008; July 1; v. 264; p. 140.
- Paul De Laney Co., Inc., Brocton, N. Y. Grape and apple juices, apple cider. No. 116,531; July 1; v. 264; p. 145.
- Phillips, Davis, New York, N. Y. Disinfectant. No. 116,273; July 1; v. 264; p. 145.
- Platts Box Company, Troy, N. H. Boys' sets of carpenter's tools in chests. No. 116,724; July 1; v. 264; p. 140.
- Portland Cheese Company, Portland, Oreg. Cheese. No. 117,690; July 1; v. 264; p. 149.
- Pratt, Allan E., Rochester, N. Y. Preparation to correct an acid condition of the stomach. No. 108,955; July 1; v. 264; p. 140.
- R. J. Reynolds Tobacco Company, Winston-Salem, N. C. Smoking-tobacco and cigarettes. No. 117,168; July 1; v. 264; p. 147.
- Rapp, Samuel W., Jr., Morton, Ill. Cleaning compound for the hands, fabrics, &c. No. 116,425; July 1; v. 264; p. 145.
- Reed Food Company, Indianapolis, Ind. Non-alcoholic beverage. No. 118,186; July 1; v. 264; p. 151.
- Renken & Yates Smith, Inc., New York, N. Y. Logan-berry-juice. No. 110,149; July 1; v. 264; p. 140.
- Richmond Hosiery Mills, Russellville, Ga. Hosiery. No. 94,462; July 1; v. 264; p. 139.
- Ridgely Trimmer Company, Springfield, Ohio. Painters' and decorators' tools and supplies. No. 117,091; July 1; v. 264; p. 147.
- Ridgely Trimmer Company, Springfield, Ohio. Painters', decorators', and paper-hangers' tools and supplies. No. 111,859; July 1; v. 264; p. 141.
- Ridgely Trimmer Company, Springfield, Ohio. Steel-wool. No. 117,090; July 1; v. 264; p. 147.
- Rosenstein, Jacob, New York, N. Y. Wheat-flour. No. 115,129; July 1; v. 264; p. 143.
- Rudomtner, Morris, Newark, N. J. Headache remedy. No. 118,186; July 1; v. 264; p. 150.
- S. J. Browner Shoe Co., Milwaukee, Wis. Leather shoes. No. 107,762; July 1; v. 264; p. 140.
- Schramm, William P., New York, N. Y. Men's collars, cuffs, shirts, &c. No. 105,780; July 1; v. 264; p. 140.
- Seader, Morris, Brooklyn, N. Y. Hair-tonics. No. 115,605; July 1; v. 264; p. 144.
- Simmons Hardware Company, St. Louis, Mo. Rubber garden-hose. No. 118,485; July 1; v. 264; p. 151.
- Sonora Phonograph Corporation, New York, N. Y. Talking-machines, phonographs, &c. No. 115,188; July 1; v. 264; p. 151.
- Sperry Flour Company, San Francisco, Stockton, Vallejo, Fresno, Salinas, Paso Robles, Los Angeles, Chico, and Marysville, Calif., and Tacoma, Wash. Oatmeal, corn flour and meal, hominy, &c. No. 114,472; July 1; vol. 264; p. 143.
- Stampede Company, Limited, St. Paul, Minn. Candy. No. 117,416; July 1; v. 264; p. 148.
- Texas Company, Houston and Port Arthur, Tex., and New York, N. Y. Asphalt products, road-oils, paving and tank-bottom cements, &c. No. 105,243; July 1; v. 264; p. 139.
- U-Magnet Safety Razor Company, Lowell, Mass. Safety-razor blades. No. 116,979; July 1; v. 264; p. 146.
- Utica Steam and Mohawk Valley Cotton Mills, Utica, N. Y. Sheets, sheetings, &c. No. 116,909; July 1; v. 264; p. 146.
- Van Dyk & Co., New York, N. Y. Perfume-bases, flower-oils, &c. No. 118,073; July 1; v. 264; p. 150.
- Van Hook, William G., Earl, Ark. Salve. No. 117,464; July 1; v. 264; p. 148.
- Venuto, Joseph, Philadelphia, Pa. Skin-lotions. No. 117,712; July 1; v. 264; p. 150.
- Victor Leather Company, Allentown, Pa. Tanned and finished calf and kid leather. No. 118,001; July 1; v. 264; p. 150.
- W. T. Rawleigh Company, Freeport, Ill. Blood-tonic. No. 117,743; July 1; v. 264; p. 150.
- Well, Alexis, New York, N. Y. Hosiery. No. 117,262; July 1; v. 264; p. 148.
- Werthelmer, Samuel M., New York, N. Y. Men's cotton, mercerized, and silk hosiery. No. 114,475; July 1; v. 264; p. 143.
- Wolfe, Charles W., East Orange, N. J. Suits of outer wearing-apparel for men, women, and children. No. 117,147; July 1; v. 264; p. 147.
- Yarnall-Waring Company, Philadelphia, Pa. Recording-meters for liquids. No. 116,870; July 1; v. 264; p. 146.
- Zehnhauser, Charles W., Jersey City, N. J. Men's ties and cravats. No. 115,168; July 1; v. 264; p. 143.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 1st DAY OF JULY, 1919.

- Acid from acetaldehyde, Manufacture of acetic. H. Dreyfus. No. 1,308,173; July 1; v. 264; p. 31.
- Acid from crude sodium nitrate, Production of methyl borate and boric. R. P. Calvert and O. L. Thomas. No. 1,308,576; July 1; v. 264; p. 104.
- Acid from mixtures containing borates, Obtaining boric. R. P. Calvert and O. L. Thomas. No. 1,308,577; July 1; v. 264; p. 104.
- Adding or calculating machine. D. S. McElroy. No. 1,308,548; July 1; v. 264; p. 98.
- Adjustable level-stand. D. Hatch. No. 1,308,630; July 1; v. 264; p. 114.
- Aeroplane. H. Campbell. No. 1,308,657; July 1; v. 264; p. 119.
- Aeroplane. L. Chauvière. No. 1,308,184; July 1; v. 264; p. 29.
- Air and pulverized-fuel control, Combined. W. O. Renkin. No. 1,308,368; July 1; v. 264; p. 68.
- Air, Apparatus for exhausting and compressing. D. Morgan. No. 1,308,603; July 1; v. 264; p. 109.
- Aircraft. P. Adams. No. 1,308,153; July 1; v. 264; p. 27.
- Aircraft, Climb-indicator for. R. B. Shaw. No. 1,308,557; July 1; v. 264; p. 100.
- Airships, Aerostat structure of rigid. J. McKechnie and H. B. Pratt. No. 1,308,291; July 1; v. 264; p. 52.
- Alcohol reduced to beer, Preparation of. H. Heuser. No. 1,308,588; July 1; v. 264; p. 106.
- Alignment indicator and straightener, Crank or cam shaft. W. S. Littell. No. 1,308,501; July 1; v. 264; p. 90.
- Alkali-metal-chloride solutions, Purification of. C. N. Riber. No. 1,308,509; July 1; v. 264; p. 91.
- Alkali used in pulp digestion, Recovering. D. S. McAfee. No. 1,308,184; July 1; v. 264; p. 33.
- Aminonaphthol substances, Ureids of substituted. R. Hymann, R. Kothé, and A. Ossensbeck. No. 1,308,071; July 1; v. 264; p. 12.
- Ammonia-compressor. J. H. McCala. No. 1,308,288; July 1; v. 264; p. 52.
- Animal-trap. J. B. Corrigan. No. 1,308,277; July 1; v. 264; p. 49.
- Annular bodies from the hardening liquid, Means for removing hardened. A. G. E. Hultgren. No. 1,308,077; July 1; v. 264; p. 13.
- Antiskid device. I. C. Stroth. No. 1,308,455; July 1; v. 264; p. 81.
- Antislipping device for tires. W. J. Edwards. No. 1,308,057; July 1; v. 264; p. 9.
- Applying and drying machine, Compound. N. Troyer. No. 1,308,208; July 1; v. 264; p. 37.
- Arc-extinguisher. F. E. Ricketts. No. 1,308,257; July 1; v. 264; p. 46.
- Arc-extinguishing device. P. MacGahan. No. 1,308,249; July 1; v. 264; p. 44.
- Arc-extinguishing device. P. MacGahan. No. 1,308,365; July 1; v. 264; p. 65.
- Arc-extinguishing device. R. T. Pierce. No. 1,308,256; July 1; v. 264; p. 45.
- Artillery, Carriage for. R. H. Korn. No. 1,308,286; July 1; v. 264; p. 51.
- Ash-pan. J. Klucina. No. 1,308,245; July 1; v. 264; p. 44.
- Automatic brake. F. R. Peets. No. 1,308,105; July 1; v. 264; p. 18.
- Automatic railway gate. A. Lattanzi. No. 1,308,598; July 1; v. 264; p. 108.
- Automobile direction-indicator. W. J. and J. Huebner. No. 1,308,240; July 1; v. 264; p. 43.
- Automobile-heater. G. H. Earle. No. 1,308,486; July 1; v. 264; p. 87.
- Automobile-lock. J. Podufaly. No. 1,308,298; July 1; v. 264; p. 53.
- Automobile-signal. J. C. Hoyt. No. 1,308,284; July 1; v. 264; p. 51.
- Automobile signaling device. T. J. Coffey. No. 1,308,662; July 1; v. 264; p. 120.
- Automobiles, Direction-signal for. J. A. Shea. No. 1,308,198; July 1; v. 264; p. 35.
- Awning-hook. D. C. Baker. No. 1,308,519; July 1; v. 264; p. 93.
- Back-rest. E. G. Lindblom. No. 1,308,500; July 1; v. 264; p. 90.
- Bag: See—
Carrying and drag bag. Comfort-bag.
- Bait, Glass. G. C. Debay. No. 1,308,278; July 1; v. 264; p. 50.
- Baling-press. H. C. Clay. No. 1,308,397; July 1; v. 264; p. 71.
- Baling-press. J. A. Sharp. No. 1,308,645; July 1; v. 264; p. 117.
- Banding-machine. H. Y. Armstrong. No. 1,308,322; July 1; v. 264; p. 57.
- Bar: See—
Locking-bar. Sine-bar.
- Battery: See—
Storage battery.
- Battery tester, Sight storage. E. Camp. No. 1,308,223; July 1; v. 264; p. 40.
- Bearing, Antifriction. J. F. O'Connor. No. 1,308,100; July 1; v. 264; p. 17.
- Bearing, Rocker side. J. F. O'Connor. No. 1,308,640; July 1; v. 264; p. 110.
- Bearing, Self-adjusting ball. E. Delmar. No. 1,308,522; July 1; v. 264; p. 94.
- Bed and seat, Combined. J. D. Bell. No. 1,308,030; July 1; v. 264; p. 4.
- Bed-supported table. W. H. Bonfield. No. 1,308,034; July 1; v. 264; p. 5.
- Bedstead. W. J. S. Herbert. No. 1,308,074; July 1; v. 264; p. 122.
- Bench: See—
Piano-bench.
- Beverages, Apparatus for making carbonated. H. Heuser. No. 1,308,587; July 1; v. 264; p. 106.
- Bicycle, Motor. T. Christensen. No. 1,308,022; July 1; v. 264; p. 3.
- Billiard-player, Mechanical. C. Engleman. No. 1,308,405; July 1; v. 264; p. 73.
- Bit. W. Say. No. 1,308,609; July 1; v. 264; p. 110.
- Block: See—
Toy building-block.
- Blotter. J. J. Sullivan. No. 1,308,688; July 1; v. 264; p. 125.
- Board: See—
Sign and bulletin board.
- Board, Machine for making plaster. J. Schumacher. No. 1,308,723; July 1; v. 264; p. 131.
- Boat, Submarine. S. Lake. No. 1,308,738; July 1; v. 264; p. 134.
- Bobbin-winding mechanism. J. N. Peterson. No. 1,308,529; July 1; v. 264; p. 95.
- Bottle-cleaning system. C. T. McGill. No. 1,308,715; July 1; v. 264; p. 130.
- Bolt: See—
Lock-bolt. Stay-bolt.
- Bolts, rivets, or the like, Manufacture of headed. F. H. Griffiths. No. 1,308,629; July 1; v. 264; p. 114.
- Book, Blank deposit. O. V. Smith. No. 1,308,532; July 1; v. 264; p. 65.
- Book-cover, Adjustable. A. T. Walraven. No. 1,308,461; July 1; v. 264; p. 82.
- Booth, Ticket-seller's. A. Fellheimer. No. 1,308,702; July 1; v. 264; p. 127.
- Boots and shoes, Motor-driven machine for the manufacture of. F. J. Spencer and W. J. Kelly. No. 1,308,305; July 1; v. 264; p. 65.
- Boring-bar holder, Reversible. E. F. G. Gibbs. No. 1,308,282; July 1; v. 264; p. 50.
- Boring-bar holder, Tool-post. E. F. G. Gibbs. No. 1,308,281; July 1; v. 264; p. 50.
- Bottle carrier, Milk. A. K. Sutherland. No. 1,308,742; July 1; v. 264; p. 135.
- Bottle-filler. J. Oftedahl. No. 1,308,101; July 1; v. 264; p. 17.
- Bottle top, Milk. J. T. Cooney. No. 1,308,226; July 1; v. 264; p. 40.
- Bow: See—
Watch-bow.
- Box and method of manufacture, Pasteboard. A. J. Evers. No. 1,308,058; July 1; v. 264; p. 9.
- Box, case, and the like, Collapsible. W. Neuts. No. 1,308,678; July 1; v. 264; p. 123.
- Brake: See—
Automatic brake.
- Brake mechanism. W. C. Baker. No. 1,308,142; July 1; v. 264; p. 25.
- Brake mechanism, Electrically-operated. C. W. Brewster. No. 1,308,619; July 1; v. 264; p. 112.
- Brake-shoe. F. T. Dickinson. No. 1,308,402; July 1; v. 264; p. 72.
- Brake-staff. C. F. Kuehne and R. P. Donaher. No. 1,308,363; July 1; v. 264; p. 65.
- Breaker, Rabbie and clinker. F. W. Bocking. No. 1,308,653; July 1; v. 264; p. 115.

Breathlog apparatus. F. M. Luchs. No. 1,308,599; July 1; v. 264; p. 108.
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 "De Croes Hair Stimulant and Dandruff Remedy." (For a Hair-Tonic.) C. E. and B. M. De Croes. No. 21,307; July 1; v. 264; p. 154.
 "Doriana." (For Cigars.) H. Mills. No. 21,324; July 1; v. 264; p. 155.
 "Egg Cream." (For Egg Substitute.) The Food Products Co. No. 21,310; July 1; v. 264; p. 154.
 "Fashionable Royal Worcester Corsets, Graceful." (For Corsets.) Royal Worcester Corset Co. No. 21,341; July 1; v. 264; p. 155.
 "Glen Rosa Brand." (For Orange Marmalade.) North Ontario Packing Co. No. 21,334; July 1; v. 264; p. 155.
 "Guernsey Brand Oleomargarine." (For Oleomargarine.) Narragansett Dairy Co. Ltd. No. 21,331; July 1; v. 264; p. 155.
 "Guess." (For a Soft Drink.) Guess Company. No. 21,314; July 1; v. 264; p. 154.
 "Harvard Bronchial Syrup." (For Bronchial Syrup.) C. A. Bell. No. 21,294; July 1; v. 264; p. 154.
 "Indian River Fruits, Nevins Merritt's Island Brand." (For Fruits.) T. F. Nevins. No. 21,333; July 1; v. 264; p. 155.
 "It Wears and Wears." (For Hosiery.) Kachel-Lenhardt Company. No. 21,316; July 1; v. 264; p. 154.
 "Its Quality." (For Bread.) P. J. Stern. No. 21,344; July 1; v. 264; p. 155.
 "Koop's Lightning." (For Hair-Remover.) F. Koop. No. 21,318; July 1; v. 264; p. 154.
 "L'Angula Alpian Brand." (For Semolina Macaroni.) Cumberland Macaroni Mfg Co. No. 21,303; July 1; v. 264; p. 154.
 "Lace Design." (For Boxes Containing Candy.) Milwaukee Paper Box Company. No. 21,325; July 1; v. 264; p. 155.
 "Levi-Tone." (For Eye-Lotion.) M. L. Levitt. No. 21,320; July 1; v. 264; p. 154.
 "Liberty Bunting." (For Bunting.) J. P. Czalgoszewski. No. 21,305; July 1; v. 264; p. 154.
 "M N Peanut Fluff." (For Candy Confection.) M. N. Nello. No. 21,332; July 1; v. 264; p. 155.
 "Moco Monkey Grip." (For Patches for Automobile-Tires.) Moco Laboratories Inc. No. 21,328; July 1; v. 264; p. 155.
 "Moor Lo." (For a Non-Intoxicating Cereal Beverage.) The Christian Moorelun Brewing Company. No. 21,302; July 1; v. 264; p. 154.
 "Natural Odor Carnation." (For Toilet Soap.) Armour and Company. No. 21,284; July 1; v. 264; p. 154.
 "Natural Odor Heliotrope." (For Toilet Soap.) Armour and Company. No. 21,283; July 1; v. 264; p. 154.
 "Natural Odor Lilac." (For Toilet Soap.) Armour and Company. No. 21,288; July 1; v. 264; p. 154.
 "Natural Odor Rose." (For Toilet Soap.) Armour and Company. No. 21,285; July 1; v. 264; p. 154.
 "Natural Odor Sandalwood." (For Toilet Soap.) Armour and Company. No. 21,282; July 1; v. 264; p. 154.
 "Natural Odor Violet." (For Violet Soap.) Armour and Company. No. 21,290; July 1; v. 264; p. 154.
 "Neo." (For Nasal Jelly.) M. Robins. No. 21,339; July 1; v. 264; p. 155.
 "Nut Butter Brand Nut Margarine." (For Margarine.) Narragansett Dairy Co. Ltd. No. 21,330; July 1; v. 264; p. 155.
 "Old Tallor Bourbon." (For a Non-Alcoholic Distilled Beverage.) M. Robins. No. 21,342; July 1; v. 264; p. 155.
 "Over-The-Top." (For Coffee.) El Reno Wholesale Grocery Co. No. 21,309; July 1; v. 264; p. 154.
 "Pacific." (For Canned Fish-Balls.) Stuart Fish Products Co., Inc. No. 21,345; July 1; v. 264; p. 155.
 "Pier." (For Cigarettes.) W. B. Glenn. No. 21,313; July 1; v. 264; p. 154.
 "Pasco." (For Canned Pimientos.) N. T. Keefe. No. 21,317; July 1; v. 264; p. 154.
 "Peacock Border." (For Candy.) Milwaukee Paper Box Company. No. 21,326; July 1; v. 264; p. 155.
 "Perfektone." (For Talking-Machines.) The Perfektone Corporation. No. 21,336; July 1; v. 264; p. 155.
 "Permanite." (For Glassing Compounds.) The Garland Co. No. 21,312; July 1; v. 264; p. 154.
 "Pig-Me." (For Toy Furniture.) Wallie Dorr Company. No. 21,348; July 1; v. 264; p. 155.
 "Poppy Brand." (For Fresh Asparagus.) Jones & Pettigrew. No. 21,315; July 1; v. 264; p. 154.
 "Rally-Stone Blocks." (For Toy Building-Blocks.) Rally Toy Company. No. 21,338; July 1; v. 264; p. 155.
 "Serviceable, Adjusto Corsets, Comfortable." (For Corsets.) Royal Worcester Corset Co. No. 21,340; July 1; v. 264; p. 155.
 "Sterile Surgical Sutures." (For Sterile Surgical Sutures and Ligatures.) Davis & Geck, Inc. No. 21,306; July 1; v. 264; p. 154.
 "Sulfern Soap." (For Soap.) The National Sulfern Soap Co. No. 21,329; July 1; v. 264; p. 155.
 "Sylvan Carnation Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,280; July 1; v. 264; p. 154.
 "Sylvan Heliotrope Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,281; July 1; v. 264; p. 154.
 "Sylvan Lilac Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,287; July 1; v. 264; p. 154.
 "Sylvan Rose Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,284; July 1; v. 264; p. 154.
 "Sylvan Sandalwood Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,289; July 1; v. 264; p. 154.
 "Sylvan Violet Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,291; July 1; v. 264; p. 154.
 "Tan-Sav." (For Preparations for Relief of Colds and Catarrhs.) J. Saadl. No. 21,343; July 1; v. 264; p. 155.
 "Terria." (For White Dye Bleach for Panamas and Straw Hats.) J. Terria. No. 21,346; July 1; v. 264; p. 155.
 "The Pretty Village." (For Toy Villages.) McLoughlin Bros. Incorporated. No. 21,323; July 1; v. 264; p. 155.
 "Tru-Blu." (For Bluing.) Lyons Chemical Works. No. 21,322; July 1; v. 264; p. 155.
 "Twin Buttes." (For Canned Tomatoes.) La Sierra Heights Canning Company. No. 21,310; July 1; v. 264; p. 154.
 "Victory Boys' Wash Suits." (For Boys' Wash-Suits.) L. J. Freedman. No. 21,311; July 1; v. 264; p. 154.
 "Wilson Non-Beam Auto Polish." (For a Liquid to Polish Bodies of Automobiles, Musical Instruments, Furniture, and Fixtures.) C. A. Wilson. No. 21,350; July 1; v. 264; p. 155.

ALPHABETICAL LIST OF PRINTS.

- "A. D. S. Cold and Grippe Tablets." (For Cold and Grippe Tablets.) American Druggists Syndicate. Nos. 5,109-10; July 1; v. 264; p. 156.
- "A. D. S. Beef Iron and Wine." (For Beef, Iron, and Wine.) American Druggists Syndicate. Nos. 5,111-13; July 1; v. 264; p. 156.
- "Cleanses and Colors Instantly." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,122; July 1; v. 264; p. 156.
- "Don't Buy New Corsets." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,121; July 1; v. 264; p. 156.
- "Dye It the Easiest Way." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,123; July 1; v. 264; p. 156.
- "Fashionable Colors Instantly." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,120; July 1; v. 264; p. 156.
- "Have You Max-Well Known Round Stove With a Flue?" (For Gaseous, Liquid, and Solid Fuel Burning Stoves and Heaters, Not Electrical.) H. McKinnic. No. 5,116; July 1; v. 264; p. 156.
- "Its Quality." (For Bread.) P. J. Stern. No. 5,118; July 1; v. 264; p. 156.
- "New Colors for Your Waists." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,110; July 1; v. 264; p. 156.
- "Pacific Coast Stacks." (For Stack-Prints.) California Paint Company. No. 5,114; July 1; v. 264; p. 156.
- "Perfektone." (For Talking-Machines.) The Perfektone Corporation. No. 5,117; July 1; v. 264; p. 156.
- "Sen-Sen makes my cigar taste like a 25¢ Perfectol!" (For Sen-Sen Tablets.) American Cigar Company. No. 5,107; July 1; v. 264; p. 156.
- "The Pickwick Service Stores." (For Self-Service Stores.) C. G. Johnson. No. 5,115; July 1; v. 264; p. 156.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

- Asphalt products, road-oils, &c. Texas Company. No. 105,243; July 1; v. 264; p. 139.
- Beltting, hose, machinery packing. Doermann-Roehrer Company. No. 113,755; July 1; v. 264; p. 142.
- Beverage, Non-alcoholic. J. Bump. No. 109,125; July 1; v. 264; p. 140.
- Beverage, Non-alcoholic. D. N. Goldberg. No. 118,666; July 1; v. 264; p. 151.
- Beverage, Non-alcoholic. National Fruit Juice Company. No. 117,686; July 1; v. 264; p. 149.
- Beverage, Non-alcoholic. Reed Food Company. No. 118,186; July 1; v. 264; p. 151.
- Beverage, Non-intoxicating non-alcoholic. Empire Bottling Works. No. 118,660; July 1; v. 264; p. 151.
- Boots and shoes. Leather. J. Wille Sons & Co. No. 117,288; July 1; v. 264; p. 148.
- Bread. Cable Draper Baking Co. No. 116,406; July 1; v. 264; p. 145.
- Broaching-machines, broaches, &c. American Broach & Machine Co. No. 115,751; July 1; v. 264; p. 144.
- Buttons, Collar and link sleeve. S. A. Hartogensis. No. 115,559; July 1; v. 264; p. 143.
- Candy. Sempede Company. No. 117,416; July 1; v. 264; p. 148.
- Carpenters' tools, Boys' sets of. Platts Box Company. No. 116,724; July 1; v. 264; p. 146.
- Carriers, Overhead. Franklin Barn Equipment Co. No. 117,008; July 1; v. 264; p. 147.
- Cart for boys, Pedalling. J. J. Rukolt. No. 117,172; July 1; v. 264; p. 147.
- Chains, Antiskid. Cleveland Chain & Mfg. Co. No. 114,622; July 1; v. 264; p. 142.
- Cheese. Portland Cheese Company. No. 117,696; July 1; v. 264; p. 149.
- Chocolates. Bunte Brothers. No. 117,001; July 1; v. 264; p. 146.
- Cigars. V. Lator. No. 118,266; July 1; v. 264; p. 151.
- Cigars. H. T. Ofterdinger. No. 111,856; July 1; v. 264; p. 141.
- Cleaning and polishing preparation for woodwork, &c. C. T. Lewis. No. 116,386; July 1; v. 264; p. 145.
- Cleaning compound for the hands, fabrics, &c. S. W. Rapp, Jr. No. 116,425; July 1; v. 264; p. 145.
- Cloths, Wiping and cleaning. A. Ferer & Sons. No. 108,769; July 1; v. 264; p. 140.
- Coats, vests, house-gowns, &c. National Shirt Shops. No. 117,498; July 1; v. 264; p. 148.
- Collars, cuffs, shirts, &c. Men's. W. P. Schramm. No. 105,780; July 1; v. 264; p. 140.
- Conveyers, elevators, &c. Alvey Manufacturing Company. No. 115,584; July 1; v. 264; p. 144.
- Cotton piece goods. Pacific Mills. No. 107,068; July 1; v. 264; p. 140.
- Cream for scalds, &c. Menthol and wintergreen. Anglo-American Pharmaceutical Corporation. No. 117,791; July 1; v. 264; p. 150.
- Disinfectant. D. Phillips. No. 116,273; July 1; v. 264; p. 145.
- Dresses. John Wanamaker, Philadelphia. No. 111,253; July 1; v. 264; p. 141.
- Duplicating machines. Duplicator Manufacturing Company. No. 117,945; July 1; v. 264; p. 149.
- Duplicating-machines, Duplicating-rolls for. Duplicator Manufacturing Company. No. 117,644; July 1; v. 264; p. 149.
- Eggs. Columbia Cheese Co. No. 117,177; July 1; v. 264; p. 147.
- Elbows for stovepipes, and flues, Adjustable. L. D. Berger. No. 115,871; July 1; v. 264; p. 144.
- Electric appliances. Chicago Electric Manufacturing Co. No. 117,614; July 1; v. 264; p. 148.
- Flour, Wheat. Commander Mill Co. No. 108,321; July 1; v. 264; p. 140.
- Flour, Wheat. Ellis Grove Milling Company. No. 114,666-7; July 1; v. 264; p. 143.
- Flour, Wheat. Nashville Roller Mills. No. 117,655; July 1; v. 264; p. 149.
- Flour, Wheat. J. Rosenstein. No. 115,129; July 1; v. 264; p. 143.
- Grape and apple juices, apple cider. Paul De Laney Co. No. 116,531; July 1; v. 264; p. 145.
- Hair nets, Sanitary human. National Commodities Co. No. 111,821; July 1; v. 264; p. 141.
- Hair-tonsic. G. Dolibella. No. 112,974; July 1; v. 264; p. 142.
- Hair-tonsics. M. Sander. No. 115,605; July 1; v. 264; p. 144.
- Hose, Rubber garden. Simmons Hardware Company. No. 118,485; July 1; v. 264; p. 151.
- Hosiery. Richmond Hosiery Mills. No. 94,462; July 1; v. 264; p. 139.
- Hosiery. A. Well. No. 117,262; July 1; v. 264; p. 148.
- Hosiery, Men's. S. M. Wertheimer. No. 114,475; July 1; v. 264; p. 143.
- Ignition and starting apparatus for internal-combustion engines and electric lighting systems for moving vehicles. American Bosch Magneto Corporation. No. 116,984; July 1; v. 264; p. 146.
- Insecticides and fungicides. Leggett & Brother. No. 117,620; July 1; v. 264; p. 149.
- Insoles for footwear. Burlington Blanket Company. No. 113,358; July 1; v. 264; p. 142.
- Lamps, Portable electric. S. W. Farber. No. 117,489; July 1; v. 264; p. 148.
- Leather gloves, shirts, &c. Joel Bally Davis Company. No. 98,321; July 1; v. 264; p. 139.
- Leather, Tanned and finished calf and kid. Victor Leather Company. No. 118,001; July 1; v. 264; p. 150.
- Loganberry-juice. Renken & Yates Smith. No. 110,149; July 1; v. 264; p. 146.
- Lotions, Skin. J. Veneto. No. 117,712; July 1; v. 264; p. 150.
- Mattresses and cushions. Marshall Ventilated Mattress Company. No. 114,346; July 1; v. 264; p. 142.
- Metal polish. Everbright Manufacturing Company. No. 112,280; July 1; v. 264; p. 141.
- Metal-working taps and dies. Gardner-Bryan Company. No. 115,658; July 1; v. 264; p. 144.
- Meters for liquids, Recording. Varnall-Waring Company. No. 116,870; July 1; v. 264; p. 146.
- Napkins, Sanitary. A. J. Churchill Co. No. 116,988; July 1; v. 264; p. 146.
- Oatmeal, meals, soups, &c. Sperry Flour Company. No. 114,472; July 1; v. 264; p. 143.
- Painters' and decorators' tools and supplies. Ridgely Trimmer Company. No. 117,091; July 1; v. 264; p. 147.
- Painters', &c., tools and supplies. Ridgely Trimmer Company. No. 111,859; July 1; v. 264; p. 141.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

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(REGISTRATION APPLIED FOR.)

- Pearls and pearl necklaces, precious, &c. stones. L. Heller & Son. No. 116,052; July 1; v. 264; p. 144.
- Perfume-bases, Gower-oils, &c. Van Dyk & Co. No. 118,073; July 1; v. 264; p. 150.
- Periodicals, Monthly. Holt Manufacturing Company. No. 117,330; July 1; v. 264; p. 148.
- Pins and snap-fasteners. Safety and toilet. De Long Hook and Eye Company. No. 100,570; July 1; v. 264; p. 139.
- Preparation to correct an acid condition of the stomach. M. F. Pratt. No. 108,955; July 1; v. 264; p. 140.
- Presses and pumps, &c. Hydraulic. Eastern Production Company. No. 117,297; July 1; v. 264; p. 148.
- Razor blades, Safety. U-Magnet Safety Razor Company. No. 116,979; July 1; v. 264; p. 146.
- Remedy, Headache. M. Rudolmber. No. 118,180; July 1; v. 264; p. 150.
- Salve. W. G. Van Hook. No. 117,464; July 1; v. 264; p. 148.
- Sauce for meats, salads, &c. Burlington Vinegar & Pickle Works. No. 112,928; July 1; v. 264; p. 142.
- Sheet-metal with a decorative coating. American Can Co. No. 94,635; July 1; v. 264; p. 139.
- Sheets, sheetings, &c. Titica Steam and Mohawk Valley Cotton Mills. No. 116,990; July 1; v. 264; p. 146.
- Shoes, Ladies'. Craddock-Terry Company. No. 117,775; July 1; v. 264; p. 150.
- Shoes, Leather. S. J. Brouwer Shoe Co. No. 107,762; July 1; v. 264; p. 140.
- Silk piece goods. Empire Silk Company. No. 115,520; July 1; v. 264; p. 143.
- Silk piece goods. L. Hoessel & Co. No. 116,275; July 1; v. 264; p. 145.
- Silver, stove, and metal polishes. C. M. Kimball Company. No. 115,740; July 1; v. 264; p. 144.
- Soap, Complexion-. Baldwin Perfumery Company. No. 116,073; July 1; v. 264; p. 144.
- Soil-tilling machines. Dunham Company. No. 112,870; July 1; v. 264; p. 142.
- Steel-wool. Ridgely Trimmer Company. No. 117,090; July 1; v. 264; p. 147.
- Salts and overcoats. Ben Wiener & Co. No. 116,804; July 1; v. 264; p. 146.
- Suits of outer wearing-apparel. C. W. Wolfe. No. 117,147; July 1; v. 264; p. 147.
- Talc and mica, Powdered. Northwestern Chemical Co. No. 110,487; July 1; v. 264; p. 141.
- Talking-machines, phonographs, &c. Sonora Phonograph Corporation. No. 118,188; July 1; v. 264; p. 151.
- Treas, mustard, coffee, &c. Meyer Bros. Coffee and Spice Co. No. 116,720; July 1; v. 264; p. 145.
- Tire and tube patches, Pneumatic. Motor Car Supply Co. No. 102,319; July 1; v. 264; p. 139.
- Ties and cravats, Men's. C. W. Zehnbauser. No. 115,168; July 1; v. 264; p. 143.
- Tires and inner tubes. Excella Tire & Rubber Co. No. 117,223; July 1; v. 264; p. 148.
- Tobacco and cigarettes, Smoking-. R. J. Reynolds Tobacco Company. No. 117,168; July 1; v. 264; p. 147.
- Tonle, Blood-. W. T. Rawleigh Company. No. 117,748; July 1; v. 264; p. 150.
- Tractors and parts thereof. Cleveland Tractor Company. No. 114,091; July 1; v. 264; p. 142.
- Valve-grinding and seat's-foot clutch and brake compounds, &c. Northwestern Chemical Co. No. 110,492; July 1; v. 264; p. 141.
- Vellings, Bettlings, chiffons, &c. Glensder Textile Co. No. 117,525; July 1; v. 264; p. 148.
- Water, Mineral. Ed. E. Dismuke. No. 108,487; July 1; v. 264; p. 140.
- Wool piece goods. Haas Brothers. No. 117,163; July 1; v. 264; p. 147.

CLASSIFICATION OF PATENTS

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62: 1,308,646	29: 1,308,292	10: 1,308,467	39: 1,308,385	59: 1,308,406	158— 53: 1,308,452
18— 2: 1,308,132	12: 1,308,167	17: 1,308,035	68: 1,308,456	80: 1,308,722	99: 1,308,364
5.3: 1,308,475	13: 1,308,395	51: 1,308,116	70: 1,308,531	91: 1,308,123	117.5: 1,308,739
6: 1,308,111	58.5: 1,308,206	36: 1,308,522	93— 2: 1,308,610	99: 1,308,707	118: 1,308,472
14: 1,308,517	7: 1,308,174	63: 1,308,100	6: 1,308,391	148: 1,308,510	19: 1,308,479
59: 1,308,330	11: 1,308,383	65: 1,308,640	26: 1,308,540	149: 1,308,076	82: 1,308,178
20— 92: 1,308,372	25: 1,308,351	91: 1,308,212	2: 1,308,538	1,308,535	82: 1,308,650
21— 8: 1,308,142	33: 1,308,666	24: 1,308,215	95— 2: 1,308,538	1,308,567	82: 1,308,650
1,308,460	31: 1,308,695	39: 1,308,334	1,308,710	164: 1,308,061	122: 1,308,272
9: 1,308,105	53: 1,308,200	116: 1,308,684	51: 1,308,617	169: 1,308,107	167— 3: 1,308,571
21: 1,308,189	61: 1,308,323	6: 1,308,359	53: 1,308,642	1,308,663	169— 17: 1,308,546
31: 1,308,488	67: 1,308,198	49: 1,308,450	82: 1,308,708	1,308,715	26: 1,308,075
39: 1,308,220	1,308,240	1,308,734	97— 6: 1,308,676	174: 1,308,489	170— 105: 1,308,649
57: 1,308,307	76: 1,308,658	53: 1,308,060	7: 1,308,445	185: 1,308,701	159: 1,308,527
62: 1,308,209	125: 1,308,502	1,308,521	30: 1,308,691	1: 1,308,201	171— 34: 1,308,656
1,308,392	132: R. 14. 679	54: 1,308,298	40: 1,308,109	124— 24: 1,308,131	222: 1,308,449
76: 1,308,525	148: 1,308,157	85: 1,308,325	70: 1,308,278	126— 20: 1,308,483	259: 1,308,274
105: 1,308,130	148: 1,308,695	110: 1,308,458	1,308,744	41: 1,308,412	252: 1,308,064
120: 1,308,537	26: 1,308,086	112: 1,308,319	98— 22: 1,308,737	99: 1,308,335	172— 126: 1,308,305
137: 1,308,079	33: 1,308,531	113: 1,308,487	23: 1,308,188	117: 1,308,194	179: 1,308,060
145: 1,308,636	49: 1,308,665	113: 1,308,453	29: 1,308,744	244: 1,308,245	1,308,070
159: 1,308,308	54: 1,308,141	49: 1,308,306	51: 1,308,536	252: 1,308,492	1,308,089
182: 1,308,232	57: 1,308,143	101: 1,308,419	99— 11: 1,308,250	351: 1,308,078	1,308,106
193: 1,308,504	1: 1,308,497	118: 1,308,199	100— 24: 1,308,397	127— 9: 1,308,493	229: 1,308,435
197: 1,308,289	22: 1,308,439	1,308,265	56: 1,308,129	128— 39: 1,308,427	240: 1,308,229
211: 1,308,513	24: 1,308,277	82: 1,308,620	95: 1,308,149	191: 1,308,509	274: 1,308,068
215: 1,308,062	2: 1,308,647	167: 1,308,560	236: 1,308,658	309: 1,308,755	281: 1,308,514
155: 1,308,156	6: 1,308,441	1,308,626	265: 1,308,114	16: 1,308,586	289: 1,308,589
188: 1,308,524	13: 1,308,564	16: 1,308,332	29: 1,308,345	129— 16.8: 1,308,471	303: 1,308,590
209: 1,308,103	1,308,670	17: 1,308,499	44: 1,308,436	10: 1,308,113	329: 1,308,284
23— 1: 1,308,576	52: 1,308,420	26: 1,308,556	75: 1,308,515	131— 12: 1,308,612	298: 1,308,390
1,308,577	70: 1,308,652	28: 1,308,160	77: 1,308,238	132— 25: 1,308,266	260: 1,308,214
3: 1,308,356	82: 1,308,034	39: 1,308,495	105— 50: 1,308,044	134— 26: 1,308,575	324: 1,308,389
11: 1,308,243	114: 1,308,350	46: 1,308,447	1,308,045	46: 1,308,136	328: 1,308,172
13: 1,308,080	14: 1,308,174	46: 1,308,447	168: 1,308,499	48: 1,308,092	175— 21: 1,308,585
22: 1,308,154	27: 1,308,340	59: 1,308,104	204: 1,308,192	53: 1,308,165	273: 1,308,042
24: 1,308,071	35: 1,308,254	78: 1,308,683	230: 1,308,442	70: 1,308,499	277: 1,308,518
1,308,395	37: 1,308,183	81: 1,308,559	244: 1,308,418	75: 1,308,072	282: 1,308,424
1,308,413	49: 1,308,405	99: 1,308,614	1,308,422	80: 1,308,613	294: 1,308,048
1,308,414	1,308,432	100: 1,308,250	248: 1,308,421	104: 1,308,382	1,308,059
5: 1,308,623	89: 1,308,673	17: 1,308,735	512: 1,308,073	155: 1,308,371	1,308,249
90: 1,308,079	1,308,673	76— 4.4: 1,308,067	332: 1,308,511	59: 1,308,121	1,308,256
101: 1,308,096	7: 1,308,498	101: 1,308,542	406: 1,308,599	65: 1,308,153	1,308,257
211: 1,308,146	44: 1,308,341	58: 1,308,304	1,308,300	1,308,234	1,308,385
1,308,545	17.1: 1,308,278	96: 1,308,503	106— 28: 1,308,644	1,308,246	310: 1,308,275
217: 1,308,446	45: 1,308,337	15: 1,308,516	107— 9: 1,308,216	1,308,144	363: 1,308,041
224: 1,308,140	52: 1,308,290	53: 1,308,450	108— 26: 1,308,205	1,308,202	364: 1,308,448
	11: 1,308,638		30: 1,308,311	141— 7: 1,308,185	64: 1,308,087
				142— 161: 1,308,541	

CLASSIFICATION OF PATENTS.

179—	15: 1,308,539	193—	29: 1,308,148	215—	104: 1,308,362	230—	16: 1,308,608	244—	16: 1,308,054	261—	50: 1,308,566	
	1,308,553	194—	32: 1,308,233	216—	12: 1,308,322		27: 1,308,387		19: 1,308,632	87: 1,308,587		
27: 1,308,554	195—	1: 1,308,588		13: 1,308,280		24: 1,308,288		21: 1,308,033		89: 1,308,338		
1,308,740	196—	25: 1,308,161		14: 1,308,678	233—	25: 1,308,271		1,308,375	262—	1: 1,308,583		
1,308,749	197—	6, 2: 1,308,648		15: 1,308,682	234—	28: 1,308,580		1,308,478		8: 1,308,639		
1,308,664		43: 1,308,328		31: 1,308,578		34: 1,308,128	245—	52: 1,308,401	273—	14: 1,308,190		
1,308,725		72: 1,308,411	219—	2: 1,308,399	235—	52: 1,308,279		126: 1,308,535		23: 1,308,653		
1,308,726		82: 1,308,386		11: 1,308,655		58: 1,308,112		180: 1,308,534		24: 1,308,241		
180—	14: 1,308,315	199—	40: 1,308,594		19: 1,308,581		60: 1,308,133		182: 1,308,558		43: 1,308,743	
	16: 1,308,316	200—	27: 1,308,711		30: 1,308,127		73: 1,308,510		196: 1,308,543	264—	1: 1,308,557	
	17: 1,308,634	204—	5: 1,308,704		38: 1,308,211		79: 1,308,548		1,308,544		19: 1,308,410	
	33: 1,308,022		8: 1,308,040		41: 1,308,023		81: 1,308,748	298: 1,308,568	265—	45: 1,308,223		
	1,308,602		25: 1,308,508		56: 1,308,043		100, 5: 1,308,671	375: 1,308,719		8: 1,308,077		
45: 1,308,314		29: 1,308,230	220—	20: 1,308,119		108, 5: 1,308,203		13: 1,308,677	296—	43: 1,308,481		
181—	27: 1,308,566		58: 1,308,509		26: 1,308,573	238—	38: 1,308,203		1,308,473		10: 1,308,601	
182—	12: 1,308,582		64: 1,308,273		32: 1,308,563		45: 1,308,177		1,308,697	267—	8: 1,308,171	
184—	6: 1,308,225		1,308,624		43: 1,308,657		188: 1,308,618		1,308,730		15: 1,308,287	
	27: 1,308,417	208—	33: 1,308,270		55: 1,308,197		207: 1,308,689	248—	3: 1,308,730	268—	34: 1,308,461	
	91: 1,308,331		36: 1,308,377		57: 1,308,333	240—	2: 1,308,182		20: 1,308,456		30: 1,308,336	
	105: 1,308,604		42: 1,308,425		73: 1,308,622		7: 1,308,498		22: 1,308,096	270—	57: 1,308,532	
186—	16: 1,308,391	165: 1,308,309		82: 1,308,703		8: 5: 1,308,032		50: 1,308,071	271—	60: 1,308,115		
188—	4: 1,308,619		1,308,526	221—	93: 1,308,242		1,308,579	250—	17: 1,308,530	274—	27: 1,308,454	
	23: 1,308,046	210—	13: 1,308,438		99: 1,308,572		10: 1,308,584	251—	6: 1,308,154		38: 1,308,158	
	52: 1,308,383	211—	13: 1,308,605		1,308,713		48, 4: 1,308,431		20: 1,308,262		30: 1,308,336	
	82: 1,308,492		24: 1,308,031		100: 1,308,547		49: 1,308,415		77: 1,308,118	277—	7: 1,308,112	
189—	24: 1,308,680		25: 1,308,212		102: 1,308,091		61: 1,308,204		144: 1,308,143	279—	16: 1,308,681	
	26: 1,308,428	213—	37: 1,308,702		109: 1,308,258		62: 1,308,730	253—	194: 1,308,108		107: 1,308,176	
	68: 1,308,276		64: 1,308,099		112: 1,308,714	241—	78: 1,308,680	254—	44: 1,308,310	281—	30: 1,308,336	
	78: 1,308,083	214—	21: 1,308,641		122: 1,308,252		6: 1,308,097		157: 1,308,486		34: 1,308,461	
190—	12: 1,308,727	215—	115: 1,308,159	223—	17: 1,308,381		22: 1,308,529	257—	19: 1,308,667	283—	57: 1,308,532	
191—	50: 1,308,120		1: 1,308,742		236—	24: 1,308,101		32: 1,308,191		60: 1,308,115		
193—	10: 1,308,369		54: 1,308,697		238—	12: 1,308,147	242—	1: 1,308,153		38: 1,308,158		
	1,308,370		80: 1,308,226		239—	3: 1,308,317	243—	3: 1,308,291		241: 1,308,135	294—	12: 1,308,164
	1,308,464		83: 1,308,606		240—	16: 1,308,068		14: 1,308,175	258—	26: 1,308,261	298—	14: 1,308,597
	17: 1,308,367		84: 1,308,745			7: 1,308,597		1,308,657				
	21: 1,308,496		1,308,746									

ALPHABETICAL LIST OF PATENTEEES

TO WHOM

PATENTS WERE ISSUED ON THE 8TH DAY OF JULY, 1919.

- A. Schrader's Son Incorporated. (See Nielsen, Frederik, assignor.)
- Abbott, Lytle S., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburg, Pa. Process of and apparatus for making halids. No. 1,308,885; July 8; v. 264; p. 182.
- Adams & Westlake Company, The. (See Hamm and Stewart, assignors.)
- Adams & Westlake Company, The. (See Hamm, William B., assignor.)
- Adams & Westlake Company, The. (See Seidel and Wattman, assignors.)
- Adams-Bagnall Electric Company. (See Thoratou, George A., assignor.)
- Adams, Edgar W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching apparatus. No. 1,309,231; July 8; v. 264; p. 254.
- Adams, Morton L., assignor to Adams Tractor Company, Seattle, Wash. Tractor attachment for motor-vehicles. No. 1,309,053; July 8; v. 264; p. 223.
- Adams Tractor Company. (See Adams, Morton L., assignor.)
- Adkins, Arthur, Leicester, England. Means for destroying enemy submarine craft. No. 1,309,391; July 8; v. 264; p. 283.
- Ahond, Felix, Paris, France. Tool of circular shape with cutting-teeth, such as screw-taps, screw-platens, boring-tools, and milling-cutters. No. 1,309,233; July 8; v. 264; p. 254.
- Aircraft Fireproofing Corporation. (See Bradley, Parker B., assignor.)
- Alraide Lauer Tire Company. (See Grube, John H., assignor.)
- Alkin, Allison, East Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Protective device for electrical apparatus. No. 1,309,233; July 8; v. 264; p. 254.
- Artikolaget Svenska Kullagerfabriken. (See Hultgren, Axel G. E., assignor.)
- Asbach, Frank, assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Basket-ball goal. No. 1,308,831; July 8; v. 264; p. 179.
- Albrecht, John H., Madison, assignor to The T. L. Smith Company, Milwaukee, Wis. Excavator. No. 1,309,054; July 8; v. 264; p. 223.
- Aldrich, Carl G. (See Swift, Charles S., assignor.)
- Allen, George H., Clinton, N. Y. Furniture-polish. No. 1,309,171; July 8; v. 264; p. 243.
- Allen, Sherman T., Los Angeles, Calif., assignor of one-half to J. H. Hunt, Chicago, Ill. Self-cleaning grouser for tractor-wheels and the like. No. 1,309,006; July 8; v. 264; p. 212.
- Altman, Irwin, Waynesburg, Pa. Abdominal support. No. 1,309,007; July 8; v. 264; p. 212.
- Allyn, Robert S., trustee. (See Clark, Norris E., assignor.)
- Alpenbach, James R., Portsmouth, Ohio. Mechanical movement. No. 1,308,832; July 8; v. 264; p. 179.
- Amalgamated Machinery Corporation. (See Yeomans, Lucien I., assignor.)
- American District Telegraph Company. (See Hopkins, Richard M., assignor.)
- American La France Fire Engine Company. (See Knoblock, James W., assignor.)
- American Laundry Machinery Company, The. (See Bruley, C. L., assignor.)
- American Laundry Machinery Company. (See Snow, Arthur E., assignor.)
- American Optical Company. (See Tilghy and Styll, assignors.)
- American Sintering Company. (See Reckard, William F., assignor.)
- American Steam Gauge & Valve Manufacturing Company. (See Hopkins, Frank H., assignor.)
- American Tag Company. (See Swett, Arthur B., assignor.)
- American Telephone and Telegraph Company. (See Carson, John R., assignor.)
- American Telephone and Telegraph Company. (See Rappaport, Lloyd, assignor.)
- American Telephone and Telegraph Company. (See Mills and Carson, assignors.)
- Ames, Bradford L., Boston, Mass. Smoke-preventer. No. 1,309,172; July 8; v. 264; p. 243.
- Anderson, Antone T., Chicago, Ill. Wrench. No. 1,309,211; July 8; v. 264; p. 269.
- Anderson, John W., New London, Conn., assignor to Electric Boat Company. Hinged funnel. No. 1,309,055; July 8; v. 264; p. 223.
- Angell, Fred E., Battle Creek, Mich. Door-check. No. 1,309,056; July 8; v. 264; p. 223.
- Archbold, Joseph G., Monkton, England. Automatic coupling for railway and other vehicles. No. 1,309,057; July 8; v. 264; p. 223.
- Archer, Charles E., and E. C. Humphreys, Detroit, Mich. Signal-lamp. No. 1,309,392; July 8; v. 264; p. 283.
- Armstrong, Ernest K., Millersburg, Ohio. Hair-pin. No. 1,308,813; July 8; v. 264; p. 179.
- Aromist Company, The. (See Harris and Bogue, assignors.)
- Arthur-Fowler Co. (See Arthur, Guy, assignor.)
- Arthur, Guy, assignor to Arthur-Fowler Co., Knoxville, Wash. Electric water-heater. No. 1,309,234; July 8; v. 264; p. 254.
- Arthur, James W., assignor to The Williams Foundry & Machine Company, Akron, Ohio. Vulcanizing apparatus. No. 1,309,334; July 8; v. 264; p. 179.
- Arthur, James W., Warren, Ohio. Tire-casing holder and shifter. No. 1,309,058; July 8; v. 264; p. 223.
- Arvian, Abraham A., assignor to R. Levin, Brooklyn, N. Y. Sprinkler system. No. 1,308,974; July 8; v. 264; p. 208.
- Ascher, Louis K., Indianapolis, Ind. Thermostatically-controlled radiator-valve. No. 1,309,008; July 8; v. 264; p. 212.
- Ashley, Arthur E., Boise, Idaho. Hood-lift motor-ventilator. No. 1,309,023; July 8; v. 264; p. 196.
- Augenthaler, Harry E. (See Greco, Joseph, assignor.)
- Austin, Walter M., Swinvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Constructing electric terminals. No. 1,308,975; July 8; v. 264; p. 208.
- Autosales Corporation. (See Pann, August C., assignor.)
- Avram, Mois H., assignor to Slocum, Avram and Slocum, Inc., New York, N. Y. Efficiency-recorder. No. 1,309,235; July 8; v. 264; p. 254.
- Averill, Earl A., Mount Vernon, N. Y., assignor to Locomotive Feed Water Heater Company, Wilmington, Del. Locomotive-feed-water heater. No. 1,308,835; July 8; v. 264; p. 180.
- B. F. Goodrich Company, The. (See Gammeter, John E., assignor.)
- B. F. Goodrich Company. (See Bentley and Gibbs, assignors.)
- Bacon, George M., Salt Lake City, Utah. Rotary valve. No. 1,309,059; July 8; v. 264; p. 223.
- Badrger, Oliver L., Plainfield, N. J., assignor to Kerr Adjustable Strap Company, Inc., New York, N. Y. Slingsitting for guns. No. 1,309,431; July 8; v. 264; p. 291.
- Baker, R. Franklin, St. Stephen, New Brunswick, Canada. Ticket-chase. No. 1,308,173; July 8; v. 264; p. 243.
- Baker, George S. (See Shaw and Baker.)
- Baker, Thomas W. (See Magee, Frederick W., assignor.)
- Barlett Hayward Company, The. (See Belgiano, Gilbert F., assignor.)
- Barling, Walter H. (See Tarrant and Barling.)
- Barrett, John F., et al. (See Jewett, John C. and W. A., assignors.)
- Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Adjuster for range-finders. No. 1,309,174; July 8; v. 264; p. 243.
- Barrett, Arthur M., Winnetka, Ill. Truck. No. 1,308,750; July 8; v. 264; p. 165.
- Barrett, Joseph C., Brooklyn, N. Y. Measuring instrument. No. 1,308,751; July 8; v. 264; p. 165.
- Bartlett, Edward T., Llanaroch, Pa. Means for raising smelter ships. No. 1,309,111; July 8; v. 264; p. 232.
- Bassett, Edgar F., Harwich, Mass. Cranberry-picker. No. 1,309,006; July 8; v. 264; p. 212.
- Batt, Charles F., Brooklyn, N. Y. Internal-combustion-engine power plant. No. 1,309,236; July 8; v. 264; p. 255.
- Bausch & Lomb Optical Company. (See Kellner, Gustav A. H., assignor.)
- Bauman, Alonzo L., Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass. Rotary pump. No. 1,309,237; July 8; v. 264; p. 255.
- Baxter & Coaster. (See Batheram, Joseph, assignor.)
- Beach, Merrill A., Penn Yan, N. Y. Liquid-dispersing apparatus. No. 1,309,505; July 8; v. 264; p. 294.
- Beausmont, Frederick J., London, England. Connection for electric batteries. No. 1,309,561; July 8; v. 264; p. 315.

ALPHABETICAL LIST OF PATENTEES.

Hachereau, Louis, Paris, France. Multiple-engine driving mechanism. No. 1,309,451; July 8; v. 264; p. 295.
 Becht, Edward C., Newport, Ky. Heating and aerating process and apparatus. No. 1,309,175; July 8; v. 264; p. 243.
 Behrman, Marcus B., New York, N. Y., assignor to Los Seal Corporation. Tag-fastener. No. 1,308,771; July 8; v. 264; p. 188.
 Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Selecting system. No. 1,309,179; July 8; v. 264; p. 244.
 Bell, Thomas W., and T. C. Rogers, Sistersville, W. Va. Wire-line clamp. No. 1,308,924; July 8; v. 264; p. 190.
 Bendix, Vincent, Chicago, Ill. Engine-starter. No. 1,308,732; July 8; v. 264; p. 165.
 Benlison, Niels, High Holborn, London, England. Means for molding powdered substances. No. 1,309,112; July 8; v. 264; p. 232.
 Benoit, Louis K., Hastings, Fla. Tractor-wheel. No. 1,309,010; July 8; v. 264; p. 213.
 Benjamin Electric Manufacturing Company. (See Benjamin, Reuben H., assignor.)
 Benjamin, Reuben H., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electrical receptacle. No. 1,308,977; July 8; v. 264; p. 204.
 Bennett, Elmer. (See Parsons, Bennett, and Rowe.)
 Bentley, Oliver D. H., West Roxbury, and J. H. Gibbs, Readville, assignors to B. F. Sturtevant Company, Hyde Park, Mass. Gearing. No. 1,309,113; July 8; v. 264; p. 232.
 Bernard, Pierre J. H., Montreal, Quebec, Canada. Heater. No. 1,309,430; July 8; v. 264; p. 180.
 Berthel, Charles J., Akron, Ohio. Stabilizing device for use on aeroplanes. No. 1,309,452; July 8; v. 264; p. 295.
 Bertrand, Joseph P., Port Arthur, Ontario, Canada. Garden tool. No. 1,309,177; July 8; v. 264; p. 244.
 Bessler, Moravia Stairway Co., The. (See Bessler, Frank R., assignor.)
 Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Needle-clamp. No. 1,309,272; July 8; v. 264; p. 261.
 Barker, John P., Tropico, assignor, by mesne assignments, to C. F. Hunter, Los Angeles, Calif. Internal-combustion motor. No. 1,309,312; July 8; v. 264; p. 260.
 Belec, Adolf, Pittsburgh, Pa. Regulating-valve. No. 1,309,313; July 8; v. 264; p. 260.
 Bessler, Frank R., assignor to The Bessler Moravia Stairway Co., Akron, Ohio. Panel-stairway. No. 1,309,314; July 8; v. 264; p. 270.
 Betts, Harry D., Kansas City, Mo. Wireless and automatic railway safety system. No. 1,308,925; July 8; v. 264; p. 190.
 Binks, Harold, Ekeles, England. Carburetor for internal-combustion engines. No. 1,309,178; July 8; v. 264; p. 244.
 Black, John L., assignor to O. P. Tucker, Valdosta, Ga. Fuel-saving device. No. 1,309,114; July 8; v. 264; p. 233.
 Blackburn, Jasper, Webster Groves, Mo. Cable-hanger. No. 1,308,979; July 8; v. 264; p. 207.
 Blackburn, Jasper. (See Trachte, Dietrich F., assignor.)
 Blackburn, Jasper, Webster Groves, Mo. Cable-hanger. No. 1,308,979; July 8; v. 264; p. 207.
 Blackman, Charles D., et al. (See Lelch, Roy C., assignor.)
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 Borden's Condensed Milk Company. (See Taylor, Burt E., assignor.)
 Bourque, David, Amesbury, assignor to G. W. Murphy Company, Merrimac, Mass. Machine for producing spring-carrying pins. No. 1,309,011; July 8; v. 264; p. 213.
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 Brown, E. D. (See Johnson, James A., assignor.)
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 Brown, Irving A., Sandusky, Ohio. Journal-lubricator. No. 1,309,013; July 8; v. 264; p. 214.
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 Eggleston, Robert N., Muskogee, Okla., assignor to Pull-Back Manufacturing Company, St. Louis, Mo. Stake. No. 1,308,939; July 8; v. 264; p. 199.
 Eggleston, Robert N., assignor to Multipull Manufacturing Company, St. Louis, Mo. Ground-stake. No. 1,308,940; July 8; v. 264; p. 199.
 Ekis, Alexander C., Mankato, Minn. Control for transmission-gears. No. 1,309,469; July 8; v. 264; p. 298.
 Eldred, Myron E., and G. Mercereau, New York, N. Y., assignors to Chemical Development Company. Regulating catalysts. No. 1,308,777; July 8; v. 264; p. 169.
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 Electric Controller & Manufacturing Company, The. (See Canfield, Harry, R., assignor.)
 Elevator Supplies Company. (See Graham, James M., assignor.)
 Eley, Charles V. A., Edgbaston, Birmingham, England. Collision-mat for use on ships. No. 1,309,022; July 8; v. 264; p. 216.
 Ella, Giovanni E., New York, N. Y. Apparatus for destroying submarine boats. No. 1,309,129; July 8; v. 264; p. 234.
 Ella, Giovanni E., Turin, Italy. Explosive-mine apparatus. No. 1,309,121; July 8; v. 264; p. 234.
 Ellboj, John, Stockholm, Sweden. Casting grooves or impressions in rollers. No. 1,309,513; July 8; v. 264; p. 300.
 Ellis, Carleton, Montreal, and A. A. Wells, Caldwell, N. J., assignors to Ellis-Foster Company. Nitration method. No. 1,309,320; July 8; v. 264; p. 270.
 Ellis-Foster Company. (See Ellis and Wells, assignors.)
 Empla, Henri C., Paris, France. Apparatus for vaporizing hydrocarbons. No. 1,309,514; July 8; v. 264; p. 306.
 Englot, Felix, Lemberg, Saskatchewan, Canada. Rail-joint. No. 1,309,356; July 8; v. 264; p. 277.
 Ennis, Charles E., assignor to Wells-Froggess Switch and Manufacturing Company, Kansas City, Mo. Swing-rail switch-frag. No. 1,309,023; July 8; v. 264; p. 216.
 Eppler, Andrew, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Welt crooving and bevelling machine. No. 1,309,567; July 8; v. 264; p. 317.
 Erskenz, Henry H. (See Young, William A., assignor.)

Espenschied, Lloyd, Hollis, N. Y., assignor to American Telephone and Telegraph Company. Radiofrequency interference-balance. No. 1,309,400; July 8; v. 264; p. 285.
 Estes, William R., Sr., assignor of one-fourth to A. Lyons, Newark, N. J. Tire-protectors and antiskid device. No. 1,309,515; July 8; v. 264; p. 306.
 Evans, Adele K., executrix. (See Evans, Henry R.)
 Evans, Edward L., Jewett, Tex. Auto-carrier. No. 1,309,479; July 8; v. 264; p. 298.
 Evans, Henry R., deceased, New York, N. Y., A. K. Evans, executrix. Motion-picture apparatus. No. 1,308,984; July 8; v. 264; p. 208.
 Evans, Henry R., deceased, London, England, A. K. Evans, executrix. Method of and apparatus for feeding motion-picture films. No. 1,309,471; July 8; v. 264; p. 298.
 Everatic Anchor Company. (See Widen, Elmer N., assignor.)
 Excelsior Steel Furnace Company, The. (See Menk, Rudolph W., assignor.)
 Fairbanks, Ernest S., Greenfield, Mass. Friction-clutch. No. 1,309,472; July 8; v. 264; p. 298.
 Fairweather, Frederick H., Bridgeport, Conn. Air-gun. No. 1,309,321; July 8; v. 264; p. 271.
 Falco, Orange R., Salem, Ohio. Steering-wheel for automobiles. No. 1,309,123; July 8; v. 264; p. 234.
 Falk, Kaufman G., and E. M. Frankel, assignors to W. G. Lyle, trustee, New York, N. Y. Preserving food. No. 1,309,367; July 8; v. 264; p. 277.
 Fanslow, Benjamin O., Rye, N. Y. Checkwriter. No. 1,308,941; July 8; v. 264; p. 199.
 Fairies, Robert, assignor to Walrus Manufacturing Company, Decatur, Ill. Jer and dipper for serving crushed fruit or the like. (Release.) No. 14,681; July 8; v. 264; p. 324.
 Farnham, Carl O., Paris, Ill. Internal-combustion rotary engine. No. 1,308,896; July 8; v. 264; p. 191.
 Farnsworth, Frederick C., Conshohocken, Pa. Tilting trap. No. 1,308,697; July 8; v. 264; p. 191.
 Farrell, George R., Detroit, Mich. Vehicle-wheel. No. 1,309,473; July 8; v. 264; p. 298.
 Farrell, Joseph E., Jr., Washington, D. C., assignor to International Mollusca Company, Inc. of Delaware. Combination-granule. No. 1,309,280; July 8; v. 264; p. 263.
 Farthing, David J., deceased; W. J. Pierce, administrator, assignor of one-third to J. E. Reece and one-third to A. C. Reece, Butler, Tenn. Corn-harvester. No. 1,309,568; July 8; v. 264; p. 317.
 Faub, Joseph S., Bloomfield, N. J. Spark-plug. No. 1,309,192; July 8; v. 264; p. 246.
 Federal Telegraph Company. (See Fuller, Leonard F., assignor.)
 Fenton, Walter, Manchester, England, assignor to Underwood Typewriter Company, New York, N. Y. Typewriter machine. No. 1,309,322; July 8; v. 264; p. 271.
 Ferris, Walter, Milwaukee, Wis., and W. E. Magie, Evansville, Ind. Hydraulic transmission device. No. 1,308,844; July 8; v. 264; p. 181.
 Finnane & Trading Corporation of New York. (See Maise, Herman C., assignor.)
 Finch, Maurice S. (See Young and Finch.)
 Fischer, William, assignor of one-half to L. Blumenstein, New Richmond, Ohio. Knitting-machine. No. 1,309,124; July 8; v. 264; p. 234.
 Fisher, Austin C., assignor to Eastman Kodak Company, Rochester, N. Y. Folding camera. No. 1,308,985; July 8; v. 264; p. 208.
 Flanders, Bert W., assignor to The New London Chemical Company, New London, Conn. Deodorizer. No. 1,308,845; July 8; v. 264; p. 181.
 Flaherty, John A., Los Angeles, Calif. Tile construction. No. 1,309,064; July 8; v. 264; p. 223.
 Fogelsonger, Howard, Clarence, N. Y. Bean-sorting machine. No. 1,309,401; July 8; v. 264; p. 285.
 Folk, Joseph. (See Lunzka and Folk.)
 Folsom, Clarence P., and L. E. Halteman, assignors to Dayton Heater and Holst Co., Dayton, Ohio. Fastening means for heater-roll bars. No. 1,309,402; July 8; v. 264; p. 285.
 Forbes, Charles W., Pasadena, Calif. Fireplace-furnace. No. 1,309,024; July 8; v. 264; p. 216.
 Forbes, Ewing M., Chappaqua, N. Y., assignor to W. W. Mountain, Flint, Mich. Tool and tool-holder. No. 1,309,281; July 8; v. 264; p. 263.
 Ford, John F., Los Angeles, Calif. Article-holder. No. 1,309,125; July 8; v. 264; p. 235.
 Fort, Tandy L., Dallas, Tex., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriter machine. No. 1,309,403; July 8; v. 264; p. 285.
 Foster, George W., Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Winding-machine. No. 1,309,404; July 8; v. 264; p. 286.
 Foundry Appliance Company, The. (See Frantz, Jerome A., assignor.)
 Fowler, Alfred R., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Punching-machine. No. 1,308,780; July 8; v. 264; p. 170.
 Fowler, Le Roy J. (See Skinner and Fowler.)
 Fox, Lawrence J., New York, N. Y. Cloth-drilling machine. No. 1,308,898; July 8; v. 264; p. 191.
 Frame, William J., London, England. Multistage centrifugal fan and pump. No. 1,309,282; July 8; v. 264; p. 263.

Franko, Albert J., et al. (See Jacobs, Alexander L., assignor.)
 Franko, Louis N., et al. (See Jacobs, Alexander L., assignor.)
 Frankel, Edward M. (See Falk and Frankel.)
 Frantz, Jerome N., assignor to The Foundry Appliance Company, Newark, N. J. Molding-machine. No. 1,309,126; July 8; v. 264; p. 235.
 Fred Medart Manufacturing Company. (See Albach, Frank, assignor.)
 French, Alfred W., Piqua, Ohio. Apparatus for drying stone or other material. No. 1,308,942; July 8; v. 264; p. 199.
 French, Alfred W., Piqua, Ohio. Apparatus for separating solid matter from liquids. No. 1,308,943; July 8; v. 264; p. 200.
 French Oil Mill Machinery Co., The. (See Schwable, Frederick J., assignor.)
 Frieble, George M., Lebrat, Saskatchewan, Canada. Belt guide and shifter. No. 1,309,474; July 8; v. 264; p. 298.
 Fryant, Harris T., Memphis, Tenn., and W. R. Crout, Hachhurst, Miss. Cooker for seed-meats. No. 1,308,586; July 8; v. 264; p. 320.
 Fuller, Leonard F., assignor to Federal Telegraph Company, San Francisco, Calif. Radiotelegraphy. No. 1,309,283; July 8; v. 264; p. 263.
 Fuller, Nelson T., New Bedford, Mass. Brick cleaning machine. No. 1,309,405; July 8; v. 264; p. 286.
 G. W. Murphy Company. (See Bourque, David, assignor.)
 Gagnon, Peter J., Jr., South Lowell, assignor of one-half to K. A. Wilson, Lowell, Mass. Rag-turning machine. No. 1,308,944; July 8; v. 264; p. 200.
 Gail, John E., assignor to Simmons Company, Kenosha, Wis. Tube-aquaring apparatus. No. 1,308,945; July 8; v. 264; p. 200.
 Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Mold-opener. No. 1,309,128; July 8; v. 264; p. 235.
 Gamper, G. Herman. (See Klagsbury, Elmer J., assignor.) (Release.)
 Gannoe Manufacturing Company. (See Gannoe, Thomas A., assignor.)
 Gannoe, Thomas A., Warren, Pa., assignor to Gannoe Manufacturing Company. Centrifugal gun. No. 1,309,129; July 8; v. 264; p. 235.
 Garretson, John D. (See Leibing, William E., assignor.)
 Garrison, Jacob T., Oakland, Calif. Rodent-exterminator. No. 1,309,193; July 8; v. 264; p. 246.
 Gaston, Robert P., Baltimore, Md. Card-rack. No. 1,309,194; July 8; v. 264; p. 247.
 Gee, Norman E., Altoona, Pa. Double-acting fuel crushing and feeding device. No. 1,308,900; July 8; v. 264; p. 192.
 Gentry, Evert L., Idabel, Okla. Armor for shingles. No. 1,309,065; July 8; v. 264; p. 224.
 Geoghegan, Edward A., San Francisco, Calif. Superheater. No. 1,309,025; July 8; v. 264; p. 216.
 Gerard, Joseph R., Parsons, Kansas. Locomotive draft-regulator. No. 1,309,516; July 8; v. 264; p. 306.
 Gerhardt, Herman F., University, Minn. Covered pulley. No. 1,309,284; July 8; v. 264; p. 264.
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 Giddens, Perry G., Salem, Oreg. Clasp. No. 1,309,323; July 8; v. 264; p. 271.
 Giddens, Perry G., assignor to Curtis M. Bass, Columbus, Ga. Driving rein support. No. 1,309,195; July 8; v. 264; p. 247.
 Giddings, George H., Ilion, N. Y. Ejecting device for double-barrel guns. No. 1,309,026; July 8; v. 264; p. 217.
 Gilson, Edward J., et al., trustees. (See Gray, Winfield H., assignor.)
 Gilhoush, Benjamin G., Los Angeles, Calif. Tire-pressure indicator. No. 1,309,317; July 8; v. 264; p. 307.
 Glielster, John F., Chicago, Ill. Dining-table connector. No. 1,309,490; July 8; v. 264; p. 286.
 Gildersleeve, Donald M., et al. (See Lamberson, George E., assignor.)
 Giaridni, Felice, Turin, Italy. Belt. No. 1,309,066; July 8; v. 264; p. 224.
 Gillett, Charles, Toronto, Ontario, Canada. Fuse control for multiphase-circuits. No. 1,309,027; July 8; v. 264; p. 217.
 Glenn, Thomas F., Ardmore, Pa., assignor to The S. S. White Dental Manufacturing Company. Producing artificial teeth. No. 1,309,127; July 8; v. 264; p. 235.
 Glick, Paul, assignor to Railway Electric Manufacturing Co., Milwaukee, Wis. Call-box. No. 1,309,569; July 8; v. 264; p. 317.
 Goldfarb, Nathan J. (See Mendelson and Goldfarb.)
 Goodhue, Julian G., assignor to The Universal Utilities Company of Illinois, Chicago, Ill. Disinfecting system. No. 1,309,028; July 8; v. 264; p. 217.
 Goodhue, Julian G., assignor to The Universal Utilities Company of Illinois, Chicago, Ill. Disinfecting apparatus. No. 1,309,029; July 8; v. 264; p. 217.
 Goodman Manufacturing Company. (See Davis, Charles E., assignor.)
 Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic telephone system. No. 1,309,248; July 8; v. 264; p. 257.
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 Goodyear's Metallic Rubber Shoe Company, The. (See Price, Raymond H., assignor.)
 Graham, James M., Maplewood, N. J., assignor to Elevator Supplies Company, Inc. Elevator-door closer. No. 1,309,130; July 8; v. 264; p. 238.
 Grandmason, Joseph, Brunswick, Me., assignor to Hope-dale Manufacturing Company, Milford, Mass. Automatic loom. No. 1,309,510; July 8; v. 264; p. 317.
 Grant, Reuben P., Manchester, N. H., assignor to W. H. McElwain Company, Counter-shaving machine. No. 1,309,407; July 8; v. 264; p. 286.
 Grant, Walter L., Detroit, Mich., assignor to Sement-Solvay Company, Solvay, N. Y. Regulating the quality of coke. No. 1,308,751; July 8; v. 264; p. 165.
 Gravel, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Electric welding apparatus. No. 1,308,775; July 8; v. 264; p. 169.
 Gravel, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Welding thin plates. No. 1,308,781; July 8; v. 264; p. 170.
 Gravel, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Transformer-secondary. No. 1,308,782; July 8; v. 264; p. 170.
 Graves, John S., Kansas City, Mo. Automatic stereopticon-machine. No. 1,309,355; July 8; v. 264; p. 277.
 Gray, James G. (See Gray, John and J. O.)
 Gray, John, London, England, and J. O. Gray, Glasgow, Scotland. Gyroscopic apparatus. No. 1,308,783; July 8; v. 264; p. 170.
 Gray, Winfield H., assignor to B. A. Hurd, Portsmouth, N. H., and E. J. Gibbon, Wakefield, Mass., trustees. Tool adjustable in taper. No. 1,309,571; July 8; v. 264; p. 317.
 Green, Joseph, assignor of one-half to H. E. Augenthaler, New York, N. Y. Releasing-penholder. No. 1,309,475; July 8; v. 264; p. 299.
 Green, Fumey E., Coalgate, Okla. Tire. No. 1,308,846; July 8; v. 264; p. 182.
 Gregg Company Limited. (See Gregg, William B., assignor.)
 Gregg, William B., assignor to The Gregg Company, Limited, Hackensack, N. J. Car-door fastening. No. 1,308,770; July 8; v. 264; p. 169.
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 Griffin, Eugene T. (See Dehn and Griffin.)
 Griffith, Euclid C., Springfield, Iowa. Automatic hog-feeder. No. 1,308,901; July 8; v. 264; p. 192.
 Grisham, Benjamin E., Memphis, Tenn. Holder for resistance-coils. No. 1,308,946; July 8; v. 264; p. 200.
 Gross, Charles E., Jr., Pittsburgh, Pa. Automatic tap. No. 1,308,902; July 8; v. 264; p. 192.
 Gruba, John H., assignor to Altrase Inner Tire Company, Los Angeles, Calif. Tire-liner. No. 1,309,219; July 8; v. 264; p. 257.
 Guerdien, Frederick C., Stamford, Conn. Driving mechanism. No. 1,309,618; July 8; v. 264; p. 307.
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 Gulick, Edward J., assignor to C. G. Conn, Limited, Elkhart, Ind. Tuning attachment for wind musical instruments. No. 1,308,903; July 8; v. 264; p. 192.
 Gunnickson, Gustav A., Seattle, Wash. Mechanical toy. No. 1,309,572; July 8; v. 264; p. 317.
 H. N. Cook Mfg. Co. (See Cook, Milton H., assignor.)
 Hagerman, Janus T., Sullivan, Ill. Radiator-humidifier. No. 1,309,519; July 8; v. 264; p. 307.
 Hagerstrom, John A., assignor to Technical Supply Company, Scranton, Pa. Mathematical instrument and the like. No. 1,309,131; July 8; v. 264; p. 239.
 Hagg, Erik L. (See Westad and Hagg.)
 Hale, Charles B., Park Ridge, Ill., assignor to Time-Systems Company, Portland, Me. Clock-case. No. 1,308,947; July 8; v. 264; p. 200.
 Haller, Carl T., managing director, Smögen, assignor to L. Laurin, Lysekil, Sweden. Muffler. No. 1,309,132; July 8; v. 264; p. 239.
 Halteman, Lee E. (See Folsom and Halteman.)
 Hamm, William S., Hubbard Woods, and W. F. Stewart, assignors to The Adams & Westlake Company, Chicago, Ill. Device for forming, assembling, and holding sheet-metal forms. No. 1,309,088; July 8; v. 264; p. 228.
 Hamm, William S., Hubbard Woods, Ill., assignor to The Adams & Westlake Company. Lamp-burner. No. 1,309,089; July 8; v. 264; p. 228.
 Hamman, George. (See Carmichael, Robert E., assignor.)
 Hammond, Ira A. (See Sother and Hammond.)
 Hancock, William D., Springfield, Tenn. Lifter. No. 1,309,324; July 8; v. 264; p. 271.
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 Harrah, Willis A., Kansas City, Mo. Tractor. No. 1,309,408; July 8; v. 264; p. 288.
 Harrington, Ralph M., assignor to E. A. Sperry, Brooklyn, N. Y. Producing lead salts. No. 1,308,948; July 8; v. 264; p. 201.
 Harris Automatic Press Company, The. (See Pritchard, Carl G., assignor.)
 Harris, Grace, Monterey, Calif. Combined seat and bed. No. 1,309,220; July 8; v. 264; p. 307.
 Harris, James, Wyoming, and R. D. Bogue, assignors to The Atomik Company, Cincinnati, Ohio. Display device. No. 1,308,949; July 8; v. 264; p. 201.

Harrold, George, Los Angeles, Calif. Adjustable curtain for wind-shields. No. 1,309,133; July 8; v. 264; p. 236.
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 Hartford Machine Gun Company, The. (See Reising, Eugene G., assignor.)
 Hassel, Neil H., Los Angeles, Calif. Riveting device. No. 1,309,134; July 8; v. 264; p. 236.
 Haug, Nils C., Drammen, Norway. Machine for taking up potatoes, &c. No. 1,309,196; July 8; v. 264; p. 247.
 Hawkins, Mason A., Baltimore, Md. Box for player-piano music-rolls. No. 1,309,030; July 8; v. 264; p. 217.
 Hawley, Royal A., assignor of one-third to J. Driver and one-third to J. Rubenkoenik, Graham, Tex. Steering mechanism for road-graders. No. 1,308,847; July 8; v. 264; p. 182.
 Hawthorne, Charles W., Buffalo, N. Y., assignor to Morgan Construction Company, Worcester, Mass. Billet-handling device for rolling-mills. No. 1,308,986; July 8; v. 264; p. 208.
 Hayes, Stanley W., Richmond, Ind. Derail. No. 1,309,434; July 8; v. 264; p. 291.
 Hearn, John F. (See Reynolds and Hearn.)
 Hechenbleikner, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Exhauster. No. 1,308,730; July 8; v. 264; p. 166.
 Heine, Ernest F., New York, N. Y. Means for preventing the theft of motor-vehicles. No. 1,309,197; July 8; v. 264; p. 247.
 Hellstrom, Oscar R., Neutral Bay, near Sydney, New South Wales, Australia. Trousers-stretching attachment to chairs. No. 1,308,755; July 8; v. 264; p. 165.
 Helzel, John N., assignor to The Helzel Steel Form & Iron Co., Warren, Ohio. Car-unloading chute. No. 1,308,950; July 8; v. 264; p. 201.
 Helzel, Joseph W., Warren, Ohio. Welding-clamp. No. 1,309,067; July 8; v. 264; p. 224.
 Helzel, Joseph W., Warren, Ohio. Concrete-form. No. 1,309,068; July 8; v. 264; p. 224.
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 Hemp, George L., Truro township, Franklin county, assignor of one-half to O. H. Mosler, Columbus, Ohio. Traction-wheel. No. 1,309,521; July 8; v. 264; p. 307.
 Henderson, James B., Lee, England. Gyrocompass. No. 1,309,409; July 8; v. 264; p. 287.
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 Hendrick, William A. E., Dorchester, assignor, by means assignments to L. F. Buff, Jamaica Plain, Mass. Driving and reversing mechanism. No. 1,309,410; July 8; v. 264; p. 287.
 Hendrick, William A. E., Boston, Mass., assignor to Hendrick Washing Machine Company. Washing, disinfecting, and drying machine. No. 1,309,411; July 8; v. 264; p. 287.
 Hendrick, William A. E., Roxbury, Mass., assignor to Hendrick Washing Machine Company. Washing-machine. No. 1,309,412; July 8; v. 264; p. 287.
 Henry, Charles A., Chicago, Ill. Counterpoising mechanism. No. 1,309,194; July 8; v. 264; p. 247.
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 Hettiger, John, London, England. Aerial conductor for wireless signaling and other purposes. No. 1,309,031; July 8; v. 264; p. 217.
 Hill, George S., Stratford, N. H., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,309,575; July 8; v. 264; p. 318.
 Hill, George S., Stratford, N. H., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,309,576; July 8; v. 264; p. 318.
 Hill, Thomas, New York, N. Y. Hose-clamp. No. 1,309,476; July 8; v. 264; p. 299.
 Hilton, Robert W., Smethport, Pa. Glass apparatus. No. 1,309,199; July 8; v. 264; p. 247.
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 Hinton, George W., assignor of one-third to E. C. Renaud and one-third to R. R. Poter, St. Joseph, Mo. Gun-pointing and automatic gun-discharging mechanism, combined. No. 1,309,091; July 8; v. 264; p. 228.
 Hirakawa, Haruo, San Diego, Calif. String-cutting ring. No. 1,309,325; July 8; v. 264; p. 271.
 Hitchcock, Robert H. (See Underwood, Lawrence H., assignor.)
 Holland, Albert, Fargo, N. D., assignor of one-tenth to A. M. Carlson, St. Paul, Minn. Flying-machine. No. 1,308,784; July 8; v. 264; p. 170.
 Holland, Edward A., Southend-on-Sea, London, England. Coating with metal of lace and other similar goods and woven or other fabrics. No. 1,309,032; July 8; v. 264; p. 218.
 Hollar, William H., Philadelphia, Pa. Vault. No. 1,309,200; July 8; v. 264; p. 248.
 Hollister, Bertram K., Chicago, Ill. Surgical package. No. 1,309,201; July 8; v. 264; p. 248.
 Hollman, Louis, Chicago, Ill. Rug and carpet cleaning machine. No. 1,308,785; July 8; v. 264; p. 170.
 Holmes, Fletcher B., Woodbury, N. J., assignor, by means assignments, to E. I. du Pont de Nemours and Company. Obtaining nitro compounds. No. 1,309,577; July 8; v. 264; p. 319.

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 Holtzhauser, Charles, assignor to La Societe de Construction des Batignolles, Paris, France. Smooth-bore gun. No. 1,309,202; July 8; v. 264; p. 248.
 Honeywell, Newell A., and C. O. McKaig, Inglewood, Calif. Ignition and starter control for automobiles. No. 1,309,135; July 8; v. 264; p. 236.
 Hoover, Herbert W., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Brush-supporting device for suction-cleaners. No. 1,309,092; July 8; v. 264; p. 228.
 Hoover, Herbert W., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Brush-driving device for suction-cleaners. No. 1,309,093; July 8; v. 264; p. 229.
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 Hopedale Manufacturing Company. (See Grandmason, Joseph, assignor.)
 Hopkins, Frank H., Somerville, assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Fluid-regulator. No. 1,309,203; July 8; v. 264; p. 248.
 Hopkins, Mark, and C. Brunkhurst, Middletown, assignors to Borden's Condensed Milk Company, New York, N. Y. Method of aerating liquefied material and machine for the purpose. No. 1,308,004; July 8; v. 264; p. 192.
 Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,257; July 8; v. 264; p. 264.
 Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,413; July 8; v. 264; p. 286.
 Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Detector device. No. 1,309,258; July 8; v. 264; p. 264.
 Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,308,772; July 8; v. 264; p. 168.
 Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,285; July 8; v. 264; p. 264.
 Hopkinson, Joseph, assignor to The Computing Scale Company, Dayton, Ohio. Grinder device for meat-slicers. No. 1,308,786; July 8; v. 264; p. 171.
 Horn, Harry, Brooklyn, N. Y. Window-glass protector. No. 1,309,130; July 8; v. 264; p. 237.
 Horner, Lorenzo B., Hammond, Ind. Attachment for mowing-machines. No. 1,309,522; July 8; v. 264; p. 308.
 Horton, Allen A., Highland Park, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,308,787; July 8; v. 264; p. 171.
 Hosbain, Louis H., assignor to M. H. Detrick Co., Chicago, Ill. Furnace-arch construction. No. 1,309,435; July 8; v. 264; p. 291.
 Hosford, William F., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming electrical contacts. No. 1,309,523; July 8; v. 264; p. 308.
 Houghton, Alexia C., Fayetteville, N. Y., assignor to Sement-Solvay Company, Solvay, N. Y. Manufacture of phenol. No. 1,308,757; July 8; v. 264; p. 169.
 Hubbard, William S., Leicester, England. Machine for affixing measurement tickets or other tickets to fabrics and the like. No. 1,309,009; July 8; v. 264; p. 224.
 Hultgren, Axel G. E., Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Hardening solids of revolution. No. 1,309,137; July 8; v. 264; p. 237.
 Humphreys, Edward C. (See Archer and Humphreys.)
 Huning, Louis R., Philadelphia, Pa. Adjustable coffee-percolator. No. 1,309,414; July 8; v. 264; p. 288.
 Hunt, Joseph H. (See Allen, Sherman T., assignor.)
 Hunter, Cal F. (See Barker, John P., assignor.)
 Hurd, Ben A., et al., trustees. (See Gray, Winfield H., assignor.)
 Hutchins, Thomas W. S., Middlewich, England. Manufacture of lampblack. No. 1,309,070; July 8; v. 264; p. 224.
 Hunt, Harry F., et al. (See Lamberson, George E., assignor.)
 Individual Drinking Cup Company. (See Luellen, Lawrence W., assignor.)
 Ingalls, Willis A., Troy, N. Y. Knitting-machine. No. 1,309,288; July 8; v. 264; p. 264.
 International Harvester Company. (See Burgess, Edward W., assignor.)
 International Mouldings Company. (See Farrell, Joseph E., Jr., assignor.)
 International Paper Company. (See Dugas, Frederic, assignor.)
 International Precipitation Company. (See Schmidt, Arthur A., assignor.)
 Irwin, Samuel D., Floydada, Tex. Repairing aluminum castings. No. 1,309,033; July 8; v. 264; p. 218.
 Israel, Lester L. (See McDowell and Israel.)
 Jackson, Ed., Taubert, Tex. Manually-operated coal-mining machine. No. 1,309,477; July 8; v. 264; p. 299.

Jacobs, Alexander L., St. Louis, Mo., assignor of one-fourth to A. J. Franke and one-fourth to L. N. Franke, St. Louis, Mo. Drying and shrinking device. No. 1,308,931; July 8; v. 264; p. 201.
 James H. Boye Manufacturing Company. (See Boye, James H., assignor.)
 Jameson, George P., assignor to The Thomas P. Taylor Co., Bridgeport, Conn. Child's and miss's waist. No. 1,309,138; July 8; v. 264; p. 237.
 James, Edwin H., Cleveland Heights, Ohio. Wheel. No. 1,309,094; July 8; v. 264; p. 229.
 James, Edwin H., Cleveland Heights, Ohio. Wheel. No. 1,309,095; July 8; v. 264; p. 229.
 Jenkins, Henry C., assignor to Newell & Neal, New York, N. Y. Periscope. No. 1,309,478; July 8; v. 264; p. 299.
 Jensen, Henry, Omaha, Nebr. Halter-releasing device. No. 1,309,034; July 8; v. 264; p. 218.
 Jay, Webb, Chicago, Ill. Vacuum fuel-feed device. No. 1,308,848; July 8; v. 264; p. 182.
 Jay, Webb, Chicago, Ill. Indicator for fuel-tanks. No. 1,308,905; July 8; v. 264; p. 193.
 Jencks Knitting Machine Company. (See Miller, Max C., assignor.)
 Jewett, John C. and W. A., San Francisco, Calif., assignors, by means assignments, of one-half to A. J. Bowle, Jr., and one-half to J. F. Baruffi. Insect catching and killing device. No. 1,308,952; July 8; v. 264; p. 201.
 Jewett, Willard A. (See Jewett, John C. and W. A.)
 Jockman, Charles H., Ansonia, Conn. Percussion-shell fuse. No. 1,309,479; July 8; v. 264; p. 299.
 John I. Thornycroft & Company, Limited. (See Donaldson and Mackie, assignors.)
 Johns-Fratt Company, The. (See Cole, Robert C., assignor.)
 Johnson, James A., assignor of one-half to E. D. Brown, Stockville, Nebr. Electrically-operated railway-switch. No. 1,309,524; July 8; v. 264; p. 308.
 Johnson, Charles W., Pasco, Wash. Antiskidding device. No. 1,309,326; July 8; v. 264; p. 272.
 Johnson, Erich, Cleveland, Ohio. Whipper for eggs, cream, or the like. No. 1,308,953; July 8; v. 264; p. 201.
 Johnson, Felix G., Clarinda, Iowa. Pig-farrowing house. No. 1,309,071; July 8; v. 264; p. 225.
 Johnson, Leonard T., Boston, Mass. Scale. No. 1,309,436; July 8; v. 264; p. 292.
 Johnston, Clarence L., Oakland, Calif., assignor to Pacific Burt Company, Limited, Toronto, Ontario, Canada. Manifolded sales-book. No. 1,309,289; July 8; v. 264; p. 265.
 Jones, Carroll L., Cheriton, Va. Car-stop. No. 1,309,035; July 8; v. 264; p. 218.
 Jones-Powers Carburetor Company, The. (See Powers, John T., assignor.)
 Jones, Walter P. (See Westberry, William G., assignor.)
 Junker, Charles, Milwaukee, Wis. Cheese-curd mill. No. 1,309,525; July 8; v. 264; p. 308.
 Kabakjian, Dikran H., Lansdowne, Pa. Impregnation of water with radium emanations. No. 1,309,139; July 8; v. 264; p. 237.
 Kahn, Bertrand B., Cincinnati, Ohio. Fuel-tank. No. 1,309,526; July 8; v. 264; p. 308.
 Kansas City Refining Company, The. (See Lasher, Henry M., assignor.)
 Keeler, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Recording-lock. No. 1,309,437; July 8; v. 264; p. 292.
 Keeler, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Lock. No. 1,309,438; July 8; v. 264; p. 292.
 Keeler, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Lock. No. 1,309,439; July 8; v. 264; p. 292.
 Keenan, Edward H., P. Christiansen, and R. Ruemelin, Stillwater, Minn., assignors of one-half to Twin City Forge & Foundry Company. Transcribing instrument. No. 1,309,000; July 8; v. 264; p. 223.
 Kellenberger, Francis L., St. Louis, Mo. Safety-guard for power-presses. No. 1,309,527; July 8; v. 264; p. 309.
 Kellner, Gustav A. H., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens-measuring instrument. No. 1,309,359; July 8; v. 264; p. 277.
 Kelly Samuel. (See Kelly, Thomas and S.)
 Kelly, Thomas and S., Glasgow, Scotland. Tube-bending apparatus. No. 1,309,250; July 8; v. 264; p. 257.
 Kelo, William. (See McConway and Kelo.)
 Kelo, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Transition car-coupling. No. 1,309,290; July 8; v. 264; p. 265.
 Kelo, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car-coupling. No. 1,309,291; July 8; v. 264; p. 265.
 Kemp, William, St. Louis, Mo. Gas-analyzer. No. 1,308,788; July 8; v. 264; p. 171.
 Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Slug-casting-machine. No. 1,309,415; July 8; v. 264; p. 288.
 Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,309,416; July 8; v. 264; p. 288.
 Kennedy, George C., Waterloo, Iowa. Force-delivery ayr-lage. No. 1,308,954; July 8; v. 264; p. 202.

Kerr Adjustable Strap Company. (See Badger, Oliver L., assignor.)

Keyes, Frederick G., assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Manufacture of molybdenum-tungsten alloy. No. 1,308,907; July 8; v. 264; p. 193.

Khoury, Michel G., Rio de Janeiro, Brazil. Molding and swaging device. No. 1,308,758; July 8; v. 264; p. 166.

Kinetic Engineering Company. (See Martens, Ludwig A., assignor.)

Klug, Chauncey H. (See Raymond, Leonard F., assignor.)

Kingsbury, Elmer J., Chicago, Ill. assignor to G. H. Ganser, Columbus, Ohio. Illuminated sign or electrograph. (Release.) No. 14,682; July 8; v. 264; p. 324.

Kirschhoff, Ferdinand, Sr., Manitowoc, Wis. Oven-ventilator. No. 1,308,780; July 8; v. 264; p. 171.

Kitts, Ernest K. (See Melihany and Kitts.)

Klein, Frank. (See Frost and Klein.)

Klein, Mathias J., assignor of sixty one-hundredths to H. B. Roelker, New York, N. Y. Slide-force and danger indicator. No. 1,309,574; July 8; v. 264; p. 318.

Klorer, Charles P., East Conemaugh, assignor of two-thirds to J. E. Zang, Johnstown, Pa. Joint for combined spotlight and trouble lamps. No. 1,309,360; July 8; v. 264; p. 276.

Klumb, George, Streeter, N. D. Air-pump. No. 1,309,528; July 8; v. 264; p. 309.

Knight American Patents Company. (See Porter, Finley R., assignor.)

Knight, Herbert, New York, N. Y. Heel. No. 1,309,490; July 8; v. 264; p. 300.

Knight, John S., La Jara, Colo. Trap-stake. No. 1,309,036; July 8; v. 264; p. 218.

Knoblock, James W., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y. Portable search-light. No. 1,309,140; July 8; v. 264; p. 237.

Knowlton, Edward L. (See Whitley and Knowlton.)

Knudson, Knud, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Switch-lock. No. 1,309,361; July 8; v. 264; p. 278.

Koch, Lydia B. (See Thompson, Henry B., assignor.)

Kocher, Charles H., Springfield, Ill. Efficiency-indicator for electric-car operation. No. 1,309,204; July 8; v. 264; p. 249.

Koger, John J., Morristown, Tenn. Automobile power-transmitting apparatus. No. 1,309,481; July 8; v. 264; p. 300.

Kolbensetter, Charles M., Detroit, Mich. Securing means for separable members. No. 1,308,906; July 8; v. 264; p. 193.

Konigsow, Otto, assignor to The Otto Konigsow Manufacturing Company, Cleveland, Ohio. Hinge. No. 1,309,579; July 8; v. 264; p. 319.

Koskinen, Kustaa R., Duluth, Minn. Freight-car door. No. 1,308,955; July 8; v. 264; p. 202.

Kranth, Albert, deceased, assignor to F. G. Diebach, administrator. Folding music-stand. No. 1,308,956; July 8; v. 264; p. 202.

Kranz, Josef, Franklin, N. H. Carrier. No. 1,308,759; July 8; v. 264; p. 166.

Kroyer, John M., Stockton, Calif. Tractor. No. 1,308,790; July 8; v. 264; p. 171.

Krug, Julius, and S. Schermann, St. Louis, Mo. Burglar-alarm. No. 1,309,529; July 8; v. 264; p. 309.

Kruse, Herman, Jersey City, and W. C. Kruse, Union, N. J. Ink. No. 1,309,232; July 8; v. 264; p. 263.

Kruse, William C. (See Kruse, Herman and W. C.)

Kuhn, John J. (See Stiles, Linford S., assignor.)

Kutchnuk, Zachary, Southwest, Pa. Spring-tire. No. 1,308,908; July 8; v. 264; p. 193.

L. J. Mueller Furnace Company. (See Butler, Charles M., assignor.)

Lachman, Maurice, assignor to Structural Wreathed Steel Wheel Company, Inc., New York, N. Y. Metal wheel. No. 1,308,849; July 8; v. 264; p. 182.

Lacy, Burrill S., Seward, N. J. assignor to The Roessler & Haasler Chemical Company, New York, N. Y. Photochemical chlorination. No. 1,308,740; July 8; v. 264; p. 166.

Ladd, Osmond Y., Danbury, Conn. Eyeglass-mounting. No. 1,309,072; July 8; v. 264; p. 225.

Lakin, Winfield S., Brooklyn, N. Y. Extension-body for vehicles. No. 1,309,251; July 8; v. 264; p. 257.

Lamberson, George E., assignor of fifty-one per cent. to G. E. Lamberson, twenty-four per cent. to M. C. Pardee, twenty per cent. to D. M. Gildersleeve, and five per cent. to H. F. Hatty, Brooklyn, N. Y. Aircraft-projectile. No. 1,309,530; July 8; v. 264; p. 309.

Lambert, Henry M., assignor to Lambert Tire and Rubber Company, Portland, Ore. Tire-tread. No. 1,309,440; July 8; v. 264; p. 293.

Lambert Tire and Rubber Company. (See Lambert, Henry M., assignor.)

Landou, Frederick M., Tacoma, Wash. Mower. No. 1,308,909; July 8; v. 264; p. 193.

Langer, Julius J., New York, N. Y. Soldering-furnace. No. 1,308,957; July 8; v. 264; p. 202.

Larcom, William S., Nogales, Ariz. Check-holder. No. 1,309,327; July 8; v. 264; p. 272.

Larsb, Everett P., assignor to The Burnett-Larsb Manufacturing Company, Dayton, Ohio. Mounting for high-pressure systems. No. 1,308,950; July 8; v. 264; p. 182.

Larson, Andrew F., Portland, Ore., assignor to Portland Industrial Company. Door-hanger. No. 1,309,205; July 8; v. 264; p. 249.

La Selva, Hocco, New York, N. Y. Rear signal for automobiles. No. 1,308,873; July 8; v. 264; p. 187.

Lasber, Henry M., assignor to The Kansas City Refining Company, Kansas City, Kans. Producing hydrochloric acid from sludge. No. 1,309,206; July 8; v. 264; p. 249.

La Societe de Construction des Batignolles. (See Holtz-banger, Charles, assignor.)

Launlin, Laurencius. (See Haller, Carl T., assignor.)

Lavender, Herbert P., Walsall, England. Automatically-opening screwing-dies. No. 1,309,141; July 8; v. 264; p. 238.

Law, James C., Carbondale, Pa. Drive-chain. No. 1,309,142; July 8; v. 264; p. 238.

Lazzari, Angelo, et al. (See Palm, William, assignor.)

Leach, William W., assignor of one-half to W. H. Dixon, Mansfield, Ohio. Furnace. No. 1,308,987; July 8; v. 264; p. 208.

Leeberg, Edward, Roselle, N. J. Flexible shaft. No. 1,309,073; July 8; v. 264; p. 225.

Lees, Edgar, and H. W. Riddale, assignors to The Whitehead Torpedo Works (Weymouth) Limited, Weymouth, England. Net-cutter of automobile torpedoes. No. 1,309,262; July 8; v. 264; p. 258.

Lehmann, Adolph, assignor to M. Crist, Hicksville, N. Y. Automatic alarm-valve. No. 1,309,362; July 8; v. 264; p. 278.

Leibing, William E., assignor of one-third to A. Weber and one-third to J. D. Garretson, Oakland, Calif. Rotary explosive-engine. No. 1,309,066; July 8; v. 264; p. 229.

Leitch, Frederick J., Belfast, Ireland. Means for separating seed-pods or the like from stalks of plants. No. 1,309,207; July 8; v. 264; p. 249.

Leflich, Roy C., Newton, assignor of one-eighth to C. D. Blackman, Dodge City, one-eighth to W. Peters, and one-eighth to A. E. Purcell, Newton, Kans. Grain-car door. No. 1,308,791; July 8; v. 264; p. 171.

Leflich, Roy C., Kansas City, Mo. Hat-check and holder therefor. No. 1,308,792; July 8; v. 264; p. 172.

Leonardi, Giulio, Long Island City, N. Y. Safety gas-jet. No. 1,309,482; July 8; v. 264; p. 300.

Lerlin, Samuel. (See Arvintz, Abraham A., assignor.)

Lewis, George W., Grinnell, Iowa, assignor, by mesne assignments, to Lovell Manufacturing Company, Erie, Pa. Wringer. (Release.) No. 14,683; July 8; v. 264; p. 326.

Lecano, Gustavo, Habana, Cuba. Resilient wheel for vehicles. No. 1,308,761; July 8; v. 264; p. 169.

Libbey Glass Company, The. (See Danner, Edward, assignor.)

Liberty Accessories Corporation. (See Raff, Ernest O., assignor.)

Lichty, Claud S. (See Lichty and Campbell.)

Lichty Metal Products Company. (See Lichty and Campbell, assignors.)

Lichty, Norman A. and C. S. and H. F. Campbell, assignors to Lichty Metal Products Company, Waterloo, Iowa. Ventilator. No. 1,309,027; July 8; v. 264; p. 218.

Light, Clara H., assignor of one-fourth to J. Zeiner and one-fourth to B. Hinde, Des Moines, Iowa. Sandless concrete. No. 1,309,038; July 8; v. 264; p. 219.

Locomotive Feed Water Heater Company. (See Averill, Earl A., assignor.)

Lovell, Charles W., Brooklyn, N. Y. Paper-cutting machine. No. 1,308,852; July 8; v. 264; p. 183.

Lovell Manufacturing Company. (See Lewis, George W., assignor.) (Release.)

Lowe, Charles W., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Connector. No. 1,309,263; July 8; v. 264; p. 258.

Lowenstein, Louis, Detroit, Mich. Ratchet extension for micrometers. No. 1,308,988; July 8; v. 264; p. 208.

Lot Seal Corporation. (See Rehman, Marcus B., assignor.)

Ludlow, Israel, New York, N. Y. Submersible gun-mount. No. 1,309,483; July 8; v. 264; p. 300.

Luellen, Lawrence W., Boonton, N. J., assignor to Individual Drinking Cup Company, New York, N. Y. Receptacle. No. 1,308,793; July 8; v. 264; p. 172.

Luchka, August R., and J. Folk, assignors to U. S. Slinging Machine Company, Laporte, Ind. Rindlog knife for slicing-machines. No. 1,309,417; July 8; v. 264; p. 288.

Lyle, William G., trustee. (See Falk and Frankel, assignors.)

Lyons, Arthur H., and N. E. Rambush, London, England. Recovery of ammonia from producer-gas. No. 1,309,143; July 8; v. 264; p. 238.

Lynch, Michael A., and J. P. F. White, Washington, D. C. Closure for tanks. No. 1,308,794; July 8; v. 264; p. 172.

Lyons, A. (See Estes, William R., Sr., assignor.)

M. H. Detrick Co. (See Detrick, Myron H., assignor.)

M. H. Detrick Co. (See Hoebein, Louis H., assignor.)

M. D. Knowlton Company. (See De Smith, Henry, assignor.)

Mable, John W., Hot Wing, Minn. Fanning-mill. No. 1,309,329; July 8; v. 264; p. 272.

MacCormac, Rockwell M., Kansas City, Mo. Paper-roll and holder therefor. No. 1,308,912; July 8; v. 264; p. 194.

Macdonald, Murdock, Cleveland, Ohio. Holder for tickets and the like. No. 1,309,255; July 8; v. 264; p. 258.

Macfadden, Bernarr, New York, N. Y. Air-supply motor for internal-combustion engines. No. 1,309,254; July 8; v. 264; p. 258.

Mackey, Louis E., and F. W. Ormiston, Detroit, Mich. Winding and rewinding mechanism. No. 1,309,266; July 8; v. 264; p. 258.

Mackie, Robert. (See Donaldson and Mackie.)

Magoe, Frederick W., assignor of one-half to T. W. Baber, London, Ontario, Canada. Gas and water controlling device for water-heaters. No. 1,309,285; July 8; v. 264; p. 266.

Magie, William E. (See Ferris and Magie.)

Maize, Herman C., assignor, by mesne assignments, to Finance & Trading Corporation of New York. Automobile-body. No. 1,309,144; July 8; v. 264; p. 238.

Mandelstamm, Leo, New York, N. Y. Metal-casting machine. No. 1,309,534; July 8; v. 264; p. 310.

Mann, Ira A., deceased; M. P. Mann, executrix, Pittsburgh, Pa. Pipe construction. No. 1,309,145; July 8; v. 264; p. 238.

Mann, Ira A., deceased; M. P. Mann, executrix, Pittsburgh, Pa. Pipe-joint. No. 1,309,146; July 8; v. 264; p. 238.

Mann, Marion P., executrix. (See Mann, Ira A.)

Manusdel, Fritz P. (See Nehrk, Charles, assignor.)

Mansfield, Frederick J., Pasadena, Calif. Literature-distributing device. No. 1,309,040; July 8; v. 264; p. 219.

Marchant Calculating Machine Company. (See Dennis, Adolphus S., assignor.)

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,210; July 8; v. 264; p. 250.

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,211; July 8; v. 264; p. 250.

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,212; July 8; v. 264; p. 250.

Marinsky, David, New York, N. Y. Sealing-machine. No. 1,309,147; July 8; v. 264; p. 239.

Marks, Arthur, Knock, assignor to himself and Harland and Wolf Limited, Belfast, Ireland. Concrete. No. 1,309,296; July 8; v. 264; p. 264.

Markwick, John, Detroit, Mich. Child's furniture. No. 1,309,097; July 8; v. 264; p. 229.

Marshall, John, Swarthmore, Pa., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Preparing dinitrophenylamine. No. 1,309,580; July 8; v. 264; p. 319.

Martens, Ludwig A., Teaneck, N. J., assignor to Kinetic Engineering Company, Inc., New York, N. Y. Torque-equalizing means. No. 1,309,257; July 8; v. 264; p. 258.

Martin, George, Ansonia, Conn. Pressure oil-cup. No. 1,309,442; July 8; v. 264; p. 293.

Martin, Joseph, assignor of one-half to H. F. Zink, Detroit, Mich. Bowling-alley surfacer. No. 1,308,762; July 8; v. 264; p. 167.

Mascard, George W., London, England. Distribution of electromotive power. No. 1,309,443; July 8; v. 264; p. 293.

Masland, Harvey C., Philadelphia, Pa. Surgical instrument. No. 1,308,798; July 8; v. 264; p. 173.

Masland, Harvey C., Philadelphia, Pa. Surgical instrument for resetting broken bones. No. 1,308,799; July 8; v. 264; p. 173.

Mason, William H., Easton, Pa. Portable electrical generating apparatus. No. 1,308,269; July 8; v. 264; p. 203.

Matheson, Howard W., Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Fireproofing and products thereof. No. 1,309,581; July 8; v. 264; p. 319.

Mays Accounting Machine Company. (See Mays, James F., assignor.)

Mays, James F., Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C. Calculating-machine. No. 1,309,535; July 8; v. 264; p. 310.

Mays, James F., Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C. Quotient mechanism for computing-machines. No. 1,309,536; July 8; v. 264; p. 310.

McAdie, Alexander G., Milton, Mass. Absolute hydrograph. No. 1,309,531; July 8; v. 264; p. 309.

McCartney, Leslie C., Lincoln, Neb. Stock-mounting. No. 1,309,268; July 8; v. 264; p. 249.

McClummonds, John R., Elwood City, Pa. Mail-box. No. 1,309,328; July 8; v. 264; p. 272.

McConway & Torley Company, The. (See Kelso, William, assignor.)

McConway & Torley Company, The. (See McConway and Kelso, assignors.)

McConway & Torley Company, The. (See Milliken, Isaac H., assignor.)

McConway, William, Jr., and W. Kelso, assignors to The McConway & Torley Company, Pittsburgh, Pa. Translation rarcoupling. No. 1,309,293; July 8; v. 264; p. 265.

McConl, Charles J., Alpha, Mich. Spring-wheel. No. 1,309,532; July 8; v. 264; p. 310.

McCormack, William D., Nashville, Tenn. Inclinator for use on aircraft. No. 1,308,795; July 8; v. 264; p. 172.

McDowell, Clyde S., U. S. Navy, and L. L. Israel, New York, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Optical signalling apparatus. No. 1,309,441; July 8; v. 264; p. 293.

McElroy, Karl P., Washington, D. C., assignor to Chemical Development Company, Augusta, Me. Oxidizing hydrocarbons. No. 1,308,796; July 8; v. 264; p. 173.

McElroy, Karl P., Washington, D. C., assignor to Chemical Development Company. Oxidizing hydrocarbons. No. 1,308,797; July 8; v. 264; p. 173.

McFell, Judson, Chicago, Ill. Electric signal-transmitting means. No. 1,308,958; July 8; v. 264; p. 202.

Melihany, John M., and E. K. Kitts, Blenheim, W. Va. Train-telephone system. No. 1,308,910; July 8; v. 264; p. 193.

McKalg, Charles O. (See Honeywell and McKalg.)

McKeehan, James, Barrow-in-Furness, and H. N. Wallis, Grange-over-Sands, assignors to Vickers Limited, Westminster, London, England. Mooring of lighter-than-air aircraft. No. 1,309,533; July 8; v. 264; p. 310.

McKinnon, Hector, Enreka, Calif. Vehicle-drive. No. 1,309,074; July 8; v. 264; p. 225.

McKnight, Robert, Pittsburgh, Pa. Making compounds of rare metals. No. 1,308,811; July 8; v. 264; p. 194.

McLaughlin, John C., East Orange, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Coin-operated type-writing machine. No. 1,309,294; July 8; v. 264; p. 266.

McNabb, William F., Pittsburgh, Pa. Heat-producing compound. No. 1,309,209; July 8; v. 264; p. 250.

McNeil, John, Los Angeles, Calif. Non-skid attachment for automobiles. No. 1,309,039; July 8; v. 264; p. 219.

McVoy, George, Scotch Plains, N. J. Quick-attachable pipe-union. No. 1,308,853; July 8; v. 264; p. 183.

Melike, Edward J., Chicago, Ill. Illuminative tool. No. 1,309,363; July 8; v. 264; p. 278.

Mendelson, Max, and N. J. Goldfarb, Brooklyn, N. Y., assignors to Brooklyn Herald Company. Means for tying bows. No. 1,308,800; July 8; v. 264; p. 173.

Ment, Rudolph W., Joliet, assignor to The Excelsior Steel Furnace Company, Chicago, Ill. Kiln-furnace. No. 1,309,213; July 8; v. 264; p. 250.

Mergenthaler, Eugene G., Baltimore, Md. Safety-razor. No. 1,308,801; July 8; v. 264; p. 173.

Mergenthaler Linotype Company. (See Kennedy, Davis S., assignor.)

Merritt, John C., Marengo, Iowa. Toy. No. 1,309,041; July 8; v. 264; p. 219.

Mersereau, Gail, New York, N. Y., assignor to Chemical Development Company. Apparatus for producing diolene. No. 1,308,802; July 8; v. 264; p. 174.

Mersereau, Gail. (See Eldred and Mersereau.)

Mersereau, Gail, assignor to Chemical Development Company, New York, N. Y. Cellulose solvent. No. 1,308,803; July 8; v. 264; p. 174.

Merwin, George H., Milford, Conn. Advertising toy. No. 1,308,854; July 8; v. 264; p. 183.

Metal Package Corporation of New York. (See Blakeney, Albert N., assignor.)

Michel, William G., Niagara Falls, N. Y. Electrolytic cell. No. 1,309,148; July 8; v. 264; p. 239.

Mildgley, Albert H., assignor of one-half to C. A. Vandervell, Action Vale, England. Percussion-fuse for explosive projectiles. No. 1,309,098; July 8; v. 264; p. 230.

Milkes, Leah G., assignor to Venus Manufacturing Company, Minneapolis, Minn. Hood for children's garments. No. 1,309,042; July 8; v. 264; p. 219.

Milkes, Leah G., assignor to Venus Manufacturing Company, Minneapolis, Minn. Reversible cuff. No. 1,309,943; July 8; v. 264; p. 219.

Miller, Albert, Buffalo, N. Y. Open-hearth furnace. No. 1,309,149; July 8; v. 264; p. 239.

Miller, Henry A., Mendon, Pa. Paper duster. No. 1,309,537; July 8; v. 264; p. 311.

Miller, John W. (See Sidenstricker and Miller.)

Miller, Max C., Cumberland Hill, assignor to Jencks Knitting Machine Company, Pawtucket, R. I. Knitted fabric and making same. No. 1,309,582; July 8; v. 264; p. 319.

Miller, Wilmer W., Ardmore, Pa. Apparatus for transmitting signals. No. 1,309,364; July 8; v. 264; p. 278.

Miller, William W. (See Priddy and Miller.)

Milliken, Isaac H., Ashtabula, assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft-yoke. No. 1,309,297; July 8; v. 264; p. 266.

Mills, John, Wyoming, N. J., and J. R. Carson, New York, N. Y., assignors to American Telephone and Telegraph Company. Wireless system. No. 1,309,538; July 8; v. 264; p. 311.

Miner, William H. (See Dwyer, William H., assignor.)

Mineral Electric Company. (See Miner, Harold S., assignor.)

Minnesota Stove Company, The. (See Nye, Charles W., assignor.)

Miner, William H. (See Strid, Sven J., assignor.)

Mingst, Charles P., Evansville, Ind. Priming-cup. No. 1,308,913; July 8; v. 264; p. 194.

Mintz, Julius, New York, N. Y. Ticket-assembling apparatus. No. 1,309,044; July 8; v. 264; p. 218.

Mitchell, William. (See Sturdy, Fred, assignor.)

Moness, Jacob M., Long Island City, N. Y., assignor to Chemical Development Company. Making chlorinated products. No. 1,308,763; July 8; v. 264; p. 167.

Moofort, Edgar A., New York, N. Y. Attachment for gloves and cuff-gloves. No. 1,309,150; July 8; v. 264; p. 239.

Monaghan, John E., Fort Wayne, Ind. Fishing-algal. No. 1,309,365; July 8; v. 264; p. 279.
 Moreland, Watt L., Los Angeles, Calif. Heater for manifold-intakes. No. 1,309,339; July 8; v. 264; p. 311.
 Moon, William F., Milwaukee, Wis. Speck-remover. No. 1,309,258; July 8; v. 264; p. 259.
 Moore, George, Joplin, Mo. Liquid-measuring apparatus. No. 1,308,555; July 8; v. 264; p. 183.
 Moore, George, Joplin, Mo. Filter and making same. No. 1,309,330; July 8; v. 264; p. 272.
 Moore, Hugh K., assignor to Brown Company, Berlin, N. H. Removing certain impurities from electrolytic cells. No. 1,309,214; July 8; v. 264; p. 250.
 Moore, William E., Pittsburgh, Pa. Electric furnace and operating same. No. 1,309,045; July 8; v. 264; p. 220.
 Moorehead, George F., assignor of one-half to A. C. Wright, Iowa. Refrigerator show-case. No. 1,309,151; July 8; v. 264; p. 230.
 Morgan Construction Company. (See Hawthorne, Charles W., assignor.)
 Morgan, William W., Philadelphia, Pa. Thermostatic valve. No. 1,308,850; July 8; v. 264; p. 183.
 Moricard, Jean H. A., Amsterdam, Netherlands. Indicating apparatus for charts, maps, and plans. No. 1,309,259; July 8; v. 264; p. 258.
 Morrill, Alfred R., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for preparing welding. No. 1,309,583; July 8; v. 264; p. 320.
 Morris, Alfred D., assignor to Morris Metallic Packing Company, Philadelphia, Pa. Metallic packing for piston and other rods. No. 1,309,075; July 8; v. 264; p. 225.
 Morris Metallic Packing Company. (See Morris, Alfred D., assignor.)
 Mort, Arthur, Lincoln, England. Drop-hammer. No. 1,309,298; July 8; v. 264; p. 266.
 Mortenson, Niels L., Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor control. No. 1,309,300; July 8; v. 264; p. 279.
 Mosler, Orla H. (See Hempy, George L., assignor.)
 Moss, Ernest, Dallington, Christchurch, New Zealand. Raising, lowering, and depth regulation of plows and other agricultural implements and vehicles. No. 1,309,299; July 8; v. 264; p. 266.
 Moulton, James N., Haverhill, Mass. Welt-strip. No. 1,308,804; July 8; v. 264; p. 174.
 Mount, Frederick R. (See Skelly, Bernard H., assignor.)
 Mountain, William W. (See Forbes, Ewing M., assignor.)
 Mueller, Louis J., Jr., Milwaukee, Wis. Combined garbage-burner and heater. No. 1,308,959; July 8; v. 264; p. 208.
 Multipull Manufacturing Company. (See Eggleston, Robert N., assignor.)
 Monkenast, Andrew, St. Louis, Mo. Lever extension. No. 1,308,960; July 8; v. 264; p. 209.
 Murphy, Walter P., Chicago, Ill. Corrugated sheet-metal cap end. No. 1,309,484; July 8; v. 264; p. 300.
 Musker, Arthur, London, England. Apparatus for trimming and similarly distributing coal and other materials. No. 1,309,584; July 8; v. 264; p. 320.
 Musker, Arthur, London, England. Discharge of coal and the like cargo in bulk from barges or vessels, and the elevation and delivery thereof. No. 1,309,585; July 8; v. 264; p. 320.
 Myers, Louis, assignor to Crystal Alloys Corporation, Detroit, Mich. Comb. No. 1,308,857; July 8; v. 264; p. 184.
 Nakamizo, Hirotsune T., Los Angeles, Calif. Self-heating container. No. 1,309,418; July 8; v. 264; p. 288.
 National Equipment Company. (See Rausman, Alonso L., assignor.)
 National Explosive Corporation. (See Brown, James, assignor.)
 Nebke, Charles, assignor to F. P. Mansbendel, Brooklyn, N. Y. Massage apparatus. No. 1,308,805; July 8; v. 264; p. 174.
 Neltzel, Conrad T. (See Pade and Neltzel.)
 Nelson, Albert S. O., Cicero, Ill. Snap-fastener. No. 1,309,568; July 8; v. 264; p. 320.
 Nelson, Richard, Chicago, Ill. Child's vehicle. No. 1,309,331; July 8; v. 264; p. 272.
 New London Chemical Company, The. (See Flanders, Bert W., assignor.)
 Newell & Neal. (See Jenkins, Henry C., assignor.)
 Newhall, Ione F., Crystal Bay, Minn. Cooker. No. 1,309,444; July 8; v. 264; p. 293.
 Nicholls, John, et al. (See Pain, William, assignor.)
 Nielsen, Frederik, Dorchester, Mass., assignor to A. Schrader's Son Incorporated, Brooklyn, N. Y. Dust-cap. No. 1,309,215; July 8; v. 264; p. 251.
 Nock, Leo F. (See Pack and Nock.)
 Norris, Almon E., Cambridge, Mass. Rail-clamp for conveying structures. No. 1,308,859; July 8; v. 264; p. 184.
 Norris, Willard J., Charleston, W. Va. Headlight. No. 1,308,858; July 8; v. 264; p. 184.
 Norrell, Lorenzo, trustee. (See Dillon, Edward L., assignor.)
 Nye, Charles W., Minneapolis, Minn., assignor to The Minnesota Stove Company, Range. No. 1,309,099; July 8; v. 264; p. 230.
 Nye, Charles W., Minneapolis, Minn., assignor to The Minnesota Stove Company. Convertible oven for ranges. No. 1,309,100; July 8; v. 264; p. 230.

Nyquist, Carl J., Chicago, Ill. Clamping hose-lines. No. 1,309,332; July 8; v. 264; p. 273.
 O'Brien, Edmund H., Kansas City, Mo. Heating appliance for carburetors. No. 1,308,860; July 8; v. 264; p. 184.
 Ohlson, Olof, Newton, assignor to Waltham Watch Company, Waltham, Mass. Coupling-release for mechanical time-fuses. No. 1,309,333; July 8; v. 264; p. 273.
 Oldham, John F., New York, N. Y. Resilient wheel. No. 1,309,540; July 8; v. 264; p. 311.
 Olds, James B., Maipeth, N. Y. Semi-trailer elevating-horse. No. 1,308,764; July 8; v. 264; p. 167.
 O'Neil, Clarence M., Eagle Creek, Oreg. Lunch-pail. No. 1,309,541; July 8; v. 264; p. 312.
 Ormiston, Frank W. (See Mackey and Ormiston.)
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,445; July 8; v. 264; p. 293.
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,446; July 8; v. 264; p. 294.
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,447; July 8; v. 264; p. 294.
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,448; July 8; v. 264; p. 294.
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,449; July 8; v. 264; p. 294.
 Otte, Otho M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,450; July 8; v. 264; p. 294.
 Otto, August, Jr., Sandwich, Ill. Tank-heater. No. 1,309,101; July 8; v. 264; p. 230.
 Otto Konigsloew Manufacturing Company, The. (See Konigsloew, Otto, assignor.)
 Pacific Burt Company. (See Johnston, Clarence L., assignor.)
 Pack, Charles, and L. F. Nock, New York, assignors to Doehler Die Casting Company, Brooklyn, N. Y. Making molds. No. 1,308,861; July 8; v. 264; p. 184.
 Pack, Charles, and L. F. Nock, assignors to Doehler Die Casting Company, Brooklyn, N. Y. Casting apparatus. No. 1,308,862; July 8; v. 264; p. 184.
 Pade, George V., and C. T. Neltzel, Dallas, Tex. Needle for hand-embroidery and similar work. No. 1,309,001; July 8; v. 264; p. 223.
 Page, Albert A., East Haven, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,309,300; July 8; v. 264; p. 267.
 Page, Frank H., Waverly, Iowa. Hog-waterer. No. 1,308,506; July 8; v. 264; p. 174.
 Pain, William, Little Rock, Wash., assignor of one-fourth to J. Nicholls, one-fourth to S. Lazzari, and one-fourth to A. Lazzari, Seattle, Wash. Aerial machine. No. 1,309,152; July 8; v. 264; p. 240.
 Paine, Cecil E., Bath, Me. Ship's steering-gear. No. 1,309,070; July 8; v. 264; p. 225.
 Pann, August C., Ridgewood, N. Y., assignor, by mesne assignments, to Autosales Corporation, Vending machine. No. 1,308,960; July 8; v. 264; p. 208.
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 Parker, Lee H., Boston, Mass., assignor to Spray Engineering Company, Spray-nozzle. No. 1,309,596; July 8; v. 264; p. 322.
 Parker, Lee H., Boston, Mass., assignor to Spray Engineering Company, Spray-nozzle. No. 1,309,597; July 8; v. 264; p. 322.
 Parkinson, William J., W. A. M. Welles, and P. W. Tierney, assignors to Eastman Kodak Company, Rochester, N. Y. Film-winding device. No. 1,308,991; July 8; v. 264; p. 209.
 Parsons, Charles A., Newcastle-upon-Tyne, R. J. Walker, S. S. Cook, and L. M. Douglas, Wallasey, England; said Walker, said Cook, and said Douglas assignors to said Parsons. Turbine installation for ship propulsion. No. 1,309,077; July 8; v. 264; p. 226.
 Parsons, Charles A., E. Bennett, and H. Rowe, Newcastle-upon-Tyne, England; said Bennett and said Rowe assignors to said Parsons. Mounting of reflectors. No. 1,309,542; July 8; v. 264; p. 312.
 Paplanaki, John, Cicero, Ill. Airship. No. 1,309,078; July 8; v. 264; p. 226.
 Pearsall, Albert W., Lowell, Mass. V-inlet for pneumatic-dispatch-tube apparatus. No. 1,309,598; July 8; v. 264; p. 322.
 Pedersen, Einar, Copenhagen, Denmark. Hair-pin. No. 1,309,334; July 8; v. 264; p. 273.
 Pelton, Clyde S., Cleveland Heights, assignor, by mesne assignments, to The Perfection Heater & Manufacturing Company, Cleveland, Ohio. Heater for motor-propelled vehicles. No. 1,309,216; July 8; v. 264; p. 251.
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 Perkins, Ivan S., Guyton, Okla. Indicator. No. 1,308,914; July 8; v. 264; p. 194.
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 Peterson, John M., assignor to G. J. Sayce, Chicago, Ill. Stuffer or filler. No. 1,309,335; July 8; v. 264; p. 273.
 Philipp, Theodore F., East St. Louis, Ill. Crank-driven device for machining apparatus. No. 1,309,301; July 8; v. 264; p. 267.
 Phillips, James L., Great Bend, N. Y. Machine for washing pulp-wood. No. 1,309,543; July 8; v. 264; p. 312.

Phillips, Leland A., assignor to Phillips Ribbon & Carbon Company, Rochester, N. Y. Reeling-machine. No. 1,309,367; July 8; v. 264; p. 279.
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 Pierce, W. J., administrator. (See Farthing, David J.)
 Platt, Clarence D., Bridgeport, Conn. Electric switch. No. 1,309,153; July 8; v. 264; p. 240.
 Podmore, William, Portbill, Stoke-upon-Trent, assignor of one-half to H. L. Donlon, London, England. Lathe. No. 1,309,040; July 8; v. 264; p. 220.
 Pollard, Willard L., assignor to The Cable Company, Chicago, Ill. Player-piano. No. 1,308,915; July 8; v. 264; p. 184.
 Porter, Finley R., Port Jefferson, N. Y., assignor to Knight American Patents Company, Chicago, Ill. Oiling mechanism for rotary shafts. No. 1,308,916; July 8; v. 264; p. 184.
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 Postal-Vinay, Pierre J. R., Paris, assignor to Societe Des Moteurs Salmson (Système Canto-Union), Billancourt, France. Bracket for accessories of explosion-engines. No. 1,308,807; July 8; v. 264; p. 174.
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 Powell, George C., Chicago, Ill. Level. No. 1,308,765; July 8; v. 264; p. 167.
 Power, Jeffrey J., assignor to Power, Stevens Fan Devices Company, Madison, Wis. Dust-collector. No. 1,308,961; July 8; v. 264; p. 203.
 Powers, John T., Tacoma, Wash., assignor to The Jones-Powers Carburetor Company, Denver, Colo. Means for locking automobiles. No. 1,309,154; July 8; v. 264; p. 240.
 Prill, Alexis R., Wilkesburg, Pa. Connecting-rod. No. 1,308,992; July 8; v. 264; p. 209.
 Price, Raymond B., New York, N. Y., assignor, by mesne assignments, to The Goodyear's Metallic Rubber Shoe Company, Nantuxuck, Conn. Rubber footwear. No. 1,309,047; July 8; v. 264; p. 220.
 Price, Raymond B., Mishawaka, Ind., assignor, by mesne assignments, to The Goodyear's Metallic Rubber Shoe Company, Nantuxuck, Conn. Treating vulcanizable plastics. No. 1,309,485; July 8; v. 264; p. 301.
 Pridmore, Edward A., and W. W. Miller, La Grange, Ill. Molding-machine. No. 1,309,886; July 8; v. 264; p. 273.
 Prindle, Franklin C., Washington, D. C., assignor to C. Kleker, Indianapolis, Ind. Tilting steering-wheel for motor-vehicles. (Reissue.) No. 14,984; July 8; v. 264; p. 326.
 Pritchard, Carl G., Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio. Deliverer for printing-presses. No. 1,309,544; July 8; v. 264; p. 312.
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 Raca, George, Chicago, Ill. Window-cleanser. No. 1,309,302; July 8; v. 264; p. 267.
 Radlne, Rudolf R., Cleveland, Ohio. Rotary brush. No. 1,309,587; July 8; v. 264; p. 320.
 Raff, Ernest G., assignor to Liberty Accessories Corporation, St. Louis, Mo. Whistle. No. 1,309,303; July 8; v. 264; p. 267.
 Rafert, John D., Minneapolis, Minn. Machine for making prestressed bread-loaves. No. 1,309,419; July 8; v. 264; p. 289.
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 Rambach, Niels E. (See Lynn and Rambach.)
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 Rarie, Weldon C., Corpus Christi, Tex. Draft mechanism for earthworking implements. No. 1,309,365; July 8; v. 264; p. 279.
 Rathern, Joseph, assignor to Baxter & Cannter, Limited, London, England. Work-centering device. No. 1,309,217; July 8; v. 264; p. 251.
 Rau, Rodolphe, Geneva, Switzerland. Economizer arrangement for locomotives. No. 1,308,808; July 8; v. 264; p. 175.
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 Raymond, Herbert N., Olympia, Wash. Solar transit. No. 1,309,486; July 8; v. 264; p. 301.
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 Reckard, William P., Youngstown, Ohio, assignor to American Sintering Company, Chicago, Ill. Sintering apparatus. No. 1,308,864; July 8; v. 264; p. 185.
 Recording Devices Company, The. (See Keefer, Thomas A., assignor.)
 Rector, Enoch, New York, N. Y. Steam-motor generator. No. 1,309,102; July 8; v. 264; p. 230.
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 Reese, J. E., et al. (See Farthing, David J., assignor.)
 Reese, Charles L., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company. Bursting charge for containers intended to be exploded, and forming said charge. No. 1,309,588; July 8; v. 264; p. 321.
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 Reicher, Jacob, Baltimore, Md. Night-light. No. 1,309,545; July 8; v. 264; p. 312.
 Reising, Eugene G., East Hartford, Conn., assignor to The Hartford Machine Gun Company, Hartford, Conn. Extractor for firearms. No. 1,309,337; July 8; v. 264; p. 273.
 Reising, Eugene G., East Hartford, Conn., assignor to The Hartford Machine Gun Company, Hartford, Conn. Ejector for firearms. No. 1,309,338; July 8; v. 264; p. 274.
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 Reynolds, George A., Indianapolis, Ind. Valve-operating mechanism. No. 1,309,859; July 8; v. 264; p. 274.
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 Rhines, Frank W., Lamont, Iowa. Adjustable hand-rake. No. 1,309,310; July 8; v. 264; p. 274.
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 Richards, James A., assignor to The Richards Manufacturing Company, Marietta, Ohio. Wheeled toy. No. 1,309,517; July 8; v. 264; p. 313.
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 Richards, Thomas M., New Philadelphia, Ohio. Signal-lantern. No. 1,309,155; July 8; v. 264; p. 240.
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 Ritter, Joseph R., Hastings, Fla. Self-fastening container. No. 1,309,541; July 8; v. 264; p. 274.
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 Rodriguez, Gavino, El Paso, Tex. Lamp attachment. No. 1,309,548; July 8; v. 264; p. 312.
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 Roemer, Herman, Chicago, Ill. Wringer. No. 1,308,808; July 8; v. 264; p. 186.
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 Rohmer, Gabriel E., Elmhurst, N. Y., assignor, by mesne assignments, to Cineb Expansion Bolt & Engineering Company, Cable and wire clamp. No. 1,308,809; July 8; v. 264; p. 186.
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 Rumpf, Peter J., Chicago, Ill. Shoe-polishing machinery. No. 1,309,370; July 8; v. 264; p. 270.
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Sampson, Charles H., assignor, by mesne assignments, to Tohl Protectograph Company, Rochester, N. Y. Check-writing machine. No. 1,309,351; July 8; v. 264; p. 280.

Sanborn, Eugene L., assignor to Smith Engineering Works, Milwaukee, Wis. Crushing-machine. No. 1,309,104; July 8; v. 264; p. 231.

Sanford, Sydney J., Los Angeles, Calif. Golf apparatus. No. 1,309,105; July 8; v. 264; p. 231.

Sargent & Company. (See Page, Albert A., assignor.)

Sargy, Emilie L. A., Paris, France. Coating-machine. No. 1,309,106; July 8; v. 264; p. 231.

Sayer, George J. (See Peterson, John M., assignor.)

Schaefer, Frederic, Pittsburgh, Pa. Connecting-bar. No. 1,309,220; July 8; v. 264; p. 251.

Schneider, Karl P., Brooklyn, N. Y. Cycle-frame. No. 1,309,305; July 8; v. 264; p. 268.

Schermann, Stefana. (See Krug and Schermann.)

Schick, George A., Philadelphia, Pa. Sewing-machine. No. 1,309,372; July 8; v. 264; p. 280.

Schlöss, Meyer W., New York, N. Y., assignor to Treco Company, Incorporated. Girdle. No. 1,308,870; July 8; v. 264; p. 188.

Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug. No. 1,308,871; July 8; v. 264; p. 188.

Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug and forming same. No. 1,308,872; July 8; v. 264; p. 188.

Schmidt, Arthur A., assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for electrical treatment of gases. No. 1,309,221; July 8; v. 264; p. 252.

Schneider, Charles C., assignor to J. H. Cutter, St. Louis, Mo. Catching device for cloth-piling machines. No. 1,308,786; July 8; v. 264; p. 167.

Schroeder, Frank J., Altoona, Pa. S-iron-bending machine. No. 1,309,420; July 8; v. 264; p. 289.

Schultz, James R. (See Dailmeyer, Brown, and Schultz.)

Schulstad, Peter L. V., Copenhagen, Denmark. Apparatus for measuring and simultaneously marking the measurements on machine-belts and the like. No. 1,309,306; July 8; v. 264; p. 268.

Schwabe, Frederick J., assignor to The French Oil Mill Machinery Co., Piquette, Ohio. Apparatus for separating liquid from solid matter. No. 1,308,918; July 8; v. 264; p. 196.

Schwartz, Bernard L., Cincinnati, Ohio. Signal. No. 1,309,222; July 8; v. 264; p. 252.

Scott, Lewis L., St. Louis, Mo. Percussion-drill. No. 1,308,811; July 8; v. 264; p. 175.

Seaboldt, Bert, New York, and H. E. J. Wackwitz, Port Washington, said Seaboldt assignor of his right to H. R. Smith, Port Washington, N. Y. Brush. No. 1,309,589; July 8; v. 264; p. 323.

Secretary of War of the United States of America. (See Walpole, Nathaniel C., assignor.)

Sell, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,309,422; July 8; v. 264; p. 289.

Sell, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,309,423; July 8; v. 264; p. 289.

Seltherling, Frank A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Fabric-forming apparatus. No. 1,309,424; July 8; v. 264; p. 289.

Seldel, Bruno W., and G. E. Wattman, assignors to The Adams & Westlake Company, Chicago, Ill. Solder-feeding machine. No. 1,309,107; July 8; v. 264; p. 231.

Sellar, John A. E., Everett, Mass., assignor to The Randall-Palchey Company, Inc. Pressure-syringe and subcutaneous needle. No. 1,308,919; July 8; v. 264; p. 195.

Semet-Solvay Company. (See Grand, Walter L., assignor.)

Semet-Solvay Company. (See Houghton, Alexis C., assignor.)

Shackie, Ida M., Watertown, S. D. Cover-fastener. No. 1,308,962; July 8; v. 264; p. 203.

Shaw, Edward, London, and G. S. Baker, Middlesex, England. Treatment or preparation of sugar. No. 1,309,425; July 8; v. 264; p. 290.

Sheehan, Thomas J., St. Louis, Mo. Refrigerating apparatus. No. 1,308,812; July 8; v. 264; p. 175.

Sheldon, Walter L., Detroit, Mich. Power steering mechanism. No. 1,309,261; July 8; v. 264; p. 259.

Sheppard, William H., assignor to J. A. Sherman, Worcester, Mass. Machine for making paper drinking-cups. No. 1,308,707; July 8; v. 264; p. 167.

Sherbondy, Earl H., Cleveland, Ohio. Turbo-compressor mounting. No. 1,309,549; July 8; v. 264; p. 313.

Sherman, John A. (See Sheppard, William H., assignor.)

Shultz, James C., Meadville, Pa. Lock-out. No. 1,309,421; July 8; v. 264; p. 289.

Shuttleworth, Charles J., Buffalo, N. Y., assignor of one-half to C. J. Warnick, Washington, D. C. Engine. No. 1,308,813; July 8; v. 264; p. 175.

Siden-tricker, Guy, and J. W. Miller, Mount Clare, W. Va. Wooden pump. No. 1,308,814; July 8; v. 264; p. 176.

Siemens-Schubert Werke, G. m. b. H. (See Trettin, Carl, assignor.)

Siemens-Schubert Werke, G. m. b. H. (See Werner, Albert, assignor.)

Simmons, Charles A., Fairfield, Ill. Aeroplane. No. 1,308,997; July 8; v. 264; p. 210.

Simmons Company. (See Galt, John F., assignor.)

Simon, Henry, Laguna Beach, Calif. Combination-square. No. 1,308,513; July 8; v. 264; p. 179.

Simpson, Robert, Cincinnati, Ohio. Resto-recovering process. No. 1,308,708; July 8; v. 264; p. 168.

Slues, Harold S., assignor to Mineral Electric Company, Chicago, Ill. Time-switch. No. 1,309,426; July 8; v. 264; p. 290.

Slues, Harold S., assignor to Mineral Electric Company, Chicago, Ill. Periodically-operated mechanism. No. 1,309,427; July 8; v. 264; p. 290.

Skelly, Bernard H., Bridgeport, Conn., assignor to F. R. Mount, Botsford, Conn. Auxiliary breather-pipe attachment. No. 1,309,262; July 8; v. 264; p. 259.

Skinner, Claude M., and L. J. Fowler, Omaha, Nebr. Grease-cup. No. 1,309,428; July 8; v. 264; p. 290.

Slocum, Avram and Slocum. (See Avram, Mois H., assignor.)

Small, Frederick E., Kansas City, Mo. Ore-concentrating machine. No. 1,309,307; July 8; v. 264; p. 268.

Smith, Ellis L., Roanoke, Ala. Doll. No. 1,308,815; July 8; v. 264; p. 176.

Smith, Emerson H., Parsons, Kans. Train-order holder. No. 1,309,080; July 8; v. 264; p. 220.

Smith Engineering Works. (See Sanborn, Eugene L., assignor.)

Smith, Ernest L., Salt Lake City, Utah. Envelop or file. No. 1,309,223; July 8; v. 264; p. 252.

Smith, Henry, College Point, N. Y. Ink-well. No. 1,308,817; July 8; v. 264; p. 176.

Smith, Hewlett R. (See Seaboldt and Wackwitz, assignors.)

Smith, Horace H., Tacoma, Wash. Separator. No. 1,308,920; July 8; v. 264; p. 195.

Smith, Marion A., Salt Lake City, Utah. Root-topping device. No. 1,308,921; July 8; v. 264; p. 196.

Snively, Clarence S., Wilkesburg, Pa., assignor to The Union Switch & Signal Company, Swisshale, Pa. Mounting for contact-fingers and adjusting the same. No. 1,309,108; July 8; v. 264; p. 232.

Snow, Arthur E., Erie, Pa., assignor to The American Laundry Machinery Company, Norwood, Ohio. Clothes-pressing apparatus. No. 1,309,589; July 8; v. 264; p. 321.

Snyder, Adam A. E., Bangor, Pa. Adjustable overhead support for hoists. No. 1,309,046; July 8; v. 264; p. 220.

Societe Des Moteurs Salmson (Systeme Canton-Unne). (See Postel-Vinay, Pierre J. R., assignor.)

Societe Des Moteurs Salmson (Systeme Canton-Unne). (See Salmson, Emilie J. J., assignor.)

Sonnemann, Carl, New York, N. Y. Can-opener. No. 1,309,224; July 8; v. 264; p. 252.

Sopher, Walter, and I. A. Hammond, Atsworth, Nebr. Automatic vise and stop for work-benches. No. 1,308,922; July 8; v. 264; p. 196.

Spellman, Roy A., St. Joseph, Mich. Lamp-shade. No. 1,309,263; July 8; v. 264; p. 259.

Sperry, Elmer A. (See Harrington, Ralph M., assignor.)

Sperry Gyroscope Company, The. (See McDowell and Israel, assignors.)

Sperry Gyroscope Company, The. (See Sperry, Lawrence B., assignor.)

Sperry Gyroscope Company, The. (See Tanner, Harry L., assignor.)

Sperry Gyroscope Company, The. (See Tanner and Thompson, assignors.)

Sperry, Lawrence B., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Double-gyro inclinometer. No. 1,309,489; July 8; v. 264; p. 302.

Spray Engineering Company. (See Parker, Lee H., assignor.)

Sproul, Lark A., Edmond, Kans. Ensilage-harvester. No. 1,308,818; July 8; v. 264; p. 176.

Squier, George A., Cleveland, Ohio. Machine for truing grinding disks. No. 1,309,264; July 8; v. 264; p. 260.

Stanbon, Charles P., Lynn, Mass. Brake. No. 1,309,590; July 8; v. 264; p. 321.

Stancliff, Edwin G., Bakersfield, Calif. Shock-loader. No. 1,309,550; July 8; v. 264; p. 313.

Stanley, George E., Coventry, England. Shock-absorbing mechanism for vehicles. No. 1,309,490; July 8; v. 264; p. 302.

Stanton, Wesley B., Gray, Saskatchewan, Canada. Slat for harvester-reels. No. 1,309,342; July 8; v. 264; p. 274.

Stara, Robert E., Cleveland, Ohio. Protective door for box-cars. No. 1,309,373; July 8; v. 264; p. 280.

Stauffer, Joseph E., Mount Dora, N. Mex. Attachment for motor-driven vehicles. No. 1,308,874; July 8; v. 264; p. 187.

Stearns, Marcus C., Buffalo, N. Y. Aerial weapon. No. 1,309,150; July 8; v. 264; p. 240.

Stebbins, William W. (See Reaser and Stebbins.)

Stebor, Anthony L., Jr. (See Clark, Lester P., assignor.)

Steinhauer, George W., Roseburg, Oreg. Automobile attachment. No. 1,309,491; July 8; v. 264; p. 302.

Stephens, Elwyn T., Springfield, Mass. Method of and apparatus for targeting guns. No. 1,309,429; July 8; v. 264; p. 290.

Stephens, Sterling, Bushnell, Fla. Irrigating apparatus. No. 1,309,225; July 8; v. 264; p. 252.

Stern, Herman C., Waukegan, Wis. Ash-sifter. No. 1,308,963; July 8; v. 264; p. 203.

Stevens and Company. (See Stevens, Frederick A., assignor.)

Stevens Fan Devices Company. (See Power, Jeffrey J., assignor.)

Stevens, Frederick A., Providence, R. I., assignor to Stevens and Company, Incorporated. Ophthalmic mounting. No. 1,308,904; July 8; v. 264; p. 204.

Stewart, Wilber F. (See Hamm and Stewart.)

Stiles, Linford S., Brooklyn, assignor of one-fourth to J. J. Kuhn, New York, N. Y. Cinematograph. No. 1,308,875; July 8; v. 264; p. 187.

Stimpson, Edward S., assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. No. 1,309,226; July 8; v. 264; p. 253.

Stine, Charles M., Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing explosive compounds and products thereof. No. 1,309,551; July 8; v. 264; p. 313.

Stine, Charles M., Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Blasting-cap charge. No. 1,309,552; July 8; v. 264; p. 314.

Stockman, Henry. (See Stockman, Henry C., assignor.)

Stockman, Henry C., New York, N. Y., assignor of one-half to H. Stockman, Englewood, N. J. Leather-cutting die and making shapes. No. 1,309,157; July 8; v. 264; p. 241.

Stone, Avon L. and J. M. Lodi, Calif. Screen. No. 1,308,988; July 8; v. 264; p. 210.

Stone, John M. (See Stone, Avon L. and J. M.)

Straub, I. Oscar. (See Wildrick, Meade, assignor.)

Strid, Sven J., Chicago Heights, Ill., assignor to W. H. Miner, Chazy, N. Y. High-capacity shock-absorbing mechanism. No. 1,308,965; July 8; v. 264; p. 204.

Stroud, William. (See Barr and Stroud.)

Structural Pilehead Steel Wheel Company. (See Lachman, Maurice, assignor.)

Strunk, Joseph B., Mill Hall, Pa. Slio-door construction. No. 1,309,109; July 8; v. 264; p. 232.

Sturdy, Fred, Leeds, assignor of one-half to W. Mitchell, Horsforth, England. Pocket for coats or other garments. No. 1,308,999; July 8; v. 264; p. 210.

Styll, Harry H. (See Tiller and Styll.)

Sullivan, William L., Ferguson, Mo. Ticket-lusling machine. No. 1,308,966; July 8; v. 264; p. 204.

Swan, Alfred H. S., assignor to Rochester Stamping Company, Rochester, N. Y. Percolator. No. 1,309,374; July 8; v. 264; p. 280.

Sweet, Arthur H., assignor to American Tag Company, Chicago, Ill. Package-fastener. No. 1,309,492; July 8; v. 264; p. 302.

Sweet, Parker H., Boonton, N. J. Gin or hater saw. No. 1,308,967; July 8; v. 264; p. 204.

Sweeney, Robert L., Armstrong, Ill. Band-wheel for sausage-grinder. No. 1,308,968; July 8; v. 264; p. 204.

Swift, Charles S., assignor to C. G. Aldrich, Somerville, Mass. Reel for eyeglasses. No. 1,309,110; July 8; v. 264; p. 252.

Swinehart, James A., Akron, Ohio. Vehicle-tire. No. 1,309,308; July 8; v. 264; p. 263.

Swint, Wendell R., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Explosive. No. 1,309,553; July 8; v. 264; p. 314.

Syrett, Herbert, Brooklyn, N. Y. Folding grill and apparatus. No. 1,309,049; July 8; v. 264; p. 221.

T. L. Smith Company, The. (See Albrecht, John H., assignor.)

Tanner, Albert E., Stretford, and E. A. Claremont, High Leigh, England. Joint for electric cables. No. 1,309,155; July 8; v. 264; p. 241.

Tanner, Harry L., Brooklyn, N. Y., assignor to The Sperry Gyroscope Company. Gyroscopic compass. No. 1,309,591; July 8; v. 264; p. 321.

Tanner, Harry L. and H. H. Thompson, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Gyroscopic compass. No. 1,309,592; July 8; v. 264; p. 321.

Tarrant, Walter G., and W. H. Barltz, Rydeet, England. Landing-aid for aeroplanes or similar aircraft. No. 1,309,227; July 8; v. 264; p. 253.

Taylor, Bert E., Mount Vernon, N. Y., assignor to Borden's Condensed Milk Company, New York, N. Y. Evaporating apparatus. No. 1,308,819; July 8; v. 264; p. 177.

Taylor, Russell E., New York, N. Y. Electric motor. No. 1,309,156; July 8; v. 264; p. 241.

Taylor, William A., assignor to Edward Miller & Company, Meriden, Conn. Electric-lamp standard. No. 1,309,575; July 8; v. 264; p. 290.

Technical Supply Company. (See Hagerstrom, John A., assignor.)

Tellin, Frank D., Kalona, Iowa. Cultivating implement. No. 1,309,228; July 8; v. 264; p. 253.

Thomas, Edward G., Toledo, Ohio. Child's play-table. No. 1,308,843; July 8; v. 264; p. 274.

Thomas P. Taylor Co., The. (See Jamison, George P., assignor.)

Thompson, Arthur J., and H. R. Romke, Manister, Mich. Basket-closure. No. 1,309,079; July 8; v. 264; p. 220.

Thompson, Henry R., assignor to I. H. Koch, New York, N. Y. Cinematographic target. No. 1,308,870; July 8; v. 264; p. 187.

Thompson, Herbert H. (See Tauner and Thompson.)

Thompson Electric Welding Company. (See Gravell, James H., assignor.)

Thomson, John, New York, N. Y. Electric furnace for fusing metals. No. 1,308,877; July 8; v. 264; p. 187.

Thomson, John, New York, N. Y. Preventing electric carbon resistors from oxidizing. No. 1,308,878; July 8; v. 264; p. 188.

Thomson, John, New York, N. Y. Eliminating carbon dioxide and oxygen in electric smelting-furnaces. No. 1,308,879; July 8; v. 264; p. 188.

Thomson, John, New York, N. Y. Electric furnace for fusing metals contained in crucibles. No. 1,308,880; July 8; v. 264; p. 188.

Thornton, George A., assignor to Adams-Ragnall Electric Company, Cleveland, Ohio. Method and apparatus for marking metal. No. 1,309,160; July 8; v. 264; p. 241.

Tibbitts, Armand A., Omaha, Nebr. Lock. No. 1,309,050; July 8; v. 264; p. 221.

Tiberli, Giuseppe O., Genoa, Italy. Rotary gas-engine. No. 1,309,554; July 8; v. 264; p. 314.

Tierney, Philip W. (See Parkinson, Welles, and Tierney.)

Tillyer, Edgar D., and H. H. Styll, assignors to American Optical Company, Southbridge, Mass. Molding lens. No. 1,308,820; July 8; v. 264; p. 178.

Time-Systems Company. (See Hale, Charles B., assignor.)

Tinsman, Edgar A. (See Dettling and Tinsman.)

Todd Protectograph Company. (See Sampson, Charles H., assignor.)

Toomey, Patrick A., Chicago, Ill. Machine for casting stereotype printing-plates. No. 1,309,309; July 8; v. 264; p. 268.

Townsend, Herbert, Gloucester, N. J., and W. B. Dixon, Nicetown, Pa. Hot-air heater. No. 1,309,000; July 8; v. 264; p. 210.

Trachte, Dietrich F., St. Louis, assignor to J. Blackburn, Webster Groves, Mo. Cable-hanger. No. 1,308,969; July 8; v. 264; p. 204.

Tregouling, Joseph H., Greeley, Colo. Direction-indicator. No. 1,309,265; July 8; v. 264; p. 259.

Treco Company, Inc. (See Schloss, Meyer W., assignor.)

Trettin, Carl, assignor to Siemens-Schubert Werke G. m. b. H., Berlin, Germany. Rotary converter. No. 1,309,001; July 8; v. 264; p. 211.

Tripp, Hal E., Chattanooga, Tenn. Baking pan. No. 1,308,821; July 8; v. 264; p. 177.

Trost, William B., and F. Klein, assignors to Waterloo Playford Silo Company, Waterloo, Iowa. Sectional silo-ladder. No. 1,308,881; July 8; v. 264; p. 188.

Trumbull Electric Manufacturing Company, The. (See Knudson, Knud, assignor.)

Tucker, Oliver P. (See Black, John L., assignor.)

Twiss City Forge & Foundry Company. (See Keenan, Christensen, and Rnemelin, assignors.)

Tyler, James E., Helen, Ga. Convertible velocipede. No. 1,309,103; July 8; v. 264; p. 232.

U. S. Slicing Machine Company. (See Demuth, Alfred M., assignor.)

U. S. Slicing Machine Company. (See Luschka and Folk, assignors.)

Uffelmann, Minar, New York, N. Y. Container. No. 1,309,376; July 8; v. 264; p. 280.

Underhill, Charles R., New Haven, Conn. Brake mechanism. No. 1,309,377; July 8; v. 264; p. 281.

Underwood, Lawrence H., Youngstown, and K. R. Hitchcock, Struthers, Ohio. Finishing system for by-product coke plants. No. 1,309,161; July 8; v. 264; p. 241.

Underwood Typewriter Company. (See Burridge, Lee S., assignor.)

Underwood Typewriter Company. (See Feston, Walter, assignor.)

Underwood Typewriter Company. (See McLaughlin, John C., assignor.)

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

Union Switch & Signal Company, The. (See Snively, Clarence S., assignor.)

United Printing Machinery Company. (See Upham, Burt F., assignor.)

United Shoe Machinery Corporation. (See Dyer, Newell V., assignor.)

United Shoe Machinery Corporation. (See Eppler, Andrew, assignor.)

United Shoe Machinery Corporation. (See Fowler, Alfred R., assignor.)

United Shoe Machinery Corporation. (See Hill, George R., assignor.)

United Shoe Machinery Corporation. (See Morrill, Alfred R., assignor.)

Universal Utilities Company of Illinois, The. (See Goodhue, Julian G., assignor.)

Universal Winding Company. (See Foster, George W., assignor.)

Upham, Burt F., assignor, by mesne assignments, to United Printing Machinery Company, Boston, Mass. Multi-color sheet-printing press. No. 1,309,255; July 8; v. 264; p. 314.

Ustrum, Christian, Seattle, Wash. Fireplace-damper. No. 1,308,822; July 8; v. 264; p. 177.

Vanderwell, Charles A. (See Mbligley, Albert H., assignor.)
 Van Brunt, John, assignor to Combustion Engineering Corporation, New York, N. Y. Mechanical stoker. No. 1,309,344; July 8; v. 264; p. 275.
 Van Heusen, John M., Boston, Mass. Collar. No. 1,309,378; July 8; v. 264; p. 281.
 Van Heusen, John M., Jamaica Plain, Mass. Collar. No. 1,309,379; July 8; v. 264; p. 281.
 Van Heusen, John M., Boston, Mass. Collar. No. 1,309,380; July 8; v. 264; p. 281.
 Van Heusen, John M., Boston, Mass. Collar. No. 1,309,381; July 8; v. 264; p. 281.
 Van Pelt, John B., Peoria, assignor of one-fourth to F. W. Volker and one-fourth to A. E. Volker, Macomb, Ill. Grain-welcher. No. 1,308,582; July 8; v. 264; p. 188.
 Van Ripper, Oscar, Hope, Ark. Boll-weevil catcher. No. 1,309,556; July 8; v. 264; p. 314.
 Van Valkenburg, Harold A., Oakland, Calif. Foot-pedal for automobiles. No. 1,309,557; July 8; v. 264; p. 314.
 Van Voorhis, Norman, Rochester, N. Y. Combination gas and coal range. No. 1,308,970; July 8; v. 264; p. 205.
 Varley, Richard, Englewood, N. J. X-ray system. No. 1,309,494; July 8; v. 264; p. 302.
 Vas Dias, Joseph, Amsterdam, Netherlands. Suspension-board for show-cards, maps, almanacs, and the like. No. 1,309,319; July 8; v. 264; p. 271.
 Venus Manufacturing Company. (See Milken, Leah G., assignor.)
 Vickers Limited. (See McKeehole and Wallis, assignors.)
 Vlasak, Christina M., Tabor, S. D. Nest-box. No. 1,309,345; July 8; v. 264; p. 275.
 Volght, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Automatic door-holder. No. 1,309,310; July 8; v. 264; p. 269.
 Volker, Alfred E., et al. (See Van Pelt, John B., assignor.)
 Volker, Frank W., et al. (See Van Pelt, John B., assignor.)
 Voorbles, Felix E., Dallas, Tex. Cotton-seed huter. No. 1,308,823; July 8; v. 264; p. 177.
 W. M. Boyle Manufacturing Company. (See Boyle, William M., assignor.)
 Wackwitz, Henry E. J. (See Seaboldt and Wackwitz.)
 Wak Novelty Company, The. (See Deane, Alexander, assignor.)
 W. H. McElwain Company. (See Grant, Reuben P., assignor.)
 Walker, Donald H., Detroit, Mich. Brush. No. 1,309,495; July 8; v. 264; p. 302.
 Walker, Gaines M., St. Louis, Mo. Basket. No. 1,308,824; July 8; v. 264; p. 177.
 Walker, George L., assignor to The Walls Frogless Switch & Manufacturing Company, Kansas City, Mo. Swing-rail switch-frog. No. 1,309,002; July 8; v. 264; p. 211.
 Walker, George L., assignor to The Walls Frogless Switch & Manufacturing Company, Kansas City, Mo. Actuating device for swing-rail switches. No. 1,309,003; July 8; v. 264; p. 211.
 Walker, Robert J. (See Parsons, Walker, Cook, and Douglas.)
 Walker, William R., New York, N. Y. Production of re-duced basic steel. No. 1,309,162; July 8; v. 264; p. 241.
 Walker, William R., New York, N. Y. Making acid steel. No. 1,309,496; July 8; v. 264; p. 303.
 Wallis, Barnes N. (See McKeehole and Wallis.)
 Walls Frogless Switch and Manufacturing Company. (See Dennis, Charles E., assignor.)
 Walls Frogless Switch & Manufacturing Company, The. (See Walker, George L., assignor.)
 Walpole, Nathaniel C., U. S. Army, assignor to the Secretary of War of the United States of America, in trust. Refining cannon. No. 1,309,163; July 8; v. 264; p. 242.
 Walrus Manufacturing Company. (See Farley, Robert, assignor.)
 Walter, Maurice, New York, N. Y. Driving-wheel for motor-vehicles. No. 1,309,266; July 8; v. 264; p. 260.
 Walther Watch Company. (See Ohlson, Olof, assignor.)
 Ward, Charles A., Mount Vernon, N. Y. Motor-vehicle. No. 1,309,164; July 8; v. 264; p. 242.
 Ward, Garret H., Tillamook, Oreg. Cow-stanchion. No. 1,309,497; July 8; v. 264; p. 303.
 Warner, James L., Girard, Kans. Violin-piano. No. 1,309,004; July 8; v. 264; p. 211.
 Warnick, Clarence J. (See Shuttleworth, Charles J., assignor.)
 Waterloo-Playford Silo Company. (See Frost and Klein, assignors.)
 Waters, John C., Epworth, Ga. Plow. No. 1,309,498; July 8; v. 264; p. 303.
 Wattman, George E. (See Seidel and Wattman.)
 Weatherly, William O., Los Angeles, Calif., assignor of forty-five per cent. to W. P. Jones, Spokane, Wash. Adjustable radiator-fan. No. 1,309,005; July 8; v. 264; p. 212.
 Weaver, Clayton B., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Making irregularly-shaped stampings. No. 1,308,709; July 8; v. 264; p. 168.
 Weber, Anton. (See Leibing, William O., assignor.)
 Weber, Frederick C., New York, N. Y. Pumping system. No. 1,309,229; July 8; v. 264; p. 253.
 Wegerer, John F., Marion, Kans. Blowpipe attachment for grain-separators. No. 1,308,825; July 8; v. 264; p. 178.

Webster, T. K., trustee. (See Yeomans, Lucien I., assignor.)
 Weinrich, Moritz, Youkers, N. Y. Manufacturing carbonaceous filtering mediums. No. 1,308,826; July 8; v. 264; p. 178.
 Wels Fibre Container Corporation, The. (See Wels, William C., assignor.)
 Wels, William C., assignor to The Wels Fibre Container Corporation, Mourac, Mich. Fibre container. No. 1,308,883; July 8; v. 264; p. 189.
 Welles, William A. (See Parkinson, Welles, and Tierney.)
 Wells, Alfred A. (See Ellis and Wells.)
 Wells, Clark H., Cedar Rapids, Iowa, assignor of one-half to H. H. Rumble, Norfolk, Va. Flush-valve. No. 1,309,230; July 8; v. 264; p. 254.
 Wells, Ernest, New York, N. Y. Box. No. 1,309,499; July 8; v. 264; p. 303.
 Werner, Albert, Berlin, Friedenau, Germany, assignor to Siemens-Schuckertwerke, G. m. b. H., Berlin, Germany. Oil-cooled electric apparatus. No. 1,309,346; July 8; v. 264; p. 275.
 West, Walter A., Elkhorn, Wis. Milk-cocoa compound and producing same. No. 1,308,770; July 8; v. 264; p. 168.
 Westad, Abraham G., and E. L. Hagg, Hunsfos, Norway. Circulating apparatus for cellulose-digesters. No. 1,309,267; July 8; v. 264; p. 260.
 Western Electric Company. (See Adams, Edgar W., assignor.)
 Western Electric Company. (See Akin, Allison, assignor.)
 Western Electric Company. (See Bell, John H., assignor.)
 Western Electric Company. (See Clausen, Henry P., assignor.)
 Western Electric Company. (See Goodrum, Charles L., assignor.)
 Western Electric Company. (See Horford, William F., assignor.)
 Western Electric Company. (See Lowe, Charles W., assignor.)
 Western Electric Company. (See Reynolds and Hearn, assignors.)
 Western Electric Company. (See Reynolds, John N., assignor.)
 Westinghouse Electric and Manufacturing Company. (See Austin, Walter M., assignor.)
 Wheeler, Roy S. (See Comstock, Frederick E., assignor.)
 Whitbeck, John V., assignor to Chandler Motor Car Company, Cleveland, Ohio. Tire-carrier. No. 1,309,298; July 8; v. 264; p. 261.
 White, Cyril H., Coventry, England. Recovery of brass from foundry-ash and the like. No. 1,309,165; July 8; v. 264; p. 242.
 White, John P. F. (See Lynch and White.)
 Whitehead Torpedo Works, (Weymouth) Limited, The. (See Lees and Riddale, assignors.)
 Whitley, Edward O., and E. L. Knowlton, Williamstown, W. Va. Glass-blower. No. 1,309,166; July 8; v. 264; p. 242.
 Wilson, Elmer N., assignor to Everitt Anchor Company, St. Louis, Mo. Altimeter. No. 1,308,971; July 8; v. 264; p. 205.
 Wildrick, Meade, U. S. Army, assignor of one-half to O. I. Straub, Fort Howard, Md. Aerial torpedo or mine. No. 1,309,500; July 8; v. 264; p. 303.
 Wilkinson, Henry O., Peterbridge, England. Valve and valve mechanism. No. 1,309,081; July 8; v. 264; p. 226.
 Williams, Allen A., Lovelock, Nebr. Attachment for operating accelerators of automobiles, &c. No. 1,309,347; July 8; v. 264; p. 275.
 Williams, Bottlers' Ball Joint Manufacturing Company. (See Condon, Daniel D., assignor.)
 Williams, Ernest C., Ruleville, Miss. Ball-joint. No. 1,308,827; July 8; v. 264; p. 178.
 Williams Foundry & Machine Company, The. (See Arthur, James W., assignor.)
 Williams, Fred D., Onden, Utah. Bass-drum and cymbal beater. No. 1,309,082; July 8; v. 264; p. 227.
 Williams, Louis N. D., Ogonts, Pa. Facilitating mechanical transfer of stitches from the needles of knitting-machines. No. 1,308,828; July 8; v. 264; p. 178.
 Williams, Rhea F., Lake Tawaway, N. C. Container for mulch or the like. No. 1,309,501; July 8; v. 264; p. 303.
 Williamson Heater Company, The. (See Richardson, John N., assignor.)
 Williamson Heater Company, The. (See Woodall, William J., assignor.)
 Willman, Herman V., Chicago, Ill. Socket-carrier for electric fixtures. No. 1,309,051; July 8; v. 264; p. 221.
 Wilson, George D., Plainfield, N. J. Shutter-holder. No. 1,309,352; July 8; v. 264; p. 282.
 Wilson, J. Pearl, Jacksonville, Fla. Flexible knockdown container. No. 1,309,502; July 8; v. 264; p. 304.
 Wilson, Ralph A. (See Gagnon, Peter J., Jr., assignor.)
 Wilson, William L., Zillah, Wash. Can-opener. No. 1,309,503; July 8; v. 264; p. 304.
 Wine, William E. (See Cremean and Wine.)
 Winograd, Morris, New York, N. Y. Lady's garment. No. 1,309,269; July 8; v. 264; p. 261.
 Wira, August H., Moylan, Pa. Bottle-stopper. No. 1,308,972; July 8; v. 264; p. 205.
 Wood, Joseph K., New York, N. Y. Measuring apparatus. No. 1,309,270; July 8; v. 264; p. 261.
 Woodall, William J., assignor to The Williamson Heater Company, Cincinnati, Ohio. Deflector for hot-air registers. No. 1,309,430; July 8; v. 264; p. 291.

Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Bursting charge for containers intended to be exploded and forming said charges. No. 1,309,558; July 8; v. 264; p. 315.
 Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Reducing crude trinitrotol and other crude aromatic nitro compounds. No. 1,309,559; July 8; v. 264; p. 315.
 Worrell, Dwight E., assignor to Harter Manufacturing Company, Chicago, Ill. Electric-fixture support. No. 1,309,052; July 8; v. 264; p. 221.
 Wright, Arthur C. (See Moorehead, George F., assignor.)
 Wright, Samuel M., Schenectady, N. Y. Water-heater. No. 1,309,083; July 8; v. 264; p. 227.
 Wright, Walter E., Cleveland, Ohio. Paint. No. 1,308,884; July 8; v. 264; p. 189.
 Wyatt, Herbert J., Longbranch, Wash. Spout-faucet base. No. 1,309,167; July 8; v. 264; p. 242.
 Wygant, Lewis B., Vincennes, Ind. Electrical bale-tie welder. No. 1,309,168; July 8; v. 264; p. 243.
 Yeomans, Lucien I., assignor to T. K. Webster, trustee, Chicago, Ill. Machine-tool. No. 1,309,383; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Planer. No. 1,309,384; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Pad-facing machine. No. 1,309,385; July 8; v. 264; p. 281.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Manufacturing long sectional machine-beds. No. 1,309,386; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. End-facing machine. No. 1,309,387; July 8; v. 264; p. 282.

Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Manufacturing the bearings of gun-boring machines. No. 1,309,388; July 8; v. 264; p. 283.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Boring-machine. No. 1,309,389; July 8; v. 264; p. 283.
 Young, Daniel. (See Eggett and Young.)
 Young, Harry R., Cincinnati, Ohio. Razor-blade holder. No. 1,309,169; July 8; v. 264; p. 243.
 Young, Harry L., and M. S. Finch, St. Joseph, Mo. Automatic mixing and antiscalding valve. No. 1,308,829; July 8; v. 264; p. 178.
 Young, Homer J., Dayton, Ohio. Electromagnetic speed-indicator for cream clarifiers and separators. No. 1,309,390; July 8; v. 264; p. 283.
 Young, John H., Bartlesville, Okla. Gun-support. No. 1,309,560; July 8; v. 264; p. 315.
 Young, William A., Milwaukee, Wis., assignor of one-half to H. H. Erkelens, Milwaukee, Wis. Traveling crane. No. 1,309,504; July 8; v. 264; p. 304.
 Zang, Joseph E. (See Klorer, Charles P., assignor.)
 Zapf, Vassilo P., New York, N. Y. Lacing device. No. 1,309,271; July 8; v. 264; p. 261.
 Zeimer, Jacob, et al. (See Light, Claus H., assignor.)
 Ziegler, Alfred A., Boston, Mass. Junction-box. No. 1,308,830; July 8; v. 264; p. 179.
 Zimmerman, Edgar A., Shamokin, Pa. Spacing bar or core for plastic work. No. 1,309,084; July 8; v. 264; p. 227.
 Zink, Herman P. (See Martin and Zink.)
 Zuka, John, Byesville, Ohio. Railway-track. No. 1,309,170; July 8; v. 264; p. 242.
 Zwermann, Carl H., Newark, Ohio. Kila. No. 1,308,973; July 8; v. 264; p. 205.

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Adam, Harry C., St. Louis, Mo. Lighting-fixture urn. No. 53,481; July 8; v. 264; p. 327.
 A. J. Deer Company, The. (See Wygant, Frederick A., assignor.)
 Bartelmech, Leonard, Wilkesburg, Pa. Service-button. No. 53,482; July 8; v. 264; p. 327.
 Belmont, Ralph A., New York, N. Y. Casing for a pendant switch. No. 53,483; July 8; v. 264; p. 327.
 Black & Company. (See Davis, Elizabeth A., assignor.)
 Black & Company. (See Meyer, Felix, assignor.)
 Brile, Lawrence M., and L. Lapides, assignors to United Smelting & Aluminum Co., Inc., New Haven, Conn. Cake of babbitt metal. No. 53,484; July 8; v. 264; p. 327.
 Bunting, James H., assignor to Susquehanna Silk Mills, New York, N. Y. Brocade. No. 53,485; July 8; v. 264; p. 327.
 Bye, Edwin A. (See Mayer and Bye.)
 Champion Spark Plug Company. (See Rohde, Otto C., assignor.)
 Claggett, Samuel A., and S. Devall, Los Angeles, Calif. Souvenir-badge. No. 53,486; July 8; v. 264; p. 327.
 Courtenay, Timothy R., New York, N. Y. Pennant, book-cover, or similar article. No. 53,487; July 8; v. 264; p. 328.
 Davis, Elizabeth A., assignor to Black & Company, Inc., New York, N. Y. Lace. No. 53,488; July 8; v. 264; p. 328.
 De Tangle, Edward S., San Francisco, Calif. Auto-headlight lens. No. 53,489; July 8; v. 264; p. 328.
 Deutsch, Harry J., Columbus, Ohio. Wind-wheel. No. 53,490; July 8; v. 264; p. 328.
 Devall, Samuel. (See Claggett and Devall.)
 De Vilbiss Manufacturing Company, The. (See Gradolph, William F., assignor.)
 Divlos, Charles A. (See Wyatt, De Witt H., assignor.)
 Dommenge, Harry F., Jr., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,491; July 8; v. 264; p. 328.
 Dudley, William W., Lancaster, Pa. Movement-frame for watches. No. 53,492; July 8; v. 264; p. 328.
 Elzele, Adolphe, assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,493; July 8; v. 264; p. 329.
 Frick, Elue O., assignor to Hood Rubber Company, Watertown, Mass. Tire. No. 53,494; July 8; v. 264; p. 329.
 Greenman, Marina, Chicago, Ill. Automobile-tire. No. 53,495; July 8; v. 264; p. 329.
 Gerhardt, Leonard, assignor to Tin Decorating Company of Baltimore, Baltimore, Md. Sifter-top can or similar receptacle. No. 53,496; July 8; v. 264; p. 329.
 Gerum, Peter, Vancouver, Wash. Tricycle. No. 53,495; July 8; v. 264; p. 329.
 Gradolph, William F., assignor to The De Vilbiss Manufacturing Company, Toledo, Ohio. Pressure-regulator head for fluid-pressure tanks. No. 53,497; July 8; v. 264; p. 329.

Hanson, John F., Concord, N. H. Novelty-box. No. 53,499; July 8; v. 264; p. 330.
 Harrison, Benjamin M., Little Rock, Ark. Perpetual calendar. No. 53,500; July 8; v. 264; p. 330.
 Hartline, William A., Penna Grove, N. J. Service-pin. No. 53,501; July 8; v. 264; p. 330.
 Heene, Isabelle, Brooklyn, N. Y. Tread-plate for shoes. No. 53,502; July 8; v. 264; p. 330.
 H. Northwood Company. (See Taylor, Dent A., assignor.)
 Holden, Harry M., Jersey City, N. J. Flag. No. 53,503; July 8; v. 264; p. 330.
 Hood Rubber Company. (See Frick, Elue O., assignor.)
 Hubbard & Company. (See Peirce, Charles L., Jr., assignor.)
 Jones, Meredith, Scranton, Pa. Stovepipe-reducer. No. 53,504; July 8; v. 264; p. 330.
 Kimball, Philip S., Milford, Mass. Lifting-jack. No. 53,505; July 8; v. 264; p. 330.
 Kitt, William C., Cincinnati, Ohio. Box. No. 53,506; July 8; v. 264; p. 331.
 Lapides, Louis. (See Brile and Lapides.)
 Lehr, Max, Brooklyn, N. Y. Banner, flag, pennant, sign, emblem, or article of a similar nature. No. 53,507; July 8; v. 264; p. 331.
 Mayer Brothers Company. (See Mayer and Bye, assignors.)
 Mayer, Lorena L. (See Mayer and Bye.)
 Mayer, Louis and L. L., and E. A. Bye, assignors to Mayer Brothers Company, Mankato, Minn. Tractor-body. No. 53,508; July 8; v. 264; p. 331.
 McLaren, Alexander, Chicago, Ill. Ice-cream cone. Nos. 53,509-10; July 8; v. 264; p. 331.
 Meeka, Annie L., Gadsden, Ala. Tire. No. 53,511; July 8; v. 264; p. 331.
 Meyer, Felix, assignor to Black & Company, Inc., New York, N. Y. Lace. Nos. 53,512-13; July 8; v. 264; p. 332.
 Mize, Julius A., New York, N. Y. Textile fabric. Nos. 53,514-15; July 8; v. 264; p. 332.
 Mudge & Company. (See Vanatta, Jean K., assignor.)
 Oberdorfer, Henry D., Quincy, Ill. Easel. No. 53,516; July 8; v. 264; p. 332.
 Onderdonk, Wesley N., Utica, N. Y. Steering-post support for automobiles. No. 53,517; July 8; v. 264; p. 332.
 Orcutt, Leon F., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,518; July 8; v. 264; p. 333.
 Owen, Raymond V., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo. Lighting-fixture. No. 53,520; July 8; v. 264; p. 333.
 Owen, Raymond V., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo. Table-lamp. No. 53,519; July 8; v. 264; p. 333.
 Paughorn, Leo D., Eau Claire, Wis. Doll or baby carriage body. No. 53,523; July 8; v. 264; p. 333.

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Peirce, Charles L. Jr., Pittsburgh, Pa., assignor of one-half to Hubbard & Company, Inc., No. 53,522; July 8; v. 264; p. 333.
 Peitche, John F., Kuna, Idaho, Match-scratcher, No. 53,521; July 8; v. 264; p. 333.
 Poczek, Joseph, Chicopee Falls, Mass., Picture-frame, No. 53,524; July 8; v. 264; p. 334.
 Potter, Thomas J., Los Angeles, Calif., Gas-radiator, No. 53,525; July 8; v. 264; p. 334.
 Reinhardt, Ruby L., assignor to Susquehanna Silk Mills, New York, N. Y., Printed silk, No. 53,526; July 8; v. 264; p. 334.
 Reith, William G., assignor to Susquehanna Silk Mills, New York, N. Y., Printed silk, No. 53,527; July 8; v. 264; p. 334.
 Rockwell, Byrd C., Camden, Ark., Screen-door, No. 53,528; July 8; v. 264; p. 334.
 Rohde, Otto C., assignor to Champion Spark Plug Company, Toledo, Ohio, Spark-plug, No. 53,529; July 8; v. 264; p. 334.
 Schless, Maurice J., New York, N. Y., Ring or similar article of manufacture, No. 53,530-5; July 8; v. 264; p. 335.
 Schults, Bernard, Worcester, Mass., Waist, No. 53,536; July 8; v. 264; p. 335.
 Steiner, Albert, Cincinnati, Ohio, Cake of soap or similar article, No. 53,537; July 8; v. 264; p. 335.
 St. Louis Brass Manufacturing Company, (See Owen, Raymond V., assignor.)
 Susquehanna Silk Mills, (See Bunting, James H., assignor.)
 Susquehanna Silk Mills, (See Dommeore, Harry F., Jr., assignor.)
 Susquehanna Silk Mills, (See Haele, Adolphe, assignor.)
 Susquehanna Silk Mills, (See Orrutt, Leon F., assignor.)
 Susquehanna Silk Mills, (See Reinhardt, Ruby L., assignor.)

Susquehanna Silk Mills, (See Reith, William G., assignor.)
 Taylor, Dent A., Wheeling, W. Va., assignor to H. Northwood Company, Lighting-fixture, No. 53,538; July 8; v. 264; p. 336.
 Templeman, Arthur E., Grand Junction, Colo., Badge, button, or similar article, No. 53,539; July 8; v. 264; p. 336.
 Timmons, John S., New York, N. Y., Wall-telephone set, No. 53,540; July 8; v. 264; p. 336.
 Tin Decorating Company of Baltimore, (See Gerhardt, Leonard, assignor.)
 United Smelting & Aluminum Co., (See Brille and Lapides, assignors.)
 Vanatta, Jess K., assignor to Mudge & Company, Chicago, Ill., Engine-base for motor-cars, No. 53,541; July 8; v. 264; p. 336.
 Vandewalker, Earl R., (See Wells and Vandewalker.)
 Wells, Thomas, and E. R. Vandewalker, Watertown, N. Y., Lamp-standard, No. 53,542; July 8; v. 264; p. 336.
 West, Ralph H., Cleveland, Ohio, Vehicle-wheel, No. 53,543-4; July 8; v. 264; p. 336.
 Widmer, Charles A., Paterson, N. J., Indicator, sign, or similar article, No. 53,545-7; July 8; v. 264; p. 337.
 Wilson, Harry A., Salisbury, Md., Wooden ice-cream spoon, No. 53,548; July 8; v. 264; p. 337.
 Wyatt, De Witt H., assignor to C. A. Divine, Columbus, Ohio, Combined lamp-bracket and sign-support, No. 53,549; July 8; v. 264; p. 337.
 Wyatt, De Witt H., assignor to C. A. Divine, Columbus, Ohio, Combined lamp-standard and street-indicator, No. 53,550; July 8; v. 264; p. 338.
 Wygant, Frederick A., assignor to The A. J. Deer Company, Incorporated, Hornell, N. Y., Frame for slicing-machines, No. 53,551; July 8; v. 264; p. 338.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

American Lead Pencil Company, New York, N. Y., Lead-pencils, No. 125,889; July 8; v. 264; p. 349.
 American Lead Pencil Company, New York, N. Y., Lead and drawing pencils, chalk, crayons, No. 125,890; July 8; v. 264; p. 349.
 American Textile Products Company, Chicago, Ill., Garters and hose-supporters, No. 125,891; July 8; v. 264; p. 349.
 Anchor Leather Co., Chicago, Ill., Tanned leather hides for shoe-uppers, No. 125,892; July 8; v. 264; p. 349.
 Austin, Nichols & Co., Inc., Brooklyn and New York, N. Y., Certain named foods, No. 125,893; July 8; v. 264; p. 349.
 Bogalusa Paper Company, Inc., Bogalusa, La., Paper for container-liner, No. 125,894; July 8; v. 264; p. 349.
 Boye Needle Company, The, Chicago, Ill., Crochet-needles for hand use, No. 125,895; July 8; v. 264; p. 349.
 Byron Weston Co., Dalton, Mass., Writing-paper, No. 125,896; July 8; v. 264; p. 349.
 Clark Thread Co., The, Newark, N. J., Cotton thread, No. 125,897; July 8; v. 264; p. 349.
 Dejong, Joseph, London, England, Imitation leather for use in making boots and shoes, No. 125,898; July 8; v. 264; p. 349.
 Dick, Ralph C., Newark, N. J., Pins, No. 125,899; July 8; v. 264; p. 349.
 Dilks, Walter H., Philadelphia, Pa., Certain named clothing for men, women, and misses, No. 125,900; July 8; v. 264; p. 349.
 Eastern Luminous Indicator Co., Inc., Waltham, Mass., Radium luminous buttons, No. 125,901; July 8; v. 264; p. 349.
 Engel Aircraft Company, The, Niles, Ohio, Aeroplanes and flying-boats, No. 125,902; July 8; v. 264; p. 349.
 Goodman, Bertram J., Brooklyn, N. Y., Dressed and dyed furs, No. 125,903; July 8; v. 264; p. 349.
 Hughes, George W., Birmingham, England, Steel pens, No. 125,904; July 8; v. 264; p. 349.
 Joseph W. Schless Co., New York, N. Y., Mechanical hair wavers or curlers, No. 125,913; July 8; v. 264; p. 349.
 Keller Printing Company, New York, N. Y., Clothing-tickets, No. 125,905; July 8; v. 264; p. 349.

Miller Brothers Company, The, Newark, N. J., Writing and mailing envelopes, No. 125,906; July 8; v. 264; p. 349.
 Nashua Gummed and Coated Paper Company, Nashua, N. H., Paper coated with a silver-like coating, No. 125,907; July 8; v. 264; p. 349.
 National Paperette Company, Springfield, Mass., Printing and writing paper and envelopes, No. 125,908; July 8; v. 264; p. 349.
 Nelson, Baker & Co., Detroit, Mich., Antiseptic dusting-powders, catarrhal nasal points, &c., No. 125,923; July 8; v. 264; p. 350.
 Oswego River Paper Mills, Phoenix, N. Y., Toilet-paper, No. 125,909; July 8; v. 264; p. 349.
 People's Outfitting Company, Detroit, Mich., Imitation leather, No. 125,910; July 8; v. 264; p. 349.
 Perfection Tire & Rubber Co., Fort Madison, Iowa, Pneumatic tires, No. 125,911; July 8; v. 264; p. 349.
 Rantville, Loova A., Grand Rapids, Mich., Leather belt-lux, No. 125,912; July 8; v. 264; p. 349.
 Ruff, Adolph, New York, N. Y., Women's and misses' dress-skirts, No. 125,913; July 8; v. 264; p. 349.
 S. D. Warren Company, Boston, Mass., Printing-paper, No. 125,921; July 8; v. 264; p. 350.
 S. D. Warren Company, Boston, Mass., Printing-paper, No. 125,922; July 8; v. 264; p. 350.
 Samstag & Hilder Bros., New York, N. Y., Dress-shields, No. 125,914; July 8; v. 264; p. 349.
 Scully, Cornelius A., Leominster, Mass., Liquid polish for furniture, automobiles, &c., No. 125,916; July 8; v. 264; p. 349.
 Stability Motors Company, Philadelphia, Pa., Motor-trucks and trailers, No. 125,917; July 8; v. 264; p. 349.
 Stearns Tire & Tube Company, St. Louis, Mo., Inner tubes for pneumatic tires, No. 125,918; July 8; v. 264; p. 350.
 Templeton, Walter B., Chicago, Ill., Blank forms designed to contain office, shop, and other records, No. 125,919; July 8; v. 264; p. 350.
 Thermokept Products Corporation, New York, N. Y., Tea, coffee, dried vegetables, cheese, &c., No. 125,920; July 8; v. 264; p. 350.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Bonner, Charles G., Fresno, Calif., "Holly," (For Raisins,) No. 21,351; July 8; v. 264; p. 351.
 Cannard, B., Los Angeles, Calif., "Dr. Cannard's Future-Proof Foot Lotion," (For a Foot-Lotion,) No. 21,352; July 8; v. 264; p. 351.
 Carolene Company, The, (See Carroll, Thomas L., assignor.)
 Carroll, Thomas L., Chicago, Ill., assignor, by mesne assignments, to The Carolene Company, "Carolene," (For a Compound of Refined Nut-Oils and Evaporated Skimmed Milk,) No. 21,353; July 8; v. 264; p. 351.
 Celro-Kols Co., Portland, Ore., "Mint-U-Lip," (For Syrup,) No. 21,354; July 8; v. 264; p. 351.
 Donald Company, The, Grand Island, Nebr., "Rob Roy," (For Coffee,) No. 21,355; July 8; v. 264; p. 351.
 Dorothy Dodd Shoe Company, Boston, Mass., "Gold Medal," (For Boots and Shoes,) No. 21,356; July 8; v. 264; p. 351.
 Empire Bottling Works, El Paso, Tex., "Broncho The Drink With a Kick," (For a Non-Alcoholic Beverage,) No. 21,357; July 8; v. 264; p. 351.
 Leroy, Victor, Attica, Ind., "No Protest," (For Cigars,) No. 21,358; July 8; v. 264; p. 351.
 Modeta Canning Company, Modeta, Calif., "Polly," (For Canned Tomatoes with Purée from Trimmings,) No. 21,359; July 8; v. 264; p. 351.
 Modeta Canning Company, Modeta, Calif., "Gold Beam," (For Canned Tomatoes,) No. 21,360; July 8; v. 264; p. 351.

Nelson & Klittle Canning Co. Ltd., Terminal, Calif., "Normans," (For Canned Sardines,) No. 21,361; July 8; v. 264; p. 351.
 Randall, J. W. II., Piedmont, W. Va., and New York, N. Y., "Pep," (For a Non-Alcoholic Beverage,) No. 21,363; July 8; v. 264; p. 351.
 Redondo Packing Co., Redondo, Calif., "Redondo," (For Canned Sardines,) No. 21,364; July 8; v. 264; p. 351.
 Rieder & Freudenberger, Louisville, Ky., "Kosine Hair Tonic," (For a Hair-Tonic Preparation,) No. 21,365; July 8; v. 264; p. 351.
 Roth, Joseph S., Monongahela, Pa., "Tip Top," (For Ginger-Beer,) No. 21,366; July 8; v. 264; p. 351.
 Russell Jabbers' Mills, The, Oklahoma, Okla., "Rusdun," (For Mules,) No. 21,367; July 8; v. 264; p. 351.
 Samuel W. Peck & Co., New York, N. Y., "Sampeck Triple-Service Suit," (For Men's, Young Men's, Boys', Children's and Juveniles' Outer Suits,) No. 21,368; July 8; v. 264; p. 351.
 San Joaquin Fruit Co., Tustin, Calif., "President," (For Oranges,) No. 21,369; July 8; v. 264; p. 351.
 San Joaquin Fruit Co., Tustin, Calif., "Senator," (For Oranges,) No. 21,370; July 8; v. 264; p. 351.
 United States Rubber Company, New York, N. Y., "Uaco Kold-Pak," (For Jar-Bottlers,) No. 21,370; July 8; v. 264; p. 351.
 William Cline Co., San Francisco, Calif., "Yosemite," (For Canned Peaches,) No. 21,371; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

Brockway, C. L., Seattle, Wash., "Saving Service, Satisfaction," (For Automobile-Tires,) No. 5,124; July 8; v. 264; p. 351.
 Bunte Brothers, Chicago, Ill., "Bunte The Quality Cocoa," (For Cocoa,) No. 5,125; July 8; v. 264; p. 351.
 The E. V. D. Company, New York, N. Y., "Get Wise, Dad, Wear It V. D.," (For Athletic Underwear,) No. 5,126; July 8; v. 264; p. 351.
 R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "I'll say it to you," (For Smoking-Tobacco,) No. 5,127; July 8; v. 264; p. 351.
 R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "P. A. is such a scuttle full of conshine," (For Smoking-Tobacco,) No. 5,128; July 8; v. 264; p. 351.
 R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "Tell it to your old jimmy pipe!" (For Smoking-Tobacco,) No. 5,129; July 8; v. 264; p. 351.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "Scrub up your smokedecks and eat for a new pipe deal!" (For Smoking-Tobacco,) No. 5,130; July 8; v. 264; p. 351.
 R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "When you said the grand idea," (For Smoking-Tobacco,) No. 5,131; July 8; v. 264; p. 351.
 R. J. Reynolds Tobacco Company, Winston-Salem, N. C., "Talk about indoor and outdoor sports," (For Smoking-Tobacco,) No. 5,132; July 8; v. 264; p. 351.
 M. G. Beville Sons Company, Ogden, Utah, "Mother Goose Brooms," (For Brooms,) No. 5,133; July 8; v. 264; p. 351.
 Thomas, C., San Francisco, Calif., "Thomas Awning Company," (For Awnings,) No. 5,134; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

A. R. Rosenthal Co., New York, N. Y., Silk piece goods, No. 118,525; July 8; v. 264; p. 347.
 Abbot Jacket Manufacturing Company, St. Louis, Mo., Workmen's overall combined coat-aprons and one-piece overall-suits, No. 116,068; July 8; v. 264; p. 342.
 Abe Bloch and Co., Cincinnati, Ohio, Men's and young men's coats, vests, and trousers, No. 117,099; July 8; v. 264; p. 344.
 Adam H. Bartel Co., Richmond, Ind., Overalls, No. 103,244; July 8; v. 264; p. 339.
 Adler, Raymond C., Dayton, Ohio, Children's outer garments, No. 111,684; July 8; v. 264; p. 340.
 Anaheim Orange & Lemon Association, Anaheim, Calif., Fresh citrus fruits, No. 118,635; July 8; v. 264; p. 347.
 Anaheim Orange & Lemon Association, Anaheim, Calif., Fresh citrus fruits, Nos. 118,638-9; July 8; v. 264; p. 347.
 Andersen, Meyer & Co. Limited, New York, N. Y., and Shanghai, China, Dye, Nos. 117,548-53; July 8; v. 264; p. 345.
 Asanakis, Stavros K., New York, N. Y., Olive-oil, No. 118,535; July 8; v. 264; p. 347.
 Raden, Ernest H. W., St. Joseph, Mo., Reinforcing-shapes for garments, No. 109,793; July 8; v. 264; p. 339.
 Baldoff, W. E., Omaha, Nebr., Chocolate candies, No. 110,852; July 8; v. 264; p. 340.
 Baltimore Pearl Hominy Company, Baltimore, Md., Corn flakes, No. 117,004; July 8; v. 264; p. 343.

Baron, Alexander, Brooklyn, N. Y., Toy-watch dials and cases, No. 117,002; July 8; v. 264; p. 343.
 C. & C. Mfg. Co., New York, N. Y., Men's, women's, and children's cotton and silk underwear, No. 116,359; July 8; v. 264; p. 342.
 C. C. Mengel & Bro. Co., Incorporated, Louisville, Ky., Cocoa-beans for food purposes, No. 116,280; July 8; v. 264; p. 342.
 C. F. Blake Tea & Coffee Co., St. Louis, Mo., Coffee, tea, spices, No. 117,636; July 8; v. 264; p. 346.
 Callaghan, Margaret J., Boston, Mass., Ointment for the scalp and hair, No. 114,658; July 8; v. 264; p. 341.
 Colonial Steel Company, Pittsburgh, Pa., Bits for lathes for cutting, No. 105,223; July 8; v. 264; p. 339.
 Crial & Cerchione, New York, N. Y., Olive-oil, No. 115,755; July 8; v. 264; p. 341.
 Delay Hosiery Mills, Burlington, N. C., Hosiery and knitted underwear, No. 115,170; July 8; v. 264; p. 341.
 De Lutz, Brook and Eye Company, Philadelphia, Pa., Hooks and eyes, snap-fasteners, safety and toilet pins, No. 100,580; July 8; v. 264; p. 339.
 Dormer Brothers Company, Cincinnati, Ohio, Men's hosiery, No. 116,150; July 8; v. 264; p. 342.
 Edward McConnell & Co., New York, N. Y., Flannel piece goods, No. 117,240; July 8; v. 264; p. 344.
 Empire Silk Company, Wilmington, Del., and New York, N. Y., Silk piece goods, No. 118,430; July 8; v. 264; p. 347.

xviii ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.
(REGISTRATION APPLIED FOR.)

Federal Biscuit Co., Everett, Mass. Ice-cream cones. No. 117,180-1; July 8; v. 264; p. 344.
Floor Shine Paint & Varnish Co., St. Louis, Mo. Varnishes, japans, and enamels for baking or air-drying. No. 111,492; July 8; v. 264; p. 340.
Frankel Specialties Corporation, New York, N. Y. Shoes, sandals, slippers, boots, &c. No. 117,400; July 8; v. 264; p. 344.
Franklin Clothing Mfg Co., St. Louis, Mo. Men's and boys' outer garments. No. 116,203; July 8; v. 264; p. 342.
G. W. Home Company, San Francisco, Calif. Dried prunes. No. 118,671; July 8; v. 264; p. 348.
Giuseppe Bianco & Figlio, New York, N. Y. Olive-oil. No. 118,642; July 8; v. 264; p. 348.
Goldsmith, Charles A., New York, N. Y. Dolls. No. 116,412; July 8; v. 264; p. 343.
Greco Cannery Co., Inc., San Jose, Calif. Canned tomatoes, pears, cherries, &c. No. 118,662; July 8; v. 264; p. 348.
Griffin Mfg Co., Inc., New York, N. Y. Shoe-polish. No. 118,290; July 8; v. 264; p. 341.
Holmes and Barnes, Ltd., Baton Rouge, La. Wheat-flour. No. 114,973; July 8; v. 264; p. 341.
Honerker, Jacob J., Cleveland, Ohio. Dyspepsia-pills. No. 117,232; July 8; v. 264; p. 344.
Howard & Casey Co., Mt. Vernon, Ill. Coffee. No. 118,667; July 8; v. 264; p. 348.
I. H. Kleibert Rubber Company, New York, N. Y. Baby-pants. No. 116,334; July 8; v. 264; p. 342.
Industrial Garment Co., Chicago, Ill. Outer work-shirts and overalls. No. 117,455; July 8; v. 264; p. 345.
John J. Hildebrandt Co., Logansport, Ind. Splinters and artificial flies for fish-bait. No. 117,672; July 8; v. 264; p. 346.
John O. Notari & Co., Chicago, Ill. Canned olive-oil. No. 117,738; July 8; v. 264; p. 346.
Kansas City Medicine Co., Kansas City, Mo. Hair-restorative. No. 115,918; July 8; v. 264; p. 342.
Katzenbach & Bullock Company, New York, N. Y. Chemical material for accelerating vulcanization of rubber. No. 117,532; July 8; v. 264; p. 345.
Kellner Bros., New York, N. Y. Children's dresses. No. 117,841; July 8; v. 264; p. 346.
Korrekts Pants Mfg. Co., St. Louis, Mo. Boys' pants. No. 110,889; July 8; v. 264; p. 340.
Lewis, Florence N., New York, N. Y. Face-powders. No. 114,185; July 8; v. 264; p. 341.
Liberty Hair Pin Manufacturing Co., Hazleton, Pa. Hair-pins. No. 116,781; July 8; v. 264; p. 343.
Macon Woolen Mills, Bibb county, Ga. Pants and overalls. No. 107,329; July 8; v. 264; p. 339.
Meridian Candy Co., Meridian, Miss. Candy. No. 118,444; July 8; v. 264; p. 347.
Mil-Ko-Ko Company, St. Paul, Minn. Preparation in powdered form for making a beverage food. No. 115,198; July 8; v. 264; p. 340.
Moch, Irving, New York, N. Y. Ladies' trimmed and tailored hats. No. 111,280; July 8; v. 264; p. 340.
Morgan Drug Company of the City of Brooklyn, Brooklyn, N. Y. Tablet for use as a body builder or invigorator. No. 115,671; July 8; v. 264; p. 341.
National Compound Company, Riverside, N. J. Water-softener compound. No. 116,787; July 8; v. 264; p. 343.
National Magnesia Manufacturing Company, San Francisco, Calif. Sectional magnesia pipe-covering and boiler and locomotive lagging. No. 116,164; July 8; v. 264; p. 342.
Nielsen & Kittle Canning Co., Terminal, Calif. Canned sardines. No. 117,987; July 8; v. 264; p. 340.
Nitrate Agencies Company, New York, N. Y. Fertilizers. No. 115,669; July 8; v. 264; p. 341.
Northwestern Chemical Co., Marietta, Ohio. Valve-grinding and seal's-foot clutch and brake compounds, &c. No. 110,486; July 8; v. 264; p. 339.
O'Hiley, Leo J., Grand Rapids, Mich. Phonographs. No. 116,848; July 8; v. 264; p. 343.
Oetlinger, Alice, Zurich, Switzerland. Dress-shoulders. No. 111,904; July 8; v. 264; p. 340.
Oxygen Products Company, Thief River Falls, Minn. Chemical carbon-preventive. No. 117,386; July 8; v. 264; p. 344.
P. & M. Giardina, Ensey, Ala. Macaroni, spaghetti, &c. No. 118,380; July 8; v. 264; p. 347.
Read Drug and Chemical Co., Baltimore, Md. Perfumery, toilet water, rouge, &c. No. 113,722; July 8; v. 264; p. 341.
Remmert, William, St. Louis, Mo. Laundry-washing machines. No. 117,950; July 8; v. 264; p. 347.
Richmond, John S., Philadelphia, Pa. Women's and children's knitted and woven underwear. No. 116,426; July 8; v. 264; p. 343.
Robert F. Mackenale Co., Cleveland, Ohio. Candy. No. 117,689; July 8; v. 264; p. 346.
Strauss Bros. & Co., New York, N. Y. Mouth-bar-moocans. No. 117,600-7; July 8; v. 264; p. 344.
Foamite Firefoam Company, New York, N. Y. Fire-extinguishing compounds. No. 117,982; July 8; v. 264; p. 344.
Taylor, Raymond E., Portland, Oreg. Preparation for coughs, colds, bronchitis, &c. No. 118,243; July 8; v. 264; p. 347.
Tolado Rex Spray Co., Toledo, Ohio. Fungicides and horticultural insecticides. No. 118,197; July 8; v. 264; p. 347.
Tractor Producing Corporation, New York, N. Y. Tractors. No. 110,878; July 8; v. 264; p. 340.
W. T. Holmes Company, Philadelphia, Pa. Leather, fabric, and combination shoes for women. No. 117,618; July 8; v. 264; p. 346.
Wilson Company, Arcade, N. Y., and Mills, Mosquero, and Solano, N. Mex. Sandals, shoes, slippers. No. 117,720; July 8; v. 264; p. 346.
Wm. Enders Manufacturing Company, Waldean, N. Y. Mule and horse collars. No. 117,479; July 8; v. 264; p. 345.
Worthington Ball Company, Elyria, Ohio. Golf-balls. Nos. 117,426-7; July 8; v. 264; p. 345.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 8TH DAY OF JULY, 1919.

Abdominal support. I. Allison. No. 1,309,007; July 8; v. 264; p. 212.
Acid from sludge, Process of producing hydrochloric. H. M. Lasher. No. 1,309,206; July 8; v. 264; p. 249.
Acid steel making. W. R. Walker. No. 1,309,406; July 8; v. 264; p. 303.
Adding-machine. A. A. Horton. No. 1,308,787; July 8; v. 264; p. 171.
Advertising attachment to wheel-rims. C. F. Dencklau. No. 1,309,404; July 8; v. 264; p. 297.
Aerating fluorescent material and machine for the purpose. M. Hopkins and C. Brunkhorst. No. 1,308,904; July 8; v. 264; p. 102.
Aerial machine. W. Pala. No. 1,309,152; July 8; v. 264; p. 240.
Aerial weapon. M. C. Stearns. No. 1,309,156; July 8; v. 264; p. 240.
Aeroplane. C. A. Simmons. No. 1,308,997; July 8; v. 264; p. 210.
Aeroplane body or cell. E. J. J. Salmons. No. 1,308,810; July 8; v. 264; p. 175.
Aeroplanes or similar aircraft. Landing skid for. W. G. Tarrant and W. H. Harling. No. 1,309,227; July 8; v. 264; p. 253.
Aeroplanes, Stabilizing device for use on. C. J. Berthel. No. 1,309,452; July 8; v. 264; p. 295.
Air-supply moistener for internal-combustion engines. B. Macfadden. No. 1,309,254; July 8; v. 264; p. 258.
Aircraft. Doping. P. R. Bradley. No. 1,309,454; July 8; v. 264; p. 295.
Aircraft, fuelinometer for use on. W. D. McCormack. No. 1,308,795; July 8; v. 264; p. 172.
Aircraft. Fireproofing. P. R. Bradley. No. 1,309,453; July 8; v. 264; p. 295.
Aircraft. Mounting of lighter-than-air. J. McKechnie and H. N. Wallis. No. 1,309,533; July 8; v. 264; p. 310.
Aircraft-projectile. G. E. Lamberson. No. 1,309,530; July 8; v. 264; p. 309.
Airmship. J. Paulanski. No. 1,309,078; July 8; v. 264; p. 226.
Alarm. See—
Burglar-alarm.
Alloy. Manufacture of molybdenum tungsten. F. G. Keyes. No. 1,308,907; July 8; v. 264; p. 193.
Altimeter. E. N. Widco. No. 1,308,971; July 8; v. 264; p. 205.
Aluminum-castings. Repairing. S. D. Irwin. No. 1,309,033; July 8; v. 264; p. 218.
Ammonia from producer-gas, Recovery of. A. H. Lyme and N. E. Ramboosh. No. 1,309,145; July 8; v. 264; p. 238.
Antifreezing-circulator. F. E. Comstock. No. 1,309,243; July 8; v. 264; p. 256.
Antiskidding device. C. W. Johnson. No. 1,309,826; July 8; v. 264; p. 272.
Article-holder. J. F. Ford. No. 1,309,128; July 8; v. 264; p. 235.
Ash-sifter. H. C. Stern. No. 1,308,963; July 8; v. 264; p. 203.
Assorting-machine. E. Danner. No. 1,309,086; July 8; v. 264; p. 227.
Auto-carrier. E. L. Evans. No. 1,309,470; July 8; v. 264; p. 298.
Automatic switch. J. N. Reynolds and J. F. Hearn. No. 1,309,364; July 8; v. 264; p. 267.
Automatic wrench. H. F. Corey. No. 1,309,462; July 8; v. 264; p. 296.
Automobile attachment. O. W. Steinhauer. No. 1,309,491; July 8; v. 264; p. 302.
Automobile-body. H. C. Malae. No. 1,309,144; July 8; v. 264; p. 238.
Automobile-jack. M. De Cesare and J. D. Chiale. No. 1,309,511; July 8; v. 264; p. 305.
Automobile rear signal. R. La Selva. No. 1,308,873; July 8; v. 264; p. 187.
Automobile steering-wheel. O. B. Fales. No. 1,309,123; July 8; v. 264; p. 234.
Automobiles, &c. Attachment for operating accelerators of. A. A. Williams. No. 1,309,347; July 8; v. 264; p. 275.
Automobiles. Foot-pedal for. H. A. Van Valkenburg. No. 1,309,557; July 8; v. 264; p. 314.
Automobiles. Non-skid attachment for. J. McNeil. No. 1,309,029; July 8; v. 264; p. 219.
Automobiles. Ignition and starter control for. N. A. Honeywell and C. O. McKaig. No. 1,309,135; July 8; v. 264; p. 236.
Automobiles. Means for locking. J. T. Powers. No. 1,309,154; July 8; v. 264; p. 240.
Bag-turning machine. P. J. Gagnon, Jr. No. 1,308,944; July 8; v. 264; p. 200.
Bake-pan. S. R. Castle. No. 1,309,062; July 8; v. 264; p. 223.
Baking-pan. H. E. Tripp. No. 1,308,821; July 8; v. 264; p. 177.
Bale-tie welder, Electrical. L. B. Wygant. No. 1,309,108; July 8; v. 264; p. 243.
Ball goal. Basket. F. Albach. No. 1,308,831; July 8; v. 264; p. 179.
Bar. See—
Connecting-bar. Draft-bar. C. P. Folsom and L. E. Halteman. No. 1,309,402; July 8; v. 264; p. 285.
Basic steel. Production of refined. W. R. Walker. No. 1,309,162; July 8; v. 264; p. 241.
Basket. G. M. Walker. No. 1,308,824; July 8; v. 264; p. 177.
Basket-closure. A. J. Thompson and H. R. Humke. No. 1,309,070; July 8; v. 264; p. 226.
Batteries. Connection for electric. F. J. Beaumont. No. 1,309,561; July 8; v. 264; p. 315.
Beard. Corner. N. E. Clark. No. 1,308,773; July 8; v. 264; p. 168.
Beard construction. Corner. N. E. Clark. No. 1,308,889; July 8; v. 264; p. 190.
Beams. Third-point support for brake. W. F. Creamean. No. 1,309,187; July 8; v. 264; p. 245.
Bean-sorting machine. H. Fogelsonger. No. 1,309,401; July 8; v. 264; p. 285.
Beating and aerating process and apparatus. E. C. Reicht. No. 1,309,175; July 8; v. 264; p. 243.
Beet-topping device. M. A. Smith. No. 1,308,921; July 8; v. 264; p. 196.
Belt. F. Gildardi. No. 1,309,066; July 8; v. 264; p. 224.
Belt. Indless. W. C. Coryell. No. 1,309,245; July 8; v. 264; p. 256.
Belt guide and shifter. G. M. Friebe. No. 1,309,474; July 8; v. 264; p. 298.
Belts and the like. Apparatus for measuring and simultaneously marking the measurements on machine. P. L. V. Schultstad. No. 1,309,306; July 8; v. 264; p. 268.
Belt. Making endless. W. C. Coryell. No. 1,309,244; July 8; v. 264; p. 256.
Bending apparatus. Tube. T. and S. Kelly. No. 1,309,250; July 8; v. 264; p. 257.
Bending machine. Tube. L. H. Brinkman. No. 1,309,238; July 8; v. 264; p. 255.
Blasting-cap charge. C. M. Stine. No. 1,309,552; July 8; v. 264; p. 314.
Block. See—
Musical block.
Blower. Glass. E. O. Whitley and E. L. Knowlton. No. 1,309,166; July 8; v. 264; p. 242.
Blower. Fan. F. H. C. Coppus. No. 1,308,982; July 8; v. 264; p. 207.
Board. See—
Sales-board.
Boat. Submarine life. D. J. Carr. No. 1,309,563; July 8; v. 264; p. 315.
Boats. Apparatus for destroying submarine. G. E. Ellis. No. 1,309,120; July 8; v. 264; p. 234.
Bolt-weevil catcher. O. Van Riper. No. 1,309,556; July 8; v. 264; p. 314.
Book. Cook. A. M. Clark. No. 1,309,394; July 8; v. 264; p. 322.
Border for show-cards, maps, almanacs, and the like. Suspension. J. Van Dias. No. 1,309,319; July 8; v. 264; p. 271.
Boring-machine. L. I. Yeomans. No. 1,309,389; July 8; v. 264; p. 283.
Bosom-press. C. L. Bruley. No. 1,309,562; July 8; v. 264; p. 313.
Bottle. Non-refillable. S. Christensen. No. 1,309,394; July 8; v. 264; p. 284.
Bottle-stopper. A. H. Wirz. No. 1,308,972; July 8; v. 264; p. 205.
Bowling-alley surfacer. J. Martin. No. 1,308,762; July 8; v. 264; p. 167.
Box. See—
Cell-box. Junction-box.
Cheese-box. Mail-box.
Collapsible box. Nest-box.
Fireproof box.
Box. E. Wells. No. 1,309,499; July 8; v. 264; p. 303.

Boxes, Self-lubricating device for journal. F. C. Buell. No. 1,308,887; July 8; v. 264; p. 189.
 Brake, C. P. Stinboe. No. 1,309,590; July 8; v. 264; p. 221.
 Brake mechanism, C. R. Underhill. No. 1,309,377; July 8; v. 264; p. 281.
 Brake-shoe-key lock, W. P. Cremeau and W. E. Wine. No. 1,309,186; July 8; v. 264; p. 245.
 Brass from foundry ash and the like, Recovery of. C. H. White. No. 1,309,105; July 8; v. 264; p. 242.
 Bread loaves, Machine for making presliced. J. D. Rafert. No. 1,309,419; July 8; v. 264; p. 289.
 Brick cleaning machine, N. T. Fuller. No. 1,309,406; July 8; v. 264; p. 286.
 Brush, H. Seaboldt. No. 1,309,509; July 8; v. 264; p. 323.
 Brush, D. H. Walker. No. 1,309,495; July 8; v. 264; p. 302.
 Brush, Nall. A. R. Davidson. No. 1,309,510; July 8; v. 264; p. 305.
 Brush, Rotary, R. R. Radtke. No. 1,309,587; July 8; v. 264; p. 320.
 Brush, Rotary tooth, W. T. Reminger. No. 1,308,864; July 8; v. 264; p. 185.
 Burglar-alarm, J. Klug and S. Schermann. No. 1,309,527; July 8; v. 264; p. 309.
 Burner: See—Lamp-burner.
 Cable and wire clamp, G. E. Rohmer. No. 1,308,860; July 8; v. 264; p. 186.
 Cable-hanger, J. Blackburn. No. 1,308,978; July 8; v. 264; p. 206.
 Cable-hanger, J. Blackburn. No. 1,308,979; July 8; v. 264; p. 207.
 Cable-hanger, D. P. Trachte. No. 1,308,980; July 8; v. 264; p. 204.
 Calculating machine, J. F. Maya. No. 1,309,535; July 8; v. 264; p. 310.
 Call-box, P. Goltke. No. 1,309,509; July 8; v. 264; p. 317.
 Camera, Folding, A. C. Fisher. No. 1,308,985; July 8; v. 264; p. 208.
 Camera-stops, Ascertaining, P. Douthill. No. 1,309,308; July 8; v. 264; p. 284.
 Can, R. W. Crary. No. 1,308,892; July 8; v. 264; p. 190.
 Can, R. W. Crary. No. 1,308,901; July 8; v. 264; p. 190.
 Can-opener, C. Seannemann. No. 1,309,224; July 8; v. 264; p. 252.
 Can-opener, W. L. Wilson. No. 1,309,505; July 8; v. 264; p. 304.
 Cane-mill, J. Buchanan. No. 1,309,015; July 8; v. 264; p. 214.
 Cannon-reloading, N. C. Walpole. No. 1,309,165; July 8; v. 264; p. 242.
 Car end, Corrugated sheet-metal, W. P. Murphy. No. 1,309,484; July 8; v. 264; p. 300.
 Car-coupling, W. Kelso. No. 1,309,291; July 8; v. 264; p. 265.
 Car-coupling, Transition, W. Kelso. No. 1,309,290; July 8; v. 264; p. 265.
 Car-coupling, Transition, W. McConaway, Jr., and W. Kelso. No. 1,309,293; July 8; v. 264; p. 265.
 Car-door fastening, W. B. Gregg. No. 1,308,779; July 8; v. 264; p. 189.
 Car-door, Freight, K. R. Koslben. No. 1,308,955; July 8; v. 264; p. 202.
 Car-door, Grain, R. C. Lettch. No. 1,308,791; July 8; v. 264; p. 171.
 Car operation, Efficiency-indicator for electric, C. H. Koehler. No. 1,309,204; July 8; v. 264; p. 249.
 Card-rack, B. P. Gaston. No. 1,309,194; July 8; v. 264; p. 241.
 Car-stop, C. L. Jones. No. 1,309,035; July 8; v. 264; p. 218.
 Car-wheel-attaching device, Mine, J. H. Rutherford. No. 1,308,996; July 8; v. 264; p. 210.
 Cars, Drafting for railway, W. M. Dwyer. No. 1,309,021; July 8; v. 264; p. 216.
 Carbon-resistors from oxidizing, Preventing electric, J. Thomson. No. 1,308,878; July 8; v. 264; p. 188.
 Carburetor for internal-combustion engines, H. Blaks. No. 1,309,178; July 8; v. 264; p. 244.
 Carburetors, Heating appliance for, E. H. O'Brien. No. 1,308,860; July 8; v. 264; p. 184.
 Carrier: See—Tire-carrier.
 Carrier, J. Kraus. No. 1,308,750; July 8; v. 264; p. 166.
 Case: See—Clock-case.
 Case, Ticket-case.
 Refrigerator above-case.
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 Valve, Flush. C. H. Wells. No. 1,309,280; July 8; v. 264; p. 254.
 Valve for gun-tanks. C. A. Bubbs. No. 1,309,507; July 8; v. 264; p. 305.
 Valve-operating mechanism. G. A. Reynolds. No. 1,309,539; July 8; v. 264; p. 314.
 Valve, Regulating. A. Beier. No. 1,309,313; July 8; v. 264; p. 269.
 Valve, Rotary. G. M. Bacon. No. 1,309,059; July 8; v. 264; p. 223.
 Valve, Thermostatic. W. W. Morgan. No. 1,308,856; July 8; v. 264; p. 183.
 Valve, Thermostatically-controlled radiator. L. K. Ascher. No. 1,309,005; July 8; v. 264; p. 212.
 Valve, Throttle. R. H. Clifton. No. 1,308,842; July 8; v. 264; p. 181.
 Valves, Automatic mixing and antiscalding. H. L. Young and M. S. Finch. No. 1,308,829; July 8; v. 264; p. 178.
 Vault. W. H. Hollar. No. 1,309,200; July 8; v. 264; p. 248.
 Vehicle, Child's. R. Nelson. No. 1,309,331; July 8; v. 264; p. 272.
 Vehicle-drive. H. McKinnon. No. 1,309,074; July 8; v. 264; p. 223.
 Vehicle, Motor. C. A. Ward. No. 1,309,164; July 8; v. 264; p. 242.
 Vehicle-wheel. G. R. Farrell. No. 1,309,473; July 8; v. 264; p. 298.
 Vehicles, Attachment for motor-driven. J. E. Stauffer. No. 1,308,874; July 8; v. 264; p. 187.
 Vehicles, Driving-wheel for motor. M. Walter. No. 1,309,268; July 8; v. 264; p. 260.
 Vehicles, Extension-body for. W. S. Lakin. No. 1,309,251; July 8; v. 264; p. 257.
 Vehicles, Heater for motor-propelled. C. S. Pelton. No. 1,309,210; July 8; v. 264; p. 251.
 Vehicles, Means for preventing the theft of motor. E. F. Heins. No. 1,309,197; July 8; v. 264; p. 247.
 Vehicles, Resilient wheel for. G. Lescano. No. 1,308,761; July 8; v. 264; p. 166.
 Vehicles, Shock-absorbing mechanism for. G. E. Stanley. No. 1,309,490; July 8; v. 264; p. 302.
 Vehicles, Tilting steering-wheel for motor. F. C. Priudle. (Reissue). No. 14,684; July 8; v. 264; p. 326.
 Vehicles, Tractor attachment for motor. M. L. Adams. No. 1,309,053; July 8; v. 264; p. 223.
 Velocipede, Convertible. J. E. Tyler. No. 1,309,498; July 8; v. 264; p. 302.
 Vending-machine. S. M. Coffman. No. 1,309,184; July 8; v. 264; p. 245.
 Vending-machine. S. M. Coffman. No. 1,309,185; July 8; v. 264; p. 245.
 Vending-machine. A. C. Pann. No. 1,308,960; July 8; v. 264; p. 203.
 Ventilator. See—
 Hood-lift motor-ventilator. Oven-ventilator.
 Ventilator. N. A. and C. S. Lichty and H. F. Campbell. No. 1,309,037; July 8; v. 264; p. 218.
 Vise and stop for work-benches, Automatic. W. Sopbar and L. A. Hammond. No. 1,308,922; July 8; v. 264; p. 190.
 Vulcanizing apparatus. J. W. Arthur. No. 1,308,834; July 8; v. 264; p. 179.
 Walt, Child's and miss's. G. P. Jameson. No. 1,309,139; July 8; v. 264; p. 237.
 Washing, disinfecting and dyeing machine. W. A. E. Hendri. No. 1,309,411; July 8; v. 264; p. 287.
 Washing-machine. W. A. E. Hendri. No. 1,309,412; July 8; v. 264; p. 287.
 Washing pulp-wood, Machine for. J. L. Phillips. No. 1,309,543; July 8; v. 264; p. 312.
 Water-heater. S. M. Wright. No. 1,309,083; July 8; v. 264; p. 227.
 Water-heater, Electric. A. Guy. No. 1,309,234; July 8; v. 264; p. 254.
 Water-heater, Gas and water, controlling device for. F. W. Mares. No. 1,309,295; July 8; v. 264; p. 266.
 Welding and cutting equipment, Carrying-race for. H. Carr. No. 1,309,273; July 8; v. 264; p. 262.
 Welding apparatus, Electric. J. H. Gravell. No. 1,308,778; July 8; v. 264; p. 169.
 Welding-clamp. J. W. Helzel. No. 1,309,067; July 8; v. 264; p. 224.
 Welding thin plates. J. H. Gravell. No. 1,308,781; July 8; v. 264; p. 170.
 Welt grooving and bevelling machine. A. Eppler. No. 1,309,567; July 8; v. 264; p. 317.
 Welt-strip. J. N. Moulton. No. 1,308,804; July 8; v. 264; p. 174.
 Welting, Machine for preparing. A. R. Morrill. No. 1,309,583; July 8; v. 264; p. 320.
 Wheel. See—
 Automobile steering-wheel. Traction-wheel.
 Metal wheel. Tractor-wheel.
 Resilient wheel. Vehicle-wheel.
 Spring-wheel.

ALPHABETICAL LIST OF INVENTIONS.

Wheel. E. H. James. No. 1,309,094; July 8; v. 264; p. 229.
 Wheel. E. H. James. No. 1,309,095; July 8; v. 264; p. 229.
 Wheels, Gripping attachment for automobile. W. Creek. No. 1,309,020; July 8; v. 264; p. 215.
 Wheels, Journal for car. J. E. Downer. No. 1,309,467; July 8; v. 264; p. 297.
 Wheels, Self-cleaning grouser for tractor. S. T. Allen. No. 1,309,006; July 8; v. 264; p. 212.
 Whistle. E. G. Raff. No. 1,309,308; July 8; v. 264; p. 267.
 Winding and rewinding mechanism. L. E. Mackey and P. W. Ormiston. No. 1,309,256; July 8; v. 264; p. 258.
 Winding machine. G. W. Foster. No. 1,309,404; July 8; v. 264; p. 286.
 Window-cleaner. G. Racz. No. 1,309,302; July 8; v. 264; p. 267.
 Window-glass protector. H. Horn. No. 1,309,136; July 8; v. 264; p. 237.

Wireless system. J. Mills and J. R. Carson. No. 1,309,535; July 8; v. 264; p. 311.
 Wire-line clamp. T. W. Bell and T. C. Rogers. No. 1,308,924; July 8; v. 264; p. 194.
 Work-centering device. J. Rathernam. No. 1,309,217; July 8; v. 264; p. 251.
 Wrench: See—
 Automatic wrench. Monkey-wrench.
 Wrench. A. T. Anderson. No. 1,309,311; July 8; v. 264; p. 269.
 Wringer. G. W. Lewis. (Reissue.) No. 14,683; July 8; v. 264; p. 326.
 Wringer. H. Roemer. No. 1,308,808; July 8; v. 264; p. 186.
 X-ray system. R. Varley. No. 1,309,404; July 8; v. 264; p. 302.
 Yoke, Draft. I. H. Milliken. No. 1,309,297; July 8; v. 264; p. 266.

ALPHABETICAL LIST OF DESIGNS.

Automobile steering-post support. W. N. Onderdonk. No. 53,517; July 8; v. 264; p. 332.
 Babbitt metal, Cake of. L. M. Urile and L. Lapides. No. 53,484; July 8; v. 264; p. 327.
 Badge, button, or similar article. A. E. Templeman. No. 53,529; July 8; v. 264; p. 326.
 Badge, Souvenir. S. A. Claggett and S. Devall. No. 53,496; July 8; v. 264; p. 327.
 Banner, flag, pennant, sign, emblem, or article of a similar nature. M. Lehr. No. 53,507; July 8; v. 264; p. 331.
 Box. Novelty. J. P. Hanson. No. 53,499; July 8; v. 264; p. 330.
 Brocade. J. H. Hunting. No. 53,485; July 8; v. 264; p. 327.
 Button, Service. L. Bartelme. No. 53,482; July 8; v. 264; p. 327.
 Calendar, Perpetual. B. M. Harrison. No. 53,500; July 8; v. 264; p. 330.
 Can or similar receptacle, Sifter-top. L. Gerhardt. No. 53,496; July 8; v. 264; p. 329.
 Carriage body, Doll or baby. L. D. Pangborn. No. 53,523; July 8; v. 264; p. 333.
 Door, Screen. B. C. Rockwell. No. 53,528; July 8; v. 264; p. 334.
 Easel. H. D. Owerderfer. No. 53,516; July 8; v. 264; p. 332.
 Fabric, Textile. J. A. Mighel. Nos. 53,514-515; July 8; v. 264; p. 332.
 Flag. H. M. Holden. No. 53,503; July 8; v. 264; p. 330.
 Fluid-pressure tanks, Pressure-regulator head for. W. F. Grudolph. No. 53,497; July 8; v. 264; p. 329.
 Headlight lens, Auto. E. S. De Tangle. No. 53,480; July 8; v. 264; p. 328.
 Ice-cream cone. A. McLaren. Nos. 53,509-510; July 8; v. 264; p. 331.
 Ice-cream spoon, Wooden. H. A. Wilson. No. 53,548; July 8; v. 264; p. 337.
 Indicator, sign, or similar article. C. A. Widmer. Nos. 53,546-547; July 8; v. 264; p. 337.
 Insulator. C. L. Pierce, Jr. No. 53,522; July 8; v. 264; p. 333.
 Jack, Lifting. P. S. Kimball. No. 53,505; July 8; v. 264; p. 330.
 Lace. E. A. Davis. No. 53,488; July 8; v. 264; p. 328.
 Lace. F. Meyer. Nos. 53,512-513; July 8; v. 264; p. 332.
 Lamp-bracket and sign-support, Combined. D. H. Wyatt. No. 53,549; July 8; v. 264; p. 337.
 Lamp standard. T. Wells and E. R. Vandawalker. No. 53,542; July 8; v. 264; p. 334.
 Lamp standard and street-indicator, Combined. D. H. Wyatt. No. 53,550; July 8; v. 264; p. 338.
 Lamp, Table. R. V. Owen. No. 53,519; July 8; v. 264; p. 333.
 Lighting fixture. R. V. Owen. No. 53,520; July 8; v. 264; p. 333.

Lighting fixture. D. A. Taylor. No. 53,538; July 8; v. 264; p. 330.
 Lighting fixture arm. H. C. Adams. No. 53,481; July 8; v. 264; p. 327.
 Match-scratcher. J. P. Pethtel. No. 53,521; July 8; v. 264; p. 333.
 Motor-car engine base. J. K. Vanatta. No. 53,541; July 8; v. 264; p. 336.
 Pendant-switch casing. R. A. Belmont. No. 53,483; July 8; v. 264; p. 327.
 Pennant, book cover, or similar article. T. R. Coertzen. No. 53,487; July 8; v. 264; p. 328.
 Picture-frame. J. Pozzatek. No. 53,524; July 8; v. 264; p. 334.
 Pin, Service. W. A. Hartline. No. 53,501; July 8; v. 264; p. 330.
 Radiator, Gas. T. J. Potter. No. 53,525; July 8; v. 264; p. 334.
 Shoe-heel tread-plate. I. Henne. No. 53,502; July 8; v. 264; p. 330.
 Ring or similar article of manufacture. M. J. Schlow. Nos. 53,530-35; July 8; v. 264; p. 335.
 Silk. L. F. Orcutt. No. 53,518; July 8; v. 264; p. 333.
 Silk, Printed. H. F. Dommenge, Jr. No. 53,491; July 8; v. 264; p. 328.
 Silk, Printed. A. Kiele. No. 53,493; July 8; v. 264; p. 329.
 Silk, Printed. H. L. Reinhardt. No. 53,526; July 8; v. 264; p. 334.
 Silk, Printed. W. U. Reith. No. 53,527; July 8; v. 264; p. 334.
 Slicing machine frame. F. A. Wygant. No. 53,551; July 8; v. 264; p. 338.
 Soap or similar article, Cake of. A. Steiner. No. 53,537; July 8; v. 264; p. 335.
 Spark-plug. O. C. Rohde. No. 53,529; July 8; v. 264; p. 334.
 Store-pipe-reducer. M. Jones. No. 53,504; July 8; v. 264; p. 330.
 Telephone set, Wall. J. S. Timmons. No. 53,540; July 8; v. 264; p. 336.
 Tire. E. D. Pritch. No. 53,494; July 8; v. 264; p. 329.
 Tire. A. L. Meeks. No. 53,511; July 8; v. 264; p. 331.
 Tire, Automobile. M. Greenspan. No. 53,498; July 8; v. 264; p. 329.
 Tractor-body. L. and L. L. Mayer and E. A. Bye. No. 53,508; July 8; v. 264; p. 331.
 Tricycle. P. Gerum. No. 53,495; July 8; v. 264; p. 329.
 Waist. H. Schultz. No. 53,536; July 8; v. 264; p. 335.
 Watch-movement frame. W. W. Dudley. No. 53,492; July 8; v. 264; p. 328.
 Wheel, Vehicle. R. H. West. Nos. 53,543-4; July 8; v. 264 pp. 331-7.
 Wheel, Wind. H. J. Deutch. No. 53,490; July 8; v. 264; p. 328.

ALPHABETICAL LIST OF TRADE-MARKS.

Aeroplanes and flying boats. The Engel Aircraft Company. No. 125,902; July 8; v. 264; p. 349.
 Belting, Leather. L. A. Hanville. No. 125,912; July 8; v. 264; p. 340.
 Buttons, radium luminous. Eastern Luminous Indicator Co. No. 125,901; July 8; v. 264; p. 340.
 Clothing for men, women, and children, Certain named. Walter H. Dilka. No. 125,900; July 8; v. 264; p. 340.
 Dress-shields. Samstag and Illider Bros. No. 125,914; July 8; v. 264; p. 340.
 Envelopes. The Miller Brothers Company. No. 125,906; July 8; v. 264; p. 340.
 Foods, Certain named. Austin, Nichols & Co., Inc. No. 125,893; July 8; v. 264; p. 340.
 Foods, Certain named. Thermokept Products Corporation. No. 125,920; July 8; v. 264; p. 350.
 Furs, Dressed and dyed. B. J. Goodmann. No. 125,903; July 8; v. 264; p. 340.
 Garters and hose-supporters. American Textile Products Company. No. 125,891; July 8; v. 264; p. 340.
 Hair wavers or curlers. Joseph W. Schloss Co. No. 125,915; July 8; v. 264; p. 340.
 Leather hides for shoe-uppers. Tanned. Anchor Leather Co. No. 125,892; July 8; v. 264; p. 340.
 Leather, Imitation. J. Dejong. No. 125,898; July 8; v. 264; p. 340.
 Leather, Imitation. People's Outfitting Company. No. 125,910; July 8; v. 264; p. 340.
 Liquid polish for furniture and all finished surfaces. No. 125,916; July 8; v. 264; p. 340.
 Needles, Crochet. The Boye Needle Company. No. 125,895; July 8; v. 264; p. 340.
 Paper and envelopes, Printing and writing. National Paperette Company. No. 125,908; July 8; v. 264; p. 340.
 Paper and stationery, Certain named. Walter H. Templeton. No. 125,919; July 8; v. 264; p. 350.

Paper for container-liner. Bogalusa Paper Company. No. 125,894; July 8; v. 264; p. 340.
 Paper, Printing. S. D. Warren Company. No. 125,921; July 8; v. 264; p. 350.
 Paper, Printing. S. D. Warren Company. No. 125,922; July 8; v. 264; p. 350.
 Paper, Toilet. Oswego River Paper Mills. No. 125,909; July 8; v. 264; p. 340.
 Paper with a silver-like coating. Nashua Gummed and Coated Paper Company. No. 125,907; July 8; v. 264; p. 340.
 Paper, Writing. Byron Weston Co. No. 125,896; July 8; v. 264; p. 340.
 Pencils, chalk, crayons, Lead and drawing. American Lead Pencil Company. No. 125,890; July 8; v. 264; p. 340.
 Pencils, Lead. American Lead Pencil Company. No. 125,889; July 8; v. 264; p. 340.
 Pens, Steel. G. W. Hughes. No. 125,904; July 8; v. 264; p. 340.
 Pharmaceutical preparation. Nelson, Baker & Co. No. 125,923; July 8; v. 264; p. 350.
 Pins. R. C. Dick. No. 125,899; July 8; v. 264; p. 340.
 Skirts, Dress. A. Raff. No. 125,913; July 8; v. 264; p. 340.
 Thread, Cotton. The Clark Thread Co. No. 125,897; July 8; v. 264; p. 340.
 Tickers, Clothing. Keller Printing Company. No. 125,905; July 8; v. 264; p. 340.
 Tires, Inner tubes for pneumatic. Stearns Tire & Tube Company. No. 125,918; July 8; v. 264; p. 350.
 Tires, Pneumatic. Perfection Tire & Rubber Co. No. 125,911; July 8; v. 264; p. 340.
 Trucks and trailers, Motor. Stability Motors Company. No. 125,917; July 8; v. 264; p. 340.

ALPHABETICAL LIST OF LABELS.

"Broacho The Drink With a Kick." (For a Non-Alcoholic Beverage.) Empire Bottling Works. No. 21,357; July 8; v. 264; p. 351.
 "Caroline." (For a Compound of Refined Nut-Oils and Evaporated Skimmed Milk.) T. L. Carroll. No. 21,353; July 8; v. 264; p. 351.
 "Dr. Cannard's Frottel Foot Lotion." (For a Foot-Lotion.) B. Cannard. No. 21,352; July 8; v. 264; p. 351.
 "Gold Beam." (For Canned Tomatoes.) Moneta Canning Company. No. 21,360; July 8; v. 264; p. 351.
 "Gold Medal." (For Boots and Shoes.) Dorothy Dodd Shoe Company. No. 21,356; July 8; v. 264; p. 351.
 "Holly." (For Raisins.) C. G. Bonner. No. 21,351; July 8; v. 264; p. 351.
 "Kosine Hair Tonic." (For a Hair-Tonic Preparation.) Kluder & Freudenberg. No. 21,365; July 8; v. 264; p. 351.
 "Mint-U-Lip." (For Syrup.) Celro-Kola Co. No. 21,354; July 8; v. 264; p. 351.
 "Norseman." (For Canned Sardines.) Nielsen & Kittle Canning Co. Ltd. No. 21,361; July 8; v. 264; p. 351.
 "No 1 Protect." (For Cigars.) V. Levor. No. 21,358; July 8; v. 264; p. 351.
 "Pep." (For a Non-Alcoholic Beverage.) J. W. H. Randall. No. 21,363; July 8; v. 264; p. 351.

"Polly." (For Canned Tomatoes with Purée from Trim-mings.) Moneta Canning Company. No. 21,359; July 8; v. 264; p. 351.
 "President." (For Oranges.) San Joaquin Fruit Co. No. 21,368; July 8; v. 264; p. 351.
 "Redondo." (For Canned Sardines.) Redondo Packing Co. No. 21,364; July 8; v. 264; p. 351.
 "Rob Roy." (For Coffee.) The Donald Company. No. 21,355; July 8; v. 264; p. 351.
 "Rusdun." (For Bluing.) The Russell Jobbers' Mills. No. 21,367; July 8; v. 264; p. 351.
 "Sampeck Triple-Service Selt." (For Men's, Young Men's, Boys', Children's, and Juveniles' Outer Suits.) Samuel W. Peck & Co. No. 21,362; July 8; v. 264; p. 351.
 "Senator." (For Oranges.) San Joaquin Fruit Co. No. 21,369; July 8; v. 264; p. 351.
 "Tip Top." (For Ginger-Beer.) J. S. Roth. No. 21,366; July 8; v. 264; p. 351.
 "Usco Kold-Pak." (For Jar-Rubbers.) United States Rubber Company. No. 21,370; July 8; v. 264; p. 351.
 "Yosemite." (For Canned Peaches.) William Cluff Co. No. 21,371; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF PRINTS.

"Bunte The Quality Cocoa." (For Cocoa.) Bunte Brothers. No. 5,125; July 8; v. 264; p. 351.
 "Get Wise, Dad, Wear B. V. D." (For Athletic Underwear.) The B. V. D. Company. No. 5,126; July 8; v. 264; p. 351.
 "I'll say it is!" (For Smoking-Tobacco.) R. J. Reynolds. No. 5,127; July 8; v. 264; p. 351.
 "Mother Goose Brooms." (For Brooms.) M. O. Scoville Sons Company. No. 5,133; July 8; v. 264; p. 351.
 "P. A. Is such a scuttle full of sunshine!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,128; July 8; v. 264; p. 351.
 "Satisfying Service, Satisfaction." (For Automobile-Tires.) C. L. Brockway. No. 5,124; July 8; v. 264; p. 351.

"Scrub up your smoke decks and cut for a new pipe deal!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,130; July 8; v. 264; p. 351.
 "Talk about indoor and outdoor sports." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,132; July 8; v. 264; p. 351.
 "Tell it to your old jimmy pipe!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,129; July 8; v. 264; p. 351.
 "Thomas Awning Company." (For Awnings.) C. Thomas. No. 5,134; July 8; v. 264; p. 351.
 "When you nail the grand idea." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,131; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Baby pants. I. B. Kleinert. Robber Company. No. 116,384; July 8; v. 264; p. 342.
 Balls. Golf. Worthington Ball Company. Nos. 117,426-7; July 8; v. 264; p. 345.
 Candles. Chocolate. W. S. Balduff. No. 110,852; July 8; v. 264; p. 340.
 Candy. Meridian Candy Co. No. 118,444; July 8; v. 264; p. 347.
 Candy. Robert F. Mackenzie Co. No. 117,680; July 8; v. 264; p. 346.
 Canned olive-oil. J. O. Notari & Co. No. 117,738; July 8; v. 264; p. 346.
 Canned sardines. Nielsen & Kittle Canning Co. No. 117,687; July 8; v. 264; p. 346.
 Canned tomatoes, pears, cherries, &c. Greco Canning Co. No. 118,662; July 8; v. 264; p. 348.
 Carbon preventive. Chemical. Oxogen Products Company. No. 117,386; July 8; v. 264; p. 344.
 Coats, vests, trousers. Abe Bloch and Co. No. 117,099; July 8; v. 264; p. 344.
 Cocoa beans for food purposes. C. C. Mengel & Bro. Co. No. 116,280; July 8; v. 264; p. 342.
 Coffee. Howard & Casey Co. No. 118,667; July 8; v. 264; p. 348.
 Coffee, tea, spices. C. F. Blanke Tea & Coffee Co. No. 117,636; July 8; v. 264; p. 346.
 Corn-flakes. Baltimore Pearl Hominy Company. No. 117,004; July 8; v. 264; p. 343.
 Dolls. C. A. Goldsmith. No. 116,412; July 8; v. 264; p. 343.
 Dresses. Children's. Kellner Bros. No. 117,841; July 8; v. 264; p. 346.
 Dress-shields. A. Ostlinger. No. 111,994; July 8; v. 264; p. 340.
 Dye. Andersen, Meyer & Co. Nos. 117,548-53; July 8; v. 264; p. 345.
 Fertilizers. Nitrate Agencies Company. No. 113,660; July 8; v. 264; p. 341.
 Fire-extinguishing compounds. Foamite Firefoam Company. No. 117,082; July 8; v. 264; p. 344.
 Fish-bait. John J. Hildebrandt Co. No. 117,672; July 8; v. 264; p. 346.
 Flannel piece goods. E. McConnell & Co. No. 117,240; July 8; v. 264; p. 344.
 Flour. Wheat. Holmes and Barnes. No. 114,673; July 8; v. 264; p. 341.
 Food. Preparation for making a beverage. Mil-Ko-Ko Company. No. 113,198; July 8; v. 264; p. 340.
 Fruits. Fresh citrus. Anshelm Orange & Lemon Association. No. 118,635-9; July 8; v. 264; p. 347.
 Fruits. Fresh citrus. Anshelm Orange & Lemon Association. Nos. 118,638-9; July 8; v. 264; p. 347.
 Fungicides and horticultural insecticides. Toledo Rex Spray Co. No. 118,197; July 8; v. 264; p. 347.
 Garments. Children's outer. R. C. Adler. No. 111,684; July 8; v. 264; p. 340.
 Garments. Men's and boys' outer. Franklin Clothing Mfg. Co. No. 116,203; July 8; v. 264; p. 342.
 Garments. Reinforcing shades for. E. H. W. Baden. No. 109,793; July 8; v. 264; p. 339.
 Hair-pins. Liberty Hair Pin Manufacturing Co. No. 116,781; July 8; v. 264; p. 343.
 Hair-restorative. Kansas City Medicine Co. No. 115,918; July 8; v. 264; p. 342.
 Harmonicas. Mouth. Strauss Bros. & Co. Nos. 117,066-7; July 8; v. 264; p. 344.
 Hats. Ladies' trimmed and tailored. I. Moch. No. 111,280; July 8; v. 264; p. 340.
 Hooks and eyes, snap-fasteners, &c. De Long Hook and Eye Company. No. 100,580; July 8; v. 264; p. 339.
 Hosiery and knitted underwear. Daisy Hosiery Mills. No. 115,170; July 8; v. 264; p. 341.
 Hosiery. Men's. Dormer Brothers Company. No. 116,150; July 8; v. 264; p. 342.
 Ice-cream cones. Federal Biscuit Co. Nos. 117,180-1; July 8; v. 264; p. 344.

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Knitted and woven underwear, Women's and children's. J. S. Richmond. No. 116,426; July 8; v. 264; p. 343.
 Lathe-bits for cutting. Colonial Steel Company. No. 105,223; July 8; v. 264; p. 339.
 Macaroni, spaghetti, &c. P. & M. Giardina. No. 118,380; July 8; v. 264; p. 347.
 Mule and horse collars. Wm. Enders Manufacturing Company. No. 117,479; July 8; v. 264; p. 345.
 Oil. Olive. S. K. Assanakis. No. 118,535; July 8; v. 264; p. 347.
 Oil. Olive. G. Bianco & Figlio. No. 118,642; July 8; v. 264; p. 348.
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 Ointment for the scalp and hair. M. J. Callaghan. No. 114,658; July 8; v. 264; p. 341.
 Overall combined coat-aprons and one-piece overall-aprons. Abbot Jacket Manufacturing Company. No. 116,068; July 8; v. 264; p. 342.
 Overall. Adam H. Bartel Co. No. 103,244; July 8; v. 264; p. 339.
 Pants and overalls. Macon Woolen Mills. No. 107,326; July 8; v. 264; p. 339.
 Pants, boys'. Korrekkt Pants Mfg. Co. No. 110,889; July 8; v. 264; p. 340.
 Perfumery, toilet water, rouge, &c. Read Drug and Chemical Co. No. 113,722; July 8; v. 264; p. 341.
 Phonograph. L. J. O'Hilly. No. 116,848; July 8; v. 264; p. 343.
 Pills. Dyspepsia. J. J. Honecker. No. 117,232; July 8; v. 264; p. 344.
 Pipe-covering and boiler and locomotive lagging. Sectional Magnesia. National Magnesia Manufacturing Company. No. 116,164; July 8; v. 264; p. 342.
 Powders. Face. F. N. Lewis. No. 114,185; July 8; v. 264; p. 341.
 Preparation for coughs, colds, &c. R. E. Taylor. No. 118,243; July 8; v. 264; p. 347.
 Prunes. Dried. G. W. Home Company. No. 118,671; July 8; v. 264; p. 348.
 Rubber materials. Chemical for accelerating vulcanization of. Katzenbach & Hullock Company. No. 117,532; July 8; v. 264; p. 345.
 Sandals, shoes, slippers. Wilson Company. No. 117,720; July 8; v. 264; p. 346.
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 Shoes for women. W. T. Holmes Company. No. 117,618; July 8; v. 264; p. 346.
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 Silk piece goods. A. S. Rosenthal Co. No. 118,525; July 8; v. 264; p. 347.
 Silk piece goods. Empire Silk Company. No. 118,436; July 8; v. 264; p. 347.
 Tablet. Morgan Drug Company of the City of Brooklyn. No. 115,571; July 8; v. 264; p. 341.
 Toy-watch dials and cases. A. Baroo. No. 117,002; July 8; v. 264; p. 343.
 Tractors. Tractor Producing Corporation. No. 110,878; July 8; v. 264; p. 340.
 Underwear. Cotton and silk. C. & C. Mfg. Co. No. 116,359; July 8; v. 264; p. 342.
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 Varnishes, japans, &c. for baking or air-drying. Floor Shine Paint & Varnish Co. No. 111,492; July 8; v. 264; p. 340.
 Washing machines. Laundry. W. Hemmert. No. 117,950; July 8; v. 264; p. 347.
 Water-softener compound. National Compound Company. No. 110,787; July 8; v. 264; p. 348.

CLASSIFICATION OF PATENTS

ISSUED JULY 8, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

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60: 1,309,537	24: 1,308,787	40: 1,308,816	1,309,242	89: 1,309,302	1,309,265
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TO WHOM

PATENTS WERE ISSUED ON THE 15TH DAY OF JULY, 1919.

- A. M. Castle & Co. (See Gabriel, Charles, assignor.)
 Ansborg, Christian, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Post-type arc-lamp. No. 1,309,711; July 15; v. 264; p. 380.
 Aasen, Niels W., Christiania, Norway. Device for shooting grenades. No. 1,309,791; July 15; v. 264; p. 393.
 Accessories Manufacturing Co. (See Bramming, Carl, assignor.)
 Achtmeyer, William, assignor to The Russell Mfg. Co., Middletown, Conn. Woven garret-pad. No. 1,310,271; July 15; v. 264; p. 452.
 Ackerman, William. (See Nicholas and Ackerman.)
 Aeme Die Casting Corporation. (See Bungay, George W., assignor.)
 Adams, Alonzo S., Waltham, Mass. Fruit-picker. No. 1,309,712; July 15; v. 264; p. 380.
 Aden, John G., Gothenburg, Nebr. Sash-holder. No. 1,309,677; July 15; v. 264; p. 374.
 Adriaens Macblue Works. (See Callison, Amos, assignor.)
 Ahlburg, Frank, San Francisco, Calif., assignor, by means assignments, to Westinghouse Electric & Manufacturing Company. Temperature-control system. (Reissue.) No. 1,4,685; July 15; v. 264; p. 507.
 Ahlbe, William, and K. H. Cederlund, Duquesne, Pa. Hot-bed and run-out table mechanism. No. 1,310,231; July 15; v. 264; p. 475.
 Air Reduction Company. (See Metzger, Floyd J., assignor.)
 Air Reduction Company. (See Roberts and Van Nuy, assignor.)
 Air Reduction Company. (See Russell, Richard F., assignor.)
 Air Reduction Company. (See Walker, George L., assignor.)
 Air Reduction Company. (See Zouck, George H., assignor.)
 Aklin, James M., San Luis Obispo, Calif. Gage. No. 1,309,930; July 15; v. 264; p. 421.
 Albaum, Louis, Everett, Mass. Piston-ring compressor. No. 1,310,232; July 15; v. 264; p. 475.
 Alexander, James G., assignor to Alexander Mfg. Co., Inc., Ames, Iowa. Garden-cultivator. No. 1,309,831; July 15; v. 264; p. 402.
 Alexander Mfg. Co. (See Alexander, James G., assignor.)
 Alexandre, Eugene J., West Haven, Conn. Toilet-powder package. No. 1,309,713; July 15; v. 264; p. 380.
 Alfred Decker & Cohn. (See Felne, Adolphus G., assignor.)
 Allee, William L., Topeka, Kans. Toy gun. No. 1,310,317; July 15; v. 264; p. 490.
 Allen, Burnet H., Aberdeen, Wash. Rotary steam-engine. No. 1,309,871; July 15; v. 264; p. 410.
 Allis-Chalmers Manufacturing Company. (See Dahlstrand, Hans P., assignor.)
 Allis-Chalmers Manufacturing Company. (See Deutsch, Edward L., assignor.)
 Allis-Chalmers Manufacturing Company. (See George, Edgar C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Greenleaf and Hanson, assignors.)
 Allis-Chalmers Manufacturing Company. (See Haderer, Carl F., assignor.)
 Allis-Chalmers Manufacturing Company. (See Holthoff, Henry C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Housum, Cheoweth, assignor.)
 Allis-Chalmers Manufacturing Company. (See Lincoln, Charles S., assignor.)
 Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)
 Allis-Chalmers Manufacturing Company. (See Search, Charles E., assignor.)
 Allis-Chalmers Manufacturing Company. (See Steen, Halidan A., assignor.)
 Allis-Chalmers Manufacturing Company. (See Trout, William H., assignor.)
 Allis-Chalmers Manufacturing Company. (See Van Zandt, Paul C., assignor.)
 Altergott, Fred, Jr., Kansas City, Mo. Fastening device for tire-chains. No. 1,310,171; July 15; v. 264; p. 464.
 Altman, Fred E. (See Frederick and Altman.)
 American Almos Corporation. (See Koehler, Frederick W., assignor.)
 American Brake Company. (See Burton, Thomas L., assignor.)
 American Can Company. (See Dister, Joseph, assignor.)
 American Can Company. (See Hothersall, John M., assignor.)
 American La France Fire Engine Company. (See Hawley, William G., assignor.)
 American Manganese Steel Company. (See Black, Edward S., assignor.)
 American Piano Company. (See Cogozzo, Joseph, assignor.)
 American Piano Company. (See Russell, Guy M., assignor.)
 American Steel Foundries. (See Peycke, Armand H., assignor.)
 American Synthetic Dyes Incorporated. (See Hamlin, Marston L., assignor.)
 Ancott, Russell, West Springfield, and P. G. Martone, Springfield, Mass. Circuit-breaker or cut-out. No. 1,310,111; July 15; v. 264; p. 453.
 Anderson, Arthur T., Champaign, Ill. Controlling device. No. 1,310,318; July 15; v. 264; p. 490.
 Anderson Electric Specialty Co. (See Anderson, Ernst G. K., assignor.)
 Anderson, Ernst G. K., assignor to Anderson Electric Specialty Co., Chicago, Ill. Extension-lamp. No. 1,309,678; July 15; v. 264; p. 374.
 Anderson, Ernst G. K., assignor to Anderson Electric Specialty Co., Chicago, Ill. Spot lamp. No. 1,309,714; July 15; v. 264; p. 381.
 Anderson, George. (See Bullock and Anderson.)
 Anderson, Victor O. J., Malmö, Sweden. Calculating machine. No. 1,309,872; July 15; v. 264; p. 410.
 Annable, Lee V., assignor to The Standard Parts Company, Cleveland, Ohio. Vehicle-wheel rim. No. 1,309,751; July 15; v. 264; p. 388.
 Antonich, Frederick A., Brooklyn, N. Y. Glass bearing and polishing apparatus. No. 1,309,792; July 15; v. 264; p. 395.
 Apfel, Philip F., Seattle, Wash. Electric heater. No. 1,309,873; July 15; v. 264; p. 410.
 Armstrong, Adam E., Three Rivers, Mich. Steam-trap. No. 1,309,604; July 15; v. 264; p. 361.
 Armstrong, John A., Westcombe Park, London, England. Unsinkable ship. No. 1,310,233; July 15; v. 264; p. 475.
 Arnot, William D., Bellevue, Wash. Combined wrench and pliers. No. 1,309,874; July 15; v. 264; p. 410.
 Art Metal Construction Company, The. (See Bullock and Anderson, assignors.)
 Ashbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Firing mechanism for guns. No. 1,310,043; July 15; v. 264; p. 441.
 Ashbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Plug-operating device for breech mechanisms. No. 1,310,044; July 15; v. 264; p. 441.
 Ashbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Breech mechanism. No. 1,310,045; July 15; v. 264; p. 441.
 Ashbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Detonating-fuse. No. 1,310,046; July 15; v. 264; p. 441.
 Atsberger, Frank X., East Islip, N. Y. Rushing-puller. No. 1,310,270; July 15; v. 264; p. 482.
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Treating mine-water. No. 1,310,382; July 15; v. 264; p. 502.
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Treating acid mine-water. No. 1,310,383; July 15; v. 264; p. 502.
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Recovering by-products from acid mine-water. No. 1,310,384; July 15; v. 264; p. 502.
 Austin, Z. H., trustee. (See Sherman, H. E. and C. E., assignors.)
 Autopiano Company. (See La Jole, Herbert J., assignor.)
 Autopiano Company. (See Velehradsky, Joseph, assignor.)
 B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
 B. F. Goodrich Company, The. (See Harper, Charles L., assignor.)
 B. F. Goodrich Company, The. (See Raymond and Renner, assignors.)

Bacon, Raymond F., Pittsburgh, Pa., assignor to Metals Research Company, New York, N. Y., Making soluble solids. No. 1,310,151; July 15; v. 264; p. 460.

Badger, Oliver L., Plainfield, N. J., assignor to Keer Adjustable Strap Company, Inc., New York, N. Y., Flexible support. No. 1,309,905; July 15; v. 264; p. 361.

Baetz, Henry, St. Louis, Mo., Air-heating apparatus. No. 1,309,977; July 15; v. 264; p. 430.

Baker, Arthur F., Sestro Woolley, Wash., assignor to The Perfecto Gear Differential Co., Seattle, Wash., Driving gear for motor-vehicles. No. 1,309,978; July 15; v. 264; p. 430.

Baker, Eric K., assignor to Universal Rim Company, Chicago, Ill., Remountable wheel-rim. No. 1,310,047; July 15; v. 264; p. 441.

Baker, Eric K., assignor to Universal Rim Company, Chicago, Ill., Remountable rim and complementary wheel. No. 1,310,048; July 15; v. 264; p. 442.

Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)

Balkenell, William F., (See Greig and Balkenell.)

Barwell, Henry C., London, and P. Phillips, Bromley, England, assignors to The National Cash Register Company, Dayton, Ohio., Ticket-printing mechanism. No. 1,309,832; July 15; v. 264; p. 402.

Barlo, John B., (See White and Barlo.)

Barker, William R., Vansant, Mo., Fence-post driver. No. 1,310,275; July 15; v. 264; p. 482.

Barlak, Feliks, Rosemont, W. Va., Ship construction. No. 1,309,875; July 15; v. 264; p. 410.

Barr, John C., New York, N. Y., Headlight for automobiles or similar vehicles. No. 1,309,979; July 15; v. 264; p. 375.

Bartholomew, Oscar L., Grand Rapids, Mich., Rat and mouse exterminator. No. 1,309,606; July 15; v. 264; p. 361.

Barton, Edward H., Sprague, Wash., Ratchet-tool. No. 1,309,715; July 15; v. 264; p. 381.

Batchelder, Asa F., Schenectady, N. Y., assignor to General Electric Company, Electric locomotives or car. No. 1,310,049; July 15; v. 264; p. 442.

Bates, Carleton, assignor to United States Glue Company, Milwaukee, Wis., Machinery for solidifying liquefied solids. No. 1,309,995; July 15; v. 264; p. 433.

Bauer Bros. Co., The. (See Paschall, Armand L., assignor.)

Baumgartner, Leopold, Sr., and F. Philadelphia, Pa., assignors of seven thirty-seconds to said L. Baumann, Sr., seven thirty-seconds to N. T. Whitaker, and eleven thirty-seconds to H. J. Browne, Washington, D. C., Tools for boring gun forgings and shafting. No. 1,310,319; July 15; v. 264; p. 491.

Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill., Molding apparatus. No. 1,309,833; July 15; v. 264; p. 403.

Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill., Making molds for steel castings. No. 1,309,834; July 15; v. 264; p. 403.

Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill., Making molds for founding. No. 1,309,835; July 15; v. 264; p. 403.

Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill., Portable machine for making molds. No. 1,309,836; July 15; v. 264; p. 403.

Bellonby, Leonard A., Dayton, Ohio, Mold. No. 1,309,607; July 15; v. 264; p. 361.

Bergqvist, Chrls., Yankton, S. D., Spectacles. No. 1,309,703; July 15; v. 264; p. 395.

Berner, Jesse S., (See Leich and Berner.)

Betts, Gilbert A., Topeka, Kans., Producing photo-engraving. No. 1,310,385; July 15; v. 264; p. 503.

Betts, William H., assignor of one-half to F. Rought, St. Louis, Mo., Sole protector. No. 1,310,050; July 15; v. 264; p. 442.

Bierbach, Carl E., assignor of one-half to O. Givere, Rochester, N. Y., Egg-cup. No. 1,310,112; July 15; v. 264; p. 453.

Bijur Motor Appliance Company. (See Wolfsohn, Lionel M., assignor.)

Bilman, Obed C., (See Trozel, Harvey H., assignor.)

Birch, Gustaf B., (See Cameron and Birch.)

Bishop Company, Inc., The. (See Bishop, Frederick R., assignor.)

Bishop, Frederick R., assignor to The Bishop Company, Inc., North Attleboro, Mass., Ryeglass-mounting. No. 1,310,273; July 15; v. 264; p. 483.

Bissell Carpet Sweeper Co., (See Owen and Bouwmeester, assignors.)

Black, Edward S., assignor to American Manganese Steel Company, Chicago, Ill., Mill pinion. No. 1,309,837; July 15; v. 264; p. 403.

Black, John, Jr., (See Moore, Black, and Crosby.)

Blair, Lewis V. D., (See Simonsen and Blair.)

Blakeslee, Henry J., West Hartford, Conn., Meter-testing apparatus. No. 1,309,931; July 15; v. 264; p. 421.

Blomfield, Alfred L., Denver, Colo., assignor to The Dorr Company, Flotation ore-separating apparatus. No. 1,310,051; July 15; v. 264; p. 442.

Bock Bearing Company, The. (See Bock, William E., assignor.)

Bock, William E., Toledo, Ohio, assignor to The Bock Bearing Company, (Incorporated in Ohio in March, 1916.) Article-grinding machine. No. 1,310,386; July 15; v. 264; p. 503.

Radga, Frank H., Hornett, Wis., Stock-watering bowl. No. 1,310,320; July 15; v. 264; p. 491.

Bolte, Ernest E. G., (See Edridge and Bolte.)

Bolin, Nils P., Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Lasting-machine. No. 1,309,716; July 15; v. 264; p. 381.

Bond Foundry & Machine Company. (See Bowen, James, assignor.)

Boner, Walter G., Pepperwood, Calif., Rack. No. 1,309,608; July 15; v. 264; p. 361.

Bonnet, Joseph, Miles City, Mont., Toy. No. 1,309,838; July 15; v. 264; p. 403.

Bontrager, Joseph C., Wenatchee, Wash., Headlight-lamp-actuating mechanism. No. 1,310,387; July 15; v. 264; p. 503.

Booker, James P., assignor to The Nulomoline Company, New York, N. Y., Making cream centers for coated candy. No. 1,309,979; July 15; v. 264; p. 430.

Borden's Condensed Milk Company. (See Taylor, Burt E., assignor.)

Bossler, Robert B., Pittsburgh, Pa., Level-rial. No. 1,309,752; July 15; v. 264; p. 388.

Bourard, Pierre, Paris, and L. Lemaire, La Garenne-Colombes, France, Apparatus for enlarging photographs. No. 1,310,052; July 15; v. 264; p. 442.

Boummeester, Bernard J., (See Owen and Bouwmeester.)

Bowen, James, assignor to Bond Foundry & Machine Company, Manheim, Pa., Friction-clutch. No. 1,309,996; July 15; v. 264; p. 433.

Bowers, Thomas L., assignor of one-half to J. S. Collins, Miami, Fla., Shipping-crate. No. 1,309,932; July 15; v. 264; p. 421.

Bowman, George W., assignor to The Universal Spring Wheel and Manufacturing Company, Hallsdale, Colo., Spring-wheel. No. 1,309,839; July 15; v. 264; p. 404.

Bowman, Newton K., Canton, Ohio, Section-insulator and hand-switch. No. 1,309,717; July 15; v. 264; p. 381.

Boyd, William P., Cambridge, Mass., Gear-shifting mechanism for automobiles and the like. No. 1,309,690; July 15; v. 264; p. 375.

Boynton, Earl S., East Orange, N. J., and A. Schacht, Brooklyn, N. Y., assignors to Slocum, Avram & Slocum Laboratories, Inc., New York, N. Y., Gage. No. 1,310,388; July 15; v. 264; p. 503.

Bramming, Carl, Chicago, Ill., assignor to Accessories Manufacturing Co., Electric switch. No. 1,309,840; July 15; v. 264; p. 404.

Brønning, Willie F., San Antonio, Texas, Underground portable drill. No. 1,310,274; July 15; v. 264; p. 483.

Brasskowsky, Bernard H., Pittsburgh, Pa., Mold. No. 1,310,172; July 15; v. 264; p. 464.

Breker, Joseph W., San Diego, Calif., Water-purifying apparatus. No. 1,309,876; July 15; v. 264; p. 410.

Brock, Frank P., (See Reisman, Welch and Brock.)

Brower, Edward S., Ridgewood, assignor of one-half to C. K. Sanborn, Elizabeth, N. J., Bomb-bopper for aerial craft. No. 1,310,053; July 15; v. 264; p. 442.

Brown, Charles A., (See Watkins and Brown.)

Brown, George W., Fort Terry, N. Y., Winding-drum. No. 1,310,275; July 15; v. 264; p. 483.

Brown, Glenn C., Taylor Ridge, Ill., Thermometer for radiators. No. 1,310,276; July 15; v. 264; p. 483.

Brown, Glenn C., Taylor Ridge, Ill., Thermometer for radiators. No. 1,310,321; July 15; v. 264; p. 491.

Brown, Lewis R., Pittsfield, Mass., assignor to General Electric Company, Protective device for electrical apparatus. No. 1,310,054; July 15; v. 264; p. 443.

Brown, Walter A., assignor of one-half to F. G. White, Los Angeles, Calif., Separating hydrocarbons from water. No. 1,309,794; July 15; v. 264; p. 395.

Browne, Cyril V., Mt. Eden, Auckland, New Zealand, Beverage. No. 1,310,277; July 15; v. 264; p. 483.

Browne, Herbert J., et al., (See Baumann, Leopold, Sr., and F., assignors.)

Browne, William G., Denver, Colo., Shipping-box. No. 1,309,877; July 15; v. 264; p. 411.

Browning, Andrew, assignor to The Hirst-Roger Company, Philadelphia, Pa., Loom. No. 1,309,997; July 15; v. 264; p. 433.

Bruce, Cyrus M., Ewing, Ky., Valve-grinding tool. No. 1,310,278; July 15; v. 264; p. 483.

Bryant, Clarence R., Memphis, Tenn., assignor, by mesne assignments, to B. Herms, Chicago, Ill., Packing-ring. No. 1,309,609; July 15; v. 264; p. 362.

Buchek, Joseph, Oak Park, Ill., Ventilating device. No. 1,309,998; July 15; v. 264; p. 433.

Buck, Sidney L., Cortland, N. Y., Curtain-support for automobile-doors. No. 1,309,610; July 15; v. 264; p. 362.

Bullock, Raymond G., and Anderson, assignors to The Art Metal Construction Company, Jamestown, N. Y., Base for filing-cabinets, furniture, &c. No. 1,310,322; July 15; v. 264; p. 491.

Bungray, George W., Brooklyn, N. Y., assignor to Acme Die Casting Corporation, Control-box. No. 1,309,911; July 15; v. 264; p. 402.

Booker, Raymond U., Yonkers, N. Y., Recovering wax from sugar-cane. No. 1,309,999; July 15; v. 264; p. 433.

Bunnell, William O., and Q. A. Gates, Wilkes-Barre, Pa., Street-indicator. No. 1,310,279; July 15; v. 264; p. 484.

Burdon, Matthew M., (See Burdon, William M. and M. M.)

Burdon, William M. and M. M., assignors to Burdon's Limited, Bellshill, Scotland, Liquid-fuel furnace. No. 1,310,152; July 15; v. 264; p. 461.

Burdon's Limited. (See Burdon, W. M. and M. M., assignors.)

Burridge, Francis O., executor. (See Burridge, Lee S.)

Burridge, Lee S., deceased; O. Burridge, executor, assignor, by mesne assignments, to Underwood Type-writer Company, New York, N. Y., Type-writing machine. No. 1,310,000; July 15; v. 264; p. 433.

Burton, Thomas L., assignor to American Brake Company, St. Louis, Mo., Brake slack-adjuster. No. 1,309,933; July 15; v. 264; p. 422.

Burton, Thomas L., assignor to American Brake Company, St. Louis, Mo., Slack-adjuster. No. 1,309,934; July 15; v. 264; p. 422.

Byrna, Brownlow. (See Bryant, Clarence R., assignor.)

C. R. Carver Company. (See Lockwood, Edward M., assignor.)

Caldwell, George, Philadelphia, Pa., Manhole. No. 1,310,055; July 15; v. 264; p. 443.

Callery, Joseph C., Columbus, Ohio, Fuel-economizer mixer and controller. No. 1,310,173; July 15; v. 264; p. 465.

Callison, Amos, assignor to Adriance Machine Works, Inc., Brooklyn, N. Y., Bottle-feeding mechanism. No. 1,309,935; July 15; v. 264; p. 422.

Cameron, James A., and G. R. Birch, assignor to Cameron Machine Company, Brooklyn, N. Y., Slitting and re-winding machine. No. 1,310,153; July 15; v. 264; p. 461.

Cameron Machine Company. (See Cameron and Birch, assignors.)

Campbell, Edward H., assignor to Williams Patent Crusher and Pulverizer Co., St. Louis, Mo., Side-closing plate. No. 1,310,001; July 15; v. 264; p. 434.

Campbell, James R., (See Auld and Campbell.)

Campbell, Jesse T., Elbridge, Tenn., Wrench. No. 1,310,056; July 15; v. 264; p. 443.

Campbell, Robert A., Minneapolis, Minn., Tire-stem cap. No. 1,309,795; July 15; v. 264; p. 396.

Canepa, John V., (See Casalena, Primiano, assignor.)

Cannon, Dombie F., Ford City, Pa., assignor to Pittsburgh Plate Glass Company, Making upright tuilles. No. 1,309,986; July 15; v. 264; p. 422.

Cantrell, Edwin H., and G. E. Miller, San Francisco, Calif., Wheel-puller. No. 1,310,154; July 15; v. 264; p. 461.

Cantrell, Edwin H., and G. E. Miller, San Francisco, Calif., Roller-bearing remover. No. 1,310,155; July 15; v. 264; p. 461.

Capitol Motors Corporation. (See Krafce, William, assignor.)

Carborandum Company, The. (See Hutchins, Otis, assignor.)

Carborandum Company, The. (See Martin, Harry C., assignor.)

Carborandum Company, The. (See Power, Henry R., assignor.)

Carlson, Oscar W., Litchfield, Minn., Home-fastener. No. 1,310,174; July 15; v. 264; p. 465.

Carlson, Wendell L., Jamestown, N. Y., Fuse-plug. No. 1,310,175; July 15; v. 264; p. 465.

Carmichael, William H., Miami, Fla., Tabulator for automobiles. No. 1,309,841; July 15; v. 264; p. 404.

Carr, John H., Alhambra, Calif., Concrete-pipe machine. No. 1,309,878; July 15; v. 264; p. 411.

Carrel, Arthur D., (See Mills and Carrel.)

Casalena, Primiano, assignor of one-half to J. V. Canepa, Chicago, Ill., Macaroni-drier. No. 1,310,176; July 15; v. 264; p. 465.

Casper, Charles H., Philadelphia, Pa., Torpedo-deflecting means for ships. No. 1,310,057; July 15; v. 264; p. 443.

Casper, Charles H., Philadelphia, Pa., Ordnance. No. 1,310,058; July 15; v. 264; p. 443.

Cederlund, Karl H., (See Ahlen and Cederlund.)

Centoletta, Giuseppe A., Clinton, N. Y., Electric-light support. No. 1,310,323; July 15; v. 264; p. 491.

Cerruti, Frank A., New York, N. Y., Aeroplane. No. 1,310,359; July 15; v. 264; p. 508.

Chabot, Ephraim, Nashua, N. H., Automatic train control. No. 1,310,059; July 15; v. 264; p. 444.

Chaddick, Mark, Plano, Tex., Device for making vessels invisible. No. 1,310,280; July 15; v. 264; p. 484.

Chain Belt Company. (See Levalley, Christopher U., assignor.)

Chopaul, Francois J., Paris, and A. L. E. Sallot, La Garenne-Colombes, France, Regulating device for the air-discharge in compressed-air brakes. No. 1,309,612; July 15; v. 264; p. 362.

Chemical Construction Company. (See Hechenbleikner and Gilchrist, assignors.)

Chemical Construction Company. (See Hechenbleikner, Ingenieur, assignor.)

Clark, Bertha, Brooklyn, N. Y., Shoe-hanger. No. 1,310,281; July 15; v. 264; p. 484.

Clark, Charles H., New York, N. Y., Coupling. No. 1,310,002; July 15; v. 264; p. 434.

Clark, Edward S., et al., (See Yelo, Anthony, assignor.)

Clark, George C., Everett, Wash., Vacuum-feed for oil-engines. No. 1,309,718; July 15; v. 264; p. 381.

Clark, James H., assignor of one-half to J. F. Kleyner, Washington, D. C., Closure for pockets. No. 1,310,282; July 15; v. 264; p. 484.

Clark, Lester P., Fanwood, assignor of one-half to A. L. Stebor, Jr., Plainfield, N. J., Blow-out patch. No. 1,310,150; July 15; v. 264; p. 461.

Clark, Lester P., Fanwood, N. J., assignor of one-half to A. L. Stebor, Jr., Plainfield, N. J., Game. No. 1,310,390; July 15; v. 264; p. 504.

Class, Hans T., assignor to Eastman Kodak Company, Rochester, N. Y., Cellulose-ester composition. No. 1,309,980; July 15; v. 264; p. 430.

Clarke, Hans T., assignor to Eastman Kodak Company, Rochester, N. Y., Cellulose-nitrate composition. No. 1,309,981; July 15; v. 264; p. 430.

Cleveland Metal Products Company, The. (See Harrison, George L., assignor.)

Cleley, John P., Chicago, Ill., Circulator. No. 1,310,324; July 15; v. 264; p. 491.

Cochran, William K., Delphos, Ohio, assignor of one-half to A. Esterline and G. W. Sherer, Fort Wayne, Ind., Oil-burner. No. 1,310,283; July 15; v. 264; p. 484.

Cogozzo, Joseph, Rochester, N. Y., assignor to American Piano Company, New York, N. Y., Wire-twisting machine. No. 1,310,003; July 15; v. 264; p. 434.

Coleman, Robert B., Los Angeles, Calif., Composite stick. No. 1,310,004; July 15; v. 264; p. 434.

Coleman, Walter M., Baltimore, Md., Game. No. 1,310,177; July 15; v. 264; p. 465.

Collins, Edgar F., Schenectady, N. Y., assignor to General Electric Company, Electric-resistance furnace. No. 1,310,060; July 15; v. 264; p. 444.

Collins, John S., (See Bowers, Thomas L., assignor.)

Columbia Fastener Company. (See Kostichuk, Leo S., assignor.)

Comptograph Company. (See Niemann, Frederick A., assignor.)

Conger, Henry M., (See Travis, Asher O., assignor.)

Cooley, Frederick D., Detroit, Mich., Converter. No. 1,310,178; July 15; v. 264; p. 465.

Coolidge, William D., Schenectady, N. Y., assignor to General Electric Company, X-ray apparatus. No. 1,310,061; July 15; v. 264; p. 444.

Cooper, David M., (See Hubbard and Cooper.)

Copper-Clad Malleable Range Company. (See Seruggs and Jones, assignors.)

Cortese, Battista, New York, N. Y., Sponging-machine. No. 1,310,325; July 15; v. 264; p. 492.

Costello, William, Jr., Philadelphia, Pa., Depositing-nozzle for cake-coating machinery. No. 1,310,062; July 15; v. 264; p. 444.

Crick, Owen J. P., (See Leighton and Crick.)

Crosby, John C., (See Moore, Black, and Crosby.)

Crowe, Thomas. (See Sharples and Crowe.)

Cru Patent Corporation. (See Uebelmesser, Charles, assignor.)

Culmer, Harry H., Chicago, Ill., Non-puncturable tire. No. 1,310,113; July 15; v. 264; p. 453.

Cummings, Joseph H., Pittsfield, Mass., assignor to General Electric Company, Electrical apparatus. No. 1,310,063; July 15; v. 264; p. 444.

Cunningham, John W., Tulsa, Okla., Oil-tank construction. No. 1,310,064; July 15; v. 264; p. 444.

Curnan, Frank W., (See Smith and Curnan.) (Reissue.)

Curtis, Henry E., San Jose, Calif., Carburetor. No. 1,309,719; July 15; v. 264; p. 382.

Cutler-Hammer Manufacturing Company, The. (See Stockle, Edwin R., assignor.)

Dahlstrand, Hans E., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., Turbine system. No. 1,309,796; July 15; v. 264; p. 396.

Dallas, Duncan W., Chambers County, Ala., Mail-catcher. No. 1,310,065; July 15; v. 264; p. 445.

Darling, Roy A., Evanston, Ill., Carrier-shell. No. 1,309,982; July 15; v. 264; p. 430.

Davenport, Herman A., Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Pressing-form. No. 1,310,005; July 15; v. 264; p. 434.

David, Ernest M., Tropic, and L. Lindsay, Los Angeles, Calif., Vacuum air-separator. No. 1,309,879; July 15; v. 264; p. 411.

Davies, Thomas W., San Jose, Calif., Invalid-table. No. 1,310,284; July 15; v. 264; p. 484.

Day, Wilbur F., St. Paul, Minn., Burner. No. 1,310,066; July 15; v. 264; p. 445.

Dayton, William L., assignor to Gravity Pump and Power Co., Fort Worth, Tex., Pump-jack. No. 1,309,842; July 15; v. 264; p. 404.

Dayton, William L., assignor to Gravity Pump and Power Co., Fort Worth, Tex., Pump-jack. No. 1,309,843; July 15; v. 264; p. 404.

Deardey, John W., assignor to Freeman Manufacturing Company, Racine, Wis., Foundry-rack clamp. No. 1,309,613; July 15; v. 264; p. 362.

De Campo, Manuel, Mexico, Mex., Rotary engine. No. 1,310,157; July 15; v. 264; p. 461.

De Forest, Lee, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., Means for transforming mechanical vibrations into electrical vibrations. No. 1,309,753; July 15; v. 264; p. 388.

De Forest Radio Telephone and Telegraph Company. (See De Forest, Lee, assignor.)
 De Haven, William L., assignor of one-eighth to C. A. Latham, Wichita, Kans. Ball-throwing toy. No. 1,309,614; July 15; v. 264; p. 362.
 De Laval Separator Company, The. (See Lelch, Meredith, assignor.)
 De Long, Nelson, assignor to J. M. Laventhal, Chicago, Ill. Feeder. No. 1,310,170; July 15; v. 264; p. 466.
 De Martino, Joseph, assignor to Mechanical Improvement Company, Chicago, Ill. Power-transmitting mechanism. No. 1,310,114; July 15; v. 264; p. 453.
 De Martino, Joseph, assignor to Mechanical Improvement Company, Chicago, Ill. Power-transmitting mechanism. No. 1,310,115; July 15; v. 264; p. 454.
 Deines, Oscar L., Ardmore, Okla. Article-holder. No. 1,309,844; July 15; v. 264; p. 404.
 Denning, Patrick F., Cleveland, Ohio. Ornamental wind-wheel. No. 1,310,234; July 15; v. 264; p. 475.
 Dennis, Oliver C., Chicago, Ill. Electric vulcanizer. No. 1,309,445; July 15; v. 264; p. 405.
 Deppernano, William, assignor to S. S. Stafford, Inc., New York, N. Y. Pour-out for bottles. No. 1,310,405; July 15; v. 264; p. 500.
 Deutsch, Edward L., North Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Motor-controller. No. 1,309,797; July 15; v. 264; p. 396.
 Devere, Philip K., Jr., Lynn, Mass., assignor to General Electric Company. Inward-arc device. No. 1,310,007; July 15; v. 264; p. 445.
 Diadem Manufacturing Company. (See Thorndike, Herbert A., assignor.)
 Diamond, George, Milwaukee, Wis. Paper-box member. No. 1,310,006; July 15; v. 264; p. 434.
 Dibble, Frank D., Muskogee, Okla. Ship-protecting device. No. 1,310,226; July 15; v. 264; p. 402.
 Dieter, Joseph, Hamilton, Ohio, assignor to American Can Company, New York, N. Y. Transparent-sided curved walled vessel. No. 1,309,615; July 15; v. 264; p. 363.
 Dodge, Otis W., deceased, New York; C. W. Stevens, administrator, assignor to W. H. Bowes Co., Port Chester, N. Y. Coupling for drain-pipes of steam-heated drying-cylinders. No. 1,310,391; July 15; v. 264; p. 504.
 Doherty, George P., Cleveland, Ohio. Copy-liner. No. 1,309,937; July 15; v. 264; p. 422.
 Doremont, Frank C., Detroit, Mich., assignor of one-half to G. J. Lowe, Cleveland, Ohio. Air-charging device. No. 1,309,880; July 15; v. 264; p. 411.
 Dorr Company, The. (See Bloomfield, Alfred L., assignor.)
 Doughty, Herman W., Birmingham, N. Y., assignor, by mesne assignments, to The Gamewell Fire Alarm Telegraph Company. Signal-recorder. No. 1,309,720; July 15; v. 264; p. 382.
 Dovel, James P., Birmingham, Ala. Portable washing plant. No. 1,309,754; July 15; v. 264; p. 388.
 Drinkard, William H., Beloit, Kans. Apparatus for heating oil wells. No. 1,309,721; July 15; v. 264; p. 382.
 Dumas, Mel B., Milwaukee, Wis. Scrubbing brush. No. 1,310,007; July 15; v. 264; p. 435.
 Dunbar, George H., Detroit, Mich. Plastic composition and making same. No. 1,310,180; July 15; v. 264; p. 460.
 Duncan, Thomas S., assignor to Vickers Limited, Westminster, London, England. Starting of internal-combustion engines. No. 1,309,722; July 15; v. 264; p. 382.
 Dunker, Charles H., et al., administrators. (See Shuman, Frank.)
 Dymmett, Edward C., Muskogee, Okla. Centrifugal pump for compression and vacuum. No. 1,310,116; July 15; v. 264; p. 454.
 Dutton, Lawrence J., Pueblo, Colo. Ventilator. No. 1,310,327; July 15; v. 264; p. 492.
 E. B. Meyrowitz, Inc. (See Meyrowitz, Emil R., assignor.)
 E. S. Cowles Electric Co. (See Haskins, Butler J., assignor.)
 E. W. Bliss Company. (See Ellsworth, Charles J., assignor.)
 Earp-Thomas, George H., Richmond, Va. Fertilizer composition and making same. (Reissue.) No. 1,468,000; July 15; v. 264; p. 507.
 Earp-Thomas, George H., Glen Ridge, N. J. Fertilizer and making same. No. 1,309,723; July 15; v. 264; p. 382.
 East, John F., Norfolk, Va. Basket. No. 1,310,328; July 15; v. 264; p. 492.
 Eastman Kodak Company. (See Clarke, Hans T., assignor.)
 Eastman Kodak Company. (See Folmer, William F., assignor.)
 Eastman Kodak Company. (See Frederick and Altman, assignors.)
 Eastman Kodak Company. (See Jones, John G., assignor.)
 Eaton, Allen B. (See Gibson, Claude W., assignor.)
 Edridge, Walter H., Woolwich, London, England, and E. E. G. Rolfe, Havre, France. Worm-gearing adjustment applicable to variable condensers for wireless telegraphy and telephony. No. 1,310,329; July 15; v. 264; p. 492.
 Edwards, Frederick E., San Francisco, Calif. Circuit-closer. No. 1,309,881; July 15; v. 264; p. 411.
 Edlitz, Charles L., New York, N. Y. Fuse-plug. No. 1,310,182; July 15; v. 264; p. 460.

Elster, Charles, Irvington, assignor of one-third to G. Zisch and one-third to Newark Engineering and Refrigerating Company, Newark, N. J. Sheet-metal device. No. 1,309,916; July 15; v. 264; p. 363.
 Elsner, Martin A. (See Elsner, Theodor D., assignor.)
 Elsner, Theodor D., Woodhaven, N. Y., assignor to M. A. Elsner, Woodhaven, N. Y. Embroidery-frame. No. 1,310,392; July 15; v. 264; p. 504.
 Electric Boat Company. (See Hibbs and Gunn, assignor.)
 Electric Boat Company. (See Grieshaber and Simpson, assignors.)
 Electric Boat Company. (See Grieshaber, Hugo E., assignor.)
 Electric Controller & Manufacturing Company. (See Wright, Renben I., assignor.)
 Electric Railway Improvement Company, The. (See Kjellgren and Stephenson, assignors.)
 Ellsworth, Charles J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Making bullets, especially shrapnel. No. 1,309,938; July 15; v. 264; p. 422.
 Elmit, John, Kansas City, Mo. Ship construction. No. 1,310,181; July 15; v. 264; p. 460.
 Epperson, Edward H. (See Rees, Frank S., assignor.)
 Erickson, Edward, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-turning machine. No. 1,310,608; July 15; v. 264; p. 435.
 Esling, Conrad, Moline, Ill., assignor to Moline Plow Company. Beet-pulling machine. No. 1,309,617; July 15; v. 264; p. 363.
 Esterline, Albert, et al. (See Cochran, William R., assignor.)
 Evans Dollar Pen Company, The. (See Fitzpatrick, William T., assignor.)
 Everlasting Valve Co. (See Hunter, Rudolph M., assignor.) (Reissue.)
 Falconer, Robert A., and F. Mendizola, Shooter Island, N. Y. Safety head-covering for the protection of workmen's skulls. No. 1,309,882; July 15; v. 264; p. 412.
 Fay, Thomas J., Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Lubricating compound. No. 1,309,618; July 15; v. 264; p. 363.
 Ferrier, James, Surat, Queensland, Australia. Propeller particularly for use on aeroplanes and other aircraft. No. 1,310,330; July 15; v. 264; p. 493.
 Ficklen, William E., Brooklyn, N. Y. Metallic edge-protector and the like. No. 1,310,331; July 15; v. 264; p. 493.
 Flieky, August A., San Francisco, Calif. Automobile-starter. No. 1,310,009; July 15; v. 264; p. 435.
 Fishback, Charles F., Los Angeles, Calif. Hinge. No. 1,309,883; July 15; v. 264; p. 412.
 Fisher, Bernard C., Jersey City Heights, N. J. Spring-wheel. No. 1,310,285; July 15; v. 264; p. 465.
 Fisher, John A., assignor to Imperial Player Roll Company, Chicago, Ill. Perforated sheet. No. 1,310,238; July 15; v. 264; p. 470.
 Fitzpatrick, William T., Waterloo, Iowa, assignor to The Evans Dollar Pen Company. Cap-clip for fountain-pens. No. 1,310,235; July 15; v. 264; p. 470.
 Flanders, Bert W., assignor to The New London Chemical Company, New London, Conn. Desodorizer. No. 1,309,619; July 15; v. 264; p. 363.
 Flower, George C., Pittsburgh, Pa. Die. No. 1,310,068; July 15; v. 264; p. 445.
 Folberth, William M., Cleveland, Ohio. Apparatus for cleaning automobile wind-shields. No. 1,309,724; July 15; v. 264; p. 384.
 Folk, Joseph. (See Luschka and Folk.)
 Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Automatic aeroplane-camera. No. 1,309,798; July 15; v. 264; p. 396.
 Fontaine, Calix, Boston, Mass. Corn and bunion secer. No. 1,310,183; July 15; v. 264; p. 460.
 Foster Machine Company. (See Kijlin, Oskar, assignor.)
 Fotheringham, Robert M., Buffalo, N. Y. Excavating-bucket. No. 1,309,846; July 15; v. 264; p. 405.
 Franc, Joseph M. E., St. Vallier, France. Tire-pump for automobiles. No. 1,310,332; July 15; v. 264; p. 493.
 Frank, Max, New York, and H. Froehlich, Brooklyn, N. Y. Doll-eye-actuating device. No. 1,309,884; July 15; v. 264; p. 412.
 Fred Medart Manufacturing Company. (See Medart, Philip S., assignor.)
 Frederick, Charles W., and E. E. Altman, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic objective. No. 1,309,847; July 15; v. 264; p. 405.
 Freeman Manufacturing Company. (See Dearsley, John W., assignor.)
 French, Fred W., Grandville, Mich. Wheel. No. 1,310,069; July 15; v. 264; p. 445.
 Freund, Max, New York, N. Y. Bill-fold. No. 1,310,010; July 15; v. 264; p. 435.
 Friday, Aaron O. (See Gibson and Friday.)
 Friedman, Jack, New York, N. Y. Protecting fabric. No. 1,309,620; July 15; v. 264; p. 363.
 Fries, John A., State College, Pa. Automatic gas-analysis apparatus. No. 1,309,681; July 15; v. 264; p. 375.
 Fritzsche, Joseph, Puente, Calif. Bean-rine cutter. No. 1,309,885; July 15; v. 264; p. 412.
 Froehlich, Hugo. (See Frank and Froehlich.)

Fuhr, Albert H., Macomb, Ill. Window-ventilator. No. 1,309,886; July 15; v. 264; p. 412.
 Fulton, Le Roy M., Des Plaines, Ill. Electric-wiring terminal. No. 1,309,887; July 15; v. 264; p. 413.
 Gabriel, Charles, assignor to A. M. Castle & Co., Chicago, Ill. Structural-shape sheen. No. 1,309,848; July 15; v. 264; p. 405.
 Gamewell Fire Alarm Telegraph Company, The. (See Doughty, Herman W., assignor.)
 Gammeter, John R., Akron, Ohio, assignor, by mesne assignments, to The B. F. Goodrich Company. Machine for making tires. No. 1,310,286; July 15; v. 264; p. 470.
 Gard, Samuel E., Amilo, Ohio. Safety-razor. No. 1,310,333; July 15; v. 264; p. 493.
 Gardner, John, Fleetwood, England. Submarine sound-signalling. No. 1,310,011; July 15; v. 264; p. 435.
 Gardner, Virgil H., Glendale, Ky. End-gate for vehicle-bodies. No. 1,310,334; July 15; v. 264; p. 493.
 Garford Manufacturing Company, The. (See Manson, Ray H., assignor.)
 Garwick, Floyd, Chicago, Ill. Vacuum feed mechanism. No. 1,310,393; July 15; v. 264; p. 504.
 Gasoline Turbine Motor Company. (See Morgan, Charles W., assignor.)
 Gates, James C. (See Shirlow, Albert E., assignor.)
 Gates, Quincy A. (See Rummell and Gates.)
 Gelsenhoner, Henry, Schenectady, N. Y., assignor to General Electric Company. Electric welding. No. 1,310,070; July 15; v. 264; p. 446.
 Geletisen, Otto E., Westfield, N. J., assignor to Greenfield Paper Bottle Company, New York, N. Y. Purifying waterproofing compositions. No. 1,310,158; July 15; v. 264; p. 462.
 Gelhaar, Harry J., Lincoln, Neb., assignor of one-half to L. J. Selbert, Kansas City, Mo. Anti-explosive attachment for dry-cleaning tumblers. No. 1,310,184; July 15; v. 264; p. 460.
 General Electric Company. (See Batchelder, Asa F., assignor.)
 General Electric Company. (See Brown, Lewis R., assignor.)
 General Electric Company. (See Collins, Edgar F., assignor.)
 General Electric Company. (See Coolidge, William D., assignor.)
 General Electric Company. (See Cummings, Joseph H., assignor.)
 General Electric Company. (See Devers, Philip K., Jr., assignor.)
 General Electric Company. (See Gelsenhoner, Henry, assignor.)
 General Electric Company. (See Junggren, Oscar, assignor.)
 General Electric Company. (See Merrill, Wilbur L., assignor.)
 General Electric Company. (See Noble, Paul O., assignor.)
 General Electric Company. (See Sargent, Howard R., assignor.)
 General Electric Company. (See Selater, Ivanhoe H., assignor.)
 General Electric Company. (See Treaner, Edward D., assignor.)
 General Electric Company. (See Tittle, John F., assignor.)
 General Electric Company. (See White, William C., assignor.)
 General Electric Company. (See Williams, William S., assignor.)
 General Electric Company. (See Winn, Harry A., assignor.)
 General Machine and Manufacturing Company, The. (See Horth, David, assignor.)
 General Petroleum Corporation. (See Leslie, Eugene H., assignor.)
 George, Edgar C., Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Flanged article. No. 1,309,799; July 15; v. 264; p. 396.
 Gerstenmaier, Carl and W. St. Paul, Minn. Hack-reat. No. 1,309,725; July 15; v. 264; p. 383.
 Gerstenmaier, Walter. (See Gerstenmaier, Carl and W.)
 Genesee Pure Food Company, The. (See Nico, Andrew S., assignor.)
 Geo. J. Meyer Manufacturing Co. (See Meyer, George J., assignor.)
 Gifford, Edward H., Adrian, Mich. Razor. No. 1,309,726; July 15; v. 264; p. 383.
 Gibson, Claude W., assignor of one-fourth to A. B. Eaton, Boise, Idaho. Stabilizing mechanism. No. 1,309,888; July 15; v. 264; p. 413.
 Gibson, Tillman N., Webster county, and A. O. Friday, Macon, Miss. Wheel-tightening device. No. 1,309,939; July 15; v. 264; p. 423.
 Gifford, Bert L., and E. H., assignors to Gifford Manufacturing Company, Incorporated, Barker, N. Y. Fruit-grader. No. 1,310,394; July 15; v. 264; p. 504.
 Gifford, Edgar B. (See Gifford, Bert L., and E. H.)
 Gifford Manufacturing Company. (See Gifford, Bert L., and E. H., assignors.)
 Glichrst, Peter S. (See Hechenbleikner and Glichrst.)
 Glichrst, Robert. (See Peacock, Benjamin A., assignor.)
 Gilmore, George D. (See Griffith, Ernest, assignor.)

Gilmore, Hiram N., Miles City, Mont. Suction-draft snow-fence. No. 1,309,889; July 15; v. 264; p. 413.
 Godfrey, Harold H., Los Angeles, Calif. Apparatus for distilling shale and the like. No. 1,309,890; July 15; v. 264; p. 413.
 Goetter, Herman H., and J. Trupke, Milwaukee, Wis. Jack. No. 1,309,755; July 15; v. 264; p. 380.
 Golar, George A., Dorchester, Mass. Garment-supporter. No. 1,309,983; July 15; v. 264; p. 431.
 Goldberg, Elias T., Bridgeport, Conn. Artificial tooth. No. 1,310,237; July 15; v. 264; p. 470.
 Goodyear Tire & Rubber Company, The. (See Kilbom, Karl B., assignor.)
 Gore, Herbert C., Takoma Park, Md. Producing a syrup and a feed. No. 1,310,012; July 15; v. 264; p. 430.
 Gosson, Benjamin F., Brookline, Mass. Merchandise-package and making the same. No. 1,310,185; July 15; v. 264; p. 460.
 Grant, Frederick C., Chicago, Ill. Attachment for automobile-pedals. No. 1,310,186; July 15; v. 264; p. 467.
 Gravity Pump and Power Co. (See Dayton, William L., assignor.)
 Greenfield, Edwin T., Klametha, and J. G. V. Lang, New York, assignors to Greenfield Paper Bottle Company, New York, N. Y. Manufacturer of paper bottles. No. 1,310,117; July 15; v. 264; p. 454.
 Greenfield, Edwin T., Klametha, and J. G. V. Lang, New York, assignors to Greenfield Paper Bottle Company, New York, N. Y. Expanding rings by internal pressure. No. 1,310,118; July 15; v. 264; p. 454.
 Greenfield Paper Bottle Company. (See Geletisen, Otto E., assignor.)
 Greenfield Paper Bottle Company. (See Greenfield and Lang, assignors.)
 Greenleaf, Edward N., and G. T. Hansen, Salt Lake City, Utah, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Granulator. No. 1,309,800; July 15; v. 264; p. 390.
 Greig, James A., and W. F. Itkenol, Lismore, Minn. Wrench. No. 1,309,727; July 15; v. 264; p. 383.
 Grieshaber, Hugo E., New London, Conn., assignor to Electric Boat Company. Testing-tank for submarines. No. 1,309,728; July 15; v. 264; p. 383.
 Grieshaber, Hugo E., and R. C. Simpson, New London, Conn., assignors to Electric Boat Company. Testing-tank for submarines. No. 1,309,750; July 15; v. 264; p. 380.
 Griffith, Ernest, Long Beach, assignor of one-half to G. D. Gilmore, Los Angeles, Calif. Compound piston for internal-combustion engines and the like. No. 1,309,891; July 15; v. 264; p. 413.
 Grojean, Louis A., Camp Cody, N. Mex. Beet-harvester. No. 1,310,335; July 15; v. 264; p. 493.
 Gros, Claude F., Putenex, France. Six-wheeled motor-vehicle. No. 1,310,395; July 15; v. 264; p. 505.
 Grossman, Samuel. (See Sadowsky, Nathan, assignor.)
 Gummerson, William, Los Angeles, Calif. Steering-gear attachment. No. 1,310,159; July 15; v. 264; p. 462.
 Gunn, Thomas M. (See Hibbs and Gunn.)
 Gurry, William, Leominster, Mass. Machine for shaping and polishing articles of celluloid and the like. No. 1,310,071; July 15; v. 264; p. 446.
 H. Koppers Company. (See Speer, Frederick W., Jr., assignor.)
 Haderer, Carl F., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Tiller. No. 1,309,801; July 15; v. 264; p. 397.
 Hadfield, Robert A., Westminster, England. Casting ingots. No. 1,310,072; July 15; v. 264; p. 446.
 Hadfield, Robert A., Westminster, London, and A. G. M. Jack, Sheffield, England. Cap for armor-piercing projectiles. No. 1,310,073; July 15; v. 264; p. 446.
 Hadfield, Robert A., Westminster, A. G. M. Jack, Sheffield, I. B. Milne, Totley, and W. E. Parker, Sheffield, England. Tempering of projectiles and apparatus therefor. No. 1,310,074; July 15; v. 264; p. 446.
 Hadfield, Robert A., London, A. G. M. Jack, Sheffield, and I. B. Milne, Totley, England. Manufacture of armor-piercing projectiles. No. 1,310,075; July 15; v. 264; p. 447.
 Hadfield, Robert A., Westminster, and A. G. M. Jack, Sheffield, England. Capped armor-piercing projectile and cap therefor. No. 1,310,076; July 15; v. 264; p. 447.
 Haertel, Hans R., Franklin, Mass. Reclaiming rubber. No. 1,310,013; July 15; v. 264; p. 436.
 Hagstrom, Joel E., Brooklyn, N. Y., assignor to Independent Filter Press Co., Inc., New York, N. Y. Construction of presses. No. 1,309,682; July 15; v. 264; p. 376.
 Hollowell Howard T., Philadelphia, Pa. Shaft-hanger. No. 1,309,729; July 15; v. 264; p. 383.
 Hamlin, Marston L., Bloomfield, N. J., assignor to American Synthetic Dyes Incorporated. Recovering benzene monosulfonic acid and producing phenol. No. 1,309,683; July 15; v. 264; p. 376.
 Hamrick, Alfred N., Crawford, Kans. Tractor. No. 1,309,684; July 15; v. 264; p. 376.
 Hanks, George S., Atchison, Kans. Telescoping clothes-prop. No. 1,310,336; July 15; v. 264; p. 494.
 Hannum, Philip L., Dalhart, Tex. Beet-harvester. No. 1,309,940; July 15; v. 264; p. 423.
 Hansen, George T. (See Greenleaf and Hansen.)

Hansen, Hans, Christiania, Norway. Lubricating apparatus. No. 1,309,685; July 15; v. 264; p. 370.
 Harper, Charles L., Akron, Ohio, assignor to The R. F. Goodrich Company, New York, N. Y. Strap-tensioner. No. 1,310,119; July 15; v. 264; p. 455.
 Harris, James O. (See Lundberg and Harris.)
 Harris, Joe. (See Suck, Charles M., assignor.)
 Harrison, George L., assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Culinary utensil. No. 1,310,015; July 15; v. 264; p. 436.
 Hartledge, Clifford W. (See Vail, Robert W., assignor.)
 Haskellite Manufacturing Corporation. (See Haskell, Henry L., assignor.)
 Haskell, Henry L., Ludington, Mich., assignor to Haskellite Manufacturing Corporation. Hinge. No. 1,309,730; July 15; v. 264; p. 384.
 Haskins, Butler J., assignor to E. S. Cowie Electric Co., Kansas City, Mo. Holding and driving device for testing purposes. No. 1,310,390; July 15; v. 264; p. 505.
 Hawk, Roscoe C., Pittsburgh, Pa., assignor to R. Hoe and Co., New York, N. Y. Web-roll support. No. 1,309,621; July 15; v. 264; p. 363.
 Hawkins, John W., Kokomo, Ind. Staple-blinder. No. 1,309,731; July 15; v. 264; p. 384.
 Hawley, William G., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y. Shut-off nozzle. No. 1,309,732; July 15; v. 264; p. 384.
 Hays Manufacturing Co. (See Hitchcock, Otto G., assignor.)
 Heaford, Edwin V., Denver, Colo. Eye-protector. No. 1,310,077; July 15; v. 264; p. 447.
 Hechenbleikner, Ingenieur, and P. S. Gichelst, assignors to Chemical Construction Co., Charlotte, N. C. Distilling apparatus. No. 1,310,075; July 15; v. 264; p. 447.
 Hechenbleikner, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Electric furnace. No. 1,310,076; July 15; v. 264; p. 447.
 Heidbrink, Jay A., Minneapolis, Minn. Anesthetic apparatus. No. 1,309,680; July 15; v. 264; p. 376.
 Heidleston, William E. (See Kellum and Heidleston.)
 Heilmund, Rudolf E., Swiservale, Pa., assignor to Westinghouse Electric & Manufacturing Company. System of control. No. 1,309,733; July 15; v. 264; p. 384.
 Hemling, John, Sr., New Germany, Minn. Wrecking-tool. No. 1,309,734; July 15; v. 264; p. 384.
 Henderson, Henry, Halstad, Minn. Distributing-apron for shock-loaders. No. 1,310,016; July 15; v. 264; p. 436.
 Henderson, Robert H., East Orange, N. J. Conduit-bender. No. 1,309,840; July 15; v. 264; p. 495.
 Henig Engine Co. (See Henig, Frank L., assignor.)
 Henig, Frank L., Chicago, Ill., assignor to Henig Engine Co. Rotary engine. No. 1,309,735; July 15; v. 264; p. 385.
 Hewwood, Abraham, Cynwyd, Pa. Oxidation of ammonia to nitric acid. No. 1,309,622; July 15; v. 264; p. 364.
 Hewwood, Abraham, Cynwyd, Pa. Catalyst. No. 1,309,623; July 15; v. 264; p. 364.
 Hewwood, Abraham, Cynwyd, Pa. Manufacture of phosphate fertilizers. No. 1,310,080; July 15; v. 264; p. 447.
 Hewworth, Cecil M., London, England. Apparatus for exposing cinematograph positive films. No. 1,310,337; July 15; v. 264; p. 494.
 Herbst, Robert L. and L. Morack, Hortonville, Wis.: said Morack assignor to said Herbst. Post-clamp. No. 1,309,941; July 15; v. 264; p. 423.
 Heulings, Samuel M., Haddonfield, N. J. Apparatus for pasteurizing fluids. No. 1,310,017; July 15; v. 264; p. 436.
 Heywood Brothers and Wakefield Company. (See Watkins and Brown, assignors.)
 Hibbs, Frank W., and T. M. Gunn, New London, Conn., assignors to Electric Boat Company. Testing-tank for submarines. No. 1,309,736; July 15; v. 264; p. 385.
 Hindmarch, Percy J., Lincoln, Neb. Fire-extinguisher. No. 1,309,624; July 15; v. 264; p. 364.
 Hines, C. V. et al. (See Volo, Anthony, assignor.)
 Hirst-Roger Company, The. (See Browning, Andrew, assignor.)
 Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-drawing apparatus. No. 1,309,942; July 15; v. 264; p. 423.
 Hitchcock, Otto G., assignor to Hays Manufacturing Co., Erie, Pa. Compression stop and waste cock. No. 1,310,378; July 15; v. 264; p. 494.
 Hjorth, David, assignor to The General Machine and Manufacturing Company, Bridgeport, Conn. Electric-wire-outlet box. No. 1,309,625; July 15; v. 264; p. 364.
 Holmson, Arthur V., Cecil, Oreg. Hay-loader. No. 1,310,187; July 15; v. 264; p. 467.
 Hoelmann, Richard, New York, N. Y. Spring safety-latch. No. 1,310,018; July 15; v. 264; p. 436.
 Hogan, George F., Chicago, Ill. Compenvelop. No. 1,310,188; July 15; v. 264; p. 467.
 Hollenbeck, George L., Jamestown, N. Y. Light-control for automobile-lamps. No. 1,309,626; July 15; v. 264; p. 364.
 Hollomon, Casey B., Kenton, Tenn. Mower cutter-bar. No. 1,310,339; July 15; v. 264; p. 494.
 Holloway, William H., Denver, Colo. System and apparatus for the control of electric-trail breakers. No. 1,310,081; July 15; v. 264; p. 447.

Holm, Charles A., Tigerton, Wis. Clamp for feed-cutter sharpeners. No. 1,309,984; July 15; v. 264; p. 431.
 Holt Manufacturing Company, The. (See Turnbull, William, assignor.)
 Holthoff, Henry C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Liquid rheostat. No. 1,309,802; July 15; v. 264; p. 396.
 Holton, Edward, Calgary, Alberta, Canada. Automobile-hood clip. No. 1,310,280; July 15; v. 264; p. 485.
 Hooker, Rufus B., Stephenville, Tex. Knee-protector. No. 1,309,627; July 15; v. 264; p. 365.
 Hoopes, Russell, West Chester, Pa. Wheel. No. 1,310,189; July 15; v. 264; p. 467.
 Horne, James B., St. Charles, Ill. Shock-absorber. No. 1,109,850; July 15; v. 264; p. 409.
 Horton, Bryson, Detroit, Mich. Fastening device for conduits and the like. No. 1,310,190; July 15; v. 264; p. 467.
 Howe, Henry G., Brooklyn, N. Y. Butt-end composition shingles for roofing and the like. No. 1,310,082; July 15; v. 264; p. 448.
 Howel, Arthur D., Portland, Oreg. Paper-roll fixture. No. 1,310,019; July 15; v. 264; p. 437.
 Hotherhall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Friction-top can. No. 1,309,628; July 15; v. 264; p. 365.
 Housum, Chenoweth, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Condenser. No. 1,309,803; July 15; v. 264; p. 397.
 Howe, Grant W., Hornepayne, Ontario, Canada. Animal-trap. No. 1,310,310; July 15; v. 264; p. 491.
 Hoyt, Ezra S., Los Angeles, Calif. Automatic water-heater. No. 1,310,160; July 15; v. 264; p. 462.
 Hubbard, Cecil H., Baden, and D. M. Cooper, Ambridge, assignors to National Metal Molding Company, Pittsburgh, Pa. Electrical fitting. No. 1,310,191; July 15; v. 264; p. 468.
 Hubbard, Richard W., Ashtabula, Ohio. Hinge. No. 1,309,629; July 15; v. 264; p. 365.
 Huber, Samuel J., Newark, and E. J. Schwanhauser, Jersey City, N. J. Process and mechanism for melting borings. No. 1,309,851; July 15; v. 264; p. 406.
 Hulac, George E., Newark, N. J., assignor to Safety Car Heating & Lighting Company. Lamp construction. No. 1,309,630; July 15; v. 264; p. 365.
 Huhle, Simon, Fort Worth, Tex. Pie-carrier. No. 1,310,403; July 15; v. 264; p. 506.
 Huestis, Charles A., Elmhurst, N. Y. Solution for and process of hardening steel. No. 1,310,020; July 15; v. 264; p. 437.
 Humphrey Gas Pump Company. (See Humphrey and Russell, assignors.)
 Humphrey, Herbert A., London, and W. J. Russell, Wolverhampton, England, assignors to Humphrey Gas Pump Company. Apparatus for pumping fluid. No. 1,309,943; July 15; v. 264; p. 424.
 Hunter, Rudolph M., Philadelphia, Pa., assignor, by means assignments, to Everlasting Valve Co. Valve. (Hissus.) No. 14,987; July 15; v. 264; p. 507.
 Hooton, William C., Providence, R. I. Collapsible tube. No. 1,310,083; July 15; v. 264; p. 448.
 Hotchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Electric furnace. No. 1,310,341; July 15; v. 264; p. 494.
 Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Purifying aluminous materials. No. 1,310,342; July 15; v. 264; p. 495.
 Hymans, Frederick, Glen Ridge, assignor to Otis Elevator Company, Jersey City, N. J. Governor. No. 1,309,631; July 15; v. 264; p. 365.
 Hymans, Frederick, Glen Ridge, N. J. Bell-holst. No. 1,309,632; July 15; v. 264; p. 366.
 Hg, Robert A., Chicago, Ill. Air washer and humidifier. No. 1,309,737; July 15; v. 264; p. 385.
 Hils, Alphonse, Rochester, N. Y. Machine for cutting needles. No. 1,310,343; July 15; v. 264; p. 495.
 Independent Filter Press Co. (See Hagstrom, Joel E., assignor.)
 International Muntions Company. (See Nichols, Frank L., assignor.)
 International Time Recording Company, of New York. (See Krautter, William F., assignor.)
 Irvine, James A., New York, N. Y. Smoking-pipe. No. 1,310,404; July 15; v. 264; p. 506.
 Jack, Alexander G. M. (See Hadfield and Jack.)
 Jack, Alexander G. M. (See Hadfield, Jack, Milne, and Parker.)
 Jackson, Carrie L., Peplin, Wis. Flexible axle. No. 1,309,944; July 15; v. 264; p. 424.
 Jasper, Charles. (See Kovacs, Louis, assignor.)
 Jay, Webb, Chicago, Ill. Combined cooling and liquid-feed system. No. 1,309,985; July 15; v. 264; p. 431.
 Jeffries, Isaac R., Llanelli, Wales. Air-tube for pneumatic tires and process of manufacturing the same. No. 1,309,687; July 15; v. 264; p. 376.
 Jenkins, John E. (See Richmond, Walter, assignor.)
 Jensen, George C., Oakland, Calif. Combined shift-lock and retainer. No. 1,309,852; July 15; v. 264; p. 406.
 Jensen, George C., Oakland, Calif. Shift-lock mechanism. No. 1,309,853; July 15; v. 264; p. 406.
 Joerin, Albert E. (See Joerin, Charles, Jr., and A. E.)
 Joerin, Charles, Jr., and A. E., Detroit, Mich. Water heater and filter. No. 1,309,892; July 15; v. 264; p. 414.

Johnson, Andrew J., Green Bay, Wis. Lantern. No. 1,309,893; July 15; v. 264; p. 414.
 Johnson, Arthur A., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,309,854; July 15; v. 264; p. 406.
 Johnson, Carl E., St. Paul, Minn. Demountable traction-wheel. No. 1,309,633; July 15; v. 264; p. 366.
 Johnson, Carl E., St. Paul, Minn. Universal joint. No. 1,310,239; July 15; v. 264; p. 470.
 Johnson, Clinton, Columbus, Ohio. Toy vehicle. No. 1,309,855; July 15; v. 264; p. 406.
 Johnson, Edward H., New York, N. Y. Transportation-case. No. 1,310,161; July 15; v. 264; p. 462.
 Johnson, Hudson A., Brooklyn, N. Y. Aeroplane. No. 1,310,344; July 15; v. 264; p. 495.
 Johnson, James A., assignor to one-half to L. J. Remm, Chicago, Ill. Shock-absorber. No. 1,310,021; July 15; v. 264; p. 437.
 Johnson, John W., Waterville, Kans. Measuring-fanct. No. 1,309,688; July 15; v. 264; p. 376.
 Joldon, Charles J., Hartford, Conn. Firearm. No. 1,310,397; July 15; v. 264; p. 505.
 Joly, Charles J., Ennis, Tex. Knockdown extension covered wagon-bed. No. 1,309,856; July 15; v. 264; p. 407.
 Jones, Charles A., Hillsboro, N. H. Trolley-supporting device. No. 1,310,345; July 15; v. 264; p. 495.
 Jones, Charles E., assignor to Metal Arts & Crafts Co., Chicago, Ill. Lighting-fixture. No. 1,309,857; July 15; v. 264; p. 407.
 Jones, Edwin C., Toronto, Ontario, Canada. Garment-supporter. No. 1,310,084; July 15; v. 264; p. 448.
 Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Coating-machine. No. 1,309,858; July 15; v. 264; p. 407.
 Jones, Ruel A., Covington, Ky. Soap-pressing machine. No. 1,309,986; July 15; v. 264; p. 431.
 Jones, Thomas L. (See Scruggs and Jones.)
 Jory, George W., Marysville, Calif. Attachment for harvesters and other agricultural machines. No. 1,309,689; July 15; v. 264; p. 377.
 Joule, William, assignor to The Nairn Linooleum Company, Kearney, N. J. Linooleum-rug manufacture. No. 1,310,346; July 15; v. 264; p. 495.
 Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic-bulb turbine. No. 1,310,022; July 15; v. 264; p. 437.
 Kariol, Edward, Brooklyn, N. Y. Lamp-shade. No. 1,310,347; July 15; v. 264; p. 495.
 Kasson, Rutgers S., Keewauville, N. Y. Brooder. No. 1,310,348; July 15; v. 264; p. 495.
 Kawanishi, Sadagiro, Tokyo, Japan. Disinfecting apparatus. No. 1,309,859; July 15; v. 264; p. 407.
 Keenan, Catherine C. (See Keenan, Daniel and C. C.)
 Keenan, Daniel T. and Catherine C., Philadelphia, Pa. Automobile or tire theft alarm. No. 1,310,349; July 15; v. 264; p. 496.
 Keller Pneumatic Tool Company. (See Schinkes, Albert, assignor.)
 Kelley, John M., Kansas City, Mo. Rod-pulling and clamping device. No. 1,309,634; July 15; v. 264; p. 366.
 Kelley, John M., Rochester, N. Y. Pump. No. 1,309,987; July 15; v. 264; p. 431.
 Kelley, John M., and W. E. Pratt, Rochester, N. Y. Air-motivating means for furnaces. No. 1,310,085; July 15; v. 264; p. 448.
 Kellogg Switchboard and Supply Company. (See Weiss, Alfred H., assignor.)
 Kellum, John J., and W. E. Heidleston, Red Lodge, Mont. Emergency-brake. No. 1,309,945; July 15; v. 264; p. 424.
 Kelsey, John, assignor to Kelsey Wheel Company, Inc., Detroit, Mich. Wheel-hub. No. 1,309,804; July 15; v. 264; p. 397.
 Kelsey Wheel Company. (See Kelsey, John, assignor.)
 Kempton, Willard H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Manufacturing composite articles. No. 1,309,757; July 15; v. 264; p. 389.
 Kempton, Willard H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Composite article. No. 1,309,758; July 15; v. 264; p. 389.
 Kennedy, David, South Norwood, London, England. Fuse for projectiles. No. 1,310,350; July 15; v. 264; p. 496.
 Kerr Adjustable Strap Company. (See Badger, Oliver L., assignor.)
 Kessel, Joseph W., Brooklyn, N. Y. Fountain-pen clip. No. 1,309,946; July 15; v. 264; p. 424.
 Kessler, Louis, Chicago, Ill., assignor to Non-Explosive Can and Tube Company. Filling-tube for explosive-liquid receptacles. No. 1,310,210; July 15; v. 264; p. 476.
 Kessler, Louis, Chicago, Ill., assignor to Non-Explosive Can and Tube Company. Device for preventing back-firing into gasoline-receptacles or the like. No. 1,310,241; July 15; v. 264; p. 477.
 Keys, William A., New York, N. Y. Neckwear. No. 1,310,192; July 15; v. 264; p. 468.
 Kilborn, Karl R., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treading-machine. No. 1,309,804; July 15; v. 264; p. 414.
 Kliner, George T., Kansas City, Mo. Clamp for tire-chains. No. 1,309,635; July 15; v. 264; p. 366.

Kjellgren, John G., Brooklyn, N. Y., and G. H. Stephenson, assignors to The Electric Railway Improvement Company, Cleveland, Ohio. Electric welding and apparatus for use therefor. No. 1,309,947; July 15; v. 264; p. 424.
 Klahn, Emil, New Vernon, N. J. Gyroscope. No. 1,309,636; July 15; v. 264; p. 366.
 Klahn, Emil, New Vernon, N. J. Gyro apparatus. No. 1,309,637; July 15; v. 264; p. 366.
 Kleaver, John F. (See Clark, James H., assignor.)
 Klein, Franklin M., Minneapolis, Minn. Wrench. No. 1,309,860; July 15; v. 264; p. 407.
 Knowlton, Cutler J., Rockport, Mass., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J. Resilient mounting for machinery. No. 1,309,759; July 15; v. 264; p. 389.
 Knudsen, Knud, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Quick-break switch. No. 1,309,895; July 15; v. 264; p. 414.
 Knudsen, Knud, assignor to The Trumbull Electric Mfg. Co., Plainville, Conn. Inclosed switch. No. 1,310,163; July 15; v. 264; p. 463.
 Kayvett, Reginald H., New York, N. Y. Wrist-watch. No. 1,309,888; July 15; v. 264; p. 432.
 Kobert, Frank P., Amityville, N. Y. Electric riveting apparatus. No. 1,309,638; July 15; v. 264; p. 367.
 Koehler, Frederick W., Wilkinsburg, assignor to American Atmos Corporation, Wilkinsburg station, Pittsburgh, Pa. Regenerator for breathing apparatus. No. 1,309,896; July 15; v. 264; p. 414.
 Kohout, George A., assignor to Shear-Klean Grate Company, Chicago, Ill. Furnace-grate. No. 1,310,162; July 15; v. 264; p. 462.
 Kollmorgen, Frederick L. G., Mountain Lakes, N. J. Periscope. No. 1,309,639; July 15; v. 264; p. 367.
 Koontz, Victor R., Waynesboro, Pa. Vise. No. 1,310,351; July 15; v. 264; p. 496.
 Koors, August W., Duluth, Minn. Packing-crate. No. 1,310,352; July 15; v. 264; p. 496.
 Kositchek, Leo S., Chicago, Ill., assignor to Columbia Fastener Company, Muelage-Jac. No. 1,309,948; July 15; v. 264; p. 425.
 Kovacs, Louis, assignor to one-third to C. Jasper, Chicago, Ill. Magnetic starting-switch. No. 1,310,353; July 15; v. 264; p. 496.
 Kovacs, Louis, Chicago, Ill. Combination-switch. No. 1,310,354; July 15; v. 264; p. 497.
 Kraft, Frederick W., Berkeley, Calif. Wall-paper-pasting machine. No. 1,310,355; July 15; v. 264; p. 497.
 Krafce, William, assignor to Capital Motors Corporation, Fall River, Mass. Automobile-spring. No. 1,310,193; July 15; v. 264; p. 468.
 Krautter, William F., Chicago, Ill., assignor, by means assignments, to International Time Recording Company of New York, New York, N. Y. Mechanical motor. No. 1,310,023; July 15; v. 264; p. 437.
 Krawczyk, James, Syracuse, N. Y. Keyed sither. No. 1,310,024; July 15; v. 264; p. 437.
 Kreamer, Ethel H., Wheeling, W. Va. Mitten. No. 1,310,120; July 15; v. 264; p. 455.
 Kravstrom, Alfred T., Detroit, Mich. Collapsible-body insert for automobiles. No. 1,309,760; July 15; v. 264; p. 389.
 Kynn, Oscar, assignor to Foster Machine Company, Elkhart, Ind. Clutch. No. 1,309,761; July 15; v. 264; p. 390.
 La France, Richard, assignor to The Owens Bottle Machine Company, Toledo, Ohio. Apparatus for handling glassware. No. 1,310,194; July 15; v. 264; p. 468.
 La Jole, Herbert J., Orange, N. J., assignor to Autopiano Company. Player-piano for producing solo effects. No. 1,309,762; July 15; v. 264; p. 391.
 Landrum, M. L. (See Parker, Luke W., assignor.)
 Lane, George A., Peoria, Calif. Inner tube. No. 1,310,121; July 15; v. 264; p. 455.
 Lang, Johan G. V. (See Greenfield and Lang.)
 La Porte, Norbert M., Baltimore, Md. Circulating system. No. 1,310,025; July 15; v. 264; p. 437.
 Larsen, Louis, Brooklyn, assignor to The Sundh Electric Company, New York, N. Y. Motor control. No. 1,309,640; July 15; v. 264; p. 367.
 Larson, David C., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Accelerating-magnet. No. 1,309,641; July 15; v. 264; p. 367.
 Larson, David C., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Reverse-phase relay. No. 1,309,642; July 15; v. 264; p. 368.
 Lasker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Lock for accumulator mechanism of adding-machines. No. 1,309,897; July 15; v. 264; p. 415.
 Lasker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Automatic naught-stop for adding-machines. No. 1,309,898; July 15; v. 264; p. 415.
 Latham, Chester A. (See De Haven, William L., assignor.)
 Lattn, Milton N., Valentine, Neb. Internal works of tubular wells. No. 1,309,738; July 15; v. 264; p. 385.
 Latimore, Lewis, Rochester, N. D. Fork attachment. No. 1,309,949; July 15; v. 264; p. 425.
 Laventhal, J. M. (See De Long, Nelson, assignor.)

Lavigne, Albert, Brunswick, Me., assignor to The Stafford Company, Readville, Boston, Mass. Let-off mechanism for looms. No. 1,310,395; July 15; v. 264; p. 305.

Levin, Joseph, assignor to Polan Katz & Co., Baltimore, Md. Parasol. No. 1,310,399; July 15; v. 264; p. 305.

Lazuka, Joseph, Newark, N. J. Fire-escape. No. 1,309,950; July 15; v. 264; p. 425.

Leichtenberg, Clemons, assignor to Rock Island Plow Company, Rock Island, Ill. Hay gatherer and loader. No. 1,309,861; July 15; v. 264; p. 408.

Lee, Hans, Iowa City, Iowa. Potato-peeler. No. 1,309,951; July 15; v. 264; p. 425.

Lee, William L., Helena, Mont. Paper-holder. No. 1,310,242; July 15; v. 264; p. 477.

Lehmann, Lawrence L., Dayton, Ohio. Headlight for automobiles. No. 1,309,952; July 15; v. 264; p. 425.

Leich, Arthur and J. S. Berner, Milwaukee, Wis. Ice-cream sandwich machine. No. 1,309,543; July 15; v. 264; p. 368.

Leighton, John W., and O. J. P. Crick, assignors to Pressed Metals, Limited, Toronto, Ontario, Canada. Means for forming tubular articles by extrusion. No. 1,310,122; July 15; v. 264; p. 455.

Leighton, John W., assignor to Pressed Metals, Limited, Toronto, Ontario, Canada. Forming billets or blooms for forming tubes by extrusion. No. 1,310,123; July 15; v. 264; p. 455.

Leitch, Meredith, Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Machine-base. No. 1,309,899; July 15; v. 264; p. 415.

Lemaitre, Louis, assignor to General Petroleum Corporation, Los Angeles, Calif. Method and apparatus for using reagents in the refining of petroleum-oils. No. 1,310,164; July 15; v. 264; p. 463.

Levalley, Christopher W., assignor to Chain Belt Company, Milwaukee, Wis. Apparatus for delivering and distributing material. No. 1,310,243; July 15; v. 264; p. 477.

Lewis, Lewis, Hamilton, Ontario, Canada. Batter-feeding mechanism for ice-cream-cone-manufacturing apparatus. No. 1,309,862; July 15; v. 264; p. 408.

Light Metals Co. (See Thofehrn, Herman G. C., assignor.)

Lincoln, Charles S., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Pulverizer. No. 1,309,895; July 15; v. 264; p. 397.

Lindsay, Lyurgus, (See Davila and Lindsay.)

Lippert, Samuel, East Cleveland, Ohio. Thermal valve and trap for wet lines. No. 1,310,026; July 15; v. 264; p. 438.

Loakwood, Edward M., Philadelphia, Pa., assignor to C. R. Carver Company. Winding device for wiping webs of embossing printing-machines. No. 1,310,195; July 15; v. 264; p. 468.

Loe Multiplex Voting Machine Company. (See Loe, Syver, assignor.)

Loe, Syver, assignor, by direct and mesne assignments, to Loe Multiplex Voting Machine Company, Minneapolis, Minn. Second-choice-voting mechanism. No. 1,310,196; July 15; v. 264; p. 468.

Loewentberg, Isidor E., Converse, Ind. Basket-handle. No. 1,310,356; July 15; v. 264; p. 497.

Lohmes, Livingston, Boston, Mass. Headlight. No. 1,309,644; July 15; v. 264; p. 368.

Lopez, Peter, New York, N. Y. Rotary-gate lock. No. 1,309,645; July 15; v. 264; p. 368.

Lowell-McConnell Manufacturing Company. (See McMurry, Alden L., assignor.)

Lowy, George J. (See Deament, Frank C., assignor.)

Lowry, George A., New York, N. Y., assignor, by mesne assignments, to A. B. Hiddington. Shredding and spinning machine. No. 1,309,646; July 15; v. 264; p. 368.

Lucas, Abraham S., Milwaukee, Wis. Marking-light for locomotives. No. 1,310,027; July 15; v. 264; p. 438.

Ludke, Raymond O. W., Coplay, Pa. Fly-swatter. No. 1,310,124; July 15; v. 264; p. 456.

Lundberg, Olof and J. O. Harris, Kelliber, Minn. Detachable pocket. No. 1,310,125; July 15; v. 264; p. 456.

Luscha, August R., and J. Folk, assignor to C. S. Slicing Machine Company, Laporte, Ind. Slicing machine. No. 1,310,197; July 15; v. 264; p. 469.

MacCorkell, Ronald W., Oakland, Calif. Fountain-brush. No. 1,309,900; July 15; v. 264; p. 415.

Macfadden, Bernarr, New York, N. Y. Combined cooling, ventilating, heating, humidifying, and purifying apparatus. No. 1,309,953; July 15; v. 264; p. 425.

Mackay, William M., East Orange, N. J. Sectional steam or water boiler with water-grate. No. 1,310,198; July 15; v. 264; p. 469.

Mahan, James J., and J. J. Reilly, Jersey City, N. J. Trailer-truck. No. 1,310,028; July 15; v. 264; p. 438.

Mahoney, Daniel M., New York, N. Y. Supplemental offer for journals. No. 1,309,864; July 15; v. 264; p. 408.

Mallen, Leaman A., Dunnellon, Fla. Dispensing-bottle. (Reissue.) No. 1,408,888; July 15; v. 264; p. 507.

Mallory, Edward T., Hamilton, Ohio, Caster. No. 1,310,029; July 15; v. 264; p. 438.

Manderfeld, Robert J., Hancock, Mich. Wood sandal. No. 1,310,358; July 15; v. 264; p. 498.

Mannell, Charles J., and R. Rose, Bournemouth, England. Machinery employed in the manufacture of concrete and the like wall-blocks. No. 1,310,359; July 15; v. 264; p. 498.

Manson, Ray H., assignor to The Garford Manufacturing Company, Elyria, Ohio. Phonograph locking or braking device. No. 1,309,741; July 15; v. 264; p. 387.

Mantle Lamp Company of America, The. (See Simonson and Blair, assignors.)

Manton, James S., Chicago, Ill. Clutch-controller. No. 1,310,199; July 15; v. 264; p. 469.

Marcotti, Demost P., Colbert, Wash. Wood-sawing device. No. 1,309,901; July 15; v. 264; p. 415.

Martin, Haakon A., Christiania, Norway, assignor to The National Cash Register Company, Dayton, Ohio. Railway-ticket-issuing machine. No. 1,309,954; July 15; v. 264; p. 426.

Martin, Harry C., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,360; July 15; v. 264; p. 498.

Martone, Pasquale G. (See Ancotti and Martone.)

Martyn, Thomas H. (See Martyn, William H., assignor.)

Martyn, William H., Teutendorf, assignor to T. H. Martyn, Sydney, New South Wales, Australia. Mechanical starting appliance for engines. No. 1,309,902; July 15; v. 264; p. 416.

Mass, Raoul P., Hawthorn, Melbourne, Victoria, Australia. Station-indicator for railway-cars. No. 1,310,361; July 15; v. 264; p. 498.

Mather, Milo E., Los Angeles, Calif. Sax-weight. No. 1,310,165; July 15; v. 264; p. 463.

Maus, Wilhelm, Johannesburg, Transvaal, South Africa. Percussive engine. No. 1,309,649; July 15; v. 264; p. 369.

Maxim, Hudson, Hopatcong borough, N. J. Position indicator or recorder. No. 1,310,200; July 15; v. 264; p. 469.

Maxim, Hudson, Hopatcong borough, N. J. Position indicator or recorder. No. 1,310,201; July 15; v. 264; p. 469.

Maynard, Howard E. (See Toaz, Wilber, and Maynard.)

McAuliffe, John W., Pelham, N. Y. Drinking-tube for liquid containers. No. 1,309,994; July 15; v. 264; p. 432.

McCullough, Arthur L. (See McCullough, Henry L., assignor.)

McCullough, Henry L., assignor to A. L. McCullough, Minneapolis, Minn. Self-oiling pulley. No. 1,309,739; July 15; v. 264; p. 385.

McCullough, Henry L., Minneapolis, Minn. Force-feed lubricator. No. 1,309,740; July 15; v. 264; p. 386.

McDonald, James, Cincinnati, Ohio. Preparing patent-leather. No. 1,309,863; July 15; v. 264; p. 408.

McFarren, David S., Quenemo, Kans. Cushion-tire. No. 1,310,126; July 15; v. 264; p. 456.

McGathery, Edgar A., Winchester, Va. Barrel-press. No. 1,310,357; July 15; v. 264; p. 497.

McKellar, David H., Motherwell, Scotland. Finger-ring. No. 1,309,647; July 15; v. 264; p. 369.

McKinnitt, William, Lakewood, Minn. Thrust-bearing for power-shafts. No. 1,309,763; July 15; v. 264; p. 390.

McLennahan, Austin, (See Potts, Louis M., assignor.)

McMurry, Alden L., Sound Beach, Conn., assignor, by mesne assignments, to Lowell-McConnell Manufacturing Company. Diaphragm-horn and means for operating the same. No. 1,309,764; July 15; v. 264; p. 390.

McNutt, Lewis, Brazil, Ind. Meter yoke and box. No. 1,310,400; July 15; v. 264; p. 500.

McSherry, James W., Duquoin, Ill. Controlling apparatus for elevators and other devices. No. 1,309,648; July 15; v. 264; p. 369.

Mechanical Improvement Company. (See de Martino, Joseph, assignor.)

Medart, Philip S., assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Back-stop. No. 1,309,899; July 15; v. 264; p. 398.

Melton, William C., Sherman, Tex. Auto-lock. No. 1,310,362; July 15; v. 264; p. 498.

Mendizza, Frank. (See Falconer and Mendizza.)

Mercer, Henry H. (See Officer and Mercer.)

Merrill, Wilbur L., Schenectady, N. Y., assignor to General Electric Company. Welding apparatus. No. 1,310,127; July 15; v. 264; p. 456.

Metal Arts & Crafts Co. (See Jones, Charles E., assignor.)

Metal Research Company. (See Bacon, Raymond F., assignor.)

Metzger, Floyd J., assignor to Air Reduction Company, New York, N. Y. Apparatus for the manufacture of alkali cyanid. No. 1,309,803; July 15; v. 264; p. 416.

Metzger, Myer, Chicago, Ill. Hubber for men-cards and the like. No. 1,310,202; July 15; v. 264; p. 469.

Meyer, Clifford L., Bellevue borough, Pa. Man's garter. No. 1,309,765; July 15; v. 264; p. 390.

Meyer, George J., assignor to Geo. J. Meyer Manufacturing Co., Milwaukee, Wis. Bottle-washing machine. No. 1,310,128; July 15; v. 264; p. 456.

Meysowitz, Emil R., New York, N. Y., assignor to E. B. Meysowitz, Inc. Spectacles. No. 1,310,203; July 15; v. 264; p. 470.

Mikulecky, Václav, Verdigre, Nebr. Wagon-tongue. No. 1,310,244; July 15; v. 264; p. 477.

Millowaki, Arthur S., Brockport, N. Y. Calculating-machine. No. 1,310,204; July 15; v. 264; p. 470.

Miller, George E. (See Cantrell and Miller.)

Miller, James M., Washington, D. C. Means for vaporizing liquid fuel. No. 1,310,245; July 15; v. 264; p. 477.

Miller, William. (See Young and Miller.)

Millet, Charles W., Johnstown, N. Y. Caster-wheel. No. 1,310,287; July 15; v. 264; p. 485.

Milliken, Foster, Lawrence, N. Y. Alloy. No. 1,310,363; July 15; v. 264; p. 498.

Mills, Albert W., West Orange, N. J. Sound-box for phonographs. No. 1,309,766; July 15; v. 264; p. 391.

Mills, Charles F. II. (See Mills and Carrel.)

Mills, Raymond L. and C. F. II., and A. D. Carrel, Grand Rapids, Mich. Sales-tag. No. 1,309,904; July 15; v. 264; p. 416.

Milla Woven Cartridge Belt Company. (See Sisson, Eugene A., assignor.)

Millne, Alexander, Newark, N. J. Watch-holder. No. 1,309,865; July 15; v. 264; p. 408.

Millne, Isaac R. (See Haddfield, Jack, Millne, and Parker.)

Mock, Hugo, New York, N. Y. Refrigerator-hubing. No. 1,309,866; July 15; v. 264; p. 409.

Molline Plow Company. (See Epling, Conrad, assignor.)

Moll, De Clinton C. and G. A. Olathe, Kan. Demountable rim for wheels. No. 1,310,364; July 15; v. 264; p. 498.

Moll, George A. (See Moll, De Clinton C. and G. A.)

Monitor Controller Company. (See Whittingham, George H., assignor.)

Moore, Alfred A., Endeavor, Wis. Ash-handling device. No. 1,309,905; July 15; v. 264; p. 416.

Moore, Beaton, Cherryvale, Kans., and G. O. Stansbury, Kansas City, Mo. Pumping-jack. No. 1,310,365; July 15; v. 264; p. 499.

Moore, John E., J. Black, Jr., J. C. Crosby, and J. Black, Walterboro, S. C. Torpedo-shield. No. 1,309,690; July 15; v. 264; p. 377.

Moore, Joseph B., Beaumont, Tex. Dry closet. No. 1,309,742; July 15; v. 264; p. 386.

Moore, William J. P., New York, N. Y. Making tension-wheels. No. 1,310,246; July 15; v. 264; p. 478.

Morack, Louis. (See Herbst and Morack.)

Morack, Louis. (See Herbst, Robert L., assignor.)

Morehouse, Cyrus E., Milwaukee, Wis. Hose-supporter. No. 1,309,651; July 15; v. 264; p. 377.

Morehouse, Merrill J., Evanston, Ill. Ventilator. No. 1,309,867; July 15; v. 264; p. 409.

Morgan, Charles W., assignor to Gasoline Turbine Motor Company, Racine, Wis. Rotary gas-engine. No. 1,309,767; July 15; v. 264; p. 391.

Morgan, John D., New York, N. Y. Apparatus for the production of cyanogen compounds. No. 1,309,650; July 15; v. 264; p. 369.

Morgenstern, Nathan, Brooklyn, N. Y. Aerial toy. No. 1,310,205; July 15; v. 264; p. 470.

Mori, Teuma Nishinari-Gun, Osaka-Fu, Japan. Razor. No. 1,310,086; July 15; v. 264; p. 448.

Moriarty, Ernest C., U. S. Army. Fluid recoil-brake for guns. No. 1,309,989; July 15; v. 264; p. 432.

Morrow, James N. F., Mount Vernon, N. Y. Non-refillable bottle. No. 1,310,366; July 15; v. 264; p. 499.

Morse, Frank L., Ithaca, N. Y. Valve mechanism for gas-engines. No. 1,309,806; July 15; v. 264; p. 416.

Morse, Frank L., Ithaca, N. Y. Punching-press. No. 1,309,667; July 15; v. 264; p. 417.

Mowat, Oliver M., McKeesport, Pa. Rolling-mill. No. 1,310,206; July 15; v. 264; p. 470.

Moyndhan, Eugene J., San Francisco, Calif. Latch for dredger-buckets. No. 1,310,030; July 15; v. 264; p. 438.

Mulet, Lorenzo M., San Juan, Porto Rico. Continuous centrifugal separator. No. 1,309,651; July 15; v. 264; p. 390.

Murray, Joseph B. (See Murray, Thomas E., Jr., and J. B.)

Murray, Thomas E., Jr., and J. B., Brooklyn, N. Y. Elongated projectile-shell for smooth-bore guns. No. 1,310,129; July 15; v. 264; p. 456.

Murray, Thomas E., Jr., Brooklyn, N. Y. Producing metal tubes. No. 1,310,130; July 15; v. 264; p. 457.

Nairn Linoleum Company, The. (See Joule, William, assignor.)

National Cash Register Company, The. (See Bauwell and Phillips, assignors.)

National Cash Register Company, The. (See Martin, Haakon A., assignor.)

National Cash Register Company, The. (See Von Pelz, Edward J., assignor.)

National Metal Molding Company. (See Hubbard and Cooper, assignors.)

National Supply Company, The. (See Wright, Clyde S., assignor.)

Nevrot, Stanley, Hellwood, Pa. Boiler construction. No. 1,309,955; July 15; v. 264; p. 426.

New London Chemical Company, The. (See Flanders, Bert W., assignor.)

New York Belting and Packing Company. (See Somerville, Elbert A., assignor.)

New York Belting and Packing Company. (See Tharner, Sheldon P., assignor.)

Newark Engineering and Refrigerating Company et al. (See Eisler, Charles, assignor.)

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Percussion-fuse for projectiles. No. 1,309,768; July 15; v. 264; p. 391.

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Percussion-fuse. No. 1,309,769; July 15; v. 264; p. 391.

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Time-fuse for projectiles. No. 1,309,770; July 15; v. 264; p. 391.

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Projectile time-fuse. No. 1,309,771; July 15; v. 264; p. 391.

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Ordnance-projectile. No. 1,309,772; July 15; v. 264; p. 392.

Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Pneumatically-operated impact-fuse. No. 1,309,773; July 15; v. 264; p. 392.

Newell, William C., Portland, Oreg. Automatic heat-controlled cut-out. No. 1,309,908; July 15; v. 264; p. 417.

Newhouse, Ray C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Jaw-crusher. No. 1,309,807; July 15; v. 264; p. 398.

Nicholas Askin M., Bismuth, via Deepwater, New South Wales, Australia. Bailing tank or bucket. No. 1,309,652; July 15; v. 264; p. 376.

Nichols, William, New York, and W. Ackerman, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company. Justifying means for type casting and composing machines. No. 1,310,207; July 15; v. 264; p. 470.

Nichols, Frank L., Stamford, Conn., assignor to International Munitions Company, Inc. of Delaware. Mortar-bomb. No. 1,309,743; July 15; v. 264; p. 387.

Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,247; July 15; v. 264; p. 478.

Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,288; July 15; v. 264; p. 485.

Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,289; July 15; v. 264; p. 485.

Niemann, Frederick A., assignor to Comptograph Company, Chicago, Ill. Adding-machine. No. 1,309,692; July 15; v. 264; p. 377.

Nixon, Miles G., Chicago, Ill., and O. Smith, Bridgeton, N. J. Game apparatus. No. 1,309,653; July 15; v. 264; p. 376.

Noble, Paul O., Schenectady, N. Y., assignor to General Electric Company. Electric welding. No. 1,310,131; July 15; v. 264; p. 457.

Non-Explosive Can and Tube Company. (See Kessler, Louis, assignor.)

North, Thomas K., assignor to Vickers Limited, Westminster, London, England. Submarine mine. No. 1,309,909; July 15; v. 264; p. 417.

Nulomoline Company, The. (See Booker, James P., assignor.)

Oborski, Marya Z., Chicago, Ill. Portable fence. No. 1,309,956; July 15; v. 264; p. 420.

O'Brien, Joseph F., New York, N. Y. Window-closure. No. 1,310,367; July 15; v. 264; p. 499.

O'Donnell, Mary M., New York, N. Y. Cooking utensil. No. 1,310,208; July 15; v. 264; p. 471.

Oehle, Franklin W., Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,310,401; July 15; v. 264; p. 500.

Oehle, Franklin W., Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,310,402; July 15; v. 264; p. 506.

Officer, Thomas, and H. H. Mercer, Claremont, N. H., assignors to Sullivan Machinery Company. Stoneworking-machine. No. 1,310,248; July 15; v. 264; p. 478.

Ogden, J. Edward. (See Tomkinson, Charles C., assignor.)

O'Halloran, William, Stoughton, Mass. Tool for forming cervical siliaga. No. 1,310,014; July 15; v. 264; p. 436.

Okun, Morris R., Chicago, Ill. Corner-post fastener for beds. No. 1,310,166; July 15; v. 264; p. 463.

Old Colony Machine Co. (See Sharples and Crowe, assignors.)

Ostolaza, Justo R., Los Angeles, Calif. Non-skid device and emergency-brake. No. 1,310,209; July 15; v. 264; p. 471.

Otis Elevator Company. (See Hyman, Frederick, assignor.)

Otis Elevator Company. (See Larson, David C., assignor.)

Otte, Otto M., Jamestown, N. Y. Folding table. No. 1,309,774; July 15; v. 264; p. 392.

Ottilla, Glier. (See Herbach, Carl F., assignor.)

Overstreet, Emmett W., Murray, Utah. Internal-combustion engine. No. 1,310,368; July 15; v. 264; p. 499.

Owen, Ira J., and B. J. Bouwmeester, assignors to Bissell Carpet Sweeper Co., Grand Rapids, Mich. Handle. No. 1,309,775; July 15; v. 264; p. 392.

Owens Bottle Machine Company, The. (See La France, Richard, assignor.)

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 Palmer, Roy C., Nevada, Mo. Marker. No. 1,310,369; July 15; v. 264; p. 509.
 Parker, Luke W., assignor of one-half to M. L. Laddrum, Mountain View, Mo. Check-protector. No. 1,310,370; July 15; v. 264; p. 500.
 Parker, William E. (See Hadfield, Jack, Milne, and Parker.)
 Parks, John R., Franklinville, N. C. Centering-tool. No. 1,309,654; July 15; v. 264; p. 370.
 Paschall, Armand L., assignor to The Baner Bros. Company, Springfield, Ohio. Grinding-mill. No. 1,310,031; July 15; v. 264; p. 433.
 Passet, Stéphane P. M., Boulogne-sur-Seine, France. Projectile, shell, and the like. No. 1,310,132; July 15; v. 264; p. 457.
 Patrick, Duncan M., Johannesburg, Transvaal, South Africa. Anticreeping device for railway-tracks. No. 1,309,957; July 15; v. 264; p. 426.
 Paulson, Lester D., Clear Lake, Iowa. Bean-thresher. No. 1,309,910; July 15; v. 264; p. 417.
 Paxton, Samuel O., Rosedale, Kans. Corn-harvester. No. 1,310,133; July 15; v. 264; p. 437.
 Peacock, Benjamin A., Philadelphia, Pa., assignor to R. Gilchrist, New York, N. Y. Producing potassium hydrate from green sand. No. 1,309,744; July 15; v. 264; p. 387.
 Pease, Roger S., assignor to Pittsburgh Plate Glass Company, Pittsburgh, Pa. Store-front. No. 1,309,911; July 15; v. 264; p. 417.
 Pelme, Adolphus G., assignor to Alfred Decker & Cohn, Chicago, Ill. Troosera safety-pocket. No. 1,310,210; July 15; v. 264; p. 471.
 Penn, Harry J., Madison, N. C. Garter. No. 1,309,912; July 15; v. 264; p. 413.
 Perfecto Gear Differential Co., The. (See Baker, Arthur F., assignor.)
 Perkins, William A., Ridgeway, S. C. Grate. No. 1,310,371; July 15; v. 264; p. 500.
 Petroff, Louis, Tyler, Pa. Plow. No. 1,309,693; July 15; v. 264; p. 377.
 Peycke, Armand H., assignor to American Steel Foundries, Chicago, Ill. Brake-supporting mechanism. No. 1,310,032; July 15; v. 264; p. 439.
 Peycke, Armand H., assignor to American Steel Foundries, Chicago, Ill. Brake-releasing means. No. 1,310,033; July 15; v. 264; p. 439.
 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Relief mechanism. No. 1,309,808; July 15; v. 264; p. 398.
 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine. No. 1,309,809; July 15; v. 264; p. 398.
 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Water-wheel bucket. No. 1,309,810; July 15; v. 264; p. 398.
 Phillips, Augusta, Brooklyn, N. Y. Shoe-tongue pad. No. 1,309,958; July 15; v. 264; p. 426.
 Phillips, Frederick. (See Hanwell and Phillips.)
 Philpot, Albert D., assignor to Tompkins Mfg. Co., Chicago, Ill. Portable projecting-machine. No. 1,310,211; July 15; v. 264; p. 471.
 Piechlewicz, Teofil, Vauxhall, N. J. Fountain-brush. No. 1,310,290; July 15; v. 264; p. 485.
 Piper, Walter E. (See Reardsley and Piper.)
 Pittsburgh Plate Glass Company. (See Cannon, Dominic E., assignor.)
 Pittsburgh Plate Glass Company. (See Hitchcock, Halbert K., assignor.)
 Pittsburgh Plate Glass Company. (See Pease, Roger S., assignor.)
 Platt, Clarence D., Bridgeport, Conn. Electric-switch member. (Release.) No. 1,469; July 15; v. 264; p. 507.
 Platt, Clarence D., Bridgeport, Conn. Electric-switch member. (Release.) No. 1,469; July 15; v. 264; p. 507.
 Pneumatic Concrete Machinery Company. (See Weaver, Charles R., assignor.)
 Polan Katz & Co. (See Levin, Joseph, assignor.)
 Poljeka, Joseph, New Brunswick, N. J. Collar and attaching means. No. 1,309,959; July 15; v. 264; p. 427.
 Poole, Arthur F., Chicago, Ill. Electric-clock system. No. 1,310,372; July 15; v. 264; p. 500.
 Poole, Arthur F., Chicago, Ill. Electric-clock system. No. 1,310,373; July 15; v. 264; p. 500.
 Poole, Arthur F., Chicago, Ill. Electric-clock system. No. 1,310,374; July 15; v. 264; p. 501.
 Poole, Arthur F., Chicago, Ill. Clock system. No. 1,310,375; July 15; v. 264; p. 501.
 Poor, Frederick E., Port Chester, assignor to Universal Stamping Machine Co., New York, N. Y. Tripping mechanism for machines for marking mail, &c. No. 1,309,955; July 15; v. 264; p. 370.
 Poje, Edwin, Quebec, Quebec, Canada. Telegraph apparatus. No. 1,309,960; July 15; v. 264; p. 427.
 Poston, Emory E., Campbell, Calif. Hose-coupling. No. 1,310,144; July 15; v. 264; p. 457.
 Pozaspech, Stefan, New York, N. Y. Gas-consumer's indicator. No. 1,309,811; July 15; v. 264; p. 398.
 Potts, Louis M., assignor to A. Melanahan, Baltimore, Md. Machine-telegraph. No. 1,309,745; July 15; v. 264; p. 387.

Power, Henry R., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,291; July 15; v. 264; p. 486.
 Power, Henry R., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,292; July 15; v. 264; p. 486.
 Powers Accounting Machine Company. (See Lasket, William W., assignor.)
 Powers Accounting Machine Company. (See Williams, Robert N., assignor.)
 Powers, James, New York, N. Y. Transferring master-drill device. No. 1,310,634; July 15; v. 264; p. 439.
 Powers, John E., Pike, N. Y. Device for supporting tubs. No. 1,309,776; July 15; v. 264; p. 392.
 Pratt, Ward E. (See Kelly and Pratt.)
 Pressed Metals, Limited. (See Leighton and Crick, assignors.)
 Pressed Steel Car Company. (See Ristine, George W., Jr., assignor.)
 Pitchard, Albert R., New York, N. Y. Barber-chair. No. 1,309,694; July 15; v. 264; p. 378.
 Proulx, Walter, Lewiston, Me. Pulling-over machine. No. 1,309,812; July 15; v. 264; p. 399.
 Puddin, David, New York, N. Y. Eyes for dolls. No. 1,310,293; July 15; v. 264; p. 486.
 R. Hoe and Co. (See Hawk, Roscoe C., assignor.)
 Raymond, Harry K., and I. R. Renner, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Head-core for pneumatic tires. No. 1,310,212; July 15; v. 264; p. 471.
 Rece, Frank S., assignor of one-half to E. H. Epperson, Dallas, Tex. Poultry-decapitator. No. 1,310,294; July 15; v. 264; p. 480.
 Redman, Lawrence V., Evanston, and A. J. Welth and F. P. Brock, assignors to Redman Chemical Products Company, Chicago, Ill. Producing phenolic condensation products. No. 1,310,087; July 15; v. 264; p. 448.
 Redman, Lawrence V., Evanston, and A. J. Welth and F. P. Brock, assignors to Redman Chemical Products Company, Chicago, Ill. Producing phenolic condensation products. No. 1,310,088; July 15; v. 264; p. 448.
 Redman Chemical Products Company. (See Redman, Welth, and Brock, assignors.)
 Reed, Charles J., Glenside, Pa. Spark-gap mechanism. No. 1,309,913; July 15; v. 264; p. 418.
 Reed, Robert E., Morrill, Neb. Cobbler's or shoemaker's knife. No. 1,309,746; July 15; v. 264; p. 387.
 Reilly, John J. (See Mahan and Reilly.)
 Reinmuth, William C., Los Angeles, Calif. Snapenders. No. 1,310,249; July 15; v. 264; p. 478.
 Remm, Leo J. (See Johnson, James A., assignor.)
 Remmele, Louis J., Newark, N. J. Rotary broom or brush. No. 1,309,695; July 15; v. 264; p. 378.
 Renner, Irvin R. (See Raymond and Renner.)
 Rhodes, George W., Scappoose, Oreg. Tooth-brush and tooth-paste holder. No. 1,310,089; July 15; v. 264; p. 449.
 Ricardo, Harry R., London, England. Balancing of reciprocating engines. No. 1,310,090; July 15; v. 264; p. 449.
 Richards, Julius H., Newark, N. J. Engine starting device. No. 1,310,091; July 15; v. 264; p. 449.
 Richards, Julius H., Springfield, Mass. Engine starting device. No. 1,310,092; July 15; v. 264; p. 449.
 Richards, Julius H., Springfield, Mass. Engine starting device. No. 1,310,093; July 15; v. 264; p. 449.
 Richmond, Walter, Memphis, Tenn., assignor to J. E. Jenkins, Chicago, Ill. Electric-switch mechanism. No. 1,310,135; July 15; v. 264; p. 475.
 Riddle, Napoleon B., Wilson, La. Record-ejector for talking-machines. No. 1,309,656; July 15; v. 264; p. 371.
 Ridginton, A. Blair. (See Lowry, George A., assignor.)
 Rippenbain, Nicholas, Perth Amboy, N. J. Aeroplane. No. 1,309,961; July 15; v. 264; p. 427.
 Ristine, George W., Jr., Chicago, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Car-roof. No. 1,309,777; July 15; v. 264; p. 392.
 Rixson, Oscar C., New Rochelle, N. Y. Self-locking screw. No. 1,310,213; July 15; v. 264; p. 471.
 Robert N. Bassett Company. (See Smith and Curman, assignors.) (Release.)
 Roberts, Montague H., Jersey City, N. J., and C. C. Van Noy, New York, N. Y., assignors to Air Reduction Company, Incorporated. Electric welding. No. 1,309,696; July 15; v. 264; p. 378.
 Robillard, Frederick J., St. Thomas, Ontario, Canada. Locomotive brake-rod safety bracket-hanger. No. 1,310,295; July 15; v. 264; p. 486.
 Rock Island Plow Company. (See Lechtenberg, Clemens, assignor.)
 Rogers, Everett T. and F. M. Ray Shore, N. Y. Floor scrubbing and mopping machine. No. 1,310,296; July 15; v. 264; p. 486.
 Rogers, Frank M. (See Rogers, Everett T. and F. M. Ray Shore, N. Y. Floor scrubbing and mopping machine.)
 Rogers, Yuhle W., St. Louis, Mo. Combination-chair. No. 1,310,250; July 15; v. 264; p. 478.
 Rootman, Nathan, New York, N. Y. Bracelet. No. 1,309,657; July 15; v. 264; p. 371.
 Roos, Oscar C., Allston, Mass. Radiotelegraph transmitting system. No. 1,309,778; July 15; v. 264; p. 393.
 Rose, Robert. (See Mannell and Rose.)
 Rosler, Charles, New York, N. Y. Press for trousers. No. 1,310,297; July 15; v. 264; p. 486.

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 Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Counterbalance for locomotive driving-wheels. No. 1,310,136; July 15; v. 264; p. 458.
 Russ, Myronus H., Pine, Colo. Harness-buckle. No. 1,310,298; July 15; v. 264; p. 487.
 Russell, Joseph J., Toledo, Ohio. Radiator. No. 1,310,251; July 15; v. 264; p. 479.
 Russell Mfg. Co., The. (See Achtmeyer, William, assignor.)
 Russell, Richard F., Jersey City, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,106; July 15; v. 264; p. 452.
 Russell, William J. (See Humphrey and Russell.)
 Russell, Frank E., Batavia, N. Y. Camera. No. 1,309,747; July 15; v. 264; p. 387.
 Russell, Guy M., Rochester, assignor to American Piano Company, New York, N. Y. Musical instrument. No. 1,310,035; July 15; v. 264; p. 439.
 S. S. Stafford, Inc. (See Deppermann, William, assignor.)
 Saduisky, Nathan, New York, N. Y., assignor of one-half to S. Grossman, Ice-skate attachment. No. 1,310,137; July 15; v. 264; p. 458.
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 Saecker, Herman G., et al. See Smith, Homer P., assignor.)
 Safety Car Heating & Lighting Company. (See Holse, George E., assignor.)
 Sage, Charles E., Rochester, N. Y. Tuning-peg adjustment for stringed musical instruments. No. 1,309,658; July 15; v. 264; p. 371.
 Salliot, Alfred L. E. (See Chapal and Salliot.)
 Samson Electric Company. (See Wilson, Daniel S., assignor.)
 Sanborn, Cuyler K. (See Brower, Edward S., assignor.)
 Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Locking-plug for receptacles and the like. No. 1,310,138; July 15; v. 264; p. 458.
 Sarr, Ora E., Sandusky, Ohio. Electric boiler. No. 1,309,697; July 15; v. 264; p. 378.
 Sattler, Hans, Sheboygan, Wis. Vibration-recorder. No. 1,309,813; July 15; v. 264; p. 399.
 Sausen, Peter J., Head of Jarvis' Inlet, British Columbia, Canada. Lifting-jack. No. 1,309,962; July 15; v. 264; p. 427.
 Schacht, Abraham. (See Boynton and Schacht.)
 Schellenbach, William L., Wyonizing, Ohio. Belt-shifting mechanism. No. 1,310,214; July 15; v. 264; p. 472.
 Scherbert, Paul H. E., New York, N. Y. Grating. No. 1,309,698; July 15; v. 264; p. 378.
 Schinkey, Albert, assignor to Keller Pneumatic Tool Company, Grand Haven, Mich. Percussion-tool. No. 1,309,815; July 15; v. 264; p. 399.
 Schuler, Ivanhoe H., Pittsfield, Mass., assignor to General Electric Company. Core for electrical apparatus. No. 1,310,299; July 15; v. 264; p. 487.
 Schneider & Cie. (See Schneider, Eugene, assignor.)
 Schneider, Eberhard, deceased, New York, N. Y.; S. Schneider, administratrix. Film-mending apparatus. No. 1,310,215; July 15; v. 264; p. 472.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for connecting gun-carriages to their limbers. No. 1,309,914; July 15; v. 264; p. 418.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Joint for telescopic tubes. No. 1,309,963; July 15; v. 264; p. 427.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for aiming guns. No. 1,310,139; July 15; v. 264; p. 458.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for effecting the adjustment of the trunnion movement of gun-carriages mounted on railway-trucks. No. 1,310,140; July 15; v. 264; p. 458.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for diminishing the recoil of gun-carriages. No. 1,310,141; July 15; v. 264; p. 459.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage with divergible trails. No. 1,310,142; July 15; v. 264; p. 459.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Hand-operated apparatus for loading large guns. No. 1,310,143; July 15; v. 264; p. 459.
 Schneider Eugene, Paris, France. Gun-supporting platform. No. 1,310,144; July 15; v. 264; p. 459.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for connecting gun-carriages to limbers or fore-carriages. No. 1,310,145; July 15; v. 264; p. 459.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Suspension apparatus for gun-carriages and the like. No. 1,310,146; July 15; v. 264; p. 460.
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for extending the limits of elevation of wheeled guns. No. 1,310,147; July 15; v. 264; p. 460.
 Schneider, Hans, New York, N. Y. Brake-gearing. No. 1,309,964; July 15; v. 264; p. 428.
 Schneider, Stanislaw, administratrix. (See Schneider, Eberhard.)

Schonfarber, Jacob G., Providence, R. I. Hose-clamp. No. 1,309,780; July 15; v. 264; p. 393.
 School, Anthony F., South Kaukauna, Wis. Portable saw. No. 1,309,781; July 15; v. 264; p. 393.
 Schorger, Arlie W., Madison, Wis. Waterproof composition and product and the like and producing the same. No. 1,310,370; July 15; v. 264; p. 501.
 Schramm, Hugh H., New York, N. Y. Tire. No. 1,310,300; July 15; v. 264; p. 487.
 Schroeder, Anton, St. Paul, Minn. Hinge-basp. No. 1,309,748; July 15; v. 264; p. 387.
 Schuman, John F., Reading, Pa. Nut-fastener. No. 1,310,167; July 15; v. 264; p. 463.
 Schwab, William C., Canton, Ohio. Container for soap. No. 1,309,965; July 15; v. 264; p. 428.
 Schwanhauser, Edwin J. (See Huber and Schwanhauser.)
 Schweitzer, Edmund O., Chicago, Ill. Instantaneous-voltage-regulating means. No. 1,309,814; July 15; v. 264; p. 399.
 Schweitzer, Edmund O., Chicago, Ill. Reverse-phase relay. No. 1,310,216; July 15; v. 264; p. 472.
 Scruggs, Lloyd, and T. L. Jones, assignors to Copper-Clad Malleable Range Company, St. Louis, Mo. Door. No. 1,310,217; July 15; v. 264; p. 472.
 Scusa, Lino, Phoenix, N. Y. Gage. No. 1,309,700; July 15; v. 264; p. 378.
 Search, Charles E., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Blade-bracing and locating the same. No. 1,309,816; July 15; v. 264; p. 399.
 Seebus, John A., Shelton, Wash. Trolling-spoon. No. 1,309,666; July 15; v. 264; p. 428.
 Seibert, Lloyd J. (See Gelhaar, Harry J., assignor.)
 Seibert, Martin W., East Bountiful, Utah. Sleigh. No. 1,310,252; July 15; v. 264; p. 470.
 Semple, Edwin C., Chicago, Ill. Lock-nut. No. 1,309,817; July 15; v. 264; p. 399.
 Semmons, Edson O., Chicago, Ill. Locking-switch. No. 1,310,168; July 15; v. 264; p. 464.
 Sharp, Robert, San Jose, Calif. Wall-finishing composition. No. 1,309,782; July 15; v. 264; p. 393.
 Sharples, John D., and T. Crowe, Taftville, Conn., assignors to Old Colony Machine Company, New Bedford, Mass. Hobbin-stripping machine. No. 1,309,818; July 15; v. 264; p. 400.
 Shear-Klean Grate Company. (See Kobout, George A., assignor.)
 Shepard, William C., Seattle, Wash. Prepared package of lubricating-grease. No. 1,309,819; July 15; v. 264; p. 400.
 Sherr, George W., et al. (See Cochran, William R., assignor.)
 Sherman, Chester E. (See Sherman, Harry E. and C. E.)
 Sherman, Eaton G., Hollywood, Calif. Moth-guard. No. 1,309,820; July 15; v. 264; p. 400.
 Sherman, Harry E. and C. E., Anoka, assignors to Z. H. Austin, trustee, Minneapolis, Minn. Internal-combustion engine. No. 1,310,301; July 15; v. 264; p. 487.
 Sherman, Milton L., Sandusky, N. Y. Auxiliary lever for operating and locking clutch-pedal levers. No. 1,310,302; July 15; v. 264; p. 487.
 Shirlow, Albert E., Glen Huntly, near Melbourne, assignor to J. C. Gates, Melbourne, Victoria, Australia. Filler attachment for printing, waxing, cutting, and like machines. No. 1,309,701; July 15; v. 264; p. 378.
 Shuman, Frank, deceased, Philadelphia, Pa.; Y. J. Shuman and C. H. Duoker, administrators. Submarine and operating the same. No. 1,310,253; July 15; v. 264; p. 479.
 Shuman, Y. Josephine, et al., administrators. (See Shuman, Frank.)
 Siegel, Anna. (See Siegel, Samuel, assignor.)
 Siegel, Samuel, assignor to A. Siegel, Chicago, Ill. Musical educational chart. No. 1,309,915; July 15; v. 264; p. 418.
 Silver, Bennett C., Chicago, Ill. Child's vehicle. No. 1,310,218; July 15; v. 264; p. 472.
 Simmons, Howard E. and P. R. Huntington, Ind. Automobile or truck wheel. No. 1,310,303; July 15; v. 264; p. 488.
 Simmons, Oliver G., San Antonio, Tex. Boll-cotton separator and cleaner. No. 1,310,304; July 15; v. 264; p. 488.
 Simmons, Paul R. (See Simmons, H. E. and P. R.)
 Simonson, William W., and L. V. D. Blair, Cincinnati, Ohio, assignors to The Mantle Lamp Company of America, Chicago, Ill. Indurated organic substance and preparing the same. No. 1,309,967; July 15; v. 264; p. 428.
 Simpson, Robert C. (See Grieshaber and Simpson.)
 Singer, Harry. (See Ziplin and Singer.)
 Sison, Eugene A., assignor, by mesne assignments, to Millis Woven Cardridge Bell Company, Worcester, Mass. Pocketed carrier. No. 1,310,377; July 15; v. 264; p. 501.
 Skinner, William G., Yorktown, Va. Method of and apparatus for testing cement. No. 1,309,702; July 15; v. 264; p. 379.
 Slawin, Hyman, Philadelphia, Pa. Hood. No. 1,309,783; July 15; v. 264; p. 393.
 Slocum, Avram & Slocum Laboratories. (See Boynton and Schacht, assignors.)

Smithley, John H., Baltimore, Md. Fire-alarm. No. 1,309,916; July 15; v. 264; p. 418.
 Smith, William H., Kansas City, Mo. Puzzle. No. 1,309,659; July 15; v. 264; p. 371.
 Smith, Carl C., Oakland, Calif. Loading device for automobiles. No. 1,310,036; July 15; v. 264; p. 439.
 Smith Cannery Machines Co. (See Waugh, Edward H., assignor.)
 Smith, Charles S., Chicago, Ill. Screen. No. 1,310,303; July 15; v. 264; p. 488.
 Smith, Emma A., Standish, Mich. Oil-burning stove. No. 1,310,264; July 15; v. 264; p. 479.
 Smith, Frederick E., and F. W. Curnan, Berby, assignors to Robert N. Bassett Company, Incorporated, Shelton, Conn. Mechanism for making stay-tips. (Re-issue.) No. 14,691; July 15; v. 264; p. 368.
 Smith, George A., Baltimore, Md. Photographic exposure-meter. No. 1,310,255; July 15; v. 264; p. 479.
 Smith, George A., Baltimore, Md. Exposure-meter. No. 1,310,254; July 15; v. 264; p. 479.
 Smith, Henry C., Philadelphia, Pa. Contents-lifter for display-cases. No. 1,310,219; July 15; v. 264; p. 473.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Machine for making hair-pins. No. 1,309,960; July 15; v. 264; p. 371.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Cutting-off attachment for hair-pin machines. No. 1,309,961; July 15; v. 264; p. 371.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-feeding mechanism for hair-pin machines. No. 1,309,962; July 15; v. 264; p. 372.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-binding mechanism for hair-pin machines. No. 1,309,963; July 15; v. 264; p. 372.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-cutting device. No. 1,309,964; July 15; v. 264; p. 372.
 Smith, (Overlin). (See Nixon and Smith.)
 Smith, William L., Oil City, Pa. Braking-valve for internal combustion engines. No. 1,310,004; July 15; v. 264; p. 459.
 Snelling, Walter O., Long Island City, N. Y. Coating process and apparatus. No. 1,310,037; July 15; v. 264; p. 439.
 Somerville, Albert A., Flushing, N. Y. assignor to New York Belting and Packing Company. Decorated rubber article and making same. No. 1,309,793; July 15; v. 264; p. 379.
 Starboom, Walter P., Rochester, N. Y. Signaling system. No. 1,309,821; July 15; v. 264; p. 400.
 Spencer, George F. (See Spencer, William H., assignor.)
 Spencer, William H., assignor to G. F. Spencer, New York, N. Y. Illuminating fixture. No. 1,309,784; July 15; v. 264; p. 394.
 Sperr, Frederick W., Jr., assignor to H. Koppers Company, Pittsburgh, Pa. Manufacture of ammonium sulfate. No. 1,310,306; July 15; v. 264; p. 489.
 Stacy, Charles E. and C. D. Dayton, Ohio. Aeroplane. No. 1,309,968; July 15; v. 264; p. 428.
 Stacy, Cornelius D. (See Stacy, Charles E. and C. D.)
 Stafford Company, The. (See Lavigne, Albert, assignor.)
 Standard Parts Company, The. (See Annable, Lee V., assignor.)
 Standard Parts Company, The. (See Fay, Thomas J., assignor.)
 Stansbury, Garrett O. (See Moore and Stansbury.)
 Stebbins, Anthony L., Jr. (See Clark, Lester P., assignor.)
 Steen, Halldan A., Milwaukee, Wis. assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company. Switch. No. 1,309,822; July 15; v. 264; p. 400.
 Steinharter, Max, Philadelphia, Pa. Apparatus for stretching and drying leather. No. 1,310,148; July 15; v. 264; p. 469.
 Stephens, Robert C., St. Louis, Mo. Lighting fixture. No. 1,310,149; July 15; v. 264; p. 469.
 Stephenson, George H. (See Kjellgren and Stephenson.)
 Sterry, Earl M., Buford, Colo. Flowing-machine. No. 1,309,949; July 15; v. 264; p. 428.
 Stevens, Charles W., administrator. (See Dodge, Otis W., assignor.)
 Stewart, Angus, Jerome, Idaho. Timepiece. No. 1,310,035; July 15; v. 264; p. 440.
 Stiles, Otto W., Washington, D. C. Pen and pencil attachment. No. 1,310,257; July 15; v. 264; p. 480.
 Stockle, Erwin R., New York, N. Y. assignor to The Cutler-Hammer Manufacturing Co., Milwaukee, Wis. Thermionic amplifier. No. 1,309,704; July 15; v. 264; p. 379.
 Stokes, Francis W., Nottingham, England. Casting-machine. No. 1,309,823; July 15; v. 264; p. 401.
 Strauss, Ernest H., Chicago, Ill. Lamp-shade. No. 1,310,378; July 15; v. 264; p. 501.
 Strickland, Jacob S., Savannah, Ga. Lock. No. 1,310,397; July 15; v. 264; p. 489.
 Strickland, Dr. Wm. W., Tylertown, Miss. Cultivator. No. 1,310,095; July 15; v. 264; p. 459.
 Suck, Charles M., assignor of one-half to J. Harris, Salem, W. Va. Display-card holder. No. 1,309,705; July 15; v. 264; p. 379.
 Sullivan Machinery Company. (See Officer and Mercer, assignors.)
 Sundh Electric Company, The. (See Larsen, Louis, assignor.)
 Taka, Otto R., Chicago, Ill. Motion-picture camera and projector. No. 1,309,665; July 15; v. 264; p. 372.
 Tanaka, Nawakichi, Boston, Mass. Crank-piston connector. No. 1,309,917; July 15; v. 264; p. 419.
 Taylor, Burt E., Mount Vernon, N. Y. assignor to Borden's Condensed Milk Company, New York, N. Y. Cleaning machine or apparatus. No. 1,309,785; July 15; v. 264; p. 394.
 Taylor, George A., Hyde Park, Mass. Twist-drill. No. 1,309,760; July 15; v. 264; p. 379.
 Taylor, Frank A., Beverly, Mass. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Die-support. No. 1,309,970; July 15; v. 264; p. 429.
 Taylor, James A., Waco, Ky. Eyeglass-support. No. 1,310,258; July 15; v. 264; p. 480.
 Taylor, James T., Fort Worth, Tex. Hollow building-tile. No. 1,310,220; July 15; v. 264; p. 473.
 Taylor, John, East Boldon, England. Ship's anchor. No. 1,310,308; July 15; v. 264; p. 489.
 Technicolor Motion Picture Corporation. (See Wescott, William B., assignor.)
 Terp, Clara A., Minneapolis, Minn. Picture-hanger. No. 1,310,096; July 15; v. 264; p. 459.
 Terraciano, Carmine, New York, N. Y. Lock and bolt. No. 1,309,918; July 15; v. 264; p. 419.
 Thatcher, Sheldon P., Weehawken, N. J. assignor to New York Belting and Packing Company. Material for containers or other like articles. No. 1,309,971; July 15; v. 264; p. 429.
 Thofebro, Herman G. C., New York, N. Y. assignor to Light Metals Co., Elizabeth, N. J. Alloy. No. 1,310,309; July 15; v. 264; p. 489.
 Thofebro, Herman G. C., New York, N. Y. assignor to Light Metals Co., Elizabeth, N. J. Making alloys. No. 1,310,310; July 15; v. 264; p. 489.
 Thomas, Gustav A., Sandusky, Ohio. Game apparatus. No. 1,310,259; July 15; v. 264; p. 480.
 Thorndike, Herbert A., assignor to Bladom Manufacturing Company, Fitchburg, Mass. Fan. No. 1,310,089; July 15; v. 264; p. 440.
 Tidd, Walter J., Springfield, Mass. Antiskid device. No. 1,310,221; July 15; v. 264; p. 473.
 Tinslin, David S., Washington, D. C. Cigarette-holder. No. 1,309,707; July 15; v. 264; p. 379.
 Toaz, Glenn A., W. E. Willer, and H. E. Maynard, Detroit, Mich. Steering-gear. No. 1,310,222; July 15; v. 264; p. 473.
 Tomalpa Mfg. Co. (See Philpot, Albert D., assignor.)
 Tomkinson, Charles C., Plainfield, N. J. assignor to J. E. Ogden, Mountville, Cornwall, N. Y. Movable column. No. 1,309,666; July 15; v. 264; p. 372.
 Tone, Fred L., Indianapolis, Ind. Internal-combustion engine. No. 1,309,919; July 15; v. 264; p. 419.
 Towner, Heber F., Santa Ana, Calif. Subsoiler, plow, and the like. No. 1,309,920; July 15; v. 264; p. 419.
 Travis, Asher O., Del Ray, Va. assignor to H. M. Conger, Washington, D. C. Machine for manufacturing gelatin sheets or films. No. 1,310,311; July 15; v. 264; p. 489.
 Treanor, Edward D., Pittsfield, Mass. assignor to General Electric Company. Water-cooled transformer. No. 1,310,007; July 15; v. 264; p. 459.
 Trille, John F., Schenectady, N. Y. assignor to General Electric Company. System of motor control. No. 1,310,040; July 15; v. 264; p. 440.
 Trout, William H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Feed-roll mechanism. No. 1,309,824; July 15; v. 264; p. 401.
 Trout, William H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Air-cushion for steam-burgers. No. 1,309,825; July 15; v. 264; p. 401.
 Troxel, Harvey H., Wooster, assignor of one-half to O. C. Hillman, Cleveland, Ohio. Propeller-pencil. No. 1,310,260; July 15; v. 264; p. 480.
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 Trupke, Julius. (See Goetter and Trupke.)
 Turnbull, William, Peoria, Ill. assignor to The Holt Manufacturing Company, Stockton, Calif. One-piece tractor frame and transmission unit. No. 1,309,972; July 15; v. 264; p. 429.
 Turner, Walter V., Wilkinsburg, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. No. 1,309,786; July 15; v. 264; p. 394.
 Turner, Walter V., Wilkinsburg, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Brake-application-valve device. No. 1,309,787; July 15; v. 264; p. 394.
 Turner, Walter V., Wilkinsburg, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. No. 1,309,788; July 15; v. 264; p. 394.
 Tveden, Peter O., Watford City, N. D. Pulley. No. 1,309,921; July 15; v. 264; p. 419.
 Tyson, Homer N., Telford, Wash. Air-handle guard. No. 1,310,312; July 15; v. 264; p. 489.
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 U. S. Slicing Machine Company. (See Luschka and Folk, assignors.)
 Underwood Computing Machine Company. (See Johnson, Arthur A., assignor.)

Underwood Typewriter Company. (See Burridge, Lee S., assignor.)
 United Shoe Machinery Corporation. (See Bollen, Nils P., assignor.)
 United Shoe Machinery Corporation. (See Davenport, Herman A., assignor.)
 United Shoe Machinery Corporation. (See Erickson, Edward, assignor.)
 United Shoe Machinery Corporation. (See Knowlton, Cutler D., assignor.)
 United Shoe Machinery Corporation. (See Taylor, Frank A., assignor.)
 United States Glue Company. (See Bates, Carleton, assignor.)
 United States Graphotype Company. (See Nicholas and Ackerman, assignors.)
 United States Ordnance Company. (See Asbury, Dorsey F., assignor.)
 Universal Rim Company. (See Baker, Eric K., assignor.)
 Universal Spring Wheel and Manufacturing Company, The. (See Bowman, George W., assignor.)
 Universal Stamping Machine Co. (See Poor, Frederick E., assignor.)
 Urachel, Bertie H., Bowling Green, Ohio. Universal joint. No. 1,309,826; July 15; v. 264; p. 401.
 Uebelmesser, Charles, New York, N. Y. assignor to Cru Patents Corporation. Automatic loop making and retaining device. No. 1,309,990; July 15; v. 264; p. 432.
 Vail, Robert W., assignor of twenty per cent. to C. W. Harridge, New York, N. Y. Rolling support for barrels. No. 1,309,607; July 15; v. 264; p. 373.
 Van Berkel, Cornelius F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Stack-former for slicing machines. No. 1,310,261; July 15; v. 264; p. 480.
 Van Berkel, Cornelius F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Stack-spacer for slicing machines. No. 1,310,262; July 15; v. 264; p. 481.
 Van der Meulen, Sybrandus L., Leeuwarden, Netherlands. Apparatus for grinding facets of a predetermined width on glass plates. No. 1,310,263; July 15; v. 264; p. 481.
 Van Noy, Claude C. (See Roberts and Van Noy.)
 Van Zandt, Paul C., Chicago, Ill. assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Roller-crusher. No. 1,309,827; July 15; v. 264; p. 401.
 Varr, Joseph C., Buffalo, N. Y. Sash-fastener. No. 1,310,313; July 15; v. 264; p. 489.
 Volehradsky, Joseph, New York, N. Y. assignor to Antopiano Company. Gearing for note-sheet propelling. No. 1,309,789; July 15; v. 264; p. 395.
 Velo, Anthony, Washington, D. C. assignor of one-third to E. S. Clark, Garden City, N. Y., and one-third to C. C. Hines, Washington, D. C. Aerial torpedo. No. 1,309,708; July 15; v. 264; p. 379.
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 Vickers Limited. (See North, Thomas K., assignor.)
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 Viscaino, Jose, Guadalajara, Mexico. Combination-lock. No. 1,310,265; July 15; v. 264; p. 481.
 Volz, Christian, St. Paul, Minn. Adjustable rail-clip for railway detector-bars. No. 1,310,098; July 15; v. 264; p. 450.
 Von Pein, Edward J., assignor to The National Cash Register Company, Dayton, Ohio. Check-issuing mechanism for cash-registers. No. 1,309,829; July 15; v. 264; p. 402.
 Walte, Edwin E., Framingham, Mass. Bushing for bearings and making the same. No. 1,309,668; July 15; v. 264; p. 373.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,099; July 15; v. 264; p. 451.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,102; July 15; v. 264; p. 451.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Cutting-blowpipes. No. 1,310,103; July 15; v. 264; p. 451.
 Walker, Samuel L., Corcoran, Calif. Device for turning trays. No. 1,310,379; July 15; v. 264; p. 501.
 Walker, Walter E., Garden Plain, Alberta, Canada. Bird-trap. No. 1,310,266; July 15; v. 264; p. 481.
 Walsh, William E., Lowell, Mass. Means for removing dust or dirt from spinning-frame guides. No. 1,309,790; July 15; v. 264; p. 395.
 Walter, George, Shelby township, Ripley county, Ind. Willow-bark remover. No. 1,310,223; July 15; v. 264; p. 473.
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 Wanamaker, Ernest, Chicago, Ill. Flexible-pipe coupling. No. 1,309,830; July 15; v. 264; p. 402.
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 Ward, Fred J., Long Beach, Calif. Gas-burner. No. 1,309,922; July 15; v. 264; p. 419.
 Wasselberger, Jacob, New York, N. Y. Fuse-link. No. 1,310,314; July 15; v. 264; p. 480.
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 Watkins, Edward G., and C. A. Brown, assignors to Heywood Brothers and Wakefield Company, Gardner, Mass. Supporting-foot for articles of furniture. No. 1,309,868; July 15; v. 264; p. 409.
 Waugh, Edward H., assignor to Smith Cannery Machines Co., Seattle, Wash. Pneumatic scraper for cleaning fish. No. 1,309,923; July 15; v. 264; p. 420.
 Weaver, Charles H., assignor to Pneumatic Concrete Machinery Company, New York, N. Y. Concrete mixing and delivering apparatus. No. 1,309,071; July 15; v. 264; p. 373.
 Webb, Jean F., Sr., New York, N. Y. Aeroplane. No. 1,309,710; July 15; v. 264; p. 380.
 Weldknecht, Amedee, Paris, France. Internal-combustion engine. No. 1,310,267; July 15; v. 264; p. 481.
 Weiss, Alfred H., Wilmette, Ill. assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Corbel-weight. No. 1,309,610; July 15; v. 264; p. 373.
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 Wells, Delbert, Paoli, Ind. Automatic spark-timing mechanism. No. 1,309,924; July 15; v. 264; p. 420.
 Welsh, Laurence W., Baltimore, Md. Automobile-lock. No. 1,309,925; July 15; v. 264; p. 420.
 Wener, Wesley E., Stone Church, Pa. Tire-shield. No. 1,310,315; July 15; v. 264; p. 480.
 Wescott, William B., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Method and apparatus for producing motion-pictures. No. 1,309,672; July 15; v. 264; p. 373.
 Wescott, William B., Welleley, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Cinematography. No. 1,309,673; July 15; v. 264; p. 374.
 Westcott, Arthur W., Los Angeles, Calif. Magnetic fishing-tool. No. 1,310,169; July 15; v. 264; p. 464.
 Western Electric Company, Inc. (See Williams, Samuel B., Jr., assignor.)
 Westinghouse Air Brake Company, The. (See Newell, Edward W., assignor.)
 Westinghouse Air Brake Company. (See Turner, Walter V., assignor.)
 Westinghouse Electric and Manufacturing Company. (See Aalborg, Christian, assignor.)
 Westinghouse Electric & Manufacturing Company. (See Aalborg, Frank, assignor.) (Re-issue.)
 Westinghouse Electric & Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Kempton, Willard H., assignor.)
 Wheeler, Clarence W., Chicago, Ill. Automatic elevator safety device. No. 1,310,224; July 15; v. 264; p. 474.
 Whitaker, Norman T., et al. (See Baumann, Leopold, Sr., and F., assignors.)
 White, Field, and J. H. Bardo, Detroit, Mich. Control mechanism. No. 1,309,926; July 15; v. 264; p. 420.
 White, French R., Independence, Mo. Deposit-book. No. 1,309,809; July 15; v. 264; p. 409.
 White, Floyd G. (See Brown, Walter A., assignor.)
 White, William C., Schenectady, N. Y. assignor to General Electric Company. Wireless signaling system. No. 1,310,041; July 15; v. 264; p. 440.
 Whiting, Theo. C., Philadelphia, Pa. Governor mechanism. No. 1,310,170; July 15; v. 264; p. 464.
 Whitmore, James, Detroit, Mich. assignor to The Owens Bottle Machine Company, Toledo, Ohio. Flowing molten glass. No. 1,310,225; July 15; v. 264; p. 474.
 Whittingham, George H., Bancroft Park, assignor to Monitor Controller Company, Baltimore, Md. Multi-value overload-switch. No. 1,310,380; July 15; v. 264; p. 502.
 Wiegand, Walter, Baltimore, Md. Direction-indicator. No. 1,310,316; July 15; v. 264; p. 480.
 Wilber, Wallace E. (See Toaz, Glenn A., and Maynard.)
 Wilcox, Daniel A. and S. H., Garden City, N. Y. Utilization of tin-acrap. No. 1,310,381; July 15; v. 264; p. 502.
 Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Feed mechanism. No. 1,309,749; July 15; v. 264; p. 388.
 Wilcox, Sidney H. (See Wilcox, Daniel A. and S. H.)
 Williams, George H., Battle Creek, Mich. Token-holder. No. 1,309,661; July 15; v. 264; p. 372.
 Williams Patent Crusher and Pulverizer Co. (See Campbell, Edward H., assignor.)
 Williams, Robert N., Norwich, England, assignor to Powers Accounting Machine Company, New York, N. Y. Perforating-machine. No. 1,309,027; July 15; v. 264; p. 420.
 Williams, Samuel B., Jr., Brooklyn, N. Y. assignor to Western Electric Company, Incorporated, New York, N. Y. Call-distributing system. No. 1,310,226; July 15; v. 264; p. 474.
 Williams, William K., Pittsfield, Mass., assignor to General Electric Company. Electrical apparatus. No. 1,310,042; July 15; v. 264; p. 441.
 Wilson, Daniel S., West Somerville, assignor to Samson Electric Company, Canton, Mass. Polarized signaling mechanism. No. 1,309,750; July 15; v. 264; p. 388.
 Wilson, James A., Central Falls, R. I. Combined reed and heddle-frame. No. 1,309,674; July 15; v. 264; p. 374.

ALPHABETICAL LIST OF PATENTEES.

Winchester, Dorsey G., Pruden, Tenn. Trolley-wire clamp. No. 1,309,870; July 15; v. 264; p. 409.
 Winne, Harry A., assignor to General Electric Company, Schenectady, N. Y. Electric-furnace-control apparatus. No. 1,310,100; July 15; v. 264; p. 452.
 Wisner, John E., Crews, Va. Power-transmission device for motor-vehicles. No. 1,310,268; July 15; v. 264; p. 482.
 Wolfard, Merl R., Cambridge, Mass. Rotary hydroplane. No. 1,309,928; July 15; v. 264; p. 421.
 Wolffsohn, Lionel M., Hoboken, N. J., assignor, by mesne assignments, to Bijur Motor Appliance Company. Electrical cut-out. No. 1,310,110; July 15; v. 264; p. 453.
 Woodcock, James S., New Lexington, Ohio. Car-wheel construction. No. 1,310,227; July 15; v. 264; p. 474.
 Woods, Homer A., Indianapolis, Ind. Lantern. No. 1,310,150; July 15; v. 264; p. 460.
 Woodhead, Daniel, Evanston, Ill. Shade-holder. No. 1,310,228; July 15; v. 264; p. 474.
 Workman, Harold, Glasgow, Scotland. Motion-picture apparatus. No. 1,309,992; July 15; v. 264; p. 432.
 Wright, Arthur. (See Wright, Henry C., assignor.)
 Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Jack. No. 1,309,973; July 15; v. 264; p. 429.
 Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Gauge-cock. No. 1,309,974; July 15; v. 264; p. 429.
 Wright, George T., Marissa, Ill. Self-rolling truck-wheel. No. 1,310,229; July 15; v. 264; p. 475.
 Wright, Henry C., assignor of one-third to A. Wright, New York, N. Y. Motor-driven canoe. No. 1,309,975; July 15; v. 264; p. 429.

Wright, Reuben I., assignor, by mesne assignments, to The Electric Controller & Manufacturing Company, Wick-Hoff-on-the-Lake, Ohio. Electromagnetic contactor. No. 1,310,269; July 15; v. 264; p. 482.
 Young, Frederick J., Los Angeles, Calif. Lead-pencil. No. 1,309,929; July 15; v. 264; p. 421.
 Young, Leonard A., and W. Miller, Detroit, Mich.; said Miller assignor to said Young. Pulley. No. 1,309,975; July 15; v. 264; p. 421.
 Ziegler, Edwin S., York, Pa. Transmission-extension means for automobiles. No. 1,309,976; July 15; v. 264; p. 421.
 Zipin, Benjamin S., and H. Singer, Philadelphia, Pa. Bedclothes-holder. No. 1,309,976; July 15; v. 264; p. 421.
 Zippler, Michael, Pittsburgh, Pa. Attachment for converters. No. 1,310,230; July 15; v. 264; p. 475.
 Zisch, George, et al. (See Eisler, Charles, assignor.)
 Zoelly, Heinrich, Zurich, Switzerland. Steam-turbine plant with horizontal axle. No. 1,309,993; July 15; v. 264; p. 432.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,100; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Cutting-blowpipe. No. 1,310,101; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,104; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,105; July 15; v. 264; p. 452.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,107; July 15; v. 264; p. 452.

ALPHABETICAL LIST OF DESIGNS.

Allen, Edward E., Rutland, Vt. Statuette. No. 53,552; July 15; v. 264; p. 508.
 American Optical Company. (See Carson, Oswald B., assignor.)
 Anderson, George S., Akron, Ohio. Elastic vehicle-tire. No. 53,553; July 15; v. 264; p. 508.
 Averill, William H., assignor to Owl Supply Company, Boston, Mass. Paper-clip. No. 53,554; July 15; v. 264; p. 508.
 B. & K. Manufacturing Co., The. (See Rockwell, Herbert O., assignor.)
 Baker, Carol R., Akron, Ohio. Rubber-tire casing. No. 53,555; July 15; v. 264; p. 508.
 Baker, Stephen D., New York, N. Y. Wall-receptacle for soap and other toilet articles. No. 53,556-7; July 15; v. 264; pp. 508-9.
 Bloch, Leon, Brooklyn, N. Y. Bath-tub and basin fitting. No. 53,558; July 15; v. 264; p. 509.
 Blossom, Frederick F., et al., executors. (See Woodward, Henry J.)
 Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y. Brocade. No. 53,559-60; July 15; v. 264; p. 509.
 Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. No. 53,561-3; July 15; v. 264; pp. 509-10.
 Campbell, Charles, Philadelphia, Pa. Pedestal for furniture or similar articles. No. 53,564; July 15; v. 264; p. 510.
 Campbell, Charles and D., Philadelphia, Pa. Picture-frame. No. 53,565; July 15; v. 264; p. 510.
 Campbell, Charles and D., and M. S. McGill, Philadelphia, Pa. Caster stand. No. 53,566; July 15; v. 264; p. 510.
 Campbell, Duncan. (See Campbell, Charles and D.)
 Carson, Oswald B., assignor to American Optical Company, Southbridge, Mass. Display-stand. No. 53,567; July 15; v. 264; p. 510.
 Case, Arthur E., assignor to Delta Electric Company, Marion, Ind. Electric lamp. No. 53,568; July 15; v. 264; p. 510.
 Cheney Talking Machine Company. (See Eggbrecht, William H., assignor.)
 Cobb, Thomas S., Ormond, Fla. Combined wrench and screw driver. No. 53,569; July 15; v. 264; p. 511.
 Davis, Meyer, Chicago, Ill. Phonograph-cabinet. No. 53,570; July 15; v. 264; p. 511.
 Delta Electric Company. (See Case, Arthur E., assignor.)
 Dennis, Francis R., and H. W. Leavitt, Peoria, Ill. Tractor-hood. No. 53,571; July 15; v. 264; p. 511.
 Dyer, Bertie M., Indianapolis, Ind. Automobile fender and lamp. No. 53,572; July 15; v. 264; p. 511.
 Eggbrecht, William H., Grand Rapids, Mich. Assignor to Cheney Talking Machine Company, Chicago, Ill. Casing for automatic sound-producing instruments. No. 53,573-4; July 15; v. 264; p. 511.
 Fredline, William H., Meyersdale, Pa. Graphophone-case. No. 53,575; July 15; v. 264; p. 512.
 Gaffney, James C., New York, N. Y. Set of playing-cards. No. 53,576; July 15; v. 264; p. 512.

Gamache, Clovis, Jr., Nashua, N. H. Frame or plaque. No. 53,577; July 15; v. 264; p. 512.
 Godfrey, George H., Los Angeles, Calif. Ring. No. 53,578; July 15; v. 264; p. 512.
 Goldberg, Abe, Chicago, Ill. Savings-bank. No. 53,579; July 15; v. 264; p. 512.
 Gorham Manufacturing Company. (See Klogman, William F., assignor.)
 Gorham Manufacturing Company. (See Ring, John H., assignor.)
 Grassberger, Boniface A., Richmond, Va. Single-service wooden spoon. No. 53,587-8; July 15; v. 264; p. 514.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Handle for an automobile-lock or similar article of manufacture. No. 53,580; July 15; v. 264; p. 512.
 Greene, Frederick E., Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Curtain-rod for an automobile or similar article of manufacture. No. 53,581; July 15; v. 264; p. 513.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Plate for an automobile-lock or similar article of manufacture. No. 53,582; July 15; v. 264; p. 513.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Rim for a speedometer or a dome-light for an automobile or similar article of manufacture. No. 53,583; July 15; v. 264; p. 513.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Handle for an automobile-seat or similar article of manufacture. No. 53,584; July 15; v. 264; p. 513.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Rim for a dome-light or a speedometer for an automobile or similar article of manufacture. No. 53,585; July 15; v. 264; p. 513.
 Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Vase for an automobile or similar article of manufacture. No. 53,586; July 15; v. 264; p. 513.
 Hartley, Bernard W., Halleybury, Ontario, Canada. Automobile-tire. No. 53,589; July 15; v. 264; p. 514.
 Hendrickson, Walter H., Chicago, Ill. Dental-equipment pedestal. No. 53,590; July 15; v. 264; p. 514.
 Hitchcock, Lynn N., Sioux City, Iowa. Crochet-needle. No. 53,591; July 15; v. 264; p. 514.
 International Silver Co. (See Ohl, George, assignor.)
 Izzo, Francesco, Toronto, Ontario, Canada. Banana-display stand. No. 53,592; July 15; v. 264; p. 514.
 J. W. & Sons Company. (See Raub, Frederic H., assignor.)
 Johnson, Axel H., Brooklyn, N. Y. Display-rack. No. 53,593; July 15; v. 264; p. 514.
 Klogman, William F., assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, forks, or similar articles. No. 53,594; July 15; v. 264; p. 515.

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Krupicka, Ella, assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. No. 53,595; July 15; v. 264; p. 515.
 Leavitt, Harry W. (See Dennis and Leavitt.)
 Lo Cascio, Pasquale, Brooklyn, N. Y. Permutation-padlock. No. 53,596; July 15; v. 264; p. 515.
 Marcmann, Jacob A., Irvington, N. J. Wrench. No. 53,597; July 15; v. 264; p. 515.
 Marienthal, Isaac L., assignor to Modern Belt Co., Chicago, Ill. Belt-buckle. No. 53,598; July 15; v. 264; p. 515.
 Mayerle, George, San Francisco, Calif. Optician's tool. No. 53,599; July 15; v. 264; p. 515.
 McGill, M. N. (See Campbell and McGill.)
 Modern Bell Co. (See Marienthal, Isaac L., assignor.)
 Mount Vernon Company, Silversmiths, The. (See Greene, Frederick E., assignor.)
 Mountford, Thomas, Newark, N. J. Setting for precious stones. No. 53,600; July 15; v. 264; p. 515.
 Oestreich, Maurice, New York, N. Y. Bedspread. No. 53,601; July 15; v. 264; p. 516.
 Oestreich, Maurice, New York, N. Y. Article of manufacture. No. 53,602; July 15; v. 264; p. 516.
 Ohl, George, assignor to International Silver Co., Meriden, Conn. Napkin-holder. No. 53,603; July 15; v. 264; p. 516.
 Owl Supply Company. (See Averill, William H., assignor.)
 Pike, Charles W. (See Pike, Robert D., assignor.)
 Pike, Robert D., assignor to C. W. Pike, San Francisco, Calif. Display-holder. No. 53,604; July 15; v. 264; p. 516.
 Pike, Robert D., assignor to C. W. Pike, San Francisco, Calif. Multiple display-holder. No. 53,605; July 15; v. 264; p. 516.
 Racine Auto Tire Company. (See Wright, Clarence, assignor.)
 Raub, Frederic H., South Orange, assignor to J. W. & Sons Company, Newark, N. J. Pair of manicure-sissors. No. 53,606; July 15; v. 264; p. 516.
 Raub, Frederic H., South Orange, assignor to J. W. & Sons Company, Newark, N. J. Pair of scissors. No. 53,607; July 15; v. 264; p. 517.
 Reels, Stephen, Houston, Tex. Automobile-tire. No. 53,608; July 15; v. 264; p. 517.
 Reith, William G., assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. No. 53,609; July 15; v. 264; p. 517.
 Reynolds, James W., Chicago, Ill. Artificial bait. No. 53,610; July 15; v. 264; p. 517.
 Ring, John H., assignor to Gorham Manufacturing Company, Providence, R. I. Platter or similar article. No. 53,611; July 15; v. 264; p. 517.

Ring, John H., assignor to Gorham Manufacturing Company, Providence, R. I. Dish or similar article. No. 53,612; July 15; v. 264; p. 517.
 Rockwell, Herbert O., assignor to The B. & K. Manufacturing Co., New Britain, Conn. Combination-tool. No. 53,613; July 15; v. 264; p. 518.
 Royal Art Glass Company. (See Willenbacher, August, assignor.)
 Rustant, Ferdinand, Manila, Philippine Islands. Poison-bottle. No. 53,614; July 15; v. 264; p. 518.
 Scribner, George H. T., San Francisco, Calif. Faucet. No. 53,615; July 15; v. 264; p. 518.
 Smith, Edward V., Pittston, Pa. Emblem, button, or article of similar nature. No. 53,616; July 15; v. 264; p. 518.
 Sommerhof, William A., Erie, Pa. Article of manufacture—namely, screen for sound-outlets of graphophones. No. 53,617; July 15; v. 264; p. 518.
 Stanfa, Niensin, Beaumont, Tex. Brake. No. 53,618; July 15; v. 264; p. 518.
 Stutz, Harry C., Indianapolis, Ind. Automobile-headlight. No. 53,619; July 15; v. 264; p. 519.
 Susquehanna Silk Mills. (See Bunting, James H., assignor.)
 Susquehanna Silk Mills. (See Krupicka, Ella, assignor.)
 Susquehanna Silk Mills. (See Reith, William G., assignor.)
 Tip Top Toy Company. (See Ziv, Abraham J., assignor.)
 Wilton, Luther L., Richmond, Va. Wrench. No. 53,620; July 15; v. 264; p. 519.
 Wertman, George W., Gary, Ind. Chandelier. No. 53,621; July 15; v. 264; p. 519.
 Willenbacher, August, Hackensack, N. J., assignor to Royal Art Glass Company, New York, N. Y. Lamp-shade-bracket piece. No. 53,622; July 15; v. 264; p. 519.
 Wilson, Ellhu C. and W. W., Los Angeles, Calif., assignors to said W. W. Wilson. Underreamer-cutter. No. 53,623; July 15; v. 264; p. 519.
 Wilson, William W. (See Wilson, Ellhu C. and W. W.)
 Woodward, Elizabeth O., et al., executors. (See Woodward, Henry J.)
 Woodward, Henry J., deceased, Peoria, Ill.; F. F. Blossom and E. G. Woodward, executors. Powder-box. No. 53,624; July 15; v. 264; p. 519.
 Wright, Clarence, assignor to Racine Auto Tire Company, Racine, Wis. Heel or lift for boots, shoes, or articles of similar nature. No. 53,625; July 15; v. 264; p. 520.
 Ziv, Abraham J., assignor to Tip Top Toy Company, Chicago, Ill. Statuette, doll, or similar article. No. 53,626; July 15; v. 264; p. 520.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. Bourjois & Co., Inc., New York, N. Y. Face-powder. No. 125,930; July 15; v. 264; p. 531.
 Agra Company, Detroit, Mich. Talcum powder. No. 125,924; July 15; v. 264; p. 531.
 American Pop Corn Company, Sioux City and Schaller, Iowa. Popping corn. No. 125,925-7; July 15; v. 264; p. 531.
 Baldwin Perfumery Company, Chicago, Ill. Perfumery, toilet-water, sachet-powder. No. 125,928; July 15; v. 264; p. 531.
 Beltenman, W. W. Preparation for treatment of tan, sunburn, freckles, &c. No. 125,929; July 15; v. 264; p. 531.
 Boydston, C. D., Porterville, Calif. Fresh oranges. No. 125,931-2; July 15; v. 264; p. 531.
 Charles E. Hires Company, Philadelphia, Pa. Coffee. No. 125,935; July 15; v. 264; p. 531.
 Elmer Candy Company, Inc., New Orleans, La. Candy. No. 125,943; July 15; v. 264; p. 531.
 Franklin MacVeagh & Company, Pickles, apple-butter, mince-meat, &c. No. 125,934; July 15; v. 264; p. 531.
 International Cotton Mills, Boston, Mass. Duck. No. 125,936; July 15; v. 264; p. 531.

John Scott & Co., Inc., Philadelphia, Pa. Canned fruits and vegetables. No. 125,941; July 15; v. 264; p. 531.
 Meadows, William H., Hoffman, Ohio. Medicine used as a blood-purifier. No. 125,937; July 15; v. 264; p. 531.
 National Biscuit Company, Jersey City, N. J., and New York, N. Y. Biscuit. No. 125,938; July 15; v. 264; p. 531.
 Pharmaceutische en Chemische Handelsvereeniging "Rotterdam," Rotterdam, Netherlands. Medicinal wadding for treatment of rheumatism. No. 125,939; July 15; v. 264; p. 531.
 Redlands Mutual Orange Company, Redlands, Calif. Fresh oranges. No. 125,940; July 15; v. 264; p. 531.
 Smith, Sam, Tonbridge, England. Composition of fatty substances used as a base for toilet cream. No. 125,942; July 15; v. 264; p. 531.
 Walser, John O., Los Angeles, Calif. Cotton, medicinal. No. 125,943; July 15; v. 264; p. 531.
 Welch Grape Juice Company, Westfield, N. Y. Jam or conserve. No. 125,944; July 15; v. 264; p. 531.
 Wolf, Edwin E., New York, N. Y. Houses, shirt-waists, shirts, &c. No. 125,945; July 15; v. 264; p. 531.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.
(REGISTRATION APPLIED FOR.)

A. J. Picard and Co., Inc., New York, N. Y. Spark-plugs, electric cables, &c. No. 118,701; July 15; v. 264; p. 528.
 Alaska Beverage Company, Juneau, Alaska. Malt beverage. No. 118,730; July 15; v. 264; p. 522.
 American Chile Company, Jersey City, N. J., and New York, N. Y. Mint candy in tablet form. No. 116,871; July 15; v. 264; p. 524.
 Argo, Fred N., Los Angeles, Calif. Compound table-syrup and sugar, food flavoring compound. No. 114,204; July 15; v. 264; p. 523.

Ascher, Leopold, New York, N. Y. Stucco, paint, shaving, &c., brushes. No. 118,713; July 15; v. 264; p. 522.
 Associated Manufacturers Company, Waterloo, Iowa. Internal-combustion engines and cream-separating machines. No. 112,313; July 15; v. 264; p. 522.
 Barker Baking Company, Denver, Colo. Bread. No. 117,830; July 15; v. 264; p. 526.
 Beauchamp, Virgil L., Evanston, Ill. Preparation for cleansing the hair. No. 103,057; July 15; v. 264; p. 521.

Boston-Okanogan Apple Co., Okanogan, Wash., and Boston, Mass. Apples. No. 115,217; July 15; v. 264; p. 523.
Brill Brothers, New York, N. Y. Twesla. No. 118,250; July 15; v. 264; p. 527.
Burris, Annie, Atlanta, Ga. Hair-grower. No. 117,034; July 15; v. 264; p. 525.
C. E. Stinson Co., Stamford, Conn. Canned vegetables. No. 118,194; July 15; v. 264; p. 527.
California Medicinal Springs Co., Deer Lick Springs, Calif. Natural medicinal water. No. 117,473; July 8; v. 264; p. 525.
Cary, Jas. R., Los Angeles, Calif. Maple-blend table-syrup. No. 116,052; July 15; v. 264; p. 524.
Casco Company, Canton, Ohio. Laxative tablets. No. 116,980; July 15; v. 264; p. 525.
Chablin, Joseph, Boston, Mass. Edible oil. No. 113,117; July 15; v. 264; p. 522.
Chase-A-Gray French Co., Great Kills, N. Y. Hair-coloring compounds. No. 118,507; July 15; v. 264; p. 528.
Collins Canning Company, Lakeland, Fla. Unfermented grape-fruit juice. No. 117,174; July 15; v. 264; p. 525.
Crane, Clarence A., Cleveland, Ohio. Chocolates. No. 117,848; July 15; v. 264; p. 526.
Cream City Brewing Co., Milwaukee, Wis. Maltless beverage made of corn. No. 118,103; July 15; v. 264; p. 526.
Cream City Brewing Co., Milwaukee, Wis. Maltless beverage. No. 118,105; July 15; v. 264; p. 527.
Darwin & Milner, Inc., New York, N. Y. Bar steel and steel castings. No. 118,907; July 15; v. 264; p. 529.
De Witt Macdonald, New York, N. Y., assignor to News Syndicate Co., Inc. Daily publication. No. 118,987; July 15; v. 264; p. 529.
Dormer Brothers Company, Cincinnati, Ohio. Men's bowlers. No. 116,149; July 15; v. 264; p. 524.
Doster-Northington Drug Co., Birmingham, Ala. Medicinal tablets. No. 118,754; July 15; v. 264; p. 528.
Drying Systems, Incorporated, Chicago, Ill. Dehydrated food products. No. 111,720; July 15; v. 264; p. 522.
Ellenbogen, Mangold H., Paterson, N. J. Shirts, pajamas, hat underwear, &c. No. 118,048; July 15; v. 264; p. 526.
Fawcett Company, Inc., Richmond, Va. Insecticides, disinfectants, germicides. No. 118,437; July 15; v. 264; p. 528.
Fisher Flouring Mills Company, Seattle, Wash. Wheat-flour. No. 116,710; July 15; v. 264; p. 524.
Frank Hemingway, Inc., New York, N. Y. Dyestuffs, cattle-dip, sodium arsenate, &c. No. 119,160; July 15; v. 264; p. 530.
Friend Bros. & Company, Inc., New York, N. Y. Pocket-books. No. 117,802; July 15; v. 264; p. 529.
G. Cramer Dry Plate Company, St. Louis, Mo. Photographic dry plates and films. No. 118,255; July 15; v. 264; p. 527.
Geneva Cutlery Corporation, Geneva, N. Y. Razors. No. 116,507; July 15; v. 264; p. 524.
Geo. R. Gibson Co., New York, N. Y. Hair, nail, tooth, bat, &c., brushes. No. 114,782; July 15; v. 264; p. 523.
Golden Rod Ice Cream Company, Fremont, Neb. Ice-cream. No. 116,181; July 15; v. 264; p. 524.
Gould, Wells & Blackburn Co., Madison, Wis. Canned goods, vanilla extract, peanut-butter, &c. No. 103,778; July 15; v. 264; p. 521.
Gutta Bertha & Rubber Manufacturing Company, New York, N. Y. Belting made of rubber and fabric. No. 115,980; July 15; v. 264; p. 523.
H. Haldinger & Company, St. Paul, Minn. Bread. No. 119,118; July 15; v. 264; p. 529.
Hacking Mfg. Co., Providence, R. I. Storage batteries. No. 119,162; July 15; v. 264; p. 530.
Henry Hewitt & Son, Inc., Somerville, Mass. Bread. No. 111,259; July 15; v. 264; p. 521.
Herman Bros. Company, Lock Haven, Pa. Cough-lozenges. No. 119,124; July 15; v. 264; p. 529.
Irvin Brush Company, Chicago, Ill. Tooth, nail, and hair brushes. No. 118,673; July 15; v. 264; p. 528.
Italian Vineyard Company, Los Angeles, Calif. Fermented sweet wines. No. 111,272; July 15; v. 264; p. 521.
Jacobs Candy Company, Ltd., New Orleans, La. Candy. Nos. 117,457; 9; July 15; v. 264; p. 525.
John Morrell & Company, Ottumwa, Iowa. Vegetable shortening. No. 118,162; July 15; v. 264; p. 527.
Jones, Harve Little Rock, Ark. Medicine for rheumatism. No. 116,638; July 15; v. 264; p. 524.

Kansas City Broom Company, Kansas City, Mo. Brooms. No. 118,603; July 15; v. 264; p. 529.
Loveland, Winifred Y., New York, N. Y. Face-powders, lip-rouge, brow-pencils. No. 108,517; July 15; v. 264; p. 521.
Macdonald, Marie H., Toledo, Ohio. Cornets. No. 103,552; July 15; v. 264; p. 521.
Magie-Keller Soap Works, Louisville, Ky. Soaps. No. 118,396; July 15; v. 264; p. 527.
Marshall Field & Company, Chicago, Ill. Toilet soap. No. 118,263; July 15; v. 264; p. 527.
Martini Mfg. Co., Norfolk, Va. Non-alcoholic maltless beverage and syrup for manufacturing same. No. 115,354; July 15; v. 264; p. 523.
McMillan, Louis H., Minneapolis, Minn. Preparation for the treatment of asthma. No. 118,833; July 15; v. 264; p. 529.
Metro Chocolate Co., Inc., Brooklyn, N. Y. Chocolate-covered molasses bars. No. 117,887; July 15; v. 264; p. 526.
Morgan Drug Company of the City of Brooklyn, Brooklyn, N. Y. Pomade chemical compound or dressing for the hair. No. 115,572; July 15; v. 264; p. 523.
National Biscuit Company, Jersey City, N. J., and New York, N. Y. Biscuits. No. 118,607; July 15; v. 264; p. 528.
National Gauge & Equipment Company, La Crosse, Wis. Pressure-gages. No. 118,167; July 15; v. 264; p. 527.
New Syndicate Co. (See De Witt Macdonald, assignor.)
Ortega, Domingo A., Bernardo, N. Mex. Medicine for sciatica, cramps, paralysis, &c. No. 117,387; July 15; v. 264; p. 525.
Peck & Co., New York, N. Y. Ladies' outer garments. No. 114,814; July 15; v. 264; p. 523.
Peninsular Chemical Co., Detroit, Mich. Shaving-cream. No. 118,091; July 15; v. 264; p. 526.
Polly Bros., New York, N. Y. Cheese. No. 118,063; July 15; v. 264; p. 526.
Rhysburger, Harvey S., Oskaloosa, Iowa. Dressed poultry. No. 117,992; July 15; v. 264; p. 526.
Sanatavo Co., Gloucester City, N. J. Germicidal solution for the teeth, mouth, nose, and throat. No. 118,627; July 15; v. 264; p. 528.
Schlesinger, Maurice F., New York, N. Y. Remedy for constipation, &c. No. 118,453; July 15; v. 264; p. 528.
Schuster Company, Cleveland, Ohio. Non-alcoholic non-cereal beverage and syrup for making same. No. 117,357; July 15; v. 264; p. 525.
Sperry Flour Company, San Francisco, Vallejo, Stockton, Fresno, Paso Robles, and Los Angeles, Calif., and Tacoma, Creston, and Spokane, Wash. Pancake-flour. No. 116,429; July 15; v. 264; p. 524.
Stevens, Seriah, Boston, Mass. Pharmaceutical preparations for intestinal and gastric disorders. No. 116,976; July 15; v. 264; p. 524.
Thorpe, John A., Soda Springs, Idaho. Healing-powder. No. 118,333; July 15; v. 264; p. 527.
Traffic Motor Truck Corporation, St. Louis, Mo. Motor-trucks. No. 115,742; July 15; v. 264; p. 523.
W. A. Baum Co., Inc., New York, N. Y. Sphygmomanometers. No. 118,955; July 15; v. 264; p. 529.
W. T. Wellsch & Co., Inc., San Francisco, Calif. Rice. No. 111,323; July 15; v. 264; p. 521.
Wallace & Cullley, Houston, Tex. Preparation for treatment of the hair and scalp. No. 118,974; July 15; v. 264; p. 529.
Ward Baking Company, New York, N. Y. Cakes. No. 118,531; July 15; v. 264; p. 528.
Western Garment Company, Chicago, Ill. Lingerie and vestcoats. No. 118,291; July 15; v. 264; p. 527.
Whitcomb, Georgiana M., New York, N. Y. Medicinal preparation for epilepsy, convulsions, and spasms. No. 117,343; July 15; v. 264; p. 525.
Whitcomb, Georgiana M., New York, N. Y. Medicinal treatment for epilepsy. No. 119,058; July 15; v. 264; p. 529.
White, Madame Annie, Cincinnati, Ohio. Hair-tonics. No. 118,950; July 15; v. 264; p. 529.
Wight Company, Lamoni, Iowa. Concentrated tonic for increasing the production and fertility of eggs. No. 118,815; July 15; v. 264; p. 529.
William Schollhorn Company, New Haven, Conn. Pliers, nippers, wire-cutters, punches, &c. No. 114,913; July 15; v. 264; p. 522.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

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Abrasive wheel. H. R. Power. No. 1,310,291; July 15; v. 264; p. 486.
Abrasive wheel. H. R. Power. No. 1,310,292; July 15; v. 264; p. 486.
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Acid and producing phenol. Recovering benzene monosulfonic. M. L. Hamlin. No. 1,309,683; July 15; v. 264; p. 376.
Acid mine-water. Recovering by-products from. E. C. Auld and J. R. Campbell. No. 1,310,384; July 15; v. 264; p. 502.
Acid mine-water. Treating. E. C. Auld and J. R. Campbell. No. 1,310,383; July 15; v. 264; p. 502.
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Aeroplane. N. Hippenbela. No. 1,309,901; July 15; v. 264; p. 427.
Aeroplane. C. E. and C. D. Stacey. No. 1,309,968; July 16; v. 264; p. 428.
Aeroplane. J. F. Webb, Sr. No. 1,309,710; July 15; v. 264; p. 380.
Aeroplane. H. A. Johnson. No. 1,310,344; July 15; v. 264; p. 495.
Aeroplanes and other aircraft. Propeller for use on. J. F. Suratt. No. 1,310,350; July 15; v. 264; p. 493.
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Air-charging device. F. C. Dornier. No. 1,309,880; July 15; v. 264; p. 411.
Air-beating apparatus. H. Baetz. No. 1,309,977; July 15; v. 264; p. 430.
Air-separator. Vacuum. E. M. Davids and L. Lindsay. No. 1,309,879; July 15; v. 264; p. 411.
Air washer and humidifier. R. A. Hg. No. 1,309,737; July 15; v. 264; p. 385.
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Alkali cyanid. Apparatus for the manufacture of. F. J. Metzger. No. 1,309,908; July 15; v. 264; p. 416.
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Ash-handling device. A. A. Moore. No. 1,309,905; July 15; v. 264; p. 416.
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Automobile-lock. L. W. Welsh. No. 1,309,925; July 15; v. 264; p. 420.
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Automobile or truck wheel. H. E. and P. R. Simmons. No. 1,310,303; July 15; v. 264; p. 488.
Automobile-pedal attachment. F. C. Grant. No. 1,310,186; July 15; v. 264; p. 466.

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 Slicing-machines. Stack-former for. C. F. M. van Berkel. No. 1,310,261; July 15; v. 264; p. 480.
 Slicing-machines. Stack-spacer for. C. F. M. van Berkel. No. 1,310,262; July 15; v. 264; p. 481.
 Slitting and rewinding machine. J. A. Cameron and G. B. Hirsch. No. 1,310,153; July 15; v. 264; p. 461.
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 Soap. Container for. W. C. Schwab. No. 1,309,965; July 15; v. 264; p. 428.
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 Spindling-frame guides. Means for removing stuff or dust from. W. E. Walsh. No. 1,309,790; July 15; v. 264; p. 395.
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 Steering-gear attachment. W. Gummerson. No. 1,310,159; July 15; v. 264; p. 462.
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 Locking switch. Quick-break switch.
 Multivoltage overload-switch.
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 Switch member. Electric. C. D. Platt. (Reissue.) No. 1,4690; July 15; v. 264; p. 507.
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 Telescope tubes. Joint for. E. Schoelder. No. 1,309,963; July 15; v. 264; p. 427.
 Temperature-control system. F. Ahlburg. (Reissue.) No. 1,4685; July 15; v. 264; p. 507.
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 Trolley-wire clamp. D. G. Winchester. No. 1,309,870; July 15; v. 264; p. 409.
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 Tubes by extrusion. Forming billets or blooms for forming. J. W. Leighton. No. 1,310,123; July 15; v. 264; p. 455.
 Tubes. Producing metal. T. E. Murray, Jr. No. 1,310,130; July 15; v. 264; p. 457.

Tubular articles by extrusion. Means for forming. J. W. Leighton and O. J. P. Crick. No. 1,310,122; July 15; v. 264; p. 455.
 Tuilles. Making upright. D. F. Cannon. No. 1,309,936; July 15; v. 264; p. 422.
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 Type-writing and computing machine. Combined. A. A. Johnson. No. 1,309,854; July 15; v. 264; p. 406.
 Type-writing machine. L. S. Burridge. No. 1,310,000; July 15; v. 264; p. 433.
 Underground portable drill. W. F. Brauning. No. 1,310,274; July 15; v. 264; p. 483.
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 Valve. R. M. Hunter. (Reissue.) No. 1,4687; July 15; v. 264; p. 507.
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 Valve device. Brake-application. W. V. Turner. No. 1,309,787; July 15; v. 264; p. 394.
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 Valve mechanism for gas-engines. F. L. Morse. No. 1,309,906; July 15; v. 264; p. 416.
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 Window-ventilator.
 Ventilator. L. J. Dalton. No. 1,310,327; July 15; v. 264; p. 492.
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 Wall-finishing composition. R. Sharp. No. 1,309,782; July 15; v. 264; p. 393.
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Watch. Wrist. R. H. Knyvelt. No. 1,309,988; July 15; v. 264; p. 432.
 Water heater and filter. C. Joerin, Jr., and A. E. Joerin. No. 1,309,892; July 15; v. 264; p. 414.
 Water-heater. Automatic. E. S. Hoyt. No. 1,310,160; July 15; v. 264; p. 462.
 Waterproof composition and product and the like and producing same. A. W. Schorger. No. 1,310,376; July 15; v. 264; p. 501.
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 Water. Separating hydrocarbons from. W. A. Brown. No. 1,309,794; July 15; v. 264; p. 395.
 Wax from sugar-cane. Recovering. R. U. Hunker. No. 1,309,999; July 15; v. 264; p. 433.
 Web-roll support. H. C. Hawk. No. 1,309,621; July 15; v. 264; p. 363.
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 Weight. Sash. M. E. Mather. No. 1,310,165; July 15; v. 264; p. 468.
 Welding and apparatus for use therein. Electric. J. G. Kjellgren and G. H. Stephenson. No. 1,309,947; July 15; v. 264; p. 424.
 Welding apparatus. W. L. Merrill. No. 1,310,127; July 15; v. 264; p. 456.
 Welding. Electric. P. O. Noble. No. 1,310,131; July 15; v. 264; p. 457.
 Welding. Electric. M. H. Roberts and C. C. Van Nys. No. 1,309,690; July 15; v. 264; p. 378.
 Wells. Internal works of tubular. M. N. Latta. No. 1,309,725; July 15; v. 264; p. 385.
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 Abrasive wheel. Truck-wheel.
 Caster-wheel. Wind-wheel.
 Spring-wheel.
 Wheel. F. W. French. No. 1,310,069; July 15; v. 264; p. 445.
 Wheel. R. Hoopes. No. 1,310,189; July 15; v. 264; p. 407.
 Wheel-puller. E. H. Cantrell and G. E. Miller. No. 1,310,154; July 15; v. 264; p. 461.
 Wheel-rim. Demountable. E. K. Baker. No. 1,310,047; July 15; v. 264; p. 441.
 Wheel rim. Vehicle. L. V. Annable. No. 1,309,751; July 15; v. 264; p. 388.
 Wheels. Demountable rim for. C. De C. and G. A. Moll. No. 1,310,304; July 15; v. 264; p. 498.
 Wheels. Making tensions. W. J. P. Moore. No. 1,310,246; July 15; v. 264; p. 478.
 Wind-wheel. Ornamental. P. F. Denning. No. 1,310,234; July 15; v. 264; p. 475.
 Window-closure. J. F. O'Brien. No. 1,310,307; July 15; v. 264; p. 489.
 Woven garter-pad. W. Achtmeyer. No. 1,310,271; July 15; v. 264; p. 482.
 Wheel-tightening device. T. N. Gibson and A. O. Friday. No. 1,309,939; July 15; v. 264; p. 423.
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 Window-ventilator. A. H. Fuhr. No. 1,309,886; July 15; v. 264; p. 412.
 Wire-cutting device. H. P. Smith. No. 1,309,664; July 15; v. 264; p. 372.
 Wire-twisting machine. J. Cegozzo. No. 1,310,003; July 15; v. 264; p. 434.
 Wrench. J. T. Campbell. No. 1,310,056; July 15; v. 264; p. 443.
 Wrench. F. M. Klein. No. 1,309,860; July 15; v. 264; p. 407.
 Wrench. J. A. Greig and W. F. Balkenol. N. 1,309,727; July 15; v. 264; p. 383.
 Wrench and pillars. Combined. W. D. Arnot. No. 1,309,874; July 15; v. 264; p. 410.
 X-ray apparatus. W. D. Coolidge. No. 1,310,061; July 15; v. 264; p. 444.
 Yoke and box. Meter. L. McNutt. No. 1,310,400; July 15; v. 264; p. 506.
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Article of manufacture. M. Oestreich. No. 53,602; July 15; v. 264; p. 516.
 Automobile-lock or similar article of manufacture. Handle for an. F. E. Greene. No. 53,580; July 15; v. 264; p. 512.
 Automobile-lock or similar article of manufacture. Plate for an. F. E. Greene. No. 53,582; July 15; v. 264; p. 513.
 Automobile or similar article of manufacture. Rim for a speedometer or a dome-light for an. F. E. Greene. No. 53,583; July 15; v. 264; p. 513.
 Automobile or similar article of manufacture. Rim for a dome-light or a speedometer for an. F. E. Greene. No. 53,585; July 15; v. 264; p. 513.

Automobile or similar article of manufacture. Curtain-draw for an. F. E. Greene. No. 53,581; July 15; v. 264; p. 513.
 Automobile or similar article of manufacture. Vase for an. F. E. Greene. No. 53,586; July 15; v. 265; p. 513.
 Automobile-seat or similar article of manufacture. Handle for an. F. E. Greene. No. 53,584; July 15; v. 264; p. 513.
 Ball. Artificial. J. W. Reynolds. No. 53,610; July 15; v. 264; p. 517.
 Bank. Savings. A. Goldberg. No. 53,579; July 15; v. 264; p. 512.
 Bedspread. M. Oestreich. No. 53,601; July 15; v. 264; p. 516.

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- Bottle, Poison-. F. Rustant. No. 53,614; July 15; v. 264; p. 518.
 Box, Powder-. H. J. Woodward. No. 53,624; July 15; v. 264; p. 519.
 Brake, N. Stanfa. No. 53,618; July 15; v. 264; p. 518.
 Brocade, J. H. Runtting. Nos. 53,559-60; July 15; v. 264; p. 509.
 Bockle, Belt-. I. L. Marienthal. No. 53,598; July 15; v. 264; p. 515.
 Cabinet, Phonograph-. M. Davis. No. 53,570; July 15; v. 264; p. 511.
 Cards, Set of playing-. J. C. Gaffney. No. 53,576; July 15; v. 264; p. 512.
 Chandeller, G. W. Wertman. No. 53,621; July 15; v. 264; p. 619.
 Cutter, Underreamer-. E. C. and W. W. Willson. No. 53,623; July 15; v. 264; p. 519.
 Dental-equipment pedestal. W. H. Hendrickson. No. 53,590; July 15; v. 264; p. 514.
 Dish or similar article. J. H. Ring. No. 53,612; July 15; v. 264; p. 517.
 Display-holder. R. D. Pike. No. 53,604; July 15; v. 264; p. 516.
 Display-holder, Multiple. R. D. Pike. No. 53,605; July 15; v. 264; p. 516.
 Display-rack. T. H. Johnson. No. 53,593; July 15; v. 264; p. 514.
 Display-stand. O. B. Carson. No. 53,567; July 15; v. 264; p. 510.
 Display stand, Banana-. F. Ixao. No. 53,592; July 15; v. 264; p. 514.
 Emblem, button, or article of similar nature. E. P. Smith. No. 53,616; July 15; v. 264; p. 518.
 Fabric, Silk. J. H. Bonding. Nos. 53,561-3; July 15; v. 264; p. 509.
 Fabric, Silk. E. Krupicka. No. 53,595; July 15; v. 264; p. 515.
 Fabric, Silk. W. G. Reith. No. 53,609; July 15; v. 264; p. 517.
 Faucet. G. H. T. Scribner. No. 53,615; July 15; v. 264; p. 518.
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 Furniture or similar articles, Pedestal for. C. Campbell. No. 53,564; July 15; v. 264; p. 510.
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 Platter or similar article. J. H. Ring. No. 53,611; July 15; v. 264; p. 517.
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 Spoons, forks, or similar articles, Handle for. W. F. Klogman. No. 53,564; July 15; v. 264; p. 515.
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 Tub and basin fitting, Bath-. L. Bloch. No. 53,558; July 15; v. 264; p. 509.
 Wrench. J. A. Marcmann. No. 53,597; July 15; v. 264; p. 515.
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 Wrench and screw-driver, Combined. T. S. Cobb. No. 53,569; July 15; v. 264; p. 511.

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- Biscuit, National Biscuit Company. No. 125,938; July 15; v. 264; p. 531.
 Blouses, shirt-waists, etc. E. W. Wolf. No. 125,946; July 15; v. 264; p. 431.
 Candy, Elmer Candy Company. No. 125,933; July 15; v. 264; p. 531.
 Canned fruits and vegetables, John Scott & Co. No. 125,941; July 15; v. 264; p. 531.
 Coffee, Charles E. Hires Company. No. 125,935; July 15; v. 264; p. 531.
 Corn, Popping, American Pop Corn Company. No. 125,925; July 15; v. 264; p. 531.
 Cotton, Medicinal. J. O. Walser. No. 125,943; July 15; v. 264; p. 531.
 Cream, Fatty substances used as a base for toilet. S. Smith. No. 125,942; July 15; v. 264; p. 531.
 Duck, International Cotton Mills. No. 125,936; July 15; v. 264; p. 531.
 Jam or conserve, Welch Grape Juice Company. No. 125,944; July 15; v. 264; p. 531.
 Medicine used as a blood-purifier. W. H. Meadows. No. 125,937; July 15; v. 264; p. 531.
 Oranges, Fresh. C. D. Boydston. No. 125,931-932; July 15; v. 264; p. 531.
 Oranges, Fresh. Redlands Mutual Orange Company. No. 125,940; July 15; v. 264; p. 531.
 Perfumery, toilet water, sachet-powder, Baldwin Perfumery Company, The. No. 125,928; July 15; v. 264; p. 531.
 Pickles, apple-butter, mince-meat, etc. Franklin Mac Veagh and Company. No. 125,934; July 15; v. 264; p. 531.
 Powder, Face. A. Bourjois & Co. No. 125,930; July 15; v. 264; p. 531.
 Powder, Talcum. Agra Company, The. No. 125,924; July 15; v. 264; p. 531.
 Preparation for treatment of tan, sunburn, freckles, etc. W. W. Beltenman. No. 125,929; July 15; v. 264; p. 531.
 Wadding for treatment of rheumatism, Medicinal. Pharmaceutische en Chemische Handelsvereniging "Rotterdam." No. 125,939; July 15; v. 264; p. 531.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

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- Apples, Boston-Okanogan Apple Co. No. 115,217; July 15; v. 264; p. 523.
 Beverage and syrup for making the same, Non-alcoholic. Schuster Company. No. 117,357; July 15; v. 264; p. 525.
 Beverage, Maltless. Cream City Brewing Co. No. 118,103; July 15; v. 264; p. 526.
 Beverage, Maltless. Cream City Brewing Co. No. 118,105; July 15; v. 264; p. 527.
 Beverage and syrup for making same, Nonalcoholic maltless. Martini Mfg. Co. No. 115,354; July 15; v. 264; p. 523.
 Beverages, Malt. Alaska Beverage Company. No. 113,230; July 15; v. 264; p. 522.
 Biscuit, National Biscuit Company. No. 118,607; July 15; v. 264; p. 528.
 Bread, H. Baidinger & Company. No. 119,118; July 15; v. 264; p. 520.
 Bread, Barker Baking Company. No. 117,830; July 15; v. 264; p. 520.
 Bread, Henry Blewett & Son. No. 111,259; July 15; v. 264; p. 521.
 Brooms, Kansas City Broom Company. No. 118,603; July 15; v. 264; p. 528.
 Brushes, L. Ascher. No. 113,713; July 15; v. 264; p. 522.
 Brushes, Geo. R. Gibson Co. No. 114,782; July 15; v. 264; p. 523.
 Brushes, Tooth, nail, hair. Irvin Brush Company. No. 118,673; July 15; v. 264; p. 528.
 Cakes, Ward Baking Company. No. 118,531; July 15; v. 264; p. 528.
 Candy, Jacobs Candy Company. Nos. 117,457-9; July 15; v. 264; p. 525.
 Candy, Milt. American Chicle Company. No. 116,871; July 15; v. 264; p. 524.
 Canned goods, vanilla extract, &c. Gould, Wells & Blackburn Co. No. 103,578; July 15; v. 264; p. 521.
 Canned vegetables. C. E. Stauson Co. No. 118,194; July 15; v. 264; p. 627.
 Cheese, Polly Bros. No. 118,063; July 15; v. 264; p. 526.
 Chocolate-covered molasses bars. Metro Chocolate Co. No. 117,587; July 15; v. 264; p. 526.
 Chocolates. C. A. Crane. No. 117,868; July 15; v. 264; p. 526.
 Corsets. M. B. MacDonald. No. 103,552; July 15; v. 264; p. 521.
 Cough-lozenges, Herman Bros. Company. No. 119,124; July 15; v. 264; p. 529.
 Cream, Shaving. Peniculus Chemical Co. No. 118,091; July 15; v. 264; p. 526.
 Dyestuffs, cattle-dip, sodium arsenate, and insecticides. Frank Hemingway, Inc. No. 119,160; July 15; v. 264; p. 530.
 Eggs, Tool for increasing the production and fertility of. Wight Company. No. 118,515; July 15; v. 264; p. 520.
 Engines and cream-separating machines, Internal-combustion. Associated Manufacturers' Company. No. 112,313; July 15; v. 264; p. 522.
 Flour, Panake. Sperry Flour Company. No. 116,429; July 15; v. 264; p. 524.
 Flour, Wheat. Fisher Flouring Mills Company. No. 116,710; July 15; v. 264; p. 524.
 Food products, Dehydrated. Drying systems. No. 111,720; July 15; v. 264; p. 522.
 Gages, Pressure. National Gauge & Equipment Company. No. 118,167; July 15; v. 264; p. 527.
 Garments, Ladies' outer. Peck & Co. No. 114,514; July 15; v. 264; p. 523.
 Grape-fruit juice. Collins Canning Company. No. 117,174; July 15; v. 264; p. 525.
 Hair-cleansing preparation. V. L. Beauchamp. No. 103,057; July 15; v. 264; p. 521.
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 Hair-dressing. Morgan Drug Company of the city of Brooklyn. No. 115,572; July 15; v. 264; p. 523.
 Hair-grower. A. Burrias. No. 117,034; July 15; v. 264; p. 525.
 Hair-tonics. Madam A. White. No. 118,950; July 15; v. 264; p. 529.
 Hosiery, Men's. Dormer Brothers Company. No. 116,149; July 15; v. 264; p. 524.
 Ice-cream, Golden Rod Ice Cream Company. No. 116,181; July 15; v. 264; p. 524.
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 Lingerie and petticoats, Western Garment Company. No. 118,201; July 15; v. 264; p. 527.
 Medicinal preparation for epilepsy, &c. G. M. Whitcomb. No. 117,363; July 15; v. 264; p. 525.
 Medicinal treatment for epilepsy. G. M. Whitcomb. No. 119,058; July 15; v. 264; p. 529.
 Medicine for rheumatism. H. Jones. No. 116,058; July 15; v. 264; p. 524.
 Medicine for sciatica, rheumatism, cramps, &c. D. A. Ortega. No. 117,387; July 15; v. 264; p. 525.
 Oil, Edible. J. Chabin. No. 113,117; July 15; v. 264; p. 522.
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 Pocket-hooks. Freund Bros. & Company. No. 117,802; July 15; v. 264; p. 528.
 Poultry, Dressed. H. S. Rhynsbarger. No. 117,092; July 15; v. 264; p. 526.
 Powder, Healing. J. A. Thorpe. No. 118,333; July 15; v. 264; p. 527.
 Powders, lip-rouge, brow-pencils, Face. W. V. Loveland. No. 108,517; July 15; v. 264; p. 521.
 Preparation for the treatment of asthma. L. H. McMillan. No. 118,833; July 15; v. 264; p. 529.
 Preparation for the treatment of the hair and scalp. Wallace & Culley. No. 118,974; July 15; v. 264; p. 529.
 Publication, Daily. M. De Witt. No. 118,987; July 15; v. 264; p. 529.
 Razors, Geneva Cutlery Corporation. No. 116,597; July 15; v. 264; p. 524.
 Remedy for constipation, ordinary derangement of digestion, &c. M. F. Schlesinger. No. 118,453; July 15; v. 264; p. 528.
 Rice. W. J. Wellisch & Co. No. 111,323; July 15; v. 264; p. 521.
 Rubber and fabric belting. Gutta Percha & Rubber Manufacturing Company. No. 115,980; July 15; v. 264; p. 523.
 Shirts, pajamas, flat underwear, &c. M. H. Ellenbogen. No. 118,048; July 15; v. 264; p. 526.
 Shortening, Vegetable. John Morrell & Company. No. 118,162; July 15; v. 264; p. 527.
 Soap, Toilet. Marshall Field & Company. No. 118,263; July 15; v. 264; p. 527.
 Soaps, Magic-Keller Soap Works. No. 118,396; July 15; v. 264; p. 527.
 Spark-plugs, electric cables, ignition systems, &c. A. J. Picard and Co. No. 118,701; July 15; v. 264; p. 528.
 Sphygmomanometers. W. A. Baum Co. No. 118,955; July 15; v. 264; p. 529.
 Steel and steel castings, Bar. Darwin & Milner, Inc. No. 118,007; July 15; v. 264; p. 529.
 Storage batteries. Hacking Mfg. Co. No. 119,162; July 15; v. 264; p. 530.
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 Tablets, Laxative. Casco Company. No. 116,080; July 15; v. 264; p. 525.
 Teeth, mouth, nose, and throat, Germicidal solution for. Savatino Co. No. 118,627; July 15; v. 264; p. 528.
 Trucks, Motor. Tescic Motor Truck Corporation. No. 115,742; July 15; v. 264; p. 523.
 Tweeds. Brill Brothers. No. 118,250; July 15; v. 264; p. 527.
 Water, Natural medicinal. California Medicinal Springs Co. No. 117,478; July 15; v. 264; p. 525.
 Wines, Fermented sweet. Italian Vineyard Company. No. 111,272; July 15; v. 264; p. 521.

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13: 1,309,650	55: 1,310,225	39: 1,310,302	32: 1,309,920	80: 1,309,906	27: 4: 1,310,099
1,310,151	1: 1,310,291	45: 1,310,170	36: 1,309,663	1,310,301	1,310,100
1,310,302	1,310,292	46: 1,309,681	42: 1,309,631	119: 1,309,985	1,310,101
1,310,383	3: 1,309,792	1,310,085	43: 1,309,601	165: 1,309,913	1,310,102
1,310,384	4: 1,310,278	1,310,086	27: 1,309,867	173: 1,310,025	1,310,103
21: 1,310,306	7: 1,310,071	52: 1,310,114	99— 11: 1,309,979	124— 13: 1,310,324	1,310,104
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34: 1,309,683	1: 1,310,015	58: 1,309,680	100— 37: 1,310,297	164: 1,310,371	1,310,106
				176: 1,310,162	1,310,107
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91: 1,310,263	364: 1,310,178	14: 1,310,318	38: 1,309,697	7: 1,309,678	114: 1,309,810
112: 1,309,922	1: 1,310,067	27: 1,309,881	57: 1,309,802	13: 1,309,714	120: 1,309,809
13: 1,310,068	41: 1,309,711	33: 1,309,908	21: 1,310,161	8.5: 1,310,150	2: 1,310,086
29: 1,309,970	7: 1,309,750	13: 1,310,361	42: 1,309,628	23: 1,309,644	29: 1,309,634
58: 1,309,848	314: 1,310,340	63: 1,310,343	63: 1,309,866	41: 1,309,644	111: 1,309,962
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106: 1,309,907	34: 1,309,745	1,310,341	82: 1,309,633	48.4: 1,309,626	1,309,755
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17: 1,309,721	122: 1,310,011	3: 1,310,122	88: 1,310,241	78: 1,310,149	31: 1,309,966
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163: 1,310,330	184- 46: 1,309,828	8: 1,309,911	1,309,988	1,310,084	92: 1,309,737
171- 119: 1,309,814	69: 1,309,685	13: 1,309,983	23: 1,310,377	5: 1,309,912	103: 1,309,933
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1,309,640	3: 1,309,786	1,309,832	24: 1,310,006	23: 1,310,249	206- 27: 1,309,851
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311: 1,309,799	14: 1,309,787	3.0: 1,309,632	1,310,289	68: 1,309,621	33: 1,310,193
356: 1,310,138	13: 1,309,788	40: 1,309,905	65: 1,310,247	117: 1,310,275	43: 1,310,367
342: 1,310,191	31: 1,309,933	91: 1,310,194	70: 1,310,188	1: 1,310,053	271- 64: 1,309,701
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30: 1,310,054	70: 1,310,032	1: 1,310,688	27: 1,310,332	29: 1,309,961	277- 57: 1,310,338
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277: 1,310,173	190- 34: 1,309,666	117: 1,309,994	26.5: 1,310,301	1,309,888	282- 51: 1,309,869
1,310,152	36: 1,309,682	7: 1,309,922	27: 1,310,300	1,310,821	283- 3: 1,310,400
281: 1,309,642	82: 1,309,698	21: 1,309,877	27.3: 1,309,730	1,309,813	285- 22: 1,310,391
1,309,622	191- 39: 1,309,717	56: 1,310,352	36: 1,309,813	1,310,196	26: 1,309,625
1,310,299	43: 1,309,870	96: 1,309,779	34: 1,310,196	58: 1,309,896	75: 1,309,780
1,310,353	192- 11: 1,310,199	122: 1,310,328	58: 1,309,896	60: 1,309,692	91: 1,309,963
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294: 1,310,081	196- 19: 1,309,860	12: 1,309,947	25: 1,310,160	6: 1,310,362	44: 1,310,179
1,310,216	25: 1,309,794	15: 1,310,131	59: 1,310,096	18: 1,310,687	55: 1,309,699
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ALPHABETICAL LIST OF PATENTEEES

TO WHOM

PATENTS WERE ISSUED ON THE 22^D DAY OF JULY, 1919.

- A. Mecky Company. (See Ledig and Gerson, assignors.)
 Abram Cox Store Company. (See Mott, Abram C., Jr., assignor.)
 A. C. Gilbert Company, The. (See Gilbert, Alfred C., assignor.)
 A. J. Deer Company, The. (See Hand and Wygant, assignors.)
 Aaron, Jacob M., assignor to The Excels Manufacturing Company, Cleveland, Ohio. Coating for boiler-settings and the like. No. 1,310,591; July 22: v. 264; p. 572.
 Acme Harvesting Machine Company. (See Swartz, George W., assignor.)
 Adams, Harry A., assignor to Serviceable Inventions Corporation, New York, N. Y. Label-vending machine. No. 1,310,592; July 22: v. 264; p. 572.
 Adams, Morton L., assignor to Adams Tractor Company, Seattle, Wash. Tractor attachment. No. 1,310,406; July 22: v. 264; p. 539.
 Adams Tractor Company. (See Adams, Morton L., assignor.)
 Almsworth, William A., assignor of one-half to C. N. Mather, Grand Rapids, Mich. Dyeing composition. No. 1,310,518; July 22: v. 264; p. 558.
 Akeley Camera Inc. (See Akeley, Carl E., assignor.)
 Akeley, Carl E., assignor to Akeley Camera Inc., New York, N. Y. Finder for moving-picture cameras. No. 1,310,776; July 22: v. 264; p. 606.
 Aktiebolaget Salenius Verkstad. (See Eskilson, Sven A., assignor.)
 Aktieselskab Roulunda Fabrikker. (See Petersen-Hjilid, Lauritz, assignor.)
 Alchovsky, Naoum, Acton Hill, London, England. Land-digging or earth-excavating means or device. No. 1,310,528; July 22: v. 264; p. 597.
 Algrunn, Carl G., Rochester, N. Y. Rifling-tool and using same. No. 1,311,107; July 22: v. 264; p. 667.
 American Can Company. (See Mothersall, John M., assignor.)
 American Can Company. (See Kline, Edward A., assignor.)
 American Can Company. (See March, John H., assignor.)
 American Can Company. (See Wood, Frederick P., assignor.)
 American Electrical Heater Company. (See Kuhu and Shallor, assignors.)
 American Machine & Foundry Company. (See Prescott, Sydney I., assignor.)
 American Magnesium Corporation. (See Seward, George O., assignor.)
 American Mine Door Company, The. (See Bowman, Newton K., assignor.)
 American Slicing Machine Co., The. (See Hood and Wolff, assignors.)
 American Telephone and Telegraph Company. (See Blauvelt, William G., assignor.)
 American Telephone and Telegraph Company. (See Verdam, Gilbert S., assignor.)
 Andresen, Viggo V. J., Copenhagen, Denmark. Making dental cements. No. 1,310,901; July 22: v. 264; p. 629.
 Anderson, John W. (See Tideman and Anderson.)
 Andersson, Victor O. J., Malmö, Sweden. Calculating-machine. No. 1,310,852; July 22: v. 264; p. 621.
 Andrew Hoffman Manufacturing Co. (See Sebastian, Alphonse A., assignor.)
 Anti-Friction Belt Dressing Company. (See Ryan, John, assignor.)
 Appelbaum, Isaac, Philadelphia, Pa. Fabric-cutting machine. No. 1,310,653; July 22: v. 264; p. 621.
 Appelbee, Frank J., Montclair, N. J. Display-card for buttons and the like. No. 1,310,729; July 22: v. 264; p. 597.
 Argylls Limited. (See Hurt, Peter, assignor.)
 Argylls Limited, The. (See McCullum, James H. K., assignor.)
 Arlington Company, The. (See Terhune, Leonard B., assignor.)
 Arms Products Company. (See Post, Truman W., assignor.)
 Armstrong, George J., Buffalo, N. Y., assignor, by mesne assignments, to The Columbus McKinnon Chain Co., Columbus, Ohio. Electric welding-machine. No. 1,310,554; July 22: v. 264; p. 565.
 Armstrong, George J., Buffalo, N. Y., assignor to The Columbus McKinnon Chain Co., Inc., Columbus, Ohio. Electric welding-machine. No. 1,310,555; July 22: v. 264; p. 565.
- Arnold, Fred W., Cambridge, Ohio. Fish-net. No. 1,310,553; July 22: v. 264; p. 565.
 Arpin, Edmund P., U. S. Army. Steering device. No. 1,310,032; July 22: v. 264; p. 634.
 Asplund, John A. F., Liverpool, England. Protected third rail. No. 1,311,035; July 22: v. 264; p. 654.
 Auld, Frederick H., Columbus, Ohio. Container for razor-blades. No. 1,310,407; July 22: v. 264; p. 539.
 Austin, Henry F., New Orleans, La. Target. No. 1,310,043; July 22: v. 264; p. 582.
 Austin, Henry F., New Orleans, La. Toy gun. No. 1,310,044; July 22: v. 264; p. 582.
 Austin Manufacturing Company. (See Liddell, Moses V., assignor.)
 Autosales Corporation. (See Grover, Albert D., assignor.)
 Auto Specialties Manufacturing Co. (See Blair, Clarence L., assignor.)
 Automatic Packing & Labeling Company. (See Gwinn, George W., assignor.)
 Ayres, George R., assignor to Wm. Ayres & Sons, Philadelphia, Pa. Woven fabric. No. 1,310,902; July 22: v. 264; p. 629.
 B. F. Sturtevant Company. (See Caracristi and Bentley, assignors.)
 Bader, Nicholas F. (See Kohler, Nathan, assignor.)
 Bair, Clarence L., St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif. Vehicle-bow-top holder. No. 1,310,519; July 22: v. 264; p. 558.
 Ballerstedt, William D., Los Angeles, Calif. Spray-nozzle. No. 1,310,938; July 22: v. 264; p. 635.
 Bancroft, George J., Denver, Colo. Separating mica from feldspar. No. 1,310,939; July 22: v. 264; p. 630.
 Barber, Franklin L., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Side bearing for cars. No. 1,310,550; July 22: v. 264; p. 565.
 Bark, Andrew, Seattle, Wash. Luggage-carrier for automobiles. No. 1,310,593; July 22: v. 264; p. 572.
 Barrett, Joseph C., Brooklyn, N. Y. Rocker-bearing for measuring instruments. No. 1,310,404; July 22: v. 264; p. 548.
 Bartow, Warren H., Toppenish, Wash. Rotary steam-engine. No. 1,310,735; July 22: v. 264; p. 598.
 Bartine, Wesley, Philadelphia, Pa. Tramway-conveyer. No. 1,310,854; July 22: v. 264; p. 621.
 Barton, Carleton J., Chicago, Ill. Treating vegetable oils. No. 1,310,977; July 22: v. 264; p. 643.
 Bass, T. H. (See Reynolds, Robert E., assignor.)
 Baxter, Kenneth S., assignor to The Sheet Steel Products Company, Bryan, Ohio. Motor-truck seat. No. 1,311,146; July 22: v. 264; p. 674.
 Beach, Elton H., Charlotte, Mich. Gravel-screen. No. 1,310,645; July 22: v. 264; p. 582.
 Beadle, Blanche E., Springfield, Mass. Hair-curler. No. 1,310,557; July 22: v. 264; p. 565.
 Beardley, Edson L., Columbus, Ohio. Lifter. No. 1,310,504; July 22: v. 264; p. 572.
 Beck, John C., Milton, Ind. Grave-lining. No. 1,310,820; July 22: v. 264; p. 615.
 Becker, Harry G., Watervliet, N. Y. Drifting-valve apparatus for locomotives. No. 1,311,034; July 22: v. 264; p. 654.
 Becket, Frederick M., Niagara Falls, N. Y., assignor to Union Carbide Company, New York, N. Y. Manufacture of calcium carbide. No. 1,310,465; July 22: v. 264; p. 540.
 Becket, Frederick M., assignor to Electro Metallurgical Company, Niagara Falls, N. Y. Explosive. No. 1,310,466; July 22: v. 264; p. 549.
 Beckwith, Walter C., Fostoria, Ohio. Hydraulic strain-equalizer. No. 1,311,108; July 22: v. 264; p. 667.
 Bell, John H., South Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. No. 1,310,595; July 22: v. 264; p. 573.
 Bender, George A., Pittsburgh, Pa. Collapsible shipping-case. No. 1,310,777; July 22: v. 264; p. 606.
 Bennett, Alfred A., assignor to The Copperstone Products Company, Toledo, Ohio. Cement composition. No. 1,310,520; July 22: v. 264; p. 559.
 Bentley, Oliver D. H. (See Caracristi and Bentley.)
 Berg, Frederick A., Chicago, Ill. Parachute. No. 1,310,467; July 22: v. 264; p. 540.
 Bergen, Harry S., assignor to Toledo Scale Company, Toledo, Ohio. Weighing-scale. No. 1,310,940; July 22: v. 264; p. 636.
 Bernsten, Berni M., Brooklyn, N. Y. Screw-driver. No. 1,311,147; July 22: v. 264; p. 674.

Borthelot, Daniel, Paris, and H. J. F. Gullbaud, Meudon, France. Pump. No. 1,311,035; July 22; v. 264; p. 634.

Best, John A., Augusta, Ga. Card for indexing. No. 1,310,468; July 22; v. 264; p. 549.

Binks, Harry D., River Forest, Ill. Spray-nozzle. No. 1,310,687; July 22; v. 264; p. 590.

Birch, James S., Chicago, Ill. Concrete-work fastener. No. 1,311,036; July 22; v. 264; p. 634.

Blake, Nicholas J., Columbus, Ohio. Drafting apparatus. No. 1,310,596; July 22; v. 264; p. 573.

Blakemore, Frank R., Chicago, Ill. Speed-signalling system. No. 1,310,778; July 22; v. 264; p. 607.

Blau, William, New York, N. Y. Fur-cutting implement. No. 1,310,736; July 22; v. 264; p. 599.

Blauvelt, William G., New York, N. Y. Assignor to American Telephone and Telegraph Company. Semi-mechanical telephone system. No. 1,310,730; July 22; v. 264; p. 597.

Blaw, Jacob B., Atlantic City, N. J. Reinforced-concrete conduit. No. 1,310,597; July 22; v. 264; p. 573.

Blaw, Jacob B., Atlantic City, N. J. Portable bolting apparatus. No. 1,310,598; July 22; v. 264; p. 573.

Bliss, Orrville J., Chicago, Ill. Protective relay system. No. 1,310,821; July 22; v. 264; p. 615.

Bliss, William L., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Variable-resistance regulator for electric circuits. No. 1,310,599; July 22; v. 264; p. 574.

Blissell, Charles H., assignor of one-third to C. H. Wise, Oil City, Pa. Pilot for locomotives. No. 1,310,731; July 22; v. 264; p. 597.

Blve, Harold, assignor to National Brass Co., Grand Rapids, Mich. Door-latch. No. 1,310,690; July 22; v. 264; p. 574.

Boardman, Charles S., Buffalo, N. Y., assignor to Lackawanna Steel Company, Lackawanna, N. Y. Pile driver and piler. No. 1,310,408; July 22; v. 264; p. 539.

Bodman, Walter L., Bromsgrove, England. Wheel for motor and other vehicles. No. 1,310,732; July 22; v. 264; p. 598.

Bohy, Alfred, Albia, Iowa. Washing-machine mechanism. No. 1,310,553; July 22; v. 264; p. 566.

Bold, Frederick W., (See Eberhard, Milner, and Bold.)

Bolen, Emerson A., Morris, Ill. Vending-machine. No. 1,310,601; July 22; v. 264; p. 574.

Boobar, John J., (See Dunlop and Boobar.)

Borden Company, The. (See Nonneman, Ira W., assignor.)

Bore, Johan, and A. Skoglund, Gottenborg, assignors to A. Westerberg, Stockholm, Sweden. Steam cleansing apparatus, particularly for vertically-arranged smoke-tubes. No. 1,310,733; July 22; v. 264; p. 598.

Borland, Lewis R., Merced Falls, Calif. Storm-sash fastener. No. 1,311,037; July 22; v. 264; p. 635.

Bowman, Josephine, near Lexington, Va. Washbottle. No. 1,310,734; July 22; v. 264; p. 598.

Bowman, Newton K., North Lawrence, Ohio, assignor to The American Mine Door Company, Wall-ancher. No. 1,311,038; July 22; v. 264; p. 635.

Bowser, Augustus, Fort Wayne, Ind. Controlling mechanism for liquid dispensers. No. 1,310,822; July 22; v. 264; p. 615.

Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain-rod. No. 1,310,469; July 22; v. 264; p. 549.

Boys, Cecil H., assignor of one-fourth to A. A. Myers and one-fourth to M. A. Myers, Louisville, Ky. Garment-former. No. 1,310,602; July 22; v. 264; p. 574.

Brady, Norman H., Butte, Mont. Hose-coupling. No. 1,310,559; July 22; v. 264; p. 566.

Brandt, Charles E. J., (See Brandt, Edgar W. and C. E. J.)

Brandt, Edgar W. and C. E. J., Paris, France. Fuse for explosive shells with safety device. No. 1,310,855; July 22; v. 264; p. 621.

Brien, William F., and M. H. Whitaker, Indianapolis, Ind. Route and station indicating means. No. 1,310,978; July 22; v. 264; p. 643.

Brink, Francis N., (See Pratt and Brink.)

British Potash Company, The. (See Catlett, Charles, assignor.)

Brooks, Wilfred M., West Orange, N. J. Shackle and bag seal. No. 1,310,494; July 22; v. 264; p. 554.

Bryant, Richard S., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Rim for vehicle-wheels. No. 1,310,603; July 22; v. 264; p. 574.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,779; July 22; v. 264; p. 607.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clocks. No. 1,310,780; July 22; v. 264; p. 607.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,781; July 22; v. 264; p. 608.

Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,782; July 22; v. 264; p. 608.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock. No. 1,310,783; July 22; v. 264; p. 608.

Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,784; July 22; v. 264; p. 608.

Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,785; July 22; v. 264; p. 609.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,786; July 22; v. 264; p. 609.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,787; July 22; v. 264; p. 609.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,788; July 22; v. 264; p. 609.

Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Clock-synchronizing device. No. 1,310,789; July 22; v. 264; p. 609.

Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Traction-engine. No. 1,310,604; July 22; v. 264; p. 575.

Burgess, William S., Marblehead, Mass., assignor to Curtiss Aeroplane and Motor Corporation. Reconnoitering-hydroaeroplane. No. 1,310,737; July 22; v. 264; p. 599.

Borman, Walfrid, Worcester, Mass. Spark-plug. No. 1,311,039; July 22; v. 264; p. 635.

Burns, John W., assignor of one-third to R. A. Holt and one-third to J. N. Harasta, Los Angeles, Calif. Two-cycle reciprocating engine. No. 1,311,145; July 22; v. 264; p. 675.

Burroughs Adding Machine Company. (See Peters, Herbert C., assignor.)

Burroughs Adding Machine Company. (See Rinsche, Frank C., assignor.)

Burt, Peter, Bothwell, Scotland. Internal-combustion engine. No. 1,310,646; July 22; v. 264; p. 582.

Burton, George C., Louisville, Ky. Cord-fastener lock. No. 1,311,040; July 22; v. 264; p. 635.

Bush, Charles A., Brooklyn, N. Y. Munition-projectile. No. 1,310,790; July 22; v. 264; p. 610.

Butcher, James M., assignor, by mesne assignments, to Marshall Dobbins & Co., Chicago, Ill. Portable burglar-alarm. No. 1,310,941; July 22; v. 264; p. 636.

Butterfield, Anne W., Columbus, Ohio. Saucery table utensil. No. 1,310,903; July 22; v. 264; p. 629.

Butterworth-Judson Corporation. (See Jones, Whitney B., assignor.)

Cable Company, The. (See Kling, Paul R., assignor.)

Cadillac Motor Car Company. (See Snell, Lyle K., assignor.)

Calder, William J., Edinburgh, Scotland. Chimney cowl or top. No. 1,310,470; July 22; v. 264; p. 549.

Campbell, Peter F., Vinal Haven, Me. Tobacco-pipe. No. 1,310,856; July 22; v. 264; p. 621.

Capparella, Thomas, New York, N. Y. Permutation electric switch. No. 1,310,605; July 22; v. 264; p. 575.

Carterist, Virginia Z., Bronxville, N. Y., and O. D. H. Bentley, West Roxbury, assignors to H. F. Stortevant Company, Hyde Park, Mass. Governor mechanism. No. 1,310,735; July 22; v. 264; p. 599.

Carey, James L., (See Murphy and Raney, assignors.)

Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Co. Calculating-machine. No. 1,311,041; July 22; v. 264; p. 635.

Carling Turbine Blower Co. (See Carlson, Axel W., assignor.)

Carlson, Axel W., assignor to Carling Turbine Blower Co., Worcester, Mass. Method and means for making turbine-rotors. No. 1,311,109; July 22; v. 264; p. 668.

Carlson, Gustave E., Topeka, Kans. Drawer-mounting. No. 1,311,042; July 22; v. 264; p. 635.

Carlson, Hjalmar G., Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts. Check-valve for automatic sprinkler systems. No. 1,310,606; July 22; v. 264; p. 575.

Carpenter, Ralph G., Chicago, Ill. Illuminated sign. No. 1,310,688; July 22; v. 264; p. 590.

Carpenter, Ralph G., assignor to himself and O. Cederquist, Chicago, Ill. Sign mechanism. No. 1,310,689; July 22; v. 264; p. 590.

Carter, Albert S., assignor to Henry Diston & Sons, Incorporated, Philadelphia, Pa. Pruning-saw. No. 1,310,904; July 22; v. 264; p. 620.

Cary, Robert S., Philadelphia, Pa. Metering device. No. 1,310,739; July 22; v. 264; p. 599.

Casper, Frank L., Howe Cave, N. Y. Automatic cabinet-hd support. No. 1,310,647; July 22; v. 264; p. 583.

Catlett, Charles, Stanton, Va., assignor to The British Potash Company, Limited, London, England. Treatment of ores for production of metal and of potassium compounds. No. 1,311,043; July 22; v. 264; p. 636.

Cavanagh, Michael, New York, N. Y. Internal-combustion engine. No. 1,311,044; July 22; v. 264; p. 636.

Cederquist, Oscar. (See Carpenter, Ralph G., assignor.)

Cement Products Company. (See Harris, John F., assignor.)

Chadwick, Lee S., East Cleveland, and C. C. Rehmer, assignors to The Cleveland Metal Products Company, Cleveland, Ohio. Fastening means for oven-doors and the like. No. 1,310,823; July 22; v. 264; p. 615.

Chenoweth, Edwin G., and W. J. Tollerton, Chicago, Ill. Replaceable bearing for brake-hangers. No. 1,310,607; July 22; v. 264; p. 575.

Chibbaro, Antonio, New York, N. Y. Music-roll protector. No. 1,311,045; July 22; v. 264; p. 636.

Chile Exploration Company. (See Rose and Monrath, assignors.)

Chism, Louis W., Planteville, assignor to The Steel Products Company, Hartford, Conn. Connecting device. No. 1,310,979; July 22; v. 264; p. 643.

Citron, Pinus, New York, N. Y. Shoe-protector. No. 1,311,046; July 22; v. 264; p. 636.

Clark Equipment Company. (See Williams, Alfred O., assignor.)

Cleveland Metal Products Company, The. (See Chadwick and Rehmer, assignors.)

Cliff, Frederic H. Barnes, assignor to S. Smith & Sons Motor Accessories Limited, St. Marylebone, London, England. Instrument for indicating the velocity of the wind or air-currents. No. 1,310,648; July 22; v. 264; p. 583.

Cobey, Frank, East Berlin, Conn. Chuck. No. 1,310,409; July 22; v. 264; p. 530.

Cochrane, Samuel R., Brooklyn, N. Y. Barrel-head. No. 1,310,587; July 22; v. 264; p. 621.

Coe, Elmer R., Wilkesburg, and R. M. Gibson, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. No. 1,310,608; July 22; v. 264; p. 575.

Coes, Russell R., assignor of one-half to Coes Wrench Co., Worcester, Mass. Wrench-handle. No. 1,311,110; July 22; v. 264; p. 668.

Coes, Russell R., assignor of one-half to Coes Wrench Co., Worcester, Mass. Handle for wrenches. No. 1,311,111; July 22; v. 264; p. 668.

Coes Wrench Co. (See Coes, Russell R., assignor.)

Coffey, Michael J., Freeport, assignor to T. A. Gillespie Company, New York, N. Y. Pipe-coupling. No. 1,310,740; July 22; v. 264; p. 599.

Coogan, Antonio, assignor to R. C. Koch, New York, N. Y. Wire-looping device for piano-strings. No. 1,310,791; July 22; v. 264; p. 610.

Cole Controlled Lock Company. (See King, Roy D., assignor.)

Cole, Cleveland W., Spokane, Wash., assignor to Cole Duplex Auto Signal Company. Automobile-signal. No. 1,310,410; July 22; v. 264; p. 539.

Cole Duplex Auto Signal Company. (See Cole, Cleveland W., assignor.)

Cole, Eugene M., Charlotte, N. C. Planter. (Release.) No. 14,692; July 22; v. 264; p. 675.

Cole, Lytle W., Lansing, Mich. Folding box. No. 1,311,047; July 22; v. 264; p. 636.

Collis, Norman P., (See Schultzen and Collis.)

Collis, Oliver D., (See Schultzen and Collis, assignors.)

Columbus McKinnon Chain Co., The. (See Armstrong, George J., assignor.)

Coon, Charles A., Anacosta, Mont. Valve. No. 1,310,960; July 22; v. 264; p. 644.

Connor, Robert D., and R. P. Slinger, Manchester, England. Apparatus for hammering the dies of wire-drawing machines. No. 1,310,968; July 22; v. 264; p. 641.

Cook, John H., Haddonsfield, N. J. Calendar. No. 1,310,905; July 22; v. 264; p. 630.

Cook, De Loyd K., Maquoketa, Iowa. Float-valve. No. 1,310,560; July 22; v. 264; p. 566.

Cook, Kathleen S., Easton, Pa. Skein-holder. No. 1,310,741; July 22; v. 264; p. 600.

Copperstone Products Company, The. (See Bennett, Alfred A., assignor.)

Coughtry, John W., (See Lipe and Coughtry.)

Coughtry, Stella S., administratrix. (See Lipe and Coughtry.)

Crall, Prentiss R., Columbus, Ohio. Stop-valve box. No. 1,310,321; July 22; v. 264; p. 530.

Cramer, Walter G., Cincinnati, Ohio. Antiskid device. No. 1,311,048; July 22; v. 264; p. 637.

Crevelius, Lawrence P., assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Rail-bonding. No. 1,310,411; July 22; v. 264; p. 540.

Crisman, Eric A., Burnham, Pa. Railway-tie. No. 1,310,649; July 22; v. 264; p. 583.

Crompton, Lionel W., Tampa, Fla. Game apparatus. No. 1,311,112; July 22; v. 264; p. 648.

Crosson, Charles M., Stillman, Okla. Evaporating-pan. No. 1,311,049; July 22; v. 264; p. 637.

Cronse-Hinds Company. (See Parker and Winter, assignors.)

Cru Patents Corporation. (See Uebelmesser, Charles, assignor.) (Release.)

Culver, Robert M., Girard, Ala. Self-starter-switch control. No. 1,310,690; July 22; v. 264; p. 590.

Curry, Joseph, Renton, Wash. Safety-brake for elevators. No. 1,311,050; July 22; v. 264; p. 637.

Curtis, Charles F., Pontardawe, Wales. Composition for the manufacture of binders of acid-pots or such like vessels. No. 1,311,051; July 22; v. 264; p. 637.

Curtis & Marble Machine Company. (See Marble, Edwin H., assignor.)

Curtiss Aeroplane and Motor Corporation. (See Burgess, William S., assignor.)

Curtiss Aeroplane and Motor Corporation. (See Dalton, Nelson W., assignor.)

Curtiss Aeroplane and Motor Corporation. (See Kleckler, Henry, assignor.)

Curtiss Aeroplane and Motor Corporation. (See Kirkham, Clarence A., assignor.)

Curtiss Aeroplane and Motor Corporation. (See Meener, William G., assignor.)

Dallage, R. A., (See Graves, McDowell, assignor.)

Dalton, Nelson W., Garden City, N. Y., assignor to Curtiss Aeroplane and Motor Corporation. Airplane-wing construction. No. 1,310,942; July 22; v. 264; p. 637.

Danforth, Matilda. (See Danforth, Oscar L., assignor.)

Danforth, Oscar L., assignor to M. Danforth, San Diego, Calif. Window-lock. No. 1,311,052; July 22; v. 264; p. 637.

Danziger, Adolph. (See Rider, Thomas B., assignor.)

Darlington, Albert E., Columbia, S. C. Picker-stick check for looms. No. 1,311,053; July 22; v. 264; p. 637.

Datta, Basiklal, Calcutta, India. Producing chlorine. No. 1,310,943; July 22; v. 264; p. 637.

Dautel, Gustave, Angers, France. Cover or lid for cooking-pots, saucepans, and other similar utensils. No. 1,310,981; July 22; v. 264; p. 644.

Davies, Gwyn O. O., Cle Elum, Wash. Circuit-breaker. No. 1,310,662; July 22; v. 264; p. 567.

Davis, Charles E., assignor to F. E. Miller, New York, N. Y. Surgical aneur. No. 1,310,982; July 22; v. 264; p. 644.

Davis, Robert W., Hiltonia, N. J. Ship construction. No. 1,310,650; July 22; v. 264; p. 583.

Davison, Gregory C., Groton, Conn. Delayed-action fuse. No. 1,311,054; July 22; v. 264; p. 638.

Davison, Gregory C., (See Spear and Davison.)

Devol, George K., assignor, by mesne assignments, to P. H. Beardon, San Francisco, Calif. Air-compressor. No. 1,310,844; July 22; v. 264; p. 637.

Dary Brothers Limited. (See Hand, Thomas W., assignor.)

Day, E. H., (See Theotso, Henry A., assignor.)

Dayton Manufacturing Company, The. (See Kirby, John, Jr., assignor.)

De Aburto, Jose R., Madrid, Spain. Internal-combustion engine. No. 1,310,906; July 22; v. 264; p. 630.

De Laval, George, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y. Detonating-fuse. No. 1,310,742; July 22; v. 264; p. 600.

De Laval, George, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y. Detonating-fuse. No. 1,310,792; July 22; v. 264; p. 610.

De Long, Marshall R., East Liverpool, Ohio. Baby-mobility. No. 1,310,651; July 22; v. 264; p. 583.

Delvaux, Arthur L., Champagny, Ill. Shoe-polishing brush. No. 1,311,055; July 22; v. 264; p. 638.

De Martino, Joseph, and E. Maurey, Chicago, Ill. Hydraulic transmission. No. 1,310,945; July 22; v. 264; p. 637.

Dempsey, James E., Manitowoc, Wis. Control mechanism for headlamps. No. 1,310,691; July 22; v. 264; p. 590.

Dempsey, William A., Scranton, Pa., assignor to Draper Corporation, Hopkinton, Mass. Automatic filling-replenishing loom. No. 1,310,793; July 22; v. 264; p. 610.

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Dodge, Harry C., (See Lowman, Roy L., assignor.)

Domeniconi, Albert S., San Anselmo, Calif. Cigarette-case. No. 1,310,652; July 22; v. 264; p. 584.

Donnelly, Clarence E., New York, N. Y. Parachute. No. 1,310,693; July 22; v. 264; p. 591.

Douch, Oliver L., and M. Hemlich, Elizabeth, N. J., assignors to The Singer Manufacturing Company. Sewing-machine. No. 1,311,114; July 22; v. 264; p. 649.

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Draper Corporation. (See Rhoades, Alonso E., assignor.)

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Dreyfus, Henry, Basel, Switzerland. Manufacture of acetic aldehyde. No. 1,310,984; July 22; v. 264; p. 644.

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Fowler, Benjamin F., Minneapolis, Minn. Cream-whip. No. 1,310,861; July 22; v. 264; p. 632.
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Gabel, Albert, Muscatine, Iowa. Lightning-arrester. No. 1,311,063; July 22; v. 264; p. 659.
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Gourju, Alexandre, Villeurbanne, assignor to La Societe A Lecompte et Cie., Lyon, France. Electric switch. No. 1,310,474; July 22; v. 264; p. 550.
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Graves, McDowell, assignor, by mesne assignments, to R. A. Dalluge, Los Angeles, Calif. Coin-controlled mechanism for vending-machines. No. 1,310,989; July 22; v. 264; p. 645.
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Holland, Frederick W., Brooklyn, assignor to Herman Scheuer & Sons, New York, N. Y., Letter-case. No. 1,310,621; July 22; v. 264; p. 578.
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Holliday, John S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa., Electric relay and motor for use therein. No. 1,310,622; July 22; v. 264; p. 578.
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Hood, Ernest K., Indianapolis, Ind., and W. B. Wolff, assignors to The American Slicing Machine Co., Chicago, Ill., Sharpener for slicing-machine knives. No. 1,310,700; July 22; v. 264; p. 592.
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Hotchkiss, Wallace J., Alpena, S. D., Food-container or lunch-box. No. 1,310,571; July 22; v. 264; p. 568.
Hothersall, John M., Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., Burner-stand. No. 1,310,830; July 22; v. 264; p. 617.
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Hughs, Thomas M., San Jose, Calif., Hose attachment. No. 1,310,625; July 22; v. 264; p. 628.
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Iles, Albert S., Birmingham, England, Apparatus for playing table and like games. No. 1,310,482; July 22; v. 264; p. 551.
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 International Harvester Company. (See Sharp, Charles S., assignor.)
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 Ireland, Ward S., St. Louis, Mo., and W. E. Lippert, Cincinnati, Ohio, assignor to National Shorthand Machine Company, St. Louis, Mo. Type-writing machine. No. 1,310,832; July 22; v. 264; p. 617.
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 Isberg, Henry, Portland, Ore. Game apparatus. No. 1,310,415; July 22; v. 264; p. 540.
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 Jaeger, Fredman R., Oak Park, Ill. Timing mechanism. No. 1,310,702; July 22; v. 264; p. 592.
 Jaffe, Harry, Chicago, Ill. Radiator for internal-combustion engines. No. 1,310,416; July 22; v. 264; p. 540.
 Jakobsen, Thomas T., Los Angeles, Calif. Music-leaf turner. No. 1,311,123; July 22; v. 264; p. 670.
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 Jendral, Jacob, Harnesboro, Pa. Rail-brake. No. 1,311,072; July 22; v. 264; p. 601.
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 Kleinschneider, Peter, Cudahy, Wis. Water-cooled refrigerator. No. 1,310,665; July 22; v. 264; p. 586.
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 Kollock, George L., and R. F. Martin, assignors to Universal Hammer Company, Seattle, Wash. Automatic hammer. No. 1,310,575; July 22; v. 264; p. 569.
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 Martlett, George E., Pasadena, Calif. Linotype-machine. No. 1,310,488; July 22; v. 264; p. 553.
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 Osterberg, Carl T., assignor of one-half to A. Hudson, Milwaukee, Wis. Calculating device. No. 1,310,961; July 22; v. 264; p. 640.
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 Parker, Eri W., Malden, Mass. Safety locking device. No. 1,310,577; July 22; v. 264; p. 569.
 Parker, John E., and D. B. Winter, assignors to Crouse-Hinds Company, Syracuse, N. Y. Means for attaching electrical appliances to conduit outlet-boxes. No. 1,310,578; July 22; v. 264; p. 570.
 Parker, Joseph F., Gardner, Mass. Automobile-licensing-fastening device. No. 1,310,769; July 22; v. 264; p. 605.
 Parker, Newell D., assignor to Standard Scientific Company, New York, N. Y. Supporting-clamp for various objects. No. 1,311,089; July 22; v. 264; p. 664.
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 Parr, George T., St. Paul, Minn. Collapsible fan-trellis. No. 1,311,130; July 22; v. 264; p. 693.
 Patterson, George F., Edgerton, Minn. Rake-cleanser. No. 1,310,541; July 22; v. 264; p. 563.
 Peacock, Benjamin A., Philadelphia, Pa., assignor, by means assignments, to R. Gilchrist, New York, N. Y. Decomposing natural silicates. No. 1,310,770; July 22; v. 264; p. 605.
 Pels, Bruno, New York, N. Y. Movable-eye doll. No. 1,310,925; July 22; v. 264; p. 633.
 Pleser, Matilda, Norwood, Ohio. Gas attachment for heating-furnaces. No. 1,310,926; July 22; v. 264; p. 634.
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 Perfeltone Corporation. (See Holmes, Arnold H., assignor.)
 Peters, Carl, St. Louis, Mo. Boat-launching apparatus. No. 1,310,962; July 22; v. 264; p. 640.
 Peters, Heber C., New York, N. Y., assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,310,963; July 22; v. 264; p. 640.
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 Peterson-Hill, Laurita, Copenhagen, assignor to Aktieselskab Roulunds Fabrikker, Odense, Denmark. Treating woven textile belts. No. 1,310,867; July 22; v. 264; p. 622.
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 Phelps, Walter H., Newark, N. J. Button and pin therefor. No. 1,310,864; July 22; v. 264; p. 612.
 Philadelphia Storage Battery Company. (See Martin, Harold M., assignor.)
 Phipps, Ira R., Mattoon, Ill. Check-row attachment for planters. No. 1,310,710; July 22; v. 264; p. 594.
 Piat, Joannes, Lyon, France. Carburetor-nozzle. No. 1,310,964; July 22; v. 264; p. 641.
 Pickop, George B., New Haven, assignor to The Malleable Iron Fittings Company, Branford, Conn. Grease-cup. No. 1,310,630; July 22; v. 264; p. 579.
 Plakney, Bryan D., Cincinnati, Ohio, assignor to Jaburg Bros., New York, N. Y. Mechanical movement for dough-handling machines. No. 1,310,711; July 22; v. 264; p. 594.
 Post, Truman W., assignor to Arms Products Company, New York, N. Y. Adapter for hand-grenades. No. 1,311,066; July 22; v. 264; p. 648.
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Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Multisorting-machine. No. 1,310,433; July 22; v. 264; p. 543.
 Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Feeding cards. No. 1,310,434; July 22; v. 264; p. 543.
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 Pratt, Lester A., Winchester, and F. N. Brink, Woburn, Mass. Manufacture of naphthalene trisulfonic acid. No. 1,311,090; July 22; v. 264; p. 664.
 Prescott, Sydney L., assignor to American Machine & Foundry Company, New York, N. Y. Cut-off mechanism for cigarette-machines. No. 1,310,631; July 22; v. 264; p. 580.
 Pritaker, Asher, Toronto, Ontario, Canada. Electric radiator. No. 1,310,838; July 22; v. 264; p. 618.
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 Pye, Bertram J., and H. Rabbea, Oakland, Calif. Fuel-vaporizer. No. 1,310,873; July 22; v. 264; p. 624.
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 Quick, Howard L., Brooklyn, N. Y. Stereoscopic motion-picture camera. No. 1,311,008; July 22; v. 264; p. 649.
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 Raffel, Ferdinand A., assignor to W. J. H. Strong, Chicago, Ill. Heat-motor. No. 1,310,435; July 22; v. 264; p. 544.
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 Rayle, Charles L., assignor to Fiedelac & Kropf Manufacturing Company, Chicago, Ill. Multistroke multijet carburetor. No. 1,310,505; July 22; v. 264; p. 612.
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 Reator, Enoch, New York, N. Y. Fluid-operated engine. No. 1,310,712; July 22; v. 264; p. 594.
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 Reed, Herbert C., Stamford, Conn. Manufacturing oxalic acid. No. 1,310,713; July 22; v. 264; p. 594.
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 Reichel, George L., New Haven, Conn. Gasifier and mixing device. No. 1,310,927; July 22; v. 264; p. 634.
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 Reynolds, Robert E., Houston, assignor of one-half to T. H. Bass, Harris county, Tex. Mold for plastic material. No. 1,310,632; July 22; v. 264; p. 580.
 Rhodes, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Loom-seat. No. 1,310,671; July 22; v. 264; p. 587.
 Richardson, John H., San Pedro, Calif. Safety-pin. No. 1,310,929; July 22; v. 264; p. 634.
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 Rideout, Arthur E., Chicago, Ill., assignor to National Blinding Machine Co., Chicago, Ill. Work-holder for the sealing of cartons. No. 1,310,580; July 22; v. 264; p. 570.
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 Riechimer, Ernest, assignor to Vulcan Iron Works, Wilkes-Barre, Pa. Air-tight door for pressure cylinders and tanks. No. 1,311,069; July 22; v. 264; p. 649.
 Rineche, Frank C., assignor to Burroughs Adding Machine Company, Detroit, Mich. Time-switch for adding-machines. No. 1,310,965; July 22; v. 264; p. 641.
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 Roberts, Abel H., Montreal, Quebec, Canada, assignor to International Arms and Fuse Company, New York, N. Y. Powder-separator. No. 1,310,633; July 22; v. 264; p. 580.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Making tubes for pneumatic tires. No. 1,310,436; July 22; v. 264; p. 544.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Making inflatable rubber articles. No. 1,310,437; July 22; v. 264; p. 544.
 Roberts, Fred T., Cleveland, Ohio. Tube for pneumatic tires. No. 1,310,438; July 22; v. 264; p. 544.
 Roberts, Fred T., Cleveland Heights, assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,439; July 22; v. 264; p. 544.

Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,440; July 22; v. 264; p. 544.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,441; July 22; v. 264; p. 545.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Process and apparatus for making hollow rubber articles. No. 1,310,442; July 22; v. 264; p. 545.
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 Roberts, William R., Dallas, Tex., and E. M. Heylman, assignors to Oliver Chilled Plow Works, South Bend, Ind. Gearing for the feed mechanism of planters. No. 1,311,010; July 22; v. 264; p. 609.
 Robertson, William A., Glasgow, Scotland, assignor of one-half to W. Henderson, Toronto, Ontario, Canada. Door. No. 1,310,840; July 22; v. 264; p. 619.
 Robinson, Edmund G., Montclair, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Fireproof composition. No. 1,310,841; July 22; v. 264; p. 619.
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 Robt. H. Ingersoll & Bro. (See Eberhard, Maloney, and Hoid, assignors.)
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 Rohm, Gustave A., Tarentum, Pa. Indicator. No. 1,310,444; July 22; v. 264; p. 545.
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 Rose, Charles A., Perth Amboy, N. J., and G. Monrath, Chugucamata, Chile, assignors to Chile Exploration Company, New York, N. Y. Corrosion-resisting condenser. No. 1,310,715; July 22; v. 264; p. 595.
 Rosenkrantz, Emil C., assignor of one-third to W. H. Rumpf, Evansville, Ind. Nut-lock washer. No. 1,311,011; July 22; v. 264; p. 649.
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 Rouston, Arthur J., assignor of two-thirds to J. H. Henderson and H. A. Werner, Prairie Depot, Ohio. Oil-level indicator and signaling device. No. 1,310,544; July 22; v. 264; p. 563.
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 Sain, Charles M., Logansdale, Nev. Postal check. No. 1,311,014; July 22; v. 264; p. 650.
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 Sanborn, Ralph C., assignor of fifty per cent. to P. J. McKenna, Briarcliff Manor, N. Y. Mathematical instrument. No. 1,310,547; July 22; v. 264; p. 564.
 Sandblom, Gideon E., assignor to Elektriska Pannrensning Aktiebolaget, Gottenborg, Sweden. Steam-boiler cleaner. No. 1,310,875; July 22; v. 264; p. 625.
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 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Construction of water-ballast tanks for submarines and other submersible floating structures. No. 1,310,877; July 22; v. 264; p. 625.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Light-artillery gun. No. 1,310,878; July 22; v. 264; p. 625.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Semi-automatic mechanism for breech-blocks. No. 1,310,879; July 22; v. 264; p. 625.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Door for the exit of torpedoes launched from torpedo-tubes. No. 1,310,880; July 22; v. 264; p. 625.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Brake for guns. No. 1,310,881; July 22; v. 264; p. 626.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage. No. 1,310,882; July 22; v. 264; p. 626.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Means for connecting and disconnecting large-caliber gun-barrels to and from their slides. No. 1,310,883; July 22; v. 264; p. 626.
 Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Safety locking apparatus for guns of large caliber. No. 1,310,884; July 22; v. 264; p. 626.
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 Sebastian, Alphonse A., assignor to Andrew Hoffman Mfg. Co., Chicago, Ill. Swinging and sliding window. No. 1,310,843; July 22; v. 264; p. 619.
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 Seward, George O., Jersey City, N. J., assignor to American Magnesium Corporation. Electrodeposition of magnesium. No. 1,310,449; July 22; v. 264; p. 646.
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 Shields, George A., assignor to C. H. Martin and R. A. Martin, Columbus, Ohio. Combined glass-machine. No. 1,310,451; July 22; v. 264; p. 646.
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Smiley, John F., Dallas, Tex. Elevated carrier. No. 1,311,018; July 22; v. 264; p. 651.
 Smith, Ernest C., assignor to Walter A. Wood Mowing & Reaping Machine Co., Hoesick Falls, N. Y. Cultivator. No. 1,310,583; July 22; v. 264; p. 670.
 Smith Gas Engineering Company, The. (See Smith, Harry F., assignor.)
 Smith, George C., Gottenborg, Sweden. Apparatus for hoisting and lowering boats. No. 1,310,717; July 22; v. 264; p. 595.
 Smith, Harry F., Lexington, Ohio, assignor to The Smith Gas Engineering Company. Rotary pump. No. 1,310,584; July 22; v. 264; p. 671.
 Smith, Kenely E., Birmingham, Ala. Attachment for rulers. No. 1,310,685; July 22; v. 264; p. 589.
 Smith, Thomas H., El Paso, Tex. Automobile-alarm. No. 1,311,019; July 22; v. 264; p. 651.
 Smith, William G., New York, N. Y. Carbureter-support. No. 1,311,020; July 22; v. 264; p. 651.
 Smythe, Horace E., assignor to The S. R. Smythe Company, Pittsburgh, Pa. Continuous furnace. No. 1,310,846; July 22; v. 264; p. 620.
 Snell, Lyle K., assignor to Cadillac Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,310,898; July 22; v. 264; p. 629.
 Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Explosive compound. No. 1,310,900; July 22; v. 264; p. 641.
 Societe Des Moteurs Salmson (Système Canton-Cone). (See Salmson, Emile J., assignor.)
 Solberg, Louis J., Malta, Mont. Folding clamp. No. 1,310,551; July 22; v. 264; p. 654.
 Southgate, George T., Brooklyn, N. Y. High-potential switch. No. 1,310,555; July 22; v. 264; p. 571.
 Spear, Lawrence Y., and G. C. Davison, New London, Conn. Fired ammunition for non-recoil guns. No. 1,311,021; July 22; v. 264; p. 651.
 Specht, Harry M., New York, N. Y. Apparatus for making filament from viscous or viscous substances. No. 1,310,509; July 22; v. 264; p. 657.
 Speirs, Charles A., The Dargle, Natal, South Africa. Screw-extractor. No. 1,310,510; July 22; v. 264; p. 657.
 Sprengnether, William F., St. Louis, Mo. Spark-plug. No. 1,310,847; July 22; v. 264; p. 620.
 Sprong, Severn D., Brooklyn, N. Y. Lock-nut. No. 1,311,139; July 22; v. 264; p. 673.
 Stacy, Charles E., Dayton, Ohio. Airplane. No. 1,311,007; July 22; v. 264; p. 666.
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 Standard Parts Company, The. (See Bryant, Richard S., assignor.)
 Standard Parts Company, The. (See Newsom, Horace H., assignor.)
 Standard Scientific Company. (See Parker, Newell D., assignor.)
 Starkey, Rollin E. (See Strand, Charles M., assignor.)
 Stedman, Seymour. (See Gardner, Benjamin F., assignor.)
 Steel Products Company, The. (See Chism, Louis W., assignor.)
 Stevenson, Donald C. (See Rintoul and Stevenson.)
 Stewart, Ernest L., La Veta, Colo. Incubator thermostat control. No. 1,311,098; July 22; v. 264; p. 666.
 Stickney, Charles L., Skull Valley, Ariz. Expansion-drill. No. 1,311,022; July 22; v. 264; p. 652.
 Stockman, James S., Brooklyn, N. Y. Marine craft. No. 1,310,809; July 22; v. 264; p. 613.
 Stone, Wallace H., Wabasha, Minn. Automatic air-hose coupling. No. 1,311,023; July 22; v. 264; p. 652.
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 Storie, Ole O., Tacoma, Wash., assignor to The Storie Engine Company, Keweenaw, Wis. Transmission-gearing. No. 1,310,935; July 22; v. 264; p. 635.
 Straub, Oscar I., and M. Wildrick, U. S. Army. Bomb or submarine mine. No. 1,310,586; July 22; v. 264; p. 571.
 Stromberg Motor Devices Company. (See Leavelle, Richard A., assignor.)
 Strong, William J. H. (See Raffel, Ferdinand A., assignor.)
 Stroud, Charles M., assignor of one-half to R. E. Starkey, Minneapolis, Minn. Spark-plug. No. 1,310,970; July 22; v. 264; p. 642.
 Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Conveyor. No. 1,310,454; July 22; v. 264; p. 647.
 Stuart, John, St. Kilda, Melbourne, Victoria, Australia. Resilient wheel. No. 1,311,024; July 22; v. 264; p. 652.
 Sumersille, Alano E., San Juan, Porto Rico. Paper-clip. No. 1,310,587; July 22; v. 264; p. 571.
 Summers, Leland L., Chicago, Ill. Ventilating and cooling. No. 1,310,511; July 22; v. 264; p. 557.
 Summers, Paul J., Mangum, Okla. Weighing-stand for cotton-pickers. No. 1,310,638; July 22; v. 264; p. 581.
 Sundh, August, Hastings-upon-Hudson, assignor to National Clutch Co., Inc., New York, N. Y. Flexible tubing. No. 1,311,025; July 22; v. 264; p. 652.
 Sumer, James E., Hops, N. D. Cross-head guide for engines. No. 1,310,512; July 22; v. 264; p. 557.
 Sverkerup, Edward A., Sea Cliff, N. Y., and E. Viall, East Orange, N. J. Method of and means for riding guns. No. 1,310,933; July 22; v. 264; p. 635.

Sverkerup, Edward A., Sea Cliff, N. Y., and E. Viall, East Orange, N. J. Method of and means for riding guns. No. 1,310,934; July 22; v. 264; p. 635.
 Swan, Harrington, Kemerton, near Tewkesbury, England. Pen. No. 1,311,026; July 22; v. 264; p. 652.
 Swartz, George W., assignor to Acme Harvesting Machine Company, Peoria, Ill. Self-propelled vehicle. No. 1,310,772; July 22; v. 264; p. 605.
 Swinglehurst, Harry, Laconia, N. H., assignor, by mesne assignments, to Scott & Williams, Incorporated. Dial-holding mechanism for knitting-machines. No. 1,311,099; July 22; v. 264; p. 660.
 T. A. Gillespie Company. (See Coffey, Michael J., assignor.)
 T. A. Gillespie Company. (See De Laval, George, assignor.)
 Tainton, Evelyn C., Doornfontein, Johannesburg, Transvaal, South Africa. Roasting ores or concentrates. No. 1,310,455; July 22; v. 264; p. 647.
 Tait, Alfred D., Evanston, Ill. Dump-car. No. 1,311,140; July 22; v. 264; p. 673.
 Tavastila, Emil. (See Siren and Tavastila.)
 Tawney, Rufus A., Grand Junction, Colo. Cam-lever coupling. No. 1,310,456; July 22; v. 264; p. 647.
 Taylor, Eli J., Edmonton, Alberta, Canada. Vehicle-tire. No. 1,310,513; July 22; v. 264; p. 557.
 Teeple, Oliver J., Jr., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing propellant powder. No. 1,310,848; July 22; v. 264; p. 620.
 Terhune, Leonard H., Newark, assignor to The Arlington Company, Arlington, N. J. Table for brush-filling machines. No. 1,310,457; July 22; v. 264; p. 647.
 Terminal Traction Company. (See Dunlop and Boobar, assignors.)
 Theston, Henry A., assignor of one-half to E. H. Day, Minneapolis, Minn. Radiator foot-rest. No. 1,310,552; July 22; v. 264; p. 565.
 Thomas, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe-bottom-filling machine. No. 1,310,588; July 22; v. 264; p. 571.
 Thompson, Alfred T. (See Fredrickson, John C., assignor.)
 Thompson, George S., Rockessin, Del. Means of communication between aviators. No. 1,310,816; July 22; v. 264; p. 613.
 Thompson, Stanley P., Seattle, Wash. Interest-computing machine. No. 1,311,100; July 22; v. 264; p. 660.
 Thompson, Stanley P., Seattle, Wash. Time and date indicator. No. 1,311,101; July 22; v. 264; p. 666.
 Thompson, Thomas, Makoti, N. D. Lock. No. 1,311,102; July 22; v. 264; p. 666.
 Thornton, Joseph N., et al. (See McEllan, Jack, assignor.)
 Thornton, Lola E., et al. (See McEllan, Jack, assignor.)
 Thorson, Thorwald, Forest City, and F. M. Eller, Ames, Iowa. Mortar-joint raker and finisher. No. 1,310,639; July 22; v. 264; p. 581.
 Thropp, Joseph W., Trenton, N. J. Pulverizer. No. 1,310,809; July 22; v. 264; p. 629.
 Thwaites, Alfred J. (See Fromm and Thwaites.)
 Tideman, Sven, and J. W. Anderson, Columbus, Ohio. Electric-switch lock. No. 1,310,514; July 22; v. 264; p. 558.
 Tilden, Ellsworth, Duluth, Minn. Stump-burner. No. 1,310,718; July 22; v. 264; p. 595.
 Timberlake, Daniel T., St. Louis, assignor to Universal Motor Truck and Traction Engine Company, St. Louis, Mo. Telescopic driving-shaft. No. 1,310,971; July 22; v. 264; p. 642.
 Tisserant, Auguste A. H., St.-Cloud, France. Motor road-vehicle. No. 1,310,972; July 22; v. 264; p. 642.
 Toledo Scale Company. (See Bergan, Harry E., assignor.)
 Toledo Scale Company. (See Haggard, Clarence H., assignor.)
 Tollerton, William J. (See Chenoweth and Tollerton.)
 Tooke, William A. (See Slipperly, John E., assignor.)
 Trager, Victor E. (See Langaker, Traker, and Rordam.)
 Trautman, Ray, Minneapolis, Minn. Artificial hand. No. 1,310,589; July 22; v. 264; p. 572.
 Trettin, Carl, assignor to Siemens-Schuckert Werke, G. m. b. H., Berlin, Germany. Electric-motor system. No. 1,310,458; July 22; v. 264; p. 647.
 Triegs, James M., and W. D. Redrup, assignors to The Majestic Company, Huntington, Ind. Furnace. No. 1,310,811; July 22; v. 264; p. 613.
 Triegs, James M., and W. D. Redrup, assignors to The Majestic Company, Huntington, Ind. Duplex-register boot. No. 1,310,812; July 22; v. 264; p. 614.
 Trojan Powder Company. (See Skoglund, Jean V., assignor.)
 Trojan Powder Company. (See Swilling, Walter O., assignor.)
 Tybon Company. (See Kirkbride, Edmund, assignor.)
 U. S. Ball Bearing Manufacturing Company. (See Lipbert-Bruensner, Otto A. J. R., assignor.)
 U. S. Light & Heat Corporation. (See Blise, William L., assignor.)
 Uchida, Yuharo, Tokyo, Japan. Electric-current limiter. No. 1,311,027; July 22; v. 264; p. 652.
 Uebelmeier, Charles, New York, N. Y., assignor to Cru Patents Corporation. Film-guide control. (Reissue.) No. 14,694; July 22; v. 264; p. 676.
 Ullman, Hugo, St. Gallen, Switzerland. Telephonograph. No. 1,310,600; July 22; v. 264; p. 620.
 Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)

Union Carbide Company. (See Becket, Frederick M., assignor.)
 Union Switch & Signal Company, The. (See Coe and Gibson, assignors.)
 Union Switch & Signal Company, The. (See Holliday, John S., assignor.)
 Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
 Union Switch & Signal Company, The. (See Neubert, Walter P., assignor.)
 United Gas Improvement Company. (See Fulweller, Walter H., assignor.)
 United Shoe Machinery Corporation. (See Remick, Lloyd T., assignor.)
 United Shoe Machinery Corporation. (See Winkley, Erasmus E., assignor.)
 United States Envelope Company. (See Novick, Abraham, assignor.)
 United States of America. (See Edwards, Vance P., assignor.)
 United States of America. (See Lindauer, Alfred C., assignor.)
 Universal Hammer Company. (See Kollock and Martin, assignors.)
 Universal Motor Truck and Traction Engine Company. (See Timberlake, Daniel T., assignor.)
 Van Buskirk, John S., et al. (See Kendrick, William D., assignor.)
 Van Cott, Frank J., Unadilla, N. Y. Saddle for anchoring cables for silos and the like. No. 1,311,141; July 22; v. 264; p. 674.
 Varnam, Gilbert S., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Secret signalling system. No. 1,310,719; July 22; v. 264; p. 665.
 Vall, Ethan. (See Suverkrup and Vall.)
 Victory Bottle Capping Machine Co. Inc. (See Oliver, Ernest A., assignor.)
 Via, Gerhardt N., Paris, France. Transforming alkali-metal monochromates into blechromates. No. 1,310,720; July 22; v. 264; p. 666.
 Von Sebrink, Arnold, St. Louis, Mo. Removable running-board for automobiles. No. 1,310,973; July 22; v. 264; p. 642.
 Vulcan Iron Works. (See Rinehimer, Ernest, assignor.)
 Wadsworth, Walter S., Eastend, Saskatchewan, Canada. Valve-grinding tool. No. 1,310,646; July 22; v. 264; p. 681.
 Waggoner, Chauncey W., assignor to W. A. Jones, Morgan-town, W. Va. Headlight-lens. No. 1,310,721; July 22; v. 264; p. 666.
 Walker, James, Carnarvon, Western Australia. Attachment for discharge of liquid from containers. No. 1,311,103; July 22; v. 264; p. 668.
 Walker, Matthew S., Corning, N. Y. Electric-light fixture. No. 1,310,936; July 22; v. 264; p. 635.
 Walkos, Michael, Detroit, Mich. Rotary gas-engine. No. 1,310,459; July 22; v. 264; p. 547.
 Walter A. Wood Mowing & Reaping Machine Company. (See Smith, Ernest C., assignor.)
 Walther, Otto, Bloomington, Ill. Beet-topper. No. 1,310,849; July 22; v. 264; p. 620.
 Walton, William L., Bantry, N. D. Power-plow lift. No. 1,310,453; July 22; v. 264; p. 546.
 Ward, Albert M., Rochester, N. Y. Signal. No. 1,310,813; July 22; v. 264; p. 614.
 Ward, William M., Wyandotte, Mich. Phonograph-disk-record-holding cabinet. No. 1,310,814; July 22; v. 264; p. 614.
 Warnke, Clarence F., Toledo, Ohio. Tackling-machine. No. 1,310,590; July 22; v. 264; p. 572.
 Warnock, Robert, assignor to Empire Cream Separator Company, Bloomfield, N. J. Muffler construction for air-pumps and the like. No. 1,310,722; July 22; v. 264; p. 590.
 Watson Arms Company. (See Watson, Charles P., assignor.)
 Watson, Charles P., assignor to Watson Arms Company, Inc., Philadelphia, Pa. Detonator for ordnance-projectiles. No. 1,311,104; July 22; v. 264; p. 666.
 Weaver, Bent L., Harrisburg, Pa. Dusting-machine. No. 1,310,815; July 22; v. 264; p. 614.
 Webb, Edwin W. (See Barber and Webb.)
 Weber, Carl M. (See Robinson, Joseph B., assignor.)
 Webster, Francis H., St. Louis, Mo. Nut-lock. No. 1,310,723; July 22; v. 264; p. 596.
 Weiss, Louis T., Brooklyn, N. Y. Rewinding-machine for fishing-lines. No. 1,310,816; July 22; v. 264; p. 614.
 Welch, Herman A., Coldwater, Kans. Wrench. No. 1,310,641; July 22; v. 264; p. 582.
 Wellman, Charles A., Chicago, Ill. Self-cleaning spark-plug. No. 1,310,817; July 22; v. 264; p. 615.
 Wells, Alfred A. (See Ellis and Wells.)
 Werner, Herbert A., et al. (See Routson, Arthur J., assignor.)
 Westberg, Sigurd, Christiania, Norway. Reduction process. No. 1,310,724; July 22; v. 264; p. 596.
 Westberg, Arvid. (See Hore and Skoglund, assignors.)
 Westergaard, Elmer, Holyoak, Del. Glasser-box. No. 1,310,725; July 22; v. 264; p. 596.
 Western Electric Company. (See Bell, John H., assignor.)
 Wheaty, George H., Racine, Wis. Rolled-apparel receptacle. No. 1,310,974; July 22; v. 264; p. 642.
 Wheaty, George H., Racine, Wis. Skidable trunk-holder. No. 1,310,975; July 22; v. 264; p. 643.

Whittaker, Douglas, Leicester, England. Shield tunneling-machine. No. 1,311,142; July 22; v. 264; p. 674.
 Whittaker, Douglas, Leicester, England. Shield tunneling-machine. No. 1,311,143; July 22; v. 264; p. 674.
 Whittaker, John H., Dennistown, N. J. Foldable broom-board stand. No. 1,310,490; July 22; v. 264; p. 553.
 Whittaker, Marvin H. (See Lirien and Whittaker.)
 White, Thomas H., South Chicago, Ill. Journal-box. No. 1,310,642; July 22; v. 264; p. 582.
 White, William D., El Paso, Tex. Collar-form. No. 1,311,105; July 22; v. 264; p. 667.
 Wildrick, Meade. (See Straub and Wildrick.)
 Wiley, Harry W., Black Lick, Pa. Can-opener. No. 1,311,028; July 22; v. 264; p. 653.
 Wilkinson, Edward F., Gramercy, La. Dismantling-tool. No. 1,311,029; July 22; v. 264; p. 653.
 Willard, Charles F., New York, assignor, by mesne assignments, to L-W-F Engineering Company, Inc., College Point, Long Island, N. Y. Guy-wire attachment. No. 1,310,850; July 22; v. 264; p. 620.
 Williams, Alfred O., South Bend, Ind., assignor to Clark Equipment Company, Buchanan, Mich. Differential gear. No. 1,310,976; July 22; v. 264; p. 643.
 Williams, Evan O., Hamworthy, near Poole, assignor to Williams Foreign Patents, Limited, London, England. Construction of reinforced-concrete floors, decks, such as decks of ships, deck-floors for bridges, and the like. No. 1,310,515; July 22; v. 264; p. 558.
 Williams Foreign Patents, Limited. (See Williams, Evan O., assignor.)
 Williams, Frederic S., Brooklyn, assignor to F. Klein, trustee, New York, N. Y. Sewing-machine. No. 1,310,460; July 22; v. 264; p. 548.
 Williams, Joseph S., Riverton, N. J. Floatable concrete construction. No. 1,310,401; July 22; v. 264; p. 548.
 Williams, Joseph S., Riverton, N. J. Reinforced concrete construction and constructing the same. No. 1,310,462; July 22; v. 264; p. 548.
 Williamson Heater Company, The. (See Richardson and Muller, assignors.)
 Wills, Walter B., Baltimore, Md. Strainer. No. 1,310,773; July 22; v. 264; p. 601.
 Wilmore, Carlton A., Ben Avon, assignor of one-third to E. J. Schellentrager and one-third to J. H. Schellentrager, Pittsburgh, Pa. Rail-clamp. No. 1,310,851; July 22; v. 264; p. 620.
 Winkley, Erasmus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Automatic shoe-machine. No. 1,310,463; July 22; v. 264; p. 548.
 Winkley, Erasmus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Automatically-controlled shoe-machine. No. 1,310,491; July 22; v. 264; p. 553.
 Winter, Daniel B. (See Parker and Winter.)
 Wireback, Joseph F., Pittsburgh, Pa. Positive or master cast for the reproduction of negative or socketed artificial limbs. No. 1,310,937; July 22; v. 264; p. 635.
 Wise, Charles H. (See Russell, Charles H., assignor.)
 Wisnerman, Joseph W., Gallon, Ohio. Box. No. 1,311,149; July 22; v. 264; p. 675.
 Wm. Ayres & Sons. (See Ayres, George R., assignor.)
 Wolf, Jacob D., London, England. Ore-concentrating apparatus. No. 1,310,492; July 22; v. 264; p. 554.
 Wolf, John, Topeka, Kans. Lock. No. 1,310,774; July 22; v. 264; p. 606.
 Wolf, John, Topeka, Kans. Lock. No. 1,310,775; July 22; v. 264; p. 606.
 Wolfert, Maurice. (See Glasel, Charles J., assignor.)
 Wolff, Wallace B. (See Hood and Wolff.)
 Wolff, Willy, assignor to Radium Chemical Company, Milwaukee, Wis. Developer for dyed fabrics. No. 1,311,150; July 22; v. 264; p. 675.
 Wood, Frederick P., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Proofing materials. No. 1,310,818; July 22; v. 264; p. 615.
 Wood, Henry A. W., New York, and J. A. Isbell, Middletown, assignors to Wood Newspaper Machinery Corporation, New York, N. Y. Quadruple air-brake for rotary presses. No. 1,311,030; July 22; v. 264; p. 653.
 Wood, Henry A. W., New York, N. Y., and C. Nordford, Jersey City Heights, N. J., assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Braking mechanism for rotary presses. No. 1,311,031; July 22; v. 264; p. 653.
 Wood, Samuel, Parkers Landing, assignor of one-third to The Franklin Valveless Engine Co., Franklin, Pa. Sand-screen for pumps. No. 1,310,636; July 22; v. 264; p. 589.
 Woods, Homer A., Indianapolis, Ind. Egg-candling attachment for portable lanterns. No. 1,311,106; July 22; v. 264; p. 667.
 Woodstock Typewriter Company. (See Hokanson, Otto A., assignor.)
 Woodward, Arthur H., Alhadena, Calif., assignor, by mesne assignments, to Johnson Pore Box Company, Chicago, Ill. Pore-regulator. No. 1,310,810; July 22; v. 264; p. 613.
 Workman, Robert J., San Francisco, Calif. Can-stuffing machine. No. 1,311,144; July 22; v. 264; p. 674.
 Wygant, Frederick A. (See Hand and Wygant.)
 Willys-Overland Company, The. (See McKinley, Charles W., assignor.)

Willys-Overland Company, The. (See Rollins, Grant W., assignor.)
 Wood Newspaper Machinery Corporation. (See Wood and Isbell, assignors.)
 Wood Newspaper Machinery Corporation. (See Wood and Nordford, assignors.)
 Wyman, Charles O., Anoka, Minn. Power-transmitting chain. No. 1,310,726; July 22; v. 264; p. 597.

Xardell, Charles A., Utica, N. Y. Compartment-tank. No. 1,310,516; July 22; v. 264; p. 558.
 Xardell, Charles A., Utica, N. Y. Tank. No. 1,310,517; July 22; v. 264; p. 558.
 Zelodier, Werner, and J. E. Martin, Philadelphia, Pa. Coupling to be used for pipe, hose, folding crutches, and the like. No. 1,311,145; July 22; v. 264; p. 674.
 Zorzi, Carlo, Milan, Italy. Electrode. No. 1,310,727; July 22; v. 264; p. 597.

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Blank & Company. (See Meyer, Felix, assignor.)
 Capron, Horace M., assignor, by mesne assignments, to Equipment Corporation of America, Chicago, Ill. Industrial tractor. No. 53,627; July 22; v. 264; p. 676.
 Cook, Ernest C., Chicago, Ill. Phonograph-cabinet. No. 53,628; July 22; v. 264; p. 676.
 Equipment Corporation of America. (See Capron, Horace M., assignor.)
 Goldsmith, Wolf T., Newark, N. J. Bag-frame. No. 53,629; July 22; v. 264; p. 676.
 Goldsmith, Wolf T. (See Jacobs, Leo, assignor.)
 Goldsmith, Wolf T. (See Scalsbrino, John, assignor.)
 Goodwin, Edward W., Detroit, Mich. Instrument-board for motor-vehicles. No. 53,630; July 22; v. 264; p. 676.
 Hunsaker, John E., assignor of one-third to L. Parker and one-third to R. Morray, Vienna, Ill. Chart. No. 53,631; July 22; v. 264; p. 677.
 J. H. Parker & Son. (See Parker, William M., assignor.)
 Jacobs, Leo, New York, N. Y., assignor to W. T. Goldsmith, Newark, N. J. Hand-bag frame. Nos. 53,632-4; July 22; v. 264; p. 677.
 Kent, William J., Brooklyn, N. Y., assignor to Revere Rubber Company, Horseshoe-pad. No. 53,635; July 22; v. 264; p. 677.
 McGee, Joseph O., Westpoint, Tenn. Hoe. No. 53,637; July 22; v. 264; p. 678.
 Mergenthaler Linotype Company. (See Mokatzel, Salloum A., assignor.)
 Meyer, Felix, assignor to Blank & Company, Inc., New York, N. Y. Lace. No. 53,636; July 22; v. 264; p. 677.
 Mokatzel, Salloum A., New York, N. Y., assignor to Mergenthaler Linotype Company. Font of Arabic type. No. 53,638; July 22; v. 264; p. 678.

Moore, William J. P., New York, N. Y. Wheel. No. 53,639; July 22; v. 264; p. 678.
 Morray, Ralph, et al. (See Hunsaker, John E., assignor.)
 Parker, Lucas, et al. (See Hunsaker, John E., assignor.)
 Parker, William M., assignor to J. H. Parker & Son, Incorporated, Parkersburg, W. Va. Plural socket. No. 53,640; July 22; v. 264; p. 678.
 Revere Rubber Company. (See Kent, William J., assignor.)
 Rosel, William E., Columbus, Ohio. Spark-plug tool. No. 53,641; July 22; v. 264; p. 678.
 Scalsbrino, John, New York, N. Y., assignor to W. T. Goldsmith, Newark, N. J. Hand-bag frame. Nos. 53,642-3; July 22; v. 264; p. 678.
 Shaffer, Edwin F., Columbus, Ohio. Ink-well. No. 53,644; July 22; v. 264; p. 679.
 Taylor, William W., Columbus, Ohio. Device for sharpening fish-hooks. No. 53,645; July 22; v. 264; p. 679.
 Tebo, Ida E., Brooklyn, N. Y. Sweater. No. 53,646; July 22; v. 264; p. 679.
 Turton, William, East Grange, N. J. Member for bag frames, purse-frames, and similar articles. No. 53,647; July 22; v. 264; p. 679.
 Velt, Berthold, Freeport, N. Y. Button. No. 53,648; July 22; v. 264; p. 679.
 Wader, Hermann, Sr., and C. H. Wolff, Philadelphia, Pa. Tongue-depressor. No. 53,649; July 22; v. 264; p. 679.
 Welmar, Robert H., Denver, Colo. Button or badge. No. 53,650; July 22; v. 264; p. 679.
 Wolff, Charles H. (See Weder and Wolff.)

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. B. Ansbacher & Company, Inc., New York, N. Y. Soluble blue. No. 125,951; July 22; v. 264; p. 695.
 Ace Waist Co. Inc., New York, N. Y. Ladies' waists. No. 125,946; July 22; v. 264; p. 695.
 Adie, Andrew, Newton, Mass. Sweaters. No. 125,947; July 22; v. 264; p. 695.
 A. G. Spalding & Bros., New York, N. Y. Playing-balls. No. 125,949; July 22; v. 264; p. 699.
 Alexander Hamilton Institute, New York, N. Y. Publications. No. 125,948; July 22; v. 264; p. 695.
 American Core-Twine Company, Boston, Mass. Clothes-line. No. 125,940; July 22; v. 264; p. 695.
 Anchor Leather Co., Chicago, Ill. Tanned leather blades for shoe-uppers. No. 125,950; July 22; v. 264; p. 695.
 Apparel Manufacturing Company, Chicago, Ill. Men's and boys' athletic union-suits. No. 125,952; July 22; v. 264; p. 695.
 A. Priemeyer Shoe Company, Jefferson City, Mo. Garters or spats. No. 125,961; July 22; v. 264; p. 695.
 Armstrong Cork Company, Pittsburgh, Pa. Composition soles for boots and shoes. No. 125,954; July 22; v. 264; p. 695.
 Armstrong Cork Company, Pittsburgh, Pa. Publications issued bimonthly. No. 125,953; July 22; v. 264; p. 695.
 Associated Pharmacists, Inc., New York, N. Y. Talcum powder. No. 125,955; July 22; v. 264; p. 695.
 Avalon Farms Company, Chicago, Ill. Tonic and conditioner for use in hogs only. No. 125,956; July 22; v. 264; p. 695.
 Bates Manufacturing Company, Lewiston, Me. Cotton piece goods. No. 125,958; July 22; v. 264; p. 695.
 Bauman, Abraham, New York, N. Y. Men's, boys', and children's outer wearing-apparel. No. 125,959; July 22; v. 264; p. 695.
 Bauah Machine Tool Company, Springfield, Mass. Certain named machinery and tools and parts thereof. No. 125,960; July 22; v. 264; p. 695.
 Benec Exporting & Importing Co., Inc., New York, N. Y. Canned condensed milk. No. 125,961; July 22; v. 264; p. 695.
 Benjamin Electric Manufacturing Company, Chicago, Ill. Wireless plural receptacles, cluster-bodies, reflector-sockets, etc. No. 125,962; July 22; v. 264; p. 695.
 Berrier Manufacturing Company, Canton, Ohio. Black and galvanized steel. No. 125,963; July 22; v. 264; p. 695.

Bernstein, David, Cleveland, Ohio. Metal-cleanser. No. 125,964; July 22; v. 264; p. 695.
 Bleecker, William R., Albany, N. Y. Lubricating oils and greases. No. 125,965; July 22; v. 264; p. 695.
 Boddington, Henry D., Los Angeles, Calif. Substitute for eggs and baking-powder. No. 125,966; July 22; v. 264; p. 695.
 Bona, Adriano, New York, N. Y. Dandruff-destroyer and hair-grower. No. 125,967; July 22; v. 264; p. 695.
 Booth Fisheries Sardine Company, Chicago, Ill. Canned sardines. No. 125,968; July 22; v. 264; p. 695.
 Bratton, Alvin A., Columbus, Ohio. Articles appearing in bulletins or lessons. No. 125,969; July 22; v. 264; p. 695.
 Bryant, A. H., New York, N. Y. Safety-razors. No. 125,971; July 22; v. 264; p. 695.
 Buckley Macaroni Company, Inc., Kensington, Conn. Macaroni. No. 125,972; July 22; v. 264; p. 695.
 Cascade Packing Company, Anacortes, Wash. Canned salmon. No. 125,973; July 22; v. 264; p. 695.
 Celluloid Company, New York, N. Y. Rosettes, etc., for harness and luggage-tags, all made of pyroxylin. Nos. 125,974-6; July 22; v. 264; p. 696.
 Cheat-Hear Sock Co., Boston, Mass. Men's and children's hosiery. No. 125,977; July 22; v. 264; p. 696.
 Clothier, Robert W., Washington, D. C. Medicinal preparations for colds, catarrh, etc. No. 125,978; July 22; v. 264; p. 696.
 Cohn-Hall-Marr Co., New York, N. Y. Cotton piece goods. No. 125,979; July 22; v. 264; p. 696.
 Congoleum Company, Philadelphia, Pa. Prepared floor-covering of the oil-cloth type. Nos. 125,980-1; July 22; v. 264; p. 696.
 Conover, John T., New Brunswick, N. J. Ladies' hosiery. No. 125,982; July 22; v. 264; p. 696.
 Doniger, Jacob, Brooklyn, N. Y. Depilatory. No. 125,985; July 22; v. 264; p. 696.
 Douthitt, Jas. W., Bedford, Ind. Remedy for the treatment of freckles, tan, etc. No. 125,986; July 22; v. 264; p. 696.
 Dry Milk Company, The, New York, N. Y. Deaerated milk. No. 125,987; July 22; v. 264; p. 696.
 Duboc Paper Company, Chicago, Ill. Certain named paper and stationery. No. 125,988; July 22; v. 264; p. 696.

Eastland Studios, Philadelphia, Pa.; Baltimore, Md.; Wilmington, Del. and Washington, D. C. Photographs and framed and unframed pictures. No. 125,990; July 22; v. 264; p. 697.

E. E. Taylor Company, Boston, Mass. Men's and women's leather boots and shoes. No. 126,090; July 22; v. 264; p. 699.

Empire Silk Company, Wilmington, Del. and New York, N. Y. Silk piece goods. Nos. 125,991-126,000; July 22; v. 264; p. 699.

Ercoli Marcelli & Co., Milan, Italy. Electric oscillating fans. No. 126,037; July 22; v. 264; p. 697.

E. Rosenfeld & Company, Baltimore, Md. Night-shirts, nightgowns, pajamas. No. 126,069; July 22; v. 264; p. 698.

Federal Rubber Company, Cudahy, Wis. Composition soles and heels. No. 125,601; July 22; v. 264; p. 696.

Fineh, Van Slyck & McConville, St. Paul, Minn. Hosiery and gloves. No. 126,062; July 22; v. 264; p. 699.

Fineh, Van Slyck & McConville, St. Paul, Minn. Certain named clothing for men, women, and children. No. 126,063; July 22; v. 264; p. 696.

Finke and Johnson, Fort Wayne, Ind. Preparation for the treatment of rheumatism and kidney disorders. No. 126,064; July 22; v. 264; p. 696.

Francis T. Simmons & Co., Chicago, Ill. Men's, women's, and children's underwear. No. 126,082; July 22; v. 264; p. 699.

Frank A. Weeks Manufacturing Company, New York, N. Y. Stationers' supplies. No. 126,106; July 22; v. 264; p. 700.

Fredericks, Maurice B., New York, N. Y. Athletic goods, shirts, &c. No. 126,005; July 22; v. 264; p. 696.

General Appraisal Company, Seattle, Wash. Periodical published monthly. No. 126,096; July 22; v. 264; p. 699.

Geo. Rahmann & Co., New York, N. Y. Leather belting. No. 126,044; July 22; v. 264; p. 698.

G. H. Dunbar & Sons, Inc., Gulfport, Miss. Canned molasses and sweet potatoes. No. 125,989; July 22; v. 264; p. 696.

Grelson, Glazen Company, Detroit, Mich. Bread. No. 126,067; July 22; v. 264; p. 697.

Guttard Company, San Francisco, Calif. Chocolates, chocolate and cocoa combined, cocoa. No. 126,068; July 22; v. 264; p. 697.

Gulf Publishing Company, Inc., Houston, Tex. Weekly magazine. No. 126,009; July 22; v. 264; p. 697.

Gutmann & Company, Chicago, Ill. Liquid chemicals for use in tanning processes. No. 126,010; July 22; v. 264; p. 697.

Heider Manufacturing Company, Carroll, Iowa. Coaster-wagon. No. 126,011; July 22; v. 264; p. 697.

Hertzog, Charles, New York, N. Y. Preparation for the treatment of influenza. No. 126,012; July 22; v. 264; p. 697.

H. Kohstamm & Co., New York, N. Y. Coloring for foods. No. 126,028; July 22; v. 264; p. 697.

H. L. Brinkhoff Company, Pittsburg, Pa. Corn remedy. No. 125,970; July 22; v. 264; p. 696.

Holmes Oil Refining Company, Athens, Ga. Shortening composed of cotton-seed oil and cotton-seed-oil stearin. No. 126,013; July 22; v. 264; p. 697.

Holden-Leonard Company, New York, N. Y. Woolen piece goods. Nos. 126,014-10; July 22; v. 264; p. 697.

Howard Bros. Chemical Co., Buffalo, N. Y. Toilet cream. No. 126,017; July 22; v. 264; p. 697.

Hunter, Margaret J., Los Angeles, Calif. Corsets. No. 126,018; July 22; v. 264; p. 697.

Hyman & Ackerman, Lima, Ohio. Poultry feed. No. 126,019; July 22; v. 264; p. 697.

Hyman & Ackerman, Lima, Ohio. Poultry feed. No. 126,020; July 22; v. 264; p. 697.

Italian Drugs Importing Co., New York, N. Y. Tonic to alleviate neurasthenia, hysteria, &c. No. 126,022; July 22; v. 264; p. 697.

Ideal Lino Mesh Company, Poughkeepsie, N. Y. Lino-mesh underwear. No. 126,021; July 22; v. 264; p. 697.

I. Ollendorff Company, New York, N. Y. Watches and watch-movements. No. 126,050; July 22; v. 264; p. 698.

James R. Kaiser, Inc., New York, N. Y. Men's cravats. Nos. 126,026-7; July 22; v. 264; p. 697.

J. Baker & Sons, Inc., Evansville, Ind. Work clothes for men, boys, and children. No. 125,957; July 22; v. 264; p. 696.

J. E. Shoemaker Co., San Francisco, Calif. Cotton-seed salad-oil, mayonnaise dressing, &c. No. 126,080; July 22; v. 264; p. 699.

Johnson, Cowdin & Co., New York, N. Y. Ribbons. No. 126,023; July 22; v. 264; p. 697.

Johnson & Johnson, New Brunswick, N. J. Medicated plasters. No. 126,024; July 22; v. 264; p. 697.

J. S. McKenzie & Co., Inc., New York, N. Y. Laundry bluing. No. 126,034; July 22; v. 264; p. 697.

Julius Schmid, Incorporated, New York, N. Y. Face-powders. Nos. 126,077-8; July 22; v. 264; p. 699.

Kaola Company, Portland, Ore. Coconut-butter. No. 126,025; July 22; v. 264; p. 697.

Kotlar, Theodore, Elizabeth, N. J. Preparation for the alleviation of consumption and other lung diseases. No. 126,029; July 22; v. 264; p. 697.

Lane, Norman A., Birmingham, England. Measuring and scientific appliances. No. 126,047; July 22; v. 264; p. 698.

Lery, Louis, New York, N. Y. Ladies' wearing-apparel. No. 126,033; July 22; v. 264; p. 697.

Lewis, Ella, St. Louis, Mo. Certain pharmaceutical preparations for the hair and scalp. No. 126,030; July 22; v. 264; p. 697.

Lloyd Brothers, Cincinnati, Ohio. Product of methyl salicylic acid for treatment of sores, ulcers, &c. No. 126,032; July 22; v. 264; p. 697.

Littauer Oil Company, Guttenberg, N. J. Edible cotton-seed oil. No. 126,031; July 22; v. 264; p. 697.

Louis Roessel & Co., New York, N. Y. Plushes. No. 126,007; July 22; v. 264; p. 698.

Magazines, Weekly, Gulf Publishing Company. No. 126,009; July 22; v. 264; p. 697.

Marden, Orth & Hastings Corporation, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash.; and San Francisco, Calif. Lyes and tanning extracts. No. 126,035; July 22; v. 264; p. 697.

Marden, Orth & Hastings Corporation, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash.; and San Francisco, Calif. Oil for the lubrication of yarp in the process of manufacture. No. 126,036; July 22; v. 264; p. 697.

Marr, R. A., Norfolk, Va. Encased wood. No. 126,038; July 22; v. 264; p. 697.

Middletown Silver Company, Middletown, Conn. Silver-plated hollow ware and tableware. No. 126,040; July 22; v. 264; p. 698.

Moser Paper Company, Chicago, Ill. Paper, cardboard, envelopes, &c. No. 126,041; July 22; v. 264; p. 698.

Mumday, Edgar F., London, England. Inks, type-writer ribbons, &c. No. 126,042; July 22; v. 264; p. 698.

Naregan, J. Earl, Los Angeles, Calif. Ointment used as an anodyne, deodorant, &c. No. 126,043; July 22; v. 264; p. 698.

National Veneer Products Company, Mishawaka, Ind. Trunks. No. 126,044; July 22; v. 264; p. 698.

National Watch Company, Inc., New York, N. Y. Watch-movements. No. 126,045; July 22; v. 264; p. 698.

Noll-Hanworth Company, Quincy, Ill. Clothing for men, women, and children. No. 126,046; July 22; v. 264; p. 698.

Nyal Company, Detroit, Mich. Alternative, hematic stimulant, and medicine for coughs, &c. No. 126,048; July 22; v. 264; p. 698.

Okada & Company, Ltd., San Francisco, Calif. Canned crab. No. 126,049; July 22; v. 264; p. 698.

Olson Rug Company, Chicago, Ill. Woven rugs. No. 126,051; July 22; v. 264; p. 698.

Otis Co., Ware, Mass. Cotton piece goods. No. 126,054; July 22; v. 264; p. 698.

Otis Co., Ware, Mass. Knit and woven underwear for men. No. 126,053; July 22; v. 264; p. 698.

Otto Helmsman Photograph Supply Co., Inc., New York, N. Y. Motors for talking-machines. No. 126,055; July 22; v. 264; p. 698.

Oshkosh Moline Underwear Co., Oshkosh, Wis. Ladies' and children's underwear and aprons. No. 126,052; July 22; v. 264; p. 696.

Pabst Pure Extract Co., Inc., Reading, Pa. Food-flavoring extracts. No. 126,056; July 22; v. 264; p. 698.

Phillips-Jones Company, Inc., New York, N. Y. Men's outer and night shirts, pajamas, underwear, collars and cuffs. No. 126,057; July 22; v. 264; p. 698.

Piedmont Chemical Works, Atlanta, Ga. Laxative wafer. No. 126,058; July 22; v. 264; p. 698.

P. L. M. Corporation, New York, N. Y. Ink in tablet form. No. 126,059; July 22; v. 264; p. 698.

Poughkeepsie Paint Co., Poughkeepsie, N. Y. Varnishes and sanding-oil. No. 126,060; July 22; v. 264; p. 698.

Propper, Harry, New York, N. Y. Laundry blue. No. 126,062; July 22; v. 264; p. 698.

Racine Auto Tire Company, Racine, Wis. Rubber heels or lifts for footwear. No. 126,063; July 22; v. 264; p. 698.

R. R. Davis Company, Hoboken, N. J. Baking-powder. Nos. 126,064-4; July 22; v. 264; p. 696.

Reverable Collar Company, Boston, Mass. Collars, cuffs, shirt-cosoms. No. 126,065; July 22; v. 264; p. 698.

Rick, Hazel, Salt Lake City, Utah. Children's underwear, dresses, nightgowns, pajamas. No. 126,066; July 22; v. 264; p. 698.

Rosa, Thomas, New York, N. Y. Laxative pills. No. 126,068; July 22; v. 264; p. 698.

Rosin & Co., Philadelphia, Pa. Gline. No. 126,070; July 22; v. 264; p. 698.

Rosa, John, Glasgow, Scotland. Woolen piece goods. No. 126,071; July 22; v. 264; p. 699.

Russo, A., Chicago, Ill. Olive-oil. No. 126,072; July 22; v. 264; p. 699.

Salerno, Frank P., Junata, Pa. Preparation for sore throat, tonsillitis, catarrh, &c. No. 126,073; July 22; v. 264; p. 699.

Salsina Canning & Packing Co., San Jose, Calif. Tomato pulp. No. 126,074; July 22; v. 264; p. 699.

Sanitary Knitting Company, Grand Rapids, Mich. Knit underwear. No. 126,075; July 22; v. 264; p. 699.

Schlesinger, Maurice F., New York, N. Y. Medical jelly for the nose. No. 126,076; July 22; v. 264; p. 699.

S. D. Warren Company, Boston, Mass. Printing-paper. No. 126,105; July 22; v. 264; p. 700.

Sheridan Investment Company, Sheridan, Ore. Fresh apples. No. 126,070; July 22; v. 264; p. 699.

Sidel-Rattner manufacturing Company, Brooklyn, N. Y. Automobile-tire pumps. No. 126,081; July 22; v. 264; p. 699.

Sinclair Refining Company, Chicago, Ill. Certain named oils for illuminating, burning, power, fuel, &c. No. 126,083; July 22; v. 264; p. 699.

Sklintex Co., New York and Forest Hills, N. Y. Face-cream. No. 126,084; July 22; v. 264; p. 699.

Sleep-In-Peace Company, Savannah, Ga. Insecticides and poisons for rodents and insect pests. No. 126,085; July 22; v. 264; p. 699.

Society of Chemical Industry in Basle, Basle, Switzerland. Coal-tar colors. No. 126,086; July 22; v. 264; p. 699.

Society of Chemical Industry in Basle, Basle, Switzerland. Indigo. No. 126,087; July 22; v. 264; p. 699.

Society of Chemical Industry in Basle, Basle, Switzerland. Pharmaceutical products. No. 126,088; July 22; v. 264; p. 699.

Sonora Photograph Sales Company, Inc., New York, N. Y. Talking-machines, phonographs, gramophones, &c. No. 126,089; July 22; v. 264; p. 699.

Standard Oil Company of New York, New York, N. Y. Refined oil for lighting, heating, and power purposes. No. 126,091; July 22; v. 264; p. 699.

Stern & Blemer, New York, N. Y. Children's overalls. No. 126,092; July 22; v. 264; p. 699.

Sunshine Cloak & Suit Company, Cleveland, Ohio. Children's dresses, coats, and suits. No. 126,093; July 22; v. 264; p. 699.

Tann, James H., Dayton, Ohio. Medicinal preparation for disorders of stomach and bowels. No. 126,094; July 22; v. 264; p. 699.

Taplex Corporation, New York, N. Y. Dry fuel containing charcoal as a base. No. 126,095; July 22; v. 264; p. 699.

Thompson, Thos. H., New Haven, Conn. Wooden toys. No. 126,097; July 22; v. 264; p. 699.

Tramer, Hugh L. S., Louisville, Ky. Medicine for corns, bunions, and calluses. No. 126,098; July 22; v. 264; p. 699.

Treat, C. E., Santa Ana, Calif. Electric plugs. No. 126,099; July 22; v. 264; p. 699.

United Drug Company, Boston, Mass. Writing-paper. No. 126,100; July 22; v. 264; p. 699.

United States Steel Products Company, New York, N. Y. Ammonium sulfate. No. 126,101; July 22; v. 264; p. 699.

Van Schaack Bros. Chemical Works, Chicago, Ill. Waterproof cement for use on leather, paper, &c. No. 126,103; July 22; v. 264; p. 700.

Van Sant & Co., San Francisco, Calif. Canned sardines. No. 126,102; July 22; v. 264; p. 700.

V. Marrone & Company, Inc., Utica, N. Y. Cotton-seed salad-oil or lard substitute. No. 126,039; July 22; v. 264; p. 698.

Weinstock-Nichols Co., San Francisco, Oakland, and Los Angeles, Calif. Publication issued monthly. No. 126,107; July 22; v. 264; p. 700.

Weich Grape Juice Company, Westfield, N. Y. Jam or conserve. No. 126,108-9; July 22; v. 264; p. 700.

Whent's Ice Cream Company, Buffalo, N. Y. Canned sweetened condensed milk. No. 126,110; July 22; v. 264; p. 700.

Whitmore, William H., Cleveland, Ohio. Ointment for the treatment of rough or coarse skin, burns, &c. No. 126,111; July 22; v. 264; p. 700.

Wireless Press Inc., New York, N. Y. Books, magazines, manuals, &c. printed monthly. No. 126,112; July 22; v. 264; p. 700.

Wiss, Albert, Peckskill, N. Y. Trading stamps or coupons. No. 126,113; July 22; v. 264; p. 700.

Wm. R. Warner & Company, Inc., New York, N. Y. Medicinal tonic remedy in convalescence. No. 126,104; July 22; v. 264; p. 700.

Yale Daily News, New Haven, Conn. Newspapers. No. 126,114; July 22; v. 264; p. 700.

Young Brothers, New York, N. Y. Men's hats. Nos. 126,115-16; July 22; v. 264; p. 700.

Youth Craft Co., Chicago, Ill. Preparation for the relief of excessive perspiration. No. 126,117; July 22; v. 264; p. 700.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

A. H. Rice Co., Pittsfield, Mass. Sewing-silks. No. 117,388; July 22; v. 264; p. 689.

A. M. Collins Manufacturing Company, Philadelphia, Pa. Coated printing-paper. No. 116,144; July 22; v. 264; p. 687.

American Mutual Seed Company, Chicago, Ill. Seeds. Nos. 117,724-5; July 22; v. 264; p. 683.

Arnold, Francis R., New York, N. Y. Powder-puffs and powder-puffs. No. 115,247; July 22; v. 264; p. 692.

Armstrong Cork Company, Pittsburgh, Pa. Composition material containing cork for making soles for boots and shoes. No. 113,026; July 22; v. 264; p. 683.

Auto Sales and Service Company. (See Penrod, William F., assignor.)

Autosales Corporation of Detroit, Detroit, Mich. Air-purifiers. No. 114,724; July 22; v. 264; p. 685.

Barbour Brothers Co., The, Paterson, N. J. Linen thread. No. 118,822; July 22; v. 264; p. 694.

Beaux Arts Corset Compagnie, Newark, N. J. Corsets. No. 118,825; July 22; v. 264; p. 694.

Bell & Co., Inc., Orangeburg, N. Y. Medicinal remedy for treatment of indigestion. No. 118,292; July 22; v. 264; p. 692.

Bio-Pharm Chemical Company, The, Denver, Colo. Lozenges for throat irritations, and ointments, &c. No. 118,074; July 22; v. 264; p. 692.

Blaskopf & Co., New York, N. Y. Shirt-waists and blouses for women. No. 116,077; July 22; v. 264; p. 687.

Bonney Vise & Tool Works, Inc., Philadelphia and Allentown, Pa. and New York, N. Y. Wrenches, pliers, and rakes. No. 118,425; July 22; v. 264; p. 692.

Buckeye Nurseries, Tampa, Winterhaven, Lucerne Park, and Howey, Fla. Trees. No. 118,587; July 22; v. 264; p. 693.

Carlton Turbine Blower Co., Worcester, Mass. Turbine-actuated blowers, turbine centrifugal blowers and exhausters, &c. No. 114,315; July 22; v. 264; p. 684.

Carter, Henry H., Pittsburgh, Pa. Electric vacuum-cleaners. No. 115,024; July 22; v. 264; p. 686.

Chapin Company, The, New York, N. Y. Prophylactics for treatment of venereal diseases. No. 117,926; July 22; v. 264; p. 692.

Cheney Brothers, South Manchester, Conn. Fabrics of silk and silk mixtures. Nos. 115,086-7; July 22; v. 264; p. 686.

Cheney Brothers, South Manchester, Conn. Fabrics of silk and silk mixtures. Nos. 115,091; July 22; v. 264; p. 686.

Cheney Brothers, South Manchester, Conn. Fabrics of silk and silk mixtures. Nos. 115,094-5; July 22; v. 264; p. 686.

Cleveland Osburn Manufacturing Company, The, Cleveland, Ohio. Paint, varnish, &c. brushes. No. 111,093; July 22; v. 264; p. 682.

Columbia Fastener Company, Chicago, Ill. Muehlage. No. 116,080; July 22; v. 264; p. 687.

Compter Confection Company, Chicago, Ill. Salted peanuts. No. 117,869; July 22; v. 264; p. 691.

Cramer, John F., Freeport, Ill. Canned fruits and vegetables, teas, coffees, &c. No. 70,824; July 22; v. 264; p. 681.

Curtis Pharmaceutical Company, Denver, Colo. Preparation for treating venereal diseases. No. 110,880; July 22; v. 264; p. 682.

Darwin & Miller, Inc., New York, N. Y. Bar-steel and steel castings. No. 118,433; July 22; v. 264; p. 692.

Davis, Elizabeth, McAdoo, Pa. Healing-salve for treatment of burns, &c. No. 115,007; July 22; v. 264; p. 685.

Dann Rogers Spritzer Co., New York, N. Y. Hosiery for boys and girls. No. 116,231; July 22; v. 264; p. 687.

Denney Tag Company, The, West Chester, Pa. Shipping-tags. No. 116,458; July 22; v. 264; p. 688.

Dothan Syrup Co., Dothan, Ala. Corn and cane syrup. No. 117,007; July 22; v. 264; p. 688.

E. E. Taylor Company, Boston, Mass. Men's and women's leather boots and shoes. No. 111,228; July 22; v. 264; p. 683.

E. T. Chaplin Co., Spokane, Wash. Red-cedar fence-posts. No. 117,611; July 22; v. 264; p. 691.

E. Myers Lye Company, St. Louis, Mo. Lye. No. 118,509; July 22; v. 264; p. 693.

Edward H. Ladew Company, Inc., Glen Cove, N. Y. Leather belting. No. 116,791; July 22; v. 264; p. 688.

Edward H. Ladew Company, Inc., Glen Cove, N. Y. Leather belting. No. 116,793; July 22; v. 264; p. 688.

Elder Manufacturing Company, St. Louis, Mo. Dress-work, and night shirts, pajamas, neckties, &c. No. 116,904; July 22; v. 264; p. 688.

Eida Manufacturing Company, New York, N. Y. Gas water-heaters, furnaces, &c. No. 116,303; July 22; v. 264; p. 688.

Eureka Fire Hose Manufacturing Company, New York, N. Y. Hose made of rubber, &c. No. 110,165; July 22; v. 264; p. 682.

Federal Soap Fastener Corporation, New York, N. Y. Snap-fasteners and bracket-fasteners. No. 117,801; July 22; v. 264; p. 691.

Fox River Paper Co., Appleton, Wis. Writing-paper. No. 113,846; July 22; v. 264; p. 684.

G. E. Conkey Co., The, Cleveland, Ohio. Poultry remedies, disinfectants, &c. Nos. 114,558-9; July 22; v. 264; p. 684.

General Manufacturing Co., Sioux City, Iowa. Fountain-pens. No. 113,621; July 22; v. 264; p. 683.
 Goodlass Wall & Company, Limited, Liverpool, England. Oils for mixing with dry paint-pigments, &c. No. 110,114; July 22; v. 264; p. 682.
 Goodgear Tire & Rubber Company, Akron, Ohio. Rubber heels and soles for boots and shoes. No. 118,663; July 22; v. 264; p. 693.
 Griggs, Cooper & Company, St. Paul, Minn. Creamed and preserved fruits, canned vegetables, &c. No. 103,144; July 22; v. 264; p. 681.
 Hartman Company, The, Chicago, Ill. Horse-drawn carts, wagons, and parts thereof, and wheelbarrows. No. 117,530; July 22; v. 264; p. 690.
 Hat Trade Publishing Co., New York, N. Y. Monthly magazine. No. 117,186; July 22; v. 264; p. 689.
 Henry Dutton & Sons, Incorporated, Philadelphia, Pa. Saws. No. 115,339; July 22; v. 264; p. 686.
 Hession Tiller & Tractor Corporation, Buffalo, N. Y. Tractors and soil-pulverizers. No. 117,162; July 22; v. 264; p. 689.
 Isolat Chemical Company, Detroit, Mich. Tooth-paste. No. 115,601; July 22; v. 264; p. 693.
 Intravenous Products Company, The, Denver, Colo. Nerve-tonic. No. 113,212; July 22; v. 264; p. 683.
 Intravenous Products Company, The, Denver, Colo. Heart-stimulant. No. 113,215; July 22; v. 264; p. 683.
 J. C. Blair Company, Huntingdon, Pa. Paper for writing, envelopes for correspondence, and writing-tablets. No. 114,460; July 22; v. 264; p. 684.
 J. F. Haig & Co., Ltd., Belfast, Ireland. Gents' dress, negligee, and work shirts, collars, cuffs, &c. No. 115,837; July 22; v. 264; p. 687.
 John Wanamaker, New York, New York, N. Y. Corsets, brassieres, and bust-supporters. No. 111,083; July 22; v. 264; p. 682.
 Knapp & Baxter, Inc., San Francisco, Calif. Canned salmon and sardines. No. 118,678; July 22; v. 264; p. 693.
 Kohler, Aaron S., Savannah, Ga. Enameled steelware. No. 113,999; July 22; v. 264; p. 684.
 Koken Barbers' Supply Company, St. Louis, Mo. Dandruff-terminator. Nos. 118,540-1; July 22; v. 264; p. 692.
 Koral Manufacturing Company, The, Boston, Mass. Florists' letters, emblems, designs, strips, and decorations. No. 117,345; July 22; v. 264; p. 689.
 Kuesner, Marguerite, New York, N. Y. Facial creams. No. 117,407; July 22; v. 264; p. 690.
 L. C. Chase & Company, Boston, Mass. Pillow fabrics. No. 118,750; July 22; v. 264; p. 693.
 Loft, George W., New York, N. Y. Candy. No. 114,973; July 22; v. 264; p. 685.
 Lustrite Corporation, The, Brooklyn, N. Y. Cold-cream, face-powder, face-rouge, lip-stick, &c. No. 115,990; July 22; v. 264; p. 687.
 Majestic Mills Paper Company Inc., The, New York, N. Y. Writing-paper, printing-paper, envelopes, &c. No. 114,117; July 22; v. 264; p. 684.
 Mariette & Co., Indianapolis, Ind. Toilet powders and creams, perfumery, and toilet waters. No. 118,605; July 22; v. 264; p. 693.
 Millbrook Woolen Mills, New York, N. Y. Woolen and mixture of wool and cotton piece goods. No. 117,533; July 22; v. 264; p. 690.
 Millinery Trade Publishing Co., New York, N. Y. Monthly magazine. No. 117,192; July 22; v. 264; p. 689.
 Milwaukee Talking Machine Mfg. Co., The, Milwaukee, Wis. Talking-machines and records therefor. No. 115,626; July 22; v. 264; p. 686.
 Minneapolis Steel & Machinery Company, Minneapolis, Minn. Threshing-machines. No. 118,925; July 22; v. 264; p. 694.
 Morrison-Waters Piano Company, Cincinnati, Ohio. Pianos. No. 115,923; July 22; v. 264; p. 687.
 Mottard, Louis, London, England. Dyes for the hair. No. 111,394; July 22; v. 264; p. 683.
 National Aniline & Chemical Company, Inc., New York, N. Y. Coal-tar dyestuffs. No. 116,103; July 22; v. 264; p. 687.
 New York Mills Corporation, New York Mills, N. Y. Centuroy. No. 101,992; July 22; v. 264; p. 681.
 Nonotuck Silk Company, Florence, Mass. Thread and yarn. No. 108,392; July 22; v. 264; p. 681.
 Ohio Metal Co., The, Columbus, Ohio. Abrifiction Rabbitt metals. No. 117,740; July 22; v. 264; p. 691.
 P. A. Field Shoe Co., Beverly, Mass. Shoes made of leather. No. 117,972; July 22; v. 264; p. 692.

Palatine Aniline & Chemical Corporation, Poughkeepsie, N. Y. Dyes. No. 118,329; July 22; v. 264; p. 692.
 Paul F. Reich Co., Bloomington, Ill. Candles. No. 117,864; July 22; v. 264; p. 691.
 Penrod, William F., Blanchester, assignor to Auto Sales and Service Company, Cincinnati, Ohio. Electric-light-controlling switches, &c., for automobiles. No. 109,159; July 22; v. 264; p. 681.
 Pittsburgh Brewing Company, Pittsburgh, Pa. Malt beverage. Nos. 115,011-14; July 22; v. 264; p. 685.
 R. P. Smith & Co., Georgetown, Ill. Pile remedy. No. 117,069; July 22; v. 264; p. 683.
 Regina Swimming Devices Co., New York, N. Y. Swimming or bathing devices. No. 102,893; July 22; v. 264; p. 681.
 Reiman, Max, New York, N. Y. Germicide. No. 116,726; July 22; v. 264; p. 688.
 Reiser, George W., Lancaster, Pa. Caudy. No. 117,818; July 22; v. 264; p. 691.
 Rex File Company, The, Newcomerstown, Ohio. Files and rasps. No. 118,767; July 22; v. 264; p. 693.
 Ridgely Trimmer Company, The, Springfield, Ohio. Rack-exhibitors for wall-paper. No. 117,094; July 22; v. 264; p. 689.
 Ridgely Trimmer Company, The, Springfield, Ohio. Painters' and decorators' tools and supplies. No. 117,096; July 22; v. 264; p. 689.
 Robert Russell Bennett Company, New York, N. Y. Musical compositions. No. 117,389; July 22; v. 264; p. 689.
 Sidney Blumenthal & Co., Inc., New York, N. Y. Pile fabric in the piece. Nos. 119,017-18; July 22; v. 264; p. 694.
 Schwab, Samuel, New York, N. Y. Suits for infants and children. No. 118,769; July 22; v. 264; p. 693.
 Schweppe & Wilt Manufacturing Company, The, Detroit, Mich. Automobile reach-rods, radius-rods, &c. No. 116,194; July 22; v. 264; p. 687.
 Silberman, Louis, Philadelphia, Pa. Sole-leathers. No. 117,468; July 22; v. 264; p. 690.
 Smith, Alice, New York, N. Y. Book-markers. No. 114,703; July 22; v. 264; p. 684.
 Sperling, George, New York, N. Y. Petticoats. No. 118,943; July 22; v. 264; p. 694.
 Stokes, John S., Philadelphia, Pa. Printing plates and matrices, &c. No. 114,994; July 22; v. 264; p. 685.
 Thoro Corporation, The, Chicago, Ill. Powdered skin-cleansers. No. 110,720; July 22; v. 264; p. 682.
 True Artificial Limb Company, The, Niagara Falls, N. Y. Artificial limbs. No. 109,251; July 22; v. 264; p. 682.
 Truman, Charles H. J., San Francisco, Calif. Partially-printed sheets for keeping funeral-records. No. 111,467; July 22; v. 264; p. 683.
 Union Lumber Company, San Francisco, Calif. Grape-packing made of redwood sawdust, &c. No. 112,619; July 22; v. 264; p. 683.
 United Brush Manufactories, New York, N. Y. Varnish-brushes. No. 117,623; July 22; v. 264; p. 690.
 United Brush Manufactories, New York, N. Y. Paint and varnish brushes. No. 117,624; July 22; v. 264; p. 690.
 United Brush Manufactories, New York, N. Y. Varnish and paint brushes, &c. No. 117,625; July 22; v. 264; p. 690.
 United Brush Manufactories, New York, N. Y. Brushes used as wash-tools. No. 117,626; July 22; v. 264; p. 690.
 United Brush Manufactories, New York, N. Y. Varnish-brushes. No. 117,628; July 22; v. 264; p. 690.
 United Brush Manufactories, New York, N. Y. Artists' brushes. No. 117,631; July 22; v. 264; p. 691.
 Walshaw, Edwin A., Bolton, Ontario, Canada. Electrical-insulator connectors. No. 114,794; July 22; v. 264; p. 685.
 Waters-Weismann Co. Inc., The, Binghamton, N. Y. Top skirts and petticoats. No. 115,473; July 22; v. 264; p. 686.
 Western Grocer Company, Marshalltown, Iowa. Castor-oil, glycerine, borax, &c. No. 117,763; July 22; v. 264; p. 691.
 Williams Brush Co., Philadelphia, Pa. Tooth-brushes. No. 118,747; July 22; v. 264; p. 693.
 Wisconsin Butterine Co., Milwaukee, Wis. Lard substitute. No. 117,717; July 22; v. 264; p. 691.
 Wm. Enders Manufacturing Company, Walden, N. Y. Sundry laundry-washing machines, and clothes-wringers. No. 117,482; July 22; v. 264; p. 690.
 Zieve, Rimal, Minneapolis, Minn. Fruit and vegetable compound. No. 101,250; July 22; v. 264; p. 681.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 22d DAY OF JULY, 1919.

Acetic aldehyde, Manufacture of. H. Dreyfus. No. 1,310,743; July 22; v. 264; p. 690.
 Acetic aldehyde, Manufacture of. H. Dreyfus. No. 1,310,984; July 22; v. 264; p. 644.
 Acid, Manufacturing oxide. H. C. Reed. No. 1,310,713; July 22; v. 264; p. 594.
 Acid, Manufacture of naphthalene trisulfonic. L. A. Pratt and F. N. Brink. No. 1,311,090; July 22; v. 264; p. 604.
 Adding-machine. H. C. Peters. No. 1,310,963; July 22; v. 264; p. 640.
 Adding-machine time-switch. F. C. Rinche. No. 1,310,965; July 22; v. 264; p. 641.
 Aeroplane landing-frame. E. J. J. Salmson. No. 1,310,710; July 22; v. 264; p. 595.
 Air-compressor. G. K. Davel. No. 1,310,944; July 22; v. 264; p. 637.
 Air-compressor. J. C. Fredrickson. No. 1,310,471; July 22; v. 264; p. 550.
 Air-distributor. S. Heath. No. 1,310,091; July 22; v. 264; p. 646.
 Airplane. A. E. Johnson. No. 1,311,076; July 22; v. 264; p. 602.
 Airplane. C. E. Stary. No. 1,311,087; July 22; v. 264; p. 660.
 Airplane-wing construction. N. W. Dalton. No. 1,310,942; July 22; v. 264; p. 637.
 Airplane wire-fastening. W. G. Mesner. No. 1,310,704; July 22; v. 264; p. 604.
 Alarm. See— Burglar-alarm.
 Alkali-metal monochromates into bichromates. Transforming. G. N. Via. No. 1,310,720; July 22; v. 264; p. 599.
 Ammonia from atmospheric nitrogen. Making. E. W. Haslop. No. 1,310,479; July 22; v. 264; p. 551.
 Annunciator. Three-position. W. H. Geiger. No. 1,311,118; July 22; v. 264; p. 600.
 Anchor, Wall. N. K. Bowman. No. 1,311,038; July 22; v. 264; p. 655.
 Antiskid device. W. G. Cramer. No. 1,311,048; July 22; v. 264; p. 657.
 Artificial hand. R. Trautman. No. 1,310,589; July 22; v. 264; p. 572.
 Automobile-alarm. T. H. Smith. No. 1,311,010; July 22; v. 264; p. 651.
 Automobile-body attachment. W. H. McIntyre. No. 1,310,425; July 22; v. 264; p. 542.
 Automobile emergency-wheel. J. D. Goldsmith. No. 1,311,110; July 22; v. 264; p. 670.
 Automobile-signal. C. W. Cole. No. 1,310,410; July 22; v. 264; p. 539.
 Automobiles. Luggage-carrier for. A. Bark. No. 1,310,593; July 22; v. 264; p. 572.
 Automobiles. Fare-meter installation for. G. T. Dunlop and J. J. Bolar. No. 1,310,907; July 22; v. 264; p. 630.
 Automobiles. Removable running-board for. A. von Schrenk. No. 1,310,973; July 22; v. 264; p. 642.
 Aviation apparatus. Control mechanism for motors for. E. Letord. No. 1,310,757; July 22; v. 264; p. 603.
 Aviators. Means of communication between. G. S. Thompson. No. 1,310,810; July 22; v. 264; p. 613.
 Barrel-head. S. B. Cochran. No. 1,310,857; July 22; v. 264; p. 621.
 Barrel hoisting and tilting device. F. A. Sebring. No. 1,311,094; July 22; v. 264; p. 605.
 Basket. W. B. L. O. and C. E. O'Loughlin. No. 1,311,086; July 22; v. 264; p. 604.
 Basket, Folding clothes. A. W. Morgan. No. 1,310,669; July 22; v. 264; p. 587.
 Battery plates, Process and apparatus for treating stage. H. M. Martin. No. 1,310,871; July 22; v. 264; p. 624.
 Bearing. Annular ball. O. A. J. R. Lippert-Bruebauer. No. 1,310,423; July 22; v. 264; p. 541.
 Bearing. Antifriction. L. Laughaer. No. 1,310,736; July 22; v. 264; p. 603.
 Bearing-assembly. E. H. Sherbondy. No. 1,310,679; July 22; v. 264; p. 588.
 Bearing. Neck. S. A. Eklison. No. 1,310,794; July 22; v. 264; p. 610.
 Bearing. Turbo-compressor. E. H. Sherbondy. No. 1,310,684; July 22; v. 264; p. 589.
 Bearing-engine. J. T. Murphy and E. J. Raney. No. 1,310,628; July 22; v. 264; p. 579.
 Beet-topper. O. Walther. No. 1,310,849; July 22; v. 264; p. 620.
 Belt-shifting device. F. W. Siren. No. 1,311,095; July 22; v. 264; p. 605.
 Belts. Treating woven textile. L. Petersen-Hvild. No. 1,310,867; July 22; v. 264; p. 623.
 Boat-launching apparatus. C. Peters. No. 1,310,962; July 22; v. 264; p. 640.
 Boats. Apparatus for detecting and indicating the presence of submarine. G. E. Ella. No. 1,310,563; July 22; v. 264; p. 567.
 Boats. Apparatus for hoisting and lowering. G. C. Smith. No. 1,310,717; July 22; v. 264; p. 595.
 Boiler. See— Steam-boiler.
 Boiler-settings and the like. Coating for. J. M. Aarons. No. 1,310,591; July 22; v. 264; p. 572.
 Bolt. W. Hackett. No. 1,310,909; July 22; v. 264; p. 631.
 Bottle. Antireflectable. A. W. Lougaker. No. 1,310,999; July 22; v. 264; p. 647.
 Bottle-capping machine. E. A. Oliver. No. 1,310,960; July 22; v. 264; p. 640.
 Box. See— Glazier-box.
 Cigar-box. Journal-box.
 Folding box. Mail-box.
 Food-container or lunch-box. Paper box.
 Stop-valve box.
 Box. J. W. Wisterman. No. 1,311,149; July 22; v. 264; p. 675.
 Boxes. Loom attachment for outlets. M. H. Levin. No. 1,310,758; July 22; v. 264; p. 603.
 Boxing and net-weighting materials. Apparatus for. C. F. Peimling. No. 1,310,747; July 22; v. 264; p. 601.
 Bracelet. A. Eklund. No. 1,310,859; July 22; v. 264; p. 622.
 Brake. See— Rail-brake.
 Drum-brake.
 Gun-brake.
 Brake-band. E. P. Hafner and J. T. Roberts. No. 1,310,617; July 22; v. 264; p. 577.
 Brake-hangers. Replaceable bearing for. E. G. Chenoweth and W. J. Tollerton. No. 1,310,607; July 22; v. 264; p. 575.
 Brake-operating mechanism. C. W. McKinley. No. 1,310,801; July 22; v. 264; p. 611.
 Breech-blocks. Semi-automatic mechanism for. E. Schneider. No. 1,310,879; July 22; v. 264; p. 625.
 Brick-machine. A. Mallinovsky. No. 1,310,953; July 22; v. 264; p. 638.
 Broom-corn cleaner. F. Joerger. No. 1,311,074; July 22; v. 264; p. 602.
 Brush-filling machines. Table for. L. H. Terbune. No. 1,310,457; July 22; v. 264; p. 547.
 Brush. Shoe-polishing. A. L. Delvaux. No. 1,311,055; July 22; v. 264; p. 658.
 Bucket lip. Dredge. L. D. Hopfield. No. 1,310,570; July 22; v. 264; p. 568.
 Burglar-alarm. Portable. J. M. Butcher. No. 1,310,941; July 22; v. 264; p. 636.
 Burial-overbox. J. Gory. No. 1,310,987; July 22; v. 264; p. 645.
 Burner. See— Stump-burner.
 Gas-burner.
 Burner-stand. J. M. Hathersall. No. 1,310,830; July 22; v. 264; p. 617.
 Button and pin therefor. W. H. Phelps. No. 1,310,804; July 22; v. 264; p. 612.
 Cabinet-tilt support. Automatic. F. L. Casper. No. 1,310,647; July 22; v. 264; p. 583.
 Cabinet. Phonograph-disk-record-holding. W. M. Ward. No. 1,310,814; July 22; v. 264; p. 614.
 Cable-climbing device for miners. C. H. Morgan. No. 1,311,084; July 22; v. 264; p. 603.
 Cables for silos and the like. Saddle for anchoring. F. J. Van Cott. No. 1,311,141; July 22; v. 264; p. 674.
 Calcium carbide. Manufacture of. F. M. Becket. No. 1,310,465; July 22; v. 264; p. 549.
 Calculating device. C. T. Osterberg. No. 1,310,901; July 22; v. 264; p. 640.
 Calculating-machine. W. O. J. Andersson. No. 1,310,852; July 22; v. 264; p. 621.
 Calculating-machine. S. E. Carlin. No. 1,311,041; July 22; v. 264; p. 655.
 Calendar. C. B. Cook. No. 1,310,905; July 22; v. 264; p. 630.

Calendar, Perpetual monthly. F. K. Moerk. No. 1,310,428; July 22; v. 264; p. 542.
 Callipers, Micrometer. A. Olevin. No. 1,310,431; July 22; v. 264; p. 543.
 Cam-lever coupling. R. A. Tawney. No. 1,310,450; July 22; v. 264; p. 547.
 Camera, Stereoscopic motion-picture. H. L. Quick. No. 1,311,008; July 22; v. 264; p. 649.
 Camera, Fluor for moving-picture. C. E. Akeley. No. 1,310,770; July 22; v. 264; p. 606.
 Can. See—
 Dispensing-can.
 Can ends, Apparatus for feeding, sorting, and distributing. J. H. March. No. 1,310,837; July 22; v. 264; p. 618.
 Can-opener. H. W. Wiley. No. 1,311,028; July 22; v. 264; p. 653.
 Can-stuffing machine. H. J. Workman. No. 1,311,144; July 22; v. 264; p. 674.
 Car. Pump. A. D. Tait. No. 1,311,140; July 22; v. 264; p. 673.
 Car-strap. A. T. Johnson. No. 1,311,075; July 22; v. 264; p. 662.
 Carbonizing compound and making same. C. P. Mebane. No. 1,310,918; July 22; v. 264; p. 632.
 Carburetor. E. J. Maoning. No. 1,310,426; July 22; v. 264; p. 542.
 Carburetor. C. J. Pembroke. No. 1,310,432; July 22; v. 264; p. 543.
 Carburetor device. H. E. Ong. No. 1,311,088; July 22; v. 264; p. 664.
 Carburetor, Multifield multijet. C. L. Rayfield. No. 1,310,805; July 22; v. 264; p. 612.
 Carburetor nozzle. J. Platt. No. 1,310,904; July 22; v. 264; p. 641.
 Carburetor-support. W. G. Smith. No. 1,311,020; July 22; v. 264; p. 651.
 Carburetors, Gasoline-fed system for. R. A. Leavell. No. 1,310,915; July 22; v. 264; p. 632.
 Carding engine. G. W. A. and R. Hargreaves. No. 1,310,825; July 22; v. 264; p. 610.
 Cards, Feeding. J. Powers. No. 1,310,434; July 22; v. 264; p. 543.
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 Elevated carrier.
 Cars, Side bearing for. F. L. Barber and E. W. Webb. No. 1,310,546; July 22; v. 264; p. 565.
 Cartons, Work holder for the sealing of. A. E. Rideout. No. 1,310,589; July 22; v. 264; p. 570.
 Cartridge for mining purposes, Safety. E. Lemaire. No. 1,310,690; July 22; v. 264; p. 580.
 Cartridge, Tool. B. Hirschhorn. No. 1,310,796; July 22; v. 264; p. 611.
 Case. See—
 Cigarette-case. Shipping-case.
 Letter-case.
 Casket. J. E. Finnegan and P. J. McCarthy. No. 1,310,860; July 22; v. 264; p. 622.
 Casting apparatus, Centrifugal pressure. G. M. Hollenback. No. 1,310,805; July 22; v. 264; p. 623.
 Caterpillar-catcher. J. A. Mansau. No. 1,311,001; July 22; v. 264; p. 647.
 Cellulose, Manufacture of. V. P. Edwards. No. 1,310,694; July 22; v. 264; p. 591.
 Cement composition. A. A. Bennett. No. 1,310,520; July 22; v. 264; p. 559.
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 Reclining-chair.
 Check or coin control apparatus. C. C. Shigley. No. 1,310,549; July 22; v. 264; p. 564.
 Check, Postal. C. M. Sain. No. 1,311,014; July 22; v. 264; p. 650.
 Chlorine, Producing. R. Datta. No. 1,310,943; July 22; v. 264; p. 637.
 Chuck. F. Cobey. No. 1,310,409; July 22; v. 264; p. 539.
 Cigar-box. O. W. Harms. No. 1,310,949; July 22; v. 264; p. 638.
 Cigar-box. E. A. Kline. No. 1,310,835; July 22; v. 264; p. 618.
 Cigarette-case. A. S. Domeniconi. No. 1,310,652; July 22; v. 264; p. 584.
 Cigarette-machines, Cut-off mechanism for. S. I. Prescott. No. 1,310,631; July 22; v. 264; p. 580.
 Tire-tight-brake. G. O. O. Davies. No. 1,310,502; July 22; v. 264; p. 567.
 Clamp. See—
 Folding clamp. Rail-clamp.
 Clamp for various objects, Supporting. N. D. Parker. No. 1,311,089; July 22; v. 264; p. 664.
 Classifier. E. F. McCool. No. 1,310,917; July 22; v. 264; p. 632.
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 Broom-corn cleaner. Rake-cleaner.
 Gasoline engine-cylinder. Steam-boiler cleaner.
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 Cleansing apparatus for vertically-arranged smoke-tubes. Steam. J. Bore and A. Skogland. No. 1,310,733; July 22; v. 264; p. 598.
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 Paper-clip.
 Clock synchronizing device. J. W. Bryce. No. 1,310,789; July 22; v. 264; p. 609.
 Clock system, Synchronizing. J. W. Bryce. No. 1,310,779; July 22; v. 264; p. 607.

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 Clock, Synchronizing. J. W. Bryce. No. 1,310,783; July 22; v. 264; p. 608.
 Clock system, Synchronizing. J. W. Bryce. No. 1,310,784; July 22; v. 264; p. 608.
 Clock system, Synchronizing. J. W. Bryce. No. 1,310,785; July 22; v. 264; p. 609.
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 Clock system, Synchronizing. J. W. Bryce. No. 1,310,787; July 22; v. 264; p. 609.
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 Clocks, Synchronizing. J. W. Bryce. No. 1,310,780; July 22; v. 264; p. 607.
 Cloth-folding machine. E. H. Marble. No. 1,311,080; July 22; v. 264; p. 662.
 Clutch drive, Friction. K. Scheiner. No. 1,310,967; July 22; v. 264; p. 641.
 Clutch mechanism. H. H. Newsom. No. 1,310,629; July 22; v. 264; p. 579.
 Collar. J. E. Sipperly. No. 1,310,550; July 22; v. 264; p. 564.
 Collar-fastener and necktie-guide. W. L. Lindsay. No. 1,310,422; July 22; v. 264; p. 541.
 Comb and brush. J. Kurpol. No. 1,310,755; July 22; v. 264; p. 602.
 Compartment-tank. C. A. Nardell. No. 1,310,516; July 22; v. 264; p. 558.
 Computing machine, Interest. S. P. Thompson. No. 1,311,100; July 22; v. 264; p. 666.
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 Woven fabric. H. R. Ayres. No. 1,310,902; July 22; v. 264; p. 629.
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 Apparel, Men's, boys' and children's outer wearings. A. Ragman. No. 126,050; July 22; v. 264; p. 695.
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 Bread. Greisell Cifzen Company. No. 126,007; July 22; v. 264; p. 697.
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 Canned crab. Okada & Company. No. 126,040; July 22; v. 264; p. 698.
 Canned molasses and sweet potatoes. G. H. Dunbar & Sons. No. 126,089; July 22; v. 264; p. 696.
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 Canned sardines. Booth Fisheries Sardine Company. No. 126,068; July 22; v. 264; p. 695.
 Canned sardines. Van Sant & Co. No. 126,102; July 22; v. 264; p. 700.
 Canned sweetened condensed milk. Wheat's Ice Cream Company. No. 126,110; July 22; v. 264; p. 700.
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Chocolates, chocolate and cocoa combined, cocoa. Gultard Company. No. 126,085; July 22; v. 264; p. 697.
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 Clothes, Work. J. Baker & Sons. No. 126,057; July 22; v. 264; p. 695.
 Clothing for men, women, and children, Certain named. Finch, Van Slyck & McConville. No. 126,003; July 22; v. 264; p. 696.
 Clothing for men, women, and children. Noll-Hanworth Company. No. 126,046; July 22; v. 264; p. 698.
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 Coloring for foods. H. Kohnstamm & Co. No. 126,028; July 22; v. 264; p. 697.
 Colors, Coal-tar. Society of Chemical Industry in Basle. No. 126,086; July 22; v. 264; p. 699.
 Corn remedy. H. L. Brinkhoff Company. No. 126,070; July 22; v. 264; p. 695.
 Corsets. M. J. Hunter. No. 126,018; July 22; v. 264; p. 697.
 Cotton piece goods. Cohn-Hall-Marx Co. No. 126,070; July 22; v. 264; p. 696.
 Cotton piece goods. Bates Manufacturing Company. No. 126,058; July 22; v. 264; p. 695.
 Cotton piece goods. Otis Co. No. 126,054; July 22; v. 264; p. 698.
 Cotton-seed salad-oil or a hard substitute. V. Marrone & Company. No. 126,039; July 22; v. 264; p. 698.
 Cravate, Men's. James H. Kelsor, Inc. Nos. 126,026-7; July 22; v. 264; p. 697.
 Cream, Face. Skintex Co. No. 126,084; July 22; v. 264; p. 699.
 Cream, Toilet. Howard Bro's Chemical Co. No. 126,017; July 22; v. 264; p. 697.
 Dandruff-destroyer and hair-grower. A. Bona. No. 126,067; July 22; v. 264; p. 695.
 Depilatory. J. Dounger. No. 126,085; July 22; v. 264; p. 696.
 Dresses, coats, suits, Children's. Sunshine Cloak & Suit Company. No. 126,093; July 22; v. 264; p. 699.
 Dyes and tanning extracts. Marden, Orth & Hastings Corporation. No. 126,035; July 22; v. 264; p. 697.
 Egg and baking-powder substitute. Henry D. Rodding-ton. No. 126,066; July 22; v. 264; p. 695.
 Fama, Electric oscillating. Ercole Marelli & Co. No. 126,037; July 22; v. 264; p. 697.

Feed, Poultry. Hyman & Ackerman. No. 126,020; July 22; v. 264; p. 697.
 Flavoring, saccharin. Food. Pabst Pure Extract Co. No. 126,024; July 22; v. 264; p. 698.
 Floor coverings. Congoleum Company. No. 125,981; July 22; v. 264; p. 696.
 Floor coverings, prepared. Congoleum Company. No. 125,980; July 22; v. 264; p. 696.
 Food, Poultry. Hyman & Ackerman. No. 126,019; July 22; v. 264; p. 697.
 Fuel containing charcoal as a base. Dry. Taplex Corporation. No. 126,095; July 22; v. 264; p. 699.
 Gaiters or spats. A. Priemeyer Shoe Company. No. 126,061; July 22; v. 264; p. 698.
 Glue. Rodin & Co. No. 126,070; July 22; v. 264; p. 698.
 Harness-rosettes, etc., and luggage-tags made of pyroxylin. Celluloid Company. No. 125,976; July 22; v. 264; p. 696.
 Hats, Men's. Young Brothers. Nos. 126,115-16; July 22; v. 264; p. 700.
 Hides for shoe-uppers. Tanned leather. Anchor Leather Company. No. 125,950; July 22; v. 264; p. 695.
 Hollow ware and tableware. Silver-plated. Middletown Silver Company. No. 126,040; July 22; v. 264; p. 698.
 Hosiery. Chest Heat Stock Co. No. 125,977; July 22; v. 264; p. 696.
 Hosiery and gloves. Finch, Van Slyke & McConville. No. 126,002; July 22; v. 264; p. 696.
 Hosiery, Ladies'. J. T. Conover. No. 125,982; July 22; v. 264; p. 696.
 Indigo. Society of Chemical Industry in Basle. No. 126,087; July 22; v. 264; p. 699.
 Ink in tablet form. F. L. M. Corporation. No. 126,059; July 22; v. 264; p. 698.
 Inks, type-writer ribbons, etc. E. F. Munday. No. 126,042; July 22; v. 264; p. 698.
 Insecticides and poisons for rodents and insect pests. Sheep-In-Pence Company. No. 126,085; July 22; v. 264; p. 699.
 Jam or conserve. Welch Grape Juice Company. Nos. 126,108-9; July 22; v. 264; p. 700.
 Knit undershirts, undershirts, union-suits, underwear. Sanitary Knitting Company. No. 126,075; July 22; v. 264; p. 699.
 Macaroni. Buckley Macaroni Company. No. 125,972; July 22; v. 264; p. 695.
 Machinery and tools and parts thereof. Baush Machine Tool Company. No. 125,960; July 22; v. 264; p. 695.
 Magazine, Weekly. Gulf Publishing Company. No. 126,069; July 22; v. 264; p. 697.
 Measuring and scientific appliances. Norman A. Lane. No. 126,047; July 22; v. 264; p. 698.
 Medical jelly for the nose. M. F. Schlesinger. No. 126,076; July 22; v. 264; p. 699.
 Medicinal preparation for colds, catarrhs, etc. R. W. Clothier. No. 125,978; July 22; v. 264; p. 696.
 Medicinal preparation. J. H. Tann. No. 126,094; July 22; v. 264; p. 699.
 Medicine for corns, bunions, and calluses. H. L. S. Toomer. No. 126,098; July 22; v. 264; p. 699.
 Methyl salicylic acid for treatment of sores, etc. Product of Lloyd Brothers. No. 126,032; July 22; v. 264; p. 697.
 Milk, Isolated. Dry Milk Company. No. 125,987; July 22; v. 264; p. 696.
 Motors, Musical-Instrument. Otto Holman Phonograph Supply Co. No. 126,055; July 22; v. 264; p. 692.
 Newspapers. Yale Daily News. No. 126,114; July 22; v. 264; p. 700.
 Oil, Edible cotton-seed. Littauer Oil Company. No. 126,031; July 22; v. 264; p. 697.
 Oil for lighting, heating, and power. Standard Oil Company of New York. No. 126,091; July 22; v. 264; p. 699.
 Oil, mayonnaise dressing, olives, etc. Cotton-seed. J. E. Shoemaker Co. No. 126,080; July 22; v. 264; p. 699.
 Oil, Olive. A. Russo. No. 126,072; July 22; v. 264; p. 699.
 Oil for lubricating yarn in the process of manufacture. Marlow, Orth & Hastings Corporation. No. 126,036; July 22; v. 264; p. 697.
 Oils and greases. Lubricating. W. H. Bieseker. No. 125,985; July 22; v. 264; p. 695.
 Oils for illuminating, burning, power, fuel, etc. Certain named. Sinclair Refining Company. No. 126,083; July 22; v. 264; p. 699.
 Ointment. W. H. Whitmore. No. 126,111; July 22; v. 264; p. 700.
 Ointment. J. E. Naregan. No. 126,043; July 22; v. 264; p. 698.
 Overalls. Stein & Reimer. No. 126,092; July 22; v. 264; p. 699.
 Paper and stationery. Certain named. Dulco Paper Company. No. 125,988; July 22; v. 264; p. 696.
 Paper, carboard, etc. Moser Paper Company. No. 126,041; July 22; v. 264; p. 698.
 Paper, Printing. S. D. Warren Company. No. 126,105; July 22; v. 264; p. 700.
 Paper, Writing. United Drug Company. No. 126,100; July 22; v. 264; p. 699.

Periodical, Monthly. General Appraisal Company. No. 126,066; July 22; v. 264; p. 696.
 Pharmaceutical product. Society of Chemical Industry in Basle. No. 126,088; July 22; v. 264; p. 699.
 Photographs and pictures. Eastland Studios. No. 125,990; July 22; v. 264; p. 696.
 Pills, Laxative. T. Rosa. No. 126,068; July 22; v. 264; p. 698.
 Plasters, Medicinal. Johnson & Johnson. No. 126,024; July 22; v. 264; p. 697.
 Plugs, Electric. C. E. Treat. No. 126,099; July 22; v. 264; p. 699.
 Plushes. L. Roessel & Co. No. 126,067; July 22; v. 264; p. 698.
 Powders, Face. Julius Schmidt Incorporated. Nos. 126,071-8; July 22; v. 264; p. 699.
 Powder, Talcum. Associated Pharmacists. No. 125,955; July 22; v. 264; p. 695.
 Preparation for the alleviation of consumption, etc. T. Kotlar. No. 126,029; July 22; v. 264; p. 697.
 Preparations for dressing the hair and cleansing the scalp. E. Lewis. No. 126,030; July 22; v. 264; p. 697.
 Preparation for the relief of excessive perspiration. Youth Craft Co. No. 126,117; July 22; v. 264; p. 700.
 Preparation for sore throat, tonsillitis, etc. F. P. Salemi. No. 126,073; July 22; v. 264; p. 699.
 Preparation for treatment of rheumatism and kidney disorders. Finke and Johnson. No. 126,004; July 22; v. 264; p. 696.
 Preparation for the treatment of influenza. C. Herzog. No. 126,012; July 22; v. 264; p. 697.
 Publications. Alexander Hamilton Institute. No. 125,948; July 22; v. 264; p. 695.
 Publications, Monthly. Armstrong Cork Company. No. 125,953; July 22; v. 264; p. 695.
 Publication, Monthly. Weinstein-Nichols Co. No. 126,107; July 22; v. 264; p. 700.
 Razors, Safety. A. H. Bryant. No. 125,971; July 22; v. 264; p. 695.
 Remedy for the treatment of freckles, tan, etc. J. W. Douthett. No. 125,986; July 22; v. 264; p. 696.
 Ribbons. Johnson, Cowdin & Co. No. 126,023; July 22; v. 264; p. 697.
 Rosettes, etc., for harness and luggage-tags all made of pyroxylin. Celluloid Company. Nos. 125,974-5; July 22; v. 264; p. 696.
 Rubber heels or lifts. Rarine Auto Tire Company. No. 126,063; July 22; v. 264; p. 698.
 Rugs, Woven. Olson Rug Company. No. 126,051; July 22; v. 264; p. 698.
 Shirts, nightgowns, pajamas, Night. E. Rosenfeld & Company. No. 126,060; July 22; v. 264; p. 698.
 Shirts, pajamas, underwear, collars, and cuffs, Men's. Phillips-Jones Company. No. 126,057; July 22; v. 264; p. 698.
 Shortening. Hodgson Oil Refining Company. No. 126,013; July 22; v. 264; p. 697.
 Silk piece goods. Empire Silk Company. Nos. 125,991-126,000; July 22; v. 264; p. 696.
 Socks and heels, Composition. Federal Rubber Company. No. 125,991; July 22; v. 264; p. 696.
 Stamps or coupons. Trading. A. Wisa. No. 126,113; July 22; v. 264; p. 700.
 Stationers' supplies. Frank A. Weeks Mfg. Co. No. 126,106; July 22; v. 264; p. 700.
 Steel, Black and galvanized. Berger Manufacturing Company. No. 125,963; July 22; v. 264; p. 695.
 Sweaters. A. Adler. No. 126,947; July 22; v. 264; p. 695.
 Talking machines, phonographs, etc. Sonora Phonograph Sales Company. No. 126,089; July 22; v. 264; p. 699.
 Tire pumps, Automobile. Shiel Ratner Manufacturing Company. No. 126,081; July 22; v. 264; p. 699.
 Tomato pulp. Salina Canning & Packing Co. No. 126,074; July 22; v. 264; p. 699.
 Tonic and conditioner for dogs only. Avalon Farms Company. No. 125,956; July 22; v. 264; p. 695.
 Tonic, Medicinal. Wm. R. Warner & Company. No. 126,104; July 22; v. 264; p. 700.
 Tools to alleviate neurasthenia, etc. Hallan Drugs Importing Co. No. 126,022; July 22; v. 264; p. 697.
 Toys, Wooden. T. R. Thompson. No. 126,097; July 22; v. 264; p. 699.
 Trunks. National Veneer Products Company. No. 126,044; July 22; v. 264; p. 698.
 Underwear. Francis T. Simmons & Co. No. 126,082; July 22; v. 264; p. 699.
 Underwear and aprons, Ladies' and children's. Oakkosh Mangle Underwear Co. No. 126,052; July 22; v. 264; p. 698.
 Underwear, dresses, etc. Children's. H. Rock. No. 126,064; July 22; v. 264; p. 698.
 Underwear for men. Oils Co. No. 126,053; July 22; v. 264; p. 698.
 Underwear, Linen-mesh. Ideal Linen Mesh Company. No. 126,021; July 22; v. 264; p. 697.
 Union suits, Athletic. Apparel Manufacturing Company. No. 125,952; July 22; v. 264; p. 695.

Varnishes and sanding-fillers. Pongkeepsle Paint Co. No. 126,060; July 22; v. 264; p. 698.
 Water, Laxative. Piedmont Chemical Works. No. 126,058; July 22; v. 264; p. 698.
 Wagon, Coaster. Holder Manufacturing Company. No. 126,011; July 22; v. 264; p. 697.
 Walists, Ladies'. Ace Walnut Co. No. 125,946; July 22; v. 264; p. 695.
 Watch-movements. National Watch Company. No. 126,045; July 22; v. 264; p. 698.
 Watches and watch-movements. I. Ollendorff Company. No. 126,050; July 22; v. 264; p. 698.

Waterproof cement for use on leather, cloth, etc. Van Schack Bros. Chemical Works. No. 126,103; July 22; v. 264; p. 700.
 Wireless plural receptacles, cluster-bolles, etc. Benjamin Electric Manufacturing Company. No. 125,962; July 22; v. 264; p. 695.
 Wood, Encased. R. A. Marr. No. 126,038; July 22; v. 264; p. 697.
 Woolen piece goods. Holden-Leonard Company. Nos. 126,014-16; July 22; v. 264; p. 697.
 Woolen piece goods. J. Ross. No. 126,071; July 22; v. 264; p. 699.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Air-purifiers. Antoslex Corporation of Detroit. No. 114,724; July 22; v. 264; p. 685.
 Automobile electric-light switches, etc. W. F. Penrod. No. 109,159; July 22; v. 264; p. 681.
 Automobile ream and radius rods, etc. Schneppe & Will Manufacturing Company. No. 116,194; July 22; v. 264; p. 687.
 Beverage, Malt. Pittsburgh Brewing Company. Nos. 115,011-14; July 22; v. 264; p. 684-5.
 Blowers and exhaustors, Turbine-actuated, etc. Carling Turbine Blower Co. No. 114,315; July 22; v. 264; p. 624.
 Book-marker. A. Smith. No. 114,705; July 22; v. 264; p. 624.
 Boots and shoes, Cork for making soles of. Armstrong Cork Company. No. 113,026; July 22; v. 264; p. 683.
 Boots and shoes, Leather. E. E. Taylor Company. No. 111,228; July 22; v. 264; p. 683.
 Brushes, Artists'. United Brush Manufacturing Co. No. 117,624; July 22; v. 264; p. 691.
 Brushes, Paint. etc. Cleveland Osburn Manufacturing Co. No. 111,093; July 22; v. 264; p. 682.
 Brushes, Paint and varnish. United Brush Manufacturing Co. No. 117,624; July 22; v. 264; p. 690.
 Brushes, Tooth. Williams Brush Co. No. 118,747; July 22; v. 264; p. 693.
 Brushes used as sash-tools. United Brush Manufacturing Co. No. 117,625; July 22; v. 264; p. 690.
 Brushes, Varnish. United Brush Manufacturing Co. No. 117,623; July 22; v. 264; p. 690.
 Brushes, Varnish. United Brush Manufacturing Co. No. 117,628; July 22; v. 264; p. 690.
 Brushes, Varnish and paint. United Brush Manufacturing Co. No. 117,625; July 22; v. 264; p. 690.
 Candy. G. W. Reiser. No. 117,818; July 22; v. 264; p. 691.
 Candles. Paul F. Belch Co. No. 117,864; July 22; v. 264; p. 691.
 Canned fruits and vegetables, teas, coffers, etc. J. F. Cramer. No. 70,824; July 22; v. 264; p. 681.
 Canned salmon and sardines. Knapp & Baxter Inc. No. 118,078; July 22; v. 264; p. 693.
 Cars, wagons, and parts thereof, and wheelbarrows. Horse-drawn. Hartman Company. No. 117,530; July 22; v. 264; p. 690.
 Cleaners. Powdered skin. Thoro Corporation. No. 110,720; July 22; v. 264; p. 682.
 Corduroy. New York Mills Corporation. No. 101,992; July 22; v. 264; p. 681.
 Corsets. Beaux Arts Corset Compagnie. No. 118,025; July 22; v. 264; p. 694.
 Corsets, brassieres, etc. John Wamamaker, New York. No. 111,083; July 22; v. 264; p. 682.
 Cream, face-powder, rouge, lip-stick, etc. Cold. Lustre Corporation. No. 115,990; July 22; v. 264; p. 687.
 Creams, Facial. M. Kussner. No. 117,407; July 22; v. 264; p. 690.
 Dandruff-exterminator. Koken Barbers' Supply Company. Nos. 118,560-1; July 22; v. 264; p. 682.
 Dye for the hair. L. Mottard. No. 111,394; July 22; v. 264; p. 683.
 Dyes. Palatine Aniline & Chemical Corporation. No. 118,329; July 22; v. 264; p. 692.
 Dyestuffs, Coal-tar. National Aniline & Chemical Company Inc. No. 116,103; July 22; v. 264; p. 687.
 Electric vacuum-cleaner. H. B. Carter. No. 115,024; July 22; v. 264; p. 686.
 Electrical-insulator connections. E. A. Walshaw. No. 114,794; July 22; v. 264; p. 685.
 Fabrics in the piece, etc. Sidney Blumenthal & Co. Inc. No. 119,017; July 22; v. 264; p. 694.
 Fabrics in the piece, etc. Sidney Blumenthal & Co. Inc. No. 119,018; July 22; v. 264; p. 694.
 Fabrics, Pile. L. C. Chase & Company. No. 118,750; July 22; v. 264; p. 693.
 Fabrics of silk and silk mixtures. Cheney Brothers. Nos. 115,080-7; July 22; v. 264; p. 686.
 Fabrics of silk and silk mixtures. Cheney Brothers. No. 115,091; July 22; v. 264; p. 686.
 Fabrics of silk and silk mixtures. Cheney Brothers. Nos. 115,094-5; July 22; v. 264; p. 686.

Fasteners, Snap and placket. Federal Snap Fastener Corporation. No. 117,801; July 22; v. 264; p. 691.
 Fence-posts, Red-cedar. E. T. Chapin Co. No. 117,641; July 22; v. 264; p. 691.
 Files and rasps. Rex File Co. No. 118,767; July 22; v. 264; p. 693.
 Florists' letters, emblems, and decorations. Koral Manufacturing Company. No. 117,845; July 22; v. 264; p. 689.
 Fruit and vegetable compound. R. Zieve. No. 101,250; July 22; v. 264; p. 681.
 Fruits, canned vegetables, etc., Creamed and preserved. Griggs, Cooper & Company. No. 103,144; July 22; v. 264; p. 681.
 Germicide. M. Reiman. No. 116,726; July 22; v. 264; p. 688.
 Grape-parking made of redwood sawdust, etc. Union Lumber Company. No. 112,619; July 22; v. 264; p. 683.
 Heart-stimulant. Intravenous Products Company. No. 113,215; July 22; v. 264; p. 683.
 Hosiery. Daum Rogers Spritzer Co. No. 116,231; July 22; v. 264; p. 687.
 Lard substitute. Wisconsin Butterline Co. No. 117,717; July 22; v. 264; p. 691.
 Leather belting. Edward R. Ladew Company, Inc. No. 116,791; July 22; v. 264; p. 688.
 Leather belting. Edward R. Ladew Company, Inc. No. 116,793; July 22; v. 264; p. 688.
 Leathers, Sole. L. Silberman. No. 117,468; July 22; v. 264; p. 690.
 Limbs, Artificial. True Artificial Limb Company. No. 109,251; July 22; v. 264; p. 682.
 Loxenges. Bio-Pharm Chemical Company. No. 118,074; July 22; v. 264; p. 692.
 Lye. E. Myers Lye Company. No. 118,569; July 22; v. 264; p. 693.
 Magazine, Monthly. Int Trade Publishing Co. No. 117,186; July 22; v. 264; p. 689.
 Magazine, Monthly. Millinery Trade Publishing Co. No. 117,192; July 22; v. 264; p. 689.
 Metals. Antifriction Babbitt. Ohio Metal Co. No. 117,740; July 22; v. 264; p. 691.
 Mullage. Columbia Fastener Company. No. 116,080; July 22; v. 264; p. 687.
 Musical compositions. Robert Russell Bennett Company. No. 117,889; July 22; v. 264; p. 689.
 Oil, glycerin, borax, etc. Castor. Western Grocer Company. No. 117,763; July 22; v. 264; p. 691.
 Oils. Goodhause Wall & Company Limited. No. 110,114; July 22; v. 264; p. 682.
 Painters' and decorators' tools and supplies. Ridgely Trimmer Company. No. 117,090; July 22; v. 264; p. 689.
 Paper, etc. Coated printing. A. M. Collins Manufacturing Company. No. 116,144; July 22; v. 264; p. 687.
 Paper and envelopes, Writing and printing. Majestic Mills Paper Company Inc. No. 114,117; July 22; v. 264; p. 624.
 Paper, envelopes, and tablets, Writing. J. C. Blair Company. No. 114,460; July 22; v. 264; p. 624.
 Paper, Back-exhibitors for walk. Ridgely Trimmer Company. No. 117,094; July 22; v. 264; p. 689.
 Paper, Writing. Fox Silver Paper Co. No. 113,846; July 22; v. 264; p. 624.
 Pens. Fountain. General Manufacturing Co. No. 113,621; July 22; v. 264; p. 683.
 Petticoats. G. Sperling. No. 118,943; July 22; v. 264; p. 694.
 Pianos. Morrison-Waters Piano Company. No. 115,923; July 22; v. 264; p. 687.
 Powder, pads and puffs. F. R. Arnold. No. 118,247; July 22; v. 264; p. 692.
 Powders and creams, Toilet. Maricotte et Cie. No. 118,605; July 22; v. 264; p. 693.
 Preparation for treating venereal diseases. Curtis Pharmaceutical Company. No. 110,880; July 22; v. 264; p. 682.
 Printing plates and matrices, etc. J. S. Stokes. No. 114,994; July 22; v. 264; p. 624.
 Prophylactics for venereal diseases. Chapin Company. No. 117,026; July 22; v. 264; p. 692.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Remedy, indigestion. Bell & Co., Inc. No. 118,292; July 22; v. 264; p. 692.
 Remedy, Pile. R. P. Smith & Co. No. 117,069; July 22; v. 264; p. 688.
 Remedies for poultry, disinfectants, &c. G. E. Conkey Co. Nos. 114,558-9; July 22; v. 264; p. 624.
 Rubber heels and soles for boots and shoes. Goodyear Tire & Rubber Company. No. 118,963; July 22; v. 264; p. 693.
 Rubber hose. Eureka Fire Hose Manufacturing Company. No. 110,165; July 22; v. 264; p. 682.
 Saddle-iron, laundry-washing machines, and wringers. Wm. Enders Manufacturing Company. No. 117,482; July 22; v. 264; p. 690.
 Salted peanuts. Conner Confection Company. No. 117,869; July 22; v. 264; p. 691.
 Salve. E. Davis. No. 115,001; July 22; v. 264; p. 624.
 Sawa. Henry Dixon & Sons Incorporated. No. 115,339; July 22; v. 264; p. 680.
 Seeds. American Mutual Seed Company. Nos. 112,724-5; July 22; v. 264; p. 683.
 Sheets for keeping funeral-records, partially-printed. C. H. J. Truman. No. 111,467; July 22; v. 264; p. 683.
 Shirts, collars, cuffs, &c. Gents' dress, negligee, work, and night. J. F. Hall & Co. Ltd. No. 115,837; July 22; v. 264; p. 687.
 Shirts, pajamas, neckties, &c. Dress, work, and night. Elder Manufacturing Company. No. 110,964; July 22; v. 264; p. 688.
 Shoes, leather. P. A. Field Shoe Co. No. 117,972; July 22; v. 264; p. 692.
 Silks, sewing. A. H. Rice Co. No. 117,388; July 22; v. 264; p. 689.
 Skirts and petticoats. Top. Waters-Weismann Co. Inc. No. 115,473; July 22; v. 264; p. 680.

Steel and steel coatings. Bar. Darwin & Milner, Inc. No. 118,433; July 22; v. 264; p. 692.
 Steelware, Enameled. A. S. Kohlec. No. 113,999; July 22; v. 264; p. 624.
 Suits for infants and children. S. Schwab. No. 118,709; July 22; v. 264; p. 693.
 Swimming or bathing devices. Regina Swimming Devices Co. No. 102,893; July 22; v. 264; p. 681.
 Syrup, Corn and cane. Duthan Syrup Co. No. 117,007; July 22; v. 264; p. 688.
 Tags, Shipping. Denney Tag Company. No. 116,458; July 22; v. 264; p. 688.
 Talking-machines and records. Milwaukee Talking Machine Mfg. Co. No. 115,626; July 22; v. 264; p. 686.
 Thread and yarn. Nonotuck Silk Company. No. 108,392; July 22; v. 264; p. 681.
 Thread, Linen. Barbours Brothers Co. No. 118,822; July 22; v. 264; p. 694.
 Threshing-machine. Minneapolis Steel & Machinery Company. No. 118,925; July 22; v. 264; p. 694.
 Tonic. Nervic. Intravenous Products Company. No. 113,212; July 22; v. 264; p. 683.
 Tooth-paste. Iodent Chemical Company. No. 118,601; July 22; v. 264; p. 693.
 Tractors and sub-pulverizers. Hession Thiller & Tractor Corporation. No. 117,162; July 22; v. 264; p. 689.
 Trees. Buckeye Nurseries. No. 118,587; July 22; v. 264; p. 693.
 Waists and blouses, shirt. Blaskopf & Co. No. 116,077; July 22; v. 264; p. 687.
 Water-heaters, furnaces, &c. Gas. Esia Manufacturing Company. No. 116,365; July 22; v. 264; p. 688.
 Woolen and wool and cotton piece goods. Millbrook Woolen Mills. No. 117,533; July 22; v. 264; p. 690.
 Wrenches, pliers, and vises. Bonney Vice & Tool Works, Inc. No. 118,425; July 22; v. 264; p. 692.

CLASSIFICATION OF PATENTS

ISSUED JULY 22, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 45: 1,310,560	24— 248: 1,311,080	58— 24: 1,310,780	74— 105: 1,311,080	92— 6: 1,310,750	130— 30: 1,311,074
2— 60: 1,310,560	250: 1,310,920	1,310,781	73— 1: 1,310,328	100— 50: 1,311,106	32: 1,310,921
91: 1,311,105	1: 1,310,963	1,310,784	17: 1,310,455	100— 50: 1,311,070	11: 1,310,935
190: 1,310,477	130: 1,310,632	1,310,785	101— 180: 1,310,658	101— 180: 1,310,658	12: 1,310,940
12: 1,310,589	1,311,122	1,310,786	76— 4: 1,310,968	220: 1,311,031	12: 1,310,856
4— 5: 1,310,497	131: 1,311,096	1,310,787	78— 27: 1,310,575	302: 1,310,932	30: 1,310,527
8— 1: 1,310,532	131.5: 1,310,515	1,310,788	39: 1,310,571	2: 1,310,586	37: 1,310,631
5: 1,310,751	2: 1,310,820	1,310,789	83: 1,310,610	6: 1,310,666	59: 1,310,652
1: 1,311,131	3: 1,310,860	1,310,793	81— 3: 1,310,510	29: 1,310,708	18: 1,310,557
1,311,150	35: 1,310,987	32: 1,310,782	1,310,535	1,310,790	1,310,914
6: 1,310,518	84: 1,311,128	68: 1,310,784	66: 1,310,965	1,311,006	35: 1,310,755
18: 1,310,522	85: 1,310,447	127: 1,310,323	119: 1,310,641	1,311,021	79: 1,310,841
22: 1,310,717	1,310,806	13: 1,310,682	177: 1,310,473	36: 1,310,844	26: 1,310,681
1,310,962	57.1: 1,310,904	24: 1,310,435	1,311,110	1,310,892	13: 1,310,521
10— 124: 1,310,620	30— 3: 1,311,028	41: 1,310,439	1,311,111	1,310,895	17: 1,310,964
12— 2: 1,310,463	11: 1,310,904	41: 1,310,608	190: 1,310,927	39: 1,310,742	75: 1,310,715
17: 1,310,491	32— 9: 1,310,654	1,310,672	83— 10: 1,310,798	1,310,792	58: 1,310,687
54: 1,310,579	80: 1,310,945	53: 1,310,945	54: 1,310,917	1,310,835	1,310,938
133: 1,310,762	98: 1,310,547	61— 2: 1,310,461	56: 1,310,643	1,311,054	1,311,081
30.5: 1,310,494	165: 1,310,431	76: 1,310,408	57: 1,310,526	1,311,081	103: 1,310,501
13— 7: 1,310,457	173: 1,310,665	63— 11: 1,310,859	60: 1,310,543	1,311,104	17: 1,310,795
13: 1,310,910	215: 1,310,444	64— 6: 1,311,095	64: 1,310,575	103— 64: 1,310,686	20: 1,310,713
16: 1,311,055	34— 12: 1,310,824	10: 1,310,684	71: 1,310,802	75: 1,311,035	139— 10: 1,310,902
41: 1,310,525	1,310,858	14: 1,310,955	75: 1,311,117	79: 1,310,615	22: 1,311,053
46: 1,310,670	17: 1,310,500	20: 1,310,679	84: 1,310,939	91: 1,310,683	85: 1,310,793
19: 1,311,022	26: 1,310,486	23: 1,310,642	85: 1,310,492	104— 172: 1,310,854	94: 1,310,799
22: 1,311,037	2: 1,310,997	36: 1,310,756	92: 1,310,433	105— 150: 1,311,018	104: 1,310,560
7: 1,310,931	40: 1,310,614	48: 1,310,794	1,310,837	262: 1,311,140	0: 1,310,966
10: 1,310,662	63: 1,311,079	59: 1,310,423	54— 17: 1,311,123	354: 1,311,075	73: 1,310,791
1: 1,310,588	73: 1,311,046	64: 1,310,556	161: 1,311,045	6: 1,310,901	1: 1,310,937
8: 1,310,509	73: 1,310,570	89: 1,310,971	193: 1,310,472	34: 1,310,520	143— 193: 1,310,640
17: 1,311,012	29: 1,310,725	90: 1,310,848	85— 2: 4: 1,311,038	1,311,081	35: 1,311,078
19: 1,310,439	61: 1,310,546	26: 1,310,655	8: 1,310,909	107— 68: 1,310,990	52: 1,311,147
35: 1,310,442	1.5: 1,310,804	53: 1,310,903	49: 1,310,908	21: 1,310,718	9: 1,310,572
56: 1,310,437	31: 1,310,688	53: 1,310,903	46: 1,311,062	111— 16: 1,310,710	30: 1,310,918
1,310,440	42: 1,310,978	72— 21: 1,311,060	12: 1,310,977	112— 22: 1,310,460	11: 1,310,740
1,310,441	87: 1,311,036	72— 22: 1,311,069	17: 1,310,706	1,311,082	3: 1,310,869
1,311,134	113: 1,311,101	67— 63: 1,310,991	58— 1: 1,311,087	230: 1,311,114	8: 1,310,448
15: 1,310,827	117: 1,310,428	68— 9: 1,310,657	1.5: 1,310,776	113— 2: 1,310,960	39: 1,310,621
16: 1,310,810	1,310,905	10: 1,310,400	17: 1,311,008	114— 1: 1,310,869	49: 1,310,669
40: 1,310,797	125: 1,310,769	30: 1,310,731	1,311,073	15: 1,310,533	4: 1,310,723
42: 1,310,842	130: 1,310,414	34: 1,310,424	18: 1,310,664	16: 1,310,677	21: 1,311,139
1,310,843	42: 1,310,659	46: 1,310,834	4: 1,310,579	17: 1,310,880	53: 1,311,011
68: 1,311,127	9: 1,310,553	53: 1,310,701	27: 1,310,887	63: 1,310,650	8: 1,310,513
7: 1,310,425	14: 1,310,815	102: 1,311,102	37: 1,310,883	238: 1,310,806	13: 1,310,438
8: 1,310,801	16: 1,310,452	108: 1,310,930	40: 1,310,878	240: 1,310,563	11: 1,311,046
12: 1,310,651	8: 1,310,985	108: 1,310,634	1,310,882	1,311,002	21: 1,310,603
31: 1,310,502	45— 77: 1,311,012	108: 1,310,634	1,310,885	21: 1,310,623	26: 1,310,831
55: 1,310,673	46— 21: 1,310,483	115: 1,310,774	1,310,888	44: 1,310,941	36: 1,311,024
61: 1,310,519	36: 1,310,493	128: 1,310,554	1,310,889	120— 114: 1,311,026	10: 1,310,701
69: 1,311,119	40: 1,310,925	128: 1,310,577	1,310,890	121— 14: 1,311,034	14: 1,310,436
76: 1,311,058	50: 1,310,421	39: 1,311,069	1,310,891	46: 1,310,735	3: 1,311,146
120: 1,310,498	50: 1,310,415	53: 1,310,597	45: 1,310,820	42: 1,310,881	9: 1,310,532
1,310,499	59: 1,310,415	66: 1,311,082	1,310,891	43: 1,310,883	12: 1,310,958
202: 1,311,032	1,310,643	77: 1,310,462	1,310,891	45: 1,310,820	16: 1,310,581
267: 1,310,732	63: 1,311,112	123: 1,310,591	1,310,891	11: 1,310,646	22: 1,310,566
230: 1,310,746	70: 1,310,707	138: 1,310,636	1,310,891	28.1: 1,310,933	1,311,148
65: 1,310,865	12: 1,311,136	110: 1,310,648	1,310,891	78: 1,310,446	156— 19: 1,310,469
196: 1,310,765	35: 1,311,001	151: 1,310,940	1,311,107	81: 1,310,646	7: 1,311,132
203: 1,311,109	167: 1,310,739	167: 1,310,739	7: 1,310,554	110: 1,311,020	36: 1,310,913
10: 1,310,943	180: 1,310,692	74— 7: 1,310,554	13: 1,310,992	127: 1,311,041	65: 1,310,927
13: 1,310,478	1,311,071	13: 1,310,992	14: 1,310,561	167: 1,310,485	99: 1,310,928
1,310,720	1,311,088	1,311,000	51: 1,310,592	169: 1,310,817	1: 1,310,702
21: 1,310,479	49— 3: 1,310,451	17: 1: 1,311,137	27: 1,310,760	54.4: 1,311,066	25: 1,310,965
22: 1,310,413	51— 4: 1,310,640	4: 1,310,640	27: 1,311,003	68: 1,310,624	61: 1,310,923
1,310,770	7: 1,310,760	28: 1,310,899	28: 1,310,703	1,310,703	68: 1,310,922
1,311,043	16: 1,310,744	32: 1,310,736	32: 1,310,847	70: 1,310,515	75: 1,310,853
1,310,984	3: 1,310,480	33: 1,311,130	1,310,847	1,310,515	114: 1,310,920
1,310,743	1,310,960	34: 1,310,711	1,310,847	92— 11: 1,310,694	12: 1,310,734
1,311,060	1,311,017	35: 1,310,590	1,310,847	23: 1,310,625	13: 1,310,613
3: 1,310,903	6: 1,310,466	37: 1,310,617	1,310,847	36: 1,310,697	1,310,644
18: 1,311,064	2: 1,310,796	40: 1,310,752	1,310,847	56: 1,310,590	22: 1,310,572
30.5: 1,311,040	8: 1,310,981	46: 1,310,984	1,310,847	35: 1,310,583	43: 1,310,830
62: 1,310,422	31: 1,310,636	58: 1,310,508	1,310,847	36: 1,310,576	54: 1,310,709
66: 1,310,587	60: 1,310,569	1,310,935	1,310,847	38: 1,310,921	112: 1,310,811
68: 1,310,456	104: 1,310,582	1,311,010	1,310,847	70: 1,310,453	116: 1,310,926
73: 1,310,536	107: 1,310,849	1,310,960	1,310,847	81: 1,310,664	196: 1,310,823
1,310,979	146: 1,310,541	78: 1,310,862	1,310,847	4: 1,310,670	127— 9: 1,311,042
123: 1,311,141	1,310,868	84: 1,310,612	1,310,847	27: 1,310,429	57: 1,310,930
156: 1,310,929	56— 285: 1,310,616	85: 1,311,124	1,310,847	31: 1,310,537	141: 1,310,825
170: 1,311,120	320: 1,311,016	99: 1,310,976	1,310,847	33: 1,310,511	153: 1,310,771
242: 1,310,548	375: 1,310,573	164: 1,310,464	1,310,847	49: 1,310,512	320: 1,310,982
244: 1,310,947	58— 24: 1,310,779	1,310,948	1,310,847	90— 2: 1,310,465	16.7: 1,310,468
				130— 15: 1,310,759	1,310,626

CLASSIFICATION OF PATENTS.

175— 28: 1,310,674	188— 70: 1,310,607	217— 13: 1,311,149	226— 33: 1,310,667	244— 21: 1,310,693	259— 143: 1,310,861
1,310,685	189— 3: 1,311,116	15: 1,310,777	229— 16: 1,310,763	1,310,839	261— 18: 1,310,806
1,310,695	49: 1,310,612	60: 1,310,647	21: 1,310,698	1,311,000	41: 1,310,426
1,311,019	13: 1,310,974	122: 1,311,086	31: 1,311,047	1,311,083	51: 1,310,432
294: 1,310,821	191— 29: 1,311,033	5: 1,310,554	22: 1,310,584	29: 1,310,619	79: 1,310,633
308: 1,310,543	192— 9: 1,310,629	10: 1,310,555	27: 1,310,471	1,311,097	262— 7: 1,311,142
355: 1,310,778	193— 22: 1,310,967	1,310,418	34: 1,310,722	1,311,129	1,311,143
1,311,135	194— 4: 1,310,454	1,310,419	1,310,944	31: 1,310,764	263— 36: 1,310,911
366: 1,310,430	195— 1: 1,310,826	34: 1,310,838	1,310,944	1,310,850	264— 7: 1,310,738
135: 1,311,133	196— 6: 1,310,540	38: 1,310,535	225— 32: 1,310,819	1,310,942	265— 6: 1,310,540
177— 7: 1,310,813	197— 88: 1,310,980	1,310,873	59: 1,311,041	266— 49: 1,310,747	266— 37: 1,310,908
327: 1,311,118	198— 3: 1,310,874	50: 1,310,666	60: 1,310,963	267— 8: 1,310,886	270— 5: 1,310,506
339: 1,310,496	199— 25: 1,310,748	63: 1,310,994	86: 1,311,100	271— 4: 1,310,434	271— 8: 1,311,061
346: 1,310,766	200— 67: 1,310,832	14: 1,310,725	133: 1,310,961	274— 34: 1,311,057	35: 1,310,753
352: 1,310,568	201— 123: 1,310,828	15: 1,310,635	130: 1,310,852	275— 3: 1,310,443	276— 32: 1,310,954
178— 22: 1,310,719	202— 179: 1,310,829	20: 1,310,516	236— 4: 1,311,098	277— 63: 1,310,409	277— 27: 1,311,012
71: 1,310,500	203— 18: 1,310,487	22: 1,310,517	16: 1,310,505	278— 58: 1,311,014	278— 26: 1,310,758
179— 6: 1,310,500	204— 47: 1,310,688	24: 1,310,571	60: 1,310,507	279— 56: 1,311,023	279— 71: 1,310,559
27: 1,310,730	205— 24: 1,310,544	25: 1,311,077	78: 1,310,705	280— 82: 1,310,827	280— 84: 1,310,866
180— 9: 1,310,466	206— 1: 1,310,727	28: 1,311,009	338: 1,310,649	281— 132: 1,310,740	281— 177: 1,311,145
1,310,417	207— 4: 1,311,096	40: 1,311,091	338: 1,310,851	282— 39: 1,310,983	282— 48: 1,310,731
13: 1,310,604	208— 19: 1,310,440	55: 1,310,836	2: 1,310,564	283— 33: 1,310,916	
26: 1,310,542	209— 20: 1,310,420	73: 1,310,857	8.4: 1,310,476		
1,310,972	210— 28: 1,310,693	96: 1,311,005	8.5: 1,310,763		
54: 1,310,898	211— 16: 1,310,407	23: 1,311,103	44: 1,310,959		
64: 1,310,265	212— 56: 1,310,669	60: 1,311,013	48.4: 1,310,721		
90: 1,310,660	213— 16: 1,310,773	61: 1,311,085	53: 1,310,936		
25: 1,310,910	214— 8: 1,310,504	99: 1,310,822	61: 1,310,691		
181— 38: 1,310,611	215— 1,310,601	135: R. 14,662	13: 1,310,498		
1,310,630	1,310,988	17: 1,310,602	89: 1,311,013		
44: 1,310,531	1,310,814	31: 1,311,062	131: 1,311,029		
187— 1: 1,311,084	1,310,814	51: 1,311,125	135: 1,311,108		
52: 1,311,112	31: 1,310,729	29: 1,310,563	142: 1,310,598		
81: 1,310,963	18: 1,310,846	14: 1,310,737	155: 1,310,576		
1,311,050	38: 1,310,986	1,311,076	1: 1,310,757		
188— 1: 1,310,951	315— 106: 1,310,999	21: 1,310,467	2: 1,310,716		
48: 1,311,072			14: 1,310,737		

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF JULY, 1919.

- A. Mecky Company. (See Ledig and Gerson, assignors.)
A. Schrubler's Son Incorporated. (See Nielsen, Frederik, assignor.)
A. C. Gilbert Company, The. (See Gilbert, Alfred C., assignor.)
A. T. Deer Company, The. (See Hand and Wygant, assignors.)
A. M. Castin & Co. (See Gabriel, Charles, assignor.)
Aalborg, Christian, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Post-type arc-lamp. No. 1,309,711; July 15; v. 264; p. 380.
Aarons, Jacob M., assignor to The Excello Manufacturing Company, Cleveland, Ohio. Coating for boiler-settings and the like. No. 1,310,591; July 22; v. 264; p. 572.
Aasen, Niels W., Christiania, Norway. Device for shooting grenades. No. 1,309,791; July 15; v. 264; p. 395.
Abbott, Edward J., Wilton, N. H. Stub-remover. No. 1,311,788; July 29; v. 264; p. 827.
Abbott, Frank E. (See Palmer and Abbott.)
Abbott, Harry R., assignor to Brockton Heel Company, Inc., Brockton, Mass. Composite heel. No. 1,311,545; July 29; v. 264; p. 783.
Abbott, Lyle S., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Process of and apparatus for making ballads. No. 1,308,885; July 8; v. 264; p. 189.
Abbott, William G., Jr., Wilton, N. H. Welding apparatus. No. 1,311,789; July 29; v. 264; p. 827.
Abell, Rollin, Milton, Mass. Internal-combustion engine. No. 1,311,200; July 29; v. 264; p. 718.
Abram Cox Store Company. (See Mott, Abram C., Jr., assignor.)
Ahtmeier, Theodore, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Percolator. No. 1,308,023; July 1; v. 264; p. 3.
Accessories Manufacturing Co. (See Bramming, Carl, assignor.)
Achtmeier, William, assignor to The Russell Mfg. Co., Middletown, Conn. Woven garter-pad. No. 1,310,271; July 15; v. 264; p. 482.
Acker, George C., Jacksonville, Fla. Attachment for locomotives. No. 1,308,407; July 1; v. 264; p. 84.
Ackerman, William. (See Nicholas and Ackerman.)
Acme Die Casting Corporation. (See Bungay, George W., assignor.)
Acme Harvesting Machine Company. (See Swartz, George W., assignor.)
Adams, Alonzo S., Waltham, Mass. Fruit-picker. No. 1,309,712; July 15; v. 264; p. 380.
Adams-Bagwell Electric Company. (See Thornton, George A., assignor.)
Adams, Edgar W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching apparatus. No. 1,309,231; July 8; v. 264; p. 254.
Adams, Floyd W., Hudson Heights, N. J., assignor to The Barrett Company. Napping and saturating felt and product thereof. No. 1,311,862; July 29; v. 264; p. 841.
Adams, Harry A., assignor to Serviceable Inventions Corporation, New York, N. Y. Label-vending machine. No. 1,310,592; July 22; v. 264; p. 572.
Adams, Morton L., assignor to Adams Tractor Company, Seattle, Wash. Tractor attachment for motor-vehicles. No. 1,309,053; July 8; v. 264; p. 223.
Adams, Morton L., assignor to Adams Tractor Company, Seattle, Wash. Tractor attachment. No. 1,310,406; July 22; v. 264; p. 539.
Adams, Perde, Newton, Ga. Aircraft. No. 1,308,155; July 1; v. 264; p. 27.
Adams Tractor Company. (See Adams, Morton L., assignor.)
Adams & Westlake Company, The. (See Hamm, William S., assignor.)
Adams & Westlake Company, The. (See Hamm and Stewart, assignors.)
Adams & Westlake Company, The. (See Seidel and Wattman, assignors.)
Aden, John G., Gothenburg, Nebr. Sash-holder. No. 1,309,677; July 15; v. 264; p. 374.
Adkins, Arthur, Leicester, England. Means for destroying enemy submarine craft. No. 1,309,391; July 8; v. 264; p. 283.
Adrian Machine Works. (See Callison, Amos, assignor.)
Adt, John R., assignor to John R. Adt Company, Baltimore, Md. Drier. No. 1,311,431; July 29; v. 264; p. 761.
Aeolin Company, The. (See Kelly, George B., assignor.)
Ahlburg, Frank, San Francisco, Calif., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Temperature-control system. (Release.) No. 1,44,685; July 15; v. 264; p. 507.
Ahlen, William, and K. H. Cederlund, Duquesne, Pa. Hot-bed and run-out table mechanism. No. 1,310,231; July 15; v. 264; p. 475.
Abond, Felix, Paris, France. Tool of circular shape with cutting-teeth, such as screw-taps, screw-plates, boring-tools, and milling-cutters. No. 1,309,232; July 8; v. 264; p. 254.
Ainsworth, William A., assignor of one-half to C. N. Mather, Grand Rapids, Mich. Dyeing composition. No. 1,310,318; July 22; v. 264; p. 558.
Air Reduction Company. (See Jacobs, Charles B., assignor.)
Air Reduction Company. (See Metager, Floyd J., assignor.)
Air Reduction Company. (See Roberts and Van Nuy, assignors.)
Air Reduction Company. (See Russell, Richard F., assignor.)
Air Reduction Company. (See Walker, George L., assignor.)
Air Reduction Company. (See Zonck, George H., assignor.)
Aircraft Fireproofing Corporation. (See Bradley, Parker R., assignor.)
Aircraft Inner Tire Company. (See Grube, John H., assignor.)
Altken, William, assignor to The Relay Automatic Telephone Company, Limited, London, England. System of multiplying trunk-wires. No. 1,311,432; July 29; v. 264; p. 761.
Akeley Camera Inc. (See Akeley, Carl E., assignor.)
Akeley, Carl E., assignor to Akeley Camera Inc., New York, N. Y. Flinder for moving-picture cameras. No. 1,310,776; July 22; v. 264; p. 608.
Akin, Allison, East Orange, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Protective device for electrical apparatus. No. 1,309,233; July 8; v. 264; p. 254.
Akin, James M., San Luis Obispo, Calif. Gage. No. 1,309,930; July 15; v. 264; p. 421.
Aktiebolaget Keros. (See Dalén, Gustaf, assignor.)
Aktiebolaget Salenius Verkstader. (See Eskilson, Sven A., assignor.)
Aktiebolaget Svenska Kullagerfabriken. (See Holtgren, Axel G. E., assignor.)
Aktieselskab Roulunda Fabrikker. (See Petersen-Hvild, Lauritz, assignor.)
Albach, Frank, assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Basket-ball goal. No. 1,308,831; July 8; v. 264; p. 179.
Albaum, Louis, Everett, Mass. Piston-ring compressor. No. 1,310,232; July 15; v. 264; p. 475.
Albert, Clifford E., Cincinnati, assignor to The U. S. Playing Card Company, Norwood, Ohio. Paper cheat-protector. No. 1,311,845; July 29; v. 264; p. 838.
Albrecht, John H., Madison, assignor to The T. L. Smith Company, Milwaukee, Wis. Extrator. No. 1,309,054; July 8; v. 264; p. 223.
Alchovsky, Naoum, Acton Hill, London, England. Land-digging or earth-excavating means or device. No. 1,310,728; July 22; v. 264; p. 597.
Aldea, Milton, assignor to Dental Electric Company, Springfield, Mass. Illuminating appliance. No. 1,311,700; July 29; v. 264; p. 828.
Aldrich, Carl G. (See Swift, Charles S., assignor.)
Alexander, James G., assignor to Alexander Mfg. Co., Inc., Ames, Iowa. Garden-cultivator. No. 1,309,831; July 15; v. 264; p. 402.
Alexander Mfg. Co. (See Alexander, James G., assignor.)
Alexandre, Eugene J., West Haven, Conn. Toilet-powder package. No. 1,309,713; July 15; v. 264; p. 380.
Alfred Decker & Cohn. (See Peine, Adolphus G., assignor.)
Allard, George G., St. Paul, Minn. Surgical instrument. No. 1,308,728; July 1; v. 264; p. 132.
Allee, William L., Topeka, Kans. Toy gun. No. 1,310,317; July 15; v. 264; p. 490.
Allen, Burnet H., Aberdeen, Wash. Rotary steam-engine. No. 1,309,871; July 15; v. 264; p. 410.
Allen, Charles S., Los Angeles, Calif. Homogenizer. No. 1,311,737; July 29; v. 264; p. 818.

Allen, George H., Clinton, N. Y. Furniture-polish. No. 1,309,171; July 8; v. 264; p. 243.
 Allen, Sherman T., Los Angeles, Calif., assignor of one-half to J. H. Hunt, Chicago, Ill. Self-cleaning grouser for tractor-wheels and the like. No. 1,309,006; July 8; v. 264; p. 212.
 Allen, William H., Muncie, assignor of one-third to E. A. Kramer, Grant Park, Ill. Brick-carrier. No. 1,308,021; July 1; v. 264; p. 3.
 Allgrunn, Carl G., Rochester, N. Y. Riding-tool and using same. No. 1,311,107; July 22; v. 264; p. 667.
 Allgrunn, Carl G., Rochester, N. Y. Riding-machine. No. 1,311,244; July 29; v. 264; p. 789.
 Alliance Machine Company. (See Kendall, David, assignor.)
 Allis-Chalmers Manufacturing Company. (See Brown, Arthur J., assignor.)
 Allis-Chalmers Manufacturing Company. (See Dahlstrand, Hans P., assignor.)
 Allis-Chalmers Manufacturing Company. (See Deutsch, Edward L., assignor.)
 Allis-Chalmers Manufacturing Company. (See George, Edgar C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Greenleaf and Hansen, assignors.)
 Allis-Chalmers Manufacturing Company. (See Haderer, Carl F., assignor.)
 Allis-Chalmers Manufacturing Company. (See Holthoff, Henry C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Hanson, Chenoweth, assignor.)
 Allis-Chalmers Manufacturing Company. (See Lincoln, Charles S., assignor.)
 Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
 Allis-Chalmers Manufacturing Company. (See Patitz, Johann F. M., assignor.)
 Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)
 Allis-Chalmers Manufacturing Company. (See Search, Charles E., assignor.)
 Allis-Chalmers Manufacturing Company. (See Steen, Halldan A., assignor.)
 Allis-Chalmers Manufacturing Company. (See Trout, William H., assignor.)
 Allis-Chalmers Manufacturing Company. (See Van Zandt, Paul C., assignor.)
 Allison, Irene, Waynesburg, Pa. Abdominal support. No. 1,309,007; July 8; v. 264; p. 212.
 Allmand, John T. (See Gates and Allmand.)
 Allsop, Thomas, and W. W. Sibson, assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Drying-machine. No. 1,308,024; July 1; v. 264; p. 3.
 Allyn, Robert S., trustee. (See Clark, Norris E., assignor.)
 Alsbaugh, James S., Portsmouth, Ohio. Mechanical movement. No. 1,308,832; July 8; v. 264; p. 179.
 Altgott, Fred, Jr., Kansas City, Mo. Fastening device for tire-chains. No. 1,310,171; July 15; v. 264; p. 464.
 Altman, Fred E. (See Frederick and Altman.)
 Aluminum Castings Company, The. (See Amick, Clair J., assignor.)
 Aluminum Castings Company, The. (See Parkhurst, Frederic A., assignor.)
 Amalgamated Machinery Corporation. (See Yeomans, Lucien L., assignor.)
 American Atmos Corporation. (See Koehler, Frederick W., assignor.)
 American Atmos Corporation. (See Lucha, Friedrich M., assignor.)
 American Barking Drum Company. (See Quettler, Herbert W., assignor.)
 American Brake Company. (See Burton, Thomas L., assignor.)
 American Can Company. (See Dister, Joseph, assignor.)
 American Can Company. (See Gray, James A., assignor.)
 American Can Company. (See Mothersall, John M., assignor.)
 American Can Company. (See Kline, Edward A., assignor.)
 American Can Company. (See March, John H., assignor.)
 American Can Company. (See Wood, Frederick P., assignor.)
 American District Telegraph Company. (See Hopkins, Richard M., assignor.)
 American District Telegraph Company. (See Johnson and Hoge, assignors.)
 American Electrical Heater Company. (See Kuhn and Shuller, assignors.)
 American Hardware Corporation, The. (See Teich, Ernest L., assignor.)
 American La France Fire Engine Company. (See Hawley, William G., assignor.)
 American La France Fire Engine Company. (See Knoblock, James W., assignor.)
 American Laundry Machinery Company, The. (See Andree, William E., assignor.)
 American Laundry Machinery Company, The. (See Braley, C. L., assignor.)
 American Laundry Machinery Company. (See Snow, Arthur E., assignor.)
 American Machine & Foundry Company. (See Prescott, Sydney I., assignor.)

American Magnesium Corporation. (See Seward, George O., assignor.)
 American Manganese Steel Company. (See Black, Edward S., assignor.)
 American Manganese Steel Company. (See Brinton, Walter, assignor.)
 American Metal Cap Company. (See Hammer, Charles, assignor.)
 American Mine Door Company, The. (See Bowman, Newton K., assignor.)
 American Optical Company. (See Blanchard, William N., assignor.)
 American Optical Company. (See Day, George H., assignor.)
 American Optical Company. (See Tillyer and Styll, assignors.)
 American Piano Company. (See Cognozzo, Joseph, assignor.)
 American Piano Company. (See Russell, Guy M., assignor.)
 American Pulley Company, The. (See Bowen, Russell H., assignor.)
 American Sintering Company. (See Reckard, William P., assignor.)
 American Sleeve-Valve Motor Company. (See Williams, Martin L., assignor.)
 American Slicing Machine Co., The. (See Hood and Wolf, assignors.)
 American Slicing Machine Co. (See Wolf and Hood, assignors.)
 American Spring Machine Co., The. (See Hood, Ernest K., assignor.)
 American Steam Gauge & Valve Manufacturing Company. (See Hopkins, Frank H., assignor.)
 American Steel Foundries. (See Peycke, Armand H., assignor.)
 American Steel & Wire Company of New Jersey, The. (See Merkt, Gustav A., assignor.)
 American Synthetic Dyes Incorporated. (See Hamlin, Marston L., assignor.)
 American Tax Company. (See Swett, Arthur H., assignor.)
 American Telephone and Telegraph Company. (See Blauvelt, William G., assignor.)
 American Telephone and Telegraph Company. (See Carson, John R., assignor.)
 American Telephone and Telegraph Company. (See Demarest, Charles S., assignor.)
 American Telephone and Telegraph Company. (See Espenchied, Lloyd, assignor.)
 American Telephone and Telegraph Company. (See Gherardi, Bancroft, assignor.)
 American Telephone and Telegraph Company. (See Mills and Carson, assignors.)
 American Telephone and Telegraph Company. (See Toomey and Demarest, assignors.)
 American Telephone and Telegraph Company. (See Vername, Gilbert S., assignor.)
 American Toy Shop, The. (See Otto, Adolph O., assignor.)
 Ames, Bradford L., Boston, Mass. Smoke-preventer. No. 1,309,172; July 8; v. 264; p. 243.
 Amet, Edward H., Redondo Beach, Calif. Retiulated motion-picture curtain. No. 1,308,468; July 1; v. 264; p. 84.
 Amet, Edward H., assignor of one-half to C. J. Funk, Redondo Beach, Calif. Drain-pipe cleaner. No. 1,308,469; July 1; v. 264; p. 84.
 Amik, Clair J., assignor to The Aluminum Castings Company, Cleveland, Ohio. Mold. No. 1,308,156; July 1; v. 264; p. 27.
 Amos, Frank, assignor to Wheeling Tile Company, Wheeling, W. Va. Insulator. No. 1,311,483; July 29; v. 264; p. 771.
 Anchorstar, Anna M., New York, N. Y. Attachment for corsets. No. 1,308,025; July 1; v. 264; p. 3.
 Ancott, Russell, West Springfield, and P. G. Martone, Springfield, Mass. Circuit-breaker or cut-out. No. 1,310,111; July 15; v. 264; p. 453.
 Anderson, Anton T., Chicago, Ill. Wrench. No. 1,309,311; July 8; v. 264; p. 269.
 Anderson, Arthur T., Champaign, Ill. Controlling device. No. 1,310,318; July 15; v. 264; p. 480.
 Anderson, Edwin C., assignor to The Buck's Stove & Range Company, St. Louis, Mo. Ash-spraying device for furnaces and boilers. No. 1,308,013; July 1; v. 264; p. 111.
 Anderson Electric Specialty Co. (See Anderson, Ernst O. K., assignor.)
 Anderson, Emil C., Denver, Colo. Lock-bolt. No. 1,308,026; July 1; v. 264; p. 4.
 Anderson, Ernst O. K., assignor to Anderson Electric Specialty Co., Chicago, Ill. Extension-lamp. No. 1,309,078; July 15; v. 264; p. 374.
 Anderson, Ernst O. K., assignor to Anderson Electric Specialty Co., Chicago, Ill. Spot-lamp. No. 1,309,714; July 15; v. 264; p. 381.
 Anderson, George. (See Bullock and Anderson.)
 Anderson, Hjalft S., Cypress River, Manitoba, Canada. Sheaf-shocker. No. 1,311,484; July 29; v. 264; p. 771.
 Anderson, Jeff, Atlanta, Tex. Stalk puller and chopper. No. 1,311,201; July 29; v. 264; p. 718.

Anderson, Jerry A., Batavia, Ill. Machine for manufacturing tank-bottoms. No. 1,311,306; July 29; v. 264; p. 737.
 Anderson, John, Duluth, Minn. Automatic damper. No. 1,311,202; July 29; v. 264; p. 718.
 Anderson, John W. (See Tideman and Anderson.)
 Anderson, John W., New London, Conn., assignor to Electric Post Company. Hinged funnel. No. 1,309,055; July 8; v. 264; p. 223.
 Anderson, Raymond M., assignor to Stromberg Motor Devices Company, Chicago, Ill. Carburetor. No. 1,311,307; July 29; v. 264; p. 737.
 Andersson, Victor O. J., Malmö, Sweden. Calculating-machine. No. 1,309,872; July 15; v. 264; p. 410.
 Andersson, Victor O. J., Malmö, Sweden. Calculating-machine. No. 1,310,852; July 22; v. 264; p. 621.
 Andree, William E., Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Garment-press. No. 1,311,151; July 29; v. 264; p. 709.
 Andree, William E., Chicago, Ill., assignor to The American Laundry Machinery Company, Norwood, Ohio. Kick-off device for garment-presses. No. 1,311,546; July 29; v. 264; p. 783.
 Andresen, Vilgo V. J., Copenhagen, Denmark. Making dental cements. No. 1,310,801; July 22; v. 264; p. 629.
 Andrew Hoffman Manufacturing Co. (See Sebastian, Alphonse A., assignor.)
 Andrews, Cyrus N., Incalpa, Calif. Audiophone. No. 1,311,433; July 29; v. 264; p. 761.
 Angell, Fred P., Battle Creek, Mich. Door-check. No. 1,309,050; July 8; v. 264; p. 223.
 Angier, Edward H., Framingham, Mass. Baling. No. 1,311,367; July 29; v. 264; p. 740.
 Ankele, Morris A., Newark, Ohio. Poultry-brooder. No. 1,308,470; July 1; v. 264; p. 84.
 Annable, Lee V., assignor to The Standard Parts Company, Cleveland, Ohio. Vehicle-wheel rim. No. 1,309,731; July 15; v. 264; p. 388.
 Anti-Friction Belt Dressing Company. (See Ryab, John, assignor.)
 Antanrich, Frederick A., Brooklyn, N. Y. Glass bevelling and polishing apparatus. No. 1,309,792; July 15; v. 264; p. 395.
 Apfel, Philip F., Seattle, Wash. Electric heater. No. 1,309,873; July 15; v. 264; p. 410.
 Appelbaum, Isaac, Philadelphia, Pa. Fabric-cutting machine. No. 1,310,853; July 22; v. 264; p. 621.
 Appelbee, Frank J., Montclair, N. J. Display-card for buttons and the like. No. 1,310,729; July 22; v. 264; p. 597.
 Appelgren, Knut. (See Gustafson and Appelgren.)
 Appleton, Henry J., Detroit, Mich. Annunciator. No. 1,311,034; July 29; v. 264; p. 798.
 Archbold, Joseph G., Monkseaton, England. Automatic coupling for railway and other vehicles. No. 1,309,057; July 8; v. 264; p. 223.
 Archer, Charles E., and E. C. Humphreys, Detroit, Mich. Signal-lamp. No. 1,309,392; July 8; v. 264; p. 283.
 Argylls Limited. (See Bort, Peter, assignor.)
 Argylls Limited, The. (See McCullum, James H. K., assignor.)
 Arlington Company, The. (See Crane, Leonard E., assignor.)
 Arlington Company, The. (See Terhane, Jasper B., assignor.)
 Armour Fertilizer Works. (See Meyers, Herbert H., assignor.)
 Arms Products Company. (See Post, Truman W., assignor.)
 Armstrong, Adam E., Three Rivers, Mich. Steam-trap. No. 1,309,604; July 15; v. 264; p. 361.
 Armstrong, Ernest K., Millersburg, Ohio. Hair-pin. No. 1,308,833; July 8; v. 264; p. 179.
 Armstrong, George F., Rutherford, N. J. Making puncture-proof tire-tubes. No. 1,311,738; July 29; v. 264; p. 818.
 Armstrong, George J., Buffalo, N. Y., assignor, by mesne assignments, to The Columbus McKinnon Chain Co., Columbus, Ohio. Electric welding-machine. No. 1,310,554; July 22; v. 264; p. 565.
 Armstrong, George J., Buffalo, N. Y., assignor to The Columbus McKinnon Chain Co., Inc., Columbus, Ohio. Electric welding-machine. No. 1,310,555; July 22; v. 264; p. 565.
 Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,308,920; July 1; v. 264; p. 57.
 Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,308,321; July 1; v. 264; p. 57.
 Armstrong, Harry Y., assignor to Package Machinery Company, Springfield, Mass. Banding-machine. No. 1,308,322; July 1; v. 264; p. 57.
 Armstrong, John A., Westcombe Park, London, England. Unsinkable ship. No. 1,310,233; July 15; v. 264; p. 473.
 Arnold, Fred W., Cambridge, Ohio. Fish-net. No. 1,310,553; July 22; v. 264; p. 565.
 Arnold, Jacob F., Bellevue, Ohio. Table. No. 1,308,052; July 1; v. 264; p. 118.
 Arnot, William D., Bellevue, Wash. Combined wrench and pliers. No. 1,309,874; July 15; v. 264; p. 410.

Aromat Company, The. (See Harris and Bogue, assignors.)
 Arps, Edmund P., U. S. Army. Steering device. No. 1,310,032; July 22; v. 264; p. 654.
 Art Metal Construction Company, The. (See Bullock and Anderson, assignors.)
 Arthur-Fowler Co. (See Arthur, Guy, assignor.)
 Arthur, Guy, assignor to Arthur-Fowler Co., Riverville, Wash. Electric water-heater. No. 1,309,234; July 8; v. 264; p. 254.
 Arthur, James W., assignor to The Williams Foundry & Machine Company, Akron, Ohio. Vulcanizing apparatus. No. 1,308,834; July 8; v. 264; p. 170.
 Arthur, James W., Warren, Ohio. Tire-casing holder and shifter. No. 1,309,058; July 8; v. 264; p. 223.
 Arta, Harry L., New York, N. Y. Weight-monitor. No. 1,311,203; July 29; v. 264; p. 718.
 Arundel, Hubert. (See Higginson and Arundel.)
 Arvintz, Abraham A., assignor to S. Levin, Brooklyn, N. Y. Sprinkler system. No. 1,308,074; July 8; v. 264; p. 206.
 Asbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Firing mechanism for guns. No. 1,310,043; July 15; v. 264; p. 441.
 Asbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Plug-operating device for breech mechanisms. No. 1,310,044; July 15; v. 264; p. 441.
 Asbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Breech mechanism. No. 1,310,045; July 15; v. 264; p. 441.
 Asbury, Dorsey F., assignor to United States Ordnance Company, Washington, D. C. Detonating-fuse. No. 1,310,046; July 15; v. 264; p. 441.
 Asbury, Harry E., Philadelphia, Pa. Hand-grenade. No. 1,311,739; July 29; v. 264; p. 818.
 Asbury, Harry E., Philadelphia, Pa. Hand-grenade. No. 1,311,740; July 29; v. 264; p. 818.
 Ascher, Louis K., Indianapolis, Ind. Thermostatically-controlled radiator-valve. No. 1,309,008; July 8; v. 264; p. 212.
 Ashley, Arthur E., Boise, Idaho. Hood-lift motor-ventilator. No. 1,308,923; July 8; v. 264; p. 190.
 Asmondia, Rocco, Zellenople, Pa. Saw setting and sharpening machine. No. 1,311,308; July 29; v. 264; p. 738.
 Aspinwall, John A. F., Liverpool, England. Protected third rail. No. 1,311,033; July 22; v. 264; p. 654.
 Aspinwall, Louis M. (See Stimson and Aspinwall.)
 Atchley, Emerson J., Riverside, Calif. Bee-shipping box. No. 1,311,741; July 29; v. 264; p. 819.
 Atkinson, Herbert S., East Orange, N. J., assignor to The Hayward Company, New York, N. Y. Bucket. No. 1,311,259; July 29; v. 264; p. 729.
 Atsberger, Frank N., East Islip, N. Y. Buebling-puller. No. 1,310,270; July 15; v. 264; p. 482.
 Auble Die & Stamping Company, The. (See Auble, James H. and J. L., assignors.)
 Auble, James H. and J. L., assignors to The Auble Die & Stamping Company, Cincinnati, Ohio. Process and apparatus for forming sheet-metal forms. No. 1,311,368; July 29; v. 264; p. 749.
 Auble, James L. (See Auble, James H. and J. L.)
 Auel, Carl B., and D. C. Pultney, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Safety-guard for machine-tools. No. 1,308,027; July 1; v. 264; p. 4.
 Augenthaler, Harry E. (See Greco, Joseph, assignor.)
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Treating mine-water. No. 1,310,382; July 15; v. 264; p. 502.
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Treating acid mine-water. No. 1,310,383; July 15; v. 264; p. 502.
 Auld, Elgie C., and J. R. Campbell, Scottsdale, Pa. Recovering by-products from acid mine-water. No. 1,310,384; July 15; v. 264; p. 502.
 Auld, Frederick H., Columbus, Ohio. Container for razor-blades. No. 1,310,407; July 22; v. 264; p. 639.
 Austin, Henry F., New Orleans, La. Target. No. 1,310,048; July 22; v. 264; p. 582.
 Austin, Henry F., New Orleans, La. Toy gun. No. 1,310,044; July 22; v. 264; p. 582.
 Austin Manufacturing Company. (See Liddell, Moses V., assignor.)
 Austin, Walter M., Swiswale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Constructing electric terminals. No. 1,309,975; July 8; v. 264; p. 206.
 Austin, Z. H., trustee. (See Sherman, H. E. and C. E., assignors.)
 Auto Specialties Manufacturing Co. (See Blair, Clarence L., assignor.)
 Automatic Carburetor Company. (See Church, Edmund H., assignor.)
 Automatic Electric Company. (See Martin, Talbot O., assignor.)
 Automatic Electric Company. (See Powell, Winfred T., assignor.)
 Automatic Electric Company. (See Smith, Arthur B., assignor.)
 Automatic Packing & Labeling Company. (See Gwinn, George W., assignor.)
 Autoplane Company. (See La Jole, Herbert J., assignor.)

Autopiano Company. (See Velebradsky, Joseph, assignor.)
 Autosales Corporation. (See Grover, Albert D., assignor.)
 Autosales Corporation. (See Pann, August C., assignor.)
 Averill, Earl A., Mount Vernon, N. Y., assignor to Locomotive Feed Water Heater Company, Wilmington, Del. Locomotive-feed-water heater. No. 1,308,835; July 8; v. 264; p. 180.
 Averill, Thomas G., Chicago, Ill. Furnace-door. No. 1,311,569; July 22; v. 264; p. 749.
 Ayres, Mols H., assignor to Slocum, Ayres and Slocum, Inc., New York, N. Y. Efficiency-recorder. No. 1,309,235; July 8; v. 264; p. 255.
 Ayres, George R., assignor to Wm. Ayres & Sons, Philadelphia, Pa. Woven fabric. No. 1,310,902; July 22; v. 264; p. 629.
 B. B. Specialty Co. (See Burke and Beckwith, assignors.)
 B. F. Avery & Sons. (See Ray, Charles T., assignor.)
 B. F. Goodrich Company, The. (See Gammeter, John H., assignor.)
 B. F. Goodrich Company, The. (See Harper, Charles L., assignor.)
 B. F. Goodrich Company, The. (See Raymond and Remond, assignors.)
 B. F. Sturtevant Company. (See Bentley and Gibbs, assignors.)
 B. F. Sturtevant Company. (See Caracristi and Bentley, assignors.)
 Babcock & Wilcox Company, The. (See Cole, Willie J., assignor.)
 Babcock & Wilcox Company, The. (See Sargent and Heaton, assignors.)
 Babcock & Wilcox Company, The. (See Webster, Hosen, assignor.)
 Backmeyer, Christopher F., Chicago, Ill. Snap-fastener. No. 1,308,140; July 1; v. 264; p. 25.
 Bacon, George M., Salt Lake City, Utah. Rotary valve. No. 1,309,059; July 8; v. 264; p. 223.
 Bacon, Raymond F., Pittsburgh, Pa., assignor to Metals Research Company, New York, N. Y. Making soluble solids. No. 1,310,151; July 15; v. 264; p. 460.
 Bader, Nicholas F. (See Kohler, Nathan, assignor.)
 Badger, Frank H., Harnett, Wis. Stock-watering bowl. No. 1,310,320; July 15; v. 264; p. 491.
 Badger, Oliver L., Plainfield, N. J., assignor to Kerr Adjustable Strap Company, Inc., New York, N. Y. Shing-biting for same. No. 1,309,431; July 8; v. 264; p. 291.
 Badger, Oliver L., Plainfield, N. J., assignor to Kerr Adjustable Strap Company, Inc., New York, N. Y. Flexible support. No. 1,309,606; July 15; v. 264; p. 361.
 Baetz, Henry, St. Louis, Mo. Air-bentling apparatus. No. 1,309,577; July 15; v. 264; p. 430.
 Bailey, Arthur C., Vancouver, Wash. Bicycle-rim. No. 1,311,434; July 22; v. 264; p. 762.
 Bailey, Charles A., Cromwell, Conn. Toy pistol. No. 1,308,141; July 1; v. 264; p. 25.
 Bailey, Charles A., Cromwell, Conn. Toy pistol. No. 1,308,143; July 1; v. 264; p. 25.
 Bair, Clarence L., St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., San Francisco, Calif. Vehicle-bow-top holder. No. 1,310,319; July 22; v. 264; p. 558.
 Bair, Clarence L., assignor to Auto Specialties Manufacturing Co., St. Joseph, Mich. Vehicle-bow-top holder. No. 1,311,370; July 22; v. 264; p. 750.
 Baird, Frank, assignor to Pacific Foundry Company, San Francisco, Calif. Valve. No. 1,311,585; July 22; v. 264; p. 749.
 Baird, James, Ardmore Papakara, New Zealand. Automatic candle-extinguisher. No. 1,308,215; July 1; v. 264; p. 38.
 Baker, Arthur F., Sedro Woolley, Wash., assignor to The Perfect Gear Differential Co., Seattle, Wash. Driving-gear for motor-vehicles. No. 1,309,978; July 15; v. 264; p. 430.
 Baker, H. Franklin, St. Stephen, New Brunswick, Canada. Ticket-case. No. 1,309,173; July 8; v. 264; p. 243.
 Baker, David C., East Orange, N. J. Awning-book. No. 1,308,519; July 1; v. 264; p. 93.
 Baker, Eric K., assignor to Universal Rim Company, Chicago, Ill. Remountable wheel-rim. No. 1,310,047; July 15; v. 264; p. 441.
 Baker, Eric K., assignor to Universal Rim Company, Chicago, Ill. Remountable rim and complementary wheel. No. 1,310,048; July 15; v. 264; p. 442.
 Baker, George S. (See Shaw and Baker.)
 Baker, Joseph C., assignor of one-half to J. L. Rokey, Denver, Colo. Thermal circuit-closer. No. 1,311,204; July 22; v. 264; p. 719.
 Baker, Stephen D., New York, N. Y. Wall-fixture element. No. 1,311,635; July 22; v. 264; p. 799.
 Baker, Thomas W. (See Magee, Frederick W., assignor.)
 Baker, Walter C., Lakewood, assignor to The Standard Parts Company, Cleveland, Ohio. Brake mechanism. No. 1,308,142; July 1; v. 264; p. 25.
 Balcells, Juan, and J. Servitje, Mexico, Mexico. Panning-machine. No. 1,308,216; July 1; v. 264; p. 39.
 Baldock, John S., Clayton, Ind. Power transmission. No. 1,308,814; July 1; v. 264; p. 11.
 Baldwin, Arthur S., Baltimore, Md. Safety percussion-fuse. No. 1,311,672; July 22; v. 264; p. 800.
 Baldwin, Arthur S., Baltimore, Md. Percussion-fuse. No. 1,311,673; July 22; v. 264; p. 800.

Baldwin, Arthur S., Baltimore, Md. Safety-fuse. No. 1,311,674; July 22; v. 264; p. 800.
 Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
 Balkenol, William F. (See Graig and Balkenol.)
 Ball Brothers Glass Manufacturing Company. (See Wadsworth, Frank L. D., assignor.)
 Ball Grain Explosives Company. (See Du Pont, Francis I., assignor.)
 Ball Grain Explosives Company. (See Du Pont, Francis I. and E. P., assignors.)
 Ball Grain Explosives Company. (See Du Pont, Ernest, assignor.)
 Ball, Lawrence, Brazil, Ind. Pulling attachment for motor-driven vehicles. No. 1,308,615; July 1; v. 264; p. 111.
 Ballerstedt, William D., Los Angeles, Calif. Spray-nozzle. No. 1,310,938; July 22; v. 264; p. 636.
 Balogh, George W., and L. Pusk, Buffalo, N. Y. Trans-parent sign. No. 1,308,157; July 1; v. 264; p. 28.
 Bancroft, George J., Denver, Colo. Separating mica from feldspar. No. 1,310,939; July 22; v. 264; p. 636.
 Bannock, Katharine S., Los Angeles, Calif. Comfort-bag. No. 1,308,028; July 1; v. 264; p. 4.
 Banwell, Henry C., London, and F. Phillips, Bromley, England, assignors to The National Cash Register Company, Dayton, Ohio. Ticket-printing mechanism. No. 1,309,832; July 15; v. 264; p. 402.
 Barber-Colman Company. (See Colman, Howard D., assignor.)
 Barber, Franklin L., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Side bearing for same. No. 1,310,556; July 22; v. 264; p. 565.
 Barber, Franklin L., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Car-truck. No. 1,311,371; July 22; v. 264; p. 750.
 Bardo, John B. (See White and Bardo.)
 Bark, Andrew, Seattle, Wash. Luggage-carrier for automobiles. No. 1,310,593; July 22; v. 264; p. 572.
 Barker, James, Ann Arbor, Mich. Index arrangement. No. 1,308,471; July 1; v. 264; p. 84.
 Barker, John P., Tropico, assignor, by mesne assignments, to C. F. Hunter, Los Angeles, Calif. Internal-combustion motor. No. 1,309,312; July 8; v. 264; p. 209.
 Barker, William R., Vanzant, Mo. Fence-post driver. No. 1,310,272; July 15; v. 264; p. 482.
 Barkwill, William H., Akron, Ohio. Milling-machine. No. 1,308,029; July 1; v. 264; p. 4.
 Barlett Hayward Company, The. (See Boigiano, Gilbert F., assignor.)
 Barling, Walter H. (See Tarrant and Barling.)
 Barnaby, Charles W., New York, N. Y. Type-writer. No. 1,308,386; July 1; v. 264; p. 69.
 Barnes, John L., Lexington, Ky. Hemp-breaker. No. 1,311,742; July 22; v. 264; p. 819.
 Barnes Manufacturing Company. (See Gorman, James C., Jr., assignor.)
 Barnett, John E., et al. (See Jewett, John C. and W. A., assignors.)
 Barnick, Feliks, Rosemont, W. Va. Ship construction. No. 1,309,375; July 15; v. 264; p. 410.
 Barnum, Ernest R., North Bangor, N. Y. Direction-indicator. No. 1,308,323; July 1; v. 264; p. 58.
 Barnum, Oliver S., Alhambra, Calif. Shade-adjuster. No. 1,311,372; July 22; v. 264; p. 750.
 Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Adjuster for range-finders. No. 1,309,174; July 8; v. 264; p. 243.
 Barr, John H., New York, N. Y. Computing-machine. No. 1,311,373; July 22; v. 264; p. 750.
 Barr, John H., New York, assignor to Remington Type-writer Company, Ilion, N. Y. Type-writing machine. No. 1,311,675; July 22; v. 264; p. 800.
 Barr, John U., New York, N. Y. Headlight for automobiles or similar vehicles. No. 1,309,679; July 15; v. 264; p. 375.
 Barratt, William, Coburg, Victoria, Australia. Atmospheric gas-burner. No. 1,308,472; July 1; v. 264; p. 84.
 Barrell, William L., Lawrence, Mass. Welt-replenishing loom. No. 1,308,144; July 1; v. 264; p. 25.
 Barrellier, Charles, Paris, France. Hand-propelled vehicle. No. 1,308,270; July 1; v. 264; p. 45.
 Barrett, Arthur M., Winnetka, Ill. Truck. No. 1,308,750; July 8; v. 264; p. 165.
 Barrett Company, The. (See Adams, Floyd W., assignor.)
 Barrett Company, The. (See Swenson, George E., assignor.)
 Barrett, Joseph C., Brooklyn, N. Y. Measuring instrument. No. 1,308,751; July 8; v. 264; p. 165.
 Barrett, Joseph C., Brooklyn, N. Y. Rocker-bearing for measuring instruments. No. 1,310,464; July 22; v. 264; p. 548.
 Barstow, Warren H., Toppenish, Wash. Rotary steam-engine. No. 1,310,735; July 22; v. 264; p. 598.
 Bartine, Wesley, Philadelphia, Pa. Tramway-conveyer. No. 1,310,854; July 22; v. 264; p. 621.
 Bartlett, A. H., et al. (See Ford, Everett G., assignor.)
 Bartlett, Edward T., Llanaroch, Pa. Means for raising sunken ships. No. 1,309,111; July 8; v. 264; p. 232.
 Bartholomew, Oscar L., Grand Rapids, Mich. Rat and mouse exterminator. No. 1,309,608; July 15; v. 264; p. 361.
 Barton, Carleton J., Chicago, Ill. Treating vegetable oils. No. 1,310,977; July 22; v. 264; p. 643.

Barton, Edward H., Sprague, Wash. Hatchet-tool. No. 1,309,715; July 15; v. 264; p. 851.
 Bass, T. H. (See Reynolds, Robert E., assignor.)
 Bassett, Edgar F., Harwich, Mass. Cranberry-picker. No. 1,309,009; July 8; v. 264; p. 213.
 Batchelder, Asa F., Schenectady, N. Y., assignor to General Electric Company. Electric locomotive or car. No. 1,310,049; July 15; v. 264; p. 442.
 Bates, Carleton, assignor to United States Glue Company, Milwaukee, Wis. Machinery for solidifying liquefied solids. No. 1,309,995; July 15; v. 264; p. 433.
 Ball, Charles F., Brooklyn, N. Y. Internal-combustion-engine power plant. No. 1,309,236; July 8; v. 264; p. 255.
 Bauer Bros. Co., The. (See Paschall, Armand L., assignor.)
 Bauer, Charles G., Brooklyn, N. Y. Compound air-pump. No. 1,308,387; July 1; v. 264; p. 69.
 Baumann, Karl, Urmston, England, assignor to The British Westinghouse Electric and Manufacturing Company, Limited. Steam-turbine especially applicable to the propulsion of marine vessels. No. 1,311,547; July 22; v. 264; p. 783.
 Baumann, Leopold, Sr., and P. Philadelphia, Pa., assignors of seven thirty-seconds to said L. Baumann, Sr., seven thirty-seconds to said P. Baumann, and seven thirty-seconds to N. T. Whitaker, and eleven thirty-seconds to H. J. Browne, Washington, D. C. Tools for boring gun forgings and shafting. No. 1,310,319; July 15; v. 264; p. 491.
 Bausch & Lomb Optical Company. (See Grebe, Albert, assignor.)
 Bausch & Lomb Optical Company. (See Kellner, Gustav A. H., assignor.)
 Bauman, Alonzo L., Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass. Rotary pump. No. 1,309,237; July 8; v. 264; p. 255.
 Baxter & Caunter. (See Rotherham, Joseph, assignor.)
 Baxter, Kenneth S., assignor to The Sheet Steel Products Company, Bryan, Ohio. Motor-truck seat. No. 1,311,146; July 22; v. 264; p. 674.
 Baylis, Everett A., El Paso, Tex. Centrifugal separator. No. 1,308,271; July 1; v. 264; p. 48.
 Beach, Fitch H., Charlotte, Mich. Gravel-screen. No. 1,310,046; July 22; v. 264; p. 582.
 Beach, Merrill A., Penn Yan, N. Y. Liquid-dispensing apparatus. No. 1,309,505; July 8; v. 264; p. 304.
 Beale, Blanche E., Springfield, Mass. Hair-curler. No. 1,310,537; July 22; v. 264; p. 565.
 Beal, Michael L., Pasadena, Calif. Resilient sandpaper-drum. No. 1,311,743; July 22; v. 264; p. 819.
 Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill. Molding apparatus. No. 1,309,833; July 15; v. 264; p. 403.
 Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill. Making molds for steel castings. No. 1,309,834; July 15; v. 264; p. 403.
 Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill. Making molds for foundling. No. 1,309,835; July 15; v. 264; p. 403.
 Beardsley, Elmer O., Chicago, and W. F. Piper, Oak Park, Ill. Portable machine for making molds. No. 1,309,836; July 15; v. 264; p. 403.
 Beattie, James M. (See Spear and Beattie.)
 Beattie, John E., assignor to The Carrie Gyroscopic Corporation, New York, N. Y. Compass-corrector. No. 1,308,692; July 1; v. 264; p. 125.
 Beattie, John E., assignor to The Carrie Gyroscopic Corporation, New York, N. Y. Dampening device for gyroscopic compasses. No. 1,308,693; July 1; v. 264; p. 126.
 Beaumont, Frederick J., London, England. Connection for electric batteries. No. 1,309,561; July 8; v. 264; p. 315.
 Beauregard, Albert F., West De Pere, Wis. Gas-control for motor-vehicles. No. 1,311,800; July 22; v. 264; p. 829.
 Beaver, Charles J., Hale, A. F. W. Richards, Brooklands, and E. A. Claremont, High Legh, England. Detecting and protective device for electric cables. No. 1,308,388; July 1; v. 264; p. 69.
 Beaver, Charles J., Hale, and E. A. Claremont, High Legh, England. Sheath-coupling for electric cables. No. 1,308,389; July 1; v. 264; p. 70.
 Beaver, Charles J., Hale, A. F. W. Richards, Brooklands, and E. A. Claremont, High Legh, England. Sheath-coupling for electric cables. No. 1,308,390; July 1; v. 264; p. 70.
 Becheran, Louis, Paris, France. Multiple-engine driving mechanism. No. 1,309,451; July 8; v. 264; p. 295.
 Becht, Edward C., Newport, Ky. Beating and aerating process and apparatus. No. 1,309,175; July 8; v. 264; p. 243.
 Beck, Alwin, assignor of one-half to H. S. Simms, Rochester, N. Y. Camera. No. 1,311,676; July 22; v. 264; p. 800.
 Beck, John C., Milton, Ind. Grave-lining. No. 1,310,820; July 22; v. 264; p. 615.
 Becka, John V., Cleveland, Ohio. Box for electric meters. (Reissue). No. 14,677; July 1; v. 264; p. 136.
 Beckwith, Grove R. (See Burke and Beckwith.)
 Becker, Harry G., Watervliet, N. Y. Drifting-valve apparatus for locomotives. No. 1,311,034; July 22; v. 264; p. 654.

Becket, Frederick M., Niagara Falls, N. Y., assignor to Union Carbide Company, New York, N. Y. Manufacture of calcium carbide. No. 1,310,465; July 22; v. 264; p. 549.
 Becket, Frederick M., assignor to Electro Metallurgical Company, Niagara Falls, N. Y. Explosive. No. 1,310,466; July 22; v. 264; p. 549.
 Beckwith, Walter C., Fostoria, Ohio. Hydraulic strain-equalizer. No. 1,311,108; July 22; v. 264; p. 687.
 Beecher, Edward, St. Louis, Mo., assignor to Indian Packing Company, Green Bay, Wis. Demonstrating case and carrier for commercial salesmen. No. 1,311,586; July 22; v. 264; p. 790.
 Becman Garlen Tractor Co. (See Phelps, Spencer H., assignor.)
 Behrman, Marcus B., New York, N. Y., assignor to Lor Seal Corporation. Tag-fastener. No. 1,308,771; July 8; v. 264; p. 168.
 Belchier, Earl H. (See Weiss, Alexander, assignor.)
 Belcher, Oswald T., Los Angeles, Calif. Aeroplane construction. No. 1,311,205; July 22; v. 264; p. 710.
 Beler, Adolf, Pittsburgh, Pa. Regulating-valve. No. 1,309,318; July 8; v. 264; p. 269.
 Bell, George H., deceased, Brooklyn, N. Y.; H. L. Bell, executrix. Vaporizer. No. 1,308,571; July 1; v. 264; p. 103.
 Bell, Harriet L., executrix. (See Bell, George H.)
 Bell, John E., Brooklyn, N. Y. Stack-sealing device. No. 1,311,435; July 22; v. 264; p. 762.
 Bell, John E., Brooklyn, N. Y. Damper. No. 1,311,436; July 22; v. 264; p. 762.
 Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated. Distributing system. No. 1,308,391; July 1; v. 264; p. 70.
 Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated. New York, N. Y. Rectifying system. No. 1,309,176; July 8; v. 264; p. 244.
 Bell, John H., South Orange, N. J., assignor to Western Electric Company, Incorporated. New York, N. Y. Telegraph system. No. 1,310,593; July 22; v. 264; p. 573.
 Bell, Joseph D., San Francisco, Calif. Combined bed and seat. No. 1,308,030; July 1; v. 264; p. 4.
 Bell, Leslie H., Paulina, Iowa. Heater for internal-combustion engines. No. 1,311,206; July 22; v. 264; p. 719.
 Bell, Mark J., assignor to Leo Shupiro & Company, Incorporated, Minneapolis, Minn. Display-rack. No. 1,308,031; July 1; v. 264; p. 5.
 Bell, Thomas W., and T. C. Rogers, Sistersville, W. Va. Wire-line clamp. No. 1,308,924; July 8; v. 264; p. 196.
 Bellard, Paul M., assignor to Compagnie D'Applications Mecaniques, Ivery Port, France. Device for gaging circular work. No. 1,308,324; July 1; v. 264; p. 58.
 Bellamy, Leonard A., Dayton, Ohio. Mold. No. 1,309,607; July 15; v. 264; p. 361.
 Belzian, Valentine, Los Angeles, Calif. Adjustable plann-bench. No. 1,308,720; July 1; v. 264; p. 132.
 Bendisari, Arthur E. (See De Mier, Fred, assignor.)
 Bender, George A., Pittsburgh, Pa. Collapsible shipping-case. No. 1,310,777; July 22; v. 264; p. 606.
 Bendheim, Edward, San Francisco, Calif. Suspender attachment. No. 1,311,853; July 22; v. 264; p. 839.
 Benfil, Vincent, Chicago, Ill. Engine-starter. No. 1,308,752; July 8; v. 264; p. 165.
 Bendisen, Nels, High Holborn, London, England. Means for molding powdered substances. No. 1,309,112; July 8; v. 264; p. 232.
 Benedict, Bernard, assignor to Traders Metal Goods Co., Inc., New York, N. Y. Flash-light. No. 1,308,032; July 1; v. 264; p. 5.
 Benedict, Edward L., Baltimore, assignor of one-half to O. O. Robinson, Baltimore county, Md. Carb-bar. No. 1,311,488; July 22; v. 264; p. 771.
 Benedict, Edward L., Baltimore, assignor of one-half to O. O. Robinson, Baltimore county, Md. Building structure. No. 1,311,486; July 22; v. 264; p. 771.
 Benedict, Louis K., Hastings, Fla. Tractor-wheel. No. 1,309,010; July 8; v. 264; p. 213.
 Benedict, Martin H., Mahawk, N. Y. Dust-pan. No. 1,311,802; July 22; v. 264; p. 830.
 Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
 Benjamin Electric Manufacturing Company. (See Harlow, Clarence H., assignor.)
 Benjamin, George H., New York, N. Y. Tunnel-kiln. No. 1,311,487; July 22; v. 264; p. 772.
 Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electrical receptacle. No. 1,308,977; July 8; v. 264; p. 206.
 Benn, Alonzo N., Chicago, Ill. Safety-razor. No. 1,308,730; July 1; v. 264; p. 133.
 Bennett, Alfred A., assignor to The Copperstone Products Company, Toledo, Ohio. Cement composition. No. 1,310,520; July 22; v. 264; p. 559.
 Bennett, Ebenezer. (See Parsons, Bennett, and Rowe.)
 Benson, David, Lenoire, Ill. Stock-fountain. No. 1,311,374; July 22; v. 264; p. 750.
 Bentley, Oliver D. H. (See Caracristi and Bentley.)
 Bentley, Oliver D. H., West Roxbury, and J. H. Gibbs, Readville, assignors to B. F. Sturtevant Company, Hyde Park, Mass. Gearing. No. 1,309,113; July 8; v. 264; p. 232.
 Benton, Frank W., Wilson, N. C. Parachute. No. 1,308,033; July 1; v. 264; p. 5.

Berg, Frederick A., Chicago, Ill. Parachute. No. 1,310,467; July 22; v. 264; p. 549.
 Bergen, Harry S., assignor to Toledo Scale Company, Toledo, Ohio. Weighing-scale. No. 1,310,940; July 22; v. 264; p. 636.
 Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Needle-clamp. No. 1,309,272; July 8; v. 264; p. 201.
 Berglund, John L., assignor to The Smith & Egge Manufacturing Company, Bridgeport, Conn. Punch. No. 1,308,272; July 1; v. 264; p. 49.
 Bergman, Edmond J., Vincennes, Ind. Demountable-rim fastener. No. 1,308,610; July 1; v. 264; p. 111.
 Bergvik, Chris., Vankton, S. D. Spectacles. No. 1,309,793; July 15; v. 264; p. 395.
 Berkowitz, Eugene B., Kansas City, Mo. Patch-box for envelop-making machines. No. 1,311,936; July 29; v. 264; p. 799.
 Berman, Frank. (See Hanson, Carl T. P., assignor.)
 Bernard Pierre J. H., Montreal, Quebec, Canada. Heater. No. 1,308,836; July 8; v. 264; p. 180.
 Berner, Jesse S. (See Leich and Berner.)
 Berner, John, assignor to H-H Manufacturing Company, Chicago, Ill. Transmission lever-lock. No. 1,311,744; July 29; v. 264; p. 819.
 Bernsten, Hertz M., Brooklyn, N. Y. Screw-driver. No. 1,311,147; July 22; v. 264; p. 674.
 Berry, George W., Rose Bay, near Sydney, assignor to The Wireless Hinge Manufacturing Company, Limited, Sydney, New South Wales, Australia. Apparatus for automatically farming and connecting hinge members on the lids and bodies of sheet-metal receptacles. No. 1,311,587; July 29; v. 264; p. 790.
 Berry, George W., Rose Bay, near Sydney, assignor to The Wireless Hinge Manufacturing Company, Limited, Sydney, New South Wales, Australia. Delivery means for sheet-metal presses. No. 1,311,588; July 29; v. 264; p. 790.
 Berthel, Charles J., Akron, Ohio. Stabilizing device for use on aeroplanes. No. 1,309,452; July 8; v. 264; p. 295.
 Berthelot, Daniel, Paris, and H. J. F. Guilbaud, Meudon, France. Pump. No. 1,311,035; July 22; v. 264; p. 634.
 Bertrand, Joseph P., Port Arthur, Ontario, Canada. Garden-tool. No. 1,309,177; July 8; v. 264; p. 244.
 Beza, Pedro J., New York, N. Y. Shutter-controlling mechanism for film-cameras. No. 1,308,017; July 1; v. 264; p. 131.
 Bessler, Frank E., assignor to The Bessler Movable Stairway Co., Akron, Ohio. Panel-stairway. No. 1,309,314; July 8; v. 264; p. 270.
 Bessler Movable Stairway Co., The. (See Bessler, Frank E., assignor.)
 Best, John A., Augusta, Ga. Card for indexing. No. 1,310,468; July 22; v. 264; p. 549.
 Best, John A., Augusta, Ga. Index-card. No. 1,311,207; July 29; v. 264; p. 719.
 Bethlehem Shipbuilding Corporation. (See Thomas, Harry J., assignor.)
 Betts, Gilbert A., Topeka, Kans. Production photo-engraving. No. 1,310,385; July 15; v. 264; p. 503.
 Betts, William H., assignor of one-half to F. Rought, St. Louis, Mo. Sole-protector. No. 1,310,050; July 15; v. 264; p. 442.
 Beta, Harry P., Kansas City, Mo. Wireless and automatic railway safety system. No. 1,308,925; July 8; v. 264; p. 190.
 Beumann, Blanche E., Brighton, Mich. Bong attachment for washtubs. No. 1,311,745; July 29; v. 264; p. 819.
 Beyerle, Gottlob W., Denver, Colo. Olive-pitter. No. 1,311,589; July 29; v. 264; p. 790.
 Bibby, James, London, England. Electric furnace. No. 1,308,273; July 1; v. 264; p. 49.
 Bilen, John M. (See Lietke and Bilen.)
 Bierbach, Carl F., assignor of one-half to O. Gilver, Rochester, N. Y. Egg-cup. No. 1,310,112; July 15; v. 264; p. 453.
 Biggs-Watterson Co., The. (See Wertman, Milton A., assignor.)
 Higham, Thomas J., Kansas City, Mo. Curtain-pole. No. 1,308,217; July 1; v. 264; p. 30.
 Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company. Electrical apparatus. No. 1,308,158; July 1; v. 264; p. 28.
 Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company. Engine starting device. No. 1,311,854; July 29; v. 264; p. 839.
 Bijur, Joseph, New York, N. Y., assignor to The Safety Car Heating and Lighting Company. Railway lighting apparatus. No. 1,308,274; July 1; v. 264; p. 49.
 Bijur Motor Appliance Company. (See Bijur, Joseph, assignor.)
 Bijur Motor Appliance Company. (See Wolffsohn, Lionel M., assignor.)
 Billman, Obed C. (See Trusel, Harvey H., assignor.)
 Bingham, Jeremiah, assignor to The Bock Bearing Company, Toledo, Ohio. Feed mechanism. No. 1,311,590; July 29; v. 264; p. 790.
 Binks, Harold, Eccles, England. Carburetor for internal-combustion engines. No. 1,309,178; July 8; v. 264; p. 244.

Binks, Harry D., River Forest, Ill. Spray-nozzle. No. 1,310,987; July 22; v. 264; p. 590.
 Birch, Gustaf B. (See Cameron and Birch.)
 Birch, James S., Chicago, Ill. Concrete-work fastener. No. 1,311,036; July 22; v. 264; p. 634.
 Bird, Milton W., Wenatchee, Wash. Door-knob. No. 1,308,325; July 1; v. 264; p. 58.
 Birkenbeul, Julia H., Portland, Oreg. Vulcanizing-press mold. No. 1,311,375; July 29; v. 264; p. 751.
 Birrell, Daniel S., and O. Smith, Warrington, England. Weaving crimped or wire-mesh work material. No. 1,311,746; July 29; v. 264; p. 819.
 Bishop Company, Inc., The. (See Bishop, Frederick R., assignor.)
 Bishop, Frederick R., assignor to The Bishop Company, Inc., North Attleboro, Mass. Eyeglass-mounting. No. 1,310,273; July 15; v. 264; p. 483.
 Bissell, Carl H., and E. O. Smith, assignors to Crouse-Hinds Company, Syracuse, N. Y. Electric-conduit fitting. No. 1,311,376; July 29; v. 264; p. 751.
 Bissell Carpet Sweeper Co. (See Owen and Bouwmeester, assignors.)
 Bjonecud, Earl S., Calmar, Iowa. Letter-opener. No. 1,308,218; July 1; v. 264; p. 39.
 Black, Edward S., assignor to American Manganese Steel Company, Chicago, Ill. Mill-pulver. No. 1,309,837; July 15; v. 264; p. 403.
 Black, James L., Alexandria, Minn. Internal-combustion engine. No. 1,308,326; July 1; v. 264; p. 58.
 Black, John, Jr. (See Moore, Black, and Crosby.)
 Black, John L., assignor to O. P. Tucker, Valdosta, Ga. Fuel-saving device. No. 1,309,114; July 8; v. 264; p. 233.
 Blackburn, Jasper, Webster Groves, Mo. Cable-hanger. No. 1,308,979; July 8; v. 264; p. 207.
 Blackburn, Jasper. (See Trachte, Dietrich F., assignor.)
 Blackburn, Jasper, Webster Groves, Mo. Cable-hanger. No. 1,308,979; July 8; v. 264; p. 207.
 Blackman, Charles D., et al. (See Leitch, Roy C., assignor.)
 Blacksher, Erasmus M., Brewton, Ala. Starting, stopping, and stabilizing appliance for aeroplanes. No. 1,311,377; July 29; v. 264; p. 751.
 Blair, Lewis V. D. (See Simonson and Blair.)
 Blake, George A., deceased; M. D. Blake, administrator, Watertown, N. Y. Device for tying packages. No. 1,309,506; July 8; v. 264; p. 304.
 Blake, Mary D., administrator. (See Blake, George A.)
 Blake, Nicholas J., Columbus, Ohio. Drafting apparatus. No. 1,310,590; July 22; v. 264; p. 573.
 Blakemore, Frank B., Chicago, Ill. Speed-signaling system. No. 1,310,778; July 22; v. 264; p. 607.
 Blakeney, Albert N., assignor to Metal Package Corporation of New York, Brooklyn, N. Y. Drying-oven. No. 1,308,837; July 8; v. 264; p. 180.
 Blakeslee, Henry J., West Hartford, Conn. Meter-testing apparatus. No. 1,309,931; July 15; v. 264; p. 421.
 Blanchard, William N., assignor to American Optical Company, Southbridge, Mass. Goggles. No. 1,308,477; July 1; v. 264; p. 86.
 Blank, George W., St. Charles, Minn. Grain-distributor. No. 1,309,315; July 8; v. 264; p. 270.
 Blaw-Knox Company. (See Venable, William M., assignor.)
 Blaw Steel Construction Company. (See Venable, William M., assignor.)
 Blau, William, New York, N. Y. Fur-cutting implement. No. 1,310,736; July 22; v. 264; p. 599.
 Blauvelt, William G., New York, N. Y., assignor to American Telephone and Telegraph Company. Semi-mechanical telephone system. No. 1,310,730; July 22; v. 264; p. 597.
 Blaw, Jacob B., Atlantic City, N. J. Reinforced-concrete conduit. No. 1,310,597; July 22; v. 264; p. 573.
 Blaw, Jacob B., Atlantic City, N. J. Portable hoisting apparatus. No. 1,310,598; July 22; v. 264; p. 573.
 Blecker, Warren F., and W. L. Morrison, Cannonsburg, Pa., assignors to Electric Reduction Company. Producing alkali-earth metals. No. 1,311,378; July 29; v. 264; p. 751.
 Blecker, Warren F., and W. L. Morrison, Cannonsburg, Pa., assignors to Electric Reduction Company. Apparatus for producing alkali-earth metals. No. 1,311,379; July 29; v. 264; p. 751.
 Blecker, Warren F., and W. L. Morrison, Cannonsburg, Pa., assignors to Electric Reduction Company. Alkali-earth metal material. No. 1,311,380; July 29; v. 264; p. 751.
 Blevins, Alonzo. (See Body, Long, Johnson, Kilgore, and Blevins.)
 Bliss, Bruce E., Wichita, Kans. Two-part interlocking tire. No. 1,311,300; July 29; v. 264; p. 738.
 Bliss, Orville J., Chicago, Ill. Protective relay system. No. 1,310,821; July 22; v. 264; p. 615.
 Bliss, William L., assignor to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Variable-resistance regulator for electric circuits. No. 1,310,599; July 22; v. 264; p. 574.
 Blissell, Charles H., assignor of one-third to C. H. Wise, Oil City, Pa. Pilot for locomotives. No. 1,310,731; July 22; v. 264; p. 597.
 Blodgett, Martin, Brooklyn, N. Y. Type-writing machine. No. 1,308,980; July 8; v. 264; p. 207.

Blomfield, Alfred L., Denver, Colo., assignor to The Dorr Company. Flotation ore-separating apparatus. No. 1,310,051; July 15; v. 264; p. 442.
 Blood, Harold L., Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y. Planer and system of motor control therefor. No. 1,311,208; July 29; v. 264; p. 719.
 Blood, Harold L., Plainfield, N. J., assignor to Niles-Bement-Pond Company, New York, N. Y. Planer and system of motor control therefor. No. 1,311,209; July 29; v. 264; p. 720.
 Blouin, Alfred, Holyoke, assignor to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,311,747; July 29; v. 264; p. 820.
 Bloxom, John J. (See Donaldson, Bloxom, and Brooks.)
 Blumenfeld, Louis. (See Fischer, William, assignor.)
 Blumenthal, Alexandre and J. Paris, France. Machine for fixing clasps. No. 1,308,327; July 1; v. 264; p. 58.
 Blumenthal, Jack. (See Blumenthal, Alexandre and J. Paris, France.)
 Blunt, Joseph D., et al. (See Tollie and Ernberger, assignors.)
 Blush, Angus T., Erie, Pa. Micrometer. No. 1,311,548; July 29; v. 264; p. 753.
 Blye, Harold, assignor to National Brass Co., Grand Rapids, Mich. Door-latch. No. 1,310,600; July 22; v. 264; p. 574.
 Boardman, Charles S., Buffalo, N. Y., assignor to Lackawanna Steel Company, Lackawanna, N. Y. Pile driver and puller. No. 1,310,408; July 22; v. 264; p. 539.
 Boblan, Johan, Southwest, Pa. Rail-joint. No. 1,208,618; July 1; v. 264; p. 112.
 Boblett, Kinderman M., Toledo, Ohio. Metal-bending into looped formation. No. 1,311,637; July 29; v. 264; p. 799.
 Bock Hearing Company, The. (See Bingham, Jeremiah, assignor.)
 Bock Hearing Company, The. (See Bock, William E., assignor.)
 Bock, William E., Toledo, Ohio. Motor-vehicle. No. 1,311,591; July 29; v. 264; p. 791.
 Bock, William E., Toledo, Ohio, assignor to The Bock Hearing Company, (Incorporated in Ohio in March, 1916.) Article-grinding machine. No. 1,310,356; July 15; v. 264; p. 503.
 Bocking, Frederick W., Van Buren, Ark. Rabbie and clincher-brake. No. 1,308,653; July 1; v. 264; p. 118.
 Bodman, Walter L., Bromsgrove, England. Wheel for motor and other vehicles. No. 1,310,732; July 22; v. 264; p. 598.
 Bode, Joseph J., L. Long, M. L. Johnson, Dante, C. F. Kilgore and A. Blevins, Coeburn, Va. Mine-door-operating means. No. 1,311,488; July 29; v. 264; p. 772.
 Boehringer, Louis V., and H. Thumasson, Dayton, Ohio. Door-lock. No. 1,308,473; July 1; v. 264; p. 85.
 Bogue, Robert D. (See Harris and Bogue.)
 Bohy, Alfred, Albion, Iowa. Washing-machine mechanism. No. 1,310,558; July 22; v. 264; p. 566.
 Bolander, Edgar. (See Henry, George W., assignor.)
 Bolte, Ernest E. G. (See Edridge and Bolte.)
 Bold, Frederick W. (See Eberhard, Maloney, and Bold.)
 Bolen, Emerson A., Morris, Ill. Vending-machine. No. 1,310,601; July 22; v. 264; p. 574.
 Bolzano, Gilbert E., assignor to The Bartlett Hayward Company, Baltimore, Md. Machine for graduating time-rings. No. 1,309,593; July 8; v. 264; p. 321.
 Boll, Nils P., Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lasting-machine. No. 1,309,710; July 15; v. 264; p. 341.
 Bond Foundry & Machine Company. (See Bowen, James, assignor.)
 Bonham, Roy A., Springfield, Mo. Electrically-controlled transmission mechanism. No. 1,311,748; July 29; v. 264; p. 820.
 Bonner, Douglas E., New York, N. Y. Folding cover, top, awning, and the like. No. 1,308,392; July 1; v. 264; p. 71.
 Bonner, Walter G., Pepperwood, Calif. Rack. No. 1,309,698; July 8; v. 264; p. 361.
 Bonnet, Joseph, Miles City, Mont. Toy. No. 1,309,838; July 15; v. 264; p. 403.
 Bonney Floyd Company, The. (See Dorsey, Walter A., assignor.)
 Bonnell, West B., Ottumwa, Iowa. Bed-supported table. No. 1,308,034; July 1; v. 264; p. 5.
 Bontrager, Joseph C., Wenatchee, Wash. Headlight-lamp-actuating mechanism. No. 1,310,387; July 15; v. 264; p. 503.
 Boobur, John J. (See Dunlop and Boobur.)
 Booker, James P., assignor to The Nulomoline Company, New York, N. Y. Making cream centers for coated candy. No. 1,309,979; July 15; v. 264; p. 430.
 Booth, Eugene E. (See Kilpatrick and Booth.)
 Bopst, Samuel P., Washington, D. C. Lumber-rule. No. 1,308,654; July 1; v. 264; p. 118.
 Borden Company, The. (See Noneman, Ira W., assignor.)
 Borden's Condensed Milk Company. (See Hopkins and Brunkhurst, assignors.)
 Borden's Condensed Milk Company. (See Taylor, Burt E., assignor.)
 Bore, Johan, and A. Skoglund, Gottenborg, assignors to A. Westberg, Stockholm, Sweden. Steam cleaning apparatus, particularly for vertically-arranged smoke-tubes. No. 1,310,733; July 22; v. 264; p. 598.

Borger, Henry E., assignor to Spiltdorf Electrical Company, Newark, N. J. Automatic cut-out for electric generators. No. 1,308,275; July 1; v. 264; p. 49.
 Borland, Lewis H., Merced Falls, Calif. Storm-sash fastener. No. 1,311,037; July 22; v. 264; p. 635.
 Bossert, Charles P., Milwaukee, Wis. Supply system for plastic materials. No. 1,309,179; July 8; v. 264; p. 244.
 Bossler, Robert B., Pittsburgh, Pa. Level-rial. No. 1,309,752; July 15; v. 264; p. 388.
 Boswell, Roscoe C., Washington, D. C. Combination-tool. No. 1,308,694; July 1; v. 264; p. 126.
 Boucard, Pierre, Paris, and L. Lemaire, La Garenne-Colombes, France. Apparatus for enlarging photographs. No. 1,310,052; July 15; v. 264; p. 442.
 Boulenger, Anthony D., Jr., Midgefield Park, N. J. Leather-working machine. No. 1,311,749; July 29; v. 264; p. 820.
 Bouwmeester, Bernard J. (See Owen and Bouwmeester.)
 Bourque, David, Amesbury, assignor to G. W. Murphy Company, Merrimac, Mass. Machine for producing spring-carrying pins. No. 1,309,011; July 8; v. 264; p. 213.
 Bouton, Georges, Paris, France, assignor to Etablissements De Dion Bouton, Société Anonyme, Puteaux, France. Speed-reducing gear. No. 1,311,310; July 29; v. 264; p. 738.
 Bowen, David M., Los Angeles, Calif. Radiator. No. 1,311,797; July 29; v. 264; p. 829.
 Bowen, James, assignor to Road Foundry & Machine Company, Manheim, Pa. Friction-clutch. No. 1,309,096; July 15; v. 264; p. 433.
 Bowen, Russell H., assignor to The American Pulley Company, Philadelphia, Pa. Metal pulley and manufacture thereof. No. 1,308,035; July 1; v. 264; p. 5.
 Bowers, Thomas L., assignor of one-half to J. S. Collins, Miami, Fla. Shipping-crate. No. 1,309,932; July 15; v. 264; p. 421.
 Bowle, Augustus J., Jr., et al. (See Jewett, John C. and W. A., assignors.)
 Bowman, Arthur E. (See Standley and Bowman.)
 Bowman, Edwin J., assignor of one-third to P. W. Wade, Birmingham, England. Radiator. No. 1,311,549; July 29; v. 264; p. 784.
 Bowman, George W., assignor to The Universal Spring Wheel and Manufacturing Company, Falksides, Colo. Spring-wheel. No. 1,309,839; July 15; v. 264; p. 404.
 Bowman, Josephine, near Lexington, Va. Washbottle. No. 1,310,734; July 22; v. 264; p. 598.
 Bowman, Newton K., Canton, Ohio. Section-insulator and hand-switch. No. 1,309,717; July 15; v. 264; p. 351.
 Bowman, Newton K., North Lawrence, Ohio, assignor to The American Mine Door Company, Wall-ancher. No. 1,311,038; July 22; v. 264; p. 655.
 Bowser, Augustus, Fort Wayne, Ind. Controlling mechanism for liquid-dispensers. No. 1,310,822; July 22; v. 264; p. 615.
 Boyce, Harrison H., Forest Hills, N. Y. Means for indicating the condition of internal-combustion engines. No. 1,311,152; July 29; v. 264; p. 700.
 Boyce, Harrison H., Forest Hills, N. Y. Means for illuminating indicating instruments. No. 1,311,153; July 29; v. 264; p. 709.
 Boyd, Florence E., Lenox, N. C. Fruit and vegetable drier. No. 1,308,036; July 1; v. 264; p. 0.
 Boyd, William P., Cambridge, Mass. Gear-shifting mechanism for automobiles and the like. No. 1,309,050; July 15; v. 264; p. 375.
 Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain-rod. No. 1,309,080; July 8; v. 264; p. 228.
 Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain-fixture. No. 1,309,348; July 8; v. 264; p. 275.
 Boye, James H., assignor to James H. Boye Manufacturing Company, Chicago, Ill. Curtain-rod. No. 1,310,469; July 22; v. 264; p. 540.
 Boyle, William M., Kansas City, Mo., assignor to W. M. Boyle Manufacturing Company. Coating device. No. 1,308,888; July 8; v. 264; p. 189.
 Boyle, Willis J., Sr., Los Angeles, Calif. Container. (Re-issue.) No. 1,409,5; July 29; v. 264; p. 841.
 Boynton, Earl S., East Orange, N. J., and A. Schacht, Brooklyn, N. Y., assignors to Stacum, Avram & Stacum Laboratories, Inc., New York, N. Y. Gage. No. 1,310,388; July 15; v. 264; p. 503.
 Boyuk, Cecil H., assignor of one-fourth to A. A. Myers and one-fourth to M. A. Myers, Louisville, Ky. Garment-former. No. 1,310,602; July 22; v. 264; p. 574.
 Bracco, Louis, New York, N. Y. Mold-machine for concrete building-blocks. No. 1,308,838; July 8; v. 264; p. 180.
 Brackett, Quincy A., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Mechanical rectifier. No. 1,311,480; July 29; v. 264; p. 772.
 Brackett, Quincy A., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Vibrating rectifier. No. 1,311,490; July 29; v. 264; p. 772.
 Bradford, Robert, Calgary, Alberta, Canada. Running-gear for vehicles. No. 1,308,220; July 1; v. 264; p. 36.

Bradley, Parker R., East Orange, assignor to Aircraft Fireproofing Corporation, Nutley, N. J. Fireproofing aircraft. No. 1,309,453; July 8; v. 264; p. 295.
 Bradley, Parker R., East Orange, assignor to Aircraft Fireproofing Corporation, Nutley, N. J. Doping aircraft. No. 1,309,454; July 8; v. 264; p. 295.
 Bradney, James D., and H. Priester, Middletown, N. Y. Automatic loader for tile and timber pillars. No. 1,311,210; July 29; v. 264; p. 720.
 Brady, James H., assignor, by mesne assignments, to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Measuring-tank. No. 1,308,572; July 1; v. 264; p. 103.
 Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Gasoline tank. No. 1,308,573; July 1; v. 264; p. 103.
 Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Indicator. No. 1,308,574; July 1; v. 264; p. 103.
 Braley, Charles L., Chicago, Ill., assignor to The American Laundry Machinery Co., Cincinnati, Ohio. Bosom-press. No. 1,309,562; July 8; v. 264; p. 315.
 Braley, Charles L., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing-machine. No. 1,311,311; July 29; v. 264; p. 735.
 Braley, Charles L., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Neckband-expander for shirt-presses. No. 1,311,312; July 29; v. 264; p. 735.
 Braly, Norma B., Batte, Mont. Hose-coupling. No. 1,310,520; July 22; v. 264; p. 566.
 Bramming, Carl, Chicago, Ill., assignor to Accessories Manufacturing Co. Electric switch. No. 1,309,840; July 15; v. 264; p. 404.
 Bramming, Carl, Chicago, Ill., assignor to Accessories Manufacturing Company. Combined switch and connector for electric circuits. No. 1,311,260; July 29; v. 264; p. 729.
 Brand, George P., New York, N. Y. Unit action for pneumatic musical instruments. No. 1,308,159; July 1; v. 264; p. 28.
 Brandt, David, Los Angeles, Calif. Adjustable chair-recliner. No. 1,309,012; July 8; v. 264; p. 213.
 Brandt, Charles E. J. (See Brandt, Edgar W. and C. E. J.)
 Brandt, Edgar W. and C. E. J., Paris, France. Fuse for explosive shells with safety device. No. 1,310,853; July 22; v. 264; p. 621.
 Breeding, Willie F., San Antonio, Texas. Underground portable drill. No. 1,310,274; July 15; v. 264; p. 483.
 Braxton, Chester H., Dayton, Ohio. Spark-plug and making the same. No. 1,311,261; July 29; v. 264; p. 729.
 Brashner, Anna A., Santa Barbara, Calif. Tire. No. 1,311,750; July 29; v. 264; p. 520.
 Brazzkowski, Bernard K., Pittsburgh, Pa. Mohl. No. 1,310,172; July 15; v. 264; p. 404.
 Brenkert, Joseph W., San Diego, Calif. Water-purifying apparatus. No. 1,309,876; July 15; v. 264; p. 410.
 Brent, George F., Welser, Idaho. Spring-reinforcement. No. 1,311,731; July 29; v. 264; p. 520.
 Brewer, Charles A., assignor to Charles A. Brewer & Sons, Chicago, Ill. Sales board. No. 1,309,349; July 8; v. 264; p. 275.
 Brewer, Charles A., assignor to Charles A. Brewer & Sons, Chicago, Ill. Sales-board. No. 1,309,350; July 8; v. 264; p. 275.
 Brewster, Charles W., New York, N. Y. Electrically-operated brake mechanism. No. 1,308,019; July 1; v. 264; p. 112.
 Brewster Film Corporation. (See Brewster, Percy D., assignor.)
 Brewster, Percy D., East Orange, assignor to Brewster Film Corporation, Newark, N. J. Color positive film. No. 1,308,538; July 1; v. 264; p. 97.
 Bridgewater, Herbert E., Syracuse, assignor to Remington Typewriter Company, Ithaca, N. Y. Type-writing machine. No. 1,308,328; July 1; v. 264; p. 50.
 Bridgewater, Herbert E., Syracuse, assignor to Remington Typewriter Company, Ithaca, N. Y. Process and apparatus for treating type-bars for type-writing and like machines. No. 1,308,329; July 1; v. 264; p. 50.
 Brien, William F., and M. H. Whitaker, Indianapolis, Ind. Route and station indicating means. No. 1,310,978; July 22; v. 264; p. 413.
 Briggs, Robert M., Pittsfield, Mass., assignor to General Electric Company. Method of and apparatus for applying shellac and the like to sheets of material. No. 1,311,491; July 29; v. 264; p. 772.
 Brink, Francis N. (See Pratt and Brink.)
 Brinkman, Louis H., Glen Ridge, N. J. Tube-bending machine. No. 1,309,238; July 8; v. 264; p. 255.
 Britton, Walter, Wilmington, Del., assignor to American Manganese Steel Company, Augusta, Me. Sectional gear. No. 1,308,160; July 1; v. 264; p. 28.
 Brisola, Sylvester A., Detroit, Mich. Vehicle-wheel tire. No. 1,311,677; July 29; v. 264; p. 501.
 Bristol, Edgar H., assignor to Foxboro Company, Foxboro, Mass. Nozzle for pressure-sensitive devices. No. 1,311,798; July 29; v. 264; p. 829.
 British Potash Company, The. (See Catlett, Charles, assignor.)

British Westinghouse Electric and Manufacturing Company, The. (See Baumann, Karl, assignor.)
 Britz, Harold M., assignor to Sharp & Smith, Chicago, Ill. Retractor. No. 1,311,313; July 29; v. 264; p. 739.
 Broad, Charles E., assignor to Stanley Motor Carriage Company, Newton, Mass. Water-level indicator. No. 1,308,620; July 1; v. 264; p. 112.
 Brock, Arthur, Jr. (See Holst and Pedersen, assignors.)
 Brock, Arthur, Jr. (See Pedersen, Nels, assignor.)
 Brock, Frank P. (See Redman, Welch and Brock.)
 Brockton Heel Company. (See Abbott, Harry R., assignor.)
 Brooklyn Braid Company. (See Mendelson and Goldfarb, assignors.)
 Brooks, John K. (See Donaldson, Blossom, and Brooks.)
 Brooks, Winfred M., West Orange, N. J. Shankle and bag seal. No. 1,310,484; July 22; v. 264; p. 534.
 Brophy, Jeremiah, Schenectady, N. Y. Coasting-scale. No. 1,309,602; July 8; v. 264; p. 323.
 Brower, Edward S., Ridgewood, assignor of one-half to C. K. Sanborn, Elizabeth, N. J. Bomb-hopper for aerial craft. No. 1,310,063; July 15; v. 264; p. 442.
 Brown, Arthur J., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine. No. 1,311,638; July 29; v. 264; p. 799.
 Brown, Augustus, Havre de Grace, Md. Metallic railway-tie. No. 1,309,453; July 8; v. 264; p. 295.
 Brown, Bertrand E., New Haven, Conn. Electrical heating device for watchmakers' use. No. 1,305,635; July 1; v. 264; p. 118.
 Brown, Blanche W. (See Brown, Gideon P., assignor.)
 Brown, Charles A. (See Watkins and Brown.)
 Brown, Charles A., et al. (See Earl, George G., assignor.)
 Brown Company. (See Moore, Hugh K., assignor.)
 Brown, E. D. (See Johnson, James A., assignor.)
 Brown, George W., Fort Terry, N. Y. Winding-drum. No. 1,310,275; July 15; v. 264; p. 483.
 Brown, Gideon P., assignor to H. W. Brown, Lake Bluff, Ill. Hand-hole scraper. No. 1,308,221; July 1; v. 264; p. 39.
 Brown, Gideon P., Lake Forest, assignor to H. W. Brown, Lake Bluff, Ill. Hand-hole scraper. No. 1,308,222; July 1; v. 264; p. 40.
 Brown, Glenn C., Taylor Ridge, Ill. Thermometer for radiators. No. 1,310,276; July 15; v. 264; p. 483.
 Brown, Glenn C., Taylor Ridge, Ill. Thermometer for radiators. No. 1,310,321; July 15; v. 264; p. 491.
 Brown, Gouverneur G. (See Dallmeyer, Brown, and Schulta.)
 Brown, Harry E. (See Penwell and Brown.)
 Brown, Irving A., Soudaky, Ohio. Journal-lubricator. No. 1,309,013; July 8; v. 264; p. 214.
 Brown, James M., assignor, by mesne assignments, to National Explosive Corporation, Onaka Springs, Tenn. Plastic chlorate explosive. No. 1,309,014; July 8; v. 264; p. 214.
 Brown, Kirk, Montclair, assignor to Condensate Company of America, Bloomfield, N. J. Composite molding. No. 1,308,330; July 1; v. 264; p. 50.
 Brown, Lewis K., Pittsfield, Mass., assignor to General Electric Company. Protective device for electrical apparatus. No. 1,310,054; July 15; v. 264; p. 443.
 Brown, Morris R., and W. L. Martin, assignors to Minnesota Tractor Company, Minneapolis, Minn. Frictional transmission mechanism. No. 1,311,592; July 29; v. 264; p. 791.
 Brown, Robert S., assignor to The New Britain Machine Company, New Britain, Conn. Metal-working machine. No. 1,311,314; July 29; v. 264; p. 739.
 Brown, Walter A., assignor of one-half to F. G. White, Los Angeles, Calif. Separating hydrocarbons from water. No. 1,309,704; July 15; v. 264; p. 395.
 Brown, William H., Cleveland, Ohio. Oil-cup. No. 1,308,331; July 1; v. 264; p. 59.
 Brown, William H., Chicago, Ill. Differential mechanism. No. 1,308,529; July 1; v. 264; p. 93.
 Browne, Cyril V., Mt. Eden, Auckland, New Zealand. Beverage. No. 1,310,277; July 15; v. 264; p. 483.
 Browne, Herbert J., et al. (See Baumann, Leopold, Sr., and F., assignors.)
 Browne, William G., Denver, Colo. Shipping-box. No. 1,309,877; July 15; v. 264; p. 411.
 Brownell, Don Carlos, Seward, Alaska. Redstead and attachment. No. 1,311,211; July 29; v. 264; p. 720.
 Browning, Andrew, assignor to The Hirst-Roger Company, Philadelphia, Pa. Loom. No. 1,309,997; July 15; v. 264; p. 433.
 Brownlee, Roy H., Pittsburgh, Pa. Treating hydrocarbon oils. No. 1,308,161; July 1; v. 264; p. 28.
 Brownlee, Roy H., Pittsburgh, Pa. Manufacturing lubricating oils and products thereof. No. 1,309,432; July 8; v. 264; p. 291.
 Bruce, Cyrus M., Bowling, Ky. Valve-grinding tool. No. 1,310,278; July 15; v. 264; p. 483.
 Brucker, Ferdinand F., Akron, Ohio. Valve-fishing tool. No. 1,308,219; July 1; v. 264; p. 30.
 Brumling, John H. (See Doherty and Brumling.)
 Branton, David W., Denver, Colo. Apparatus for locating salpeters and for other purposes. No. 1,308,474; July 1; v. 264; p. 85.
 Bryant, Augustus H., Glen Ridge, N. J. Safety razor blade. No. 1,309,490; July 8; v. 264; p. 295.

Bryant, Clarence R., Memphis, Tenn., assignor, by mesne assignments, to R. Byrns, Chicago, Ill. Packing-ring. No. 1,309,609; July 15; v. 264; p. 362.
 Bryant, Richard S., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Rim for vehicle-wheels. No. 1,310,603; July 22; v. 264; p. 574.
 Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,782; July 22; v. 264; p. 608.
 Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,784; July 22; v. 264; p. 608.
 Bryce, James W., Binghamton, N. Y. Synchronizing clock system. No. 1,310,785; July 22; v. 264; p. 609.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,779; July 22; v. 264; p. 607.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clocks. No. 1,310,780; July 22; v. 264; p. 607.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronous clock system. No. 1,310,781; July 22; v. 264; p. 608.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock. No. 1,310,783; July 22; v. 264; p. 608.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,786; July 22; v. 264; p. 609.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,787; July 22; v. 264; p. 609.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Synchronizing clock system. No. 1,310,788; July 22; v. 264; p. 609.
 Bryce, James W., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Clock-synchronizing device. No. 1,310,789; July 22; v. 264; p. 609.
 Bobb, Clarence A., assignor of one-half to P. H. Rich, Detroit, Mich. Valve for bush-tanks. No. 1,309,507; July 8; v. 264; p. 365.
 Buchanan, Judson, Chattanooga, Tenn. Cane-mill. No. 1,309,015; July 8; v. 264; p. 214.
 Buchek, Joseph, Oak Park, Ill. Safety-valve mechanism and pressure-gage. No. 1,308,087; July 1; v. 264; p. 6.
 Buchek, Joseph, Oak Park, Ill. Vending device. No. 1,309,998; July 15; v. 264; p. 433.
 Buck, Sidney L., Cortland, N. Y. Curtain-support for automobile-doors. No. 1,309,010; July 15; v. 264; p. 262.
 Buckeye Dryer Company, The. (See Prindle, William E., assignor.)
 Buck's Store & Range Company, The. (See Anderson, Edwin C., assignor.)
 Buckwalter, John S., Lancaster, Pa. Milking-machine. No. 1,309,457; July 8; v. 264; p. 295.
 Buell, Furdice C., St. Augustine, Fla. Self-lubricating device for journal-boxes. No. 1,308,887; July 8; v. 264; p. 189.
 Buell, William H., New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Priming charge. No. 1,308,393; July 1; v. 264; p. 71.
 Buell, William H., New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Charge for primers. No. 1,308,394; July 1; v. 264; p. 71.
 Buff, Louis F. (See Henricl, William A. E., assignor.)
 Buffalo Co-operative Store Company. (See Jones, Frederick R., assignor.)
 Buffalo Forge Company. (See Carrier, Willis H., assignor.)
 Bullard, Herbert A., San Francisco, Calif., assignor to Intercontinental Company. Centrifugal gun. No. 1,311,492; July 29; v. 264; p. 773.
 Buller, Charles M., assignor to L. J. Mueller Furnace Company, Milwaukee, Wis. Double-wall pipe. No. 1,308,981; July 8; v. 264; p. 207.
 Bullington, Frank A. (See Combs and Bullington.)
 Bullock, Raymond G., and Anderson, assignors to The Art Metal Construction Company, Jamestown, N. Y. Base for bling-cabinets, furniture, &c. No. 1,310,322; July 15; v. 264; p. 491.
 Bullock, Samuel M., Chicago, and H. S. Lloyd, Oak Park, Ill. Forming abrasive disks. No. 1,311,550; July 29; v. 264; p. 784.
 Bunker, Herman R. (See Thompson and Bunker.)
 Bungay, George W., Brooklyn, N. Y., assignor to Acme Die Casting Corporation. Control-box. No. 1,309,611; July 15; v. 264; p. 362.
 Booker, Charles A., Kansas City, Mo. Laundry-registering apparatus. No. 1,311,315; July 29; v. 264; p. 739.
 Bonker, Raymond U., Yonkers, N. Y. Recovering wax from sugar-cane. No. 1,309,999; July 15; v. 264; p. 433.
 Bonnell, William O., and Q. A. Gates, Wilkes-Barre, Pa. Street-indicator. No. 1,310,279; July 15; v. 264; p. 454.

Burch, Zeno, El Centro, Calif. Accordion reed-box. No. 1,311,752; July 29; v. 264; p. 821.
 Burdon, Matthew M. (See Burdon, William M. and M. M.)
 Burdon, William M. and M. M., assignors to Burdon's Limited, Bellshill, Scotland. Liquid-fuel furnace. No. 1,310,152; July 15; v. 264; p. 461.
 Burdon's Limited. (See Burdon, W. M. and M. M., assignors.)
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Cutting apparatus for mowing-machines. No. 1,308,162; July 1; v. 264; p. 29.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Corn-planter. No. 1,308,163; July 1; v. 264; p. 29.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Grain-drill. No. 1,308,588; July 8; v. 264; p. 190.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Traction-engine. No. 1,310,604; July 22; v. 264; p. 575.
 Burgess, William S., Marlborough, Mass., assignor to Curtiss Aeroplane and Motor Corporation. Reconnoitering-hydroaeroplane. No. 1,310,737; July 22; v. 264; p. 599.
 Burke, Alfred W., Wynnewood, Pa. Excess-demand meter. No. 1,308,650; July 1; v. 264; p. 118.
 Burke, Clayton E., and G. R. Beckwith, assignors to R. H. Specialty Co., Minneapolis, Minn. Mop-holder. No. 1,311,310; July 29; v. 264; p. 739.
 Burkhardt, Henry W., Jr., Dayton, Ohio. Means for conveying meat to be stuffed from mixing to stuffing machines. No. 1,311,493; July 29; v. 264; p. 773.
 Burkhardt, John, New York, N. Y. Casting-machine. No. 1,308,926; July 8; v. 264; p. 197.
 Burman, Walfrid, Worcester, Mass. Spark-plug. No. 1,311,039; July 22; v. 264; p. 655.
 Burnell, Oscar L., Caribou, Minn. Hay-stacker. No. 1,309,016; July 8; v. 264; p. 214.
 Burnett, Ira A., Chicago, Ill. Dental-amalgam mixer. No. 1,308,938; July 1; v. 264; p. 6.
 Burnett-Larsh Manufacturing Company, The. (See Larsh, Everett P., assignor.)
 Burnett, Thomas H., Eschequer, Calif. Internal-combustion engine. No. 1,308,621; July 1; v. 264; p. 112.
 Boros, John W., assignor of one-third to B. A. Holt and one-third to J. N. Harasta, Los Angeles, Calif. Two-cycle reciprocating engine. No. 1,311,148; July 22; v. 264; p. 675.
 Burrige, Francis O., executor. (See Burrige, Lee S.)
 Burrige, Lee S., deceased; F. O. Burrige, executor, assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,308,316; July 8; v. 264; p. 270.
 Burrige, Lee S., deceased; O. Burrige, executor, assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,310,000; July 15; v. 264; p. 433.
 Burroughs Adding Machine Company. (See Horton, Allen A., assignor.)
 Burroughs Adding Machine Company. (See Peters, Herbert C., assignor.)
 Burroughs Adding Machine Company. (See Rinsche, Frank C., assignor.)
 Burroughs, Charles F., East Orange, N. J. Tiltlog head for molding-presses. No. 1,308,475; July 1; v. 264; p. 85.
 Burrows, Robert J., assignor to Clark Equipment Company, Buchanan, Mich. Motor-truck axle. No. 1,309,239; July 8; v. 264; p. 255.
 Burt, Peter, Rothwell, assignor of one-half to Argylls Limited, Alexandria, Scotland. Internal-combustion engine. No. 1,310,646; July 22; v. 264; p. 582.
 Burton, George C., Louisville, Ky. Cord-fastener lock. No. 1,311,040; July 22; v. 264; p. 655.
 Burton, Thomas L., assignor to American Brake Company, St. Louis, Mo. Brake slack-adjuster. No. 1,309,933; July 15; v. 264; p. 422.
 Burton, Thomas L., assignor to American Brake Company, St. Louis, Mo. Slack-adjuster. No. 1,309,934; July 15; v. 264; p. 422.
 Busby, Nahum J., Sr., Boston, Mass. Adjustable and interchangeable cravat and bow. No. 1,305,731; July 1; v. 264; p. 133.
 Bush, Charles A., Brooklyn, N. Y. Multiton-projectile. No. 1,310,790; July 22; v. 264; p. 610.
 Bushkorski, John, American Expeditionary Forces. Pic-ture-frame. No. 1,308,686; July 1; v. 264; p. 126.
 Bushnell Manufacturing Company, The. (See Coffman, Samuel M., assignor.)
 Bussard, Charles W., Blytheville, Ark. Fireproof box. No. 1,309,458; July 8; v. 264; p. 296.
 Butcher, James M., assignor, by mesne assignments, to Marshall Holdings & Co., Chicago, Ill. Portable burglar-alarm. No. 1,310,041; July 22; v. 264; p. 636.
 Butcher, Joseph A., Sulphur, Ia. Oil-tank. No. 1,311,753; July 29; v. 264; p. 821.
 Butcher, Francis J., Wolverhampton, assignor to Chubb and Son's Lock and Safe Company, Limited, London, England. Permutation-lock. No. 1,305,521; July 1; v. 264; p. 93.

Butterfield, Anne W., Columbus, Ohio. Sanitary table utensil. No. 1,310,903; July 22; v. 264; p. 629.
 Butterworth-Judson Corporation. (See Jones, Whitney B., assignor.)
 Byrns, Brownlow. (See Bryant, Clarence R., assignor.)
 Byron, Kenneth M., Detroit, Mich., assignor to O. E. Byron, Washington, D. C. Draft and steering gear. No. 1,308,476; July 1; v. 264; p. 85.
 Byron, Orra E. (See Byron, Kenneth, assignor.)
 C. G. Conn, Limited. (See Gulick, Edward J., assignor.)
 C. G. Sargent's Sons Corporation. (See Sargent, Frederick G., assignor.)
 C. R. Carver Company. (See Lockwood, Edward M., assignor.)
 Cable Company, The. (See Klingh, Paul B., assignor.)
 Cable Company, The. (See Pollard, Willard L., assignor.)
 Cabot, Samuel, assignor to Samuel Cabot, Inc., Canton, Mass. Coating composition. No. 1,308,573; July 1; v. 264; p. 104.
 Cadden, Frank, Chicago, Ill. Collar-button. No. 1,308,696; July 1; v. 264; p. 126.
 Cadieux, Louis E. (See Hanson, Harry, assignor.)
 Cadillac Motor Car Company. (See Foltz, William E., assignor.)
 Cadillac Motor Car Company. (See Johnson, Frank, assignor.)
 Cadillac Motor Car Company. (See Snell, Lyle K., assignor.)
 Cadillac Motor Car Company. (See Waldon, Sidney D., assignor.)
 Cadillac Motor Car Company. (See White, D'Orsay M., assignor.)
 Cadman, Addi B., Beloit, Wis., assignor to Warner Manufacturing Company, South Beloit, Ill. Means for transporting logs or the like. No. 1,308,939; July 1; v. 264; p. 6.
 Cadmus, Alfred B., New York, N. Y. Locking device. No. 1,308,697; July 1; v. 264; p. 126.
 Calder, William J., Edinburgh, Scotland. Chimney cowl or top. No. 1,310,470; July 22; v. 264; p. 549.
 Caldwell, George, Philadelphia, Pa. Manhole. No. 1,310,055; July 15; v. 264; p. 443.
 Caldwell, John A., Vancouver, British Columbia, Canada. Enamelled or granite ware cooking utensil. No. 1,308,922; July 1; v. 264; p. 112.
 Calkins, Harriette and Z. M., Varysburg, N. Y. Flower-holder. No. 1,308,623; July 1; v. 264; p. 112.
 Calkins, Zolma M. (See Calkins, Harriette and Z. M.)
 Callery, Joseph C., Columbus, Ohio. Fuel-economiser mixer and controller. No. 1,310,173; July 15; v. 264; p. 465.
 Callison, Amos, assignor to Adriance Machine Works, Inc., Brooklyn, N. Y. Bottle-feeding mechanism. No. 1,309,935; July 15; v. 264; p. 422.
 Calloway, James W., et al. (See Zartman, Charles M., assignor.)
 Calthrop, Everard R., London, England. Parachute. No. 1,308,478; July 1; v. 264; p. 86.
 Calvert, Robert F., and O. L. Thomas, assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Production of methyl borate and boric acid from crude sodium nitrate. No. 1,308,579; July 1; v. 264; p. 104.
 Calvert, Robert F., and O. L. Thomas, assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Obtaining boric acid from mixtures containing borates. No. 1,308,577; July 1; v. 264; p. 104.
 Cameron, James A., and G. B. Birch, assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting and re-winding machine. No. 1,310,153; July 15; v. 264; p. 461.
 Cameron Machine Company. (See Cameron and Birch, assignors.)
 Cameron, William W. (See Davis and Cameron.)
 Camp, Ernest, San Diego, Calif. Sight storage-battery tester. No. 1,308,223; July 1; v. 264; p. 40.
 Camp, Ervin M., Denver, Colo. Electrically operating surgical needle device. No. 1,311,494; July 29; v. 264; p. 773.
 Camp, Ervin M., Denver, Colo. Extensible supporting stand for multiple numbers of electrically-operating surgical needles. No. 1,311,495; July 29; v. 264; p. 773.
 Campbell, Duncan R., Boston, assignor to F. Rumrill, Newton, Mass. Trimming machine for rubber articles. No. 1,308,479; July 1; v. 264; p. 86.
 Campbell, Edward R., assignor to Williams Patent Crusher and Pulverizer Co., St. Louis, Mo. Side-closing plate. No. 1,310,001; July 15; v. 264; p. 434.
 Campbell, Henry, Logan, Utah. Aeroplane. No. 1,308,657; July 1; v. 264; p. 119.
 Campbell, Henry E. (See Liberty and Campbell.)
 Campbell, James R. (See And and Campbell.)
 Campbell, Jesse T., Elbridge, Tenn. Wrench. No. 1,310,036; July 15; v. 264; p. 443.
 Campbell, Peter F., Vinet Haven, Me. Tobacco-pipe. No. 1,310,856; July 22; v. 264; p. 621.
 Campbell, Robert A., Minneapolis, Minn. Tire-stem cap. No. 1,309,785; July 15; v. 264; p. 390.
 Campbell, William A., Bellefontaine, Ohio. Tabular bling-grate. No. 1,311,551; July 29; v. 264; p. 784.
 Campbell, William M., Jr., Baltimore, Md. Dog-control harness means. No. 1,308,332; July 1; v. 264; p. 59.
 Canepa, John V. (See Casaleua, Primiano, assignor.)

Canfield, Harry R., assignor to The Electric Controller and Manufacturing Company, Cleveland, Ohio. Motor-control system. No. 1,308,927; July 8; v. 264; p. 197.
 Cannon, Dominic E., Ford City, Pa., assignor to Pittsburgh Plate Glass Company. Making upright tulle. No. 1,309,936; July 15; v. 264; p. 422.
 Cantrell, Edwin B., and G. E. Miller, San Francisco, Calif. Wheel-puller. No. 1,310,154; July 15; v. 264; p. 461.
 Cantrell, Edwin B., and G. E. Miller, San Francisco, Calif. Roller-bearing remover. No. 1,310,155; July 15; v. 264; p. 461.
 Caouette, Marcel, Clinton, N. Y. Fire-escape. No. 1,308,480; July 1; v. 264; p. 86.
 Capitol Motors Corporation. (See Krafoe, William, assignor.)
 Capparella, Thomas, New York, N. Y. Permutation electric switch. No. 1,310,095; July 22; v. 264; p. 575.
 Caraculati, Virginia Z., Bronxville, N. Y., and O. D. H. Bentley, West Hoxbury, assignors to B. F. Sturtevant Company, Hyde Park, Mass. Governor mechanism. No. 1,310,735; July 22; v. 264; p. 599.
 Carborundum Company, The. (See Hutchins, Otis, assignor.)
 Carborundum Company, The. (See Martin, Harry C., assignor.)
 Carborundum Company, The. (See Power, Henry R., assignor.)
 Cardona, Antonio J. (See Creek, Allen B., assignor.)
 Carey, James L. (See Murphy and Roney, assignors.)
 Carlehoff, Eugene R., assignor to General Electric Company, Schenectady, N. Y. Control for electric motors. No. 1,311,754; July 29; v. 264; p. 821.
 Carleton, Laurence S., and R. G. Davenport, Iowa. Traffic signal device. No. 1,311,755; July 29; v. 264; p. 821.
 Carleton, Robert G. (See Carleton, Laurence S. and R. G.)
 Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Co. Calculating-machine. No. 1,311,041; July 22; v. 264; p. 655.
 Carling Turbine Blower Co. (See Carlson, Axel W., assignor.)
 Carlson, Andrew M. (See Holland, Albert, assignor.)
 Carlson, Axel W., assignor to Carling Turbine Blower Co., Worcester, Mass. Method and means for making turbine-rotors. No. 1,311,109; July 22; v. 264; p. 668.
 Carlson, Gustave E., Topeka, Kans. Drawer-mounting. No. 1,311,042; July 22; v. 264; p. 655.
 Carlson, Hjalmar G., Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts. Check-valve for automatic sprinkler systems. No. 1,310,606; July 22; v. 264; p. 575.
 Carlson, John E., Hartford, Conn. Cream-extractor. No. 1,308,928; July 8; v. 264; p. 107.
 Carlson, Oscar W., Litchfield, Minn. Hame-fastener. No. 1,310,174; July 15; v. 264; p. 465.
 Carlson, Wendell L., Jamestown, N. Y. Fuse-plug. No. 1,310,175; July 15; v. 264; p. 465.
 Carmichael, Robert E., Damos, assignor of one-half to O. Hauman, Houston, Tex. Apparatus for sulphur-mining. No. 1,308,929; July 8; v. 264; p. 107.
 Carmichael, William H., Miami, Fla. Tabulator for automobiles. No. 1,309,841; July 15; v. 264; p. 404.
 Carpenter, Alexander, assignor to National Tractor and Plow Company, Carey, Ohio. Gang-plow. No. 1,308,744; July 1; v. 264; p. 135.
 Carpenter, Ralph G., Chicago, Ill. Illuminated sign. No. 1,310,688; July 22; v. 264; p. 590.
 Carpenter, Ralph G., assignor to himself and O. Cederquist, Chicago, Ill. Sign mechanism. No. 1,310,689; July 22; v. 264; p. 590.
 Carr, Alva W., Groveport, Ohio. Hammer and wrench. No. 1,309,180; July 8; v. 264; p. 244.
 Carr, Daniel J., Long Beach, Calif. Submarine life-boat. No. 1,309,563; July 8; v. 264; p. 315.
 Carr, John H., Alhambra, Calif. Concrete-pipe machine. No. 1,309,878; July 15; v. 264; p. 411.
 Carr, William E., Seattle, assignor to Police Traffic Signal Company, Ltd., King county, Wash. Street-crossing signal. No. 1,308,658; July 1; v. 264; p. 119.
 Carrel, Arthur D. (See Mills and Carrel.)
 Carrie Gyroscopic Corporation, The. (See Beattie, John E., assignor.)
 Carrie Gyroscopic Corporation, The. (See Rossiter, George A., assignor.)
 Carrie, L. (See Thieries, Joseph H., assignor.)
 Carrier, Albert H., Asheville, N. C., assignor of one-half to E. W. Grove, St. Louis, Mo. Combined surface breaker and cultivator. No. 1,311,212; July 29; v. 264; p. 720.
 Carlier, Willis H., assignor to Buffalo Forge Company, Buffalo, N. Y. Humidity and temperature regulator and device. No. 1,308,930; July 8; v. 264; p. 197.
 Carson, John R. (See Mills and Carson.)
 Carson, John R., New York, N. Y., assignor to American Telephone and Telegraph Company. Wireless signalling system. No. 1,309,459; July 8; v. 264; p. 296.
 Carter, Albert S., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Pruning-saw. No. 1,310,004; July 22; v. 264; p. 430.
 Carter, Frank E., Huntington, W. Va. Toy gun. No. 1,311,756; July 29; v. 264; p. 821.

Carter, George L., near Dayton, Ohio. Paper-rolling machine. No. 1,309,393; July 8; v. 264; p. 284.
 Cartwright, David J., Easton, Pa., assignor, by mesne assignments, to Liberty Ordnance Corporation, New York, N. Y. Percussion-fuse for shells. No. 1,311,678; July 29; v. 264; p. 807.
 Cartwright, Ernest O., assignor to C. F. Gardner, Springfield, Ohio. Settling and separating tank. No. 1,311,636; July 29; v. 264; p. 799.
 Cary, Egbert S., Philadelphia, Pa. Metering device. No. 1,310,739; July 22; v. 264; p. 590.
 Cary Manufacturing Company. (See Cary, Spencer C., assignor.)
 Cary, Spencer C., assignor to Cary Manufacturing Company, Brooklyn, N. Y. Method and means for sealing packages. No. 1,309,115; July 8; v. 264; p. 233.
 Casaleua, Primiano, assignor of one-half to J. V. Canepa, Chicago, Ill. Macaroni-drier. No. 1,310,170; July 15; v. 264; p. 465.
 Case, Jesse A., assignor of one-third to E. F. Copeland, Brockton, Mass. Wooden-bottomed shoe. No. 1,308,395; July 1; v. 264; p. 71.
 Case, Theodore W., Scipio, N. Y. Variable resistance. No. 1,309,181; July 8; v. 264; p. 244.
 Caspar, Charles H., Philadelphia, Pa. Torpedo-deflecting means for ships. No. 1,310,057; July 15; v. 264; p. 443.
 Caspar, Charles H., Philadelphia, Pa. Ordnance. No. 1,310,058; July 15; v. 264; p. 443.
 Casper, Frank L., Howe Cave, N. Y. Automatic cabinet-lid support. No. 1,310,047; July 22; v. 264; p. 583.
 Cassedy, Hiram, Sr., Brookhaven, Miss. Fisherman's fly. No. 1,309,061; July 8; v. 264; p. 223.
 Castellini, Joseph J., Cincinnati, Ohio. Vegetable-washer. No. 1,311,466; July 29; v. 264; p. 773.
 Castle, Samuel R., Aberdeen, Wash. Bake-pan. No. 1,309,062; July 8; v. 264; p. 223.
 Castle, John H. (See Underwood and Castle.)
 Cattell, Charles, Staunton, Va. Treating lime. No. 1,308,931; July 8; v. 264; p. 198.
 Cattell, Charles, Staunton, Va. Cementitious composition and preparing same. No. 1,308,932; July 8; v. 264; p. 198.
 Cattell, Charles, Staunton, Va., assignor to The British Potash Company, Limited, London, England. Treatment of ores for production of metal and of potassium compounds. No. 1,311,043; July 22; v. 264; p. 656.
 Causey, Joseph W., and A. Harvey, Charleston, S. C. Adjustable guide for band-saws. No. 1,311,593; July 29; v. 264; p. 791.
 Cavanagh, Michael, New York, N. Y. Internal-combustion engine. No. 1,311,044; July 22; v. 264; p. 656.
 Cave, Henry, Elizabeth, N. J., assignor to Davis-Hounonville Company, New York, N. Y. Carrying-case for welding and cutting equipment. No. 1,309,273; July 8; v. 264; p. 262.
 Caricchi, Ercole, Quincy, Mass. Grinding or polishing machine. No. 1,308,933; July 8; v. 264; p. 198.
 Cedarstram, Charles W., Westwood, Calif. Stock-gate. No. 1,308,659; July 1; v. 264; p. 119.
 Cederlund, Carl H. (See Ahlen and Cederlund.)
 Cederquist, Oscar. (See Carpenter, Ralph G., assignor.)
 Cellist Brush Company, The. (See Chandler, Daniel L., assignor.)
 Cement Products Company. (See Harris, John F., assignor.)
 Cementograph Company, The. (See Walling, William F., assignor.)
 Centolella, Giuseppe A., Clinton, N. Y. Electric-light support. No. 1,310,323; July 15; v. 264; p. 491.
 Centoni, Cesare, Chicago, Ill. Locking mechanism. No. 1,309,351; July 8; v. 264; p. 276.
 Central Railway Signal Company. (See Dutcher, Frank, assignor.)
 Central Tool Company, The. (See Jaques, Fernando O., Jr., assignor.)
 Cerruti, Frank A., New York, N. Y. Aeroplane. No. 1,310,359; July 15; v. 264; p. 503.
 Chabot, Ephraim, Nashua, N. H. Automatic train control. No. 1,310,059; July 15; v. 264; p. 444.
 Chaddick, Mark, Plano, Tex. Device for making vessels inviolable. No. 1,310,280; July 15; v. 264; p. 484.
 Chadwick, Lee S., East Cleveland, and C. C. Rehmer, assignors to The Cleveland Metal Products Company, Cleveland, Ohio. Fastening means for oven-doors and the like. No. 1,310,823; July 22; v. 264; p. 615.
 Chaffee, Russell, Wilkes, Wis. Gutter and scraper therefor. No. 1,311,640; July 29; v. 264; p. 799.
 Chain Belt Company. (See Leavley, Christopher U., assignor.)
 Chakravarty, Akhil, and F. H. Grell, Chicago, Ill. Automatic skin-bone cutter. No. 1,309,017; July 8; v. 264; p. 214.
 Chalfont, Emil W., Chicago, Ill. Universal joint. No. 1,311,679; July 29; v. 264; p. 807.
 Chambers, James A., Pittsburgh, Pa. Manufacture of glass. No. 1,309,274; July 8; v. 264; p. 262.
 Champion Ignition Company. (See Schmidt, Albert, assignor.)
 Champion Shoe Machinery Company. (See Dohyna and Hrusnina, assignors.)
 Chandler, Daniel L., Fitchburg, Mass., assignor to The Cellist Brush Company. Brush-making machine. No. 1,311,796; July 29; v. 264; p. 829.

Chandler, Edwin N., Braintree, Mass. Insole. No. 1,311,154; July 29; v. 264; p. 709.
 Chandler Motor Car Company. (See Whitbeck, John V., assignor.)
 Chappell, Howard F., New York, N. Y. Protecting refractory furnace-linings. No. 1,308,481; July 1; v. 264; p. 86.
 Chappuis, John A., La Chaux-de-Fonds, Switzerland. Toy building element. No. 1,309,240; July 8; v. 264; p. 258.
 Chapuis, François J., Paris, and A. L. E. Saffiot, La Garenne-Colombes, France. Regulating device for the air-discharge in compressed-air brakes. No. 1,309,612; July 15; v. 264; p. 362.
 Charles A. Brewer & Sons. (See Brewer, Charles A., assignor.)
 Charvat, Alois, Clafin, Kans. Stock-releasing device. No. 1,308,224; July 1; v. 264; p. 40.
 Chatfield, Franklin, Minneapolis, Minn., assignor to Northwestern Knitting Company. Undergarment. No. 1,308,396; July 1; v. 264; p. 71.
 Chauvière, Lucien, assignor to Société Anonyme l'Helice Intégrale (Anciens Etablissements L. Chauvière), Paris, France. Aeroplane. No. 1,308,164; July 1; v. 264; p. 29.
 Chemical Construction Company. (See Hechenbleikner, Ingenieur, assignor.)
 Chemical Construction Company. (See Hechenbleikner and Glichrst, assignors.)
 Chemical Development Company. (See Eldred and Mercereau, assignors.)
 Chemical Development Company. (See McElroy, Karl P., assignor.)
 Chemical Development Company. (See Marsereau, Gail, assignor.)
 Chemical Development Company. (See Monesa, Jacob M., assignor.)
 Cheln, Julius, Montclair, N. J. Toy. No. 1,311,351; July 29; v. 264; p. 752.
 Chemical Construction Company. (See Hechenbleikner, Ingenieur, assignor.)
 Chenoweth, Edwin G., and W. J. Tollerton, Chicago, Ill. Replaceable bearing for brake-hangers. No. 1,310,607; July 22; v. 264; p. 575.
 Chesnutt, John L., assignor to The Chesnutt Manufacturing Company, Kansas City, Mo. Combined tilting and platform truck. No. 1,308,934; July 8; v. 264; p. 198.
 Chesnutt Manufacturing Company, The. (See Chesnutt, John L., assignor.)
 Chiale, Joseph D. (See De Cesare and Chiale.)
 Chibbaro, Antonino, New York, N. Y. Music-roll protector. No. 1,311,045; July 22; v. 264; p. 656.
 Chicago Miniature Lamp Works. (See Gast, Adolph W., assignor.)
 Chicago Railway Equipment Company. (See Hawkins, Arthur W., assignor.)
 Chile Exploration Company. (See Rose and Moorath, assignors.)
 Chism, Louis W., Plantville, assignor to The Steel Products Company, Hartford, Conn. Connecting device. No. 1,310,979; July 22; v. 264; p. 643.
 Choma, John, Pittsburgh, Pa., assignor of one-half to B. Merenko, Passaic, N. J. Automatic wardrobe. No. 1,308,333; July 1; v. 264; p. 60.
 Chretien, Henri, Nice, France. Collimating device and sighting. No. 1,311,846; July 29; v. 264; p. 838.
 Christensen, Jens P. (See Keenan, Christensen, and Ruemelin.)
 Christensen, Richard M., New York, N. Y. Automatic course and deviation finder. No. 1,311,641; July 29; v. 264; p. 800.
 Christensen, Sverre, Astoria, Ore. Non-refillable bottle. No. 1,309,394; July 8; v. 264; p. 284.
 Christensen, Tyvald, Port Richmond, N. Y. Motor-bicycle. No. 1,308,022; July 1; v. 264; p. 3.
 Christie, Alexander, Newcastle, New South Wales, Australia. Piercing and decanting device for sheet-metal liquid-containers. No. 1,308,830; July 8; v. 264; p. 180.
 Christie, Walter, Weehawken, N. J. Ladder-truck. No. 1,311,552; July 29; v. 264; p. 784.
 Christopher, William M., Amsterdam, N. Y. Adjustable storm and light shield. No. 1,309,352; July 8; v. 264; p. 276.
 Chryst, William A. (See Kettering and Chryst.)
 Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Liquid-heating method and apparatus. No. 1,308,040; July 1; v. 264; p. 6.
 Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Method of and apparatus for producing asymmetric potential waves. No. 1,308,041; July 1; v. 264; p. 7.
 Chubb and Son's Lock and Safe Company. (See Butter, Francis J., assignor.)
 Church, Edmund S., assignor to Automatic Carburetor Company, Chicago, Ill. Fuel-regulating device for explosive-engines. No. 1,308,145; July 1; v. 264; p. 25.
 Church, Edmund S., assignor to Automatic Carburetor Company, Chicago, Ill. Fastener. No. 1,308,146; July 1; v. 264; p. 24.
 Chute, Purdie E., Tucson, Ariz. Cushion-tire for vehicles. No. 1,309,400; July 8; v. 264; p. 296.

ALPHABETICAL LIST OF PATENTEES.

Copper-Clad Malleable Range Company. (See Scruggs and Jones, assignors.)
Cooperations Products Company, The. (See Bennett, Alfred A., assignor.)
Coppus Engineering and Equipment Company. (See Coppus, Francis H. C., assignor.)
Coppus, Francis H. C., assignor to Coppus Engineering and Equipment Company, Worcester, Mass. Fan-blower. No. 1,308,962; July 8; v. 264; p. 207.
Copus, Henry T., Detroit, Mich. Hair-cutting device. No. 1,311,438; July 29; v. 264; p. 702.
Corey, Henry F., Des Moines, Iowa. Automatic wrench. No. 1,309,462; July 8; v. 264; p. 296.
Cornell, Andrew J., assignor to Empire Art Metal Co., Inc., College Point, N. Y. Metallic door-frame buck and trim-fastening. No. 1,308,276; July 1; v. 264; p. 49.
Cornell Wood Products Company. (See Smith, Walter T., assignor.)
Corrigan, John B., Prior Lake, Minn. Animal-trap. No. 1,308,277; July 1; v. 264; p. 49.
Cortese, Battista, New York, N. Y. Sponging-machine. No. 1,310,325; July 15; v. 264; p. 482.
Cortes, Albert M., San Francisco, Calif. Ship. No. 1,309,019; July 8; v. 264; p. 215.
Coryell, John B., Adrian, Mich. Tractor. No. 1,309,085; July 8; v. 264; p. 227.
Coryell, William C., Youngstown, Ohio. Making endless belts. No. 1,309,244; July 8; v. 264; p. 256.
Coryell, William C., Washington, D. C. Endless belt. No. 1,309,245; July 8; v. 264; p. 256.
Costello, William, Jr., Philadelphia, Pa. Depositing-nozzle for rake-coating machines. No. 1,310,062; July 15; v. 264; p. 444.
Cottini, Girolamo. (See Cottini, Guilelmo and G.)
Cottini, Guilelmo, Springfield, and G. Cottini, Ludlow, assignors to M. T. Foley, Springfield, Mass. Paper-drawing cabinet. No. 1,311,199; July 29; v. 264; p. 829.
Coughtry, John W. (See Lipe and Coughtry.)
Coughtry, Stella S., administratrix. (See Lipe and Coughtry.)
Coulson, William T., Anerley, London, England. Diver's lantern. No. 1,308,579; July 1; v. 264; p. 104.
Coulston, Earl V., Rock Island, Ill. Heating system. No. 1,308,335; July 1; v. 264; p. 60.
Courvoisier, Andrew, Huguenot Park, N. Y. Pontoon for raising ships. No. 1,308,168; July 1; v. 264; p. 30.
Cowan, Charles H., Jr., Stoughton, Conn. Ticket-holder. No. 1,311,758; July 29; v. 264; p. 822.
Cowan Truck Company. (See Fairchild, George R., assignor.)
Cowan Truck Company. (See Hendee, Daniel E., assignor.)
Cowling, William E., Sioux City, Iowa. Hose-supporter. No. 1,308,774; July 8; v. 264; p. 169.
Cox, Millard F., Louisville, Ky. Reversible brake-beam fulcrum. No. 1,308,040; July 1; v. 264; p. 7.
Craig, Richard M., San Antonio, Tex. Automatic electric advertising-sign. No. 1,308,698; July 1; v. 264; p. 126.
Craighead, Thomas O., Seattle, Wash. Stocking. No. 1,308,483; July 1; v. 264; p. 87.
Crail, Prentiss R., Columbus, Ohio. Stop-valve box. No. 1,310,521; July 22; v. 264; p. 859.
Cram, Marshall M., North Mankato, Minn. Profile measuring and recording device. No. 1,308,580; July 1; v. 264; p. 104.
Cramer, Walter G., Cincinnati, Ohio. Anti-kid device. No. 1,311,046; July 22; v. 264; p. 657.
Crane, James A., Belfast, Me. Nut-lock. No. 1,309,468; July 8; v. 264; p. 296.
Crane, Jasper E., Newark, assignor to The Arlington Company, Arlington, N. J. Purifying camphor. No. 1,308,398; July 1; v. 264; p. 72.
Crane, Newton, Boston, Mass. Motor-sleigh. No. 1,308,987; July 8; v. 264; p. 199.
Crane, Peter B., Long Lake, Minn. Deep-tilling machine. No. 1,308,169; July 1; v. 264; p. 30.
Crarr, Ralph W., Waukesha, Wis. Can. No. 1,308,891; July 8; v. 264; p. 190.
Crarr, Ralph W., Waukesha, Wis. Can. No. 1,308,892; July 8; v. 264; p. 190.
Crawley, Harriett A., Brookville, assignor of one-half to O. Commins, Falmouth, Ky. Milk-can. No. 1,308,047; July 1; v. 264; p. 7.
Creswell, Lawrence P., assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Rail-bonding. No. 1,310,411; July 22; v. 264; p. 840.
Creek, Allen B., assignor of one-half to A. J. Cardoza, San Francisco, Calif. Card-case. No. 1,308,336; July 1; v. 264; p. 60.
Creek, Walter, Los Animas, Colo. Gripping attachment for automobile-wheels. No. 1,309,020; July 8; v. 264; p. 215.
Creman, William F., Wilkes-Barre, Pa. Third-point support for brake-beams. No. 1,309,187; July 8; v. 264; p. 245.
Creman, William F., Wilkes-Barre, Pa., and W. E. Wine, Toledo, Ohio. Brake-shoe-key lock. No. 1,309,186; July 8; v. 264; p. 245.
Crescent Machine Company, The. (See Harold, Elmer, assignor.)
Cretors, Charles, Chicago, Ill. Timing mechanism. No. 1,309,564; July 8; v. 264; p. 816.

Cretors, Charles, Chicago, Ill. Cover-operating mechanism. No. 1,309,565; July 8; v. 264; p. 316.
 Creveling, John L., New York, N. Y., assignor to Safety Car Heating and Lighting Company. Electric regulation. No. 1,308,988; July 8; v. 264; p. 207.
 Crichton, Leslie N., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electrical device. No. 1,308,048; July 1; v. 264; p. 8.
 Crick, Owen J. P. (See Leighton and Crick.)
 Crist, Frank, Sharpsville, Pa. Walking toy. No. 1,311,553; July 29; v. 264; p. 784.
 Crisman, Urle A., Burnham, Pa. Railway tie. No. 1,310,649; July 22; v. 264; p. 583.
 Crist, Mable. (See Lehmann, Adolph, assignor.)
 Crockett, Lewis M., Kalamazoo, Mich. Machine for setting up cartons. No. 1,311,321; July 29; v. 264; p. 740.
 Crompton, Lionel W., Tampa, Fla. Game apparatus. No. 1,311,112; July 22; v. 264; p. 668.
 Cronk, Harrison T., assignor to Cronk-Salter Company, New York, N. Y. Fluid-conduit in closet-bowls. No. 1,308,581; July 1; v. 264; p. 105.
 Cronk, Harrison T., assignor to Cronk-Salter Company, New York, N. Y. Destructible closet-trap. No. 1,308,582; July 1; v. 264; p. 104.
 Cronk-Salter Company. (See Cronk, Harrison T., assignor.)
 Crosby, Dell S., Chicago, Ill. Cheese-box. No. 1,308,593; July 8; v. 264; p. 190.
 Crosby, John C. (See Moore, Black, and Crosby.)
 Crosby Steam Gage & Valve Company. (See Clark, George H., assignor.)
 Crosse, Charles M., Sallisaw, Okla. Evaporating-pan. No. 1,311,049; July 22; v. 264; p. 657.
 Crouch, Marlon L., Milwaukee, Wis. Soap-molding machine. No. 1,308,753; July 8; v. 264; p. 165.
 Crouse-Hinds Company. (See Hissell and Smith, assignors.)
 Crouse-Hinds Company. (See Olley, Edwin A., assignor.)
 Crouse-Hinds Company. (See Parker and Winter, assignors.)
 Croot, William R. (See Fryant and Croot.)
 Crowder, Raymond. (See MacKenzie and Crowder.)
 Crowe, Thomas. (See Sharples and Crowe.)
 Crowell, William J., Jr., Wyncote, Pa. Ratio indicating and recording meter. No. 1,308,626; July 1; v. 264; p. 113.
 Cru Patents Corporation. (See Uebelmesser, Charles, assignor.) (Reliance.)
 Cruikshank, James W., assignor to J. W. Cruikshank Engineering Company, Pittsburgh, Pa. Glass-carrying rod for glass-annealing levers. No. 1,308,337; July 1; v. 264; p. 60.
 Crystal Alloys Corporation. (See Myers, Louis, assignor.)
 Culley, Walter E., assignor to Simmonds Manufacturing Company, Pittsburg, Mass. Separable-tooth saw. No. 1,308,541; July 1; v. 264; p. 97.
 Culmer, Harry H., Chicago, Ill. Non-puncturable tire. No. 1,310,113; July 15; v. 264; p. 453.
 Culver, Robert M., Girard, Ala. Self-starter-switch control. No. 1,310,690; July 22; v. 264; p. 590.
 Culverwell, Joseph F., assignor of one-half to L. G. Jullien, Washington, D. C. Storage-cabinet for phonographic disk records. No. 1,311,322; July 29; v. 264; p. 741.
 Cummings, Benjamin F., assignor of one-half to C. W. Davis, Locust Grove, Okla. Metallic tie and rail fastener. No. 1,311,323; July 29; v. 264; p. 741.
 Cummings, Joseph R., Pittsfield, Mass., assignor to General Electric Company. Electrical apparatus. No. 1,310,063; July 15; v. 264; p. 444.
 Cummings, Lincoln C., Brookline, Mass. Non-skid tire-protector. (Reliance.) No. 1,309,696; July 29; v. 264; p. 841.
 Cummings, Thomas W. (See Rohan, James J., assignor.)
 Cummins, Orvil. (See Crawley, Harriett A., assignor.)
 Cunningham, John W., Tulsa, Okla. Oil-tank construction. No. 1,310,064; July 15; v. 264; p. 444.
 Cuomo, John, New York, N. Y. Knitting device. No. 1,309,318; July 8; v. 264; p. 270.
 Cureton, Richard W., Lordsburg, N. Mex. Grass-harvesting machine. No. 1,311,382; July 29; v. 264; p. 752.
 Curle, Charles W., San Francisco, Calif. Linotype-slugsawing machine. No. 1,308,733; July 1; v. 264; p. 133.
 Curnan, Frank W. (See Smith and Curnan.) (Reliance.)
 Currier, Frank W., Chicago, and H. H. Ide, La Grange, Ill. Assignors to Kellogg Switchboard & Supply Company, Chicago, Ill. Automatic test and ringing circuits. No. 1,311,156; July 29; v. 264; p. 710.
 Curry, Joseph, Renton, Wash. Safety-brake for elevators. No. 1,311,050; July 22; v. 264; p. 657.
 Curtis, Charles F., Pontardawe, Wales. Composition for the manufacture of linings of acid-pots or such like vessels. No. 1,311,051; July 22; v. 264; p. 657.
 Curtis, Henry E., San Jose, Calif. Carburetor. No. 1,309,719; July 15; v. 264; p. 382.
 Curtis, M. Bass. (See Giddens, Perry G., assignor.)
 Curtis & Marble Machine Company. (See Marble, Edwin H., assignor.)
 Curtiss Aeroplane and Motor Corporation. (See Burgess, William S., assignor.)
 Curtiss Aeroplane and Motor Corporation. (See Dalton, Nelson W., assignor.)

Curtiss Aeroplane and Motor Corporation. (See Kirkham, Clarence A., assignor.)
 Curtiss Aeroplane and Motor Corporation. (See Kleckler, Henry, assignor.)
 Curtiss Aeroplane and Motor Corporation. (See Messner, William G., assignor.)
 Cusick, Wilfred L., Follansbee, W. Va. Combined level, plumb, and gage. No. 1,308,899; July 1; v. 264; p. 126.
 Cutler-Hammer Manufacturing Co., The. (See Lent, William F., assignor.)
 Cutler-Hammer Manufacturing Company, The. (See Stoekle, Edwin R., assignor.)
 Cutler-Hammer Mfg. Co., The. (See Mortensen, Niels L., assignor.)
 Cutter, George A., Dedham, Mass., assignor to Thomson Electric Welding Company. Electric metal-working apparatus. No. 1,308,399; July 1; v. 264; p. 72.
 Cutter, James H. (See Schneider, Charles C., assignor.)
 Czerwinski, Wladyslaw. (See Javinski, Piotr, assignor.)
 D. Napier & Son Limited. (See Knowledge, Arthur J., assignor.)
 D and D Auto Lock Co., The. (See Davis, Otis L., assignor.)
 D'Aix, Fritz C. L., Brooklyn, N. Y. Internal-combustion engine. No. 1,308,400; July 1; v. 264; p. 72.
 D'Yarmett, Edward C., Muskogee, Okla. Centrifugal pump for compression and vacuum. No. 1,310,116; July 15; v. 264; p. 454.
 Dahl, Otto, Seattle, Wash. Flue-cleaner for boilers. No. 1,311,439; July 29; v. 264; p. 763.
 Dahlstrand, Hans P., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Turbine system. No. 1,309,796; July 15; v. 264; p. 396.
 Dalby, William E. (See Wilson and Dalby.)
 Dalen, Gustaf, Stockholm, assignor to Aktiebolaget Keros, Sodertalle, Sweden. Manufacturing lighting-bodies. No. 1,311,324; July 29; v. 264; p. 741.
 Dallas, Duncan W., Chambers County, Ala. Mail-catcher. No. 1,310,065; July 15; v. 264; p. 445.
 Dallmeyer, Thomas D., Pittsburgh, G. O. Brown, and J. R. Schulta, Oakmont, Pa. Breaking rods or bars. No. 1,309,354; July 8; v. 264; p. 276.
 Dallinger, R. A. (See Graves, McDowell, assignor.)
 Dalton, Nelson W., Garden City, N. Y., assignor to Curtiss Aeroplane and Motor Corporation. Airplane-wing construction. No. 1,310,942; July 22; v. 264; p. 637.
 Danforth, Matilda. (See Danforth, Oscar L., assignor.)
 Danforth, Oscar L., assignor to M. Danforth, San Diego, Calif. Window-lock. No. 1,311,052; July 22; v. 264; p. 657.
 Danielson, Carl, Chicago, Ill. Horseshoe. No. 1,311,680; July 29; v. 264; p. 807.
 Danner, Edward, assignor to The Libbey Glass Company, Toledo, Ohio. Assorting-machine. No. 1,309,066; July 8; v. 264; p. 227.
 Dausiger, Adolphe. (See Rider, Thomas B., assignor.)
 Darling, Roy A., Evanson, Ill. Carrier-shell. No. 1,309,982; July 15; v. 264; p. 430.
 Darlington, Albert E., Columbia, S. C. Picker-stick check for looms. No. 1,311,053; July 22; v. 264; p. 657.
 Darnall, John C., Cincinnati, Ohio. Rack for sterilizers and the like. No. 1,309,117; July 8; v. 264; p. 233.
 Darr, George E., Ontario, Oreg. Hook. No. 1,311,499; July 29; v. 264; p. 774.
 Datta, Rasiklal, Calcutta, India. Producing chlorine. No. 1,310,943; July 22; v. 264; p. 637.
 Daudelin, Jean B., Fall River, Mass. Loom-shuttle. No. 1,309,188; July 8; v. 264; p. 245.
 Deutel, Gustave, Angers, France. Cover or lid for cooking-pots, saucepans, and other similar utensils. No. 1,310,981; July 22; v. 264; p. 644.
 Davenport, Herman A., Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Pressing-form. No. 1,310,005; July 15; v. 264; p. 434.
 Davis, Ernest M., Tropico, and L. Lindsay, Los Angeles, Calif. Vacuum air-separator. No. 1,309,879; July 15; v. 264; p. 411.
 Davidson, Adam H., Bedford, Ind. Nail-brush. No. 1,309,510; July 8; v. 264; p. 306.
 Davidson, Frank R., Marceline, Ill., assignor to National Bliscuit Company, New York, N. Y. Carton. No. 1,311,325; July 29; v. 264; p. 741.
 Davidson, William B., Huddersfield, England. Gas and liquid contact apparatus. No. 1,308,338; July 1; v. 264; p. 60.
 Davies, Gwyn O. G., Cle Elum, Wash. Circuit-breaker. No. 1,310,562; July 22; v. 264; p. 567.
 Davies, Llewelyn J., Medford, Oreg. Valve-spring lifter. No. 1,311,805; July 29; v. 264; p. 830.
 Davies, Thomas W., San Jose, Calif. Invalid-table. No. 1,310,284; July 15; v. 264; p. 484.
 Davis, Archibald C., Newark, Ohio. Sanitary apron. No. 1,311,759; July 29; v. 264; p. 822.
 Davis, Augustus, Jr., Cincinnati, Ohio. Oil wagon-tank. No. 1,311,155; July 29; v. 264; p. 709.
 Davis-Bourneville Company. (See Carr, Henry, assignor.)
 Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Driving-chain for mining-machines. No. 1,308,843; July 8; v. 264; p. 181.
 Davis, Charles E., assignor to F. E. Miller, New York, N. Y. Surgical snare. No. 1,310,982; July 22; v. 264; p. 644.

Davis, Cleland, U. S. Navy. Aerial artillery. No. 1,311,761; July 29; v. 264; p. 628.
 Davis, Clyde W. (See Cummings, Benjamin F., assignor.)
 Davis, Frank B., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,308,227; July 1; v. 264; p. 40.
 Davis, Frank E., and W. W. Cameron, assignors to La Crosse Plow Company, La Crosse, Wis. Plow. No. 1,308,228; July 1; v. 264; p. 41.
 Davis, George S., Kogarah, New South Wales, Australia. Railway stock-truck. No. 1,311,326; July 29; v. 264; p. 741.
 Davis, Harry O., Ipswich, assignor to Spray Engineering Company, Boston, Mass. Means for and method of applying coating. No. 1,311,760; July 29; v. 264; p. 822.
 Davis, Otis L., Iowa City, Iowa, assignor to The D and D Auto Lock Co., Chicago, Ill. Electric switch. No. 1,311,263; July 29; v. 264; p. 729.
 Davis, Robert V., Washington, D. C. Trousers-press. No. 1,309,189; July 8; v. 264; p. 246.
 Davis, Robert W., Miltona, N. J. Ship construction. No. 1,310,650; July 22; v. 264; p. 583.
 Davison, Gregory C. (See Spear and Davison.)
 Davison, Gregory C., Groton, Conn. Delayed-action fuse. No. 1,311,054; July 22; v. 264; p. 658.
 Devol, George K., assignor, by mesne assignments, to P. H. Reardon, San Francisco, Calif. Air-compressor. No. 1,310,944; July 22; v. 264; p. 637.
 Dary Brothers Limited. (See Hand, Thomas W., assignor.)
 Day, Albert V. T., New Rochelle, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa. Traffic-controlling system. No. 1,308,401; July 1; v. 264; p. 72.
 Day, E. H. (See Thexton, Henry A., assignor.)
 Day, George H., Southbridge, Mass. Safety device. No. 1,308,775; July 8; v. 264; p. 169.
 Day, George H., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,308,464; July 1; v. 264; p. 87.
 Day, Wilbur F., St. Paul, Minn. Burner. No. 1,310,060; July 15; v. 264; p. 445.
 Dayton Bealer and Hoist Company. (See Folsom and Haltemann, assignors.)
 Dayton Engineering Laboratories Company, The. (See Ketterling and Christ, assignors.)
 Dayton Manufacturing Company, The. (See Kirby, John, Jr., assignor.)
 Dayton, William L., assignor to Gravity Pump and Power Co., Fort Worth, Tex. Pump-jack. No. 1,309,842; July 15; v. 264; p. 404.
 Dayton, William L., assignor to Gravity Pump and Power Co., Fort Worth, Tex. Pump-jack. No. 1,309,843; July 15; v. 264; p. 404.
 De Aburto, Jose R., Madrid, Spain. Internal-combustion engine. No. 1,310,906; July 22; v. 264; p. 630.
 De Campo, Manuel, Mexico, Mex. Rotary engine. No. 1,310,157; July 15; v. 264; p. 461.
 De Cesare, Matteo, and J. D. Chiale, Clifton, N. J., assignors of one-third to P. Diiodato, New York, N. Y. Automobile-jack. No. 1,309,811; July 8; v. 264; p. 305.
 De Escobedo, Hilario, New York, N. Y. Packaging-machine. No. 1,309,122; July 8; v. 264; p. 254.
 De Forest, Lee, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y. Means for transforming mechanical vibrations into electrical vibrations. No. 1,309,753; July 15; v. 264; p. 388.
 De Forest, Lee, Spuyten Duyvil, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y. Oscillation-generator. No. 1,311,264; July 29; v. 264; p. 729.
 De Forest Radio Telephone and Telegraph Company. (See De Forest, Lee, assignor.)
 De Haven, William L., assignor of one-eighth to C. A. Latham, Wichita, Kans. Ball-throwing toy. No. 1,309,614; July 15; v. 264; p. 362.
 De las Fuentes, Jose, Mexico, Mexico. Treating natural soda. No. 1,308,899; July 8; v. 264; p. 192.
 De Laval, George, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y. Detonating-fuse. No. 1,310,742; July 22; v. 264; p. 600.
 De Laval, George, Orange, N. J., assignor to T. A. Gillespie Company, New York, N. Y. Detonating-fuse. No. 1,310,792; July 22; v. 264; p. 610.
 De Laval Separator Company, The. (See Lelich, Meredith, assignor.)
 De Laval Steam Turbine Company. (See Peterson, Per A., assignor.)
 De Lavand, Dimitri S., New York, N. Y. Fluid power transmission. No. 1,308,170; July 1; v. 264; p. 30.
 De Long, Marshall B., East Liverpool, Ohio. Baby-mobile. No. 1,310,651; July 22; v. 264; p. 583.
 De Long, Nelson, assignor to J. M. Laventhol, Chicago, Ill. Fender. No. 1,310,179; July 15; v. 264; p. 466.
 De Martino, Joseph, assignor to Mechanical Improvement Company, Chicago, Ill. Power-transmitting mechanism. No. 1,310,114; July 15; v. 264; p. 453.
 De Martino, Joseph, assignor to Mechanical Improvement Company, Chicago, Ill. Power-transmitting mechanism. No. 1,310,116; July 15; v. 264; p. 454.
 De Martino, Joseph, and E. Maury, Chicago, Ill. Hydraulic transmission. No. 1,310,945; July 22; v. 264; p. 637.
 De Mattia, Barthold. (See De Mattia, Peter and R.)

De Mattia, Peter and B., Clifton, N. J. Rubber-shoe-sole-making apparatus. No. 1,311,856; July 29; v. 264; p. 839.
 De Mier, Fred, assignor to himself and A. E. Bendelari, Picher, Okla. Apparatus for concentrating ore. No. 1,308,049; July 1; v. 264; p. 8.
 De Smith, Henry, assignor to M. D. Knowlton Company, Rochester, N. Y. Safety operating mechanism. No. 1,309,240; July 8; v. 264; p. 256.
 De Vaughn, Harry E., assignor to W. A. Jones, Morgantown, W. Va. Flattening-oven. No. 1,308,341; July 1; v. 264; p. 61.
 De Vry Corporation, The. (See De Vry, Herman A., assignor.)
 De Vry, Herman A., assignor to The De Vry Corporation, Chicago, Ill. Motion-picture machine. No. 1,309,087; July 8; v. 264; p. 227.
 De Witt, Alvah W., Rochester, N. Y. Powder-container. No. 1,310,609; July 22; v. 264; p. 576.
 Deadmond, Isaac E., Newkirk, Okla. Fuel-lock. No. 1,311,863; July 29; v. 264; p. 841.
 Dearley, John W., assignor to Freeman Manufacturing Company, Racine, Wis. Foundry-task clamp. No. 1,309,613; July 15; v. 264; p. 362.
 Debar, George C., Springdale, assignor to Universal Glass Company, New Kensington, Pa. Glass-bait. No. 1,308,278; July 1; v. 264; p. 50.
 Debban, Henry O., London, England. Rotary internal-combustion engine. No. 1,308,339; July 1; v. 264; p. 61.
 Debs, Louis H. (See Cohn and Debs.)
 Dedolph, Walter G. (See Turner and Dedolph.)
 Dehuff, Wilmer A., Baltimore, and E. T. Griffin, Annapolis, Md. Automobile-lavatory. No. 1,309,612; July 8; v. 264; p. 306.
 Delbel, Christopher S., and L. E. Lawlor, Youngstown, Ohio. Flag-holder. No. 1,308,340; July 1; v. 264; p. 61.
 Delbert, Hans G. J., Big Spring, Tex. Check-valve. No. 1,311,042; July 29; v. 264; p. 700.
 Delaware Chemical Engineering Company. (See Du Pont, Francis I., assignor.)
 Delmar, Evald, Stockholm, Sweden. Self-adjusting ball-bearing. No. 1,308,522; July 1; v. 264; p. 94.
 Delvaux, Arthur L., Champaign, Ill. Shoe-polishing brush. No. 1,311,055; July 22; v. 264; p. 658.
 Demarest, Charles S. (See Toomey and Demarest.)
 Demarest, Charles S., Flatbush, N. Y., assignor to American Telephone and Telegraph Company. Relay-selecting circuit for artificial lines. No. 1,308,684; July 1; v. 264; p. 120.
 Dempsey, James E., Manitowoc, Wis. Control mechanism for headlights. No. 1,310,691; July 22; v. 264; p. 590.
 Dempsey, William A., Scranton, Pa. Assignor to Draper Corporation, Hopedale, Mass. Automatic filling-replenishing loom. No. 1,310,793; July 22; v. 264; p. 610.
 Demuth, Alfred M., San Francisco, Calif., assignor to J. A. Kelly, Chicago, Ill. Cooker. No. 1,308,485; July 1; v. 264; p. 87.
 Demuth, Alfred M., Chicago, Ill., assignor to U. S. Slicing Machine Company, Laporte, Ind. Work-holder for slicing-machines. No. 1,309,306; July 8; v. 264; p. 284.
 Dencklau, Charles F., Los Angeles, Calif. Advertising attachment to wheel-rims. No. 1,309,464; July 8; v. 264; p. 297.
 Dees, Alexander, Brooklyn, assignor to The Wak Novelty Co., Inc., New York, N. Y. Doll-head. No. 1,309,190; July 8; v. 264; p. 246.
 Dees, Alexander, Brooklyn, assignor to The Wak Novelty Co., Inc., New York, N. Y. Doll-head. No. 1,309,191; July 8; v. 264; p. 246.
 Denner, John H., Detroit, Mich. Mixer. No. 1,310,692; July 22; v. 264; p. 591.
 Dennes, Oscar L., Ardmore, Okla. Article-holder. No. 1,309,844; July 15; v. 264; p. 404.
 Denning, Patrick F., Cleveland, Ohio. Ornamental wind-wheel. No. 1,310,234; July 15; v. 264; p. 475.
 Dennis, Adolphus S., Cleveland, Ohio, assignor to Marchant Calculating Machine Company. Combined typewriter and calculating-machine. No. 1,309,276; July 8; v. 264; p. 262.
 Dennis, Arthur C., Glacier, British Columbia, Canada. Tunneling. No. 1,308,583; July 1; v. 264; p. 105.
 Dennis, Oliver C., Chicago, Ill. Electric vulcanizer. No. 1,309,845; July 15; v. 264; p. 405.
 Dental Electric Company. (See Alden, Milton, assignor.)
 Deppermann, William, assignor to S. S. Stafford, Inc., New York, N. Y. Pour-out for bottles. No. 1,310,405; July 15; v. 264; p. 506.
 Detrick, Myron H., Chicago, Ill., assignor to M. H. Detrick Co., Chicago, Ill. Furnace-arch. No. 1,309,438; July 8; v. 264; p. 291.
 Detroit-Cadillac Motor Car Company. (See Zaner, Delaney D., assignor.)
 Dettling, Joseph J., and E. A. Tinsman, Akron, Ohio. Producing leggings. No. 1,309,118; July 8; v. 264; p. 233.
 Deutsch, Edward I., Cincinnati, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Motor-control system. No. 1,308,229; July 1; v. 264; p. 41.
 Deutsch, Edward I., North Norwood, Ohio, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Motor-controller. No. 1,309,797; July 15; v. 264; p. 896.

Deutch, Simon, and E. L. Gross, Chicago, Ill. Mechanism for operating gates, doors, or other closures. No. 1,311,113; July 22; v. 264; p. 668.

Devers, Philip K., Jr., Lynn, Mass., assignor to General Electric Company. Inclosed-arc device. No. 1,310,097; July 15; v. 264; p. 445.

Devlin, Francis N., Chicago, Ill. Oil-cup. No. 1,311,327; July 29; v. 264; p. 742.

Di Salvo, Antonio, Washington, Pa. Hair-cleaning device. No. 1,308,685; July 1; v. 264; p. 124.

Diadem Manufacturing Company. (See Thorndike, Herbert A., assignor.)

Diamond, George, Milwaukee, Wis. Paper-box member. No. 1,310,606; July 15; v. 264; p. 434.

Diamond, James E., Cleveland, Ohio. Internal-combustion engine. No. 1,311,213; July 29; v. 264; p. 720.

Dibble, Frank D., Muskogee, Okla. Ship-protecting device. No. 1,310,328; July 15; v. 264; p. 492.

Dick, James E., Denver, Colo. Hand-transit. No. 1,308,050; July 1; v. 264; p. 8.

Dickey, Franklin, Indianapolis, Ind. Air-heater for internal-combustion engines. No. 1,310,412; July 22; v. 264; p. 540.

Dickie, E. W. (See Higbee, Charlie D., assignor.)

Dickinson, Frank T., Toledo, Ohio. Brake-shoe. No. 1,308,402; July 1; v. 264; p. 72.

Dickinson, Joel, Newark, N. J. Die for forging projectiles and the like. No. 1,309,247; July 8; v. 264; p. 257.

Dickinson, William H., et al. (See McKeever, Charles, assignor.)

Diesbach, Fritz G., administrator. (See Krauth, Albert.)

Diller, Samuel, Des Moines, Iowa. Storage battery. No. 1,308,230; July 1; v. 264; p. 41.

Dillon, Edward L., assignor to L. Norvell, trustee, St. Louis, Mo. Drilling-machine. No. 1,309,277; July 8; v. 264; p. 202.

Dillon, Friend E., Deep Run, Ohio. Fruit-conveyer. No. 1,309,119; July 8; v. 264; p. 233.

Dines Magnetic Separator Company. (See Manegold and Fobian, assignors.)

Dinhof, Julius, New York, N. Y. Fluger-ring. No. 1,308,804; July 8; v. 264; p. 191.

Diolato, Pandio. (See De Cesare and Chiale, assignors.)

Dishrow, Clarkson A., New Rochelle, assignor to The Rail Joint Company, New York, N. Y. Insulating unit for rail-joints. No. 1,311,430; July 29; v. 264; p. 763.

Dishrow, Reuben B., St. Paul, Minn. Milking apparatus. No. 1,308,051; July 1; v. 264; p. 8.

Dishrow, Reuben B., St. Paul, Minn. Valve mechanism for milking apparatus. No. 1,308,052; July 1; v. 264; p. 8.

Dishrow, Reuben B., St. Paul, Minn. Milking apparatus. No. 1,308,053; July 1; v. 264; p. 9.

Dieter, Joseph, Hamilton, Ohio, assignor to American Can Company, New York, N. Y. Transparent-sided curved walled vessel. (See Townsend, Herbert, assignor.)

Dixon, William H. (See Leach, William W., assignor.)

Dixson, George A., and J. H. Bruening, assignors to Champion Shoe Machinery Company, St. Louis, Mo. Fastener-forming mechanism for fastener-inserting machines. No. 1,309,590; July 8; v. 264; p. 310.

Dodd, Henry S., assignor by mesne assignments, of one-half to J. O'Neill, Toronto, Ontario, Canada. Automatic valve for controlling the flow of gaseous mixtures. No. 1,311,328; July 29; v. 264; p. 742.

Dodge, Harry C. (See Lowman, Roy L., assignor.)

Dodge, Otto W., deceased, New York; C. W. Stevens, administrator, assignor to W. H. Bowes Co., Port Chester, N. Y. Coupling for drain-pipes of steam-heated drying-cylinders. No. 1,310,391; July 15; v. 264; p. 504.

Dodge, R. B., South Bellingham, Wash. Auger. No. 1,311,265; July 29; v. 264; p. 730.

Dochler Die Casting Company. (See Pack and Nock, assignors.)

Doecker, William J., Akron, Ohio. Lamp. No. 1,311,681; July 29; v. 264; p. 807.

Doherty, George P., Cleveland, Ohio. Copy-liner. No. 1,309,947; July 15; v. 264; p. 422.

Domelcon, Albert S., San Anselmo, Calif. Cigarette-case. No. 1,310,652; July 22; v. 264; p. 584.

Dominy, Charles O., Lone Pine, Calif. Power-driven chuck. No. 1,309,235; July 8; v. 264; p. 277.

Donaher, Patrick. (See Kuehne and Donaher.)

Donaldson, Charles J., J. Mossom, and J. K. Brooks, assignors of one-fourth to E. E. Myers, Brookville, Pa. Glass apparatus. No. 1,311,804; July 29; v. 264; p. 830.

Donaldson, Thornycroft, and R. Mackie, Woolston, assignors to John I. Thornycroft & Company, Limited, Westminster, England. Furnace-front for liquid-fuel furnaces. No. 1,309,397; July 8; v. 264; p. 284.

Donnelly, Clarence E., New York, N. Y. Parachute. No. 1,310,693; July 22; v. 264; p. 591.

Donohue, William, New York, N. Y. Circuit-closer. No. 1,311,214; July 29; v. 264; p. 721.

Donovan, Patrick L., Toulon, Ill. Draft-bar. No. 1,308,938; July 8; v. 264; p. 190.

Doolan, Henry J., Washington, D. C. Automatic train-stop. No. 1,311,761; July 29; v. 264; p. 822.

Doolin, Charles R., San Antonio, Tex. Laminated fabric for tire-casings. No. 1,311,837; July 29; v. 264; p. 840.

Doonan, Louis, Bend, Ore. Producing dehydrated mineral salts. No. 1,308,403; July 1; v. 264; p. 72.

Dorey, George B., Montreal, Quebec, Canada. Shock-absorber. No. 1,308,171; July 1; v. 264; p. 30.

Dormont, Frank C., Detroit, Mich., assignor of one-half to G. J. Lowe, Cleveland, Ohio. Air-charging device. No. 1,309,880; July 15; v. 264; p. 411.

Dorr Company, The. (See Bloomfield, Alfred L., assignor.)

Dorr Company, The. (See McAfee, Daniel S., assignor.)

Dorsey, Walter A., assignor to The Honney Floyd Company, Columbus, Ohio. Car-moving tool. No. 1,311,803; July 29; v. 264; p. 830.

Dosch, Oliver L., and M. Hemle, Elizabeth, N. J., assignors to The Slinger Manufacturing Company. Sewing-machine. No. 1,311,114; July 22; v. 264; p. 609.

Dougherty, John W., Weaver, Pa. Blowing-down and blowing-out blast-furnaces. No. 1,309,405; July 8; v. 264; p. 297.

Dougherty, John W., Beaver, Pa. Preventing gas explosions in blast-furnaces during temporary stops. No. 1,309,460; July 8; v. 264; p. 297.

Dougherty, Herman W., Binghamton, N. Y., assignor, by mesne assignments, to The Gamewell Fire Alarm Telegraph Company. Signal-recorder. No. 1,309,720; July 15; v. 264; p. 382.

Douglas, Harry A., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich. Circuit-connector. No. 1,308,172; July 1; v. 264; p. 31.

Douglas, Louis M. (See Parsons, Walker, Cook, and Douglas.)

Douglas & Rudd Manufacturing Company. (See Douglas, Harry A., assignor.)

Douglas, Walter W., Savannah, Ga. Magazine for firearms. No. 1,308,605; July 1; v. 264; p. 120.

Douglas, Homer S., assignor to M. B. Douglas, Lathrop, Mo. Valve-grinding mechanism. No. 1,309,603; July 8; v. 264; p. 324.

Douglas, Mary B. (See Douglas, Homer S., assignor.)

Doulton, Henry L. (See Podmore, William, assignor.)

Douthitt, Fletcher, Detroit, Mich. Ascertaining camera-stops. No. 1,309,395; July 8; v. 264; p. 284.

Dovel, James P., Birmingham, Ala. Portable washing plant. No. 1,309,754; July 15; v. 264; p. 388.

Dow Chemical Company, The. (See Dow and Quayle, assignors.)

Dow, Herbert H., Midland, Mich., and W. O. Quayle, Wilmington, Del., assignors to The Dow Chemical Company, Midland, Mich. Manufacturing chloroform. No. 1,311,329; July 29; v. 264; p. 742.

Downer, Joseph E., Allentown, Pa. Journal for car-wheels. No. 1,309,467; July 8; v. 264; p. 297.

Downey, Dennis A., Cleveland, Ohio. Street-indicator. No. 1,311,058; July 22; v. 264; p. 658.

Downie, Robert O., Minneapolis, Minn. Flying-machine. No. 1,308,054; July 1; v. 264; p. 9.

Downs, George F., Buffalo, N. Y. Open-hearth furnace. No. 1,308,404; July 1; v. 264; p. 73.

Doxler, James C., Baton Rouge, La. Drier. No. 1,310,858; July 22; v. 264; p. 621.

Draeger, Lloyd H., assignor to T. L. Smith Company, Milwaukee, Wis. Discharge-spout for concrete-mixers. No. 1,308,148; July 1; v. 264; p. 26.

Draper Corporation. (See Blouin, Alfred, assignor.)

Draper Corporation. (See Davis, Frank H., assignor.)

Draper Corporation. (See Dempsey, William A., assignor.)

Draper Corporation. (See Ferguson, Thomas, assignor.)

Draper Corporation. (See Gellinas, Raphael H., assignor.)

Draper Corporation. (See Lacey, Fred, assignor.)

Draper Corporation. (See Rhoades, Alonzo E., assignor.)

Draper Corporation. (See Stimpson, Edward S., assignor.)

Drasner, George H., Jr., Brooklyn, assignor to L. B. Koch, New York, N. Y. Cinematographic target. No. 1,311,383; July 29; v. 264; p. 732.

Draver, Emil R., Richmond, Ind. Wheel-carrier. No. 1,311,267; July 29; v. 264; p. 730.

Dressel, Oskar. (See Heymann, Dressel, Kothe, and Osenbeck.)

Dresser, Charles J., Toledo, Ohio. Car-door seal. No. 1,311,500; July 29; v. 264; p. 774.

Drew, Clement S. (See Hinchley and Drew.)

Drew, John W., assignor to Moon Brothers Manufacturing Company, St. Louis, Mo. Piston-rod packing. No. 1,310,983; July 22; v. 264; p. 644.

Drew, Leonard S., New York, N. Y., assignor to J. G. Williams, Boston, Mass. Pocket signal-chart. No. 1,311,982; July 29; v. 264; p. 807.

Drew, William F., Oakland, Calif. Electric keyboard for calculating-machines, type-writing machines, and the like. No. 1,311,384; July 29; v. 264; p. 752.

Dreys, Edward H. (See Morricks and Dreys.)

Drew, Frank W., Williams, Minn. Wrench. No. 1,311,801; July 29; v. 264; p. 830.

Dreyfus, Henry, Basel, Switzerland. Manufacture of acetic acid from acetaldehyde. No. 1,308,173; July 1; v. 264; p. 31.

Dreyfus, Henry, Basel, Switzerland. Manufacture of acetic aldehyde. No. 1,310,743; July 22; v. 264; p. 600.

Dreyfus, Henry, Basel, Switzerland. Manufacture of acetic aldehyde. No. 1,310,984; July 22; v. 264; p. 644.

Driggs, Louis L., New York, N. Y. Combination percussion and time fuse. No. 1,311,792; July 29; v. 264; p. 828.

Driggs, Louis L., New York, N. Y. Percussion-fuse for shells. No. 1,311,793; July 29; v. 264; p. 828.

Driggs, Louis L., New York, N. Y. Percussion-fuse. No. 1,311,794; July 29; v. 264; p. 828.

Driggs, Louis L., New York, N. Y. Shell-fuse. No. 1,311,795; July 29; v. 264; p. 828.

Drinkern, William H., Beloit, Kans. Apparatus for heating oil-wells. No. 1,309,721; July 15; v. 264; p. 382.

Driver, J., et al. (See Hawley, Royal A., assignor.)

Du Pont, Eleuthere P. (See Du Pont, Francis I. and E. I.)

Du Pont, Ernest, assignor to Ball Grain Explosives Company, Wilmington, Del. Making explosive black powder. No. 1,308,342; July 1; v. 264; p. 61.

Du Pont, Francis I., assignor to Ball Grain Explosives Company, Wilmington, Del. Smokeless powder and coating same. No. 1,308,343; July 1; v. 264; p. 61.

Du Pont, Francis I., assignor to Ball Grain Explosives Company, Wilmington, Del. Making smokeless powder. No. 1,308,344; July 1; v. 264; p. 61.

Du Pont, Francis I., assignor to Ball Grain Explosives Company, Wilmington, Del. Explosive charge for the central tubes of shrapnel-shells. No. 1,308,345; July 1; v. 264; p. 62.

Du Pont, Francis I., assignor to Ball Grain Explosives Company, Wilmington, Del. Preparing explosive charges for shells. No. 1,308,347; July 1; v. 264; p. 62.

Du Pont, Francis I., assignor to Delaware Chemical Engineering Company, Wilmington, Del. Process of and apparatus for obtaining oxides of nitrogen from atmospheric air. No. 1,311,594; July 29; v. 264; p. 781.

Du Pont, Francis I., Wilmington, and E. I. Du Pont, Montchanin, assignors to Ball Grain Explosives Company, Wilmington, Del. Making smokeless powder. No. 1,308,346; July 1; v. 264; p. 62.

Duckworth, Thomas E., Colfax, La. Wheeled scoop. No. 1,308,666; July 1; v. 264; p. 120.

Dudley, Howard M., Philadelphia, Pa. Fiber-treating device. No. 1,310,322; July 22; v. 264; p. 569.

Dugas, Frederic J., Jay, Me., assignor to International Paper Company, Apparatus for facing grindstones. No. 1,308,895; July 8; v. 264; p. 191.

Dumas, Mel B., Milwaukee, Wis. Scrubbing-brush. No. 1,310,007; July 15; v. 264; p. 435.

Dunbar, George B., Detroit, Mich. Plastic composition and making same. No. 1,310,180; July 15; v. 264; p. 400.

Duncan, Thomas S., assignor to Vickers Limited, Westminster, London, England. Starting of internal-combustion engines. No. 1,309,722; July 15; v. 264; p. 382.

Duncanson, Vincent E., Lynchburg, Ohio. Eyeglass-holder. No. 1,309,573; July 8; v. 264; p. 318.

Dunker, Charles H., et al., administrators. (See Shuman, Frank.)

Dunlop, George T., and J. J. Roohar, assignors to Terminal Taxicab Company, Washington, D. C. Fare-meter installation for automobiles. No. 1,310,907; July 22; v. 264; p. 630.

Dunn, Rufus C., Vidalia, Ga. Mow. No. 1,309,408; July 8; v. 264; p. 297.

Dunne, Julius Brooklyn, N. Y. Hair-comb. No. 1,311,830; July 29; v. 264; p. 742.

Dunne, Alonzo G., Concordia, Kans. Road-working machine. No. 1,308,174; July 1; v. 264; p. 31.

Durham, John C., Reno, Nev. Attachment for applying and removing caps from jars. No. 1,309,399; July 8; v. 264; p. 285.

Durham, William T., Ridge Spring, S. C. Snap-hook. No. 1,308,055; July 1; v. 264; p. 9.

Dutcher, Frank, Versailles, assignor to Central Railway Signal Company, Pittsburgh, Pa. Railway signal-torpedo. No. 1,311,762; July 29; v. 264; p. 822.

Dutton, Lawrence J., Pueblo, Colo. Ventilator. No. 1,310,327; July 15; v. 264; p. 492.

Dwight & Lloyd Metalurgical Company. (See Lloyd, Richard L., assignor.)

Dwyer, William M., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Draft-rigging for railway-cars. No. 1,309,021; July 8; v. 264; p. 216.

Dyer, Frank L., Montclair, N. J. Assembly voting-machine. No. 1,308,279; July 1; v. 264; p. 50.

Dyer, Newell V., Holbrook, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Skiving-machine. No. 1,308,776; July 8; v. 264; p. 169.

Dyer, Richard F., Providence, R. I., assignor to G. H. Gahn, Bloomfield, Conn. Artificial leather and producing it. No. 1,308,281; July 1; v. 264; p. 41.

E. B. Meyrowitz, Inc. (See Meyrowitz, Emil B., assignor.)

E. I. du Pont de Nemours and Company. (See Buell, William H., assignor.)

E. I. du Pont de Nemours and Company. (See Calvert and Thomas, assignors.)

E. I. du Pont de Nemours and Company. (See Holmes, Fletcher R., assignor.)

E. I. du Pont de Nemours and Company. (See Houlihan, Arthur E., assignor.)

E. I. du Pont de Nemours & Company. (See Marshall, John, assignor.)

E. I. du Pont de Nemours and Company. (See Matheson, Howard W., assignor.)

E. I. du Pont de Nemours and Company. (See Reese, Charles L., assignor.)

E. I. du Pont de Nemours and Company. (See Robinson, Edmund G., assignor.)

E. I. du Pont de Nemours and Company. (See Stine, Charles M., assignor.)

E. I. du Pont de Nemours and Company. (See Swint, Wendell R., assignor.)

E. I. du Pont de Nemours and Company. (See Teeple, Oliver J., Jr., assignor.)

E. I. du Pont de Nemours and Company. (See Woodbury, Clifford A., assignor.)

E. S. Cowie Electric Co. (See Haskins, Butler J., assignor.)

E. W. Bliss Company. (See Ellsworth, Charles J., assignor.)

E. W. Bliss Company. (See Leavitt, Frank M., assignor.)

E. W. Carpenter Manufacturing Company. (See Lund, Charles W., assignor.)

Earl, George O., New Orleans, La., assignor of one-third to C. A. Brown, Lorain, Ohio, and one-third to A. B. Wood, New Orleans, La. Hydraulic system and method. No. 1,311,861; July 29; v. 264; p. 840.

Earle, George H., Valparaiso, Ind. Automobile-heater. No. 1,308,486; July 1; v. 264; p. 87.

Earle, Horatio S., assignor to H. S. Earle Mfg. Co., Detroit, Mich. Grass-hook. No. 1,309,278; July 8; v. 264; p. 263.

Earp-Thomas, George H., Glen Ridge, N. J. Fertilizer and making same. No. 1,309,723; July 15; v. 264; p. 382.

Earp-Thomas, George H., Richmond, Va. Fertilizer composition and making same. (Reissue.) No. 14,080; July 15; v. 264; p. 507.

East, John F., Norfolk, Va. Basket. No. 1,310,828; July 15; v. 264; p. 492.

Eastman, Floyd K., Indianapolis, Ind. Radiator-cover. No. 1,308,056; July 1; v. 264; p. 8.

Eastman Kodak Company. (See Clarke, Hans T., assignor.)

Eastman Kodak Company. (See Fisher, Austin C., assignor.)

Eastman Kodak Company. (See Folmer, William F., assignor.)

Eastman Kodak Company. (See Frederick and Altman, assignors.)

Eastman Kodak Company. (See Jones, John G., assignor.)

Eastman Kodak Company. (See Parkinson, Welles, and Tierney, assignors.)

Eaton, Allen H. (See Gibson, Claude W., assignor.)

Eaton, Fred L., Rew, Pa. Permutation-padlock. No. 1,308,487; July 1; v. 264; p. 87.

Eaton, William D., Glen Echo, Md. Circuit-closer operator. No. 1,311,763; July 29; v. 264; p. 822.

Eberhard, George F., Trenton, N. J., assignor to Robt. H. Ingersoll & Bro. Dial and dial-holder for watches and the like. No. 1,310,523; July 22; v. 264; p. 659.

Eberhard, George F., W. T. Maloney, Trenton, N. J., and F. W. Bold, Thomaston, Conn., assignors to Robt. H. Ingersoll & Bro. Stem-winding and stem-setting mechanism for watches. No. 1,310,524; July 22; v. 264; p. 659.

Eberhardt, Louis A., New York, N. Y. Treating silicates containing potassium and aluminum. No. 1,310,413; July 22; v. 264; p. 540.

Eberle, Andrew, Dodge City, Kans. Portable transferring-derrick. No. 1,311,331; July 29; v. 264; p. 742.

Ebraut, Frederic, Brooklyn, N. Y. Hair-spring and balance mounting. No. 1,311,501; July 29; v. 264; p. 774.

Ecaubert, Frederic, New York, N. Y. Hair-spring adjustment. No. 1,311,502; July 29; v. 264; p. 774.

Eckelbarger, Zena, Goshen, Ind. Reproducer. No. 1,311,037; July 22; v. 264; p. 658.

Eddison, William R., et al. (See Richardson, Eddison, and Read.)

Edens, Henry N., assignor to John Lanson Manufacturing Company, New Holstein, Wis. Tread attachment for wheel-rims. No. 1,311,683; July 29; v. 264; p. 808.

Edmonds, Artemas R., Pawtucket, R. I. Knot-tying device. (Reissue.) No. 14,697; July 29; v. 264; p. 541.

Edridge, Walter H., Woolwich, London, England, and E. E. G. Rolfe, Havre, France. Worm-gearing adjustment applicable to variable condensers for wireless telegraphy and telephony. No. 1,310,329; July 15; v. 264; p. 492.

Educational Motion Picture Machine and Film Company. (See O'Hara, Joseph G. R., assignor.)

Edward G. Budd Manufacturing Company. (See Weaver, Clayton B., assignor.)

Edward Miller & Company. (See Taylor, Wilton A., assignor.)

Edwardes, Vance P., Madison, Wis., assignor to the United States of America. Manufacture of cellulose. No. 1,310,694; July 22; v. 264; p. 591.

Edwards, Frederick E., San Francisco, Calif. Circuit-closer. No. 1,309,881; July 15; v. 264; p. 411.

Edwards, James L., Birmingham, England. Fastening for detachable wheels. No. 1,308,488; July 1; v. 264; p. 87.

Edwards, James M., New York, N. Y. Gate mechanism. No. 1,311,332; July 29; v. 264; p. 742.

Edwards, Ralph H., Helper, Utah. Sanitary holder for trousers. No. 1,310,744; July 22; v. 264; p. 600.
 Edwards, William J., Florsanna, Tex. Antislipping device for tires. No. 1,308,957; July 1; v. 264; p. 9.
 Eggett, Charles E., and D. Young, New York, N. Y. Explosive engine. No. 1,309,279; July 8; v. 264; p. 263.
 Eggleston, Robert N., Muskogee, Okla., assignor to Pull-U-Out Manufacturing Company, St. Louis, Mo. Stake. No. 1,308,939; July 8; v. 264; p. 199.
 Eggleston, Robert N., assignor to Multipull Manufacturing Company, St. Louis, Mo. Ground-stake. No. 1,308,940; July 8; v. 264; p. 199.
 Ehrhart, Raymond A., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Means for withdrawing non-condensable vapors from condensers. (Reissue.) No. 1,4678; July 1; v. 264; p. 136.
 Eldred, Charles L., New York, N. Y. Fuse-plug. No. 1,310,182; July 15; v. 264; p. 466.
 Elmer, Charles, Irvington, assignor of one-third to G. Zisch and one-third to Newark Engineering and Refrigerating Company, Newark, N. J. Sheet-metal device. No. 1,309,616; July 15; v. 264; p. 363.
 Elmer, Martin A. (See Elmer, Theodor D., assignor.)
 Elmer, Theodor D., Woodhaven, N. Y., assignor to M. A. Elmer, Woodhaven, N. Y. Embroidery-frame. No. 1,310,392; July 15; v. 264; p. 504.
 Ekle, Alexander C., Mankato, Minn. Control for transmission-gears. No. 1,309,469; July 8; v. 264; p. 298.
 Elkind, Alexander, assignor to Bliss Bros. Co., Attleboro, Mass. Bracelet. No. 1,310,859; July 22; v. 264; p. 622.
 Eldred, Byron E., and G. Merseman, New York, N. Y., assignors to Chemical Development Company. Regulating catalytic. No. 1,308,777; July 15; v. 264; p. 169.
 Electric Boat Company. (See Anderson, John W., assignor.)
 Electric Boat Company. (See Grieshaber, Hugo E., assignor.)
 Electric Boat Company. (See Grieshaber and Simpson, assignors.)
 Electric Boat Company. (See Hibbs and Guon, assignor.)
 Electric Controller & Manufacturing Company, The. (See Canfield, Harry, H., assignor.)
 Electric Controller & Manufacturing Company. (See Wright, Reuben L., assignor.)
 Electric Horse Manufacturing and Amusement Co. (See Johnson, Charles L., assignor.)
 Electric Railway Improvement Company, The. (See Crechellus, Lawrence P., assignor.)
 Electric Railway Improvement Company, The. (See Kehlgen and Stephenson, assignors.)
 Electric Reduction Company. (See Wiercker and Morrison, assignors.)
 Electro Metallurgical Company. (See Becket, Frederick M., assignor.)
 Elekriska Jantrennings Aktiebolaget. (See Sandblom, Hildeon E., assignor.)
 Elektricitetswerk Louza. (See Lichtenhahn, Theodor, assignor.)
 Elevator Supplies Company. (See Graham, James M., assignor.)
 Eley, Charles V. A., Edgbaston, Birmingham, England. Collision-mat for use on ships. No. 1,309,022; July 8; v. 264; p. 216.
 Ella, Giovanni E., New York, N. Y. Apparatus for destroying submarine boats. No. 1,309,120; July 8; v. 264; p. 234.
 Ella, Giovanni E., Turin, Italy. Explosive-mine apparatus. No. 1,309,121; July 8; v. 264; p. 234.
 Ella, Giovanni E., Rome, Italy. Apparatus for detecting and indicating the presence of submarine boats. No. 1,310,563; July 22; v. 264; p. 566.
 Ellboj, John, Stockholm, Sweden. Casting grooves or impressions in rollers. No. 1,309,513; July 8; v. 264; p. 306.
 Eller, Fred M. (See Thorsen and Eller.)
 Elliott, Alexander D., Viola, Ill. Seam-welding machine. No. 1,310,610; July 22; v. 264; p. 576.
 Ellis, Carleton, Montclair, N. J. Oil-proof-paper container and making same. No. 1,311,395; July 29; v. 264; p. 791.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Sulfite-liquor product and producing same. No. 1,311,215; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Binding agent. No. 1,311,216; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Dried sulfite waste-liquor solid and making same. No. 1,311,217; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Drying sulfite waste liquor. No. 1,311,218; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Binding and adsorbing substance, tanning agent, and the like. No. 1,311,219; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Sulfite-waste-liquor product. No. 1,311,220; July 29; v. 264; p. 721.
 Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Briquet and manufacturing the same. No. 1,311,221; July 29; v. 264; p. 721.

Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Briquet and making same. No. 1,311,222; July 29; v. 264; p. 721.
 Ellis, Carleton, and A. A. Wells, Montclair, N. J. Gasoline-engine-cylinder cleaner. No. 1,310,955; July 22; v. 264; p. 644.
 Ellis, Carleton, Montclair, and A. A. Wells, Caldwell, N. J., assignors to Ellis-Foster Company. Nitration method. No. 1,309,320; July 8; v. 264; p. 270.
 Ellis-Foster Company. (See Ellis, Carleton, assignor.)
 Ellis-Foster Company. (See Ellis and Wells, assignors.)
 Ellis, Frank E., Revere, Mass. Unitary printer's blanket. No. 1,311,596; July 29; v. 264; p. 792.
 Ellsworth, Charles J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Making bullets, especially shrapnel. No. 1,309,938; July 15; v. 264; p. 422.
 Eluff, John, Kansas City, Mo. Ship construction. No. 1,310,181; July 15; v. 264; p. 460.
 Emerson Hurlingham Company. (See Clay, Harry C., assignor.)
 Empire Art Metal Co. (See Cornell, Andrew J., assignor.)
 Empire Cream Separator Company. (See Warnock, Robert, assignor.)
 Empla, Henri C., Paris, France. Apparatus for vaporizing hydrocarbons. No. 1,309,514; July 8; v. 264; p. 306.
 End, George E., Svensen, Ore. Vehicle. No. 1,308,232; July 1; v. 264; p. 41.
 Engelson, Albert K., Canby, Minn. Draft-equalizer. No. 1,311,058; July 22; v. 264; p. 658.
 England, George T. (See Templeton and England.)
 England, William A. (See Hauge and England.)
 Engleman, Christian, Vancouver, Wash. Mechanical billiard-player. No. 1,308,405; July 1; v. 264; p. 73.
 Engleman, Christian, Vancouver, Wash. Sanitary water-closet seat. No. 1,308,406; July 1; v. 264; p. 73.
 English, Frank, Fresno, Calif. Shaft oiler or lubricator. No. 1,310,611; July 22; v. 264; p. 576.
 Englot, Felix, Lemberg, Saskatchewan, Canada. Rail-joint. No. 1,309,350; July 8; v. 264; p. 277.
 Ennis, Charles E., assignor to Walla Progress Switch and Manufacturing Company, Kansas City, Mo. Swing-rail switch-frog. No. 1,309,023; July 8; v. 264; p. 216.
 Enright, John W., New Orleans, La. Stationary chemical-mixing fire-extinguisher system. No. 1,311,059; July 22; v. 264; p. 659.
 Ensign, Emory S., assignor to R. Ensign, East Orange, N. J. Window-lock. No. 1,311,597; July 29; v. 264; p. 792.
 Ensign, Rose. (See Ensign, Emory S., assignor.)
 Epperson, Edward H. (See Rice, Frank S., assignor.)
 Eppler, Andrew, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Welt grooving and bevelling machine. No. 1,309,507; July 8; v. 264; p. 317.
 Erickson, Edward, Beverly, Mass., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-turning machine. No. 1,310,008; July 15; v. 264; p. 435.
 Erickson, Albert, Oakland, Calif. Music-leaf turner. No. 1,308,348; July 1; v. 264; p. 62.
 Erkelens, Henry H. (See Young, William A., assignor.)
 Erlinger, George, assignor of one-half to A. O. Tronstel, Milwaukee, Wis. Firing apparatus. No. 1,308,233; July 1; v. 264; p. 42.
 Ermold, Edward, New York, N. Y. Bottle-labeling machine. No. 1,308,280; July 1; v. 264; p. 50.
 Ernsbarger, George H. (See Tolles and Ernsbarger.)
 Errington, George A., assignor of sixty per cent. to W. E. Waterman and twenty per cent. to M. E. Waterman, Buffalo, N. Y. Check-writing machine. No. 1,308,140; July 1; v. 264; p. 29.
 Eskell, Eero, Worcester, Mass. Fire-operated stock-releasing device. No. 1,310,612; July 22; v. 264; p. 576.
 Eskilson, Sven A., assignor to Aktiebolaget Salenings Verkstader, Stockholm, Sweden. Neck-bearing. No. 1,310,794; July 22; v. 264; p. 610.
 Espenchied, Lloyd, Holla, N. Y., assignor to American Telephone and Telegraph Company. Radiofrequency interference-balancer. No. 1,309,400; July 8; v. 264; p. 285.
 Esping, Conrad, Moline, Ill., assignor to Moline Plow Company. Root-pulling machine. No. 1,309,617; July 15; v. 264; p. 363.
 Esterline, Albert, et al. (See Cochran, William R., assignor.)
 Estes, William H., Sr., assignor of one-fourth to A. Lyons, Newark, N. J. Tire-protectors and anti-kid device. No. 1,309,515; July 8; v. 264; p. 306.
 Etablissements De Dion Bouton, Société Anonyme. (See Bouton, Georges, assignor.)
 Etablissements De Dion Bouton, Société Anonyme. (See Gallet, Henri, assignor.)
 Evans, Adele K., executrix. (See Evans, Henry R.)
 Evans Dollar Pen Company, The. (See Fitzpatrick, William T., assignor.)
 Evans, Edward L., Jewett, Tex. Auto-carrier. No. 1,309,470; July 8; v. 264; p. 298.
 Evans, Harry E., Buffalo, N. Y. Primary electric cell. No. 1,310,693; July 22; v. 264; p. 591.
 Evans, Henry R., deceased, New York, N. Y.; A. K. Evans, executrix. Motion-picture apparatus. No. 1,308,984; July 8; v. 264; p. 268.

Evans, Henry R., deceased, London, England; A. K. Evans, executrix. Method of and apparatus for feeding motion-picture films. No. 1,309,471; July 8; v. 264; p. 298.
 Everhart, Albert M., et al. (See Rombach, Fred, assignor.)
 Everitt, Willard C., Knoxville, Pa. Package-tilt. No. 1,311,764; July 29; v. 264; p. 823.
 Everlasting Valve Co. (See Hunter, Rudolph M., assignor.) (Reissue.)
 Evers, Arthur J., Chicago, Ill. Pasteboard box and manufacture. No. 1,308,658; July 1; v. 264; p. 9.
 Everstick Anchor Company. (See Widen, Elmer N., assignor.)
 Ewing, Floyd C., Jeromesville, Ohio. Pedal. No. 1,308,700; July 1; v. 264; p. 127.
 Ewoldt, Henry, Grand Island, Nebr. Cable-guide. No. 1,308,607; July 1; v. 264; p. 121.
 Excelsior Manufacturing Company, The. (See Aaron, Jacob M., assignor.)
 Excelsior Steel Furnace Company, The. (See Menk, Rudolph W., assignor.)
 Fairbanks, Ernest S., Greenfield, Mass. Friction-clutch. No. 1,309,472; July 8; v. 264; p. 298.
 Fairbanks, Morse & Co. (See Goff, Olidden, and Mahana, assignors.)
 Fairbills, George R., assignor to trustees Cowan Truck Company, Holyoke, Mass. Industrial truck. No. 1,311,333; July 29; v. 264; p. 743.
 Fairies, Robert, assignor to Walrus Manufacturing Company, Decatur, Ill. Jar and dipper for serving crushed fruit or the like. (Reissue.) No. 1,4681; July 8; v. 264; p. 324.
 Fairweather, Frederick H., Bridgeport, Conn. Air-gun. No. 1,309,321; July 8; v. 264; p. 271.
 Falconer, Robert A., and F. Mendizsa, Shooter Island, N. Y. Safety head-covering for the protection of workmen's skulls. No. 1,309,882; July 15; v. 264; p. 412.
 Fales, Orange B., Salem, Ohio. Steering-wheel for automobiles. No. 1,309,123; July 8; v. 264; p. 234.
 Falk, Albin H., Moline, Ill. Air-gun. No. 1,310,745; July 22; v. 264; p. 600.
 Falk, Kaufman G. and E. M. Frankel, assignors to W. O. Lyle, trustee, New York, N. Y. Preserving food. No. 1,309,357; July 8; v. 264; p. 277.
 Farnlow, Benjamin O., Rye, N. Y. Checkwriter. No. 1,308,941; July 8; v. 264; p. 199.
 Fargo, Arthur H., Poughkeepsie, N. Y. Plug and receptacle. No. 1,311,266; July 29; v. 264; p. 730.
 Farley, Bert T., Paris, Tex. Safety-crack. No. 1,308,701; July 1; v. 264; p. 127.
 Farnham, Carl O., Paris, Ill. Internal-combustion rotary engine. No. 1,308,596; July 8; v. 264; p. 191.
 Farnsworth, Frederick C., Conshohocken, Pa. Tilling trap. No. 1,308,897; July 8; v. 264; p. 191.
 Farnsworth, Willis S., assignor to Cold Controlled Lock Company, San Francisco, Calif. Lock-guard. No. 1,308,734; July 1; v. 264; p. 133.
 Farrell, George R., Detroit, Mich. Vehicle-wheel. No. 1,309,473; July 8; v. 264; p. 298.
 Farrell, Joseph E., Jr., Washington, D. C., assignor to International Munitions Company, Inc., of Delaware. Combination-grenade. No. 1,309,280; July 8; v. 264; p. 263.
 Farthing, David J., deceased; W. J. Pierce, administrator, assignor of one-third to J. E. Reece and one-third to A. C. Reece, Butler, Tenn. Corn-harvester. No. 1,309,568; July 8; v. 264; p. 317.
 Faith, Joseph S., Bloomfield, N. J. Spark-plug. No. 1,309,192; July 8; v. 264; p. 246.
 Fay, Thomas J., Brooklyn, N. Y., assignor, by means assignments, to The Standard Parts Company, Cleveland, Ohio. Lubricating compound. No. 1,309,618; July 15; v. 264; p. 363.
 Federal Telegraph Company. (See Fuller, Leonard F., assignor.)
 Fedyna, Feiko, New York, N. Y. Flying-machine. No. 1,308,175; July 1; v. 264; p. 31.
 Feldman, Edward D., Chester, N. Y. Penholder. No. 1,308,349; July 1; v. 264; p. 62.
 Fell, Paul, Knoxville, Tenn. Multicylinder engine. No. 1,311,060; July 22; v. 264; p. 659.
 Feilheimer, Alfred, New York, N. Y. Ticket-seller's booth. No. 1,308,702; July 1; v. 264; p. 127.
 Fenton, Walter, Manchester, England, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,309,322; July 8; v. 264; p. 271.
 Ferand, Frank H., Granite City, Ill. Phonograph-lamp. No. 1,310,564; July 22; v. 264; p. 567.
 Ferguson, Louis M., Toledo, Ohio. Can-opener. No. 1,311,334; July 29; v. 264; p. 743.
 Ferguson, Thomas, Lowell, assignor, by means assignments, to Draper Corporation, Hopedale, Mass. Feeler device for filling-replenishing looms. No. 1,308,234; July 1; v. 264; p. 42.
 Fern, Anthony P., Dunkirk, N. Y. Music-leaf turner. No. 1,311,765; July 29; v. 264; p. 823.
 Fernald, Benjamin G., New York, and J. L. Moore, assignors to The Keer Turbine Company, Wellsboro, N. Y. Turbine bleeder-valve. No. 1,308,407; July 1; v. 264; p. 73.
 Ferrier, James, Surat, Queensland, Australia. Propeller particularly for use on aeroplanes and other aircraft. No. 1,310,330; July 15; v. 264; p. 492.

Ferris, Walter, Milwaukee, Wis., and W. E. Magie, Evansville, Ind. Hydraulic transmission device. No. 1,308,844; July 8; v. 264; p. 181.
 Feussenden, Reginald A., Brookline, Mass., assignor to Submarine Signal Company, Portland, Me. Submarine signaling. No. 1,311,157; July 29; v. 264; p. 710.
 Fey, Frank E., Portland, Ore. Spring suspension. No. 1,311,091; July 22; v. 264; p. 659.
 Fieken, William E., Brooklyn, N. Y. Metallic edge-protector and the like. No. 1,310,331; July 15; v. 264; p. 493.
 Field, Allan B. (See Heap and Field.)
 Field, Thomas H., Archbold, Ohio. Stock centerer and chuck. No. 1,308,176; July 1; v. 264; p. 31.
 Filicky, August A., San Francisco, Calif. Automobile-starter. No. 1,310,009; July 15; v. 264; p. 435.
 Finance & Trading Corporation of New York. (See Malec, Herman C., assignor.)
 Finck, Leon S., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Concentrating acetic anhydride. No. 1,311,158; July 29; v. 264; p. 710.
 Finck, Maurice S. (See Young and Finck.)
 Findelsen & Kropf Manufacturing Company. (See Raymond, Charles L., assignor.)
 Fink, Charles B., East Syracuse, N. Y. Car-door lock. No. 1,311,598; July 29; v. 264; p. 792.
 Finlayson, Alexander W., Detroit, Mich. Radiator construction. No. 1,311,599; July 29; v. 264; p. 792.
 Finnegan, Eugene E., Chicago, Ill., assignor to Continental Can Company, Incorporated, Syracuse, N. Y. Cover-opener for receptacles. No. 1,308,627; July 1; v. 264; p. 113.
 Finnegan, John E., and P. J. McCarthy, Providence, R. I. Casket. No. 1,310,800; July 22; v. 264; p. 622.
 Flore, Letterio, New York, N. Y. Combination-garment. No. 1,311,600; July 29; v. 264; p. 793.
 Firestone, Herbert L., Akron, Ohio. Vehicle-wheel. No. 1,310,746; July 22; v. 264; p. 601.
 Firth, Edward T., Richmond, Ind. Drying-machine. No. 1,310,824; July 22; v. 264; p. 616.
 Fischer, Arthur L., assignor to Gluber Brass Manufacturing Company, Cleveland, Ohio. Combined check and compression valve. No. 1,311,115; July 22; v. 264; p. 669.
 Fischer, Hermann O., assignor to Package Machinery Company, Springfield, Mass. Labeling-machine. No. 1,311,643; July 29; v. 264; p. 800.
 Fischer, Louis G., Camp Hill, Pa. Rotary engine. No. 1,311,885; July 29; v. 264; p. 840.
 Fischer, William, assignor of one-half to L. Blumenstein, New Richmond, Ohio. Knitting-machine. No. 1,309,124; July 8; v. 264; p. 234.
 Fishback, Charles F., Los Angeles, Calif. Hinge. No. 1,309,883; July 15; v. 264; p. 412.
 Fisher, Austin C., assignor to Eastman Kodak Company, Rochester, N. Y. Folding camera. No. 1,308,985; July 8; v. 264; p. 208.
 Fisher, Bernard C., Jersey City Heights, N. J. Spring-wheel. No. 1,310,285; July 15; v. 264; p. 485.
 Fisher, Guy H., Houston, Tex. Tractor. No. 1,310,653; July 22; v. 264; p. 584.
 Fisher, John A., assignor to Imperial Player Roll Company, Chicago, Ill. Perforated sheet. No. 1,310,238; July 15; v. 264; p. 476.
 Fitch, Benjamin C., Detroit, Mich. Steering-wheel and making same. No. 1,311,681; July 29; v. 264; p. 808.
 Fitch, Benjamin F., Evanston, Ill., assignor to The Motor Terminals Company, Cleveland, Ohio. Means for transferring freight to and from electric lines. No. 1,310,980; July 22; v. 264; p. 645.
 Fitch, Maxwell H., Corona, Calif. Portable and knock-down storage-bin. No. 1,311,116; July 22; v. 264; p. 669.
 Fitzpatrick, William T., Waterloo, Iowa, assignor to The Evans Dollar Pen Company. Cap-clip for fountain-pens. No. 1,310,235; July 15; v. 264; p. 476.
 Flahive, John A., Los Angeles, Calif. Tile construction. No. 1,309,064; July 8; v. 264; p. 223.
 Flanders, Bert W., assignor to The New London Chemical Company, New London, Conn. Deodorizer. No. 1,308,845; July 8; v. 264; p. 181.
 Flanders, Bert W., assignor to The New London Chemical Company, New London, Conn. Deodorizer. No. 1,309,619; July 15; v. 264; p. 363.
 Fleischauer, William G. (See Lawrence and Fleischauer.)
 Fleming, Charles F., San Jose, Calif. Apparatus for boxing and net-weighting materials. No. 1,310,747; July 22; v. 264; p. 601.
 Fletcher, Harold W., Houston, Tex. Device for unscrewing and withdrawing pipe. No. 1,311,355; July 29; v. 264; p. 753.
 Flexume Sign Company. (See Wiley, Roy R., assignor.) (Reissue.)
 Flom, Andrew K., Monterideo, Minn. End-gate. No. 1,311,644; July 29; v. 264; p. 800.
 Flower, George C., Pittsburg, Pa. Die. No. 1,310,008; July 15; v. 264; p. 445.
 Fobian, George H. (See Manegold and Fobian.)
 Fogelson, Howard, Clarence, N. Y. Head-sorting machine. No. 1,309,401; July 8; v. 264; p. 285.
 Folberth, William M., Cleveland, Ohio. Apparatus for cleaning automobile wind-shields. No. 1,309,724; July 15; v. 264; p. 384.

Foley, Michael T. (See Cottrell, Gullielmo and G., assignors.)
 Folk, Joseph. (See Luschka and Folk.)
 Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Automatic aeroplane-camera. No. 1,309,738; July 15; v. 264; p. 396.
 Folsom, Clarence P., and L. E. Halteman, assignors to Dayton Water and Hoist Co., Dayton, Ohio. Fastening means for heater roll bars. No. 1,309,402; July 8; v. 264; p. 285.
 Foltz, William E., Detroit, assignor to Cadillac Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,308,489; July 1; v. 264; p. 88.
 Fontaine, Calyx, Boston, Mass. Corn and bunion scorer. No. 1,310,183; July 15; v. 264; p. 466.
 Forbes, Charles W., Pasadena, Calif. Fireplace-furnace. No. 1,309,024; July 8; v. 264; p. 216.
 Forbes, Ewing M., Chappaqua, N. Y., assignor to W. W. Mountain, Flint, Mich. Tool and tool-holder. No. 1,309,281; July 8; v. 264; p. 265.
 Ford, Charles F., Chicago, Ill. Automatic cooker. No. 1,310,195; July 22; v. 264; p. 554.
 Ford, Everett G., Glendale, assignor of one-third to G. W. Neill, Torrance, Calif., and one-third to A. H. Bartlett. Internal combustion engine. No. 1,311,504; July 29; v. 264; p. 775.
 Ford, John F., Los Angeles, Calif. Article-holder. No. 1,309,125; July 8; v. 264; p. 235.
 Forland, Torodd R., Haugesund, Norway. Separation of molybdenum ores. No. 1,308,725; July 1; v. 264; p. 134.
 Forster, John W. L., et al. (See McCollum, James H. K., assignor.)
 Fort, Tandy L., Dallas, Tex., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,309,403; July 8; v. 264; p. 285.
 Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Distributing system. No. 1,308,059; July 1; v. 264; p. 10.
 Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Lighting arrester. No. 1,311,503; July 29; v. 264; p. 775.
 Fortuna-Werke Spezialmaschinenfabrik, G. m. b. H. (See Klager, Hermann, assignor.)
 Foss, Benjamin Q. P., assignor to The Foss International Ore Reduction Company, Chicago, Ill. Ore-reducing process. No. 1,311,645; July 29; v. 264; p. 806.
 Foss International Ore Reduction Company, The. (See Foss, Benjamin Q. P., assignor.)
 Foster, George W., Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Winding-machine. No. 1,309,404; July 8; v. 264; p. 286.
 Foster Machine Company. (See Kiffin, Oskar, assignor.)
 Fotheringham, Robert M., Buffalo, N. Y. Excavating-bucket. No. 1,309,540; July 15; v. 264; p. 405.
 Foulke, John T., Richmond, Ind. Device for inserting fence-anchors. No. 1,311,335; July 29; v. 264; p. 743.
 Foundry Appliance Company, The. (See Frautz, Jerome A., assignor.)
 Fowler, Alfred B., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Punching-machine. No. 1,308,780; July 8; v. 264; p. 170.
 Fowler, Benjamin F., Minneapolis, Minn. Cream-whip. No. 1,310,501; July 22; v. 264; p. 622.
 Fowler, Jonathan O., New York, N. Y. Convertible table, bed, and settle. No. 1,308,523; July 1; v. 264; p. 94.
 Fowler, Le Roy J., (See Skinner and Fowler.)
 Fox, Lawrence J., New York, N. Y. Cloth-drilling machine. No. 1,308,898; July 8; v. 264; p. 194.
 Foxboro Company. (See Bristol, Edgar H., assignor.)
 Frame, William J., London, England. Multistage centrifugal fan and pump. No. 1,309,282; July 8; v. 264; p. 263.
 Franc, Joseph M. E., St. Vallier, France. Tire-pump for automobiles. No. 1,310,332; July 15; v. 264; p. 493.
 Frank C. Mathers & Jacob Pappas. (See Mathers and Pappas, assignors.)
 Frank, Max, New York, and H. Froehlich, Brooklyn, N. Y. Hollow-actuating device. No. 1,309,884; July 15; v. 264; p. 412.
 Franke, Albert J., et al. (See Jacobs, Alexander L., assignor.)
 Franke, Louis N., et al. (See Jacobs, Alexander L., assignor.)
 Frankel, Edward M. (See Falk and Frankel.)
 Franklin Valveless Engine Co., The. (See Wood, Samuel, assignor.)
 Frautz, Jerome N., assignor to The Foundry Appliance Company, Newark, N. J. Molding-machine. No. 1,309,126; July 8; v. 264; p. 235.
 Franzén, Ernest T., Jamaica, N. Y. Automatic rail-lubricator. No. 1,311,505; July 29; v. 264; p. 775.
 Fraseh, Hans A., New York, N. Y. Dyestuff. No. 1,308,060; July 1; v. 264; p. 10.
 Frasier, Lee, Frederick, Okla. Stovepipe-cleaner. No. 1,310,525; July 22; v. 264; p. 599.
 Frazier, Julius O., New Orleans, La. By-passed-gas cane-juice heater. No. 1,311,336; July 29; v. 264; p. 743.
 Fred Medart Manufacturing Company. (See Albach, Frank, assignor.)
 Fred Medart Manufacturing Company. (See Medart, Philip S., assignor.)

Frederick, Charles W., and F. E. Altman, assignors to Eastman Kodak Company, Rochester, N. Y. Photographic objective. No. 1,309,847; July 15; v. 264; p. 405.
 Fredericksen, John C., Miller, assignor of one-third to A. T. Thompson, Hammond, Ind. Air-compressor. No. 1,310,411; July 22; v. 264; p. 550.
 Fredson, Samuel C., Kenosha, Wis. Toy. No. 1,311,337; July 29; v. 264; p. 743.
 Fredson, Samuel C., Ravenna, Ga. Scraper. No. 1,311,338; July 29; v. 264; p. 743.
 Freeborn, Cornelius C., Sr., New Milford, N. J. Transparent closure for cans. No. 1,308,703; July 1; v. 264; p. 127.
 Freed, Liebh B., Williamstown, Ohio. Power-attachment. No. 1,311,339; July 29; v. 264; p. 744.
 Frew, Daniel B., Detroit, Mich. Protector for pneumatic tires. No. 1,311,340; July 29; v. 264; p. 744.
 Freeman-Daugbady Company. (See Le Clair, Frank J., assignor.)
 Freeman Manufacturing Company. (See Dearsley, John W., assignor.)
 Freer, Phelps M., Detroit, Mich. Packing-ring. No. 1,311,159; July 29; v. 264; p. 710.
 Frees, Hans P., Brayton, Neb. Work-stand for automobile-engines. No. 1,311,685; July 29; v. 264; p. 808.
 French, Alfred W., Piqua, Ohio. Apparatus for drying stone or other material. No. 1,308,942; July 8; v. 264; p. 199.
 French, Alfred W., Piqua, Ohio. Apparatus for separating solid matter from liquids. No. 1,308,943; July 8; v. 264; p. 200.
 French, Alfred W., Piqua, Ohio. Cage and drainage-plate for oil-expressing presses. No. 1,311,160; July 29; v. 264; p. 710.
 French, Fred W., Grandville, Mich. Wheel. No. 1,310,069; July 15; v. 264; p. 445.
 French Oil Mill Machinery Co., The. (See Schwable, Frederick J., assignor.)
 Freund, Max, New York, N. Y. Bill-fold. No. 1,310,010; July 15; v. 264; p. 435.
 Friday, Aaron O. (See Gibson and Friday.)
 Friebe, George M., Lebrun, Saskatchewan, Canada. Belt guide and shifter. No. 1,309,474; July 8; v. 264; p. 208.
 Fried, Krupp Aktiengesellschaft Germanlawerft. (See Ritter, Paul A., assignor.)
 Friedman, Jack, New York, N. Y. Protecting fabric. No. 1,309,620; July 15; v. 264; p. 363.
 Fries, Jona A., State College, Pa. Automatic gas-analysis apparatus. No. 1,309,681; July 15; v. 264; p. 375.
 Friak, Herbert J., assignor to Holyoke Machine Company, Holyoke, Mass. Wood-pulp grinder. No. 1,311,117; July 22; v. 264; p. 669.
 Fritzsche, Joseph, Puente, Calif. Bean-vine cutter. No. 1,309,885; July 15; v. 264; p. 412.
 Froehlich, Hugo. (See Frank and Froehlich.)
 Froess, Jacob J., Erie, Pa. Music-desk for pianos. No. 1,310,472; July 22; v. 264; p. 559.
 Fromm, Nathan, New York, and A. J. Thwaites, Hunting ton, N. Y. Attachment for hat-stamping machines. No. 1,311,062; July 22; v. 264; p. 639.
 Fryant, Harris T., Memphis, Tenn., and W. R. Crout, Hazlehurst, Miss. Cooker for seed-meats. No. 1,309,595; July 8; v. 264; p. 320.
 Fuchs, Maximilian J., Stamford, Conn. Machine for making bronze-powder. No. 1,310,520; July 22; v. 264; p. 560.
 Fuhr, Albert B., Maromb, Ill. Window-ventilator. No. 1,309,886; July 15; v. 264; p. 412.
 Fulkerson, Walter P. (See McCargar, Lorren B., assignor.)
 Fullenwider, George R., Fairfield, Mont. Angular-socket wrench. No. 1,310,473; July 22; v. 264; p. 550.
 Fuller, Leonard F., assignor to Federal Telegraph Company, San Francisco, Calif. Radiotelegraphy. No. 1,309,283; July 8; v. 264; p. 263.
 Fuller, Nelson T., New Bedford, Mass. Brick-cleaning machine. No. 1,309,405; July 8; v. 264; p. 286.
 Fulton Company, The. (See Giesler, Jean V., assignor.)
 Fulton, Le Roy M., Des Plaines, Ill. Electric-wiring terminal. No. 1,309,887; July 15; v. 264; p. 413.
 Fulweller, Walter H., Wallingford, Pa., assignor to United Gas Improvement Company, Philadelphia, Pa. Recovering by-products of illuminating-gas. No. 1,310,748; July 22; v. 264; p. 601.
 Funk, Charles J. (See Amet, Edward H., assignor.)
 Funk, Frank M., Detroit, Mich. Stud-driver. No. 1,308,490; July 1; v. 264; p. 83.
 Further, Frederick M., Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Blacking-machine. No. 1,311,161; July 29; v. 264; p. 711.
 G. H. Leather Limited. (See Louthorne, Fred, assignor.)
 G. W. Murphy Company. (See Bourque, David, assignor.)
 Gabb, George H. (See Dyer, Richard F., assignor.)
 Gabel, Albert, Mountaine, Iowa. Lightbulb-arrester. No. 1,311,063; July 22; v. 264; p. 650.
 Gabel, Charles, assignor to A. M. Castle & Co., Chicago, Ill. Structural-shape shear. No. 1,309,848; July 15; v. 264; p. 405.
 Gagnon, Peter J., Jr., South Lowell, assignor of one-half to R. A. Wilson, Lowell, Mass. Bag-turning machine. No. 1,308,944; July 8; v. 264; p. 200.

Gall, John F., assignor to Simmons Company, Kenosha, Wis. Tube-sawing apparatus. No. 1,308,945; July 8; v. 264; p. 200.
 Gaiser, Charles F., Chicago, Ill. Oil-treating apparatus. No. 1,311,268; July 29; v. 264; p. 730.
 Gajan, Joseph, New York, N. Y. Non-skid attachment for wheels. No. 1,308,705; July 1; v. 264; p. 128.
 Gallet, Henri, assignor to Etablissements De Dion Bouton, Société Anonyme, Puteaux, France. Locking device for detachable wheels. No. 1,311,341; July 29; v. 264; p. 744.
 Gamble, Dorothy, New York, N. Y. Cleaning implement. No. 1,308,491; July 1; v. 264; p. 88.
 Gamewell Fire Alarm Telegraph Company, The. (See Doughty, Herman W., assignor.)
 Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Mold-opener. No. 1,309,128; July 8; v. 264; p. 235.
 Gammeter, John R., Akron, Ohio, assignor, by mesne assignments, to The B. F. Goodrich Company. Machine for making tires. No. 1,310,236; July 15; v. 264; p. 478.
 Gamper, G. Herman. (See Kingsbury, Elmer J., assignor.)
 Ganoe Manufacturing Company. (See Ganoe, Thomas A., assignor.)
 Ganoe, Thomas A., Warren, Pa., assignor to Ganoe Manufacturing Company. Centrifugal gun. No. 1,309,129; July 8; v. 264; p. 235.
 Ganser, John M., Poughkeepsie, N. Y. Respiratory apparatus. No. 1,310,825; July 22; v. 264; p. 614.
 Garanti, Joseph, Newark, N. J., assignor of one-half to S. Stelzer, New York, N. Y. Display device. No. 1,311,601; July 29; v. 264; p. 793.
 Gard, Samuel E., Amalia, Ohio. Safety-razor. No. 1,310,333; July 15; v. 264; p. 493.
 Gardner, Benjamin F., assignor of one-half to S. Stedman, Chicago, Ill. Rheostat. No. 1,310,699; July 22; v. 264; p. 591.
 Gardner, Charles F. (See Cartwright, Ernest O., assignor.)
 Gardner, Florida, Salt Lake City, Utah. Combination clothes-hanger and ironing-board. No. 1,311,760; July 29; v. 264; p. 823.
 Gardner, John, Fleetwood, England. Submarine sound-signal. No. 1,310,011; July 15; v. 264; p. 435.
 Gardner, John P., San Francisco, Calif. Metallic railway-tie and fastener. No. 1,311,389; July 29; v. 264; p. 753.
 Gardner, Virgil H., Glendale, Ky. End-gate for vehicle-bodies. No. 1,310,334; July 15; v. 264; p. 493.
 Garford Manufacturing Company, The. (See Manson, Ray H., assignor.)
 Garred-Cavera Corporation. (See Garred, Ulysses A., assignor.)
 Garred, Ulysses A., assignor to Garred-Cavera Corporation, New York, N. Y. Combustion process and apparatus for practicing the same. No. 1,311,807; July 29; v. 264; p. 831.
 Garrettson, John D. (See Lebling, William E., assignor.)
 Garrison, Jacob T., Oakland, Calif. Rodent-exterminator. No. 1,309,193; July 8; v. 264; p. 246.
 Garwick, Floyd, Chicago, Ill. Vacuum feed mechanism. No. 1,310,393; July 15; v. 264; p. 504.
 Gas and Oil Combustion Company. (See Lucke, Charles E., assignor.)
 Gasoline Turbine Motor Company. (See Morgan, Charles W., assignor.)
 Gaat, Adolph W., assignor to Chicago Miniature Lamp Works, Chicago, Ill. Process and apparatus for making glass-plate letters. No. 1,308,408; July 1; v. 264; p. 73.
 Gaston, Robert P., Baltimore, Md. Card-rack. No. 1,309,194; July 8; v. 264; p. 247.
 Gates, James C. (See Shilow, Albert E., assignor.)
 Gates, Louis W., and J. T. Allmand, assignors to Torsstedt Manufacturing Company, Detroit, Mich. Window-steadying device. No. 1,311,162; July 29; v. 264; p. 711.
 Gates, Quincy A. (See Bunnell and Gates.)
 Gay, Verner M., Danbury, Conn. Foldable table. No. 1,308,360; July 1; v. 264; p. 62.
 Gee, Norman E., Altona, Pa. Double-acting fuel crushing and feeding device. No. 1,308,000; July 8; v. 264; p. 192.
 Geeraerd, Evariste, Prestwich, assignor to G. J. Stanfield, Manchester, England. Electrolytic cell for production of oxygen and hydrogen. No. 1,308,704; July 1; v. 264; p. 127.
 Geiger, Wesley H., Wormleysburg, Pa. Electric signal. No. 1,310,414; July 22; v. 264; p. 540.
 Geiger, Wesley H., Wormleysburg, Pa. Three-position annunciator. No. 1,311,118; July 22; v. 264; p. 660.
 Gelsenhofer, Henry, Schenectady, N. Y., assignor to General Electric Company. Electric welding. No. 1,310,070; July 15; v. 264; p. 446.
 Gelst, Harry F., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis. Ignition mechanism for internal-combustion engines. No. 1,308,235; July 1; v. 264; p. 42.
 Gelertsen, Otto E., Westfield, N. J., assignor to Greenfield Paper Bottle Company, New York, N. Y. Purifying waterproofing compositions. No. 1,310,158; July 15; v. 264; p. 462.

Gelhaar, Harry J., Lincoln, Neb., assignor of one-half to L. J. Selbert, Kansas City, Mo. Anti-explosive attachment for dry-cleaning tumblers. No. 1,310,154; July 15; v. 264; p. 466.
 Gelinas, Raphael H., South Hadley Falls, assignor to Draper Corporation, Hopedale, Mass. Harness-stop-motion for looms. No. 1,311,767; July 29; v. 264; p. 823.
 Gelling, John W., Mexico, Mexico. Wheel-vehicle. No. 1,308,409; July 1; v. 264; p. 73.
 General Chain Company. (See Spieffell, Eugen, assignor.)
 General Electric Company. (See Hatchelder, Asa F., assignor.)
 General Electric Company. (See Briggs, Robert M., assignor.)
 General Electric Company. (See Brown, Lewis R., assignor.)
 General Electric Company. (See Carichoff, Eugene R., assignor.)
 General Electric Company. (See Collins, Edgar F., assignor.)
 General Electric Company. (See Coolidge, William D., assignor.)
 General Electric Company. (See Cummings, Joseph R., assignor.)
 General Electric Company. (See Devers, Philip K., Jr., assignor.)
 General Electric Company. (See Gelsehouer, Henry, assignor.)
 General Electric Company. (See Juggren, Oscar, assignor.)
 General Electric Company. (See Merrill, Wilbur L., assignor.)
 General Electric Company. (See Noble, Paul O., assignor.)
 General Electric Company. (See Sargent, Howard R., assignor.)
 General Electric Company. (See Schater, Ivanhoe H., assignor.)
 General Electric Company. (See Tremor, Edward D., assignor.)
 General Electric Company. (See Trittle, John F., assignor.)
 General Electric Company. (See White, William C., assignor.)
 General Electric Company. (See Williams, William S., assignor.)
 General Electric Company. (See Wilson, Harry A., assignor.)
 General Machine and Manufacturing Company, The. (See Hjorth, David, assignor.)
 General Petroleum Corporation. (See Lennie, Eugene H., assignor.)
 General Railway Signal Company. (See Howe, Winthrop K., assignor.)
 General Railway Signal Company. (See Taylor, Herbert H., assignor.)
 Genesee Pure Food Company, The. (See Nico, Andrew S., assignor.)
 Gentry, Everett L., Idabel, Okla. Armor for shingles. No. 1,309,645; July 8; v. 264; p. 224.
 Geo. J. Meyer Manufacturing Co. (See Meyer, George J., assignor.)
 George, Edward A., San Francisco, Calif. Superheater. No. 1,309,025; July 8; v. 264; p. 216.
 George, Edgar C., Norwood, Ohio, assignor to Alhathalmers Manufacturing Company, Milwaukee, Wis. Flanged article. No. 1,309,799; July 15; v. 264; p. 396.
 Gerardts, William, New York, N. Y. Sheet-lathing. No. 1,311,441; July 29; v. 264; p. 768.
 Gerard, Joseph H., Parsons, Kans. Locomotive draft-regulator. No. 1,309,516; July 8; v. 264; p. 366.
 Gerhard, Herman F., University, Mo. Covered pulley. No. 1,309,284; July 8; v. 264; p. 264.
 Gerhart, Horace L., Doylestown, Pa. Package-tie. No. 1,311,064; July 22; v. 264; p. 690.
 Gerlach, George W., Cumberland, Iowa. Track-obstacle and controlling mechanism therefor. No. 1,311,065; July 22; v. 264; p. 690.
 Gerson, Nikolaus. (See Ledig and Gerson.)
 Gerstenmaier, Carl and W. St. Paul, Minn. Back-rest. No. 1,309,725; July 15; v. 264; p. 383.
 Gerstenmaier, Walter. (See Gerstenmaier, Carl and W.)
 Gerry, John, Paterson, N. J. Burial-overbox. No. 1,310,957; July 22; v. 264; p. 645.
 Gherardl, Bancroft, assignor to American Telephone and Telegraph Company, Bayhead, N. J. Method and means for avoiding interference. No. 1,311,808; July 29; v. 264; p. 831.
 Giacoleto, Savino, Hancock, Mich. Pedal-operating device. No. 1,311,223; July 29; v. 264; p. 722.
 Gibbs, Edward F. G., Washington, D. C. Tool-post-boring-bar holder. No. 1,308,281; July 1; v. 264; p. 50.
 Gibbs, Edward F. G., Washington, D. C. Reversible boring-bar holder. No. 1,308,282; July 1; v. 264; p. 50.
 Gibbs, John H. (See Bentley and Gibbs.)
 Gifford, Edward B., Adrian, Mich. Razor. No. 1,309,726; July 15; v. 264; p. 383.
 Gibson, Claude W., assignor of one-fourth to A. H. Eaton, Boise, Idaho. Stabilizing mechanism. No. 1,309,888; July 15; v. 264; p. 413.
 Gibson, Tillman N., Webster county, and A. O. Friday, Abbe, Miss. Wheel-tightening device. No. 1,309,939; July 15; v. 264; p. 423.

Giddens, Kere W., Salem, Oreg. Clasp. No. 1,309,323; July 8; v. 264; p. 271.
 Giddens, Perry G., assignor to Curtis M. Bass, Columbus, Ga. Driving-rein support. No. 1,309,195; July 8; v. 264; p. 247.
 Giddings, George H., Ilion, N. Y. Ejecting device for double-barrel guns. No. 1,309,026; July 8; v. 264; p. 217.
 Giesler, Jean V., assignor to The Fulton Company, Knoxville, Tenn. Cooling system for internal-combustion engines. No. 1,311,899; July 29; v. 264; p. 831.
 Gifford, Bert L. and E. B., assignors to Gifford Manufacturing Company, Incorporated, Barker, N. Y. Fruit-grader. No. 1,310,394; July 15; v. 264; p. 504.
 Gifford, Edgar B. (See Gifford, Bert L. and E. B.)
 Gifford Manufacturing Company. (See Gifford, Bert L. and E. B., assignors.)
 Gifford, Thomas L. (See Stockatill, Herman A., assignor.)
 Gibson, Edward J., et al., trustees. (See Gray, Winfield H., assignor.)
 Gildardi, Felice, Turin, Italy. Belt. No. 1,309,066; July 8; v. 264; p. 224.
 Gilbert, Alfred C., assignor to The A. C. Gilbert Company, New Haven, Conn. Toy gun. No. 1,310,613; July 22; v. 264; p. 550.
 Gilbert, Fred E., Draper, S. D. Staple. No. 1,310,908; July 22; v. 264; p. 630.
 Gilbough, Benjamin G., Los Angeles, Calif. Tire-pressure indicator. No. 1,309,517; July 8; v. 264; p. 307.
 Gilchrist, John F., Chicago, Ill. Dining-table connector. No. 1,309,400; July 8; v. 264; p. 280.
 Gilchrist, Peter S. (See Hechenbleikner and Gilchrist.)
 Gilchrist, Robert. (See Haslup, Edward W., assignor.)
 Gilchrist, Robert. (See Peacock, Benjamin A., assignor.)
 Gilderleeve, Donald M., et al. (See Lomberson, George E., assignor.)
 Gillilan, Frederic C., Ebenerer, N. Y. Automatic pressure-regulator. No. 1,311,442; July 29; v. 264; p. 763.
 Gilkey, Sallie S., Marlon, N. C. Rake attachment. No. 1,308,706; July 1; v. 264; p. 128.
 Gilliam, Manly M., Flushing, N. Y. Device for burning vaporous or gaseous fuel. No. 1,311,443; July 29; v. 264; p. 763.
 Gillett, Charles, Toronto, Ontario, Canada. Fuse control for multiphase-circuits. No. 1,309,027; July 8; v. 264; p. 217.
 Gilmore, Edward J., New York, N. Y. Game apparatus. No. 1,311,810; July 29; v. 264; p. 831.
 Gilmore, George D. (See Griffith, Ernest, assignor.)
 Gilmore, George E., Cleveland, and H. M. Hanes, Wellington, assignors to The Security Tire & Rubber Company, Cleveland, Ohio. Resilient wheel-tire. No. 1,311,163; July 29; v. 264; p. 711.
 Gilmore, Hiram N., Miles City, Mont. Section-draft snow-fence. No. 1,309,889; July 15; v. 264; p. 413.
 Gilson, John E., assignor to Gilson Manufacturing Company, Port Washington, Wis. Gas-engine-controlling mechanism. No. 1,308,061; July 1; v. 264; p. 10.
 Gilson Manufacturing Company. (See Gilson, John E., assignor.)
 Gilson, Robert M. (See Coe and Gilson.)
 Gilson Co., (Leicester), Limited. (See Spencer and Kelly, assignors.)
 Gintler, John H., Taylorville, Ill. Smoke-consumer. No. 1,311,224; July 29; v. 264; p. 722.
 Gloranna, George, New York, N. Y. Illuminated ornamental effect. No. 1,308,584; July 1; v. 264; p. 105.
 Grl, Christian, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Spring-testing machine. No. 1,308,410; July 1; v. 264; p. 74.
 Glaser, Charles J., assignor to M. Wolfert, New York, N. Y. Tanning apparatus. No. 1,310,749; July 22; v. 264; p. 601.
 Glass, James V., Walkerville, Ontario, Canada. Ventilator. No. 1,308,236; July 1; v. 264; p. 42.
 Glass, Percy H., Brookline, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Edge-tucking machine. No. 1,311,164; July 29; v. 264; p. 711.
 Glazner, Isaac W., Brooklyn, N. Y. Antiskid device for vehicle-wheels. No. 1,311,554; July 29; v. 264; p. 784.
 Gleason Works. (See McCracken, Isaac E., assignor.)
 Gleiche, Carl, assignor to Stock Motorpump Gesellschaft mit beschränkter Haftung, Berlin, Germany. Traction-wheel. No. 1,308,002; July 1; v. 264; p. 10.
 Glenn, Thomas F., Ardmore, Pa., assignor to The S. S. White Dental Manufacturing Company. Producing artificial teeth. No. 1,309,127; July 8; v. 264; p. 235.
 Glenn, Walter T., assignor of one-half to C. H. Murphy, Pine Bluff, Ark. Mounting for slasher-saws. No. 1,311,347; July 29; v. 264; p. 753.
 Glick, Earl B. (See Goff, Giddens, and Mahana.)
 Glickner, Raymond A., Berlin-Schöneberg, Germany. Production of disk records. No. 1,311,342; July 29; v. 264; p. 744.
 Gluber Brass Manufacturing Company. (See Fischer, Arthur I., assignor.)
 Glick, Paul, assignor to Railway Electric Manufacturing Co., Milwaukee, Wis. Call-box. No. 1,309,569; July 8; v. 264; p. 317.
 Goldard, Archibald N., Detroit, Mich. Milling-cutter. No. 1,311,686; July 29; v. 264; p. 808.

Goddard, Walter T., Hamilton, Ontario, Canada. Insulator. No. 1,311,007; July 22; v. 264; p. 660.
 Godfrey, Harold H., Los Angeles, Calif. Apparatus for distilling shale and the like. No. 1,309,890; July 15; v. 264; p. 413.
 Goetter, Herman H., and J. Trupke, Milwaukee, Wis. Jack. No. 1,300,755; July 15; v. 264; p. 380.
 Goff, Leo D., E. D. Giddens, and C. G. Mahana, Three Rivers, Mich., assignors, by mesne assignments, to Fairbanks, Morse & Co., Chicago, Ill. Internal-combustion engine. No. 1,308,237; July 1; v. 264; p. 42.
 Golng, George G., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,308,411; July 1; v. 264; p. 74.
 Golar, George A., Dorchester, Mass. Garment-supporter. No. 1,309,983; July 15; v. 264; p. 431.
 Goldberg, Elias T., Bridgeport, Conn. Artificial tooth. No. 1,310,237; July 15; v. 264; p. 476.
 Goldfarb, Nathan J. (See Mendelson and Goldfarb.)
 Goldman, Isaac, New York, N. Y. Doll and applying hair to dolls' heads. No. 1,311,066; July 22; v. 264; p. 660.
 Goldman, Max M., Somerville, and M. J. Connelly, Boston, Mass. Cable-thimble. No. 1,311,555; July 29; v. 264; p. 784.
 Goldman, Samuel, Chicago, Ill. Heel. No. 1,310,614; July 22; v. 264; p. 577.
 Goldsmith, John D., Indianapolis, Ind. Emergency-wheel for automobiles. No. 1,311,119; July 22; v. 264; p. 670.
 Gollan, Warlaw, Cosmopolis, Wash. Front-axle drive for dirigible vehicles. No. 1,311,343; July 29; v. 264; p. 744.
 Gooderham, George H., et al. (See McCullum, James H. K., assignor.)
 Goodhue, Julian G., assignor to The Universal Utilities Company of Illinois, Chicago, Ill. Disinfecting system. No. 1,309,028; July 8; v. 264; p. 217.
 Goodhue, Julian G., assignor to The Universal Utilities Company of Illinois, Chicago, Ill. Disinfecting apparatus. No. 1,309,029; July 8; v. 264; p. 217.
 Goodman Manufacturing Company. (See Davis, Charles E., assignor.)
 Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic telephone system. No. 1,309,248; July 8; v. 264; p. 257.
 Goodyear Tire & Rubber Company, The. (See Kilborn, Karl B., assignor.)
 Goodyear Tire & Rubber Company, The. (See Selberling, Frank A., assignor.)
 Goodyear's Metallic Rubber Shoe Company, The. (See Price, Raymond B., assignor.)
 Gordon, John C., Birmingham, England. Socket or device for receiving or bearing screws such as are employed for fastening purposes. No. 1,311,046; July 29; v. 264; p. 801.
 Gore, Herbert C., Takoma Park, Md. Producing a syrup and a feed. No. 1,310,012; July 15; v. 264; p. 436.
 Gorman, James C., Jr., assignor to Barnes Manufacturing Company, Mansfield, Ohio. Double-cylinder pump. No. 1,308,238; July 1; v. 264; p. 43.
 Gorselany, Thomas, Detroit, Mich. Grater and slicer. No. 1,308,648; July 1; v. 264; p. 121.
 Gosson, Benjamin F., Brookline, Mass. Merchandise-package and making the same. No. 1,310,185; July 15; v. 264; p. 406.
 Gough, Achilles C., Pocatello, Idaho. Separator. No. 1,311,811; July 29; v. 264; p. 832.
 Gourju, Alexandre, Villeurbanne, assignor to La Societe A Lecompte et Cie., Lyon, France. Electric switch. No. 1,310,474; July 22; v. 264; p. 550.
 Graham, George H., Jersey City, N. J. Printing mechanism. No. 1,308,628; July 1; v. 264; p. 114.
 Graham, James M., Maplewood, N. J., assignor to Elevator Supplies Company, Inc. Elevator-door closer. No. 1,309,130; July 8; v. 264; p. 236.
 Granberry, Edgar H., Jacksonville, Ark. Excavating-machine. No. 1,308,351; July 1; v. 264; p. 63.
 Grandmason, Joseph, Brunswick, Me., assignor to Hope-dale Manufacturing Company, Milford, Mass. Automatic loom. No. 1,309,570; July 15; v. 264; p. 317.
 Grant, Frederick C., Chicago, Ill. Attachment for automobile-pedals. No. 1,310,186; July 15; v. 264; p. 467.
 Grant, Jesse R., Kokomo, Ind. Ex-candler. No. 1,310,750; July 22; v. 264; p. 602.
 Grant, Reuben P., Manchester, N. H., assignor to W. H. McElwain Company. Counter-acting machine. No. 1,309,407; July 8; v. 264; p. 286.
 Graphoscope Company, The. (See Jenkins, Charles F., assignor.)
 Gratsch, Marvin A., Cincinnati, Ohio. Machine for applying atrap-ferrules. No. 1,311,556; July 29; v. 264; p. 785.
 Graul, Walter L., Detroit, Mich., assignor to Semet-Solway Company, Solway, N. Y. Regulating the quality of coke. No. 1,308,754; July 8; v. 264; p. 165.
 Gravell, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Electric welding apparatus. No. 1,308,778; July 8; v. 264; p. 169.
 Gravell, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Welding thin plates. No. 1,308,781; July 8; v. 264; p. 170.

Gravell, James H., Brooklyn, N. Y., assignor to Thomson Electric Welding Company, Lynn, Mass. Transformer-secondary. No. 1,308,782; July 8; v. 264; p. 170.
 Graves, John S., Kansas City, Mo. Automatic stereopticon-machine. No. 1,309,358; July 8; v. 264; p. 217.
 Graves, McDowell, assignor, by mesne assignments, to R. A. Ballugge, Los Angeles, Calif. Veuding-machine. No. 1,310,955; July 22; v. 264; p. 645.
 Graves, McDowell, assignor, by mesne assignments, to R. A. Ballugge, Los Angeles, Calif. Coin-controlled mechanism for vending-machines. No. 1,310,959; July 22; v. 264; p. 645.
 Gravity Pump and Power Co. (See Dayton, William L., assignor.)
 Gray, James A., assignor to American Can Company, San Francisco, Calif. Can-end-sorting apparatus. No. 1,308,063; July 1; v. 264; p. 10.
 Gray, James G. (See Gray, John and J. G.)
 Gray, John, London, England, and J. G. Gray, Glasgow, Scotland. Gyroscopic apparatus. No. 1,308,783; July 8; v. 264; p. 170.
 Gray, John, London, England, and J. G. Gray, Glasgow, Scotland. Gyroscopic apparatus. No. 1,310,862; July 22; v. 264; p. 622.
 Gray, John, London, England, and J. G. Gray, Glasgow, Scotland. Gyrostatic apparatus. No. 1,311,768; July 29; v. 264; p. 823.
 Gray, William R. (See Hollenbeck and Gray.)
 Gray, Winfield H., assignor to H. A. Hurd, Portsmouth, N. H., and E. J. Gihon, Wakefield, Mass., trustees. Tool adjustable in taper. No. 1,309,571; July 8; v. 264; p. 317.
 Grebe, Albert, assignor to Rausch & Lomb Optical Company, Rochester, N. Y. Telescope-prism mounting. No. 1,308,253; July 1; v. 264; p. 51.
 Greco, Joseph, assignor of one-half to H. E. Augenthaler, New York, N. Y. Retaining-penholder. No. 1,309,475; July 8; v. 264; p. 209.
 Greeley, Earl R., assignor to Pierce, Butler & Pierce Manufacturing Corporation, Syracuse, N. Y. Heater. No. 1,308,649; July 1; v. 264; p. 121.
 Green Engineering Company. (See Poppenhusen and Strong, assignors.)
 Green Engineering Company. (See Strong, Arthur P., assignor.)
 Green, Fumey F., Coalgate, Okla. Tire. No. 1,308,846; July 8; v. 264; p. 182.
 Green, James W., Portland, Oreg. Rotary gas-engine. No. 1,308,352; July 1; v. 264; p. 93.
 Green, John R., Dalhart, Tex. Tail-end light for automobiles. No. 1,311,345; July 29; v. 264; p. 745.
 Green, Walter R., Chicago, Ill. Bumper. No. 1,311,557; July 29; v. 264; p. 785.
 Greenfield, Edwin T., Klamath, and J. G. V. Lang, New York, assignors to Greenfield Paper Bottle Company, New York, N. Y. Manufacturer of paper bottles. No. 1,310,117; July 15; v. 264; p. 454.
 Greenfield, Edwin T., Klamath, and J. G. V. Lang, New York, assignors to Greenfield Paper Bottle Company, New York, N. Y. Expanding rings for internal pressure. No. 1,310,118; July 15; v. 264; p. 454.
 Greenfield Paper Bottle Company. (See Gelertsen, Otto E., assignor.)
 Greenfield Paper Bottle Company. (See Greenfield and Lang, assignors.)
 Greenleaf, Edward N., and G. T. Hansen, Salt Lake City, Utah, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Granulator. No. 1,309,800; July 15; v. 264; p. 396.
 Greenlee, Warren R., Pasadena, Calif. Method of and system for pumping. No. 1,310,615; July 22; v. 264; p. 577.
 Greenwood, Guyon F., Georgeville, Quebec, Canada. Expanded-metal railway or track. No. 1,308,177; July 1; v. 264; p. 31.
 Greig Company Limited. (See Greig, William B., assignor.)
 Greig, William B., assignor to The Greig Company, Limited, Hackensack, N. J. Car-door fastening. No. 1,308,779; July 8; v. 264; p. 169.
 Greig, James A., and W. F. Balkenol, Lismore, Minn. Wrench. No. 1,309,727; July 15; v. 264; p. 383.
 Grell, Frederick H. (See Chakravarty and Grell.)
 Grenon, Araldas J., New Haven, Conn. Smoke-hood for cooking utensils. No. 1,308,412; July 1; v. 264; p. 74.
 Grosse, Charles W., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Vehicle-wheel rim. No. 1,311,209; July 29; v. 264; p. 730.
 Grieshaber, Hugo E., New London, Conn., assignor to Electric Boat Company. Testing-tank for submarines. No. 1,309,728; July 15; v. 264; p. 383.
 Grieshaber, Hugo E., and R. C. Simpson, New London, Conn., assignors to Electric Boat Company. Testing-tank for submarines. No. 1,309,756; July 15; v. 264; p. 389.
 Grievess, Albert, Springfield, Ohio, assignor, by mesne assignments, to International Harvester Company. Mowing-machine. No. 1,310,616; July 22; v. 264; p. 577.
 Griffin, Alvah M., Kansas City, Mo. Acetylene-gas generator. No. 1,311,270; July 29; v. 264; p. 731.
 Griffin, Alvah M., Kansas City, Mo. Gasoline-tower. No. 1,311,271; July 29; v. 264; p. 731.
 Griffin, Eugene T. (See Dehoff and Griffin.)

Griffith, Ernest, Long Beach, assignor of one-half to G. D. Gilmore, Los Angeles, Calif. Compound piston for internal-combustion engines and the like. No. 1,309,891; July 15; v. 264; p. 413.
 Griffith, Euclid C., Springfield, Iowa. Automatic hog-feeder. No. 1,308,901; July 8; v. 264; p. 192.
 Griffith, Israel L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Coil-insulating device. No. 1,308,064; July 1; v. 264; p. 10.
 Griffiths, Francis H., Handsworth, Birmingham, England. Manufacture of beaded bolts, rivets, or the like. No. 1,308,629; July 1; v. 264; p. 114.
 Grimm, George W., West Hoboken, N. J. Artificial teeth. No. 1,310,654; July 22; v. 264; p. 584.
 Grindelund, Bennie T., Mabel, Minn. Shoe-buckle. No. 1,311,120; July 22; v. 264; p. 670.
 Grisham, Benjamin E., Memphis, Tenn. Holder for resistance-cells. No. 1,308,040; July 8; v. 264; p. 200.
 Grojean, Louis A., Camp Cody, N. Mex. Beet-harvester. No. 1,310,353; July 15; v. 264; p. 493.
 Gros, Claude F., Putnam, France. Six-wheel motor-vehicle. No. 1,310,395; July 15; v. 264; p. 505.
 Gross, Allan J., assignor to J. L. Kennedy, Chicago, Ill. Dry-pipe valve. No. 1,311,388; July 1; v. 264; p. 753.
 Gross, Charles E., Jr., Pittsburgh, Pa. Automatic tap. No. 1,308,802; July 8; v. 264; p. 192.
 Gross, Edward L. (See Deutscher and Gross.)
 Gross, Herman, La Fayette, Ind. Carburetor-adjusting attachment. No. 1,308,707; July 1; v. 264; p. 128.
 Grossman, Samuel. (See Sadowsky, Nathan, assignor.)
 Grove, Edwin W. (See Carrier, Albert H., assignor.)
 Grover, Albert D., New York, N. Y., assignor, by mesne assignments, to Autolites Corporation. Slot-closing mechanism for coin-controlled vending-machines. No. 1,310,826; July 22; v. 264; p. 616.
 Grover, Albert D., New York, N. Y., assignor, by mesne assignments, to Autolites Corporation. Coin-controlled vending-machine. No. 1,310,863; July 22; v. 264; p. 622.
 Grube, John H., assignor to Airsafe Inner Tire Company, Los Angeles, Calif. Tire-liner. No. 1,309,249; July 8; v. 264; p. 257.
 Gruber, Joseph, Milwaukee, Wis. Window-ventilator. No. 1,310,475; July 22; v. 264; p. 550.
 Gruber, Paul H., Waterbury, Conn., and M. Sell, New York, N. Y. Separable fastener. No. 1,311,812; July 29; v. 264; p. 832.
 Gruber, Paul H., Waterbury, Conn., and M. Sell, New York, N. Y. Garment-fastener. No. 1,311,813; July 29; v. 264; p. 832.
 Gruber, Paul H., New York, N. Y., assignor to Norsk Hydro-elektrisk Kvaestofabrikationsk, Solingen, Christiania, Norway. Electrolysis of solutions. No. 1,311,505; July 29; v. 264; p. 775.
 Grunwald, Carl, Bredene, Germany. Fuel-injecting device for internal-combustion engines. No. 1,310,565; July 22; v. 264; p. 567.
 Guarantee Liquid Measure Company. (See MacKenzie and Crowder, assignors.)
 Guerlich, Frederick C., Stamford, Conn. Driving mechanism. No. 1,309,518; July 8; v. 264; p. 207.
 Guest, Grace M., et al. (See Guest, John B. H., assignor.)
 Guest, John B. H., Oakland, assignor of one-half to H. S. Stark and one-fourth to G. M. Guest, San Francisco, Calif. Means for stabilizing and controlling the flight of aerial machines. No. 1,311,389; July 29; v. 264; p. 753.
 Guett, Monroe, assignor to The Hart & Hageman Manufacturing Company, Hartford, Conn. Spacing-washer. No. 1,311,344; July 29; v. 264; p. 745.
 Guettler, Herbert, Chicago, Ill., assignor to American Barking Drum Company, Barking-drum. No. 1,311,226; July 29; v. 264; p. 722.
 Guettler, Herbert W., assignor to American Barking Drum Company, Chicago, Ill. Barking-drum. No. 1,311,225; July 29; v. 264; p. 722.
 Guzenbeld, Marrus, Basel, and E. Hug, Riehen, near Basel, Switzerland, assignors to The Hoffman-La Roche Chemical Works, New York, N. Y. Making ethanol-triethyl-arsenium hydride and making the same. No. 1,308,414; July 1; v. 264; p. 74.
 Guzenbeld, Marrus, Basel, and E. Hug, Riehen, near Basel, Switzerland, assignors to The Hoffman-La Roche Chemical Works, New York, N. Y. Ethanol-triethyl-arsenium hydride and making the same. No. 1,308,414; July 1; v. 264; p. 74.
 Gulhaud, Henri J. F. (See Berthelot and Gulhaud.)
 Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Tobacco-pouch. No. 1,310,527; July 22; v. 264; p. 560.
 Gulbransen, Axel G., and C., assignors to Gulbransen-Dickinson Company, Chicago, Ill. Player-piano. No. 1,308,736; July 1; v. 264; p. 134.
 Gulbransen, Christian. (See Gulbransen, Axel G., and C., assignors.)
 Gulbransen-Dickinson Company. (See King and Roberts, assignors.)
 Gulf Refining Company. (See Stockton, Abbott L., assignor.)
 Gulick, Edward J., assignor to C. G. Conn, Limited, Elkhart, Ind. Tuning attachment for wind musical instruments. No. 1,308,903; July 8; v. 264; p. 192.

Guillory, Arthur V., assignor to Commercial Utilities Manufacturing Company, Chicago, Ill. Illuminated advertising device. No. 1,308,415; July 1; v. 264; p. 74.
 Guillekson, Gustav A., Seattle, Wash. Mechanical toy. No. 1,300,572; July 8; v. 264; p. 317.
 Gullion, Russell R., Sheldon, Iowa. Egg-turner. No. 1,311,814; July 29; v. 264; p. 832.
 Gummerson, William, Los Angeles, Calif. Steering-gear attachment. No. 1,310,159; July 15; v. 264; p. 462.
 Gumpfer, John K., assignor of one-half to W. H. Wooluma, Decatur, Ill. Wheel-removing tool. No. 1,311,272; July 29; v. 264; p. 731.
 Gunn, Charles H., Emeryville, Calif. Tire construction for vehicle-wheels. No. 1,308,416; July 1; v. 264; p. 74.
 Gunn, Thomas M. (See Hibbs and Gunn.)
 Gurry, William, Leominster, Mass. Machine for shaping and polishing articles of celluloid and the like. No. 1,310,071; July 15; v. 264; p. 446.
 Gustafson, Carl, Södertelje, and K. Appelgren, Ljuane, Sweden. Force-feed lubricator. No. 1,308,417; July 1; v. 264; p. 73.
 Guth, Edwin F., assignor to Luminous Unit Company, St. Louis, Mo. Lighting-fixture. (Reissue.) No. 14,680; July 1; v. 264; p. 137.
 Gwion, George W., Brooklyn, N. Y., assignor to Automobile Packing & Labeling Company, Durham, N. C. Measuring-pan. No. 1,310,655; July 22; v. 264; p. 584.
 Gyp Steel Products Company. (See Shuman, Cleo G., assignor.)
 H. Koppers Company. (See Speer, Frederick W., Jr., assignor.)
 H. N. Cook Bolting Co. (See Cook, Milton H., assignor.)
 H-R Manufacturing Company. (See Bernet, John, assignor.)
 H. S. Earle Mfg. Co. (See Earle, Horatio S., assignor.)
 Hack, Ernest, Detroit, Mich. Mail-box. No. 1,310,490; July 22; v. 264; p. 554.
 Hackbert, Emil H., Cleveland, Ohio. Dispensing-container. No. 1,311,273; July 29; v. 264; p. 731.
 Hackert, William, assignor of one-half to J. McPhee, Portland, Oreg. Bolt. No. 1,310,909; July 22; v. 264; p. 631.
 Haderer, Carl F., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Tiller. No. 1,309,801; July 15; v. 264; p. 397.
 Hadfield, Robert A., Westminster, England. Casting ingots. No. 1,310,072; July 15; v. 264; p. 446.
 Hadfield, Robert A., Westminster, England. Manufacture of manganese steel. No. 1,310,528; July 22; v. 264; p. 560.
 Hadfield, Robert A., Westminster, London, and A. G. M. Jack, Sheffield, England. Cap for armor-piercing projectiles. No. 1,310,073; July 15; v. 264; p. 446.
 Hadfield, Robert A., Westminster, and A. G. M. Jack, Sheffield, England. Capped armor-piercing projectile and cap therefor. No. 1,310,076; July 15; v. 264; p. 447.
 Hadfield, Robert A., London, A. G. M. Jack, Sheffield, and I. B. Milne, Totley, England. Manufacture of armor-piercing projectiles. No. 1,310,075; July 15; v. 264; p. 447.
 Hadfield, Robert A., Westminster, A. G. M. Jack, Sheffield, I. B. Milne, Totley, and W. E. Parker, Sheffield, England. Tempering of projectiles and apparatus therefor. No. 1,310,071; July 15; v. 264; p. 446.
 Hafely, Emil, Basel, Switzerland. Manufacture of insulating fibrous webs for electric insulation purposes. No. 1,311,121; July 22; v. 264; p. 670.
 Haerdel, Hans R., Franklin, Mass. Reclaiming rubber. No. 1,310,013; July 15; v. 264; p. 439.
 Hafner, Edward P., and J. T. Robert, St. Louis, Mo. Brake-band. No. 1,310,017; July 22; v. 264; p. 577.
 Hagerman, Linus T., Sullivan, Ill. Radiator-humidifier. No. 1,309,519; July 8; v. 264; p. 307.
 Hagerstrom, John A., assignor to Technical Supply Company, Scranton, Pa. Mathematical instrument and the like. No. 1,309,131; July 8; v. 264; p. 236.
 Hagerstrom, John A., assignor to Victor Typewriter Company, Scranton, Pa. Paper-guide. No. 1,311,657; July 29; v. 264; p. 808.
 Hagerstrom, John A., assignor to Victor Typewriter Company, Scranton, Pa. Paper-feeding device. No. 1,311,658; July 29; v. 264; p. 808.
 Hagerstrom, John A., assignor to Victor Typewriter Company, Scranton, Pa. Ribbon-attaching means for typewriters. No. 1,311,659; July 29; v. 264; p. 809.
 Hagg, Erik L. (See Westad and Hagg.)
 Hagner, Frederick H., Houston, Tex. Foldable stool. No. 1,310,590; July 22; v. 264; p. 597.
 Hagstrom, Joel E., Brooklyn, N. Y., assignor to Independent Filter Press Co., Inc., New York, N. Y. Construction of presses. No. 1,309,982; July 15; v. 264; p. 376.
 Haines, John H. J., New York, N. Y. Phonographic reproducer. No. 1,310,940; July 22; v. 264; p. 637.
 Hajek, Joseph, East Pittsburgh, Pa. Phonograph. No. 1,308,095; July 1; v. 264; p. 10.
 Hakius, George, Toledo, Ohio. Trombone whistle. No. 1,311,096; July 29; v. 264; p. 809.
 Hale, Charles H., Park Ridge, Ill., assignor to Time-Systems Company, Portland, Me. Clock-case. No. 1,308,947; July 8; v. 264; p. 200.

Hale, Patrick, Lexington, Ky. Oiling device. No. 1,311,098; July 22; v. 264; p. 640.
 Hall, Alfred. (See Kendall, Hazel C., assignor.)
 Hall, Arthur J. (See Marzilli and Hall.)
 Hall, Carl A., Corbridge, N. Y. Wire-stretcher. No. 1,311,590; July 29; v. 264; p. 753.
 Hall, Lewis S. (See Meeder, Herbert L., assignor.)
 Haller, Carl T., managing director, Smögen, assignor to L. Laurin, Lysekil, Sweden. Muffler. No. 1,309,132; July 8; v. 264; p. 236.
 Halteman, Lee E. (See Folsom and Halteman.)
 Halvorsen, Birger F., and C. Høbye, Christiania, Norway. Manufacture of sulfur dyes. No. 1,310,751; July 22; v. 264; p. 602.
 Hamon, John D., Wilmington, Del. Pipe-wrench. No. 1,308,353; July 1; v. 264; p. 63.
 Hamburger, Aron, Mayfair, London, England. Color photography. No. 1,308,708; July 1; v. 264; p. 128.
 Hamburger, Aron, Mayfair, London, England. Treating cinematograph-films. No. 1,308,709; July 1; v. 264; p. 128.
 Hamburger, Aron, Mayfair, London, England. Developing, coloring, and washing tank for two-sided photographic films. No. 1,308,710; July 1; v. 264; p. 129.
 Hamelius, Edouard, Marseille, France. Forming sand foundry-cores and substance for use therein. No. 1,308,524; July 1; v. 264; p. 94.
 Hamilton, Clifford C. (See Hutchinson and Hamilton.)
 Hamilton, Jacob S., Harlan, Iowa. Feed-agitator for feed-troughs. No. 1,311,691; July 29; v. 264; p. 809.
 Hamlin, Marston L., Bloomfield, N. J., assignor to American Synthetic Dyes Incorporated. Recovering benzene monosulfonic acid and producing phenol. No. 1,309,683; July 15; v. 264; p. 376.
 Hamm, William S., Hubbard Woods, and W. F. Stewart, assignors to The Adams & Westlake Company, Chicago, Ill. Device for forming, assembling, and holding sheet-metal forms. No. 1,309,088; July 8; v. 264; p. 228.
 Hamm, William S., Hubbard Woods, Ill., assignor to The Adams & Westlake Company. Lamp-burner. No. 1,309,089; July 8; v. 264; p. 228.
 Hamman, George. (See Carmichael, Robert E., assignor.)
 Hammer, Charles, Queens, assignor to Amerlenn Metal Cap Company, Brooklyn, N. Y. Scallop cap. No. 1,308,745; July 1; v. 264; p. 135.
 Hammer, Charles, Queens, assignor, by direct and means assignments, to Amerlenn Metal Cap Co., Brooklyn, N. Y. Scallop cap. No. 1,308,746; July 1; v. 264; p. 135.
 Hammond, Ira A. (See Sophor and Hammond.)
 Hamrick, Alfred N., Crawford, Kans. Tractor. No. 1,309,684; July 15; v. 264; p. 376.
 Hamrick, Walter, Emory, Tex. Cotton sack hanger. No. 1,310,947; July 22; v. 264; p. 637.
 Hancock, William D., Springfield, Tenn. Lifter. No. 1,309,324; July 8; v. 264; p. 271.
 Hand, Ernest A., and F. A. Wygant, assignors to The A. J. Beer Company, Incorporated, Harnett, N. Y. Feed mechanism for slicing-machines. No. 1,310,752; July 22; v. 264; p. 602.
 Hand, Thomas W., assignor to Davy Brothers Limited, Sheffield, England. Hydraulic press, shears, and the like. No. 1,310,795; July 22; v. 264; p. 611.
 Hanes, Harvey M. (See Gilmore and Hanes.)
 Hanks, George S., Atchison, Kans. Telescoping clothes-prop. No. 1,310,336; July 15; v. 264; p. 494.
 Hannum, Philip L., Dalhart, Tex. Beet-harvester. No. 1,309,940; July 15; v. 264; p. 423.
 Hansen, Augle L., Evanston, Ill. Acetylene-lamp. No. 1,310,529; July 22; v. 264; p. 560.
 Hansen, Carl T. P., Glen Ohlen, assignor of one-half to P. Herman, Chester, Pa. Explosive and making same. No. 1,311,274; July 29; v. 264; p. 731.
 Hansen, Charles C., assignor to Refrigerating Specialties Company, Chicago, Ill. Automatic control. No. 1,311,346; July 29; v. 264; p. 745.
 Hansen, Charles C., assignor to Thermal Appliance Company, Inc., New York, N. Y. Water-heater. No. 1,311,391; July 29; v. 264; p. 754.
 Hansen, George T. (See Greenleaf and Hansen.)
 Hansen, Hans, Christiania, Norway. Lubricating apparatus. No. 1,309,085; July 15; v. 264; p. 376.
 Hanson, Albert O., Ophelm, Mont. Flax-harvester. No. 1,311,347; July 29; v. 264; p. 745.
 Hanson, Harry, Watertown, assignor of one-half to L. E. Cadieux, Boston, Mass. Hat, coat, and cane holding device. No. 1,308,670; July 1; v. 264; p. 121.
 Hanzlik, Henry J., assignor to Kerr Turbine Company, Wellsville, N. Y. Turbine-bucket construction. No. 1,310,864; July 22; v. 264; p. 623.
 Hapgood, Clarence H., assignor to Toledo Scale Company, Toledo, Ohio. Weighing-scale. No. 1,310,045; July 22; v. 264; p. 638.
 Harasta, Joseph N. (See Burns, John W., assignor.)
 Harbord, Rella C., Spokane, Wash. Grain-testing device. No. 1,310,567; July 22; v. 264; p. 568.
 Hardie, James G., Canton, N. Y. Sheet-carrying mechanism. No. 1,310,618; July 22; v. 264; p. 577.
 Hardoncourt, Arthur, Jr., Brooklyn, N. Y. Wall construction and channel brick or block therefor. No. 1,311,069; July 22; v. 264; p. 641.
 Hargreaves, Albert. (See Hargreaves, George W., A., and R.)

Hargreaves, George W., A., and R. Blackburn, England. Carding-engine. No. 1,310,827; July 22; v. 264; p. 616.
 Hargreaves, Robert. (See Hargreaves, George W., A., and R.)
 Harland and Wolff. (See Marks, Arthur, assignor.)
 Harley-Davidson Motor Co. (See Harley, William S., assignor.)
 Harley-Davidson Motor Company. (See Zetterlund, Theodor, assignor.)
 Harley, William S., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Case-hardening materials. No. 1,308,239; July 1; v. 264; p. 43.
 Harlow, Clarence B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Circuit-closer. No. 1,308,711; July 1; v. 264; p. 129.
 Harlow, George, Eltrincham, England, assignor to Westinghouse Electric and Manufacturing Company. Transformer. No. 1,311,507; July 29; v. 264; p. 775.
 Harms, Otto W., Chicago, Ill. Cigar-box. No. 1,310,949; July 22; v. 264; p. 638.
 Harper, Charles L., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Strap-fastener. No. 1,310,119; July 15; v. 264; p. 455.
 Harper, Stephen C., Hampton, Miss. Hoisting and conveying apparatus. No. 1,311,692; July 29; v. 264; p. 811.
 Harrah, Willis A., Kansas City, Mo. Tractor. No. 1,309,408; July 8; v. 264; p. 286.
 Harrington, Clinton G., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Method and apparatus for adjusting armatures of electromagnetic devices. No. 1,308,585; July 1; v. 264; p. 105.
 Harrington, Ralph M., assignor to E. A. Sperry, Brooklyn, N. Y. Producing lead salts. No. 1,308,948; July 8; v. 264; p. 201.
 Harris Automatic Press Company, The. (See Pritchard, Carl G., assignor.)
 Harris, Dorothy J. (See Rutter, Sydney E., assignor.)
 Harris, Grace, Monterey, Calif. Combined seat and bed. No. 1,309,520; July 8; v. 264; p. 307.
 Harris, James, Wyoming, and R. D. Bogue, assignors to The Aromint Company, Cincinnati, Ohio. Display device. No. 1,308,949; July 8; v. 264; p. 201.
 Harris, James O. (See Landberg and Harris.)
 Harris, Joe. (See Sack, Charles M., assignor.)
 Harris, John, Cleveland, Ohio. Blowpipe-burner. No. 1,311,615; July 29; v. 264; p. 812.
 Harris, John F., assignor to Cement Products Company, Wilmington, N. C. Mold. No. 1,311,122; July 22; v. 264; p. 670.
 Harrison, Charles L., Richmond, Va. Car-ventilator. No. 1,308,737; July 1; v. 264; p. 134.
 Harrison, George L., assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Culinary utensil. No. 1,310,016; July 15; v. 264; p. 430.
 Harrison, Ralph H., Detroit, Mich. Electrolytic process for making stencils. No. 1,311,275; July 29; v. 264; p. 731.
 Harrison, Robert J., Chicopee Falls, Mass. Joining tubes. No. 1,311,292; July 29; v. 264; p. 734.
 Harrold, Elmer, assignor to The Crescent Machine Company, Leetonia, Ohio. Saw-guard. No. 1,311,508; July 29; v. 264; p. 775.
 Harrold, George, Los Angeles, Calif. Adjustable curtain for wind-shields. No. 1,309,183; July 8; v. 264; p. 236.
 Hart, Harry S., Chicago, Ill. Locking mechanism for card-doors. No. 1,308,478; July 1; v. 264; p. 75.
 Hart & Hegeman Manufacturing Company, The. (See Gneil, Monroe, assignor.)
 Hart & Hegeman Manufacturing Company, The. (See Vossler, Henry, assignor.)
 Hart, Louis F., Groton, N. Y. Illuminated writing instrument. No. 1,310,476; July 22; v. 264; p. 550.
 Harter, Frank E., Seattle, Wash. Micrometer-scale gage. No. 1,311,602; July 29; v. 264; p. 793.
 Harter Manufacturing Company. (See Worrell, Dwight E., assignor.)
 Hartford Machine-Gun Company, The. (See Reising, Eugene G., assignor.)
 Hartman, Hans, New York, N. Y. Toilet-powder dispenser. No. 1,311,227; July 29; v. 264; p. 722.
 Hartman, Thomas J., Chicago, Ill. Shoulder-pad. No. 1,310,477; July 22; v. 264; p. 551.
 Hartledge, Clifford W. (See Yall, Robert W., assignor.)
 Harvey, Amasa. (See Causey and Harvey.)
 Haskellite Manufacturing Corporation. (See Haskell, Henry L., assignor.)
 Haskell, Henry L., Ludington, Mich., assignor to Haskellite Manufacturing Corporation. Hinge. No. 1,308,736; July 15; v. 264; p. 384.
 Haskins, Butler J., assignor to E. S. Cowie Electric Co., Kansas City, Mo. Holding and driving device for testing purposes. No. 1,310,396; July 15; v. 264; p. 505.
 Haslup, Edward W., assignor to R. G. Christ, New York, N. Y. Recovering fired nitrogen. No. 1,310,478; July 22; v. 264; p. 551.
 Haslup, Edward W., Bronxville, assignor to R. G. Christ, New York, N. Y. Making ammonia from atmospheric nitrogen. No. 1,310,479; July 22; v. 264; p. 551.
 Haslup, Edward W., Bronxville, assignor to R. G. Christ, New York, N. Y. Recovering combined nitrogen from blast-furnaces. No. 1,310,480; July 22; v. 264; p. 551.

Hassel, Nels H., Los Angeles, Calif. Riveting device. No. 1,309,134; July 8; v. 264; p. 236.
 Haste, William M., et al. (See Loveless, Fred H., assignor.)
 Hatch, Delford, Alta, Iowa. Adjustable level-stand. No. 1,308,830; July 1; v. 264; p. 114.
 Hatch, Fred W., Barronett, Wis. Funnel. No. 1,311,303; July 29; v. 264; p. 734.
 Haug, Nils C., Drammen, Norway. Machine for taking up potatoes, &c. No. 1,309,196; July 8; v. 264; p. 247.
 Haug, Oscar, and W. A. England, San Francisco, Calif. Machine for making pasmy-shells. No. 1,310,990; July 22; v. 264; p. 645.
 Hautala, Emil, Bruce Crossing, Mich. Speed-indicator for separators. No. 1,308,671; July 1; v. 264; p. 121.
 Hawk, Roscoe C., Pittsburgh, Pa., assignor to H. Hoe and Co., New York, N. Y. Web-roll support. No. 1,309,621; July 15; v. 264; p. 303.
 Hawkins, Arthur W., assignor to Chicago Railway Equipment Company, Chicago, Ill. Car-ladder. No. 1,311,348; July 29; v. 264; p. 745.
 Hawkins, John W., Kokomo, Ind. Staple-blender. No. 1,309,731; July 15; v. 264; p. 384.
 Hawkins, Mason A., Baltimore, Md. Box for player-piano music-rolls. No. 1,309,030; July 8; v. 264; p. 217.
 Hawley, Amos H., Norwood, Ohio, assignor to International Money Machine Company, Reading, Pa. Accounting-machine handle. No. 1,311,394; July 29; v. 264; p. 754.
 Hawley, Royal A., assignor of one-third to J. Driver and one-third to J. Rubenkovik, Graham, Tex. Steering mechanism for road-graders. No. 1,308,847; July 8; v. 264; p. 182.
 Hawley, William G., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y. Shut-off nozzle. No. 1,309,732; July 15; v. 264; p. 384.
 Hawthorne, Charles W., Buffalo, N. Y., assignor to Morgan Construction Company, Worcester, Mass. Billet-handling device for rolling-mills. No. 1,308,980; July 8; v. 264; p. 208.
 Hawthorne, Louis A., Newark, and H. S. Pero, Jersey City, N. J., assignors to Steel Utilites, Incorporated. Metal-working machine. No. 1,311,276; July 29; v. 264; p. 731.
 Hayes, Robert D., assignor to Index Visible, Incorporated, New Haven, Conn. Index or file. No. 1,308,586; July 1; v. 264; p. 106.
 Hayes, Rollie R., Peoria, Ill. Paint-bucket hanger. No. 1,308,060; July 1; v. 264; p. 11.
 Hayes, Stanley W., Richmond, Ind. Derail. No. 1,309,434; July 8; v. 264; p. 291.
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 Hayward Company, The. (See Atkinson, Herbert S., assignor.)
 Hayward, Henry S., Jr., Spring Lake, N. J. Reinforced battery-box. No. 1,311,558; July 29; v. 264; p. 785.
 Hazard, George E., assignor to Kellogg Manufacturing Co., Rochester, N. Y. Automobile-tire pump. No. 1,311,693; July 29; v. 264; p. 809.
 Hazarvartian, Garabed, Brooklyn, N. Y. Projecting device. No. 1,311,694; July 29; v. 264; p. 810.
 Head, Ralph H., Monroeville, Ill. Sighting device for aeroplanes. No. 1,311,277; July 29; v. 264; p. 732.
 Heaford, Edwin W., Denver, Colo. Eye-protector. No. 1,310,077; July 15; v. 264; p. 447.
 Hegany, Dennis J., Chicago, Ill. Massage device. No. 1,310,950; July 22; v. 264; p. 638.
 Heap, Arthur C., Woking, and A. B. Field, Marple, England. Acoustically-operated electric-contact-actuating mechanism and system employing the same. No. 1,310,568; July 22; v. 264; p. 568.
 Heap, Jesse J., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Folder for sewing machines. No. 1,308,631; July 1; v. 264; p. 114.
 Hearn, John F. (See Reynolds and Hearn.)
 Heath, Samuel, Roxborough, Pa. Air-distributor. No. 1,310,991; July 22; v. 264; p. 646.
 Heaton, Herman C. (See Sargent and Heaton.)
 Hehrard, Henri F., Paris, France. Device for transmitting motion to gyroscopic bodies. No. 1,311,509; July 29; v. 264; p. 776.
 Hechenbleikner, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Exhauster. No. 1,308,756; July 8; v. 264; p. 166.
 Hechenbleikner, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Electric furnace. No. 1,310,078; July 15; v. 264; p. 447.
 Hechenbleikner, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Cooling and oxidation apparatus. No. 1,311,595; July 29; v. 264; p. 754.
 Hechenbleikner, Ingenieur, and P. S. Glichrist, assignors to Chemical Construction Co., Charlotte, N. C. Distilling apparatus. No. 1,310,078; July 15; v. 264; p. 447.
 Hecht, Louis E. (See Hilton, George A., assignor.)
 Heddy, Arthur H., Chicago, Ill., assignor to The Ludlow Typograph Company, Cleveland, Ohio. Making typograph-matrices. No. 1,305,067; July 1; v. 264; p. 11.
 Hegeman, Benjamin A., Jr. (See Hillman, Edward D., assignor.)

Heldbrink, Jay A., Minneapolis, Minn. Anesthetic apparatus. No. 1,300,688; July 15; v. 264; p. 376.
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 Held, Charles M., Omaha, Nebr. Flying-machine. No. 1,310,619; July 22; v. 264; p. 577.
 Heller, Genevieve, New York, N. Y. Corset. No. 1,311,444; July 29; v. 264; p. 763.
 Helms, Ernest F., New York, N. Y. Means for preventing the theft of motor-vehicles. No. 1,309,197; July 8; v. 264; p. 247.
 Heintz, Otto L., Buffalo, N. Y. Vehicle attachment for motor and other cycles. No. 1,311,816; July 29; v. 264; p. 832.
 Heldinger, Charles F., Durham, Wash. Coal-drill. No. 1,311,356; July 29; v. 264; p. 755.
 Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,308,068; July 1; v. 264; p. 11.
 Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,308,069; July 1; v. 264; p. 11.
 Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,308,070; July 1; v. 264; p. 11.
 Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,309,733; July 15; v. 264; p. 384.
 Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamoelectric machine. No. 1,311,510; July 29; v. 264; p. 776.
 Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,311,511; July 29; v. 264; p. 776.
 Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,311,512; July 29; v. 264; p. 776.
 Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Field-control system for dynamoelectric machines. No. 1,311,513; July 29; v. 264; p. 776.
 Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,311,514; July 29; v. 264; p. 777.
 Hellmund, Rudolf E., Pittsburgh, and H. T. Morris, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. System of control. No. 1,311,559; July 29; v. 264; p. 840.
 Helstrom, Oscar B., Neutral Bay, near Sydney, New South Wales, Australia. Trouser-stretching attachment to chairs. No. 1,308,755; July 8; v. 264; p. 165.
 Heltzel, John N., navigator to The Heltzel Steel Form & Iron Co., Warren, Ohio. Car-unloading chute. No. 1,308,950; July 8; v. 264; p. 201.
 Heltzel, Joseph W., Warren, Ohio. Welding-clamp. No. 1,309,067; July 8; v. 264; p. 224.
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 Hemminger, John, Sr., New Germany, Minn. Wrecking-tool. No. 1,309,734; July 15; v. 264; p. 384.
 Hemleb, Martin. (See Bosch and Hemleb.)
 Hemmery, Kenneth R., South Bethlehem, Pa. Supporting structure. No. 1,308,419; July 1; v. 264; p. 75.
 Hemph, George L., Truro township, Franklin county, assignor of one-half to O. H. Mosler, Columbus, Ohio. Traction-wheel. No. 1,309,521; July 8; v. 264; p. 307.
 Henderson, Henry, Halstad, Minn. Distributing-apron for shockloaders. No. 1,310,010; July 15; v. 264; p. 430.
 Henderson, James R., Lee, England. Gyro compass. No. 1,309,409; July 8; v. 264; p. 287.
 Henderson, James H., et al. (See Routson, Arthur J., assignor.)
 Henderson, Robert H., East Orange, N. J. Conduit-bender. No. 1,309,849; July 15; v. 264; p. 405.
 Henderson, William. (See Robertson, William A., assignor.)
 Henig Engine Co. (See Henig, Frank L., assignor.)
 Henig, Frank L., Chicago, Ill., assignor to Henig Engine Co. Rotary engine. No. 1,309,735; July 15; v. 264; p. 385.
 Henz, Edwin C. (See Mebane, Charles P., assignor.)
 Henney, Daniel E., Holyoke, Mass., assignor to Cowan Truck Company. Truck. No. 1,311,165; July 29; v. 264; p. 711.
 Hennessy, John J., New Kensington, Pa. Nut-lock. No. 1,308,672; July 1; v. 264; p. 122.
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 Henriel, William A. E., Dorchester, assignor, by mesne assignments to L. F. Huff, Jamaica Plain, Mass. Driving and reversing mechanism. No. 1,309,410; July 8; v. 264; p. 287.
 Henriel, William A. E., Boston, Mass., assignor to Henriel Washing Machine Company. Washing, disinfecting, and drying machine. No. 1,309,411; July 8; v. 264; p. 287.
 Henriel, William A. E., Roxbury, Mass., assignor to Henriel Washing Machine Company. Washing-machine. No. 1,309,412; July 8; v. 264; p. 287.
 Henry, Aaron E., Brown Valley, Minn. Planting-stand. No. 1,308,073; July 1; v. 264; p. 122.

Henry, Charles A., Chicago, Ill. Counterpoising mechanism. No. 1,309,198; July 8; v. 264; p. 247.
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 Henry, George W., assignor to E. Holtsler, New York, N. Y. Tool-holder. No. 1,311,445; July 29; v. 264; p. 764.
 Henson, George S., Rushville, Mo. Feeding device. No. 1,309,090; July 8; v. 264; p. 228.
 Henwood, Abraham, Cynwyd, Pa. Oxidation of ammonia to nitric acid. No. 1,309,622; July 15; v. 264; p. 364.
 Henwood, Abraham, Cynwyd, Pa. Catalyst. No. 1,309,623; July 15; v. 264; p. 364.
 Henwood, Abraham, Cynwyd, Pa. Manufacture of phosphate fertilizers. No. 1,310,080; July 15; v. 264; p. 441.
 Hepworth, Cecil M., London, England. Apparatus for exposing cinematograph positive films. No. 1,310,337; July 15; v. 264; p. 404.
 Herbert, William J. S., Orrville, Ohio. Bedstead. No. 1,308,674; July 1; v. 264; p. 122.
 Herbst, Robert L. and L. Morack, Hortonville, Wis.; said Morack assignor to said Herbst. Post-clamp. No. 1,309,941; July 15; v. 264; p. 423.
 Hercules Powder Company. (See Finch, Leon S., assignor.)
 Herman Scheuer & Sons. (See Holland, Frederick W., assignor.)
 Herter, Rudolph B., assignor to Jones and Baker, New York, N. Y. Folding mailing-card. No. 1,311,397; July 29; v. 264; p. 755.
 Herzog, John, Saginaw, Mich. Cabinet for talking-machines. No. 1,308,420; July 1; v. 264; p. 76.
 Hess, John G., Adamston, W. Va. Gas-burner for furnaces. No. 1,311,515; July 29; v. 264; p. 777.
 Hessel, Albert C., New York, N. Y. Conveyor system for steam and other substances. No. 1,308,072; July 1; v. 264; p. 12.
 Hewick, Delbert A., et al. (See Tolles and Ernsberger, assignors.)
 Hewland, Rue S., Howe, Tex. Ratchet die-stock. No. 1,310,020; July 22; v. 264; p. 578.
 Hester, George C., Chicago, Ill. Corner and division bar for store-front constructions. No. 1,311,398; July 29; v. 264; p. 755.
 Hettinger, John, London, England. Aerial conductor for wireless signalling and other purposes. No. 1,309,031; July 8; v. 264; p. 217.
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 Heuser, Herman, Chicago, Ill. Apparatus for making carbonated beverages. No. 1,308,587; July 1; v. 264; p. 106.
 Heuser, Herman, Chicago, Ill. Preparation of alcohol-reduced beer. No. 1,308,588; July 1; v. 264; p. 106.
 Heylman, Edward M. (See Roberts and Heylman.)
 Heymann, Bernhard, Wiesdorf-on-the-Rhine, O. Dressel, Mülheim-on-the-Rhine, R. Kothe, Vohwinkel, near Elberfeld, and A. Ossenbeck, Cologne-on-the-Rhine, Germany, assignors to Synthetic Patents Co., Inc., New York, N. Y. Ureids of substituted aminonaphthol substances. No. 1,308,071; July 1; v. 264; p. 12.
 Heywood Brothers and Wakefield Company. (See Watkins and Brown, assignors.)
 Heywood, Vincent E., Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass. Envelope machinery. No. 1,308,954; July 1; v. 264; p. 63.
 Hibbs, Frank W., and T. M. Guco, New London, Conn., assignors to Electric Boat Company. Testing-tank for submarines. No. 1,309,736; July 15; v. 264; p. 385.
 Hidden, Charles P., Brookline, assignor to The Lamson Company, Boston, Mass. Carrier-despatch apparatus. No. 1,311,647; July 29; v. 264; p. 801.
 Higbee, Charlie D., assignor of one-half to E. W. Dickle, Dallas, Tex. Internal-combustion engine. No. 1,311,603; July 29; v. 264; p. 793.
 Higgins, Eugene, assignor to Jackson Machine Tool Co., Jackson, Mich. Die-sinking machine. No. 1,310,656; July 22; v. 264; p. 584.
 Higgins, Martin G., Dunmore, Pa. Pressure-brake system. No. 1,310,951; July 22; v. 264; p. 638.
 Higginson, Joseph, and H. Arundel, Stockport, England. Liquid-fuel-supply system of internal-combustion engines. No. 1,311,695; July 29; v. 264; p. 810.
 Hill, George S., Stratford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,309,575; July 8; v. 264; p. 318.
 Hill, George S., Stratford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,309,576; July 8; v. 264; p. 318.
 Hill, Harriet, New York, N. Y., assignor to Paper Utilities Corporation. Paper or similar cup. No. 1,310,698; July 22; v. 264; p. 592.
 Hill, Herbert M., New York, N. Y., assignor to Paper Utilities Corporation. Ink. No. 1,310,697; July 22; v. 264; p. 592.
 Hill, Homer A., Lebanon, Tenn. Flying-machine. No. 1,308,632; July 1; v. 264; p. 114.
 Hill, Thomas, New York, N. Y. Hose-clamp. No. 1,309,476; July 8; v. 264; p. 299.
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 Hillman, Edward D., Larchmont, N. Y., assignor to B. A. Hegeman, Jr., North Plainfield, N. J. Hopper-car. No. 1,308,073; July 1; v. 264; p. 12.
 Hillman, Edward D., Larchmont, N. Y., assignor to B. A. Hegeman, Jr., North Plainfield, N. J. Hopper-car. No. 1,308,421; July 1; v. 264; p. 75.
 Hills, Harry B., Riverton, N. J., assignor to Steward Davitt and Equipment Corporation, New York, N. Y. Boat-launching carriage. No. 1,311,440; July 29; v. 264; p. 764.
 Hilton, George A., assignor of one-half to L. E. Hecht, Irvington, N. J. Hanger for brushes. No. 1,308,074; July 1; v. 264; p. 13.
 Hilton, Robert W., Smethport, Pa. Glass apparatus. No. 1,309,199; July 8; v. 264; p. 247.
 Himes, Orrville J., Oswego, N. Y. Umbrella. No. 1,310,481; July 22; v. 264; p. 651.
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 Hindmarsh, Percy J., Lincoln, Nebr. Fire-extinguisher. No. 1,309,624; July 15; v. 264; p. 364.
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 Hinkens, Arnold, Chicago, Ill. Bank-vault. No. 1,311,399; July 29; v. 264; p. 755.
 Hinton, George W., assignor of one-third to E. C. Renaud and one-third to H. R. Poteet, St. Joseph, Mo. Gun-pointing and automatic gun-discharging mechanism, combined. No. 1,309,091; July 8; v. 264; p. 228.
 Hirakawa, Harue, San Diego, Calif. String-cutting ring. No. 1,309,325; July 8; v. 264; p. 271.
 Hirschhorn, Benjamin, assignor to National Urn Rag Manufacturing Co., New York, N. Y. Tea-cartridge. No. 1,310,790; July 22; v. 264; p. 611.
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 Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass-drawing apparatus. No. 1,309,942; July 15; v. 264; p. 423.
 Hitchcock, Halbert K., Pittsburgh, Pa. Method of and apparatus for applying finely-divided material to grinding and smoothing mechanism. No. 1,311,517; July 29; v. 264; p. 777.
 Hitchcock, Halbert K., Pittsburgh, Pa. Method of and apparatus for applying finely-divided material to grinding and smoothing mechanism. No. 1,311,518; July 29; v. 264; p. 778.
 Hitchcock, Halbert K., Pittsburgh, Pa. Method of and apparatus for applying finely-divided material to grinding and smoothing mechanism. No. 1,311,519; July 29; v. 264; p. 778.
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 Hjorth, David, assignor to The General Machine and Manufacturing Company, Bridgeport, Conn. Electric-wire-outlet box. No. 1,309,625; July 15; v. 264; p. 364.
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 Hogan, George F., Chicago, Ill. Coupon-envelope. No. 1,310,188; July 15; v. 264; p. 467.
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 Hohmann, Richard K., Sioux City, Iowa. Gilling system for sewing-machines. No. 1,311,817; July 29; v. 264; p. 833.
 Holland, Albert, Fargo, N. D., assignor of one-tenth to A. M. Carlsen, St. Paul, Minn. Flying-machine. No. 1,308,784; July 8; v. 264; p. 170.
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 Holdsworth, Marmaduke, assignor to A. Thomas, Worcester, Mass. Mirror-support for use in closed cars. No. 1,311,278; July 29; v. 264; p. 732.
 Holdforth, Howard, Huron, S. D. Root-cutting implement. No. 1,310,569; July 22; v. 264; p. 568.
 Holland, Edward A., Southend-on-Sea, London, England. Coating with metal of lace and other similar goods and woven or other fabrics. No. 1,309,032; July 8; v. 264; p. 218.

Holland, Frederick W., Brooklyn, assignor to Herman Scheuer & Sons, New York, N. Y. Letter-case. No. 1,310,621; July 22; v. 264; p. 578.
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 Holliday, John S., Wilkesburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric relay and motor for use therein. No. 1,310,622; July 22; v. 264; p. 618.
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 Hollman, Louis, Chicago, Ill. Rug and carpet cleaning machine. No. 1,308,785; July 8; v. 264; p. 170.
 Hollomon, Casey H., Kenton, Tenn. Mower cutter-bar. No. 1,310,330; July 15; v. 264; p. 494.
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 Hollowell, Howard T., Philadelphia, Pa. Shaft-banger. No. 1,309,720; July 15; v. 264; p. 383.
 Holm, Charles A., Tigerton, Wis. Clamp for feed-cutter sharpeners. No. 1,309,984; July 15; v. 264; p. 431.
 Holmes, Arnold H., assignor to Perfeltone Corporation, Philadelphia, Pa. Reproducer for talking-machines. No. 1,310,753; July 22; v. 264; p. 602.
 Holmes, Arthur, Canton, Ohio. Piston. No. 1,311,124; July 29; v. 264; p. 761.
 Holmes, Fletcher B., Woodbury, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company. Obtaining nitro compounds. No. 1,309,577; July 8; v. 264; p. 319.
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 Holt, Philby E., Stockton, Calif. Traction-engine. No. 1,309,578; July 8; v. 264; p. 319.
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 Holthoff, Henry C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Liquid rheostat. No. 1,309,802; July 15; v. 264; p. 390.
 Holton, Edward, Calgary, Alberta, Canada. Automobile hood clip. No. 1,310,280; July 15; v. 264; p. 485.
 Holtsinger, Francis A., Ottumwa, Iowa. Laundry-machine. No. 1,310,657; July 22; v. 264; p. 584.
 Holtzhauser, Charles, assignor to La Societe de Construction des Batignolles, Paris, France. Smooth-bore gun. No. 1,309,202; July 8; v. 264; p. 248.
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 Holtschauen, John H., Milwaukee, Wis. Spring-motor. No. 1,308,712; July 1; v. 264; p. 129.
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 Honeywell, Newell A., and C. O. McKalg, Inglewood, Calif. Ignition and starter control for automobiles. No. 1,309,135; July 8; v. 264; p. 236.
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 Hood, Ernest K., Indianapolis, Ind., assignor to The American Machine Co., Chicago, Ill. Slicing-machine. No. 1,311,847; July 29; v. 264; p. 838.
 Hood, Ernest K., Indianapolis, Ind., and W. B. Wolf, assignors to The American Slicing Machine Co., Chicago, Ill. Sharpener for slicing-machine knives. No. 1,310,700; July 22; v. 264; p. 592.
 Hooker, Rufus B., Stephenville, Tex. Knee-protector. No. 1,309,627; July 15; v. 264; p. 365.
 Hooker, Thomas E., Dos Palos, Calif. Cream-cooler. No. 1,308,857; July 1; v. 264; p. 84.
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 Hoover, Herbert W., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Brush-supporting device for suction-cleaners. No. 1,309,092; July 8; v. 264; p. 228.
 Hoover, Herbert W., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Brush-driving device for suction-cleaners. No. 1,309,093; July 8; v. 264; p. 228.
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 Hope, William H., Providence, R. I. Cloth or paper printing machine. No. 1,310,658; July 22; v. 264; p. 584.
 Hope, William H., Providence, R. I. Preparing rolls for cloth-printing. No. 1,310,659; July 22; v. 264; p. 585.
 Hopedale Manufacturing Company. (See Graudmaison, Joseph, assignor.)

Hopfield, Lewis D., Natoma, assignor to one-half to O. E. Sibbett, San Francisco, Calif. Dredge-bucket lip. No. 1,310,570; July 22; v. 264; p. 568.

Hopkins, Frank H., Somerville, assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Fluid-regulator. No. 1,309,203; July 8; v. 264; p. 248.

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Hopkins, Morton K., assignor to J. L. Kennedy, Chicago, Ill. Fusible link. No. 1,308,075; July 1; v. 264; p. 13.

Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,287; July 8; v. 264; p. 264.

Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,413; July 8; v. 264; p. 286.

Hopkins, Richard M., Rutherford, assignor to American District Telegraph Company, Jersey City, N. J. Signaling system. No. 1,311,640; July 29; v. 264; p. 801.

Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,308,772; July 8; v. 264; p. 168.

Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Recording system and apparatus. No. 1,309,285; July 8; v. 264; p. 264.

Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Detector device. No. 1,309,280; July 8; v. 264; p. 264.

Hopkins, Richard M., New York, N. Y., assignor to American District Telegraph Company, Jersey City, N. J. Relay. No. 1,311,648; July 29; v. 264; p. 801.

Hopkinson, Ernest, New York, N. Y. Machine for building pneumatic-tire casings. No. 1,310,701; July 22; v. 264; p. 592.

Hopkinson, Joseph, assignor to The Computing Scale Company, Dayton, Ohio. Grinder device for meat slicers. No. 1,308,786; July 8; v. 264; p. 171.

Hörbye, Christian. (See Halvorsen and Hörbye.)

Hori, Kazuo, Hokkaido, Japan. Resuscitating spent dry cells. No. 1,311,559; July 29; v. 264; p. 785.

Hornel, August. (See Wagner, Hornel, and Vican.)

Horn, Harry, Brooklyn, N. Y. Window-glass protector. No. 1,309,130; July 8; v. 264; p. 237.

Hornback, Rose W., Gardner, Colo. Rotary steam-engine. No. 1,311,818; July 29; v. 264; p. 833.

Horubek, William M., Peoria, Ill. Automatic stock-feeding machine. No. 1,311,696; July 29; v. 264; p. 810.

Horne, James A., Washington, D. C. Resilient tire. No. 1,308,433; July 1; v. 264; p. 114.

Horne, James B., St. Charles, Ill. Shock-absorber. No. 1,109,850; July 15; v. 264; p. 406.

Hornor, Lorenzo B., Hammond, Ind. Attachment for mowing machines. No. 1,309,522; July 8; v. 264; p. 308.

Horsling, Frederick H., assignor to Swias Magneto Company, Chicago, Ill. Starting-coupling for high-tension magnetos. No. 1,308,076; July 1; v. 264; p. 13.

Horsy, Edgar T., Cleveland, Ohio. Vulcanizer. No. 1,311,560; July 29; v. 264; p. 785.

Horton, Allen A., Highland Park, Mich. Assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,308,787; July 8; v. 264; p. 171.

Horton, Bryson D., Detroit, Mich. Electrical switch. No. 1,308,423; July 1; v. 264; p. 76.

Horton, Bryson D., Detroit, Mich. Electrical switch. No. 1,308,424; July 1; v. 264; p. 76.

Horton, Bryson, Detroit, Mich. Fastening device for conduits and the like. No. 1,310,190; July 15; v. 264; p. 467.

Hosbain, Louis H., assignor to M. H. Detrick Co., Chicago, Ill. Furnace-arch construction. No. 1,309,435; July 8; v. 264; p. 291.

Hossett, William J., Chicago, Ill. Door-lock mechanism. No. 1,311,561; July 29; v. 264; p. 785.

Hossett, William J., Chicago, Ill. Locking mechanism for doors. No. 1,311,562; July 29; v. 264; p. 786.

Hose, Henry O., Brooklyn, N. Y. Butt-end composition shingles for roofing and the like. No. 1,310,982; July 15; v. 264; p. 448.

Hosfeldt, Arthur D., Portland, Oreg. Paper-roll fixture. No. 1,310,619; July 15; v. 264; p. 437.

Hosford, William F., Oak Park, Ill. Assignor to Western Electric Company, Incorporated, New York, N. Y. Forming electrical contacts. No. 1,309,523; July 8; v. 264; p. 308.

Hotchkiss, Wallace J., Alpena, S. D. Food-container or lunch-box. No. 1,310,571; July 22; v. 264; p. 568.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Friction-top can. No. 1,309,628; July 15; v. 264; p. 362.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Burner-stand. No. 1,310,830; July 22; v. 264; p. 617.

Houghton, Alexis C., Fayetteville, N. Y., assignor to Remet-Solvay Company, Solvay, N. Y. Manufacture of phenol. No. 1,308,757; July 8; v. 264; p. 166.

Houlehan, Arthur E., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Apparatus for the manufacture of diphenylamine. No. 1,308,356; July 1; v. 264; p. 64.

Housum, Chenoweth, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Condenser. No. 1,309,808; July 15; v. 264; p. 397.

Howe, Grant W., Hornepayne, Ontario, Canada. Animal-trap. No. 1,310,340; July 15; v. 264; p. 494.

Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Automatic train-control system. No. 1,308,543; July 1; v. 264; p. 97.

Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Contact-shoe for automatic train-control systems. No. 1,308,544; July 1; v. 264; p. 97.

Hoyt, Ezra S., Los Angeles, Calif. Automatic water-heater. No. 1,310,160; July 15; v. 264; p. 402.

Hoyt, Homer J. (See Welton and Hoyt.)

Hoyt, Jackson C., Denver, Colo. Automobile-signal. No. 1,308,284; July 1; v. 264; p. 51.

Hubbard, Cecil R., Haden, and D. M. Cooper, Ambridge, assignors to National Metal Molding Company, Pittsburgh, Pa. Electrical fitting. No. 1,310,191; July 15; v. 264; p. 468.

Hubbard, Richard W., Ashtabula, Ohio. Hinge. No. 1,309,029; July 15; v. 264; p. 395.

Hubbard, William S., Leicester, England. Machine for affixing measurement tickets or other tickets to fabrics and the like. No. 1,309,000; July 8; v. 264; p. 224.

Huer, Samuel J., Newark, and E. J. Schwannhauser, Jersey City, N. J. Process and mechanism for melting borings. No. 1,309,851; July 15; v. 264; p. 406.

Huiler, Simon, Fort Worth, Tex. He-carrier. No. 1,310,403; July 15; v. 264; p. 506.

Hudson, Allen. (See Osterberg, Carl T., assignor.)

Huebner, Joseph W. (See Huebner, William J. and J. W.)

Huebner, William J. and J. W., Milwaukee, Wis. Automobile direction-indicator. No. 1,308,240; July 1; v. 264; p. 43.

Huestis, Charles A., Elmhurst, N. Y. Solution for and process of hardening steel. No. 1,310,020; July 15; v. 264; p. 437.

Huey, George W., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Motor-control system. No. 1,308,589; July 1; v. 264; p. 100.

Hug, Ernst. (See Guzenheim and Hug.)

Hughes, Arthur S., Mansfield, Ohio. Toilet partition. No. 1,311,220; July 29; v. 264; p. 723.

Hughes, Thomas M., San Jose, Calif. Hose attachment. No. 1,310,860; July 22; v. 264; p. 623.

Huidt, Sven, Stockholm, Sweden, assignor to Norsk Elektrisk Metalindustri Aktieselskab, Sarpsborg, Norway. Condenser for zinc vapors. No. 1,311,604; July 29; v. 264; p. 793.

Hulse, George E., Newark, N. J., assignor to Safety Car Heating & Lighting Company. Lamp construction. No. 1,309,630; July 15; v. 264; p. 363.

Hultgren, Axel G. E., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Means for removing hardened annular bodies from the hardening liquid. No. 1,308,077; July 1; v. 264; p. 13.

Hultgren, Axel G. E., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Hardening liquids of revolution. No. 1,309,137; July 8; v. 264; p. 237.

Humes, Guy B., Chicago, Ill. Control-lever detent. No. 1,311,400; July 29; v. 264; p. 755.

Humphrey, Ernest N., New Britain, Conn. Fastener for curtains and the like. No. 1,308,545; July 1; v. 264; p. 98.

Humphrey Gas Pump Company. (See Humphrey and Russell, assignors.)

Humphrey, Herbert A., London, and W. J. Russell, Wolverhampton, England, assignors to Humphrey Gas Pump Company. Apparatus for pumping fluid. No. 1,309,043; July 15; v. 264; p. 424.

Humphrey, Herbert A., London, and W. J. Russell, Wolverhampton, England, assignors to Humphrey Gas Pump Company. Pump. No. 1,311,166; July 29; v. 264; p. 712.

Humphrey, Herbert S., Kalamazoo, Mich. Water-heater. No. 1,308,078; July 1; v. 264; p. 13.

Humphreys, Edward C. (See Archer and Humphreys.)

Hungerford, Henry H. (See Tomlinson and Hungerford.)

Huning, Louis B., Philadelphia, Pa. Adjustable coffee-percolator. No. 1,309,414; July 8; v. 264; p. 288.

Hunt, Joseph H. (See Allen, Sherman T., assignor.)

Hunter, Carl F. (See Barker, John P., assignor.)

Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Everlasting Valve Co. Valve (Release). No. 14,087; July 15; v. 264; p. 507.

Hunter, William F., Arcata, assignor to one-half to C. L. Koster, San Francisco, Calif. Gaseous-fuel mixer. No. 1,311,071; July 22; v. 264; p. 661.

Huntoon, William C., Providence, R. I. Collapsible tube. No. 1,310,083; July 15; v. 264; p. 448.

Huntoon, William C., Providence, R. I. Puncture-plug. No. 1,310,831; July 22; v. 264; p. 617.

Hupp Motor Car Corporation. (See Watts, Frank E., assignor.)

Hurd, Ben A., et al., trustees. (See Gray, Winfield H., assignor.)

Hurd, Hubbard F., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Soft fold-collar. No. 1,311,520; July 29; v. 264; p. 778.

Huseby, Albert A., Chicago, Ill. Reproducer for talking-machines. No. 1,308,358; July 1; v. 264; p. 64.

Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Electric furnace. No. 1,310,341; July 15; v. 264; p. 491.

Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Purifying aluminous materials. No. 1,310,342; July 15; v. 264; p. 495.

Hutchins, Thomas W. S., Middlewich, England. Manufacture of lampblack. No. 1,309,070; July 8; v. 264; p. 224.

Hutchinson, Joseph, and C. C. Hamilton, Gull Lake, Saskatchewan, Canada. Damper for stove-pipes. No. 1,308,492; July 1; v. 264; p. 88.

Hutchinson, William A., Charleston, S. C. Drier. No. 1,308,241; July 1; v. 264; p. 43.

Hutchinson, William S., Oryster Bay, N. Y. Drum-brake. No. 1,310,992; July 22; v. 264; p. 646.

Hutton, William, and W. Jorgensen, Omaha, Nebr. Storm sewer-inlet. No. 1,311,810; July 29; v. 264; p. 833.

Hutty, Harry F., et al. (See Lamberson, George E., assignor.)

Hymans, Frederick, Glen Ridge, N. J. Bell-holst. No. 1,309,632; July 15; v. 264; p. 403.

Hymans, Frederick, Glen Ridge, assignor to Otis Elevator Company, Jersey City, N. J. Governor. No. 1,309,631; July 15; v. 264; p. 365.

Hypes, Layman S., Bluefield, W. Va. Adjustable clevis attachment for plows. No. 1,311,230; July 29; v. 264; p. 723.

I. R. Kleinert Rubber Company. (See Ginzburg, Victor, assignor.)

Ide, Harry L. (See Currier and Ide.)

Ido, Harry L. (See Maurer, Henry E., Jr., assignor.)

Iles, Albert S., Birmingham, England. Apparatus for playing table and like games. No. 1,310,482; July 22; v. 264; p. 551.

Ilg, Robert A., Chicago, Ill. Air washer and humidifier. No. 1,309,737; July 15; v. 264; p. 585.

Ilia, Alphonse, Rochester, N. Y. Machine for cutting noodles. No. 1,310,313; July 15; v. 264; p. 495.

Imazumi, Tatsuro, Seattle, Wash. Canteen-filter. No. 1,308,242; July 1; v. 264; p. 43.

Indahl, Mauritz C., Philadelphia, Pa. Driving mechanism. No. 1,308,634; July 1; v. 264; p. 115.

Independent Filter Press Co. (See Hagstrom, Joel E., assignor.)

Index Viable, Incorporated. (See Hayes, Robert D., assignor.)

Indian Packing Company. (See Boecher, Edward, assignor.)

Individual Drinking Cup Company. (See Luellen, Lawrence W., assignor.)

Ignalls, Willis A., Troy, N. Y. Knitting-machine. No. 1,309,288; July 8; v. 264; p. 264.

Inman, David W., Versailles, Ohio. Combination paddle and tones. No. 1,308,359; July 1; v. 264; p. 64.

Inman, Earl R., Portland, Oreg. Wood-splitting machine. No. 1,310,640; July 22; v. 264; p. 585.

Intercontinental Company. (See Bullard, Herbert A., assignor.)

Intercontinental Company. (See Saliger, Alois B., assignor.)

International Arms and Fuse Company. (See Roberts, Abel H., assignor.)

International Clay Machinery Company. (See McElroy, Roy H., assignor.)

International Conveyor Corporation. (See Stuart, Francis L., assignor.)

International Harvester Company. (See Burgess, Edward W., assignor.)

International Harvester Company. (See Griever, Albert, assignor.)

International Harvester Company. (See Morey, James A., assignor.)

International Harvester Company. (See Sharp, Charles S., assignor.)

International Harvester Company. (See Sharp, James A., assignor.)

International Money Machine Company. (See Hawley, Amos H., assignor.)

International Money Machine Company. (See Mauo, Miles H., assignor.)

International Munitions Company. (See Farrell, Joseph E., Jr., assignor.)

International Munitions Company. (See Nichols, Frank L., assignor.)

International Paper Company. (See Dugan, Frederic, assignor.)

International Precipitation Company. (See Schmidt, Arthur A., assignor.)

International Time Recording Company of New York. (See Bryce, James W., assignor.)

International Time Recording Company, of New York. (See Krotter, William F., assignor.)

Ireland, Ward S., St. Louis, Mo., and W. E. Lippert, Cincinnati, Ohio, assignors to National Shorthand Machine Company, St. Louis, Mo. Type-writing machine. No. 1,310,842; July 22; v. 264; p. 617.

Irvine, James A., New York, N. Y. Smoking-pipe. No. 1,310,404; July 15; v. 264; p. 506.

Irwin, Samuel D., Flordada, Tex. Repairing aluminum castings. No. 1,309,033; July 8; v. 264; p. 218.

Isbell, John A. W. (See Wood and Isbell.)

Isberg, Henry, Portland, Oreg. Game apparatus. No. 1,310,415; July 22; v. 264; p. 540.

Israel, Lester L. (See McDowell and Israel.)

Istaya, Douglas J., Los Angeles, Calif. Meat-grinding machine. No. 1,310,572; July 22; v. 264; p. 568.

J. W. Cruikshank Engineering Company. (See Cruikshank, James W., assignor.)

Jaborg Bros. (See Pluckney, Bryan D., assignor.)

Jack, Alexander G. M. (See Hadfield and Jack.)

Jack, Alexander G. M. (See Hadfield, Jack, Milne, and Parker.)

Jackson, Winney W., Philadelphia, Pa. Plow. No. 1,308,360; July 1; v. 264; p. 64.

Jackson, Carrie L., Poplin, Wis. Flexible axle. No. 1,309,044; July 15; v. 264; p. 424.

Jackson, Ed., Thurber, Tex. Manually-operated coal-mining machine. No. 1,309,477; July 8; v. 264; p. 290.

Jackson, George R., Guelph, Ontario, Canada. Torpedo-making machine. No. 1,308,301; July 1; v. 264; p. 64.

Jackson Machine Tool Co. (See Higgins, Eugene, assignor.)

Jacobs, Alexander L., St. Louis, Mo., assignor of one-fourth to A. J. Franke and one-fourth to L. N. Franke, St. Louis, Mo. Drying and shrinking device. No. 1,308,951; July 8; v. 264; p. 201.

Jacobs, Charles B., Bloomfield, N. J., assignor, by mesne assignments, to Air Reduction Company, Incorporated. Making nitrogen compound. No. 1,311,231; July 29; v. 264; p. 723.

Jacobs, Charles B., Bloomfield, N. J., assignor, by mesne assignments, to Air Reduction Company, Incorporated. Separation of cyanid compounds from other substances. No. 1,311,232; July 29; v. 264; p. 723.

Jaculis, Janna, East Chicago, Ind. Stove. No. 1,311,097; July 29; v. 264; p. 810.

Jager, Friedman R., Oak Park, Ill. Timing mechanism. No. 1,310,702; July 22; v. 264; p. 592.

Jaffe, Harry, Chicago, Ill. Radiator for internal-combustion engines. No. 1,310,410; July 22; v. 264; p. 540.

Jakobson, Thomas T., Los Angeles, Calif. Music-leaf turner. No. 1,311,123; July 22; v. 264; p. 670.

James, George S., Birmingham, England. Manufacture of seat-pillar stays and chain-stays of cycle-frames. No. 1,308,591; July 1; v. 264; p. 106.

James H. Boye Manufacturing Company. (See Boye, James H., assignor.)

Jameson, George P., assignor to The Thomas P. Taylor Co., Bridgeport, Conn. Child's and miss's waist. No. 1,309,135; July 8; v. 264; p. 237.

Janes, Edwin H., Cleveland Heights, Ohio. Wheel. No. 1,309,094; July 8; v. 264; p. 229.

Janes, Edwin H., Cleveland Heights, Ohio. Wheel. No. 1,309,095; July 8; v. 264; p. 229.

Jankowsky, Lazlo, Toronto, Ontario, Canada. Treating commercial calcium carbide. No. 1,308,243; July 1; v. 264; p. 43.

Jansen, Henry, Omaha, Nebr. Halter-releasing device. No. 1,309,034; July 8; v. 264; p. 218.

Jaques, Fernando O., Jr., Providence, assignor to The Central Tool Company, Cranston, R. I. Gage. No. 1,308,495; July 1; v. 264; p. 83.

Jaques, Fernando O., Jr., Providence, assignor of one-half to H. C. Peckham, Cranston, R. I. Making cast-iron nuts. No. 1,311,449; July 29; v. 264; p. 764.

Jasculca, Isadore, Milwaukee, Wis. Burglar-alarm. No. 1,311,233; July 29; v. 264; p. 723.

Jasinski, Piotr, assignor of one-half to W. Czerwinski, Welland, Ontario, Canada. Boat. No. 1,311,350; July 29; v. 264; p. 746.

Jasper, Charles. (See Kovacs, Louis, assignor.)

Jay, Webb, Chicago, Ill. Vacuum fuel-feed device. No. 1,308,648; July 8; v. 264; p. 182.

Jay, Webb, Chicago, Ill. Indicator for fuel-tanks. No. 1,308,905; July 8; v. 264; p. 193.

Jay, Webb, Chicago, Ill. Combined cooling and liquid-feed system. No. 1,309,085; July 15; v. 264; p. 431.

Jay, Webb, Chicago, Ill. Combined carburetor and vacuum-feed device. No. 1,311,107; July 29; v. 264; p. 712.

Jeffries, Isaac B., Llanelli, Wales. Air-tube for pneumatic tires and process of manufacturing the same. No. 1,309,657; July 15; v. 264; p. 376.

Jenckes Knitting Machine Company. (See Miller, Max C., assignor.)

Jendral, Jacob, Barnesboro, Pa. Rail-brake. No. 1,311,072; July 22; v. 264; p. 661.

Jenkins, Charles F., Washington, D. C. Motion-picture shutter. No. 1,308,404; July 1; v. 264; p. 86.

Jenkins, Charles F., assignor to The Graphoscope Company, Washington, D. C. Motion-picture-projecting apparatus. No. 1,311,073; July 22; v. 264; p. 661.

Jenkins, Henry C., assignor to Newell & Neil, New York, N. Y. Periscope. No. 1,309,478; July 8; v. 264; p. 299.

Jenkins, John E. (See Richmond, Walter, assignor.)

Jenner, Horace W., Lawrenceville, Ill. Nut-lock. No. 1,308,285; July 1; v. 264; p. 61.

Jennings, Francis A., Harrow, England. Rotary internal-combustion engine. No. 1,311,401; July 29; v. 264; p. 735.

Jensen, George C., Oakland, Calif. Combined shift-lock and retainer. No. 1,309,852; July 15; v. 264; p. 406.

Jensen, George C., Oakland, Calif. Shift-lock mechanism. No. 1,309,853; July 15; v. 264; p. 406.

Jespersen, Thomas, Neenah, Wis. Removing printers' ink from paper-stock. No. 1,311,503; July 29; v. 264; p. 786.

Jespersen, Thomas, Neenah, Wis. Device for removing printers' ink from printed matter. No. 1,311,504; July 29; v. 264; p. 786.

Jesup, Nelson R., Stamford, Conn., assignor to Merchants Profit Sharing Corporation, New York, N. Y. Commercial certificate. No. 1,311,698; July 29; v. 264; p. 810.

Jewett, John C. and W. A., San Francisco, Calif., assignors, by mesne assignments, of one-half to A. J. Howie, Jr., and one-half to J. F. Barnett. Insect catching and killing device. No. 1,308,952; July 8; v. 264; p. 201.

Jewett, Willard A. (See Jewett, John C. and W. A.)

Jockims, Charles H., Ansonia, Conn. Percussion-shell fuse. No. 1,309,479; July 8; v. 264; p. 209.

Joeger, Frank, Weingarten, Mo. Broom-corn cleaner. No. 1,311,074; July 22; v. 264; p. 662.

Joerin, Albert E. (See Joerin, Charles, Jr., and A. E.)

Joerin, Charles, Jr., and A. E., Detroit, Mich. Water heater and filter. No. 1,309,892; July 15; v. 264; p. 414.

Johnson, Carl S., Montclair, N. J. Extension-window. No. 1,310,707; July 22; v. 264; p. 611.

Johnson, Emil G., Chicago, Ill. Power-transmission mechanism. No. 1,310,530; July 22; v. 264; p. 560.

John B. Adt Company. (See Adt, John B., assignor.)

John Douglas Company, The. (See McNeill, Daniel W., assignor.)

John I. Thornycroft & Co. (See Thornycroft, Tom, assignor.)

John I. Thornycroft & Company, Limited. (See Donaldson and Mackie, assignors.)

John Lauson Manufacturing Company. (See Edens, Henry N., assignor.)

John, William, Morriston, Swansea, Wales. Furnace for annealing metal plates. No. 1,310,911; July 22; v. 264; p. 631.

Johns-Fratt Company, The. (See Cole, Robert C., assignor.)

Johnson, Adler G., Fort Scott, Kans. Button. No. 1,308,079; July 1; v. 264; p. 11.

Johnson, Albert T., Stratford, Conn. Car-strap. No. 1,311,075; July 22; v. 264; p. 662.

Johnson, Alfred E., Racine, Wis. Airplane. No. 1,311,076; July 22; v. 264; p. 662.

Johnson, Andrew, Haskell, N. J. Projectile. No. 1,311,521; July 29; v. 264; p. 778.

Johnson, Andrew J., Green Bay, Wis. Lantern. No. 1,309,893; July 15; v. 264; p. 414.

Johnson, Arthur A., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,309,854; July 15; v. 264; p. 406.

Johnson, Arthur C. (See Newburg, Carl O., assignor.)

Johnson, Carl E., St. Paul, Minn. Demountable traction-wheel. No. 1,309,653; July 15; v. 264; p. 366.

Johnson, Carl E., St. Paul, Minn. Universal joint. No. 1,310,239; July 15; v. 264; p. 476.

Johnson, Charles W., Pasco, Wash. Antiskidding device. No. 1,309,526; July 8; v. 264; p. 272.

Johnson, Charley L., San Diego, Calif., assignor to Electric Horse Manufacturing and Amusement Co., Phoenix, Ariz. Motor-propelled horse. No. 1,308,425; July 1; v. 264; p. 10.

Johnson, Clarence C., and J. F. D. Hoge, New York, N. Y., assignors to American District Telegraph Company, Jersey City, N. J. Signal system. No. 1,311,650; July 29; v. 264; p. 802.

Johnson, Clinton, Columbus, Ohio. Toy vehicle. No. 1,309,855; July 15; v. 264; p. 406.

Johnson, Edward H., New York, N. Y. Transportation-case. No. 1,310,161; July 15; v. 264; p. 462.

Johnson, Erich, Cleveland, Ohio. Whopper for eggs, cream, or the like. No. 1,308,953; July 8; v. 264; p. 201.

Johnson Fare Box Company. (See Johnson, Jay M., assignor.)

Johnson Fare Box Company. (See Woodward, Arthur H., assignor.)

Johnson, Felix G., Clarinda, Iowa. Pig-farrowing house. No. 1,309,071; July 8; v. 264; p. 225.

Johnson, Frank, assignor to Cadillac Motor Car Company, Detroit, Mich. Motor-vehicle gear-shifting lever. No. 1,308,495; July 1; v. 264; p. 89.

Johnson, Fred V., Berkeley, Calif. Tractor. No. 1,310,417; July 22; v. 264; p. 540.

Johnson, Hutson A., Brooklyn, N. Y. Aeroplane. No. 1,310,344; July 15; v. 264; p. 495.

Johnson, James A., assignor of one-half to E. D. Brown, Stockville, Neb. Electrically-operated railway-switch. No. 1,309,524; July 8; v. 264; p. 272.

Johnson, James A., assignor of one-half to J. J. Remm, Chicago, Ill. Shock-absorber. No. 1,310,021; July 15; v. 264; p. 437.

Johnson, Jay M., assignor, by mesne assignments, to Johnson Fare Box Company, Chicago, Ill. Coin and ticket fare register. No. 1,310,833; July 22; v. 264; p. 618.

Johnson, Jay M. C., Seattle, Wash. Thread-cutting attachment. No. 1,311,125; July 22; v. 264; p. 671.

Johnson, John W., Waterville, Kans. Measuring-faucet. No. 1,309,688; July 15; v. 264; p. 376.

Johnson, Leonard T., Boston, Mass. Scale. No. 1,309,436; July 6; v. 264; p. 292.

Johnson, Mary R., Holasevau, Manitoba, Canada. Preserving and canning rack. No. 1,308,244; July 1; v. 264; p. 43.

Johnson, Mason L. (See Body, Long, Johnson, Kilgore, and Mervins.)

Johnson, Sarah, executrix. (See Johnson, executrix, assignor of one-half to W. C. Shultz, Montclair, N. J. Fluid-clutch. No. 1,311,279; July 29; v. 264; p. 732.

Johnson, Walter, Middletown, Conn. Toy aeroplane. No. 1,311,351; July 29; v. 264; p. 746.

Johnston, Clarence L., Oakland, Calif., assignor to Pacific Hurt Company, Limited, Toronto, Ontario, Canada. Manifold sales-book. No. 1,309,289; July 8; v. 264; p. 265.

Johnston, Roy R., Cosmopolis, Wash. Grain-separator. No. 1,308,466; July 1; v. 264; p. 89.

Joldon, Charles J., Hartford, Conn. Firearm. No. 1,310,397; July 15; v. 264; p. 505.

Jolly, Benjamin H., Raleigh, N. C. Insect-catcher. No. 1,308,407; July 1; v. 264; p. 89.

Joly, Charles J., Ennis, Tex. Knockdown extension covered wagon-bed. No. 1,309,856; July 15; v. 264; p. 407.

Jones and Baker. (See Herter, Rudolph H., assignor.)

Jones, Carroll L., Cheriton, Va. Car-strap. No. 1,309,935; July 8; v. 264; p. 218.

Jones, Charles A., Hillsboro, N. H. Trolley-supporting device. No. 1,310,345; July 15; v. 264; p. 495.

Jones, Charles E., assignor to Metal Arts & Crafts Co., Chicago, Ill. Lighting-fixture. No. 1,309,557; July 15; v. 264; p. 407.

Jones, Deyo, Detroit, Mich. Lubricating device for locomotive-rod-pin connections. No. 1,310,531; July 22; v. 264; p. 561.

Jones, Edwin C., Toronto, Ontario, Canada. Garment-supporter. No. 1,310,084; July 15; v. 264; p. 448.

Jones, Frederick R., assignor to Buffalo Co-operative Store Company, Buffalo, N. Y. Incinerator. No. 1,311,522; July 29; v. 264; p. 778.

Jones, James E. (See Newdick, Norton A., assignor.)

Jones, John, Minneapolis, Minn. Roller-mill. No. 1,311,352; July 29; v. 264; p. 746.

Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Coating-machine. No. 1,309,858; July 15; v. 264; p. 407.

Jones, Joseph W., St. Louis, Mo. Metallic building structure. No. 1,311,820; July 29; v. 264; p. 833.

Jones-Powers Carburetor Company, The. (See Powers, John T., assignor.)

Jones, Ruel A., Covington, Ky. Soap-pressing machine. No. 1,309,980; July 15; v. 264; p. 431.

Jones, Thomas L. (See Scruggs, and Jones.)

Jones, Walter A. (See De Vaughn, Harry E., assignor.)

Jones, Walter A. (See Waggoner, Chaucney W., assignor.)

Jones, Walter P. (See Weatherly, William G., assignor.)

Jones, Whitney B., Newark, N. J., assignor to Hutterworth-Judson Corporation. Brown dyestuff. No. 1,310,532; July 22; v. 264; p. 501.

Jordan, John W., Philadelphia, Pa. Terminal connector. No. 1,310,601; July 22; v. 264; p. 585.

Jorgensen, William. (See Hutton and Jorgensen.)

Jory, George W., Marysville, Calif. Attachment for harvesters and other agricultural machines. No. 1,309,689; July 15; v. 264; p. 377.

Joule, William, assignor to The Nairn Linoleum Company, Kearney, N. J. Linoleum-rug manufacture. No. 1,310,346; July 15; v. 264; p. 495.

Julihn, Louis G. (See Culverwell, Joseph F., assignor.)

Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic-bulb turbine. No. 1,310,622; July 15; v. 264; p. 437.

Junkin, Charles, Milwaukee, Wis. Cheese-curd mill. No. 1,309,525; July 8; v. 264; p. 272.

Kahakjian, Dorian H., Lansdowne, Pa. Impregnation of water with radium emanations. No. 1,308,139; July 8; v. 264; p. 237.

Kahn, Bertrand R., Cincinnati, Ohio. Fuel-tank. No. 1,309,526; July 8; v. 264; p. 272.

Kahrs, Otto, Christiania, Norway. Driving arrangement for pivoted ships' derricks. No. 1,311,234; July 29; v. 264; p. 724.

Kaisling, William, assignor to Kellogg Switchboard & Supply Company, Chicago, Ill. Heat element for engine-manifolds. No. 1,310,535; July 22; v. 264; p. 561.

Kansas City Refining Company, The. (See Lasher, Henry M., assignor.)

Kanster, Jacob, assignor of one-third to T. J. Walsh and one-third to F. Walsh, Newark, N. J. Hinge. No. 1,311,651; July 29; v. 264; p. 802.

Karfol, Edward, Brooklyn, N. Y. Lamp-shade. No. 1,310,347; July 15; v. 264; p. 495.

Karton, Isidor, Brooklyn, N. Y. Means for screening or obscuring ships. No. 1,310,533; July 22; v. 264; p. 561.

Kasel, Otto, New York, N. Y. Die. No. 1,308,178; July 1; v. 264; p. 31.

Kasson, Rutgers S., Keeseville, N. Y. Brooder. No. 1,310,348; July 15; v. 264; p. 495.

Kawabuchi, Sadagiro, Tokyo, Japan. Disinfecting apparatus. No. 1,309,850; July 15; v. 264; p. 407.

Kay, Charles F., Spokane, Wash. Signalling device. No. 1,308,498; July 1; v. 264; p. 89.

Keefe, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Recording-lock. No. 1,309,437; July 8; v. 264; p. 292.

Keefe, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Lock. No. 1,309,438; July 8; v. 264; p. 292.

Keefe, Thomas A., assignor to The Recording Devices Company, Dayton, Ohio. Lock. No. 1,309,439; July 8; v. 264; p. 292.

Keenan, Catherine C. (See Keenan, Daniel and C. C.)

Keenan, Daniel T. and Catherine C., Philadelphia, Pa. Automobile or tire theft alarm. No. 1,310,340; July 15; v. 264; p. 490.

Keenan, Edward H., P. Christensen, and R. Rasmussen, Stillwater, Minn., assignors of one-half to Twin City Forge & Foundry Company. Transcribing instrument. No. 1,309,600; July 8; v. 264; p. 323.

Keenan, John F., Providence, R. I. Valve. No. 1,310,407; July 22; v. 264; p. 554.

Keesey, John A., Brooklyn, N. Y., and A. Shedlock, Canandaigua, Conn.; said Shedlock assignor to said Keesey. Signalling apparatus. No. 1,310,023; July 22; v. 264; p. 578.

Kell, Otto W., New York, assignor of one-half to O. C. Stets, Woodhaven, N. Y. Manufacturing transparent surfaces. No. 1,308,426; July 1; v. 264; p. 76.

Kelly, William J. (See Spencer and Kelly.)

Kelth, Irving L., Haverhill, Mass. Cementing-machine. No. 1,311,605; July 29; v. 264; p. 703.

Kellenberger, Francis A., St. Louis, Mo. Safety-guard for power-presses. No. 1,309,527; July 8; v. 264; p. 309.

Keller Pneumatic Tool Company. (See Schluke, Albert, assignor.)

Kelley, George S. (See Landry and Kelley.)

Kelley, John M., Kansas City, Mo. Rod-pulling and clamping device. No. 1,309,034; July 15; v. 264; p. 366.

Kelley, John M., Rochester, N. Y. Pump. No. 1,309,987; July 15; v. 264; p. 431.

Kelley, John M., and W. E. Pratt, Rochester, N. Y. Aluminizing means for furnaces. No. 1,310,055; July 15; v. 264; p. 448.

Kelley, Leslie C., South San Francisco, Calif. Pedomotor. No. 1,308,675; July 1; v. 264; p. 122.

Kellington, John, New Westminster, British Columbia, Canada. Fish salting and desalting machine. No. 1,310,662; July 22; v. 264; p. 585.

Kellner, Gustav A. H., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens-measuring instrument. No. 1,309,359; July 8; v. 264; p. 277.

Kellogg Manufacturing Co. (See Hazard, George E., assignor.)

Kellogg Switchboard & Supply Company. (See Currier and Ide, assignors.)

Kellogg Switchboard & Supply Company. (See Kaisling, William, assignor.)

Kellogg Switchboard and Supply Company. (See Weiss, Alfred H., assignor.)

Kellum, John J., and W. E. Heddleston, Red Lodge, Mont. Emergency-brake. No. 1,309,945; July 15; v. 264; p. 424.

Kelly, George B., Jamaica Plain, Mass., assignor to The Acolian Company. Music-sheet. No. 1,308,592; July 1; v. 264; p. 107.

Kelly, John A. (See Demuth, Alfred M., assignor.)

Kelly, Samuel. (See Kelly, Thomas and S.)

Kelly, Thomas and S., Glasgow, Scotland. Tube-bending apparatus. No. 1,309,250; July 8; v. 264; p. 257.

Kelsey, John, assignor to Kelsey Wheel Company, Inc., Detroit, Mich. Wheel-hub. No. 1,309,804; July 15; v. 264; p. 597.

Kelsey, John, assignor to Kelsey Wheel Company, Inc., Detroit, Mich. Securing means for split tire-holding rims. No. 1,311,126; July 22; v. 264; p. 671.

Kelsey Wheel Company. (See Kelsey, John, assignor.)

Kelso, William. (See McConway and Kelso.)

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Transition car-coupling. No. 1,309,290; July 8; v. 264; p. 265.

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car-coupling. No. 1,309,291; July 8; v. 264; p. 265.

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft-rigging mechanism. No. 1,311,699; July 29; v. 264; p. 811.

Kemp, William, St. Louis, Mo. Gas-analyzer. No. 1,308,788; July 8; v. 264; p. 171.

Kemp, William W., and W. H. Van Horn, Baltimore, Md. Method of and apparatus for producing blasts of heated air. No. 1,311,235; July 29; v. 264; p. 724.

Kempton, Willard H., Wilkensburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Manufacturing composite articles. No. 1,309,757; July 15; v. 264; p. 359.

Kempton, Willard H., Wilkensburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Composite article. No. 1,309,758; July 15; v. 264; p. 359.

Kendall, David, assignor to The Alliance Machine Company, Alliance, Ohio. Furling-manipulator. No. 1,308,593; July 1; v. 264; p. 107.

Kendall, Hazel C., Alliston, assignor to A. Hall, Boston, Mass. Means for supplying moisture. No. 1,311,052; July 29; v. 264; p. 802.

Kendrick, William D., Miami, assignor of one-half to R. S. Knowles, Geronimo, and one-eighth to J. S. Van Buskirk, Miami, Ariz. Weather-strip. No. 1,311,127; July 22; v. 264; p. 671.

Kennedy, David, South Norwood, London, England. Fuse for projectiles. No. 1,310,350; July 15; v. 264; p. 496.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,308,504; July 1; v. 264; p. 107.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Slug-casting machine. No. 1,309,415; July 8; v. 264; p. 288.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,309,416; July 8; v. 264; p. 288.

Kennedy, George C., Waterloo, Iowa. Force-delivery syringe. No. 1,308,854; July 8; v. 264; p. 202.

Kennedy, Gusie M. (See Kennedy, Homer H., assignor.)

Kennedy, Homer H., assignor to G. M. Kennedy, Los Angeles, Calif. Sheet-metal-working tool. No. 1,311,853; July 29; v. 264; p. 746.

Kennedy, John L. (See Gross, Allan J., assignor.)

Kennedy, John L. (See Hopkins, Morton K., assignor.)

Kennedy, Joseph E., New York, N. Y. Oryatory crushing apparatus. No. 1,310,798; July 22; v. 264; p. 611.

Kenworthy Brothers Company. (See Kenworthy, Herbert F., assignor.)

Kenworthy, Herbert F., assignor to Kenworthy Brothers Company, Stoughton, Mass. Waterproof substitute for leather and the like. No. 1,310,024; July 22; v. 264; p. 578.

Kenworthy, Herbert F., Seltwater, assignor to Kenworthy Brothers Company, Stoughton, Mass. Porous substitute for leather and the like. No. 1,310,703; July 22; v. 264; p. 593.

Kephart, Harry C., Denver, Colo. Combined insurance-contract and hotel-receipt. No. 1,310,912; July 22; v. 264; p. 631.

Kepler, Carl S., Keosauqua, Iowa. Oiling device. No. 1,310,603; July 22; v. 264; p. 585.

Kerr Adjustable Strap Company. (See Badger, Oliver L., assignor.)

Kerr Turbine Company, The. (See Fernald, Benjamin O., assignor.)

Kerr Turbine Company. (See Hazalik, Henry J., assignor.)

Kershaw, Charles E., Manchester, N. H. Hinged last. No. 1,311,523; July 29; v. 264; p. 779.

Kershaw, Grindrod. (See Holt and Kershaw.)

Kessel, Joseph W., Brooklyn, N. Y. Fountain-pen clip. No. 1,309,046; July 15; v. 264; p. 424.

Keasler, Louis, Chicago, Ill., assignor to Non-Explosive Can and Tube Company. Filling-tube for explosive-liquid receptacles. No. 1,310,240; July 15; v. 264; p. 476.

Keasler, Louis, Chicago, Ill., assignor to Non-Explosive Can and Tube Company. Device for preventing back-firing into gasoline-receptacles or the like. No. 1,310,241; July 15; v. 264; p. 477.

Ketterling, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Electrical system for engines. No. 1,311,402; July 29; v. 264; p. 756.

Ketterling, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Electrical system for engines. No. 1,311,403; July 29; v. 264; p. 756.

Keres, Frederick G., assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Manufacture of molybdenum-tungsten alloy. No. 1,308,907; July 8; v. 264; p. 193.

Keys, William A., New York, N. Y. Neckwear. No. 1,310,192; July 15; v. 264; p. 468.

Khoury, Michel G., Rio de Janeiro, Brazil. Molding and awaging device. No. 1,308,758; July 8; v. 264; p. 166.

Kicklighter, Charles H., Atlanta, Ga. Electric welding. No. 1,310,418; July 22; v. 264; p. 541.

Kicklighter, Charles H., Atlanta, Ga. Electric welding metal plates. No. 1,310,419; July 22; v. 264; p. 541.

Kidder, Wellington P., Boston, Mass. Carburetor. No. 1,308,595; July 1; v. 264; p. 107.

Kiefer, Karl, Cincinnati, Ohio. Filter element. No. 1,311,280; July 29; v. 264; p. 732.

Kilborn, Karl B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treading-machine. No. 1,309,804; July 15; v. 264; p. 414.

Kilby, Herbert N., Cleveland, Ohio. Filter hood mechanism. No. 1,311,077; July 22; v. 264; p. 662.

Kilgore, Charles F. (See Body, Long, Johnson, Kilgore, and Mervins.)

Kilgour, David, Vancouver, British Columbia, Canada. Drift-pin. No. 1,311,128; July 22; v. 264; p. 671.

Killark Electric Manufacturing Company. (See Woolley, Walton D., assignor.)

Kilpatrick, Walter W., and E. T. Booth, Atlanta, Ga. Gasoline-vending machine. No. 1,308,713; July 1; v. 264; p. 129.

Klueck Engineering Company. (See Martens, Ludwig A., assignor.)

King, Bertell W., New York, N. Y. Paste-ejector. No. 1,311,354; July 29; v. 264; p. 740.
 King, Chauncey B. (See Raymond, Leonard F., assignor.)
 King, George H., and G. I. Roberts, Port Arthur, Tex., assignors to Gulf Refining Company, Pittsburgh, Pa. Manufacture of aluminum chloride. No. 1,308,080; July 1; v. 264; p. 14.
 King, John O., Los Angeles, Calif. Hydrocarbon-burner. No. 1,311,822; July 29; v. 264; p. 833.
 King, Patrick F. (See Parsons and King.)
 King, Roy D., assignor to Coin Controlled Lock Company, Chicago, Ill. Lock-guard. No. 1,310,834; July 22; v. 264; p. 618.
 Kingsbury, Elmer J., Chicago, Ill., assignor to G. H. Gamper, Columbus, Ohio. Illuminated sign or electrograph. (Reissue.) No. 1,468,2; July 8; v. 264; p. 324.
 Kinzbach, Frank, Sourlake, Tex. Machine for cleaning pipe-lines. No. 1,308,081; July 1; v. 264; p. 14.
 Kinney, George T., Kansas City, Mo. Clamp for tire-chains. No. 1,309,635; July 15; v. 264; p. 366.
 Kirby, John, Jr., assignor to The Dayton Manufacturing Company, Dayton, Ohio. Device for locking levers. No. 1,310,534; July 22; v. 264; p. 501.
 Kirchhoff, Ferdinand, Sr., Manitowish, Wis. Oven-ventilator. No. 1,308,789; July 8; v. 264; p. 171.
 Kirk, John T., Memphis, Tenn. Colter. No. 1,308,670; July 1; v. 264; p. 122.
 Kirkbridge, Edmund, Camden, N. J., assignor to Tybon Company, Wilmington, Del. Ribbon-inking machine. No. 1,311,625; July 22; v. 264; p. 578.
 Kirkham, Clarence A., Hammondport, assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y. Motor-cylinder. No. 1,310,913; July 22; v. 264; p. 631.
 Kittredge, John W., Akron, Ohio. Automatic power transmission. No. 1,311,236; July 29; v. 264; p. 724.
 Kitts, Ernest K. (See McIlhenny and Kitts.)
 Kjellgren, John G., Brooklyn, N. Y., and G. H. Stephenson, assignors to The Electric Railway Improvement Company, Cleveland, Ohio. Electric welding and apparatus for use therein. No. 1,309,547; July 15; v. 264; p. 424.
 Klüger, Hermann, Stuttgart, Germany, assignor to the Firm: Fortuna-Werke Spezialmaschinenfabrik, G. m. b. H., Stuttgart-Cannstatt, Germany. Measuring apparatus. No. 1,308,170; July 1; v. 264; p. 32.
 Klahn, Emil, New Vernon, N. J. Gyroscope. No. 1,309,636; July 15; v. 264; p. 366.
 Klahn, Emil, New Vernon, N. J. Gyro apparatus. No. 1,309,637; July 15; v. 264; p. 366.
 Klason, Frank, McPherson, Kans. Guiding device. No. 1,310,664; July 22; v. 264; p. 586.
 Kleaver, John F. (See Clark, James H., assignor.)
 Kleckler, Henry, assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y. Control system. No. 1,311,120; July 22; v. 264; p. 671.
 Klein, Albert, New York, N. Y. Attachment for water-closet seats. No. 1,308,590; July 1; v. 264; p. 107.
 Klein, Frank. (See Trost and Klein.)
 Klein, Frederick, trustee. (See Williams, Frederic S., assignor.)
 Klein, Mathias J., assignor of sixty one-hundredths to H. B. Koelker, New York, N. Y. Side-force and danger indicator. No. 1,309,574; July 8; v. 264; p. 318.
 Kleine, Franklin M., Minneapolis, Minn. Wrench. No. 1,309,860; July 15; v. 264; p. 467.
 Kleinrider, Peter, Cudahy, Wis. Water-cooled refrigerator. No. 1,310,665; July 22; v. 264; p. 586.
 Kline, Edward A., Montreal, Quebec, Canada, assignor to American Can Company, New York, N. Y. Cigar-box. No. 1,310,835; July 22; v. 264; p. 618.
 Klinker, Lawrence, San Francisco, Calif. Wheel-lock. No. 1,311,404; July 29; v. 264; p. 750.
 Klorer, Charles P., East Conemaugh, assignor of two-thirds to J. E. Zang, Johnstown, Pa. Joint for combined spot-light and trouble lamps. No. 1,309,360; July 8; v. 264; p. 278.
 Klosters Aktie Bolag. (See Ohlsson, Johan A., assignor.)
 Kluchna, John, Cicero, Ill. Ash-pan. No. 1,308,245; July 1; v. 264; p. 44.
 Kling, Paul R., assignor to The Cable Company, Chicago, Ill. Marking and perforating sheets. No. 1,310,420; July 22; v. 264; p. 541.
 Klunig, George, Streeter, N. D. Air-pump. No. 1,309,528; July 8; v. 264; p. 309.
 Knight American Patents Company. (See Porter, Finley R., assignor.)
 Knight, Herbert, New York, N. Y. Heel. No. 1,309,480; July 8; v. 264; p. 300.
 Knight, John S., La Jara, Colo. Trap-stake. No. 1,309,030; July 8; v. 264; p. 218.
 Knoblock, James W., assignor to American La France Fire Engine Company, Inc., Elmira, N. Y. Portable search-light. No. 1,309,140; July 8; v. 264; p. 237.
 Knowles, Robert S., et al. (See Kendrick, William D., assignor.)
 Knowlton, Cutler D., Rockport, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Resilient mounting for machinery. No. 1,309,759; July 15; v. 264; p. 389.
 Knowlton, Edward L. (See Whitley and Knowlton.)
 Knudsen, Knud, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Switch-lock. No. 1,309,361; July 8; v. 264; p. 278.

Knudsen, Knud, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Quick-break switch. No. 1,309,595; July 15; v. 264; p. 414.
 Knudsen, Knud, assignor to The Trumbull Electric Mfg. Co., Plainville, Conn. Inclosed switch. No. 1,310,103; July 15; v. 264; p. 403.
 Koutson, August, Mapleton, Minn. Heat-regulator for dough-raisers. No. 1,311,823; July 29; v. 264; p. 834.
 Knyvett, Reginald H., New York, N. Y. Wrist-watch. No. 1,309,988; July 15; v. 264; p. 432.
 Kobert, Frank P., Amityville, N. Y. Electric riveting apparatus. No. 1,309,638; July 15; v. 264; p. 367.
 Koch, Lydia R. (See Drasset, George H., Jr., assignor.)
 Koch, Lydia R. (See Thompson, Henry B., assignor.)
 Koch, Michael. (See Koch, William H. and M.)
 Koch, Rudolph C. (See Cogozzo, Antonio, assignor.)
 Koch, William F., Hillside, Colo. Hay-cocking machine. No. 1,310,573; July 22; v. 264; p. 569.
 Koch, William H. and M., Independence, Iowa. Test-cup for milking-machines. No. 1,308,082; July 1; v. 264; p. 14.
 Koehler, Charles H., Springfield, Ill. Efficiency-indicator for electric-car operation. No. 1,309,204; July 8; v. 264; p. 240.
 Koehler, Frederick W., Wilkinsburg, assignor to American Atmos Corporation, Wilkinsburg station, Pittsburgh, Pa. Regenerator for breathing apparatus. No. 1,309,806; July 15; v. 264; p. 414.
 Koepf, Paul H., Pittsburgh, Pa. Curtain-stretcher. No. 1,311,658; July 29; v. 264; p. 802.
 Koger, John J., Morristown, Tenn. Automobile power-transmitting apparatus. No. 1,309,481; July 8; v. 264; p. 300.
 Kohler, Nathan, assignor of one-half to N. F. Rader, New York, N. Y. Safety device for elevators. No. 1,310,993; July 22; v. 264; p. 646.
 Kohout, George A., assignor to Shear-Klean Grate Company, Chicago, Ill. Furnace-grate. No. 1,310,162; July 15; v. 264; p. 402.
 Kolbenstetter, Charles M., Detroit, Mich. Securing means for separable members. No. 1,308,900; July 8; v. 264; p. 193.
 Kolhede, Karl H. (See Stee and Kolhede.)
 Kollmorgen, Frederick L., G. Mountain Lakes, N. J. Periscope. No. 1,309,639; July 15; v. 264; p. 367.
 Klock, George L., and R. P. Martin, assignors to Universal Hammer Company, Seattle, Wash. Automatic hammer. No. 1,310,574; July 22; v. 264; p. 569.
 Klock, George L., and R. P. Martin, assignors to Universal Hammer Company, Seattle, Wash. Automatic hammer. No. 1,310,575; July 22; v. 264; p. 569.
 Koller, Frederick A., Washington, D. C. Radio method and apparatus. No. 1,311,654; July 29; v. 264; p. 802.
 Koltz, William J., Kingston, N. Y. Non-refillable container. No. 1,308,362; July 1; v. 264; p. 65.
 Koulislaw, Otto, assignor to The Otto Koulislaw Manufacturing Company, Cleveland, Ohio. Hinge. No. 1,309,579; July 8; v. 264; p. 319.
 Koontz, Victor R., Waynesboro, Pa. Vise. No. 1,310,351; July 15; v. 264; p. 496.
 Koors, August W., Duluth, Minn. Packing-crate. No. 1,310,352; July 15; v. 264; p. 496.
 Korn, Ralph H., New York, N. Y. Carriage for artillery. No. 1,308,280; July 1; v. 264; p. 51.
 Korth, Paul V., Detroit, Mich. Game apparatus. No. 1,310,483; July 22; v. 264; p. 552.
 Kosch, Demster K., Milwaukee, Wis. Fruit-picker. No. 1,308,077; July 1; v. 264; p. 122.
 Kosch, Mark, Washington, D. C. Permutation-lock. No. 1,310,704; July 22; v. 264; p. 503.
 Kositchek, Leo S., Chicago, Ill., assignor to Columbia Fastener Company, Muncie, Ind. No. 1,309,948; July 15; v. 264; p. 425.
 Koskinen, Kustaa R., Duluth, Minn. Freight-car door. No. 1,308,055; July 8; v. 264; p. 202.
 Koster, Carl L. (See Hunter, William F., assignor.)
 Kothe, Richard. (See Heymann, Drensel, Kothe, and Ossenbeck.)
 Kovacs, Louis, Chicago, Ill. Combination-switch. No. 1,310,354; July 15; v. 264; p. 497.
 Kovacs, Louis, assignor of one-third to C. Jasper, Chicago, Ill. Magnetic starting-switch. No. 1,310,353; July 15; v. 264; p. 496.
 Kozlowski, Wladyslaw, Forestville, Conn. Toilet. No. 1,311,405; July 29; v. 264; p. 750.
 Kraft, Frederick W., Berkeley, Calif. Wall-paper-pasting machine. No. 1,310,355; July 15; v. 264; p. 497.
 Kratze, William, assignor to Capitol Motors Corporation, Fall River, Mass. Automobile-spring. No. 1,310,193; July 15; v. 264; p. 468.
 Kramer, Ernest A. (See Allen, William H., assignor.)
 Krasnolemski, John, Joliet, Ill. Toy pistol. No. 1,310,754; July 22; v. 264; p. 602.
 Krause, Edwin. (See Seaver, William H., assignor.)
 Krauth, Albert, deceased, Hamilton, Ohio; F. G. Diesbach, administrator. Folding music-stand. No. 1,308,956; July 8; v. 264; p. 202.
 Krautter, William F., Chicago, Ill., assignor, by mesne assignments, to International Time Recording Company of New York, New York, N. Y. Mechanical motor. No. 1,310,028; July 15; v. 264; p. 437.
 Krauz, Josef, Franklin, N. H. Carrier. No. 1,308,759; July 8; v. 264; p. 160.
 Krawczyk, James, Syracuse, N. Y. Keyed sifter. No. 1,310,024; July 15; v. 264; p. 437.

Kreamer, Ethel H., Wheeling, W. Va. Mitten. No. 1,310,120; July 15; v. 264; p. 453.
 Kropacz, John, Rosedale, Alberta, Canada. Steam-whistle diaphragm. No. 1,311,355; July 29; v. 264; p. 747.
 Kroyer, John M., Stockton, Calif. Tractor. No. 1,308,790; July 8; v. 264; p. 171.
 Krug, Julius, and S. Schermann, St. Louis, Mo. Burglar-alarm. No. 1,309,529; July 8; v. 264; p. 309.
 Krug, William H., Oshkosh, Wis. Antiskid device for vehicles. No. 1,310,530; July 22; v. 264; p. 502.
 Kruse, Herman, Jersey City, and W. C. Kruse, Union, N. J. Ink. No. 1,309,292; July 8; v. 264; p. 263.
 Kruse, William C. (See Kruse, Herman and W. C.)
 Kucera, George, Grand Island, Nebr. Hack-saw. No. 1,311,078; July 22; v. 264; p. 602.
 Kuehne, Charles F., and P. Donaher, Oakland, Calif. Brake-staff. No. 1,308,363; July 1; v. 264; p. 65.
 Kuenstler, Richard, Chicago, Ill. Phonograph-stop. No. 1,310,484; July 22; v. 264; p. 552.
 Kulis, William J., Dayton, Ohio. Lock. No. 1,311,600; July 29; v. 264; p. 794.
 Kuba, Frank, and E. E. Shaller, assignors to American Electrical Heater Company, Detroit, Mich. Electrical heating unit. No. 1,310,004; July 22; v. 264; p. 046.
 Kubo, John J. (See Stiles, Linford S., assignor.)
 Kubne, Paul, Birmingham, Ala. Reinforcing-bar. No. 1,311,864; July 29; v. 264; p. 841.
 Kuhnert, Walter A. (See Winkle and Kuhnert.)
 Kuney, Agnes D., Earlville, Ill. Fly-guard. No. 1,308,597; July 1; v. 264; p. 108.
 Kurka, Mark, Toronto, Ontario, Canada. Flycatcher. No. 1,311,281; July 29; v. 264; p. 732.
 Kurpol, John, Helvetia, Pa. Comb and brush. No. 1,310,755; July 22; v. 264; p. 602.
 Kutebenreiter, Fred L., Springdale, Pa. Internal-combustion engine. No. 1,308,499; July 1; v. 264; p. 89.
 Kutchuk, Zachary, Southwest, Pa. Spring-tire. No. 1,308,908; July 8; v. 264; p. 193.
 Kvanstrom, Alfred T., Detroit, Mich. Collapsible-body insert for automobiles. No. 1,309,700; July 15; v. 264; p. 389.
 Kylin, Oskar, assignor to Foster Machine Company, Elkhardt, Ind. Clutch. No. 1,309,761; July 15; v. 264; p. 390.
 L. J. Mueller Furnace Company. (See Butler, Charles M., assignor.)
 L-W-F Engineering Company. (See Willard, Charles F., assignor.)
 La Clair, William, Oakville, Wash. Saw-filing gage. No. 1,308,247; July 1; v. 264; p. 44.
 La Crosse Flow Company. (See Davis and Cameron, assignors.)
 La France, Richard, assignor to The Owens Bottle Machine Company, Toledo, Ohio. Apparatus for handling glassware. No. 1,310,194; July 15; v. 264; p. 468.
 La Jole, Herbert J., Orange, N. J., assignor to Autoplane Company. Player piano for producing solo effects. No. 1,309,762; July 15; v. 264; p. 390.
 La Plant, Peter, Duluth, Minn. Horseshoe-calk. No. 1,310,990; July 22; v. 264; p. 647.
 La Porte, Norbert M., Baltimore, Md. Circulating system. No. 1,310,025; July 15; v. 264; p. 437.
 La Selva, Rocco, New York, N. Y. Rear signal for automobiles. No. 1,308,873; July 8; v. 264; p. 187.
 La Societe A. Lecompte et Cie. (See Gourju, Alexandre, assignor.)
 La Societe de Construction des Batignolles. (See Holtzbauger, Charles, assignor.)
 Laborda, Richard. (See Spreckles and Laborda.)
 Laborde, Anne, New York, N. Y. Combined hot-water bottle and douche-bag. No. 1,308,427; July 1; v. 264; p. 76.
 Lacey, Fred, Lowell, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeder mechanism for looms. No. 1,308,240; July 1; v. 264; p. 44.
 Laehman, Laurence S., assignor to Universal Electric Welding Company, New York, N. Y. Metal structure. No. 1,308,083; July 1; v. 264; p. 14.
 Laehman, Laurence S., assignor to Universal Electric Welding Company, New York, N. Y. Metal sash or frame. No. 1,308,428; July 1; v. 264; p. 76.
 Laehman, Maurice, assignor to Structural Pressed Steel Wheel Company, Inc., New York, N. Y. Metal wheel. No. 1,308,849; July 8; v. 264; p. 182.
 Lackawanna Steel Company. (See Boardman, Charles S., assignor.)
 Lacy, Burritt S., Sewaren, N. J., assignor to The Roessler & Hasselbacher Chemical Company, New York, N. Y. Photochemical chlorination. No. 1,308,760; July 8; v. 264; p. 160.
 Laid, Osmond Y., Danbury, Conn. Eyeglass-mounting. No. 1,309,072; July 8; v. 264; p. 225.
 Laley, Oscar J., Cleveland, Ohio. Airship. No. 1,311,237; July 29; v. 264; p. 724.
 Lake, Simon, Milford, assignor to The Lake Torpedo Boat Company of Maine, Bridgport, Conn. Submarine boat. No. 1,308,788; July 1; v. 264; p. 134.
 Lake Torpedo Boat Company, The. (See Lake, Simon, assignor.)
 Lakin, Winfield S., Brooklyn, N. Y. Extension-body for vehicles. No. 1,309,251; July 8; v. 264; p. 257.
 Lamb, John J., Detroit, Mich. Timer for internal-combustion engines. No. 1,310,485; July 22; v. 264; p. 552.

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Lamberson, George E., assignor of fifty-one per cent. to G. E. Lamberson, twenty-four per cent. to M. C. Pardee, twenty per cent. to D. M. Gildersleeve, and five per cent. to H. F. Hatty, Brooklyn, N. Y. Aircraft-projectile. No. 1,309,530; July 8; v. 264; p. 309.
 Lambert, Henry M., assignor to Lambert Tire and Rubber Company, Portland, Oreg. Tire-tread. No. 1,309,440; July 8; v. 264; p. 203.
 Lambert Tire and Rubber Company. (See Lambert, Henry M., assignor.)
 Lampert, Henry H., Chicago, Ill. Column-clamp. No. 1,308,084; July 1; v. 264; p. 14.
 Lamson Company, The. (See Hadden, Charles P., assignor.)
 Lamson Company, The. (See Pearsall, Albert W., assignor.)
 Lancaster, Frederick W., London, England. Aeroplane and apparatus for launching and receiving same. No. 1,311,000; July 29; v. 264; p. 811.
 Landon, Frederick M., Tacoma, Wash. Mower. No. 1,308,909; July 8; v. 264; p. 103.
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 Landry, Gertrude L., Pawtucket, and G. S. Kelley, Cranston, R. I.; said Kelley assignor to said Landry. Hair-retainer. No. 1,310,914; July 22; v. 264; p. 631.
 Lane, Alfred M., assignor to Monarch Metal Weather Strip Company, St. Louis, Mo. Fruit-tray. No. 1,310,800; July 22; v. 264; p. 611.
 Lane, George A., Peoria, Calif. Inner tube. No. 1,310,121; July 15; v. 264; p. 455.
 Lane, William, Melann, Ill. Seed-corn rack. No. 1,310,480; July 22; v. 264; p. 552.
 Lang, Johan G. V. (See Greenfield and Lang.)
 Langer, Julius J., New York, N. Y. Soldering-furnace. No. 1,308,657; July 8; v. 264; p. 202.
 Langford, Frank, Eureka, Calif. Treatment of clays and earths. No. 1,308,429; July 1; v. 264; p. 77.
 Langford, Walter K., Coalinga, Calif. Pipe-wrench. No. 1,310,986; July 22; v. 264; p. 646.
 Langhaar, Louis, Cincinnati, Ohio. Antifriction-bearing. No. 1,310,756; July 22; v. 264; p. 603.
 Lapham, De Forest A., and A. M. Loungway, Syracuse, N. Y. Tool-holder and reamer. No. 1,311,400; July 29; v. 264; p. 757.
 Laraway, Fred A., Cleveland, N. Y. Packing-holder. No. 1,311,450; July 29; v. 264; p. 764.
 Larcom, William S., Nogales, Ark. Check-holder. No. 1,309,327; July 8; v. 264; p. 272.
 Larson, Louis, Brooklyn, assignor to The Sundb Electric Company, New York, N. Y. Motor control. No. 1,309,640; July 15; v. 264; p. 367.
 Larsh, Everett P., assignor to The Burnett-Larsh Manufacturing Company, Dayton, Ohio. Mounting for fluid-pressure systems. No. 1,308,850; July 8; v. 264; p. 182.
 Larson, Andrew F., Portland, Oreg., assignor to Portland Industrial Company. Door-hanger. No. 1,309,205; July 8; v. 264; p. 240.
 Larson, David C., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Accelerating-magnet. No. 1,309,641; July 15; v. 264; p. 367.
 Larson, David C., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Reverse-phase relay. No. 1,309,642; July 15; v. 264; p. 368.
 Larson, David C., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Stop-motion apparatus. No. 1,311,055; July 29; v. 264; p. 808.
 Larson, Victor A., Chicago, Ill. Humidifying device. No. 1,310,705; July 22; v. 264; p. 593.
 Laeber, Henry M., assignor to The Kansas City Refining Company, Kansas City, Kans. Producing hydrochloric acid from sludge. No. 1,309,200; July 8; v. 264; p. 240.
 Laker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Lock for accumulator mechanism of adding-machines. No. 1,309,897; July 15; v. 264; p. 415.
 Laker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Automatic naught-stop for adding-machines. No. 1,309,898; July 15; v. 264; p. 415.
 Laker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Flexible connection. No. 1,311,545; July 29; v. 264; p. 780.
 Laker, William W., Brooklyn, assignor to Powers Accounting Machine Company, New York, N. Y. Flexible set-bar action for perforating-machines. No. 1,311,560; July 29; v. 264; p. 780.
 Latham, Albert, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Cutter-grinding device. No. 1,308,085; July 1; v. 264; p. 15.
 Latham, Chester A. (See De Haven, William L., assignor.)
 Latech, Jerome E., and G. N. Markle, Lincoln, Nebr. Adjustable guard for printers' galleys. No. 1,311,056; July 29; v. 264; p. 803.
 Latta, Milton N., Valentine, Nebr. Internal works of tubular wells. No. 1,309,788; July 15; v. 264; p. 385.
 Lattanzi, Angelo, Vancouver, British Columbia, Canada. Automatic railway-gate. No. 1,308,595; July 1; v. 264; p. 108.
 Lattimore, Lewis, Ronestee, S. D. Fork attachment. No. 1,309,949; July 15; v. 264; p. 425.

Laughlin, George F., Chicago, Ill. Brine-retaining valve. No. 1,308,986; July 1; v. 264; p. 15.
 Laurio, Lauroncius. (See Haller, Carl T., assignor.)
 Lauter Company. (See Lynde, Frank G., assignor.)
 Lavender, Herbert P., Walsall, England. Automatically-opening screwing-die. No. 1,309,141; July 8; v. 264; p. 238.
 Laveoath, J. M. (See De Long, Nelson, assignor.)
 Lavigne, Albert, Brunswick, Me. assignor to The Stafford Company, Readville, Boston, Mass. Let-off mechanism for looms. No. 1,310,398; July 15; v. 264; p. 505.
 Law, James C., Carbondale, Pa. Drive-chain. No. 1,309,142; July 8; v. 264; p. 238.
 Lawler, Leslie E. (See Deibel and Lawler.)
 Lawrence, John D., and W. G. Fleischauer, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Window-lifter stop. No. 1,311,108; July 29; v. 264; p. 712.
 Lawson, Edward, El Dorado, Wis. Hemp-gatherer. No. 1,311,407; July 29; v. 264; p. 737.
 Layne, Mahlon E., Memphis, Tenn. Apparatus for separating fluid in wells. No. 1,311,109; July 29; v. 264; p. 712.
 Lazenby, Leroy C., Chicago, Ill. Steering-wheel. No. 1,311,130; July 22; v. 264; p. 672.
 Lazuka, Joseph, Newark, N. J. Fire-escape. No. 1,309,950; July 15; v. 264; p. 425.
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 Le Clair, Frank J., Attleboro, assignor to Freeman-Lough-eady Company, Chertsey, Mass. Collar-holder. No. 1,311,821; July 29; v. 264; p. 833.
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 Leach, William W., assignor of one-half to W. H. Dixon, Mansfield, Ohio. Furnace. No. 1,308,987; July 8; v. 264; p. 208.
 Leake, John M., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass. Skate. No. 1,310,421; July 22; v. 264; p. 541.
 Leavell, Richard A., assignor of one-half to Stromberg Motor Devices Company, Chicago, Ill. Gasoline-feed system for carbureters. No. 1,310,915; July 22; v. 264; p. 631.
 Leavitt, Frank M., Smithtown, assignor, to E. W. Bliss Company, Brooklyn, N. Y. Automobile torpedo. No. 1,308,180; July 1; v. 264; p. 32.
 Leavitt, Frank M., Smithtown, assignor to E. W. Bliss Company, Brooklyn, N. Y. Automobile torpedo. No. 1,308,181; July 1; v. 264; p. 32.
 Lechtersberg, Clemens, assignor to Rock Island Plow Company, Rock Island, Ill. Hay gatherer and loader. No. 1,309,861; July 15; v. 264; p. 408.
 Leile, Richard G. and R. C., and N. Gerson, assignors to A. Mecky Company, Philadelphia, Pa. Electric heating and lighting apparatus. No. 1,310,952; July 22; v. 264; p. 638.
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 Lee, Hans, Iowa City, Iowa. Potato-peeler. No. 1,309,951; July 15; v. 264; p. 425.
 Lee, Harry G., assignor of one-half to A. G. Pritchard, Tacoma, Wash. Automatic stoker. No. 1,311,524; July 29; v. 264; p. 779.
 Lee, Robert W., Brooklyn, N. Y., assignor to Pyrene Manufacturing Company, Fire-extinguisher. No. 1,308,546; July 1; v. 264; p. 88.
 Lee, William H., assignor to Syracuse Chilled Plow Company, Syracuse, N. Y. Harrow-tooth. No. 1,308,635; July 1; v. 264; p. 115.
 Lee, William L., Helena, Mont. Paper-holder. No. 1,310,242; July 15; v. 264; p. 477.
 Leeburg, Edward, Roselle, N. J. Flexible shaft. No. 1,309,973; July 8; v. 264; p. 225.
 Lees, Edgar, and H. W. Rhisale, assignors to The Whitehead Torpedo Works (Weymouth) Limited, Weymouth, England. Net-cutter of automobile torpedoes. No. 1,309,252; July 8; v. 264; p. 258.
 Leggett, Ira S., Hallock, Minn. Hay-stacker. No. 1,311,451; July 29; v. 264; p. 765.
 Lehmann, Adolph, assignor to M. Crist, Hicksville, N. Y. Automatic alarm-valve. No. 1,309,362; July 8; v. 264; p. 278.
 Lehmann, Lawrence L., Dayton, Ohio. Headlight for automobiles. No. 1,309,952; July 15; v. 264; p. 425.
 Lebling, William E., assignor of one-third to A. Weber and one-third to J. D. Garrison, Oakland, Calif. Rotary explosive-engine. No. 1,309,096; July 8; v. 264; p. 229.
 Leich, Arthur and J. S. Berner, Milwaukee, Wis. Ice-cream-sandwich machine. No. 1,309,643; July 15; v. 264; p. 268.
 Leighton, John W., and O. J. P. Crick, assignors to Pressed Metals Limited, Toronto, Ontario, Canada. Means for forming tubular articles by extrusion. No. 1,310,122; July 15; v. 264; p. 455.
 Leighton, John W., assignor to Pressed Metals Limited, Toronto, Ontario, Canada. Forming billets or blooms for forming tubes by extrusion. No. 1,310,123; July 15; v. 264; p. 455.
 Leitch, Frederick J., Belfast, Ireland. Means for separating seed-pods or the like from stalks of plants. No. 1,309,207; July 8; v. 264; p. 249.

Leitch, Meredith, Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Machine-base. No. 1,309,899; July 15; v. 264; p. 415.
 Leitch, Roy C., Newton, assignor of one-eighth to C. D. Blackman, Dodge City, one-eighth to W. Peters, and one-eighth to A. E. Parcell, Newton, Kans. Grain-car door. No. 1,308,791; July 8; v. 264; p. 171.
 Leitch, Roy C., Kansas City, Mo. Hat-check and holder therefor. No. 1,308,792; July 8; v. 264; p. 172.
 Lemaire, Emmanuel, Mons, Belgium. Safety-cartridge for mining purposes. No. 1,310,666; July 22; v. 264; p. 586.
 Lemaire, Louis. (See Boucard and Lemaire.)
 Leman, Edward J., Morton, Ill. Lifting-jack. No. 1,310,498; July 22; v. 264; p. 555.
 Leman, Edward J., Morton, Ill. Jack. No. 1,310,499; July 22; v. 264; p. 555.
 Lep, Wilmar F., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor-controller. No. 1,311,507; July 29; v. 264; p. 780.
 Leutatz, Ambrose, West Hoboken, N. J. Tool-holder for grinding thread-cutting tools. No. 1,308,430; July 1; v. 264; p. 77.
 Leo Shapiro & Company. (See Bell, Mark J., assignor.)
 Leonard, Gino, Long Island City, N. Y. Safety gas-jet. No. 1,309,482; July 8; v. 264; p. 300.
 Lepers, Pierre, Lyon, France. Separating metaxylene from xylene substances. No. 1,311,848; July 29; v. 264; p. 838.
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 Lester, Charles A., Winona, Minn. Lens. No. 1,308,431; July 1; v. 264; p. 77.
 Leslie, Eugene H., assignor to General Petroleum Corporation, Los Angeles, Calif. Method and apparatus for using reagents in the refining of petroleum-oils. No. 1,310,164; July 15; v. 264; p. 463.
 Letord, Emile, Neudon, France. Control mechanism for motors for aviation apparatus. No. 1,310,757; July 22; v. 264; p. 603.
 Leuckert, William, Astoria, N. Y. Combined mirror, flag, and lamp holder. No. 1,308,182; July 1; v. 264; p. 32.
 Levall, Christopher W., assignor to Chain Bell Company, Milwaukee, Wis. Apparatus for delivering and distributing material. No. 1,310,243; July 15; v. 264; p. 477.
 Levin, Joseph, assignor to Polan Katz & Co., Baltimore, Md. Parasol. No. 1,310,399; July 15; v. 264; p. 508.
 Levin, Matilda B., San Francisco, Calif. Loom attachment for outlet-boxes. No. 1,310,758; July 22; v. 264; p. 603.
 Levo, Samuel. (See Arvints, Abraham A., assignor.)
 Levins, Harry B., Minneapolis, Minn. Bulb. No. 1,311,657; July 29; v. 264; p. 803.
 Lewis, George W., Grinnell, Iowa, assignor, by mesne assignments, to Lovell Manufacturing Company, Erie, Pa. Wringer. (Release.) No. 1,4,683; July 8; v. 264; p. 326.
 Lewis, John M. B., Lynchburg, Va. Animal-stanchion. No. 1,311,658; July 29; v. 264; p. 803.
 Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Relay. No. 1,310,620; July 22; v. 264; p. 579.
 Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. No. 1,311,607; July 29; v. 264; p. 794.
 Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. No. 1,311,608; July 29; v. 264; p. 794.
 Lewison, Lewis, Hamilton, Ontario, Canada. Batter-feeding mechanism for ice-cream-cone-manufacturing apparatus. No. 1,309,862; July 15; v. 264; p. 408.
 Lescano, Gustavo, Habana, Cuba. Resilient wheel for vehicles. No. 1,308,761; July 8; v. 264; p. 166.
 Libbey Glass Company, The. (See Dunner, Edward, assignor.)
 Liberty Accessories Corporation. (See Raff, Ernest G., assignor.)
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 Lichtenhahn, Theodor, Basel, assignor to Elektrizitäts-werk Lonza, Gampel, Switzerland. Manufacture of ethyl alcohol from acetaldehyde. No. 1,311,824; July 29; v. 264; p. 834.
 Lichty, Claud S. (See Lichty and Campbell.)
 Lichty Metal Products Company. (See Lichty and Campbell, assignors.)
 Lichty, Norman A. and C. S., and H. F. Campbell, assignors to Lichty Metal Products Company, Waterloo, Iowa. Ventilator. No. 1,309,037; July 8; v. 264; p. 218.
 Liddell, Moses V., Harvey, assignor to Austin Manufacturing Company, Chicago, Ill. Dump-wagon. No. 1,310,916; July 22; v. 264; p. 632.
 Liedtke, Oscar, and J. M. Rien, Newark, N. J. Sash-locking bar. No. 1,308,287; July 1; v. 264; p. 51.
 Light, Claus H., assignor of one-fourth to J. Zeller and one-fourth to B. Hindle, Des Moines, Iowa. Sandless concrete. No. 1,309,038; July 8; v. 264; p. 219.
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Linay, Ethel L., Reading, England. Device or appliance for use in teaching children. No. 1,310,997; July 22; v. 264; p. 647.
 Lincoln, Charles S., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Pulverizer. No. 1,309,805; July 15; v. 264; p. 397.
 Lindauer, Alfred C., Madison, Wis., assignor to the United States of America. Waterproof glue. No. 1,310,700; July 22; v. 264; p. 593.
 Lindblad, Axel R., Stockholm, Sweden. Process and apparatus for producing nitrogen compounds, especially nitrides. No. 1,311,568; July 29; v. 264; p. 780.
 Lindholm, Ernest G., Providence, R. I. Back-rest. No. 1,308,500; July 1; v. 264; p. 90.
 Lindsay, Lycurgus. (See Davida and Lindsay.)
 Lindsey, Walter L., Baltimore, Md. Collar-fastener and necktie-guide. No. 1,310,422; July 22; v. 264; p. 541.
 Lipe, Willard C., and J. W. Coughtry, deceased; S. S. Coughtry, administratrix, Syracuse, N. Y. Motion-transmitting-controlling means. No. 1,310,561; July 22; v. 264; p. 566.
 Liptok, John, Leavenworth, Kans. Illusion apparatus. No. 1,310,707; July 22; v. 264; p. 593.
 Lippert-Hruenauer, Otto A. J. R., assignor to U. S. Hall Bearing Manufacturing Company, Chicago, Ill. Annular ball-bearing. No. 1,310,423; July 22; v. 264; p. 541.
 Lippert, Samuel, East Cleveland, Ohio. Thermal valve and trap for wet lines. No. 1,310,026; July 15; v. 264; p. 438.
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 Little, George M., assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Starting device for arc-lamps. No. 1,308,057; July 1; v. 264; p. 15.
 Little, William S., Spokane, Wash. Crank or cam shaft alignment indicator and straightener. No. 1,308,501; July 1; v. 264; p. 90.
 Lloyd, Harry S. (See Bullock and Lloyd.)
 Lloyd, Richard L., assignor to Dwight & Lloyd Metalurgical Company, New York, N. Y. Separation of materials by gravity. No. 1,310,998; July 22; v. 264; p. 647.
 Loebbridge, Eleanor A., Long Beach, Calif. Doll and making same. No. 1,308,432; July 1; v. 264; p. 77.
 Lockhart, Charles F. (See Munhollon, Frank, assignor.)
 Lockwood, Edward M., Philadelphia, Pa., assignor to C. R. Carver Company. Winding device for wiping webs of embossing printing-machines. No. 1,310,195; July 15; v. 264; p. 468.
 Lockwood, Marquis H., New York, and H. Nias, assignors to Public Service Corp. Company, Brooklyn, N. Y. Dispensing-machine. No. 1,311,170; July 29; v. 264; p. 712.
 Locomotive Feed Water Heater Company. (See Averill, Earl A., assignor.)
 Loe Multiplex Voting Machine Company. (See Loe, Syver, assignor.)
 Loe, Syver, assignor, by direct and mesne assignments, to Loe Multiplex Voting Machine Company, Minneapolis, Minn. Second-choice-voting mechanism. No. 1,310,190; July 15; v. 264; p. 468.
 Loewenberg, Isador E., Converse, Ind. Basket-handle. No. 1,310,356; July 15; v. 264; p. 497.
 Lobbes, Livingston, Boston, Mass. Headlight. No. 1,309,644; July 15; v. 264; p. 368.
 Lombardo, Charles, Watford, N. J. Automobile-signal. No. 1,311,408; July 29; v. 264; p. 757.
 Londick, John H., Toledo, Ohio. Liquid-dispensing apparatus. No. 1,308,547; July 1; v. 264; p. 98.
 Long, Lee. (See Body, Long, Johnson, Kilgore, and Hevlina.)
 Longaker, Albert W., V. E. Trager, and R. P. Rordam, Burrwood, La. Antifrangible bottle. No. 1,310,899; July 22; v. 264; p. 647.
 Longthorne, Fred Undercliffe, near Bradford, assignor of one-half to G. H. Leather Limited, Bradford, England. Producing intermittently-dyed yarn. No. 1,311,181; July 22; v. 264; p. 672.
 Loomer, Henry M., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Grinding-machine. No. 1,308,088; July 1; v. 264; p. 15.
 Lopez, Dalmacio P., San Nicolas, Habana, Cuba. Oil-burner for church-lamps. No. 1,311,569; July 29; v. 264; p. 787.
 Lopez, Peter, New York, N. Y. Rotary-gate lock. No. 1,309,645; July 15; v. 264; p. 368.
 Loudon, Dorr F., New York, N. Y. Humidifier. No. 1,311,701; July 29; v. 264; p. 811.
 Looneyway, Arthur M. (See Lapham and Looneyway.)
 Lovejoy, Fred P., Springfield, Vt. Milling-tool. No. 1,311,452; July 29; v. 264; p. 765.
 Lovell, Charles W., Brooklyn, N. Y. Paper-cutting machine. No. 1,308,852; July 8; v. 264; p. 183.
 Lovell Manufacturing Company. (See Lewis, George W., assignor.) (Release.)
 Lovell-McConnell Manufacturing Company. (See McMurtry, Alden L., assignor.)
 Loveless, Fred H., Chicago, Ill., assignor of two-thirds to J. Rowan and W. M. Hasty, Marion, Ind. Combined sign and bulletin board. No. 1,308,502; July 1; v. 264; p. 90.

Lowe, Charles W., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Connector. No. 1,309,253; July 8; v. 264; p. 258.
 Lowe, George J. (See Bornum, Frank C., assignor.)
 Lowenstein, Louis, Detroit, Mich. Hatchet extension for micrometers. No. 1,308,088; July 8; v. 264; p. 208.
 Lowman, Roy L., Washington, D. C., assignor to H. C. Lodge, Boston, Mass. Tracer for projectiles. No. 1,310,708; July 22; v. 264; p. 593.
 Lowry, George A., New York, N. Y., assignor, by mesne assignments, to A. H. Ridginton. Shredding and splitting machine. No. 1,309,646; July 15; v. 264; p. 368.
 Loz Seal Corporation. (See Behrman, Marcus B., assignor.)
 Lubken, John C. H., Westmont borough, Pa. Mining-car. No. 1,311,659; July 29; v. 264; p. 803.
 Lucas, Abraham N., Milwaukee, Wis. Marking-light for locomotives. No. 1,310,027; July 15; v. 264; p. 438.
 Lucas, John, Stockton, Calif. Grain and seed separator and cleaner. No. 1,310,759; July 22; v. 264; p. 603.
 Lueoff, Waseel, Briss Mine, Ontario, Canada. Laundry drying appliance. No. 1,310,424; July 22; v. 264; p. 542.
 Luchs, Friedrich M., Wilkinsburg, assignor to American Atmos Corporation, Wilkinsburg Station, Pittsburgh, Pa. Breathing apparatus. No. 1,308,509; July 1; v. 264; p. 108.
 Lucke, Charles E., assignor to Gas and Oil Combustion Company, New York, N. Y. Apparatus for burning explosive gaseous mixtures. No. 1,308,364; July 1; v. 264; p. 65.
 Ludke, Raymond O. W., Coplay, Pa. Fly-swatter. No. 1,310,124; July 15; v. 264; p. 450.
 Ludlow, Israel, New York, N. Y. Submersible gun-mount. No. 1,309,483; July 8; v. 264; p. 300.
 Ludlow Typograph Company, The. (See Hedly, Arthur H., assignor.)
 Luellen, Lawrence W., Boonton, N. J., assignor to Individual Drinking Cup Company, New York, N. Y. Receptacle. No. 1,308,793; July 8; v. 264; p. 172.
 Luminous Unit Company. (See Guth, Edwin F., assignor.) (Release.)
 Lund, Charles W., assignor to E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Safety-rasor. No. 1,308,747; July 1; v. 264; p. 130.
 Lundberg, Olof and J. O. Harris, Kellher, Minn. Detachable pocket. No. 1,310,125; July 15; v. 264; p. 456.
 Lundgren, Herman E., Chicago, Ill. Toy. No. 1,308,183; July 1; v. 264; p. 32.
 Luschka, August R., and J. Folk, Laporte, Ind., assignors to U. S. Slicing Machine Company. Sharpener for slicing-machines. No. 1,308,433; July 1; v. 264; p. 77.
 Luschka, August R., and J. Folk, assignors to U. S. Slicing Machine Company, Laporte, Ind. Rind-knife for slicing-machines. No. 1,309,417; July 8; v. 264; p. 288.
 Luschka, August R., and J. Folk, assignor to U. S. Slicing Machine Company, Laporte, Ind. Slicing-machine. No. 1,310,197; July 15; v. 264; p. 469.
 Lyle, William G., trustee. (See Falk and Frankel, assignors.)
 Lynn, Arthur H., and N. E. Rambush, London, England. Recovery of ammonia from producer-gas. No. 1,309,143; July 8; v. 264; p. 238.
 Lynch, Michael A., and J. P. F. White, Washington, D. C. Closure for tanks. No. 1,308,794; July 8; v. 264; p. 172.
 Lynde, Frank G., assignor to Lauter Company, Newark, N. J. Motor-valve construction. No. 1,311,660; July 29; v. 264; p. 804.
 Lyon, Frank A., Milford, N. Y. Draft-equalizer. No. 1,308,525; July 1; v. 264; p. 94.
 Lyons, A. (See Estes, William H., Sr., assignor.)
 M. Goudard & Meunesson. (See Meunesson, Marcel, assignor.)
 M. H. Detrick Co. (See Detrick, Myron H., assignor.)
 M. H. Detrick Co. (See Hosheln, Louis H., assignor.)
 M. D. Knowlton Company. (See De Smith, Henry, assignor.)
 Mahlo, John W., Red Wing, Minn. Fanning-mill. No. 1,309,329; July 8; v. 264; p. 272.
 MacCorkell, Ronald W., Oakland, Calif. Fountain-brush. No. 1,309,000; July 15; v. 264; p. 415.
 MacCormac, Rockwell M., Kansas City, Mo. Paper-roll and holder therefor. No. 1,308,912; July 8; v. 264; p. 194.
 MacGahan, Paul, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc-extinguishing device. No. 1,308,249; July 1; v. 264; p. 44.
 MacGahan, Paul, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc-extinguishing device. No. 1,308,365; July 1; v. 264; p. 65.
 MacKenzie, George W., Jr., Beaver, and R. Crowder, Edgewood, assignors to Guarantee Liquid Measure Company, Rochester, Pa. Measuring and dispensing pump. No. 1,311,172; July 29; v. 264; p. 713.
 Macdonald, Murdoch, Cleveland, Ohio. Holder for tickets and the like. No. 1,309,255; July 8; v. 264; p. 258.
 Macfadden, Bernarr, New York, N. Y. Air-supply motor for internal-combustion engines. No. 1,309,254; July 8; v. 264; p. 258.

Macfadden, Bernarr, New York, N. Y. Combined cooling, ventilating, heating, humidifying, and purifying apparatus. No. 1,309,953; July 15; v. 264; p. 426.

Mackay, William M., East Orange, N. J. Sectional steam or water boiler with water-grate. No. 1,310,198; July 15; v. 264; p. 469.

Mackey, Louis E., and F. W. Ormiston, Detroit, Mich. Windlog and rewinding mechanism. No. 1,309,250; July 8; v. 264; p. 254.

Mackie, Robert. (See Donaldson and Mackie.)

Mackintosh, Archibald W. (See Clark, James B., assignor.)

Macklind, William H., Chicago, Ill. Treating and separating system. No. 1,311,828; July 29; v. 264; p. 834.

Magee, Frederick W., assignor to T. W. Baker, London, Ontario, Canada. Gas and water controlling device for water heaters. No. 1,309,295; July 8; v. 264; p. 266.

Magard, Eliza E., Morehead, Ky. Motion-picture apparatus. No. 1,308,293; July 1; v. 264; p. 52.

Magie, William E. (See Ferris and Magie.)

Mahan, James J., and J. J. Kelly, Jersey City, N. J. Trailer-truck. No. 1,310,028; July 15; v. 264; p. 438.

Mahana, Charles G. (See Goff, Gladden, and Mahana.)

Mahoney, Daniel M., New York, N. Y. Supplemental oiler for journals. No. 1,309,804; July 15; v. 264; p. 408.

Malden, Leaman A., Dunnellon, Fla. Dispensing-bottle. (Reissue.) No. 1,488,484; July 15; v. 264; p. 507.

Maire, Auguste, Argentuil, assignor to Societe Lorraine des Anciens Etablissements de Dietrich & Cie. De Lorraine, Paris, France. Drive for pumps. No. 1,308,435; July 1; v. 264; p. 78.

Malach, Gustave P., Chicago, Ill. assignor, by mesne assignments, to Todd Protograph Company, Inc., Rochester, N. Y. Computing mechanism for check-writers. No. 1,311,226; July 29; v. 264; p. 779.

Malac, Herman C., assignor, by mesne assignments, to Finance & Trading Corporation of New York. Automobile-body. No. 1,309,144; July 8; v. 264; p. 238.

Majestic Company, The. (See Triggs and Redrup, assignors.)

Malinite Company, The. (See Mallovsaky, Andrew, assignor.)

Mallovsaky, Andrew, Belleville, Ill. assignor to The Malinite Company, Wilmington, Del. Brick-machine. No. 1,310,953; July 22; v. 264; p. 638.

Malleable Iron Fittings Company, The. (See Pickop, George H., assignor.)

Malloy, Edward T., Hamilton, Ohio. Caster. No. 1,310,029; July 15; v. 264; p. 434.

Maloney, Edward J., Long Island City, assignor to A. Wolf, New York, N. Y. Forming attiches. No. 1,308,294; July 1; v. 264; p. 53.

Maloney, William T. (See Eberhard, Maloney, and Bold.)

Mandelstamm, Leo, New York, N. Y. Metal-casting machine. No. 1,309,534; July 8; v. 264; p. 310.

Manderfeld, Robert J., Hancock, Mich. Wood sandal. No. 1,310,358; July 15; v. 264; p. 408.

Mangold, Robert A., and G. H. Fobian, assignors to Hoga Magnetic Separator Company, Milwaukee, Wis. Magnetic separator. No. 1,310,802; July 22; v. 264; p. 612.

Manly, Charles M., Freeport, N. Y. Control apparatus for power-driven mechanism. No. 1,308,550; July 1; v. 264; p. 99.

Mann, Horace, Old Albuquerque, N. Mex. Brooder. No. 1,308,717; July 1; v. 264; p. 130.

Mann, Ira A., deceased; M. P. Mann, executrix, Pittsburgh, Pa. Pipe construction. No. 1,309,145; July 8; v. 264; p. 238.

Mann, Ira A., deceased; M. P. Mann, executrix, Pittsburgh, Pa. Pipe-joint. No. 1,309,146; July 8; v. 264; p. 239.

Mann, Marion P., executrix. (See Mann, Ira A.)

Mann, Miles H., assignor to International Money Machine Company, Terre Haute, Ind. Rectifying machine. No. 1,311,173; July 29; v. 264; p. 713.

Mann, Miles H., Reading, Pa. Pay roll accounting and paying machine. No. 1,311,174; July 29; v. 264; p. 713.

Mannell, Charles J., and R. Rose, Bournemouth, England. Machinery employed in the manufacture of concrete and the like wall-blocks. No. 1,310,359; July 15; v. 264; p. 408.

Manneson, Marcel, assignor to M. Goudard & Mennesson, Neuilly-sur-Seine, France. Motor-vehicle. No. 1,308,602; July 1; v. 264; p. 109.

Manning, Elmer J., Janesville, Wis. Carburetor. No. 1,310,426; July 22; v. 264; p. 542.

Mansson, John A., Beaumont, Quebec, Canada. Centrifugal catcher. No. 1,311,091; July 22; v. 264; p. 647.

Mansfield, Fritz P. (See Naburke, Charles, assignor.)

Mansfield, Frederick J., Pasadena, Calif. Literature-distributing device. No. 1,309,040; July 8; v. 264; p. 219.

Manson, Ray H., assignor to The Garford Manufacturing Company, Elyria, Ohio. Phonograph locking or braking device. No. 1,309,741; July 15; v. 264; p. 387.

Mantle Lamp Company of America, The. (See Simonson and Blair, assignors.)

Manton, James S., Chicago, Ill. Clutch-controller. No. 1,310,199; July 15; v. 264; p. 469.

Mapson, Arthur L., Granada, Minn. Radiator-protector. No. 1,310,870; July 22; v. 264; p. 624.

Maranda, Albert H., Pittsburgh, Pa. Electric-lighting assembly. No. 1,310,763; July 22; v. 264; p. 604.

Marble, Edwin H., assignor to Curtis & Marble Machine Company, Worcester, Mass. Cloth-folding machine. No. 1,311,080; July 22; v. 264; p. 662.

Marchant Calculating Machine Company. (See Dennis, Adolphus S., assignor.)

Marcott, Demoss D., Colbert, Wash. Wood-sawing device. No. 1,309,901; July 15; v. 264; p. 415.

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,210; July 8; v. 264; p. 250.

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,211; July 8; v. 264; p. 250.

Marcy, Frank E., Salt Lake City, Utah. Roller-mill. No. 1,309,212; July 8; v. 264; p. 250.

Mardie, Paul L., and A. J. Hall, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,308,089; July 1; v. 264; p. 15.

Marinsky, Davis, New York, N. Y. Sealing-machine. No. 1,309,147; July 8; v. 264; p. 239.

Markle, George S. (See Latsch and Markle.)

Markley, Daniel R., Lancaster, Pa. Combination cylinder-lock. No. 1,308,090; July 1; v. 264; p. 16.

Marko, Arthur, Knock, assignor to himself and Harland and Wolf Limited, Belfast, Ireland. Concrete. No. 1,309,296; July 8; v. 264; p. 266.

Markwick, John, Detroit, Mich. Child's furniture. No. 1,309,097; July 8; v. 264; p. 229.

Mariatt, George E., Pasadena, Calif. Linotype-machine. No. 1,310,487; July 22; v. 264; p. 553.

Mariatt, George E., Pasadena, Calif. Linotype-machine. No. 1,310,488; July 22; v. 264; p. 553.

Marsh, Marshall S., et al. (See Morehouse, William H., assignor.)

Marshall Dobbin & Co. (See Ritcher, James M., assignor.)

Marshall, John, Swarthmore, Pa. assignor to E. L. du Pont de Nemours & Company, Wilmington, Del. Preparing dinitrodiphenylamine. No. 1,309,580; July 8; v. 264; p. 319.

Martens, Ludwig A., Teaneck, N. J., assignor to Kinetic Engineering Company, Inc., New York, N. Y. Torque-equalizing means. No. 1,309,257; July 8; v. 264; p. 258.

Martin, Blanch A., et al. (See Shields, George A., assignor.)

Martin, Cyrus H., et al. (See Shields, George A., assignor.)

Martin, George, Ansonia, Conn. Pressure oil-cup. No. 1,309,442; July 8; v. 264; p. 293.

Martin, Haakon A., Christiania, Norway, assignor to The National Cash Register Company, Dayton, Ohio. Railway-ticket-issuing machine. No. 1,309,254; July 15; v. 264; p. 426.

Martin, Harold M., New York, N. Y., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Process and apparatus for treating storage-battery plates. No. 1,310,871; July 22; v. 264; p. 624.

Martin, Harry C., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,360; July 15; v. 264; p. 408.

Martin, Howard H. (See Martin, Ira J., and H. R.)

Martin, Ira J., and H. R. Pawtucket, R. I. Fuse for explosive shells. No. 1,311,081; July 22; v. 264; p. 603.

Martin, John E. (See Zindler and Martin.)

Martin, Joseph, assignor of one-half to H. F. Zink, Detroit, Mich. Bowling-alley surfacer. No. 1,308,762; July 8; v. 264; p. 107.

Martin, Robert P. (See Kollock and Martin.)

Martin, Scott O., Lamar, Colo. Ditching-plow. No. 1,311,829; July 29; v. 264; p. 834.

Martin, Silas W., Oglesby, Tex. Plant-chopper. No. 1,311,411; July 29; v. 264; p. 757.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill. Automatic or semi-automatic telephone system. No. 1,308,740; July 1; v. 264; p. 134.

Martin, William L. (See Brown and Martin.)

Martin, William L., Boyne City, Mich. Shield for the protection of ships. No. 1,311,002; July 22; v. 264; p. 648.

Martire, Giuseppe D., Milan, Italy. Ignition-magneto switch for internal-combustion engines. No. 1,308,503; July 1; v. 264; p. 90.

Martone, Pasquale G. (See Ancotti and Martone.)

Martyn, Thomas H. (See Martyn, William H., assignor.)

Martyn, William H., Tenetfield, assignor to T. H. Martyn, Sydney, New South Wales, Australia. Mechanical starting appliance for engines. No. 1,309,902; July 15; v. 264; p. 416.

Mascard, George W., London, England. Distribution of electromotive power. No. 1,309,143; July 8; v. 264; p. 293.

Masland, Harvey C., Philadelphia, Pa. Surgical instrument. No. 1,308,798; July 8; v. 264; p. 173.

Masland, Harvey C., Philadelphia, Pa. Surgical instrument for resetting broken bones. No. 1,308,799; July 8; v. 264; p. 173.

Mason, William H., Easton, Pa. Portable electrical generating apparatus. No. 1,308,989; July 8; v. 264; p. 203.

Mass, Raoul P., Hawthorne, Melbourne, Victoria, Australia. Station-indicator for railway-cars. No. 1,310,361; July 15; v. 264; p. 498.

Mate, William C. A. (See Poulson and Mate.)

Mather, Carl N. (See Asenworthy, William A., assignor.)

Mather, Milo E., Los Angeles, Calif. Sash-weight. No. 1,310,165; July 15; v. 264; p. 463.

Mathers, Frank C., and J. Papish, assignors, by mesne assignments, to Frank C. Mathers & Jacob Papish, Bloomington, Ind. Coloring liquor and staining metals. No. 1,308,092; July 1; v. 264; p. 16.

Mathers, Harry E., Delta, Colo. Cutting-machine. No. 1,308,600; July 1; v. 264; p. 108.

Mathes, Robert C., assignor to Western Electric Company, Incorporated, New York, N. Y. Amplifying and correcting system. No. 1,311,283; July 29; v. 264; p. 733.

Matheson, Howard W., Wilmington, Del. assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Fireproofing and products thereof. No. 1,309,581; July 8; v. 264; p. 319.

Mathis, Paul, Brooklyn, N. Y. Water-heating attachment for fuses. No. 1,311,702; July 29; v. 264; p. 811.

Maurer, Albert, New York, N. Y. Medal-holder. No. 1,310,803; July 22; v. 264; p. 612.

Maurer, Henry E., Jr., assignor of one-half to H. L. Ide, Springfield, Ill. Apparatus for dispensing liquid. No. 1,308,091; July 1; v. 264; p. 16.

Maurey, Eugene. (See De Martino and Maurey.)

Maus, Wilhelm, Johannesburg, Transvaal, South Africa. Percussive engine. No. 1,309,640; July 15; v. 264; p. 369.

Maw, Robert, and W. B. McLean, Montreal, Quebec, Canada, assignors, by direct and mesne assignments, to The Universal Machine Company, Limited. Combined fluid-pressure pump and motor. No. 1,308,436; July 1; v. 264; p. 78.

Maxim, Hudson, Hopatcong borough, N. J. Position indicator or recorder. No. 1,310,200; July 15; v. 264; p. 469.

Maxim, Hudson, Hopatcong borough, N. J. Position indicator or recorder. No. 1,310,201; July 15; v. 264; p. 469.

Mayer, Abraham, St. Louis, Mo. Arch-support. No. 1,311,240; July 29; v. 264; p. 725.

Mayer, Alvin, Rhineland, Mo. Spark-plug. No. 1,308,718; July 1; v. 264; p. 130.

Maynard, Howard E. (See Tonz, Wilber, and Maynard.)

Mays Accounting Machine Company. (See Mays, James F., assignor.)

Mays, James F., Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C. Calculating-machine. No. 1,309,535; July 8; v. 264; p. 310.

Mays, James F., Birmingham, Ala., assignor to Mays Accounting Machine Company, Lexington, N. C. Quotient mechanism for computing machines. No. 1,309,536; July 8; v. 264; p. 310.

McAdie, Alexander G., Milton, Mass. Absolute hydrograph. No. 1,309,531; July 8; v. 264; p. 309.

McAfee, Daniel S., New York, N. Y., assignor to The Dorr Company. Recovering alkali used in pulp digestion. No. 1,308,184; July 1; v. 264; p. 33.

McAllister, Robert L., Shenandoah, assignor to Shores-Mueller Company, Cedar Rapids, Iowa. Breaching-bit for animals. No. 1,311,400; July 29; v. 264; p. 757.

McAllister, William H., Gainesville, Tex. Railway right-of-way-moving device. No. 1,311,825; July 29; v. 264; p. 834.

McAuliffe, John W., Pelham, N. Y. Drinking-tube for liquid-containers. No. 1,309,994; July 15; v. 264; p. 432.

McBride, Thomas C., Philadelphia, Pa. Surface condenser. No. 1,311,239; July 29; v. 264; p. 725.

McCabe, Allan E., Richmond, Va. Water-heater for oil-stoves. No. 1,310,709; July 22; v. 264; p. 593.

McCain, Joseph H., Philadelphia, Pa. Ammonia-compressor. No. 1,308,288; July 1; v. 264; p. 52.

McCarag, Lorrie B., Kansas City, assignor to W. P. Fulkerson, St. Joseph, Mo. Feed-cutting mill. No. 1,311,826; July 29; v. 264; p. 834.

McCarthy, Patrick J. (See Finnegan and McCarthy.)

McCartney, Leslie C., Lincoln, Neb. Stock-fountain. No. 1,309,208; July 8; v. 264; p. 240.

McClymonds, John R., Elwood City, Pa. Mail-box. No. 1,309,328; July 8; v. 264; p. 272.

McCollum, Earl E., Downers Grove, Ill. Speed-reduction mechanism for meters. No. 1,310,760; July 22; v. 264; p. 603.

McCollum, James H. K., Toronto, Ontario, Canada, assignor to G. H. Gooderham, J. W. L. Forster, and The Argyle Limited, Alexandria, Scotland. Internal-combustion engine. No. 1,310,667; July 22; v. 264; p. 586.

McConnell, Winton W. (See Seymour, John K., assignor.)

McConway & Torley Company, The. (See Kelso, William, assignor.)

McConway & Torley Company, The. (See McConway and Kelso, assignors.)

McConway & Torley Company, The. (See Milliken, Isaac H., assignor.)

McConway, William, Jr., and W. Kelso, assignors to The McConway & Torley Company, Pittsburgh, Pa. Transmission car-coupling. No. 1,309,293; July 8; v. 264; p. 265.

McCool, Edward F., Victor, Colo. Classifier. No. 1,310,917; July 22; v. 264; p. 632.

McCord, Charles J., Alpha, Mich. Spring-wheel. No. 1,309,532; July 8; v. 264; p. 310.

McCormack, William D., Nashville, Tenn. Inclinator for use on aircraft. No. 1,308,795; July 8; v. 264; p. 172.

McCracken, Isaac E., Pittsburgh, Pa., assignor to Gleason Works, Rochester, N. Y. Method of and machine for cutting gears. No. 1,310,761; July 22; v. 264; p. 603.

McCreary, Alfred W., Mount Pleasant, Pa. Fertilizer-distributor. No. 1,308,714; July 1; v. 264; p. 130.

McCullough, Arthur L. (See McCullough, Henry L., assignor.)

McCullough, Henry L., assignor to A. L. McCullough, Minneapolis, Minn. Self-olting pulley. No. 1,309,739; July 15; v. 264; p. 385.

McCullough, Henry L., Minneapolis, Minn. Force-feed lubricator. No. 1,309,740; July 15; v. 264; p. 386.

McCullough, William T., Chicago, Ill. Power-transmitting device. (Reissue.) No. 1,408,808; July 29; v. 264; p. 842.

McDermott, John J., Woodstown, N. J. Shoe attachment. No. 1,311,079; July 22; v. 264; p. 662.

Melbale, Alby B., Buffalo, N. Y. Painting apparatus. No. 1,311,827; July 29; v. 264; p. 834.

McDonald, Clarence T., assignor to Mudd Refillable Fuse Company, Chicago, Ill. Refillable cartridge-fuse. No. 1,311,661; July 29; v. 264; p. 804.

Melton, James, Cincinnati, Ohio. Preparing patent-leather. No. 1,309,863; July 15; v. 264; p. 408.

McDowell, Clyde S., U. S. Navy, and L. L. Israel, New York, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Optical signaling apparatus. No. 1,309,444; July 8; v. 264; p. 293.

McElroy, Daniel S., Springfield, Ill. Adding or calculating machine. No. 1,308,548; July 1; v. 264; p. 98.

McElroy, Karl P., Washington, D. C., assignor to Chemical Development Company, Augusta, Me. Oxidizing hydrocarbons. No. 1,308,796; July 8; v. 264; p. 173.

McElroy, Karl P., Washington, D. C., assignor to Chemical Development Company, Oxidizing hydrocarbons. No. 1,308,797; July 8; v. 264; p. 173.

McElroy, Roy H., assignor to International Clay Machinery Company, Dayton, Ohio. Gas-burner. No. 1,311,132; July 22; v. 264; p. 672.

McEvilly, Thomas F., Wilmington, Del. Locking device. No. 1,310,627; July 22; v. 264; p. 579.

McFarland, Frank W., Reynolds, Ill. Parachute. No. 1,311,000; July 22; v. 264; p. 647.

McFell, Judson, Chicago, Ill. Electric signal-transmitting means. No. 1,308,858; July 8; v. 264; p. 202.

McFarren, David S., Queens, N. Y. Cushion-tire. No. 1,310,126; July 15; v. 264; p. 456.

McGill, Chester T., Elgin, Ill. System for cleaning boilers. No. 1,308,715; July 1; v. 264; p. 130.

McGinn, Jack, assignor of one-half to L. F. and J. N. Thornton, Oakland, Calif. Ditching attachment for rakes. No. 1,310,808; July 22; v. 264; p. 623.

McGlashen, Edgar A., Winchester, Va. Barrel-press. No. 1,310,357; July 15; v. 264; p. 407.

McGowan, Owen J., Brooklyn, N. Y. Releasing-hook. No. 1,308,549; July 1; v. 264; p. 99.

McHugh, James L., Seattle, Wash. Tobacco-pouch. No. 1,310,800; July 22; v. 264; p. 623.

McIlhenny, John M., and E. K. Kitts, Bluefield, W. Va. Train-telephone system. No. 1,308,910; July 8; v. 264; p. 193.

McIntyre, William H., Chicago, Ill. Automobile-body attachment. No. 1,310,425; July 22; v. 264; p. 542.

McKalg, Charles O. (See Honeywell and McKalg.)

McKalg, Eddy T., Waukegan, Ill. Tilt front axle for vehicles. No. 1,308,289; July 1; v. 264; p. 52.

McKalg, Eddy T., Waukegan, Ill. Locking device for differential gears. No. 1,308,290; July 1; v. 264; p. 52.

McKay Concrete Form Company. (See McKay, Stewart H., assignor.)

McKay, Robert J., Pittsburgh, Pa. Stay-bolt. No. 1,308,185; July 1; v. 264; p. 33.

McKay, Robert J., Pittsburgh, Pa. Stay-bolt. No. 1,308,186; July 1; v. 264; p. 33.

McKay, Stewart H., Cleveland, Ohio, assignor to McKay Concrete Form Company, Seward, N. J. Concrete-form. No. 1,311,282; July 29; v. 264; p. 733.

McKeeble, James, Barrow-in-Furness, and B. N. Wallis, Grange-over-Sands, assignors to Vickers Limited, West-Ingster, London, England. Mooring of lighter-than-air aircraft. No. 1,309,533; July 8; v. 264; p. 310.

McKeeble, James M., and H. B. Pratt, Barrow-in-Furness, assignors to Vickers Limited, West-Ingster, London, England. Aerostat structure of rigid airships. No. 1,308,291; July 1; v. 264; p. 52.

McKee, Homer E., Braddyville, Iowa. Piston construction. No. 1,311,525; July 29; v. 264; p. 779.

McKeever, Charles, Jersey City, N. J., assignor of one-third to W. H. Dickinson and one-third to C. H. Means, New York, N. Y. Signal apparatus. No. 1,311,662; July 29; v. 264; p. 804.

McKellar, David H., Motherwell, Scotland. Finger-ring. No. 1,309,647; July 15; v. 264; p. 309.

McKenna, Charles F., New York, N. Y. Explosive. No. 1,311,171; July 29; v. 264; p. 713.

McKenna, Peter J. (See Sanborn, Ralph C., assignor.)

McKenna, William, Lakewood, Minn. Thrust-bearing for power shafts. No. 1,309,763; July 15; v. 264; p. 390.
 McKenzie, Archibald F., Whytewold, Manitoba, Canada. Attachment to saw-vices. No. 1,308,249; July 1; v. 264; p. 44.
 McKuske, John W., Itay City, Mich. Tire attachment. No. 1,308,434; July 1; v. 264; p. 77.
 McKinley, Charles W., assignor to The Willa-Overland Company, Toledo, Ohio. Brake-operating mechanism. No. 1,310,801; July 22; v. 264; p. 611.
 McKinnon, Hector, Eureka, Calif. Vehicle-drive. No. 1,309,074; July 8; v. 264; p. 225.
 McKnight, Robert, Pittsburgh, Pa. Making compounds of rare metals. No. 1,308,911; July 8; v. 264; p. 194.
 McLanahan, Austin. (See Potts, Louis M., assignor.)
 McLaren and Company. (See Potts, Louis M., assignor.)
 McLaren, William E., assignor to McLaren and Company, Chicago, Ill. Vehicle. No. 1,308,526; July 1; v. 264; p. 94.
 McLaughlin, John H., Holbrook, Mass. Last. No. 1,310,762; July 22; v. 264; p. 604.
 McLaughlin, John C., East Orange, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Coin-operated type-writing machine. No. 1,309,294; July 8; v. 264; p. 266.
 McLean, William. (See Maw and McLean.)
 McMillan, William J., Philadelphia, Pa. Box-partition-assembling machine. No. 1,311,609; July 29; v. 264; p. 704.
 McMurtry, Alden L., Sound Beach, Conn., assignor, by mesne assignments, to Lorell-McConnell Manufacturing Company. Diaphragm-bore and means for operating the same. No. 1,309,764; July 15; v. 264; p. 390.
 McNabb, William F., Pittsburgh, Pa. Heat-producing compound. No. 1,309,209; July 8; v. 264; p. 250.
 McNeill, Daniel W., assignor to The John Douglas Company, Cincinnati, Ohio. Molding ceramics. No. 1,311,410; July 29; v. 264; p. 757.
 McNeill, John, Los Angeles, Calif. Non-skid attachment for automobiles. No. 1,309,039; July 8; v. 264; p. 219.
 McNeill, John D., Trenton, Nova Scotia, Canada. Torpedo-guard. No. 1,308,710; July 1; v. 264; p. 130.
 McNeill, George, assignor to Morgan & Wright, Detroit, Mich. Head-drying apparatus. No. 1,308,292; July 1; v. 264; p. 52.
 McNeill, Lewis, Brazil, Ind. Meter yoke and box. No. 1,310,400; July 15; v. 264; p. 509.
 McPherson, John. (See Hackett, William, assignor.)
 McSherry, James W., Duquoin, Ill. Controlling apparatus for elevators and other devices. No. 1,309,644; July 15; v. 264; p. 369.
 McVoy, George, Scotch Plains, N. J. Quick-attachable pipe-union. No. 1,308,853; July 8; v. 264; p. 185.
 Mears, Clem B., et al. (See McKeever, Charles, assignor.)
 Mebane, Charles P., assignor, by mesne assignments, to E. C. Henna, Cleveland, Ohio. Carbonizing compound and making the same. No. 1,310,918; July 22; v. 264; p. 632.
 Mechanical Improvement Company. (See de Martino, Joseph, assignor.)
 Mechling, Elizabeth C., New York, N. Y., assignor to Melville Clark Piano Company, Chicago, Ill. Player-piano and phonograph. No. 1,311,603; July 29; v. 264; p. 804.
 Medart, Philip S., assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Back-stop. No. 1,309,806; July 15; v. 264; p. 398.
 Melitz, Joseph, Brooklyn, N. Y. Spring. No. 1,308,601; July 1; v. 264; p. 108.
 Mesler, Herbert L., assignor of one-half to L. S. Hall, Denver, Colo. Internal-combustion engine. No. 1,310,919; July 22; v. 264; p. 632.
 Meluke, Edward J., Chicago, Ill. Illuminative tool. No. 1,309,363; July 8; v. 264; p. 278.
 Melzner, Alexander. (See Von Arco and Melzner.)
 Melzner, George R., Deater, Iowa. Spark-plug intensifier. No. 1,310,427; July 22; v. 264; p. 542.
 Melroe, George C., Redondo Beach, Calif. Silent railway-crossing. No. 1,308,719; July 1; v. 264; p. 131.
 Melton, William C., Sherman, Tex. Auto-lock. No. 1,310,362; July 15; v. 264; p. 498.
 Melville Clark Piano Company. (See Mechling, Elizabeth C., assignor.)
 Mendelson, Max, and N. J. Goldfarb, Brooklyn, N. Y., assignors to Brooklyn Braid Company. Means for tying bows. No. 1,308,800; July 8; v. 264; p. 173.
 Mendizaga, Frank. (See Falconer and Mendizaga.)
 Menk, Rudolph W., Joliet, assignor to The Excelsior Steel Furnace Company, Chicago, Ill. Kiln-furnace. No. 1,309,213; July 8; v. 264; p. 250.
 Menning, Otto H., Houston, Tex. Vehicle. No. 1,308,636; July 1; v. 264; p. 115.
 Mercer, Henry H. (See Officer and Mercer.)
 Merchants Profit Sharing Corporation. (See Jaup, Nelson H., assignor.)
 Merenko, Basil. (See Choma, John, assignor.)
 Mergenthaler, Eugene G., Baltimore, Md. Safety-razor. No. 1,308,801; July 8; v. 264; p. 173.
 Mergenthaler Linotype Company. (See Kennedy, Davis S., assignor.)

Meridian Machine Products Corporation. (See Olevia, Adolph, assignor.)
 Merkel, John, Robinson, N. D. Ventilator. No. 1,310,537; July 22; v. 264; p. 502.
 Merkt, Gustav A., Worcester, Mass., assignor to The American Steel & Wire Company of New Jersey. Rabb-bonding. No. 1,308,637; July 1; v. 264; p. 115.
 Merrell, Oliver E., assignor to Merrell-Soule Company, Syracuse, N. Y. Obtaining solids from liquids. (Release.) No. 14,603; July 22; v. 264; p. 670.
 Merrell-Soule Company. (See Merrell, Oliver E., assignor.) (Release.)
 Merrill, Wilbur L., Schenectady, N. Y., assignor to General Electric Company. Welding apparatus. No. 1,310,127; July 15; v. 264; p. 456.
 Merrimac Chemical Company. (See Pratt and Brink, assignors.)
 Merritt, Frank R., Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Abrasive tool. No. 1,308,093; July 1; v. 264; p. 16.
 Merritt, John C., Marengo, Iowa. Toy. No. 1,309,041; July 8; v. 264; p. 219.
 Mersereau, Gall, New York, N. Y., assignor to Chemical Development Company. Apparatus for producing diolens. No. 1,308,802; July 8; v. 264; p. 174.
 Mersereau, Gall. (See Eldred and Mersereau.)
 Mersereau, Gall, assignor to Chemical Development Company, New York, N. Y. Cellulose solvent. No. 1,308,803; July 8; v. 264; p. 174.
 Merwin, George H., Milford, Conn. Advertising toy. No. 1,308,854; July 8; v. 264; p. 183.
 Messner, William G., Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation. Airplane wire-fastening. No. 1,310,764; July 22; v. 264; p. 604.
 Metal Arts & Crafts Co. (See Jones, Charles E., assignor.)
 Metal Package Corporation of New York. (See Blakeney, Albert N., assignor.)
 Metals Research Company. (See Bacon, Raymond F., assignor.)
 Metcalfe, Henry, Cold Spring, N. Y. Pocket memo-case. No. 1,308,437; July 1; v. 264; p. 78.
 Metzger, Floyd J., assignor to Air Reduction Company, New York, N. Y. Apparatus for the manufacture of alkali cyanide. No. 1,309,908; July 15; v. 264; p. 418.
 Metzger, Joseph A., Buffalo, N. Y. Adjustable shade or curtain bracket. No. 1,311,453; July 29; v. 264; p. 705.
 Metzger, Jules P., Carlsbad, assignor to The Leslie Co., Lyndhurst, N. J. Pressure-regulator. No. 1,308,638; July 1; v. 264; p. 115.
 Metzger, Myer, Chicago, Ill. Holder for menu-cards and the like. No. 1,310,202; July 15; v. 264; p. 409.
 Meyer, Clifford L., Bellevue borough, Pa. Man's garter. No. 1,309,765; July 15; v. 264; p. 390.
 Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,308,094; July 1; v. 264; p. 16.
 Meyer, George J., assignor to Geo. J. Meyer Manufacturing Co., Milwaukee, Wis. Bottle-washing machine. No. 1,310,128; July 15; v. 264; p. 456.
 Meyer, Peter F., Brooklyn, N. Y. Pleasure-railway. No. 1,311,703; July 29; v. 264; p. 811.
 Meyers, Herbert H., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill. Manufacture of chlorine. No. 1,311,175; July 29; v. 264; p. 713.
 Meyers, Luther C., Bridgeton, N. J. Press-frame. No. 1,311,412; July 29; v. 264; p. 757.
 Meyrowitz, Emil H., New York, N. Y., assignor to E. B. Meyrowitz, Inc. Spectacles. No. 1,310,203; July 15; v. 264; p. 470.
 Michael, Harry A., Beaver Falls, Pa. Pipe-wrench. No. 1,311,610; July 29; v. 264; p. 704.
 Michaelchek, Fred, Portland, Ore. Operating means for washing-machines. No. 1,311,003; July 22; v. 264; p. 648.
 Michel, William G., Niagara Falls, N. Y. Electrolytic cell. No. 1,309,148; July 8; v. 264; p. 239.
 Micheletti, Attilio. (See Valente and Micheletti.)
 Midgley, Albert H., assignor of one-half to C. A. Vaederrell, Action Vale, England. Percussion-fuse for explosive projectiles. No. 1,309,098; July 8; v. 264; p. 230.
 Mikulecky, Vaclav, Verdigré, Nehr. Wagon-tongue. No. 1,310,244; July 15; v. 264; p. 477.
 Millnowski, Arthur S., Brockport, N. Y. Calculating-machine. No. 1,310,204; July 15; v. 264; p. 470.
 Milkes, Leah G., assignor to Venus Manufacturing Company, Minneapolis, Minn. Hood for children's garments. No. 1,309,042; July 8; v. 264; p. 219.
 Milkes, Leah G., assignor to Venus Manufacturing Company, Minneapolis, Minn. Reversible cuff. No. 1,309,943; July 8; v. 264; p. 219.
 Miller, Albert, Buffalo, N. Y. Open-hearth furnace. No. 1,309,149; July 8; v. 264; p. 239.
 Miller, Frank E. (See Davis, Charles E., assignor.)
 Miller, George E. (See Cantrell and Miller.)
 Miller, George F., New York, N. Y. Filter-press plate. No. 1,308,438; July 1; v. 264; p. 78.
 Miller, Henry A., Meadville, Pa. Paper duster. No. 1,309,537; July 8; v. 264; p. 311.
 Miller, James M., Washington, D. C. Means for vaporizing liquid fuel. No. 1,310,245; July 15; v. 264; p. 477.

Miller, John A., Dow City, Iowa. Internal-combustion engine. No. 1,310,698; July 22; v. 264; p. 586.
 Miller, John W. (See Sidenstricker and Miller.)
 Miller, Joseph C., assignor of one-half to J. O'Brien, St. Paul, Minn. Fan-bracket and belt-tightener. No. 1,311,327; July 29; v. 264; p. 780.
 Miller, Max C., Cumberland Hill, assignor to Jencken Knitting Machine Company, Pawtucket, R. I. Knitted fabric and making same. No. 1,309,582; July 8; v. 264; p. 319.
 Miller, William. (See Young and Miller.)
 Miller, William J., Swiswale borough, Pa. Apparatus for manufacturing articles of glass. No. 1,308,095; July 1; v. 264; p. 16.
 Miller, William W. (See Pridmore and Miller.)
 Miller, Wilmer W., Ardmore, Pa. Apparatus for transmitting signals. No. 1,309,364; July 8; v. 264; p. 278.
 Millet, Charles W., Johnstown, N. Y. Castor-wheel. No. 1,310,287; July 15; v. 264; p. 485.
 Milliken, Foster, Lawrence, N. Y. Alloy. No. 1,310,363; July 15; v. 264; p. 498.
 Milliken, Isaac H., Aspinwall, assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft-yoke. No. 1,309,297; July 8; v. 264; p. 266.
 Millner, Edgar, St. Louis, Mo. Rack for shoes and the like. No. 1,308,551; July 1; v. 264; p. 99.
 Mills, Albert W., West Orange, N. J. Sound-box for phonographs. No. 1,309,760; July 15; v. 264; p. 301.
 Mills, Charles F. H. (See Mills and Carrel.)
 Mills, Herbert S. (See Sandell, Henry K., assignor.)
 Mills, John, Wyoming, N. J., and J. R. Carson, New York, N. Y., assignors to American Telephone and Telegraph Company. Wireless system. No. 1,309,538; July 8; v. 264; p. 311.
 Mills, Joseph H., Richmond, Ind. Self-compensating cot. No. 1,308,187; July 1; v. 264; p. 33.
 Mills, Raymond L. and C. F. H., and A. D. Carrel, Grand Rapids, Mich. Sales-tag. No. 1,309,904; July 15; v. 264; p. 410.
 Mills Woren Cartridge Belt Company. (See Sisson, Eugene A., assignor.)
 Milne, Alexander, Newark, N. J. Watch-holder. No. 1,309,865; July 15; v. 264; p. 408.
 Milne, Isaac B. (See Hadfield, Jack, Milne, and Parker.)
 Miner, Lucien L., Tyronne, N. Mex. Cover for paste-tubes. No. 1,311,004; July 29; v. 264; p. 648.
 Miner, William H. (See Dwyer, William H., assignor.)
 Miner, William H. (See O'Connor, John F., assignor.)
 Minor, William H. (See Strid, Sven J., assignor.)
 Mineral Electric Company. (See Sines, Harold S., assignor.)
 Minnet, Charles P., Evansville, Ind. Priming-cup. No. 1,308,913; July 8; v. 264; p. 194.
 Minnesota Store Company, The. (See Nye, Charles W., assignor.)
 Minnesota Tractor Company. (See Brown and Martin, assignors.)
 Mintz, Harry, Boston, Mass. Hammock. No. 1,308,090; July 1; v. 264; p. 17.
 Mintz, Julius, New York, N. Y. Ticket-assembling apparatus. No. 1,309,044; July 8; v. 264; p. 219.
 Mitchell, Frederick G. (See Parnall and Mitchell.)
 Mitchell, William. (See Sturdy, Fred, assignor.)
 Miyamoto, Jutaro. (See Takasaki and Miyamoto.)
 Mock, Hugo, New York, N. Y. Refrigerator-lining. No. 1,309,866; July 15; v. 264; p. 409.
 Mock, Otto D., Louisville, Ky. Stop for hollow tiles. No. 1,311,082; July 29; v. 264; p. 605.
 Moerk, Frank X., Philadelphia, Pa. Perpetual monthly calendar. No. 1,310,428; July 22; v. 264; p. 542.
 Mohr, William D., Baldwin, Iowa. Water-cut-off valve. No. 1,311,830; July 29; v. 264; p. 835.
 Moline Plow Company. (See Epling, Conrad, assignor.)
 Moll, De Clinton C., and G. A. Olafsen, Kan. Demountable rim for wheels. No. 1,310,364; July 15; v. 264; p. 498.
 Moll, George A. (See Moll, De Clinton C., and G. A.)
 Möller, Anton R., Everett, Mass. Valve. No. 1,310,954; July 22; v. 264; p. 659.
 Monarch Metal Weather Strip Company. (See Lane, Alfred M., assignor.)
 Moness, Jacob M., Long Island City, N. Y., assignor to Chemical Development Company. Making chlorinated products. No. 1,308,763; July 8; v. 264; p. 167.
 Monfort, Edgar A., New York, N. Y. Attachment for gloves and cuff-gloves. No. 1,309,150; July 8; v. 264; p. 239.
 Monaghan, John E., Fort Wayne, Ind. Fishing-signal. No. 1,309,305; July 8; v. 264; p. 279.
 Monitor Controller Company. (See Whittingham, George H., assignor.)
 Mourath, Gustave. (See Rose and Mourath.)
 Moody, Calvin D., Corpus Christi, Tex. Locomotive-head-light. No. 1,308,720; July 1; v. 264; p. 131.
 Moon Brothers Manufacturing Company. (See Drew, John W., assignor.)
 Moon, George H., Dallas, Iowa. Parachute. No. 1,311,693; July 29; v. 264; p. 703.
 Moon, William F., Milwaukee, Wis. Speck-remover. No. 1,309,258; July 8; v. 264; p. 259.
 Moor, Edward N., Oakland, Calif. Supplementary high-speed spindle for engine-lathes. No. 1,311,454; July 29; v. 264; p. 705.
 Moor, Edward N., Oakland, Calif. Universal dividing attachment for lathes. No. 1,311,455; July 29; v. 264; p. 705.

Moor, Edward N., Oakland, Calif. Indexing and dividing machine. No. 1,311,456; July 29; v. 264; p. 706.
 Moore, Alfred A., Endavor, Wis. Ash-handling device. No. 1,309,905; July 15; v. 264; p. 410.
 Moore, Benton, Chertseyale, Kans., and G. O. Stansbury, Kansas City, Mo. Pumping-jack. No. 1,310,365; July 15; v. 264; p. 499.
 Moore, Charles A., St. Paul, Minn. Ventilating system for cars. No. 1,308,188; July 1; v. 264; p. 33.
 Moore, George, Joplin, Mo. Liquid-measuring apparatus. No. 1,308,555; July 8; v. 264; p. 188.
 Moore, George, Joplin, Mo. Filter and making same. No. 1,309,330; July 8; v. 264; p. 272.
 Moore, Harlan, New York, N. Y. Garter-supporter. No. 1,308,097; July 1; v. 264; p. 17.
 Moore, Hugh K., assignor to Brown Company, Berlin, N. H. Removing certain impurities from electrolytic cells. No. 1,309,214; July 8; v. 264; p. 250.
 Moore, John E., J. Black, Jr., J. C. Crosby, and J. Black, Waltherboro, S. C. Torpedo-shield. No. 1,309,690; July 15; v. 264; p. 377.
 Moore, Joseph H., Beaumont, Tex. Dry closet. No. 1,309,742; July 15; v. 264; p. 386.
 Moore, William E., Pittsburgh, Pa. Electric furnace and operating same. No. 1,309,045; July 8; v. 264; p. 220.
 Moore, Victor W., Athens, Ga. Frying device. No. 1,310,538; July 22; v. 264; p. 552.
 Moore, William J., New York, N. Y. Making tension-wheels. No. 1,310,240; July 15; v. 264; p. 478.
 Moorehead, George F., assignor of one-half to A. C. Wright, Des Moines, Iowa. Refrigerator show-case. No. 1,309,151; July 8; v. 264; p. 239.
 Morack, Louis. (See Herbst and Morack.)
 Morack, Louis. (See Herbst, Robert L., assignor.)
 Morell, Samuel, Chicago, Ill. Rascule-bridge. No. 1,311,284; July 29; v. 264; p. 733.
 Morehouse, Cyrus E., Milwaukee, Wis. Hose-supporter. No. 1,309,091; July 15; v. 264; p. 377.
 Morehouse, Merrill J., Evanston, Ill. Ventilator. No. 1,309,867; July 15; v. 264; p. 409.
 Morehouse, William H., Pasadena, Calif., assignor to S. Slade and M. S. Marsh, Chicago, Ill. Headlight-lens. No. 1,311,570; July 29; v. 264; p. 787.
 Moreland, Watt L., Los Angeles, Calif. Heater for manifold-intakes. No. 1,309,539; July 8; v. 264; p. 311.
 Morgan, Alonso W., Perry, Iowa. Folding clothes-basket. No. 1,310,669; July 22; v. 264; p. 587.
 Morgan, Charles E., Rincon, N. Mex. Cable-climbing device for miners. No. 1,311,054; July 29; v. 264; p. 665.
 Morgan, Charles E., Chicago, Ill. Air-heater for furnaces. No. 1,311,611; July 29; v. 264; p. 794.
 Morgan, Charles W., assignor to Gasoline Turbine Motor Company, Racine, Wis. Rotary gas-engine. No. 1,309,767; July 15; v. 264; p. 391.
 Morgan Construction Company. (See Hawthorne, Charles W., assignor.)
 Morgan, David, Launceston, Tasmania, Australia. Apparatus for exhausting and compressing air. No. 1,308,603; July 1; v. 264; p. 109.
 Morgan, John D., New York, N. Y. Apparatus for the production of cyanogen compounds. No. 1,209,050; July 15; v. 264; p. 369.
 Morgan, Ray, St. Louis, Mo. Machine for making sheet-glass. No. 1,311,671; July 29; v. 264; p. 787.
 Morgan, William W., Philadelphia, Pa. Thermostatic valve. No. 1,308,856; July 8; v. 264; p. 188.
 Morgan & Wright. (See McNeill, George, assignor.)
 Morgenstern, Nathan, Brooklyn, N. Y. Animal toy. No. 1,310,205; July 15; v. 264; p. 470.
 Mori, Iguma, Nishinari-Guo, Osaka-Fu, Japan. Razor. No. 1,310,056; July 15; v. 264; p. 448.
 Moriarty, Ernest C., U. S. Army. Fluid recoil-brake for guns. No. 1,309,989; July 15; v. 264; p. 432.
 Morichard, Jean H. A., Amsterdam, Netherlands. Indicating apparatus for charts, maps, and plans. No. 1,309,259; July 8; v. 264; p. 259.
 Morisak, John, Akron, Ohio. Fly-trap. No. 1,308,439; July 1; v. 264; p. 78.
 Morrick, Robert W., and E. H. Drews, Madison, Wis. Steering apparatus. No. 1,308,504; July 1; v. 264; p. 90.
 Morrill, Alfred B., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for preparing welding. No. 1,309,583; July 8; v. 264; p. 320.
 Morris, Alfred D., assignor to Morris Metallic Packing Company, Philadelphia, Pa. Metallic packing for piston and other rods. No. 1,309,075; July 8; v. 264; p. 225.
 Morris, Charles O., Indianapolis, Ind. Means for nnd method of building concrete boats. No. 1,311,612; July 29; v. 264; p. 795.
 Morris, Hurd T. (See Hellmund and Morris.)
 Morris, Matthew, assignor to The Norwich Woolen Millia Company, Norwich, Conn. Measuring device. No. 1,308,295; July 1; v. 264; p. 53.
 Morris Metallic Packing Company. (See Morris, Alfred D., assignor.)
 Morrison, James S., Flint, Mich. Wrench. No. 1,308,440; July 1; v. 264; p. 78.
 Morrison, Walter L. (See Bleecker and Morrison.)
 Morrow, James X. E., Mount Vernon, N. Y. Non-refillable bottle. No. 1,310,366; July 15; v. 264; p. 499.

Morse, Frank L., Ithaca, N. Y. Valve mechanism for gas-engines. No. 1,309,966; July 15; v. 264; p. 416.
 Morse, Frank L., Ithaca, N. Y. Punching-press. No. 1,309,907; July 15; v. 264; p. 417.
 Morse, Irving H., New Orleans, La. Apparatus for separating impurities from cane-juice or other liquids. No. 1,311,831; July 29; v. 264; p. 835.
 Mort, Arthur, Lincoln, England. Drop-hammer. No. 1,309,298; July 8; v. 264; p. 266.
 Mortensen, Cornelius, Louisville, Ky. Emulser. No. 1,308,250; July 1; v. 264; p. 44.
 Mortenson, Niels L., Milwaukee, Wis., assignor to The Cutter Hammer Mfg. Co., Milwaukee, Wis. Motor control. No. 1,309,366; July 8; v. 264; p. 279.
 Morton, Albert H., Lowell, Mass. Spinning-frame. No. 1,308,721; July 1; v. 264; p. 131.
 Morton, Herbert E. (See Savage and Morton.)
 Mosier, Orla H. (See Hempy, George L., assignor.)
 Moss, Ernest, Dallington, Christchurch, New Zealand. Raising, lowering, and depth regulation of plows and other agricultural implements and vehicles. No. 1,309,290; July 8; v. 264; p. 266.
 Mosteller, Doris H., Oak Park, Ill. Receptacle-cover. No. 1,310,836; July 22; v. 264; p. 618.
 Motor Terminals Company, The. (See Fitch, Benjamin F., assignor.)
 Mott, Abram C., Jr., assignor to Abram Cox Stove Company, Philadelphia, Pa. Baffle-plate for ovens. No. 1,310,872; July 22; v. 264; p. 624.
 Mott, William R., Lakewood, Ohio, assignor to National Carbon Company, Inc. Arc-lamp electrode. No. 1,311,133; July 22; v. 264; p. 672.
 Motte, Charles M., Paris, France. Multiple plow. No. 1,310,539; July 22; v. 264; p. 562.
 Moulton, James N., Haverhill, Mass. Well-strip. No. 1,308,804; July 8; v. 264; p. 174.
 Mount, Frederick R. (See Skelly, Bernard H., assignor.)
 Mountain, William W. (See Forbes, Ewing M., assignor.)
 Mount, Oliver M., McKeesport, Pa. Rolling-mill. No. 1,310,200; July 15; v. 264; p. 470.
 Moxey, James A., assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Folding end-gate. No. 1,308,189; July 1; v. 264; p. 33.
 Moxham, Arthur J., New York, N. Y. Cooling explosive shells. No. 1,311,176; July 22; v. 264; p. 713.
 Moyes, Henry, Eltham, New Zealand. Hat-fastener. No. 1,308,290; July 1; v. 264; p. 53.
 Moynihan, Eugene J., San Francisco, Calif. Latch for dryer-buckets. No. 1,310,020; July 15; v. 264; p. 428.
 Mruk, Landle J., Butte, Mont. Lubricator. No. 1,308,604; July 1; v. 264; p. 109.
 Mucher, John J., Brooklyn, N. Y. Tube-squeezer. No. 1,311,085; July 22; v. 264; p. 663.
 Mueller, Louis J., Jr., Milwaukee, Wis. Combined range-burner and heater. No. 1,308,980; July 8; v. 264; p. 208.
 Mueller, Philip, Decatur, Ill. Seat washer and stem. No. 1,311,832; July 29; v. 264; p. 835.
 Mueller, Philip, Decatur, Ill. Sanitary drinking-fountain. No. 1,311,833; July 29; v. 264; p. 835.
 Mueller, Robert H., Decatur, Ill. Service-box. No. 1,311,834; July 29; v. 264; p. 835.
 Muir, Chester A., and C. A. Taylor, Kayre, Pa. Projectile. No. 1,311,285; July 29; v. 264; p. 733.
 Muir, W. Hamilton, W. Baltimore, Md. Cooling system. No. 1,311,528; July 29; v. 264; p. 780.
 Muir, W. Hamilton, W. Baltimore, Md. Cooling system. No. 1,311,529; July 29; v. 264; p. 780.
 Mulet, Lorenzo M., San Juan, Porto Rico. Continuous centrifugal separator. No. 1,309,651; July 15; v. 264; p. 369.
 Muller, Edward A. (See Richardson and Muller.)
 Multi-Reliable Fuse Company. (See McDonald, Clarence T., assignor.)
 Multicolor Intaglio Press Company. (See Saalburg, Charles W., assignor.)
 Multipull Manufacturing Company. (See Eggleston, Robert N., assignor.)
 Mungenast, Andrew, St. Louis, Mo. Lever extension. No. 1,308,990; July 8; v. 264; p. 269.
 Munger, Melvin L., Pittsburgh, Pa., assignor to E. B. Sawyer, Lincoln, Neb. Tire-vulcanizer. No. 1,311,612; July 29; v. 264; p. 795.
 Munhollon, Frank, assignor of one-third to C. F. Lockhart, Cleveland, Ohio. Kiln. No. 1,311,286; July 29; v. 264; p. 733.
 Murph, John H., assignor to American Can Company, San Francisco, Calif. Apparatus for feeding, sorting, and distributing can ends. No. 1,310,837; July 22; v. 264; p. 618.
 Murphy, Charles H. (See Glenn, Walter T., assignor.)
 Murphy, James T., and E. J. Ramey, assignors of one-third to J. L. Carey, Chicago, Ill. Reeling-engine. No. 1,310,628; July 22; v. 264; p. 570.
 Murphy, Robert N., Ottawa, Ontario, Canada. Sanitary trap. No. 1,311,287; July 29; v. 264; p. 734.
 Morphy, Walter P., Chicago, Ill. Corrugated sheet-metal car end. No. 1,309,484; July 8; v. 264; p. 260.
 Morphy, Walter P., Chicago, Ill. Sheet-metal end structure for railway-cars. No. 1,311,572; July 29; v. 264; p. 787.
 Murray, Albert L., Auburn, Ind. Manufacturing automobile-tire patches. No. 1,311,134; July 22; v. 264; p. 672.

Murray, Joseph B. (See Murray, Thomas E., Jr., and J. B.)
 Murray, Thomas E., Jr., and J. B., Brooklyn, N. Y. Ejector projectile-shell for smooth-bore gun. No. 1,310,129; July 15; v. 264; p. 456.
 Murray, Thomas E., Jr., Brooklyn, N. Y. Producing metal tubes. No. 1,310,130; July 15; v. 264; p. 457.
 Mosker, Arthur, London, England. Apparatus for trimming and similarly distributing coal and other materials. No. 1,309,584; July 8; v. 264; p. 320.
 Mosker, Arthur, London, England. Discharge of coal and the like cargo in bulk from barges or vessels, and the elevation and delivery thereof. No. 1,309,585; July 8; v. 264; p. 320.
 Myers, Adolph A., et al. (See Boylis, Cecil H., assignor.)
 Myers, Elmer E. (See Donaldson, Hiram, and Brooks, assignors.)
 Myers, Harold L., Morristown, N. J. Paper box. No. 1,310,765; July 22; v. 264; p. 604.
 Myers, John M., Yonkers, N. Y. Adding-machine cabinet. No. 1,308,441; July 1; v. 264; p. 79.
 Myers, Louis, assignor to Crystal Alloys Corporation, Detroit, Mich. Comb. No. 1,308,857; July 8; v. 264; p. 184.
 Myers, Milton A., et al. (See Boylis, Cecil H., assignor.)
 Myerson, Simon, Cambridge, Mass. Making seamless stemmed metal plates. No. 1,308,251; July 1; v. 264; p. 45.
 Nagashima, Hajime, Tapanee, Nanshinseikel Satri, Taloan, Formosa, assignor to Taloan Saito Kabushiki Kaisha, Tokyn, Japan. Manufacturing solid dye from filter-cakes of sugar-juice. No. 1,308,552; July 1; v. 264; p. 99.
 Nagrabaki, Jakub, Waterbury, Conn. Clothes-hanger. No. 1,308,605; July 1; v. 264; p. 109.
 Naira Linoleum Company, The. (See Joule, William, assignor.)
 Nakamizo, Hirotsune T., Los Angeles, Calif. Self-heating container. No. 1,309,418; July 8; v. 264; p. 288.
 National Binding Machine Company. (See Rideout, Arthur E., assignor.)
 National Blacult Company. (See Davidson, Frank B., assignor.)
 National Biscuit Company. (See Tomlinson and Hangerford, assignors.)
 National Brass Co. (See Biye, Harold, assignor.)
 National Carbon Company. (See Mott, William R., assignor.)
 National Carbon Company. (See Shaw, William, assignor.)
 National Cash Register Company, The. (See Banwell and Phillips, assignors.)
 National Cash Register Company, The. (See Martin, Isakson A., assignor.)
 National Cash Register Company, The. (See Von Pein, Edward J., assignor.)
 National Clasp Co. (See Planchenault, Alexandre G., assignor.)
 National Clutch Co. (See Sandh, August, assignor.)
 National Equipment Company. (See Baasman, Alonso L., assignor.)
 National Explosive Corporation. (See Brown, James, assignor.)
 National Metal Molding Company. (See Hubbard and Cooper, assignors.)
 National Pneumatic Company. (See Rowntree, Harold, assignor.)
 National Shorthand Machine Company. (See Ireland and Lippert, assignors.)
 National Supply Company, The. (See Wright, Clyde S., assignor.)
 National Tractor and Plow Company. (See Carpenter, Alexander, assignor.)
 National Tin Rag Manufacturing Co. (See Hirschhorn, Benjamin, assignor.)
 Navrat, Stanley, Hollywood, Pa. Boiler construction. No. 1,309,955; July 15; v. 264; p. 420.
 Neabr, Will C., assignor to The Protective Signal Manufacturing Company, Denver, Colo. Electrical-signal flasher. No. 1,310,766; July 22; v. 264; p. 604.
 Nebel, Emil T., Ridgewood, assignor to Nebel Manufacturing Company, Jersey City, N. J. Making multicolor-printed paper. No. 1,308,098; July 1; v. 264; p. 17.
 Nebel Manufacturing Company. (See Nebel, Emil T., assignor.)
 Nehrke, Charles, assignor to E. P. Maasbendel, Brooklyn, N. Y. Massage apparatus. No. 1,308,805; July 8; v. 264; p. 174.
 Nelkirk, John O., Lombard, Ill. Railway-car. No. 1,308,442; July 1; v. 264; p. 79.
 Neill, Geo. W., et al. (See Ford, Everett G., assignor.)
 Nelson, Albert S., O. Cicero, Ill. Soap-fastener. No. 1,309,586; July 8; v. 264; p. 320.
 Nelson, Herbert, Harpree, Saskatchewan, Canada. Grain-drill. No. 1,308,252; July 1; v. 264; p. 45.
 Nelson, Joseph W., St. Cloud, Minn. Control-lever mount-log. No. 1,310,955; July 22; v. 264; p. 639.
 Nelson, Joseph W., St. Cloud, Minn. Supporting means for motors. No. 1,310,956; July 22; v. 264; p. 639.
 Nelson, Richard, Chicago, Ill. Child's vehicle. No. 1,309,331; July 8; v. 264; p. 272.

Neubert, Walter P., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Slow-acting device. No. 1,310,500; July 22; v. 264; p. 555.
 Neutts, William, Hyde Park, London, England. Collapsible box, case, and the like. No. 1,308,078; July 1; v. 264; p. 123.
 New Britala Machine Company, The. (See Brown, Robert S., assignor.)
 New London Chemical Company, The. (See Flanders, Bert W., assignor.)
 New York Belling and Packing Company. (See Somerville, Elbert A., assignor.)
 New York Belling and Packing Company. (See Thatcher, Sheldon P., assignor.)
 Newark Engineering and Refrigerating Company et al. (See Elmer, Charles, assignor.)
 Newburgh, Carl O., assignor of one-half to A. C. Johnson, Rockford, Ill. Steam-separator. No. 1,311,573; July 29; v. 264; p. 787.
 Newcombe, Charles W., Tacoma, Wash. Drain-valve. No. 1,310,501; July 22; v. 264; p. 555.
 Newdick, Norton A., Columbus, Ohio, assignor to J. E. Jones, Switzback, W. Va. Mine-working machine. No. 1,308,639; July 1; v. 264; p. 115.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Percussion-fuse for projectiles. No. 1,309,708; July 15; v. 264; p. 391.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Percussion-fuse. No. 1,309,709; July 15; v. 264; p. 391.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Time-fuse for projectiles. No. 1,309,770; July 15; v. 264; p. 391.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Projectile time-fuse. No. 1,309,771; July 15; v. 264; p. 391.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Ordnance-projectile. No. 1,309,772; July 15; v. 264; p. 392.
 Newell, Edward W., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Pneumatically-operated impact-fuse. No. 1,309,773; July 15; v. 264; p. 392.
 Newell, Lewis, Union Hill, N. J. Engine. No. 1,310,767; July 22; v. 264; p. 605.
 Newell & Neal. (See Jenkins, Henry C., assignor.)
 Newell, William C., Portland, Oreg. Automatic heat-controlled cut-out. No. 1,309,006; July 15; v. 264; p. 417.
 Newhall, Iose F., Crystal Bay, Minn. Cooker. No. 1,309,444; July 8; v. 264; p. 293.
 Newhouse, Ray C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Jaw-crusher. No. 1,309,807; July 15; v. 264; p. 308.
 Newman, Albert G., Stanhope, Iowa. Grinding-mill. No. 1,311,014; July 29; v. 264; p. 705.
 Newman, William A., Oakland, Calif. Vehicle-bed. No. 1,311,177; July 29; v. 264; p. 713.
 Newsom, Horace H., assignor to The Standard Parts Company, Cleveland, Ohio. Clutch mechanism. No. 1,310,620; July 22; v. 264; p. 570.
 Newton, William G., assignor to The Peck Bros & Co., New Haven, Conn. Basin-waste fixture. No. 1,311,241; July 29; v. 264; p. 725.
 Nias, Henry. (See Lockwood and Nias.)
 Nisols, Walter W., London, England. Ventilator. No. 1,310,420; July 22; v. 264; p. 542.
 Nisols' Explosives Company. (See Rintoul and Stevenson, assignors.)
 Noble, Howard C., assignor to The North & Judd Manufacturing Company, New Britain, Conn. Fastening. No. 1,310,920; July 22; v. 264; p. 633.
 Nichol, John C., Perth, Ontario, Canada. Closure for jars or receptacles. No. 1,311,288; July 29; v. 264; p. 734.
 Nicholas Askin M., Blamuth, via Deepwater, New South Wales, Australia. Baling tank or bucket. No. 1,309,652; July 15; v. 264; p. 370.
 Nicholas, William, New York, and W. Arkerman, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company. Justifying means for type-casting and composing machines. No. 1,310,207; July 15; v. 264; p. 470.
 Nichols, John, et al. (See Paine, William, assignor.)
 Nichols, Frank L., Stamford, Conn., assignor to International Munitions Company, Inc. of Delaware. Mortar-bomb. No. 1,309,743; July 15; v. 264; p. 387.
 Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,247; July 15; v. 264; p. 478.
 Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,288; July 15; v. 264; p. 485.
 Nico, Andrew S., assignor to The Genesee Pure Food Company, Le Roy, N. Y. Sealed receptacle. No. 1,310,289; July 15; v. 264; p. 485.
 Nicoletti, Luigi, Rome, Italy. Clipper apparatus. No. 1,311,457; July 29; v. 264; p. 760.
 Nielsen, Frederik, Dorchester, Mass., assignor to A. Schrader's Son Incorporated, Brooklyn, N. Y. Dust-cap. No. 1,309,215; July 8; v. 264; p. 261.

Niemann, Frederick A., assignor to Comptograph Company, Chicago, Ill. Adding-machine. No. 1,300,092; July 15; v. 264; p. 377.
 Nihonow, John P., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Starting mechanism. No. 1,311,458; July 29; v. 264; p. 760.
 Niles-Henent-Pond Company. (See Blood, Harold L., assignor.)
 Nilson, Lars G., Hoboken, N. J. Propeller. No. 1,308,527; July 1; v. 264; p. 94.
 Nizer, Jesse P., Allamuchy, N. J. Direction-indicator. No. 1,311,289; July 29; v. 264; p. 734.
 Nixon, Lewis, New Brunswick, N. J. Percussion-fuse. No. 1,311,835; July 29; v. 264; p. 836.
 Nixoa, Mica G., Chicago, Ill., and O. Smith, Bridgeport, N. J. Game apparatus. No. 1,309,653; July 15; v. 264; p. 370.
 Noble, Paul O., Schenectady, N. Y., assignor to General Electric Company. Electric welding. No. 1,310,131; July 15; v. 264; p. 457.
 Nock, Leo P. (See Pack and Nock.)
 Noleless Typewriter Company, The. (See Goling, George H., assignor.)
 Non-Explosive Can and Tube Company. (See Kessler, Louis, assignor.)
 Nonneman, Ira W., assignor to The Borden Company, Warren, Ohio. Pipe-cutter. No. 1,310,957; July 22; v. 264; p. 630.
 Nordfors, Conrad. (See Wood and Nordfors.)
 Norris, Almon F., Cambridge, Mass. Rail-clamp for conveying structures. No. 1,308,850; July 8; v. 264; p. 184.
 Norris, Willard J., Charleston, W. Va. Headlight. No. 1,308,858; July 8; v. 264; p. 184.
 Norris, William E., Washington, D. C. Tool for adjusting journals. No. 1,311,836; July 29; v. 264; p. 836.
 Norsk Alkali A. S. (See Riber, Claus N., assignor.)
 Norsk Elektrisk Metallindustri Aktieselskab. (See Huld, Sren, assignor.)
 Norsk Hydro-elektrisk Krafstoftaktieselskab. (See Gruner, Wilhelm, assignor.)
 North American Chemical Company. (See Thoma, Andrew, assignor.)
 North & Judd Manufacturing Company, The. (See Noble, Howard C., assignor.)
 North, Thomas K., assignor to Vickers Limited, Westminster, London, England. Submarine mine. No. 1,309,909; July 15; v. 264; p. 417.
 Northcott, Theodore C., Luray, Va. Flycatcher. No. 1,311,704; July 29; v. 264; p. 811.
 Northwestern Knitting Company. (See Chatfield, Frank H., assignor.)
 Norton, Allen B., Detroit, Mich. Internal-combustion motor. No. 1,311,242; July 29; v. 264; p. 725.
 Norton, Edwin, deceased; L. E. Norton executrix, assignor to Perfect Vacuum Canning Company, New York, N. Y. Jar-closure. No. 1,308,606; July 1; v. 264; p. 109.
 Norton, Lucy E., executrix. (See Norton, Edwin.)
 Norvell, Lorenzo, trustee. (See Tilton, Edward L., assignor.)
 Norwich Woolen Mills Company, The. (See Morris, Matthew, assignor.)
 Notenboom, Pieter, Rotterdam, Netherlands. Fruit-sorting machine. No. 1,310,921; July 22; v. 264; p. 633.
 Norvik, Abraham, New York, N. Y., assignor, by mesne assignments, to United States Envelope Company, Springfield, Mass. Cutting mechanism for envelopes-blanks. No. 1,310,022; July 22; v. 264; p. 633.
 Norvik, Abraham, New York, N. Y., assignor to United States Envelope Company, Springfield, Mass. Envelope-blank cutting and forwarding mechanism. No. 1,310,023; July 22; v. 264; p. 633.
 Nugent, Robert A., Somerville, Mass. Making open cores. No. 1,310,768; July 22; v. 264; p. 605.
 Nulomoline Company, The. (See Rooker, James P., assignor.)
 Nye, Charles W., Minneapolis, Minn., assignor to The Minnesota Stove Company. Range. No. 1,309,099; July 8; v. 264; p. 230.
 Nye, Charles W., Minneapolis, Minn., assignor to The Minnesota Stove Company. Convertible oven for ranges. No. 1,309,100; July 8; v. 264; p. 230.
 Nye, Clyde M., assignor to J. H. Nye, Emmett, Idaho. Switch. No. 1,310,430; July 22; v. 264; p. 543.
 Nye, John H. (See Nye, Clyde M., assignor.)
 Nyquist, Carl J., Chicago, Ill. Clamping bow-lines. No. 1,309,332; July 8; v. 264; p. 273.
 O. M. Edwards Company. (See Stock, Everett, assignor.)
 O'Brien, Edmund H., Kansas City, Mo. Heating appliance for carbureters. No. 1,308,860; July 8; v. 264; p. 184.
 O'Brien, John. (See Miller, Joseph C., assignor.)
 O'Brien, Joseph F., New York, N. Y. Window-closure. No. 1,310,367; July 15; v. 264; p. 499.
 O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Friction shock-absorbing mechanism. No. 1,308,099; July 1; v. 264; p. 17.
 O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Antifriction-bearing. No. 1,308,100; July 1; v. 264; p. 17.
 O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Rocker side bearing. No. 1,308,640; July 1; v. 264; p. 116.
 O'Connor, Rosalie C., Highlandtown, Md. Safety-harness for children. No. 1,310,958; July 22; v. 264; p. 639.

O'Connor, Thomas F., Chicago, Ill. Demountable wheel. No. 1,310,502; July 22; v. 264; p. 555.
 O'Donnell, Mary M., New York, N. Y. Cooking utensil. No. 1,310,208; July 15; v. 264; p. 471.
 O'Halloran, William, Stoughton, Mass. Tool for forming cervical fillings. No. 1,310,614; July 15; v. 264; p. 436.
 O'Hara, Joseph G. R., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo. Film-guide. No. 1,308,443; July 1; v. 264; p. 79.
 O'Hara, Joseph G. R., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo. Motion-picture-projecting machine. No. 1,308,444; July 1; v. 264; p. 79.
 O'Hara, Joseph G. R., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo. Adjustable lamp for motion-picture-projecting machines. No. 1,310,959; July 22; v. 264; p. 640.
 O'Meara, Thomas J., (See Shook, Thomas M., assignor.)
 O'Neil, Clarence M., Eagle Creek, Oreg. Lunch-pail. No. 1,309,541; July 8; v. 264; p. 312.
 O'Neill, John, (See Dodd, Henry S., assignor.)
 O'Loughlin, Charles E., (See O'Loughlin, William R., L. G., and C. E.)
 O'Loughlin, Leo G., (See O'Loughlin, William R., L. G., and C. E.)
 O'Loughlin, William R., L. G., and C. E., Providence, R. I. Basket. No. 1,311,056; July 22; v. 264; p. 604.
 Oborski, Marya Z., Chicago, Ill. Portable fence. No. 1,309,956; July 15; v. 264; p. 426.
 Ochrie, Franklin W., Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,310,401; July 15; v. 264; p. 506.
 Ochrie, Franklin W., Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,310,402; July 15; v. 264; p. 506.
 Ocker, Thomas, and H. H. Mercer, Claremont, N. H., assignors to Sullivan Machinery Company, Stoneworking-machine. No. 1,310,248; July 15; v. 264; p. 478.
 Offedahl, John, Hanley Falls, Minn. Bottle-filler. No. 1,308,101; July 1; v. 264; p. 17.
 Offedahl, John, Hanley Falls, Minn. Seed-corn holder. No. 1,308,253; July 1; v. 264; p. 45.
 Ogden, J. Edward, (See Tomkinson, Charles C., assignor.)
 Ohlson, Olof, Newton, assignor to Waltham Watch Company, Waltham, Mass. Coupling-release for mechanical time-fuses. No. 1,309,333; July 8; v. 264; p. 273.
 Ohlson, Olof, Newton, assignor to Waltham Watch Company, Waltham, Mass. Settling device for mechanical time-fuses. No. 1,311,837; July 29; v. 264; p. 836.
 Ohlson, Olof, Newton, assignor to Waltham Watch Company, Waltham, Mass. Locking device for time-fuses. No. 1,311,838; July 29; v. 264; p. 836.
 Ohlsson, Johan A., assignor to Klostera Aktie Bolag, Stockholm, Sweden. Ball-bearing. No. 1,311,769; July 29; v. 264; p. 824.
 Okun, Morris B., Chicago, Ill. Corner-post fastener for beds. No. 1,310,166; July 15; v. 264; p. 403.
 Old Colony Machine Co., (See Sharples and Crowe, assignors.)
 Oldham, John F., New York, N. Y. Resilient wheel. No. 1,309,540; July 8; v. 264; p. 311.
 Olds, Alfred W., Windsor, Conn. Apparatus for operating automobiles. No. 1,311,135; July 22; v. 264; p. 672.
 Olds, James H., Maspeth, N. Y. Semi-trailer elevating-horse. No. 1,308,764; July 8; v. 264; p. 167.
 Olerin, Adolph, assignor to Meridian Machine Products Corporation, Detroit, Mich. Micrometer-callipers. No. 1,310,431; July 22; v. 264; p. 543.
 Oliver Chilled Flow Works, (See Roberts and Heylman, assignors.)
 Olliver, Ernest A., Flushing, N. Y., assignor to Victory Bottle Capping Machine Co., Incorporated. Bottle-capping machine. No. 1,310,960; July 22; v. 264; p. 640.
 Olley, Edwin A., assignor to Crouse-Hinds Company, Syracuse, N. Y. Panel-board construction. No. 1,308,607; July 1; v. 264; p. 110.
 Olmsted, Harold F., Grand Rapids, Mich. Periscope casing. No. 1,311,087; July 22; v. 264; p. 664.
 Olson, John J., Bellevue, Minn. Store attachment. No. 1,311,705; July 29; v. 264; p. 812.
 Olson, Karl A., Plainfield, N. J. Apparatus for raising sunken vessels and the like. No. 1,308,528; July 1; v. 264; p. 35.
 Olson, Magnus, Golden, British Columbia, Canada. Cutter-head. No. 1,308,297; July 1; v. 264; p. 53.
 Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Pile-driving machine. No. 1,308,698; July 1; v. 264; p. 110.
 Ong, Harlow F., Portland, Oreg. Carburetor device. No. 1,311,088; July 22; v. 264; p. 664.
 Ono, Takano, Sedwick, Colo. Crust-breaking attachment for cultivators. No. 1,310,924; July 22; v. 264; p. 633.
 Ormiston, Frank W., (See Mackey and Ormiston.)
 Orr, Walker P., Dhana, Tenn. Quilter-frame. No. 1,311,413; July 29; v. 264; p. 758.
 Osher, Julius C., Anaheim, Calif. Universal dentist's and jeweler's tool. No. 1,311,414; July 29; v. 264; p. 758.

Oso Chemical Company, (See Wood, John H., assignor.)
 Ossenbeck, Anton, (See Heymann, Dressel, Kothé, and Ossenbeck.)
 Osterberg, Carl T., assignor of one-half to A. Hudson, Milwaukee, Wis. Calculating device. No. 1,310,961; July 22; v. 264; p. 640.
 Ostolaza, Justo R., Los Angeles, Calif. Non-skid device and emergency-brake. No. 1,310,209; July 15; v. 264; p. 471.
 Otis Elevator Company, (See Hyman, Frederick, assignor.)
 Otis Elevator Company, (See Larson, David C., assignor.)
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,445; July 8; v. 264; p. 293.
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,446; July 8; v. 264; p. 294.
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,447; July 8; v. 264; p. 294.
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,448; July 8; v. 264; p. 294.
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,449; July 8; v. 264; p. 294.
 Otte, Otto M., Jamestown, N. Y., assignor to Raydex Manufacturing Company, Brackenridge, Pa. Automobile-lamp. No. 1,309,450; July 8; v. 264; p. 294.
 Otte, Otto M., Jamestown, N. Y. Folding table. No. 1,309,774; July 15; v. 264; p. 392.
 Ottila, Gileve, (See Bierbach, Carl F., assignor.)
 Otto, Adolph O., Oak Park, assignor to The American Toy Shop, Chicago, Ill. Toy building-block. No. 1,308,254; July 1; v. 264; p. 45.
 Otto, August, Jr., Sandwich, Ill. Tank-heater. No. 1,309,101; July 8; v. 264; p. 230.
 Otto Konigsloew Manufacturing Company, The, (See Konigsloew, Otto, assignor.)
 Overstreet, Emmett W., Murray, Utah. Internal-combustion engine. No. 1,310,368; July 15; v. 264; p. 409.
 Owen, Ira J., and B. J. Houwmeester, assignors to Blaisell Carpet Sweeper Co., Grand Rapids, Mich. Handdle. No. 1,309,775; July 15; v. 264; p. 392.
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 Owens Bottle Machine Company, The, (See Whittemore, James, assignor.)
 Paasche, Jens A., Chicago, Ill. Pneumatic coating apparatus. No. 1,311,839; July 29; v. 264; p. 836.
 Pacific Hurt Company, (See Johnston, Clarence L., assignor.)
 Pacific Foundry Company, (See Baird, Frank, assignor.)
 Pack, Charles, and L. F. Nock, New York, assignors to Doebler Die Casting Company, Brooklyn, N. Y. Molding molds. No. 1,308,661; July 8; v. 264; p. 184.
 Pack, Charles, and L. F. Nock, assignors to Doebler Die Casting Company, Brooklyn, N. Y. Casting apparatus. No. 1,308,662; July 8; v. 264; p. 184.
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 Package Machinery Company, (See Fischer, Hermann O., assignor.)
 Pade, George V., and C. T. Neltzel, Dallas, Tex. Needle for hand-embroidery and similar work. No. 1,309,601; July 8; v. 264; p. 323.
 Padgett, Thomas, East Palestine, Ohio. Dirigible headlight. No. 1,311,290; July 29; v. 264; p. 734.
 Page, Albert A., East Haven, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,309,300; July 8; v. 264; p. 267.
 Page, Frank H., Waverly, Iowa. Hog-walterer. No. 1,308,506; July 8; v. 264; p. 174.
 Page, Frederick H., London, England. Union for attachment of struts or frames in aircraft. No. 1,311,706; July 29; v. 264; p. 812.
 Pagendam, John F., San Francisco, assignor of seventy per cent. to J. W. Shannon, San Rafael, ten per cent. to W. Von Hacht, ten per cent. to W. C. R. Taylor, and ten per cent. to W. F. Clowe, Sonoma, Calif. Rotary-valve gas-engine. No. 1,308,722; July 1; v. 264; p. 131.
 Pain, William, Little Rock, Wash., assignor of one-fourth to J. Nichols, one-fourth to S. Lazzari, and one-fourth to A. Lazzari, Seattle, Wash. Aerial machine. No. 1,309,152; July 8; v. 264; p. 240.
 Paine, Cecil E., Bath, Me. Ship's steering-gear. No. 1,309,076; July 8; v. 264; p. 225.
 Palladino, Giuseppe, Allentown, Pa. Billiard-cue tip holder. No. 1,311,707; July 29; v. 264; p. 812.
 Palmer, Martin J., Seattle, Wash. Safety-clip. No. 1,311,574; July 29; v. 264; p. 788.
 Palmer, Roy C., Nevada, Mo. Marker. No. 1,310,369; July 15; v. 264; p. 500.
 Palmer, William T., and F. E. Abbott, Coalinga, Calif. Oil-burner. No. 1,311,575; July 29; v. 264; p. 788.
 Pann, August C., Ridgewood, N. Y., assignor, by mesne assignments, to Antosales Corporation, Vending-machine. No. 1,308,960; July 8; v. 264; p. 203.
 Paper Utilities Corporation, (See Hill, Herbert M., assignor.)

Papish, Jacob, (See Mathers and Papish.)
 Paragon Metal Cap Company, (See Russell, Robert A., assignor.)
 Paramount Rubber Company, The, (See Roberts, Fred T., assignor.)
 Pardee, M. Clifford, et al., (See Lamberson, George E., assignor.)
 Parlab, Le Grand, New York, N. Y. Locomotive-fire-box construction. No. 1,308,102; July 1; v. 264; p. 18.
 Parker, Earl W., Malden, Mass. Safety locking device. No. 1,310,577; July 22; v. 264; p. 569.
 Parker, Harold, Hartford, Wis. Nut-lock. No. 1,308,505; July 1; v. 264; p. 90.
 Parker, John E., and D. H. Winter, assignors to Crouse-Hinds Company, Syracuse, N. Y. Means for attaching electrical appliances to conduit outlet-boxes. No. 1,310,578; July 22; v. 264; p. 570.
 Parker, Joseph F., Gardner, Mass. Automobile-licensing-tag-fastening device. No. 1,310,769; July 22; v. 264; p. 605.
 Parker, Lee H., Boston, Mass., assignor to Spray Engineering Company, Spray-nozzle. No. 1,309,596; July 8; v. 264; p. 322.
 Parker, Lee H., Boston, Mass., assignor to Spray Engineering Company, Spray-nozzle. No. 1,309,597; July 8; v. 264; p. 322.
 Parker, Lee H., assignor to Spray Engineering Company, Boston, Mass. Distributing liquid. No. 1,311,840; July 29; v. 264; p. 836.
 Parker, Lee H., assignor to Spray Engineering Company, Boston, Mass. Distributing liquid. No. 1,311,841; July 29; v. 264; p. 837.
 Parker, Luke W., assignor of one-half to M. L. Landrum, Mountain View, Mo. Check-protector. No. 1,310,370; July 15; v. 264; p. 500.
 Parker, Newell D., assignor to Standard Scientific Company, New York, N. Y. Supporting-clamp for various objects. No. 1,311,089; July 22; v. 264; p. 664.
 Parker Rust-Proof Company of America, (See Colquhoun, Roy D., assignor.)
 Parker, William E., (See Haddfield, Jack, Milne, and Parker.)
 Parkhurst, Frederic A., assignor to The Aluminum Castings Company, Cleveland, Ohio. Mold and method of casting. No. 1,308,103; July 1; v. 264; p. 18.
 Parkinson, William J., W. A. M. Welles, and P. W. Tierney, assignors to Eastman Kodak Company, Rochester, N. Y. Film-winding device. No. 1,308,991; July 8; v. 264; p. 209.
 Parkman, George W., Sunnyvale, Calif. Culinary utensil. No. 1,311,178; July 29; v. 264; p. 714.
 Parks, John R., Franklinville, N. C. Centering-tool. No. 1,309,654; July 15; v. 264; p. 370.
 Parnall, Thomas S. R., Smethwick, near Birmingham, and F. G. Mitchell, Hyde Park, London, England. Transporter weighing-crane. No. 1,310,540; July 22; v. 264; p. 562.
 Parr, George T., St. Paul, Minn. Collapsible fan-trellis. No. 1,311,136; July 22; v. 264; p. 693.
 Parrish, Walter C., Kansas City, Mo. Propelling means. No. 1,311,415; July 29; v. 264; p. 758.
 Parsons, Charles A., Newcastle-upon-Tyne, E. J. Walker, S. S. Cook, and L. M. Douglas, Wallasey, England; said Walker, said Cook, and said Douglas assignors to said Parsons. Turbine installation for ship propulsion. No. 1,309,077; July 8; v. 264; p. 226.
 Parsons, Charles A., E. Bennett, and H. Rowe, Newcastle-upon-Tyne, England; said Bennett and said Rowe assignors to said Parsons. Mounting of reflectors. No. 1,309,542; July 8; v. 264; p. 312.
 Parsons, George K., Detroit, Mich. Alternating rotary drive for washing-machines. No. 1,308,104; July 1; v. 264; p. 65.
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 Parsons, Stuart W., and P. F. King, assignors to The Stanley Works, New Britain, Conn. Rutt. No. 1,311,243; July 29; v. 264; p. 725.
 Parsy, Paul V., Paris, France. Crucible-furnace for melting metals. No. 1,308,180; July 1; v. 264; p. 34.
 Paschall, Armand L., assignor to The Banner Bros. Company, Springfield, Ohio. Grinding-mill. No. 1,310,931; July 15; v. 264; p. 438.
 Passat, Stéphane F. M., Boulogne-sur-Seine, France. Projectile, shell, and the like. No. 1,310,132; July 15; v. 264; p. 457.
 Patrick, Duncan M., Johannesburg, Transvaal, South Africa. Anticreeping device for railway-tracks. No. 1,309,957; July 15; v. 264; p. 426.
 Patis, Johann F. M., assignor to Ailla-Chalmers Manufacturing Company, Milwaukee, Wis. Steam-turbine. No. 1,311,615; July 29; v. 264; p. 795.
 Patten, Francis H., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, Cut-out. No. 1,311,459; July 29; v. 264; p. 766.
 Patten, Francis H., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, Cut-out. No. 1,311,460; July 29; v. 264; p. 766.
 Patterson, George F., Edgerton, Minn. Brake-cleaner. No. 1,310,541; July 22; v. 264; p. 563.
 Pattle, Thomas, Pongsonby, Auckland, New Zealand. String-cutter. No. 1,311,616; July 29; v. 264; p. 795.

Paulauski, John, Cicero, Ill. Airship. No. 1,309,078; July 8; v. 264; p. 226.
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 Paxton, Samuel O., Rosedale, Kans. Corn-harvester. No. 1,310,133; July 15; v. 264; p. 457.
 Peacock, Benjamin A., Philadelphia, Pa., assignor to R. Gilchrist, New York, N. Y. Producing potassium hydrate from green sand. No. 1,309,744; July 15; v. 264; p. 357.
 Peacock, Benjamin A., Philadelphia, Pa., assignor, by mesne assignments, to R. Gilchrist, New York, N. Y. Decomposing natural silicates. No. 1,310,770; July 22; v. 264; p. 605.
 Pearl, Eugene, New York, N. Y. Crutch. No. 1,311,604; July 29; v. 264; p. 804.
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 Pesce, Roger S., assignor to Pittsburgh Plate Glass Company, Pittsburgh, Pa. Store-front. No. 1,309,911; July 15; v. 264; p. 417.
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 Peck, William H., Cicero, Ill. Reverse-jaw expansion-chuck. No. 1,311,665; July 29; v. 264; p. 804.
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 Pedersen, Einar, Copenhagen, Denmark. Hair-pin. No. 1,309,334; July 8; v. 264; p. 273.
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 Peeta, Frank R., Merrill, N. Y. Automatic brake. No. 1,308,105; July 1; v. 264; p. 18.
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 Pelne, Adolphus G., assignor to Alfred Decker & Cohn, Chicago, Ill. Trouser safety-pocket. No. 1,310,210; July 15; v. 264; p. 471.
 Pelton, Clyde S., Cleveland Heights, assignor, by mesne assignments, to The Perfection Heater & Manufacturing Company, Cleveland, Ohio. Heater for motor-propelled vehicles. No. 1,309,216; July 8; v. 264; p. 251.
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 Perkins, Frank E., Hartford, Conn. Self-drawing soap-container. No. 1,311,606; July 29; v. 264; p. 803.
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 Peters, Carl, St. Louis, Mo. Boat-launching apparatus. No. 1,310,962; July 22; v. 264; p. 640.
 Peters, Heber C., New York, N. Y., assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,310,963; July 22; v. 264; p. 640.
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 Peterson, Edward G., South Range, Wis. Shoe-polishing device. No. 1,310,670; July 22; v. 264; p. 567.
 Peterson-Held, Lauritz, Copenhagen, assignor to Aktieselskabet Houlsteds Fabrikker (Hensle, Denmark. Treating woven textile belts. No. 1,310,867; July 22; v. 264; p. 622.

Peterson, John M., assignor to G. J. Sayer, Chicago, Ill. Stuffer or filler. No. 1,309,335; July 8; v. 264; p. 273.
 Peterson, John N., assignor of one-half to C. F. Zansig, Milwaukee, Wis. Bobbin-winding mechanism. No. 1,308,529; July 1; v. 264; p. 95.
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 Peycke, Armand H., assignor to American Steel Foundries, Chicago, Ill. Brake-supporting mechanism. No. 1,310,032; July 15; v. 264; p. 430.
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 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Relief mechanism. No. 1,309,808; July 15; v. 264; p. 398.
 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine. No. 1,309,809; July 15; v. 264; p. 398.
 Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Water-wheel bucket. No. 1,309,810; July 15; v. 264; p. 398.
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 Philippi, Theodore F., East St. Louis, Ill. Crank-driven device for machining apparatus. No. 1,309,301; July 8; v. 264; p. 267.
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 Phillips, James E., New York, N. Y. Window-lock. No. 1,311,708; July 29; v. 264; p. 812.
 Phillips, James L., Great Bend, N. Y. Machine for washing pulp-wood. No. 1,309,545; July 8; v. 264; p. 312.
 Phillips, Leland A., assignor to Phillips Ribbon & Carbon Company, Rochester, N. Y. Reeling-machine. No. 1,309,367; July 8; v. 264; p. 279.
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 Philpot, Albert D., assignor to Tumalpa Mfg. Co., Chicago, Ill. Portable projecting machine. No. 1,310,211; July 15; v. 264; p. 471.
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 Plat, Joannes, Lyon, France. Carburetor-nozzle. No. 1,310,964; July 22; v. 264; p. 641.
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 Piechowicz, Teofil, Vauhall, N. J. Fountain-brush. No. 1,310,290; July 15; v. 264; p. 485.
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 Pierce, George P., Kansas City, Mo. Sho-door. No. 1,311,357; July 29; v. 264; p. 747.
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 Pieters, Julien, Paris, France. Charing apparatus for continuous vertical ovens, more particularly coke and gas ovens. No. 1,308,641; July 1; v. 264; p. 116.
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 Piekney, Bryan D., Cincinnati, Ohio, assignor to Jaburg Bros., New York, N. Y. Mechanical movement for dough-handling machines. No. 1,310,711; July 22; v. 264; p. 594.
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 Pippin, William R., Paris, Tex. Liquid-indicator for tanks. No. 1,311,244; July 29; v. 264; p. 725.
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 Plaisance, Gerald P., assignor to Ralston Purina Company, St. Louis, Mo. Means for preventing formation of mold. No. 1,311,709; July 29; v. 264; p. 812.

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 Pneumatic Concrete Machinery Company. (See Weaver, Charles R., assignor.)
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 Pollard, Willard L., assignor to The Cable Company, Chicago, Ill. Player-piano. No. 1,308,915; July 8; v. 264; p. 194.
 Polistacelli, Frank, Benwood, W. Va. Sowing-machine construction. No. 1,308,070; July 1; v. 264; p. 123.
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 Poole, Arthur F., Chicago, Ill. Assignor to Wahl Company, Wilmington, Del. Calculating-machine. No. 1,311,710; July 29; v. 264; p. 812.
 Poor, Charles L., Dering Harbor, Shelter Island, N. Y. Navigation instrument. No. 1,308,748; July 1; v. 264; p. 130.
 Poor, Frederick E., Port Chester, assignor to Universal Stamping Machine Co., New York, N. Y. Tripping mechanism for machines for marking mail, &c. No. 1,309,655; July 15; v. 264; p. 370.
 Popen, Edwin, Quebec, Quebec, Canada. Telegraph apparatus. No. 1,309,960; July 15; v. 264; p. 427.
 Poppenhusen, Herman A., Hammond, Ind., and A. P. Strong, Chicago, Ill., assignors to Green Engineering Company, East Chicago, Ind. Storage-tank or receptacle. No. 1,311,296; July 29; v. 264; p. 735.
 Porter, Finley R., Port Jefferson, N. Y., assignor to Knight American Patents Company, Chicago, Ill. Oiling mechanism for rotary shafts. No. 1,308,910; July 8; v. 264; p. 194.
 Portland Industrial Company. (See Larson, Andrew F., assignor.)
 Porzel, Joseph, assignor to City Trust Company, Buffalo, N. Y. Vulcanizing-machine. No. 1,308,111; July 1; v. 264; p. 19.
 Post, Truman W., assignor to Arms Products Company, New York, N. Y. Adapter for hand-grenades. No. 1,311,006; July 22; v. 264; p. 648.
 Postal-Vinay, Pierre J. R., Paris, assignor to Societe Des Moteurs Salmson (Système Canton-Linac), Billancourt, France. Bracket for accessories of explosion-engines. No. 1,308,807; July 8; v. 264; p. 174.
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 Poszpech, Stefan, New York, N. Y. Gas-consumer's indicator. No. 1,309,811; July 15; v. 264; p. 398.
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 Potts, Louis M., assignor to A. McLanahan, Baltimore, Md. Machine-telegraph. No. 1,309,745; July 15; v. 264; p. 387.
 Pou, James H., Jr., Raleigh, N. C. Eraser-pad. No. 1,311,245; July 29; v. 264; p. 726.
 Poulson, Andrew, Hough Green, near Widnes, and W. C. A. Mate, Garstang, assignors to C. J. Rourke, Cheshire Hulme, Manchester, England. Smelting furnace or cupola. No. 1,311,711; July 29; v. 264; p. 813.
 Powell, George C., Chicago, Ill. Level. No. 1,308,765; July 8; v. 264; p. 167.
 Powell, Walter C., Columbus, Ohio. Sealing-tape moistener. No. 1,311,007; July 22; v. 264; p. 649.
 Powell, Winfred T., assignor to Automatic Electric Company, Chicago, Ill. Telephone-exchange system. No. 1,308,533; July 1; v. 264; p. 99.
 Power, Henry R., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,291; July 15; v. 264; p. 486.
 Power, Henry R., assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive wheel. No. 1,310,292; July 15; v. 264; p. 486.
 Power, Jeffrey J., assignor to Power, Stevens Fan Devices Company, Madison, Wis. Dust-collector. No. 1,308,961; July 8; v. 264; p. 203.

Power, Thomas W., Washington, D. C. Non-furling device for banners. No. 1,311,712; July 29; v. 264; p. 813.
 Powers Accounting Machine Company. (See Lasker, William W., assignor.)
 Powers Accounting Machine Company. (See Powers, James, assignor.)
 Powers Accounting Machine Company. (See Williams, Robert N., assignor.)
 Powers, James, New York, N. Y. Transferring master-drill device. No. 1,310,034; July 15; v. 264; p. 439.
 Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Multisorting-machine. No. 1,310,433; July 22; v. 264; p. 543.
 Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Feeding cards. No. 1,310,434; July 22; v. 264; p. 543.
 Powers, John E., Pike, N. Y. Device for supporting tubs. No. 1,309,770; July 15; v. 264; p. 392.
 Powers, John T., Tacoma, Wash., assignor to The Jones-Powers Carbaretor Company, Denver, Colo. Means for locking automobiles. No. 1,309,154; July 8; v. 264; p. 240.
 Pratt, Clarence H., Milwaukee, Wis. Monowheel drive mechanism. No. 1,310,542; July 22; v. 264; p. 563.
 Pratt, Hartley B. (See McKechule and Pratt.)
 Pratt, Lester A., Winchester, and F. N. Brink, Woburn, Mass. Manufacture of naphthalene trisulfonic acid. No. 1,311,090; July 22; v. 264; p. 664.
 Pratt, Ward E. (See Kelly and Pratt.)
 Pratt & Whitney Company. (See Hoagland, Frank O., assignor.)
 Prefontaine, Harry F., Brooklyn, N. Y. Shutter-operating attachment for cameras. No. 1,308,042; July 1; v. 264; p. 116.
 Prescott, Sydney I., assignor to American Machine & Foundry Company, New York, N. Y. Cut-off mechanism for character-machines. No. 1,310,631; July 22; v. 264; p. 580.
 Pressed Metals, Limited. (See Leighton and Crick, assignors.)
 Pressed Steel Car Company. (See Rhatine, George W., Jr., assignor.)
 Pressman, Harry J. (See Von Stetten and Pressman.)
 Pribil, Alexis B., Wilkesburg, Pa. Connecting-rod. No. 1,308,992; July 8; v. 264; p. 209.
 Price, Austin E., Decatur, Ill. Knockdown sign. No. 1,308,080; July 1; v. 264; p. 123.
 Price, Raymond B., New York, N. Y., assignor, by mesne assignments, to The Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Rubber footwear. No. 1,309,047; July 8; v. 264; p. 220.
 Price, Raymond B., Mishawaka, Ind., assignor, by mesne assignments, to The Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Treating vulcanizable plastics. No. 1,309,455; July 8; v. 264; p. 301.
 Pritchard, Arthur G. (See Lee Harry G., assignor.)
 Pridoux, Clarence B., Forest Hill, London, England. Tool-holder. No. 1,308,681; July 1; v. 264; p. 123.
 Pridmore, Edward A., and W. W. Miller, La Grange, Ill. Molding-machine. No. 1,309,356; July 8; v. 264; p. 273.
 Priestley, Henry. (See Bradney and Priestley.)
 Prindle, Franklin C., Washington, D. C., assignor to C. Ricker, Indianapolis, Ind. Tilting steering-wheel for motor-vehicles. (Release.) No. 1,408,4; July 8; v. 264; p. 320.
 Prindle, William E., London, assignor, by mesne assignments, to The Backeye Dryer Company, Columbus, Ohio. Rotary drier. No. 1,311,667; July 29; v. 264; p. 805.
 Pritchard, Albert R., New York, N. Y. Barber-chair. No. 1,309,694; July 15; v. 264; p. 378.
 Pritaker, Asher, Toronto, Ontario, Canada. Electric radiator. No. 1,310,838; July 22; v. 264; p. 618.
 Pritchard, Carl G., Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio. Deliverer for printing-presses. No. 1,309,544; July 8; v. 264; p. 312.
 Protective Signal Manufacturing Company, The. (See Neahr, Will C., assignor.)
 Proula, Walter, Lewiston, Me. Pulling-over machine. No. 1,309,812; July 15; v. 264; p. 399.
 Public Service Cup Company. (See Lockwood and Nias, assignors.)
 Puddin, David, New York, N. Y. Eyes for dolls. No. 1,310,293; July 15; v. 264; p. 486.
 Pull-Out Manufacturing Company. (See Eggleston, Robert N., assignor.)
 Pultney, David C. (See Auel and Pultney.)
 Purcell, Adam E., et al. (See Leitch, Roy C., assignor.)
 Piskil, Ladislav. (See Balogh and Piskil.)
 Pye, Bertram J., and H. Rabbes, Oakland, Calif. Fuel-vaporizer. No. 1,310,873; July 22; v. 264; p. 624.
 Pyrene Manufacturing Company. (See Lee, Robert W., assignor.)
 Quass, Ralph L., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Call-distributing system. No. 1,308,554; July 1; v. 264; p. 100.
 Quasle, William O. (See Dow and Quasle.)
 Quick, Howard L., Brooklyn, N. Y. Stereoscopic motion-picture camera. No. 1,311,008; July 22; v. 264; p. 649.

Quigley Furnace Specialties Co. (See Renkin, William O., assignor.)
 R. Hoe and Co. (See Hawk, Roscoe C., assignor.)
 R. Hoe and Co. (See Roosen, Oscar, assignor.)
 R. Hoe and Co. (See White, Bruce C., assignor.)
 Rabbes, Henry. (See Iye and Rabbes.)
 Rackstraw, Albert V., Bedford, Ohio. Tractor. No. 1,311,577; July 29; v. 264; p. 788.
 Racy, Gabor, Bridgeport, Conn. Flour-sifter. No. 1,310,543; July 22; v. 264; p. 563.
 Ratz, George, Chicago, Ill. Window-cleaner. No. 1,309,302; July 8; v. 264; p. 267.
 Radinac, Rudolf H., Cleveland, Ohio. Rotary brush. No. 1,309,587; July 8; v. 264; p. 229.
 Radium Chemical Company. (See Wolff, Willy, assignor.)
 Ralston, John D., Minneapolis, Minn. Machine for making pressed bread-loaves. No. 1,309,419; July 8; v. 264; p. 259.
 Raff, Ernest G., assignor to Liberty Accessories Corporation, St. Louis, Mo. Whistle. No. 1,309,303; July 8; v. 264; p. 267.
 Raffel, Ferdinand A., assignor to W. J. H. Strong, Chicago, Ill. Heat-motor. No. 1,310,435; July 22; v. 264; p. 544.
 Railway Electric Manufacturing Co. (See Gniske, Paul, assignor.)
 Rail Joint Company, The. (See Dishrow, Clarkson A., assignor.)
 Rail Joint Company, The. (See Van Dresar, Elmer L., assignor.)
 Ralston Purina Company. (See Plaisance, Gerald P., assignor.)
 Rambush, Niels E. (See Lynn and Rambush.)
 Rand, James H., Newton, Mass. Index. No. 1,311,771; July 29; v. 264; p. 824.
 Randall-Falchney Company, The. (See Sellar, John A. E., assignor.)
 Randolph, Alva F., Bloomfield, Iowa. Poultry-dipping apparatus. No. 1,311,772; July 29; v. 264; p. 824.
 Ramey, Edward J. (See Murphy and Ramey.)
 Raric, Welden C., Corpus Christi, Tex. Draft mechanism for earthworking implements. No. 1,309,308; July 8; v. 264; p. 270.
 Rateau Battu Smoot Engineering Corporation, The. (See Smoot, Charles H., assignor.)
 Ratheram, Joseph, assignor to Baxter & Caunter, Limited, London, England. Work-centering device. No. 1,309,217; July 8; v. 264; p. 231.
 Ratner, Aaron, New York, N. Y. Dish-washing machine. No. 1,311,179; July 29; v. 264; p. 714.
 Ran, Rodolphe, Geneva, Switzerland. Economizer arrangement for locomotives. No. 1,308,808; July 8; v. 264; p. 175.
 Raver, Harvey C., Salem, Ill. Valve for explosive-engines. No. 1,308,112; July 1; v. 264; p. 19.
 Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Disk plow. No. 1,311,775; July 29; v. 264; p. 825.
 Raydex Manufacturing Company. (See Otte, Otto M., assignor.)
 Rayfield, Charles L., assignor to Fiedelsen & Kroff Manufacturing Company, Chicago, Ill. Multifold multijet carburetor. No. 1,310,805; July 22; v. 264; p. 612.
 Raymond, Harry K., and I. B. Renner, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Read-core for pneumatic tires. No. 1,310,212; July 15; v. 264; p. 471.
 Raymond, Herbert N., Olympia, Wash. Solar transit. No. 1,309,450; July 8; v. 264; p. 301.
 Raymond, Leonard F., assignor of one-half to C. B. King, Bremerton, Wash. Knee-pad. No. 1,308,803; July 8; v. 264; p. 185.
 Read, Henry L., et al. (See Richardson, Eddison, and Read.)
 Reagan, Robert P., et al. (See Rombach, Fred, assignor.)
 Reardon, P. H. (See Davol, George K., assignor.)
 Rebol, Edward A., Philadelphia, Pa. Train control. No. 1,311,246; July 29; v. 264; p. 726.
 Rece, Frank S., assignor of one-half to E. H. Epperson, Dallas, Tex. Poultry-decapitator. No. 1,310,294; July 15; v. 264; p. 486.
 Reckard, William P., Youngstown, Ohio, assignor to American Sintering Company, Chicago, Ill. Sintering apparatus. No. 1,308,804; July 8; v. 264; p. 185.
 Recording Devices Company, The. (See Keefer, Thomas A., assignor.)
 Rector, Enoch, New York, N. Y. Steam-motor generator. No. 1,309,102; July 8; v. 264; p. 239.
 Rector, Enoch, New York, N. Y. Fluid-operated engine. No. 1,310,712; July 22; v. 264; p. 594.
 Redman, Lawrence V., Evanston, and A. J. Welch and P. P. Brock, assignors to Redmanol Chemical Products Company, Chicago, Ill. Producing phenolic condensation products. No. 1,310,687; July 15; v. 264; p. 448.
 Redman, Lawrence V., Evanston, and A. J. Welch and P. P. Brock, assignors to Redmanol Chemical Products Company, Chicago, Ill. Producing phenolic condensation products. No. 1,310,688; July 15; v. 264; p. 448.
 Redmanol Chemical Products Company. (See Redman, Welch, and Brock, assignors.)
 Redrup, William D. (See Triggs and Redrup, assignors.)
 Reece, Ana C., et al. (See Farthing, David J., assignor.)
 Reece, J. E., et al. (See Farthing, David J., assignor.)

Reed, Charles J., Glenside, Pa. Spark-gap mechanism. No. 1,309,913; July 15; v. 264; p. 418.
 Reed, Herbert C., Stamford, Conn. Manufacturing oxalic acid. No. 1,310,713; July 22; v. 264; p. 594.
 Reed, John G., Los Angeles, Calif. Music-leaf turner. No. 1,308,555; July 1; v. 264; p. 100.
 Reed, Robert E., Morrill, Neb. Cobbler's or shoemaker's knife. No. 1,309,746; July 15; v. 264; p. 347.
 Reese, Berthold J., New York, N. Y. Lamp. No. 1,308,809; July 8; v. 264; p. 175.
 Reese, Charles L., Wilmington, Del. assignor to E. I. du Pont de Nemours and Company. Bursting charge for containers intended to be exploded, and forming said charge. No. 1,309,588; July 8; v. 264; p. 321.
 Reiser, Marguerite, and W. W. Stebbins, Newark, N. J. Seamless dress. No. 1,309,487; July 8; v. 264; p. 301.
 Reeves, Herbert K., London, England. Parachute. No. 1,310,839; July 22; v. 264; p. 619.
 Reeves, William C., Eldorado, Okla. Cotton-cleanser. No. 1,311,180; July 29; v. 264; p. 714.
 Refrigerating Specialties Company. (See Hansen, Charles C., assignor.)
 Rehmer, Carl C. (See Chadwick and Rehmer.)
 Reibhard, Vern E., Perry, N. Y. Collapsible box. No. 1,308,865; July 8; v. 264; p. 185.
 Reicher, Jacob, Baltimore, Md. Night-light. No. 1,309,545; July 8; v. 264; p. 312.
 Reichenheim, George L., New Haven, Conn. Gasifier and drying device. No. 1,310,927; July 22; v. 264; p. 634.
 Reichenheim, George L., New Haven, Conn. Method and apparatus for burning combustible solids. No. 1,310,928; July 22; v. 264; p. 634.
 Reilly, John J. (See Mahan and Reilly.)
 Reilly, Peter C., Indianapolis, Ind. 8(Hill). No. 1,310,874; July 22; v. 264; p. 624.
 Reinfield, Ernest, Ludlow, Ky. Receptacle-closure. No. 1,311,001; July 22; v. 264; p. 664.
 Reinmuth, William C., Los Angeles, Calif. Suspenders. No. 1,310,249; July 15; v. 264; p. 478.
 Reising, Eugene G., East Hartford, Conn. assignor to The Hartford Machine Gun Company, Hartford, Conn. Extractor for firearms. No. 1,309,337; July 8; v. 264; p. 273.
 Reising, Eugene G., East Hartford, Conn. assignor to The Hartford Machine Gun Company, Hartford, Conn. Ejector for firearms. No. 1,309,338; July 8; v. 264; p. 274.
 Relay Automatic Telephone Company, The. (See Altken, William, assignor.)
 Remick, Lloyd T., Brockton, Mass. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for finishing the edges of leather material. No. 1,310,579; July 22; v. 264; p. 570.
 Remington, William T., Tiffin, Ohio. Rotary tooth-brush. No. 1,308,866; July 8; v. 264; p. 185.
 Remington Typewriter Company. (See Barr, John H., assignor.)
 Remington Typewriter Company. (See Bridgwater, Herbert E., assignor.)
 Remington Typewriter Company. (See Fort, Tandy I., assignor.)
 Remington Typewriter Company. (See Selb, George A., assignor.)
 Remm, Leo J. (See Johnson, James A., assignor.)
 Remmle, Louis J., Newark, N. J. Rotary broom or brush. No. 1,309,693; July 15; v. 264; p. 378.
 Renaud, Edwin C., et al. (See Hinton, George W., assignor.)
 Renkin, William O., Oradell, N. J. assignor to Quigley Furnace Specialties Co. Inc. Apparatus for handling pulverized fuel. No. 1,308,367; July 1; v. 264; p. 65.
 Renkin, William O., Oradell, N. J. assignor to Quigley Furnace Specialties Co. Inc. Combined air and pulverized-fuel control. No. 1,308,368; July 1; v. 264; p. 66.
 Renkin, William O., Oradell, N. J. assignor to Quigley Furnace Specialties Co. Inc. Apparatus for storing and handling pulverized fuel. No. 1,308,369; July 1; v. 264; p. 66.
 Renkin, William O., Oradell, N. J. assignor to Quigley Furnace Specialties Co. Inc. Yielding supporting and vertically-guiding apparatus. No. 1,308,370; July 1; v. 264; p. 66.
 Renner, Irvin R. (See Raymond and Renner.)
 Reuther, Gustav, Sayville, N. Y. Controlling wireless-telegraph transmitters. No. 1,308,330; July 1; v. 264; p. 65.
 Reynard, John, Omaha, Neb. Inhaler or respirator. No. 1,311,461; July 29; v. 264; p. 766.
 Reynolds, George A., Indianapolis, Ind. Valve-operating mechanism. No. 1,309,339; July 8; v. 264; p. 274.
 Reynolds, John N., Greenwich, Conn. assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,308,867; July 8; v. 264; p. 185.
 Reynolds, John N., Greenwich, Conn., and John F. Hearn, Passaic, N. J. assignors to Western Electric Company, Incorporated, New York, N. Y. Automatic switch. No. 1,309,304; July 8; v. 264; p. 267.
 Reynolds, Robert E., Houston, assignor of one-half to T. H. Bass, Harris county, Tex. Mold for plastic material. No. 1,310,632; July 22; v. 264; p. 580.

Rhineland, James J., Pittsburgh, Pa. Pipe-gripping device. No. 1,309,540; July 8; v. 264; p. 313.
 Rhines, Frank W., Lamont, Iowa. Adjustable hand-rake. No. 1,309,340; July 8; v. 264; p. 274.
 Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Feeder-motion for looms. No. 1,308,193; July 1; v. 264; p. 34.
 Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Loom-seat. No. 1,310,671; July 22; v. 264; p. 587.
 Rhoads, Charles S., Jr., Indianapolis, Ind. Answer-back for signaling systems. No. 1,309,369; July 8; v. 264; p. 270.
 Rhodes, George W., Scappoose, Oreg. Tooth-brush and tooth-paste holder. No. 1,310,089; July 15; v. 264; p. 449.
 Ricardo, Harry R., London, England. Balancing of reciprocating engines. No. 1,310,090; July 15; v. 264; p. 449.
 Rich, Peter H. (See Habb, Clarence A., assignor.)
 Richards, Arthur F. W. (See Beaver, Richards, and Claremont.)
 Richards, James A., assignor to The Richards Manufacturing Company, Marietta, Ohio. Wheeled toy. No. 1,309,547; July 8; v. 264; p. 313.
 Richards, Julius H., Newark, N. J. Engine starting device. No. 1,310,091; July 15; v. 264; p. 449.
 Richards, Julius H., Springfield, Mass. Engine starting device. No. 1,310,092; July 15; v. 264; p. 449.
 Richards, Julius H., Springfield, Mass. Engine starting device. No. 1,310,093; July 15; v. 264; p. 449.
 Richards, Lambert B., Shelden, Pa., and C. P. Watkins, Louisville, Ky. assignors to Tate-Jones & Co., Pittsburgh, Pa. Furnace. No. 1,308,743; July 1; v. 264; p. 135.
 Richards Manufacturing Company, The. (See Richards, James A., assignor.)
 Richards, Thomas M., New Philadelphia, Ohio. Signal-lantern. No. 1,309,153; July 8; v. 264; p. 240.
 Richardson, Arthur P., Los Angeles, Calif. Automatic inlet-valve mechanism for gas-tanks and the like. No. 1,311,713; July 29; v. 264; p. 813.
 Richardson, Arthur P., Los Angeles, Calif. Flush-tank-siphon mechanism. No. 1,311,714; July 29; v. 264; p. 813.
 Richardson, Charles E., New York, W. B. Eddison, Irvington, and H. L. Read, assignors to The Surface Combustion Company, New York, N. Y. Method of burning explosive gaseous mixtures. No. 1,308,730; July 1; v. 264; p. 134.
 Richardson, John H., San Pedro, Calif. Safety-pin. No. 1,310,929; July 22; v. 264; p. 634.
 Richardson, John N., and E. A. Muller, assignor to The Williamson Heater Company, Cincinnati, Ohio. Furnace. No. 1,311,092; July 22; v. 264; p. 665.
 Richardson, John N., assignor to The Williamson Heater Company, Cincinnati, Ohio. Household-furnace. No. 1,309,260; July 8; v. 264; p. 259.
 Richardson, Robert, Elmbling, N. Y. Keyless padlock. No. 1,310,930; July 22; v. 264; p. 634.
 Richardson, Telbert L., Brock, Neb. Screen, curtain, or like article. No. 1,309,488; July 8; v. 264; p. 301.
 Richardson, Wilbur P., Beaver, Pa., assignor to E. S. Clarkson, Washington, D. C. Safety closure means. No. 1,309,218; July 8; v. 264; p. 251.
 Richmond, Walter, Memphis, Tenn. assignor to J. E. Jenkins, Chicago, Ill. Electric-switch mechanism. No. 1,310,135; July 15; v. 264; p. 473.
 Rieker, Chester. (See Prindle, Franklin C., assignor.) (Reissue.)
 Ricketts, Forrest E., Baltimore, Md. Arc-extinguisher. No. 1,308,257; July 1; v. 264; p. 46.
 Ricketts, James R., Long Beach, Calif. Dual fuel-feed system for internal-combustion engines. No. 1,308,917; July 8; v. 264; p. 195.
 Ricks, Floyd K., Canton, Ill. Dump-box and frame. No. 1,308,607; July 1; v. 264; p. 91.
 Riddle, Napoleon B., Wilson, La. Record-ejector for talking-machines. No. 1,309,656; July 15; v. 264; p. 371.
 Riehlout, Arthur E., Chicago, Ill. assignor to National Binding Machine Company. Work-holder for the sealing of cartons. No. 1,310,580; July 22; v. 264; p. 570.
 Rider, Thomas H., assignor of one-half to A. Danziger, Los Angeles, Calif. X-ray tube. No. 1,310,714; July 22; v. 264; p. 594.
 Riddington, A. H. (See Lowry, George A., assignor.)
 Riddington, Alfred H., St. Louis, Mo. Hand-pad for vehicle-drops. No. 1,308,993; July 8; v. 264; p. 200.
 Riddsdale, Herbert W. (See Leek and Riddsdale.)
 Rigotard, Laurent E., Paris, France. Lubricating-bearing. No. 1,311,247; July 29; v. 264; p. 726.
 Rihber, Claus N., assignor to Norsk Alkali A. S., Trondheim, Norway. Purification of alkali-metal-chloride solutions. No. 1,308,509; July 1; v. 264; p. 91.
 Riley, Lynn G. (See Simmon and Riley.)
 Riley, Lynn G., Wilkes-Barre, Pa. assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,311,462; July 29; v. 264; p. 767.
 Rinehardt, Carlton C., Loveland, Ohio. Corn-harvesting machine. No. 1,308,613; July 1; v. 264; p. 116.

Rinebimer, Ernest, assignor to Vulcan Iron Works, Wilkes-Barre, Pa. Air-tight door for pressure cylinders and tanks. No. 1,311,060; July 22; v. 264; p. 649.
 Rinsch, Frank C., assignor to Barron's Adding Machine Company, Detroit, Mich. Time-switch for adding-machines. No. 1,310,965; July 22; v. 264; p. 641.
 Ristoul, William, and D. Cross, assignors to Nobel's Explosives Company, Limited, Stevenson, Scotland. Explosive. No. 1,310,480; July 22; v. 264; p. 553.
 Rippenstein, Nicholas, Perth Amboy, N. J. Aeroplane. No. 1,309,961; July 15; v. 264; p. 427.
 Ristine, George W., Jr., Chicago, Ill. assignor to Pressed Steel Car Company, Pittsburgh, Pa. Car-roof. No. 1,309,777; July 15; v. 264; p. 302.
 Ritchie, George W., Oak Hill, Fla. Foldable crate. No. 1,308,682; July 1; v. 264; p. 122.
 Rittase, Ephraim N., Baltimore, Md. Cigar-holder. No. 1,308,113; July 1; v. 264; p. 34.
 Ritter, Joseph R., Hastings, Fla. Self-fastening container. No. 1,309,341; July 8; v. 264; p. 274.
 Ritter, Paul A., Kiel, assignor to Fried. Krupp Aktiengesellschaft, Germaniawerft, Kiel-Garden, Germany. Safety device. No. 1,311,774; July 29; v. 264; p. 825.
 Riviere, Fernando. (See Riviere, Francisco and F.)
 Riviere, Francisco and F., Barcelona, Spain. Apparatus for the manufacture of wire-netting. No. 1,310,966; July 22; v. 264; p. 641.
 Risson, Oscar C., New Rochelle, N. Y. Self-locking screw. No. 1,310,213; July 15; v. 264; p. 471.
 Roach, Flois E., Chicago, Ill. Lawn-sprinkler. No. 1,308,371; July 1; v. 264; p. 66.
 Robert N. Bassett Company. (See Smith and Curnan, assignors.) (Reissue.)
 Roberts, Abel H., Montreal, Quebec, Canada, assignor to International Arms and Fuse Company, New York, N. Y. Powder-separator. No. 1,310,633; July 22; v. 264; p. 580.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Making tubes for pneumatic tires. No. 1,310,436; July 22; v. 264; p. 544.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Making indestructible rubber articles. No. 1,310,437; July 22; v. 264; p. 544.
 Roberts, Fred T., Cleveland, Ohio. Tube for pneumatic tires. No. 1,310,438; July 22; v. 264; p. 544.
 Roberts, Fred T., Cleveland Heights, assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,439; July 22; v. 264; p. 544.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,440; July 22; v. 264; p. 544.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Method and apparatus for making hollow rubber articles. No. 1,310,441; July 22; v. 264; p. 545.
 Roberts, Fred T., assignor to The Paramount Rubber Company, Cleveland, Ohio. Process and apparatus for making hollow rubber articles. No. 1,310,442; July 22; v. 264; p. 545.
 Roberts, Gerald I. (See King and Roberts.)
 Roberts, Henry H., Jr., Philadelphia, assignor to J. W. Watson, Wayne, Pa. Telltale device for tires. (Reissue.) No. 1,309,929; July 29; v. 264; p. 842.
 Roberts, John T. (See Hafter and Roberts.)
 Roberts, Montague H., Jersey City, N. J., and C. C. Van Noy, New York, N. Y. assignors to Air Reduction Company, Incorporated, New York, N. Y. Electric welding. No. 1,309,696; July 15; v. 264; p. 378.
 Roberts, William H., Dallas, Tex., and E. M. Heylman, assignors to Oliver Chilled Plow Works, South Bend, Ind. Gearing for the feed mechanism of planters. No. 1,311,010; July 22; v. 264; p. 649.
 Robertson, William A., Glasgow, Scotland, assignor of one-half to W. Henderson, Toronto, Ontario, Canada. Door. No. 1,310,840; July 22; v. 264; p. 619.
 Robillard, Frederick J., St. Thomas, Ontario, Canada. Locomotive brake-rod safety bracket-hanger. No. 1,310,295; July 15; v. 264; p. 456.
 Robinson, Edmund G., Montclair, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Fireproof composition. No. 1,310,841; July 22; v. 264; p. 619.
 Robinson, Joseph R., assignor of one-half to C. M. Weber, Rochester, N. Y. Instrument for ascertaining the point of recalcence of steel. No. 1,310,443; July 22; v. 264; p. 545.
 Robinson, Orrville O. (See Benedict, Edward L., assignor.)
 Robt. H. Ingersoll & Bro. (See Eberhard, George F., assignor.)
 Robt. H. Ingersoll & Bro. (See Eberhard, Maloney, and Hold, assignors.)
 Roeb, Joseph, Detroit, Mich. Window-screen. No. 1,311,248; July 29; v. 264; p. 726.
 Rochester Stamping Company. (See Swan, Alfred H. S., assignor.)
 Rock Island Plow Company. (See Lechtenberg, Clemens, assignor.)
 Rockwell, Byrd C., Camden, Ark. Wooden-structure joint. No. 1,308,372; July 1; v. 264; p. 67.
 Rockwell, Herbert O. (See Sutherland, Alexander K., assignor.)

Rockwood Sprinkler Company of Massachusetts. (See Carlson, Hjalmar G., assignor.)
 Rodriguez, Gavino, El Paso, Tex. Lamp attachment. No. 1,309,548; July 8; v. 264; p. 313.
 Rodriguez, Oscar, New York, N. Y. Globe-manipulator. No. 1,311,776; July 29; v. 264; p. 825.
 Roedel, Otto, Jersey City, N. J. Plating-hook. No. 1,308,508; July 1; v. 264; p. 91.
 Roelker, Hugo B. (See Klein, Mathias J., assignor.)
 Roemer, Herman, Chicago, Ill. Wringer. No. 1,308,868; July 8; v. 264; p. 186.
 Roese, Oscar, assignor to H. Hoe and Co., New York, N. Y. Inking mechanism for plate-printing machines. No. 1,308,114; July 1; v. 264; p. 20.
 Roessler & Hasselbacher, The. (See Lacy, Burritt S., assignor.)
 Rogers, Everett T. and F. M., Bay Shore, N. Y. Floor scrubbing and mopping machine. No. 1,310,296; July 15; v. 264; p. 480.
 Rogers, Frank M. (See Rogers, Everett T. and F. M.)
 Rogers, Thomas C. (See Bell and Rogers.)
 Rogers, Walter F., Chicago, Ill. Gas-ature. No. 1,311,181; July 29; v. 264; p. 714.
 Rogers, Yule W., St. Louis, Mo. Combination-chair. No. 1,310,250; July 15; v. 264; p. 478.
 Rohan, James J., assignor of one-half to T. W. Cummings, St. Louis, Mo. Car-heater. No. 1,308,194; July 1; v. 264; p. 34.
 Rohm, Gustave A., Tarentum, Pa. Indicator. No. 1,310,444; July 22; v. 264; p. 545.
 Rohrer, Gabriel E., Elmhurst, N. Y., assignor, by mesne assignments, to Clinch Expansion Bolt & Engineering Company, Cable and wire clamp. No. 1,308,869; July 8; v. 264; p. 186.
 Rohrer, Even J., Minneapolis, Minn. Electric soldering-iron. No. 1,308,994; July 8; v. 264; p. 200.
 Rolant, Emile, assignor to A. Wilkin, St. Ouen, France. Method of and apparatus for gathering glass by suction. No. 1,311,249; July 29; v. 264; p. 727.
 Roke, John L. (See Baker, Joseph C., assignor.)
 Roll, Edward F., Cleveland, Ohio. Retarder. No. 1,308,644; July 1; v. 264; p. 116.
 Rollins, Grant W., assignor to The Willia-Overland Company, Toledo, Ohio. Tool for removing shaft-couplings. No. 1,310,806; July 22; v. 264; p. 612.
 Rombach, Fred, Tonawanda, assignor of one-fourth to R. P. Reagan and one-fourth to A. M. Everhart, North Tonawanda, N. Y. Internal-combustion engine. No. 1,308,373; July 1; v. 264; p. 67.
 Roodman, Nathan, New York, N. Y. Bracelet. No. 1,309,657; July 15; v. 264; p. 371.
 Roos, Oscar C., Allston, Mass. Radiotelegraph transmitting system. No. 1,309,778; July 15; v. 264; p. 363.
 Rordam, Ringvall P. (See Longaker, Trager, and Rordam.)
 Roshack, Henry A., Chicago, Ill. Cashier's ticket. No. 1,308,115; July 1; v. 264; p. 20.
 Rose, Charles A., Perth Amboy, N. J., and G. Monrath, Chaguncamata, Chile, assignors to Chile Exploration Company, New York, N. Y. Corrosion-resisting condenser. No. 1,310,715; July 22; v. 264; p. 595.
 Rose, Robert. (See Mannell and Rose.)
 Rose, William H., Jersey City, N. J. Liquid-soap dispenser. No. 1,308,258; July 1; v. 264; p. 46.
 Rosebush, Waldo L., Appleton, Wis. Firearm. No. 1,311,715; July 29; v. 264; p. 814.
 Rosencrans, Emil C., assignor of one-third to W. H. Humpf, Evansville, Ind. Nut-lock washer. No. 1,311,011; July 22; v. 264; p. 649.
 Rosier, Charles, New York, N. Y. Press for trousers. No. 1,310,297; July 15; v. 264; p. 486.
 Ross, Frank H., Cape Girardeau, Mo. Vulcanizer for rubber boots and shoes. No. 1,311,012; July 22; v. 264; p. 650.
 Ross, Mark A., Chicago, Ill. Steam-turbine. No. 1,308,116; July 1; v. 264; p. 20.
 Rossiter, George A., assignor to The Carlie Gyroscopic Corporation, New York, N. Y. Gyroscopic compass. No. 1,308,683; July 1; v. 264; p. 124.
 Rossiter, George A., Brooklyn, N. Y., assignor to The Carlie Gyroscopic Corporation, New York, N. Y. Gyroscopic compass. No. 1,311,716; July 29; v. 264; p. 814.
 Roth, Martin L., Wilkes-Barre, Pa. Manifold-heater. No. 1,311,417; July 29; v. 264; p. 750.
 Roth, Plus J., Brooklyn, N. Y. Tooth-brush. No. 1,308,374; July 1; v. 264; p. 67.
 Rothschild, Louis, Philadelphia, Pa. Auto-tire carrier. No. 1,311,463; July 29; v. 264; p. 767.
 Rought, Frank. (See Betts, William H., assignor.)
 Rourke, Charles J. (See Poulson and Rourke, assignors.)
 Rousseau, Frank L., Pittsburgh, Pa. Corn-planter. No. 1,310,771; July 22; v. 264; p. 605.
 Rouston, Arthur J., assignor of two-thirds to J. H. Henderson and H. A. Werner, Prairie Depot, Ohio. Oil-level indicator and signaling device. No. 1,310,544; July 22; v. 264; p. 563.
 Rowan, James, et al. (See Loveless, Fred H., assignor.)
 Rowe, Harry. (See Parsons, Bennett, and Rowe.)
 Rowledge, Arthur J., assignor to D. Napier & Son Limited, London, England. Cylinder for internal-combustion engines. No. 1,309,103; July 8; v. 264; p. 231.
 Rowling, William H., Oakland, Calif. Traffic-signal for motor-vehicles. No. 1,311,418; July 29; v. 264; p. 759.

Rowntree, Harold, Kentworth, Ill., assignor to National Pneumatic Company, New York, N. Y. Tread-control system. No. 1,311,182; July 29; v. 264; p. 714.

Rowntree, Richardson, Seattle, Wash. Barrel, keg, or the like. No. 1,309,779; July 15; v. 264; p. 393.

Royce, Frank C., Philadelphia, Pa. Keyless padlock. No. 1,310,634; July 22; v. 264; p. 580.

Rulienkoenig, John, et al. (See Hawley, Royal A., assignor.)

Rubin, Frederick W., Indianapolis, Ind. Sealing means for doors, windows, and the like. No. 1,311,775; July 29; v. 264; p. 825.

Rubsam, Charles F., Brooklyn, N. Y. Vehicle-wheel. No. 1,311,842; July 29; v. 264; p. 837.

Ruchty, Alexander E., Cincinnati, Ohio. Automatic safety valve. No. 1,308,684; July 1; v. 264; p. 124.

Rude, James M., Covington, Ky. Hoop-staple-cleaning apparatus. No. 1,308,195; July 1; v. 264; p. 35.

Ruder, John F., Liberty, Ind. Manure-spreader. No. 1,310,445; July 22; v. 264; p. 545.

Rudin, Karl V., Stockholm, Sweden. Revolution-counting mechanism for calculating machines. No. 1,308,510; July 1; v. 264; p. 91.

Ruemelin, Richard. (See Keenan, Christensen, and Rue mlin.)

Rumple, H. H. (See Wells, Clark H., assignor.)

Rumpf, Peter J., Chicago, Ill. Shoe-polishing machinery. No. 1,309,370; July 8; v. 264; p. 279.

Rumpf, William H. (See Rosencrans, Emil C., assignor.)

Rumrill, Frank. (See Campbell, Duncan R., assignor.)

Rusell, William J. (See Humphrey and Rusell.)

Rushton, James L., Bolton, England. Machine for opening, scutching, and similarly treating cotton and other fibrous materials. No. 1,310,545; July 22; v. 264; p. 563.

Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Counterbalance for locomotive driving-wheels. No. 1,310,130; July 15; v. 264; p. 458.

Russ, Myronus H., Pine, Colo. Harness-buckle. No. 1,310,298; July 15; v. 264; p. 487.

Russell, Frank E., Batavia, N. Y. Camera. No. 1,309,747; July 15; v. 264; p. 387.

Russell, Guy M., Rochester, assignor to American Piano Company, New York, N. Y. Musical instrument. No. 1,310,635; July 15; v. 264; p. 439.

Russell, Joseph J., Toledo, Ohio. Radiator. No. 1,310,251; July 15; v. 264; p. 479.

Russell, Mfg. Co., The. (See Achtmeyer, William, assignor.)

Russell, Oasie, Cape Fair, Mo. Incubator. No. 1,308,995; July 8; v. 264; p. 210.

Russell, Parlee H., Van Buren, Ohio. Fireless cooking utensil. No. 1,310,635; July 22; v. 264; p. 580.

Russell, Richard F., Jersey City, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,106; July 15; v. 264; p. 452.

Russell, Robert A., New York, assignor to Paragon Metal Tap Company, Inc., Brooklyn, N. Y. Receptacle-closure. No. 1,311,419; July 29; v. 264; p. 759.

Russo, Andrew, Fitchburg, Mass. Reclining-chair. No. 1,310,581; July 22; v. 264; p. 570.

Rust, Edwin G., Philadelphia, Pa. Excavating and loading machine. No. 1,311,621; July 29; v. 264; p. 796.

Ruth, Joseph P., Jr. Independence, Colo. Flotation apparatus. No. 1,309,219; July 8; v. 264; p. 251.

Rutherford, John H., Knoxville, Tenn. Mucous-wheel-attaching device. No. 1,308,996; July 8; v. 264; p. 210.

Rutter, Sydney E., assignor to D. J. Harris, London, England. Mechanism for stripping or honing razor-blades. No. 1,308,196; July 1; v. 264; p. 35.

Ryan, John, assignor to Anti-Friction Belt Dressing Company, Baltimore, Md. Dispensing-can. No. 1,311,013; July 22; v. 264; p. 65.

Ryan, John J., Bayonne, N. J. Snow-removing machine. No. 1,310,546; July 22; v. 264; p. 564.

Rydquist, Adolph, Rochester, N. Y. Pressure-operated pump-controlling mechanism. No. 1,310,503; July 22; v. 264; p. 556.

Rydquist, Adolph, Rochester, N. Y. Check-controlled feeding machine. No. 1,310,504; July 22; v. 264; p. 556.

S. Smith & Sons Motor Accessories Limited. (See Clift, Frederic H., assignor.)

S. H. Smythe Company, The. (See Smythe, Horner E., assignor.)

S. S. Stafford, Inc. (See Deppermann, William, assignor.)

S. S. White Dental Manufacturing Company, The. (See Glenn, Thomas F., assignor.)

Saeburg, Charles W., Richmond Hill, assignor to Multicolor Printing Press Company, New York, N. Y. Transferring carbon-tissue prints. No. 1,308,531; July 1; v. 264; p. 95.

Sadowsky, Nathan, New York, N. Y., assignor of one-half to S. Grossman. Ice-kate attachment. No. 1,310,137; July 15; v. 264; p. 458.

Sacker, F. Edward, et al. (See Smith, Homer P., assignor.)

Sacker, Herman G., et al. See Smith, Homer P., assignor.)

Said, Oskar, and K. Pettersen, Sarpsborg, Norway. Electric-heat-storing apparatus. No. 1,311,464; July 29; v. 264; p. 767.

Safety Car Heating and Lighting Company, The. (See Hilger, Joseph, assignor.)

Safety Car Heating and Lighting Company. (See Creveling, John L., assignor.)

Safety Car Heating and Lighting Company. (See Hulce, George E., assignor.)

Sage, Charles E., Rochester, N. Y. Tuning-peg adjustment for stringed musical instruments. No. 1,309,658; July 15; v. 264; p. 371.

Sage, Ralph V., Philadelphia, Pa. Metal car. No. 1,308,299; July 1; v. 264; p. 54.

Sage, Ralph V., Philadelphia, Pa. Car construction. No. 1,308,300; July 1; v. 264; p. 54.

Saillet, Alfred L. E. (See Chapsal and Saillet.)

Sain, Charles M., Logansdale, Nev. Postal check. No. 1,311,014; July 22; v. 264; p. 660.

Sakagawa, Masunosuke, Oakland, Calif. Toilet-flushing device. No. 1,308,301; July 1; v. 264; p. 54.

Salliger, Alois R., New York, N. Y., assignor to Intercontinental Company, Centrifugal gun. No. 1,311,465; July 29; v. 264; p. 767.

Salmonson, Emil J. J., assignor to Societe des Moteurs Salomon Systeme Canton-Unnef, Billancourt, France. Aeroplane body or cell. No. 1,308,510; July 8; v. 264; p. 175.

Salmonson, Emil J. J., assignor to Societe des Moteurs Salomon Systeme Canton-Unnef, Billancourt, France. Aeroplane landing-frame. No. 1,310,710; July 22; v. 264; p. 595.

Samuelson, Charles H., assignor, by means assignments, to Todd Protograph Company, Rochester, N. Y. Check-writing machine. No. 1,309,371; July 8; v. 264; p. 280.

Samson Electric Company. (See Wilson, Daniel S., assignor.)

Samuel Cabot Inc. (See Cabot, Samuel, assignor.)

Samuel Wlosow Skate Mfg. Co., The. (See Leake, John M., assignor.)

Sanborn, Cuyler K. (See Brower, Edward S., assignor.)

Sanborn, Eugene L., assignor to Smith Engineering Works, Milwaukee, Wis. Crushing-machine. No. 1,309,104; July 8; v. 264; p. 231.

Sanborn, Ralph C., assignor of fifty per cent. to P. J. McKenna, Briarcliff Manor, N. Y. Mathematical instrument. No. 1,310,547; July 22; v. 264; p. 564.

Sandholm, Gideon E., assignor to Elektriska Pannrennings Aktiebolaget, Gottenborg, Sweden. Steam-boller cleaner. No. 1,310,875; July 22; v. 264; p. 625.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Phonograph-stap. No. 1,308,447; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Rectifying alternating currents. No. 1,308,448; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Electric motor and governing mechanism therefor. No. 1,308,449; July 1; v. 264; p. 80.

Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Phonograph. No. 1,308,450; July 1; v. 264; p. 80.

Sandfield, Michael, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Coil-retaining device. No. 1,311,460; July 29; v. 264; p. 767.

Sandow, Eugen, London, England. Spring-grip dumb-bell. No. 1,308,250; July 1; v. 264; p. 46.

Sandstrom, John, Adams, N. D. Snap-hook. No. 1,310,518; July 22; v. 264; p. 564.

Saltzer, Andrew, Los Angeles, Calif. Mow. No. 1,311,530; July 29; v. 264; p. 780.

Sanford, Sydney J., Los Angeles, Calif. Golf apparatus. No. 1,309,105; July 8; v. 264; p. 231.

Sargent & Company. (See Sarge, Albert A., assignor.)

Sargent & Company. (See Sargent, Edward R., assignor.)

Sargent & Company. (See Shaw, John H., assignor.)

Sargent & Company. (See Volght, Henry G., assignor.)

Sargent, Edward R., assignor to Sargent & Company, New Haven, Conn. Casket-handle. No. 1,311,291; July 29; v. 264; p. 734.

Sargent, Edward R., assignor to Sargent & Company, New Haven, Conn. Casket-handle. No. 1,311,292; July 29; v. 264; p. 734.

Sargeot, Frederick, and H. C. Heaton, Chicago, Ill., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Water-tube boiler. No. 1,311,467; July 29; v. 264; p. 767.

Sargent, Frederick G., Westford, assignor to C. G. Sargent's Sons Corporation, Granville, Mass. Drier. No. 1,311,250; July 29; v. 264; p. 727.

Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Locking-plug for receptacles and the like. No. 1,310,138; July 15; v. 264; p. 458.

Sarr, Ora E., Sandusky, Ohio. Electric boiler. No. 1,309,697; July 15; v. 264; p. 378.

Satre, Koute S., Heda, S. D. Parachute. No. 1,308,375; July 1; v. 264; p. 67.

Sattler, Hans, Sheboygan, Wis. Vibration-recorder. No. 1,309,513; July 15; v. 264; p. 399.

Saunder, Richard L., Hartford, Conn. Wheel. No. 1,311,408; July 29; v. 264; p. 768.

Sanson, Peter J., Head of Jarvis' Inlet, British Columbia, Canada. Lifting-jack. No. 1,309,962; July 15; v. 264; p. 427.

Savage, Howard F., Boston, Mass. Vehicle. No. 1,311,420; July 29; v. 264; p. 759.

Savage, Paris L., and H. E. Morton, Blaboe, Ariz. Air-pump. No. 1,310,876; July 22; v. 264; p. 625.

Savy, Emile L. A., Paris, France. Coating-machine. No. 1,309,106; July 8; v. 264; p. 231.

Sawyer, Everett B. (See Munger, Melvin L., assignor.)

Say, William, London, England. Bit. No. 1,308,600; July 1; v. 264; p. 110.

Sayer, George J. (See Peterson, John M., assignor.)

Schacht, Abraham, Brooklyn, assignor to Slocum, Avram & Slocum Laboratories, Inc., New York, N. Y. Slide-bar. No. 1,308,451; July 1; v. 264; p. 81.

Schaefer, Frederic, Pittsburgh, Pa. Connecting-bar. No. 1,309,220; July 8; v. 264; p. 251.

Schaefer, Gustav, Worcester, Mass. Cleaner for garnet-ting-machines. No. 1,311,293; July 29; v. 264; p. 785.

Schaeffers, Joseph, Lakewood, Ohio. Variable-displacement piston for internal-combustion engines. No. 1,310,446; July 22; v. 264; p. 545.

Schachter, Nathan, Chicago, Ill. Shock-absorber. No. 1,311,531; July 29; v. 264; p. 780.

Schellner, Karl P., Brooklyn, N. Y. Cycle-frame. No. 1,309,305; July 8; v. 264; p. 268.

Schellner, Karl, Brooklyn, N. Y. Friction-clutch drive. No. 1,310,967; July 22; v. 264; p. 641.

Schellenbach, William L., Wyoming, Ohio. Belt-shifting mechanism. No. 1,310,214; July 15; v. 264; p. 472.

Schellentrager, E. J., et al. (See Wilmore, Carlton A., assignor.)

Schellentrager, J. Homer, et al. (See Wilmore, Carlton A., assignor.)

Scherbner, Paul H. E., New York, N. Y. Grating. No. 1,309,698; July 15; v. 264; p. 378.

Schermann, Stefana. (See Krug and Scherman.)

Schick, George A., Philadelphia, Pa. Sewing-machine. No. 1,309,372; July 8; v. 264; p. 280.

Schilling, George W., Philadelphia, Pa. Device for removing articles from shafts. No. 1,310,447; July 22; v. 264; p. 545.

Schilling, Louis J., Syracuse, N. Y. Means for locking car-covers. No. 1,308,197; July 1; v. 264; p. 35.

Schinkes, Albert, assignor to Keller Pneumatic Tool Company, Grand Haven, Mich. Percussion-tool. No. 1,309,515; July 15; v. 264; p. 399.

Schleit, Willis A., Syracuse, N. Y. Draft-regulator for heaters. No. 1,310,505; July 22; v. 264; p. 556.

Schlichten, George W., San Diego, Calif. Means for treating fiber-bearing plants. No. 1,308,370; July 1; v. 264; p. 67.

Schloss, Meyer W., New York, N. Y., assignor to Treo Company, Incorporated. Girdle. No. 1,308,570; July 8; v. 264; p. 180.

Schluer, William M., Orange, N. J. Top or hood for vehicles. No. 1,311,717; July 29; v. 264; p. 814.

Schmid, Albert, Long Beach, N. Y. Carbureter. No. 1,311,532; July 29; v. 264; p. 780.

Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug. No. 1,308,871; July 8; v. 264; p. 186.

Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug and forming same. No. 1,308,872; July 8; v. 264; p. 186.

Schmidt, Arthur A., assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for electrical treatment of gases. No. 1,309,221; July 8; v. 264; p. 252.

Schneble, Joseph, Chicago, Ill. Manufacture of beverages. No. 1,311,251; July 29; v. 264; p. 727.

Schneble, Joseph, Chicago, Ill. Manufacture of ethyl alcohol and residue from beverage. No. 1,311,421; July 29; v. 264; p. 759.

Schneider & Cie. (See Schneider, Eugene, assignor.)

Schneider, Charles C., assignor to J. H. Cutter, St. Louis, Mo. Catching device for cloth-piling machines. No. 1,308,766; July 8; v. 264; p. 107.

Schneider, Eberhard, deceased, New York, N. Y.; S. Schneider, administratrix. Film-mending apparatus. No. 1,310,213; July 15; v. 264; p. 472.

Schneider, Eugene, Paris, France. Gun-supporting platform. No. 1,310,144; July 15; v. 264; p. 450.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for connecting gun-carriages to their limbers. No. 1,309,014; July 15; v. 264; p. 418.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for aiming guns. No. 1,310,139; July 15; v. 264; p. 458.

Schoelder, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Apparatus for effecting the adjustment of the training movement of gun-carriages mounted on railway-trucks. No. 1,310,140; July 15; v. 264; p. 458.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Construction of water-ballast tanks for submarines and other submergible floating structures. No. 1,310,877; July 22; v. 264; p. 625.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Light-artillery gun. No. 1,310,878; July 22; v. 264; p. 625.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Semi-automatic mechanism for breech-blocks. No. 1,310,879; July 22; v. 264; p. 625.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Door for the exit of torpedoes launched from torpedo-tubes. No. 1,310,880; July 22; v. 264; p. 625.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage with divergible trails. No. 1,310,142; July 15; v. 264; p. 450.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Brake for guns. No. 1,310,881; July 22; v. 264; p. 626.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage. No. 1,310,882; July 22; v. 264; p. 626.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Means for connecting and disconnecting large-caliber gun-barrels to and from their slides. No. 1,310,883; July 22; v. 264; p. 626.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Safety locking apparatus for guns of large caliber. No. 1,310,884; July 22; v. 264; p. 626.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Gun-carriage. No. 1,310,885; July 22; v. 264; p. 626.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Resilient suspension for gun-carriages. No. 1,310,886; July 22; v. 264; p. 627.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Firing mechanism of guns. No. 1,310,887; July 22; v. 264; p. 627.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Trail-carriage for guns of large caliber. No. 1,310,888; July 22; v. 264; p. 627.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage. No. 1,310,889; July 22; v. 264; p. 627.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Episcopes for tanks and other uses. No. 1,311,294; July 29; v. 264; p. 735.

Schneider, Eugene, Le Creusot, assignor to Schneider & Cie., Paris, France. Field-gun carriage. No. 1,311,777; July 29; v. 264; p. 825.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Joint for telescopic tubes. No. 1,309,903; July 15; v. 264; p. 427.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for diminishing the recoil of gun-carriages. No. 1,310,141; July 15; v. 264; p. 450.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Hand-operated apparatus for loading large guns. No. 1,310,143; July 15; v. 264; p. 450.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for connecting gun-carriages to limbers or fore-carriages. No. 1,310,145; July 15; v. 264; p. 450.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Suspension apparatus for gun-carriages and the like. No. 1,310,146; July 15; v. 264; p. 460.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for extending the limits of elevation of wheeled guns. No. 1,310,147; July 15; v. 264; p. 460.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for loading guns. No. 1,310,890; July 22; v. 264; p. 626.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for loading guns. No. 1,310,891; July 22; v. 264; p. 627.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Safety apparatus for preventing untimely explosions in the fuse-rings of time-fuses. No. 1,310,892; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Combined recuperator and recoil-brake apparatus for guns. No. 1,310,893; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Automatic apparatus for locking the cradle and pedestal of guns of small caliber during their recoil and return into firing position. No. 1,310,894; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for regulating the combustion in fuses for shells. No. 1,310,895; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Apparatus for launching torpedoes by means of under-water torpedo-tubes. No. 1,310,896; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Wheeled gun-carriage. No. 1,310,897; July 22; v. 264; p. 628.

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Field-gun carriage. No. 1,311,778; July 29; v. 264; p. 825.

Schneider, Hans, New York, N. Y. Brake-gearing. No. 1,309,964; July 15; v. 264; p. 428.

Schneider, Stanislaw, administratrix. (See Schneider, Eberhard.)

Schnitzler, Frank P., Clinton, and N. P. Collis, Dubuque, Iowa, assignors to O. D. Collis, Clinton, Iowa. Steam-ing-receptacle. No. 1,310,931; July 22; v. 264; p. 634.

Schock, Clarence, Mount Joy, Pa. Coal-chute. No. 1,311,622; July 29; v. 264; p. 796.

Schnaffar, Jacob G., Providence, R. I. Hose-clamp. No. 1,309,780; July 15; v. 264; p. 398.

Schoel, Anthony P., South Kaukauna, Wis. Portable saw. No. 1,309,781; July 15; v. 264; p. 398.

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Schager, Artie W., Madison, Wis. Waterproof composition and product and the like and producing the same. No. 1,310,376; July 15; v. 264; p. 501.

Schramm, Hugh H., New York, N. Y. Tire. No. 1,310,300; July 15; v. 264; p. 487.

Schroeder, Anton, St. Paul, Minn. Hinge-basp. No. 1,309,748; July 15; v. 264; p. 387.

Schroeder, Frank J., Altoona, Pa. S-iron-bending machine. No. 1,309,420; July 8; v. 264; p. 289.

Schroeder, Harry C., Berkeley, Calif. Compensating pump for pneumatic vehicle-tires. No. 1,311,533; July 15; v. 264; p. 781.

Schultz, James R. (See Dallmeyer, Brown, and Schultz.)

Schulstad, Peter L. V., Copenhagen, Denmark. Apparatus for measuring and simultaneously marking the measurements on machine-bells and the like. No. 1,309,306; July 8; v. 264; p. 298.

Schunmayer, John, Los Angeles, Calif. Machine for making plaster-board and the like. No. 1,308,723; July 1; v. 264; p. 132.

Schunmayer, John, Los Angeles, Calif. Plaster-board lathe. No. 1,308,723; July 1; v. 264; p. 132.

Schuman, John P., Reading, Pa. Nut-fastener. No. 1,310,107; July 15; v. 264; p. 463.

Schuppe, Max, Brooklyn, N. Y., assignor to Wales Adding Machine Company, Wilkes-Barre, Pa. Calculating-machine. No. 1,308,117; July 1; v. 264; p. 20.

Schussler, John H., Chicago, Ill. Ink-roller for printing presses. No. 1,310,932; July 22; v. 264; p. 635.

Schwab, William C., Canton, Ohio. Container for soap. No. 1,309,965; July 15; v. 264; p. 428.

Schwab, Frederick J., assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Apparatus for separating liquid from solid matter. No. 1,308,818; July 8; v. 264; p. 195.

Schwanhauser, Edwin J. (See Hober and Schwanhauser.)

Schwartz, Bernard L., Cincinnati, Ohio. Signal. No. 1,309,222; July 8; v. 264; p. 252.

Schwetner, Maximilian C., West Hoboken, N. J. Stopper. No. 1,310,445; July 22; v. 264; p. 546.

Schwitzer, Edmund O., Chicago, Ill. Instantaneous-voltage-regulating means. No. 1,309,514; July 15; v. 264; p. 399.

Schwitzer, Edmund O., Chicago, Ill. Reverse-phase relay. No. 1,310,210; July 15; v. 264; p. 472.

Sclater, Ivanhoe H., Pittsfield, Mass., assignor to General Electric Company, Corvallis, Ore. Core for electrical apparatus. No. 1,310,200; July 15; v. 264; p. 487.

Seahy, John R., Okmulgee, Okla. Internal-lock ball for drawing glass. No. 1,311,137; July 22; v. 264; p. 673.

Scott, David J., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Offset web-perfecting machine. No. 1,311,138; July 22; v. 264; p. 673.

Scott, Isabella, et al., executors. (See Scott, David J., assignor.)

Scott, Lewis L., St. Louis, Mo. Percussion-drill. No. 1,308,811; July 8; v. 264; p. 175.

Scott, Robert W., assignor, by mesne assignments, to Scott & Williams, Incorporated, Boston, Mass. Needle-arm structure for knitting-machines. No. 1,311,093; July 22; v. 264; p. 665.

Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Tuck-attch mechanism for knitting-machines. No. 1,311,023; July 22; v. 264; p. 706.

Scott, William, Glasgow, Scotland. Steam-trap. No. 1,310,507; July 22; v. 264; p. 550.

Scott, William L., Montreal, Quebec, Canada. Steam-boiler. No. 1,310,807; July 22; v. 264; p. 613.

Scott & Williams. (See Scott, Robert W., assignor.)

Serukas, Loyl, and T. L. Jones, assignors to Copper-Clad Malleable Hinge Company, St. Louis, Mo. Door. No. 1,310,217; July 15; v. 264; p. 472.

Seullin, Michael J., Newark, N. J. Glass-cutter. No. 1,308,260; July 1; v. 264; p. 46.

Seusen, Lino, Phoenix, N. Y. Gage. No. 1,309,700; July 15; v. 264; p. 378.

Seaboldt, Bert, New York, and H. E. J. Wackwitz, Port Washington, said Seaboldt assignor of his right to H. E. Smith, Port Washington, N. Y. Brush. No. 1,309,590; July 8; v. 264; p. 323.

Search, Charles E., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Blade-bracing and locating the same. No. 1,309,516; July 15; v. 264; p. 399.

Searight Co. (See Wright, Wilbur L., assignor.)

Seaton, Alexander J., Carney, Okla. Vehicle-jack. No. 1,311,015; July 22; v. 264; p. 650.

Seattle Astoria Iron Works. (See Troyer, Nelson, assignor.)

Seaver, William H., Agawam, assignor to E. Kruse, Springfield, Mass. Tobacco-stripper. No. 1,311,183; July 22; v. 264; p. 714.

Sebastian, Apollon A., assignor to Andrew Hoffman Mfg. Co., Chicago, Ill. Folding and sliding window. No. 1,310,842; July 22; v. 264; p. 610.

Sebastian, Apollon A., assignor to Andrew Hoffman Mfg. Co., Chicago, Ill. Swinging and sliding window. No. 1,310,843; July 22; v. 264; p. 619.

Sebenius, John A., Shelton, Wash. Trolling-spoon. No. 1,309,966; July 15; v. 264; p. 428.

Sebring, Fred A., Granite Falls, Minn. Barrel hoisting and tilting device. No. 1,311,094; July 22; v. 264; p. 665.

Secretary of War of the United States of America. (See Walpole, Nathaniel C., assignor.)

Security Tire & Rubber Company, The. (See Gilmore and Hanns, assignors.)

Selb, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,309,422; July 8; v. 264; p. 289.

Selb, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,309,423; July 8; v. 264; p. 289.

Selberling, Frank A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Fabric-forming apparatus. No. 1,309,424; July 8; v. 264; p. 289.

Selbert, Lloyd J. (See Gelhaar, Harry J., assignor.)

Seldel, Bruno W., and G. E. Wattman, assignors to The Adams & Westlake Company, Chicago, Ill. Solder-feeding machine. No. 1,309,107; July 8; v. 264; p. 231.

Selfert, Martin W., East Bountiful, Utah. Sleigh. No. 1,310,232; July 15; v. 264; p. 479.

Selig, Moses. (See Gruber and Selig.)

Sellar, John A. E., Everett, Mass., assignor to The Randall-Falchney Company, Inc. Pressure-syringe and subcutaneous needle. No. 1,308,019; July 8; v. 264; p. 106.

Semet-Solvay Company. (See Grant, Walter L., assignor.)

Semet-Solvay Company. (See Houghton, Alicia C., assignor.)

Semple, Edwin C., Chicago, Ill. Lock-out. No. 1,309,817; July 15; v. 264; p. 399.

Semple, John R., Sewickley, Pa. Fuse. No. 1,310,844; July 22; v. 264; p. 610.

Servicable Inventions Corporation. (See Adams, Harry A., assignor.)

Servitje, Juan. (See Halcilla and Servitje.)

Seassons, Edison O., Chicago, Ill. Locking-switch. No. 1,310,168; July 15; v. 264; p. 464.

Seward, George O., Jersey City, N. J., assignor to American Magnesium Corporation. Electrodeposition of magnesium. No. 1,310,440; July 22; v. 264; p. 540.

Seward, George O., assignor to American Magnesium Corporation, Niagara Falls, N. Y. Electrodeposition of magnesium. No. 1,310,450; July 22; v. 264; p. 540.

Seymour, John K., assignor of one-half to W. W. McConnel, Elyria, Ohio. Toy. No. 1,311,534; July 22; v. 264; p. 781.

Shackley, Ida M., Watertown, S. D. Cover-fastener. No. 1,308,962; July 8; v. 264; p. 203.

Shallor, Frank E. (See Kuhn and Shallor.)

Shane, Roy H., Quinter, Kans. Valve. No. 1,308,118; July 1; v. 264; p. 21.

Shank, Irvin F., Agency, Iowa. Adjustable hanger. No. 1,311,770; July 22; v. 264; p. 825.

Shank, Thomas M., Bidwell, assignor of one-half to T. J. O'Meara, Cincinnati, Ohio. Driving mechanism for phonographs. No. 1,308,556; July 1; v. 264; p. 100.

Shanks, Edward, Belfast, Ireland. Suspenders. No. 1,310,808; July 22; v. 264; p. 613.

Shannon, John W., et al. (See Pagedarm, John F., assignor.)

Sharp, Charles S., Auburn, N. Y., assignor, by mesne assignments, to International Harvester Company, Harrow. No. 1,310,582; July 22; v. 264; p. 570.

Sharp, James A., assignor, by mesne assignments, to International Harvester Company, Springfield, Ohio. Balancing-press. No. 1,308,645; July 1; v. 264; p. 117.

Sharp, Robert, San Jose, Calif. Wall-finishing composition. No. 1,309,782; July 15; v. 264; p. 393.

Sharp & Smith. (See Ritz, Harold M., assignor.)

Sharpley, John D., and T. Crowe, Taffville, Conn., assignors to Old Colony Machine Company, New Bedford, Mass. Bobbin-stripping machine. No. 1,309,818; July 15; v. 264; p. 400.

Shaw, Benson R., Dayton, Ohio. Climber-indicator for aircrafts. No. 1,308,557; July 1; v. 264; p. 100.

Shaw, Edward, London, and G. S. Baker, Middlesex, England. Treatment or preparation of sugar. No. 1,309,425; July 8; v. 264; p. 290.

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Door-check. No. 1,311,184; July 22; v. 264; p. 715.

Shaw, William, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electrode-threading apparatus. No. 1,308,302; July 1; v. 264; p. 34.

Shea, John A., Wilkes-Barre, Pa. Direction-signal for automobiles. No. 1,308,198; July 1; v. 264; p. 35.

Shra, Thomas J., Portland, Ore. Welding plates. No. 1,311,422; July 22; v. 264; p. 759.

Shear-Klein Grate Company. (See Kohout, George A., assignor.)

Shedlock, Alfred. (See Keesey and Shedlock.)

Sheehan, Thomas J., St. Louis, Mo. Refrigerating apparatus. No. 1,308,812; July 8; v. 264; p. 175.

Sheet Steel Products Company, The. (See Baxter, Kenneth S., assignor.)

Sheldon, Walter L., Detroit, Mich. Power steering mechanism. No. 1,309,261; July 8; v. 264; p. 259.

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Shelton, Harry J., St. Louis, Mo. Pulverizer. No. 1,311,535; July 22; v. 264; p. 781.

Shelton, William A., assignor to The Williams Foundry & Machine Company, Akron, Ohio. Auxiliary head for heaters. No. 1,311,252; July 22; v. 264; p. 727.

Shepard, William C., Seattle, Wash. Prepared package of lubricating-grease. No. 1,309,819; July 15; v. 264; p. 400.

Sheppard, William H., assignor to J. A. Sherman, Worcester, Mass. Machine for making paper drinking-cups. No. 1,308,767; July 8; v. 264; p. 187.

Sherbondy, Earl H., Cleveland, Ohio. Turbo-compressor mounting. No. 1,309,540; July 8; v. 264; p. 313.

Sherbondy, Earl H., Cleveland, Ohio. Cooling and insulating system for turbo-compressors. No. 1,310,672; July 22; v. 264; p. 587.

Sherbondy, Earl H., Cleveland, Ohio. Turbine-casing. No. 1,310,673; July 22; v. 264; p. 587.

Sherbondy, Earl H., Cleveland, Ohio. Turbine-casing. No. 1,310,674; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Nozzle-ring. No. 1,310,675; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Nozzle-ring. No. 1,310,676; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Nozzle-ring. No. 1,310,677; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Turbine-casing. No. 1,310,678; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Bearing-assembly. No. 1,310,679; July 22; v. 264; p. 588.

Sherbondy, Earl H., Cleveland, Ohio. Double rotor for turbines and casing therefor. No. 1,310,680; July 22; v. 264; p. 589.

Sherbondy, Earl H., Cleveland, Ohio. Turbine nozzle-ring. No. 1,310,681; July 22; v. 264; p. 589.

Sherbondy, Earl H., Cleveland, Ohio. Duplex turbo-compressor. No. 1,310,682; July 22; v. 264; p. 589.

Sherbondy, Earl H., Cleveland, Ohio. Supercharging device for turbo-compressors. No. 1,310,683; July 22; v. 264; p. 589.

Sherbondy, Earl H., Cleveland, Ohio. Turbo-compressor bearing. No. 1,310,684; July 22; v. 264; p. 589.

Sheer, George W., et al. (See Cochran, William R., assignor.)

Sherman, Chester E. (See Sherman, Harry E. and C. E.)

Sherman, Easton G., Hollywood, Calif. Moth-guard. No. 1,309,820; July 15; v. 264; p. 400.

Sherman, Harry E. and C. E. Anoka, assignors to Z. H. Austin, trustee, Minneapolis, Minn. Internal-combustion engine. No. 1,310,301; July 15; v. 264; p. 467.

Sherman, John A. (See Sheppard, William H., assignor.)

Sherman, Milton L., Sandusky, N. Y. Auxiliary lever for operating and locking clutch-pedal levers. No. 1,310,302; July 15; v. 264; p. 467.

Sherwood, William E., Canastota, N. Y. Velocipede. No. 1,308,377; July 1; v. 264; p. 67.

Shetokin, George, Portland, Ore. Foldable table and case therefor convertible into benches. No. 1,308,727; July 1; v. 264; p. 132.

Shields, George A., assignor to C. H. Martin and B. A. Martin, Columbus, Ohio. Combined glass-machinist. No. 1,310,451; July 22; v. 264; p. 540.

Shigley, Cyrus C., Grand Rapids, Mich. Check or coin control apparatus. No. 1,310,549; July 22; v. 264; p. 564.

Shillito, Bernard J., Manchester, England. Rolling-mill. No. 1,310,508; July 22; v. 264; p. 557.

Shirrow, Albert E., Glen Huntly, near Melbourne, assignor to J. C. Gates, Melbourne, Victoria, Australia. Filter attachment for printing, waxing, cutting, and like machines. No. 1,309,701; July 15; v. 264; p. 378.

Shoecraft, Judson, Eskridge, Kans. Absolute and permissible block-signaling system. No. 1,311,715; July 22; v. 264; p. 814.

Shoemaker, George W., Dalton, Pa. Washboard. No. 1,311,624; July 22; v. 264; p. 787.

Shores-Mueller Company. (See McAllister, Robert L., assignor.)

Short, George M., Litchfield, Calif. Grass-divider. No. 1,311,014; July 22; v. 264; p. 650.

Shuck, George W., Lawrence, Kans. Flour sifter and scale. No. 1,308,303; July 1; v. 264; p. 54.

Shulenberger, Jay G., and L. Whitright, Lodi, Ohio. Mail-bag-delivering device. No. 1,308,261; July 1; v. 264; p. 46.

Shultz, James C., Meadville, Pa. Lock-nut. No. 1,309,421; July 8; v. 264; p. 289.

Shultz, Walter C. (See Johnson, Sinclair J., assignor.)

Shuman, Cleo G., Chicago, Ill., assignor to Gyp Steel Products Company. Building structure and plaster-board-suchorage means. No. 1,308,199; July 1; v. 264; p. 35.

Shuman, Frank, deceased, Philadelphia, Pa.; Y. J. Shuman and C. H. Dunker, administrators. Submarine and operating the same. No. 1,310,253; July 15; v. 264; p. 479.

Shuman, Y. Josephine, et al., administrators. (See Shuman, Frank.)

Shurtler, Cecil, Kingston, N. Y. Level. No. 1,311,423; July 22; v. 264; p. 760.

Shuttleworth, Charles J., Buffalo, N. Y., assignor of one-half to C. J. Warnick, Washington, D. C. Engine. No. 1,308,813; July 8; v. 264; p. 175.

Sibbett, George E. (See Hopfield, Lewis D., assignor.)

Sibson, Walter W. (See Allsop and Sibson.)

Sidestricker, Guy, and J. W. Miller, Mount Clare, W. Va. Wooden pump. No. 1,308,814; July 8; v. 264; p. 176.

Siegel, Anna. (See Siegel, Samuel, assignor.)

Siegel, Samuel, assignor to A. Siegel, Chicago, Ill. Musical educational chart. No. 1,309,016; July 15; v. 264; p. 418.

Siegenthaler, George, Fremont, Ohio. Flame attachment. No. 1,310,036; July 22; v. 264; p. 581.

Siemens-Schubert Werke, G. m. b. H. (See Trettin, Carl, assignor.)

Siemens-Schubert Werke, G. m. b. H. (See Werner, Albert, assignor.)

Silver, Bennett C., Chicago, Ill. Child's vehicle. No. 1,310,218; July 15; v. 264; p. 472.

Silverman, Alexander, Pittsburgh, Pa. Illuminator for microscopes. No. 1,311,185; July 22; v. 264; p. 715.

Silverman, Alexander, Pittsburgh, Pa. Illuminator for microscopes. No. 1,311,186; July 22; v. 264; p. 715.

Simmen, Paul J., Buffalo, N. Y. Automatic moving-vehicle control. No. 1,308,558; July 1; v. 264; p. 100.

Simmon, Karl A., Edgewood Park, and L. G. Riley, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, Casing for control apparatus. No. 1,308,119; July 1; v. 264; p. 21.

Simmon, Karl A., Edgewood Park, and L. M. Aspluwall, Wilkesburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Protective device for trolley systems. No. 1,308,120; July 1; v. 264; p. 21.

Simmonds, Francis N., San Francisco, Calif. Counterbore. No. 1,308,304; July 1; v. 264; p. 65.

Simmons, Charles A., Fairfield, Ill. Aeroplane. No. 1,308,997; July 8; v. 264; p. 210.

Simmons Company. (See Galt, John F., assignor.)

Simmons, Howard E. and P. R. Huntington, Ind. Automobile or truck wheel. No. 1,310,303; July 15; v. 264; p. 488.

Simmons, Oliver G., San Antonio, Tex. Boll-cotton separator and cleaner. No. 1,310,304; July 15; v. 264; p. 488.

Simmons, Paul R. (See Simmons, H. E. and P. R.)

Simms, Frederick H., assignor of one-half to Simms Motor Units, Limited, Rathbone Place, London, England. Shaft-coupling. No. 1,310,545; July 22; v. 264; p. 610.

Simms, Harold S. (See Beck, Alwin, assignor.)

Simms Motor Units, Limited. (See Simms, Frederick H., assignor.)

Simon, Emil. (See Willson, Russell A., assignor.)

Simon, Henry, Laguna Beach, Calif. Combination-square. No. 1,308,515; July 8; v. 264; p. 176.

Simonds Manufacturing Company. (See Culley, Walter E., assignor.)

Simonsen, William W., and L. V. D. Blair, Cincinnati, Ohio, assignors to The Mantle Lamp Company of America, Chicago, Ill. Indurated organic substance and preparing the same. No. 1,309,907; July 15; v. 264; p. 425.

Simpson, Frank F., U. S. Army. Folding bed. No. 1,311,719; July 22; v. 264; p. 814.

Simpson, Hobart A. (See Stockdale and Simpson.)

Simpson, Robert, Cincinnati, Ohio. Resin-recovering process. No. 1,308,768; July 8; v. 264; p. 108.

Simpson, Robert C. (See Grieshaber and Simpson.)

Sines, Harold S., assignor to Mineralac Electric Company, Chicago, Ill. Time-switch. No. 1,309,426; July 8; v. 264; p. 200.

Sines, Harold S., assignor to Mineralac Electric Company, Chicago, Ill. Periodically-operated mechanism. No. 1,309,427; July 8; v. 264; p. 200.

Singer, Harry. (See Zipin and Singer.)

Singer Manufacturing Company, The. (See Doach and Hemleb, assignors.)

Singleton, James D., Houston, Tex. Jack. No. 1,310,637; July 22; v. 264; p. 581.

Singleton, Stephen G., Burke, Idaho. Toothpick-holder. No. 1,311,025; July 22; v. 264; p. 797.

Sinzel, Leonard T., Los Angeles, Calif. Detachable automobile-tire tread. No. 1,311,720; July 22; v. 264; p. 815.

Sipher, Edmund F., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Operating mechanism for valves. No. 1,308,262; July 1; v. 264; p. 46.

Sipperly, John E., Troy, N. Y., assignor, by mesne assignments, to W. A. Tooke, Montreal, Quebec, Canada. Collar. No. 1,310,550; July 22; v. 264; p. 564.

Sir W. G. Armstrong-Whitworth and Company. (See Willson and Dalby, assignors.)

Siren, Frank W., Detroit, Mich., and E. Tavastila, Donora, Pa. Belt-shifting device. No. 1,311,095; July 22; v. 264; p. 665.

Sisou, Eugene A., assignor, by mesne assignments, to Mills Woven Cartridge Belt Company, Worcester, Mass. Pocketed carrier. No. 1,310,377; July 15; v. 264; p. 501.

Skelly, Bernard H., Bridgeport, Conn., assignor to F. R. Mount, Hartford, Conn. Auxiliary breather-pipe attachment. No. 1,309,202; July 8; v. 264; p. 250.

Skinner, Claude M., and L. J. Fowler, Omaha, Neb. Grease-cup. No. 1,309,428; July 8; v. 264; p. 290.

Skinner, William G., Yorktown, Va. Method of and apparatus for testing cement. No. 1,309,702; July 15; v. 264; p. 379.

Skoglund, Albert. (See Bore and Skoglund.)
 Skoglund, Jean V., assignor, by mesne assignments, to Trojan Powder Company, New York, N. Y. Treating nitrated bodies. No. 1,311,017; July 22; v. 264; p. 651.
 Slade, Samuel, et al. (See Morehouse, William H., assignor.)
 Slawin, Hyman, Philadelphia, Pa. Hood. No. 1,309,783; July 15; v. 264; p. 393.
 Sleeper & Hartley. (See Sleeper, Frank H., assignor.)
 Sleeper, Frank H., assignor to Sleeper & Hartley, Inc., Worcester, Mass. Machine for forming hooks on spiral springs. No. 1,311,187; July 29; v. 264; p. 713.
 Slinger, Robert P. (See Connor and Slinger.)
 Sliwinski, Stephen, Cressona, Pa. Combined fishing-rod and cane. No. 1,310,452; July 22; v. 264; p. 546.
 Slocum, Avram and Slocum. (See Avram, Moia H., assignor.)
 Slocum, Avram & Slocum Laboratories. (See Boynton and Schachet, assignors.)
 Slocum, Avram & Slocum Laboratories. (See Schachet, Abraham, assignor.)
 Small, Frederick E., Kansas City, Mo. Ore-concentrating machine. No. 1,309,307; July 8; v. 264; p. 268.
 Small, Thomas W., Cleveland, Ohio. Display apparatus. No. 1,308,200; July 1; v. 264; p. 36.
 Smiley, John H., Baltimore, Md. Fire-alarm. No. 1,309,910; July 15; v. 264; p. 418.
 Smiley, William H., Kansas City, Mo. Pozole. No. 1,309,059; July 15; v. 264; p. 371.
 Smith, Allen W., New York, N. Y. Carrying and drag bag. No. 1,308,203; July 1; v. 264; p. 47.
 Smith, Andrew, Chicago, Ill. Propelling device or shooter for toys. No. 1,308,201; July 1; v. 264; p. 30.
 Smith, Arthur B., assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,308,749; July 1; v. 264; p. 136.
 Smith, Carl C., Oakland, Calif. Loading device for automobiles. No. 1,310,086; July 15; v. 264; p. 439.
 Smith Cannery Machines Co. (See Waugh, Edward H., assignor.)
 Smith, Charles A., Chicago, Ill. Screen. No. 1,310,305; July 15; v. 264; p. 488.
 Smith, Earl G. (See Combs and Bullington, assignors.)
 Smith & Egg Manufacturing Company, The. (See Berg-Juol, John L., assignor.)
 Smith, John O. (See Russell and Smith.)
 Smith, Eliza A. C. (See Russell and Smith.)
 Smith, Eliza A. C., New York, N. Y. Electrode. No. 1,311,091; July 22; v. 264; p. 685.
 Smith, Ella L., Knoxville, Ala. Dolt. No. 1,308,910; July 8; v. 264; p. 176.
 Smith, Emerson H., Parsons, Kans. Train-order holder. No. 1,308,080; July 8; v. 264; p. 226.
 Smith, Emma A., Standish, Mich. Oil-burning stove. No. 1,310,254; July 15; v. 264; p. 479.
 Smith Engineering Works. (See Sanborn, Eugene L., assignor.)
 Smith, Ernest C., assignor to Walter A. Wood Mowing & Reaping Machine Co., Hoesick Falls, N. Y. Cultivator. No. 1,310,583; July 22; v. 264; p. 570.
 Smith, Ernest L., Salt Lake City, Utah. Envelop or file. No. 1,309,223; July 8; v. 264; p. 232.
 Smith, Frederick E., and F. W. Curran, Berby, assignors to Robert N. Bassett Company, Incorporated, Shelton, Conn. Mechanism for making stay-tips. (Reissue.) No. 14,691; July 15; v. 264; p. 598.
 Smith Gas Engineering Company, The. (See Smith, Harry F., assignor.)
 Smith, George. (See Merrill and Smith.)
 Smith, George A., Baltimore, Md. Photographic exposure-meter. No. 1,310,255; July 15; v. 264; p. 479.
 Smith, George A., Baltimore, Md. Exposure-meter. No. 1,310,256; July 15; v. 264; p. 479.
 Smith, George C., Gottenborg, Sweden. Apparatus for hoisting and lowering boats. No. 1,310,717; July 22; v. 264; p. 505.
 Smith, Harry P., Lexington, Ohio, assignor to The Smith Gas Engineering Company, Rotary pump. No. 1,310,584; July 22; v. 264; p. 571.
 Smith, Henry, College Point, N. Y. Ink-well. No. 1,308,817; July 8; v. 264; p. 176.
 Smith, Henry C., Philadelphia, Pa. Contents-lifter for display-cans. No. 1,310,219; July 15; v. 264; p. 473.
 Smith, Hewlett R. (See Semboldt and Wackwitz, assignors.)
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Machine for making hair-plugs. No. 1,309,660; July 15; v. 264; p. 371.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Cutting-off attachment for hair-plug machines. No. 1,309,661; July 15; v. 264; p. 371.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-feed mechanism for hair-plug machines. No. 1,309,662; July 15; v. 264; p. 372.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-bending mechanism for hair-plug machines. No. 1,309,663; July 15; v. 264; p. 372.
 Smith, Homer P., assignor of one-third to F. E. Saecker and one-third to H. G. Saecker, Appleton, Wis. Wire-cutting device. No. 1,309,664; July 15; v. 264; p. 372.

Smith, Horace H., Tacoma, Wash. Separator. No. 1,308,920; July 8; v. 264; p. 193.
 Smith, Joel W., Ardmore, Okla. Locking means for freight-car doors. No. 1,308,640; July 1; v. 264; p. 117.
 Smiley, John P., Dallas, Tex. Elevated carrier. No. 1,311,018; July 22; v. 264; p. 651.
 Smith, Kenely E., Birmingham, Ala. Attachment for rulers. No. 1,310,655; July 22; v. 264; p. 659.
 Smith, Marion A., Salt Lake City, Utah. Root-topping device. No. 1,308,921; July 8; v. 264; p. 196.
 Smith, Orlin. (See Nixon and Smith.)
 Smith, Orlin V., Bridgeport, Conn. Bank deposit-book. No. 1,308,532; July 1; v. 264; p. 95.
 Smith, Roland L., Everett, Mass. Leather-finishing process. No. 1,311,188; July 29; v. 264; p. 715.
 Smith, Thomas H., El Paso, Tex. Automobile-alarm. No. 1,311,019; July 22; v. 264; p. 651.
 Smith, Walter T., assignor to Cornell Wood Products Company, Cornell, Wis. Scraper-bar support for pasting-machines. No. 1,311,721; July 29; v. 264; p. 815.
 Smith, William G., New York, N. Y. Carburetor-support. No. 1,311,020; July 22; v. 264; p. 651.
 Smith, William L., Oil City, Pa. Draining-valve for internal-combustion engines. No. 1,310,094; July 15; v. 264; p. 450.
 Smith, William J., Portage La Prairie, Manitoba, Canada. Ventilator. No. 1,308,264; July 1; v. 264; p. 47.
 Smith, William L., Ontonagon, Mich. Combined log loader and decker. No. 1,311,469; July 29; v. 264; p. 768.
 Smock, Howard A., assignor of one-tenth to T. Cohen, Indianapolis, Ind. Kerosene blow-torch. No. 1,308,452; July 1; v. 264; p. 81.
 Smolarski, Jan, Omaha, Nebr. Vessel-hd. No. 1,308,533; July 1; v. 264; p. 95.
 Smoot, Charles H., South Orange, N. J., assignor to The Hattess, Hattis, Smoot Engineering Corporation, New York, N. Y. Fluid-control valve. No. 1,311,336; July 29; v. 264; p. 781.
 Smythe, Horace E., assignor to The S. R. Smythe Company, Pittsburgh, Pa. Continuous furnace. No. 1,310,840; July 22; v. 264; p. 620.
 Snapp, Bert M., Halibou, Canal Zone. Coupon-counting machine. No. 1,311,810; July 29; v. 264; p. 838.
 Snively, Clarence S., Wilkesburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Mounting for contact-fingers and adjusting the same. No. 1,309,108; July 8; v. 264; p. 232.
 Snell, Lyle K., assignor to Cadillac Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,310,898; July 22; v. 264; p. 629.
 Snelling, Walter O., Allentown, Pa. Fertilizing method and material. No. 1,308,463; July 1; v. 264; p. 81.
 Snelling, Walter O., Long Island City, N. Y. Coating process and apparatus. No. 1,310,037; July 15; v. 264; p. 439.
 Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Explosive compound. No. 1,310,060; July 22; v. 264; p. 641.
 Snow, Arthur E., Erie, Pa., assignor to The American Laundry Machinery Company, Norwood, Ohio. Clothes-pressing apparatus. No. 1,309,589; July 8; v. 264; p. 321.
 Snyder, Adam A., Bangor, Pa. Adjustable overhead support for holsts. No. 1,309,048; July 8; v. 264; p. 220.
 Socelo, Andrew, Altoona, Pa. Tensioning device for looms. No. 1,308,121; July 1; v. 264; p. 21.
 Societe Anonyme l'Industrie Integrative (Anciens Etablissements L. Chaviviere). (See Chaviviere, Lucien, assignor.)
 Societe Des Moteurs Salmson (Systeme Canton-Unne). (See Postel-Vinay, Pierre J. R., assignor.)
 Societe Des Moteurs Salmson (Systeme Canton-Unne). (See Salmson, Emile J. J., assignor.)
 Societe Lorraine des Anciens Etablissements de Dietrich & Cie. De Luneville. (See Malce, Auguste, assignor.)
 Solberg, Louis J., Malta, Mont. Folding clamp. No. 1,310,551; July 22; v. 264; p. 664.
 Somerville, Albert A., Flushing, N. Y., assignor to New York Helting and Packing Company. Decorated rubber article and making same. No. 1,309,703; July 15; v. 264; p. 370.
 Somen, Walter F., Boston, Mass. Packing for turbine-shafts and the like. No. 1,308,454; July 1; v. 264; p. 81.
 Soonemann, Carl, New York, N. Y. Can-opener. No. 1,309,224; July 8; v. 264; p. 232.
 Sopher, Walter, and I. A. Hammond, Almsworth, Nebr. Automatic vise and stop for work-benches. No. 1,308,922; July 8; v. 264; p. 196.
 Southgate, George T., Brooklyn, N. Y. High-potential switch. No. 1,310,585; July 22; v. 264; p. 571.
 Sowa, John, Kansas City, Kans. Curtain-holder. No. 1,311,350; July 29; v. 264; p. 747.
 Sparboom, Walter P., Rochester, N. Y. Signaling system. No. 1,309,821; July 15; v. 264; p. 400.
 Spargo, Benjamin H. M., Hawksburn, Melbourne, Victoria, Australia. Alarm. No. 1,311,424; July 29; v. 264; p. 760.
 Spear, John R., Winnipeg, Manitoba, and J. M. Beattie, Calgary, Alberta, Canada. Building-clip. No. 1,308,265; July 1; v. 264; p. 47.

Spear, Lawrence Y., and G. C. Davison, New London, Conn. Fixed ammunition for non-recoil guns. No. 1,311,021; July 22; v. 264; p. 651.
 Specht, Harry M., New York, N. Y. Apparatus for making filament from viscid or viscous substances. No. 1,310,509; July 22; v. 264; p. 657.
 Speldel, Eugen, Homburg, Germany, assignor, by mesne assignments, to General Chain Company, Providence, R. I. Soldering chain-links. No. 1,308,741; July 1; v. 264; p. 135.
 Speira, Charles A., The Dargle, Natal, South Africa. Screw-extractor. No. 1,310,510; July 22; v. 264; p. 657.
 Spellman, Ray A., St. Joseph, Mich. Lamp-shade. No. 1,309,263; July 8; v. 264; p. 259.
 Spencer, Frank J., and W. J. Kelly, assignors to Gimson Co. (Leicester), Limited, Leicester, England. Motor-driven machine for the manufacture of boots and shoes. No. 1,308,303; July 1; v. 264; p. 65.
 Spencer, George F. (See Spencer, William H., assignor.)
 Spencer, William H., assignor to G. F. Spencer, New York, N. Y. Illuminating-fixture. No. 1,309,784; July 15; v. 264; p. 394.
 Sperr, Frederick W., Jr., assignor to H. Koppers Company, Pittsburgh, Pa. Manufacture of ammonium sulfate. No. 1,310,306; July 15; v. 264; p. 489.
 Sperry, Elmer A. (See Harrington, Ralph M., assignor.)
 Sperry Gyroscope Company, The. (See McDowell and Israel, assignors.)
 Sperry Gyroscope Company, The. (See Sperry, Lawrence H., assignor.)
 Sperry Gyroscope Company, The. (See Tanner, Harry L., assignor.)
 Sperry Gyroscope Company, The. (See Tanner and Thompson, assignors.)
 Sperry, Lawrence H., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Double-gyro inclinometer. No. 1,308,489; July 8; v. 264; p. 302.
 Spiegel, Joseph F., Toronto, Ontario, Canada. Steam-generating plant. No. 1,308,122; July 1; v. 264; p. 21.
 Spirek, David, Fort Dodge, Iowa. Device for turning eggs. No. 1,308,656; July 1; v. 264; p. 124.
 Splitdorf Electrical Company. (See Berger, Henry E., assignor.)
 Spohrer, Gregory J., East Orange, assignor of one-half to C. E. Van Vleck, Montclair, N. J. Internal-combustion engine. No. 1,308,123; July 1; v. 264; p. 22.
 Spray Engineering Company. (See Davis, Harry O., assignor.)
 Spray Engineering Company. (See Parker, Lee H., assignor.)
 Spreckels, John D., Jr., and R. Laborda, San Francisco, Calif. Sugar packing and boxing machine. No. 1,308,266; July 1; v. 264; p. 47.
 Sprengnether, William F., St. Louis, Mo. Spark-plug. No. 1,310,847; July 22; v. 264; p. 620.
 Sprong, Severn D., Brooklyn, N. Y. Lock-nut. No. 1,311,139; July 22; v. 264; p. 673.
 Sprout, Lark A., Edmond, Kans. Ensilage-harvester. No. 1,308,815; July 8; v. 264; p. 176.
 Squier, George A., Cleveland, Ohio. Machine for truing grinding-disks. No. 1,309,264; July 8; v. 264; p. 260.
 Stack, John, Chicago, Ill. Toy. No. 1,308,124; July 1; v. 264; p. 22.
 Stacy, Cornelius D. (See Stacy, Charles E. and C. D.)
 Stacy, Charles E. and C. D., Dayton, Ohio. Aeroplane. No. 1,309,905; July 15; v. 264; p. 428.
 Stacy, Charles E., Dayton, Ohio. Airplane. No. 1,311,097; July 22; v. 264; p. 666.
 Stafford Company, The. (See Lavigne, Albert, assignor.)
 Stagg, Thomas D., London, England. Wheel of vehicles, driving-pulleys, and the like. No. 1,311,537; July 29; v. 264; p. 781.
 Stanbon, Charles P., Lynn, Mass. Brake. No. 1,309,590; July 8; v. 264; p. 321.
 Stancliff, Edwin O., Bakersfield, Calif. Shock-loader. No. 1,309,550; July 8; v. 264; p. 313.
 Stander, Edwin G., Minneapolis, Minn. Driving-pinion. (Reissue.) No. 14,700; July 29; v. 264; p. 842.
 Standard Car Truck Company. (See Barber and Webb, assignors.)
 Standard Parts Company, The. (See Annable, Lee V., assignor.)
 Standard Parts Company, The. (See Baker, Walter C., assignor.)
 Standard Parts Company, The. (See Bryant, Richard S., assignor.)
 Standard Parts Company, The. (See Fay, Thomas J., assignor.)
 Standard Parts Company, The. (See Gird, Christian, assignor.)
 Standard Parts Company, The. (See Gressie, Charles W., assignor.)
 Standard Parts Company, The. (See Newsom, Horace H., assignor.)
 Standard Scientific Company. (See Parker, Newell D., assignor.)
 Standley, Meredith G., Cincinnati, Ohio, and A. E. Rowman, Covington, Ky. Recepting stamp and register. No. 1,311,189; July 29; v. 264; p. 716.
 Stanfield, George J. (See Geeraerd, Evariste, assignor.)

Stanley, George E., Coventry, England. Shock-absorbing mechanism for vehicles. No. 1,309,490; July 8; v. 264; p. 302.
 Stanley Motor Carriage Company. (See Broad, Charles E., assignor.)
 Stanley Works, The. (See Parsons and King, assignors.)
 Stansbury, Garrett O. (See Moore and Stansbury.)
 Staples, Albert F., Boston, Mass. Control mechanism. No. 1,308,559; July 1; v. 264; p. 101.
 Stark, Gara R., El Campo, Tex. Spring-clip tool. No. 1,308,687; July 1; v. 264; p. 125.
 Stark, Robert E., et al. (See Guest, John B. H., assignor.)
 Starkey, Rollin E. (See Stroud, Charles M., assignor.)
 Stars, Robert E., Cleveland, Ohio. Protective door for box-cars. No. 1,309,373; July 8; v. 264; p. 280.
 Staton, Wesley B., Gray, Saskatchewan, Canada. Slat for harvester-reels. No. 1,309,342; July 8; v. 264; p. 274.
 Stauffer, Joseph E., Mount Dora, N. Mex. Attachment for motor-driven vehicles. No. 1,308,874; July 8; v. 264; p. 187.
 Stauffer, Wilbert W., Wilbur, Wash. Cooling system for motor-vehicles. No. 1,311,470; July 29; v. 264; p. 768.
 Stearns, Jason C., Worcester, Mass. Combined tonneau and trouble lamp. No. 1,311,295; July 29; v. 264; p. 735.
 Stearns, Marcus C., Buffalo, N. Y. Aerial weapon. No. 1,308,156; July 8; v. 264; p. 240.
 Stebbins, William W. (See Reaser and Stebbins.)
 Stebor, Anthony L., Jr. (See Clark, Lester P., assignor.)
 Stedman, Seymour. (See Gardner, Benjamin F., assignor.)
 Stee, Clarence O., and K. H. Kolhede, Cerro de Pasco, Peru. Automatic tempering-machine for tools. No. 1,311,722; July 29; v. 264; p. 815.
 Steel Products Company, The. (See Chlam, Louis W., assignor.)
 Steel Utilities, Incorporated. (See Hawthorne and Pero, assignors.)
 Steele, Charles H., New York, N. Y. Convertible car. No. 1,308,511; July 1; v. 264; p. 92.
 Steen, Halfdan A., Milwaukee, Wis., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Switch. No. 1,309,822; July 15; v. 264; p. 400.
 Steiner, Sara. (See Garami, Joseph, assignor.)
 Steinbarter, Max, Philadelphia, Pa. Apparatus for stretching and drying leather. No. 1,310,148; July 15; v. 264; p. 460.
 Steinhauer, George W., Roseburg, Oreg. Automobile attachment. No. 1,309,491; July 8; v. 264; p. 302.
 Stephens, Elwyn T., Springfield, Mass. Method of and apparatus for targeting guns. No. 1,309,429; July 8; v. 264; p. 290.
 Stephens, Robert C., St. Louis, Mo. Lighting-fixture. No. 1,310,149; July 15; v. 264; p. 460.
 Stephens, Sterling, Bushnell, Fla. Irrigating apparatus. No. 1,309,225; July 8; v. 264; p. 252.
 Stephenson, George H. (See Kjekrum and Stephenson.)
 Stern, Herman C., Waukesha, Wis. Ash-sifter. No. 1,308,903; July 8; v. 264; p. 203.
 Stern, Louis J., Boston, Mass. Distance-indicator. No. 1,311,253; July 29; v. 264; p. 727.
 Sterry, Earl M., Buford, Colo. Plowing-machine. No. 1,309,960; July 15; v. 264; p. 428.
 Stets, Oscar C. (See Kell, Otto W., assignor.)
 Stevens, Charles W., administrator. (See Dodge, Otis W., assignor.)
 Stevens and Company. (See Stevens, Frederick A., assignor.)
 Stevens Fan Devices Company. (See Power, Jeffrey J., assignor.)
 Stevens, Frederick A., Providence, R. I., assignor to Stevens and Company, Incorporated. Ophthalmic mounting. No. 1,308,964; July 8; v. 264; p. 204.
 Stevenson, Donald C. (See Rintoul and Stevenson.)
 Stewart, Angus, Jerome, Idaho. Timepiece. No. 1,310,038; July 15; v. 264; p. 440.
 Stewart, Charles P., Walla Walla, Wash. Decorticating-machine. No. 1,308,267; July 1; v. 264; p. 45.
 Stewart Davit and Equipment Corporation. (See Hills, Harry B., assignor.)
 Stewart, Ernest L., La Veta, Colo. Incubator (thermo-static control). No. 1,311,098; July 22; v. 264; p. 666.
 Stewart, Gertrude F. (See Stewart, Perez M., assignor.)
 Stewart, Perez M., assignor to G. F. Stewart, New York, N. Y. Composite slab for building purposes. No. 1,308,300; July 1; v. 264; p. 65.
 Stewart, Wilbur F. (See Hamann and Stewart.)
 Stickney, Charles L., Skull Valley, Ariz. Expansion-clip. No. 1,311,022; July 22; v. 264; p. 652.
 Still, Lloyd S., Brooklyn, assignor of one-fourth to J. J. Kuhn, New York, N. Y. Cinematograph. No. 1,308,875; July 8; v. 264; p. 187.
 Stiles, Otto W., Washington, D. C. Pen and pencil attachment. No. 1,310,257; July 15; v. 264; p. 450.
 Stithon, Herbert A., assignor to H. F. Treck, Dubuque, Iowa. Device for supporting wheel-tires. No. 1,311,578; July 29; v. 264; p. 788.
 Stimpson, Edward S., assignor to Draper Corporation, Hopedale, Mass. Filling-catcher for looms. No. 1,308,292; July 1; v. 264; p. 36.

Stimpson, Edward S., assignor to Draper Corporation, Hopedale, Mass. Feeler mechanism for looms. No. 1,309,226; July 8; v. 264; p. 253.

Stine, Charles M., Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing explosive compounds and products thereof. No. 1,309,551; July 8; v. 264; p. 313.

Stine, Charles M., Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Blasting-cap charge. No. 1,309,552; July 8; v. 264; p. 314.

Stock Motorflug Gesellschaft mit beschränkter Haftung. (See Glöckle, Carl, assignor.)

Stockdale, Fairbank B., Brooklyn, N. Y., and H. A. Simpson, Ocean Grove, N. J. Power-storing mechanism. No. 1,311,190; July 29; v. 264; p. 710.

Stockman, Henry. (See Stockman, Henry C., assignor.)

Stockman, Henry C., New York, N. Y., assignor of one-half to H. Stockman, Englewood, N. J. Leather-cutting die and making shapes. No. 1,309,157; July 8; v. 264; p. 241.

Stockman, James S., Brooklyn, N. Y. Marine craft. No. 1,310,609; July 22; v. 264; p. 613.

Stockstill, Herman A., Toledo, Ohio, assignor of one-half to T. L. Gifford, Metal tie. No. 1,308,203; July 1; v. 264; p. 30.

Stoeckle, Erwin R., New York, N. Y., assignor to The Cutler-Hammer Manufacturing Co., Milwaukee, Wis. Thermionic amplifier. No. 1,309,704; July 15; v. 264; p. 379.

Stokes, Charles L., Millong, via Young, New South Wales, Australia. Internal-combustion engine. No. 1,308,560; July 1; v. 264; p. 101.

Stokes, Charles L., Los Angeles, Calif. Vacuum liquid-feed apparatus and method therefor. (Reissue.) No. 1,301,701; July 29; v. 264; p. 842.

Stokes, Francis W., Nottingham, England. Casting-machine. No. 1,309,823; July 15; v. 264; p. 401.

Stone, Andrew J., New London, Conn. Depth-charge projector. No. 1,311,780; July 29; v. 264; p. 826.

Stone, Aron L. and J. M. Lodi, Calif. Screen. No. 1,308,098; July 8; v. 264; p. 210.

Stone, John M. (See Stone, Aron L. and J. M.)

Stone, Wallace H., Wabasha, Minn. Automatic air-hose coupling. No. 1,311,023; July 22; v. 264; p. 652.

Storcy, John W., Attalla, Ala. Shaft-coupling. No. 1,308,307; July 1; v. 264; p. 55.

Storie Engine Company, The. (See Storie, Ole O., assignor.)

Storie, Ole O., Tacoma, Wash., assignor to The Storie Engine Company, Kewauunee, Wis. Transmission-gearing. No. 1,310,935; July 22; v. 264; p. 635.

Stout, Wilfred O., St. Paul, Minn. Dirigible headlight. No. 1,308,204; July 1; v. 264; p. 36.

Straub, Oscar L. and M. Wildrick, U. S. Army. Bomb or submarine mine. No. 1,310,586; July 22; v. 264; p. 571.

Strand, John, Chicago, Ill. Carrier. No. 1,311,608; July 29; v. 264; p. 805.

Straub, Oscar L. (See Wildrick, Meade, assignor.)

Straub, Oscar L. and M. Wildrick, U. S. Army. Bomb or submarine mine. No. 1,311,781; July 29; v. 264; p. 826.

Strass, Ernest H., Chicago, Ill. Lamp-shade. No. 1,310,375; July 15; v. 264; p. 501.

Strickland, Jacob N., Savannah, Ga. Lock. No. 1,310,307; July 15; v. 264; p. 489.

Strickland, De Witt W., Tylertown, Miss. Cultivator. No. 1,310,095; July 15; v. 264; p. 450.

Strid, Sven J., Chicago Heights, Ill., assignor to W. H. Miner, Chazy, N. Y. High-capacity shock-absorbing mechanism. No. 1,308,965; July 8; v. 264; p. 204.

Strimple, Pierce J., Cleveland, Ohio. Dirigible and tiltable headlight. No. 1,311,254; July 29; v. 264; p. 727.

Stromberg Motor Devices Company. (See Anderson, Raymond M., assignor.)

Stromberg Motor Devices Company. (See Leavell, Richard A., assignor.)

Strouch, Harry S., Tacoma, Wash. Boring-machine. No. 1,311,620; July 29; v. 264; p. 797.

Strong, Arthur P. (See Poppenhusen and Strong.)

Strong, Arthur P., Chicago, Ill., assignor to Green Engineering Company, East Chicago, Ind. Ash-conveying system. No. 1,311,297; July 29; v. 264; p. 736.

Strong, William J. H. (See Raffel, Ferdinand A., assignor.)

Stroth, Irwin C., Wellston, Ohio. Anti-skid device. No. 1,308,455; July 1; v. 264; p. 81.

Stroud, Charles M., assignor of one-half to R. E. Starkey, Minneapolis, Minn. Spark-plug. No. 1,310,970; July 22; v. 264; p. 642.

Stroud, William. (See Barr and Stroud.)

Structural Pressed Steel Wheel Company. (See Lachman, Maurice, assignor.)

Struck, Joseph B., Mill Hall, Pa. Sho-door construction. No. 1,309,109; July 8; v. 264; p. 232.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Conveyor. No. 1,310,454; July 22; v. 264; p. 547.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Conveyor. No. 1,311,298; July 29; v. 264; p. 736.

Stuart, John, St. Kilda, Melbourne, Victoria, Australia. Resident wheel. No. 1,311,024; July 22; v. 264; p. 652.

Stuck, Everett, assignor to The O. M. Edwards Company, Incorporated, Syracuse, N. Y. Sectional cabinet. No. 1,308,647; July 1; v. 264; p. 117.

Sturdy, Fred, Leeds, assignor of one-half to W. Mitchell, Horaforth, England. Pocket for coats or other garments. No. 1,308,999; July 8; v. 264; p. 210.

Styll, Harry H. (See Tillyer and Styll.)

Submarine Signal Company. (See Feasenden, Reginald A., assignor.)

Suck, Charles M., assignor of one-half to J. Harris, Salem, W. Va. Display-card holder. No. 1,309,705; July 15; v. 264; p. 379.

Suittelma Aktiebolag. (See Westly, Jens, assignor.)

Sullivan, Edward F., Oakland, Calif. Tractor-chain. No. 1,308,308; July 1; v. 264; p. 55.

Sullivan, James J., St. Thomas, Minn. Blotter. No. 1,308,688; July 1; v. 264; p. 125.

Sullivan Machinery Company. (See Officer and Mercer, assignors.)

Sullivan, William L., Ferguson, Mo. Ticket-issuing machine. No. 1,308,966; July 8; v. 264; p. 204.

Sumbling, William H., Toronto, Ontario, Canada. Rectifying-machine for shells. No. 1,308,125; July 1; v. 264; p. 22.

Summers, Alano E., San Juan, Porto Rico. Paper-clip. No. 1,310,387; July 22; v. 264; p. 571.

Summers, Leland L., Chicago, Ill. Ventilating and cooling. No. 1,310,511; July 22; v. 264; p. 557.

Summers, Paul J., Mangum, Okla. Weighing-stand for cotton-pickers. No. 1,310,638; July 22; v. 264; p. 581.

Sundb, August, Hastings-upon-Hudson, assignor to National Clutch Co., Inc., New York, N. Y. Flexible tubing. No. 1,311,025; July 22; v. 264; p. 652.

Sundb Electric Company, The. (See Larsen, Louis, assignor.)

Surface Combustion Company. (See Richardson, Eddison, and Read, assignors.)

Sussex, James E., Hope, N. D. Cross-head guide for engines. No. 1,310,512; July 22; v. 264; p. 557.

Sutherland, Alexander K., assignor of one-half to H. O. Rockwell, New Britain, Conn. Milk-bottle carrier. No. 1,308,742; July 1; v. 264; p. 135.

Suverkrop, Edward A., Sea Cliff, N. Y., and E. Viall, East Orange, N. J. Method of and means for rifling guns. No. 1,310,933; July 22; v. 264; p. 635.

Suverkrop, Edward A., Sea Cliff, N. Y., and E. Viall, East Orange, N. J. Method of and means for rifling guns. No. 1,310,934; July 22; v. 264; p. 635.

Svensson, Niels P., Calgary, Alberta, Canada. Baby-crib. No. 1,311,782; July 29; v. 264; p. 826.

Swan, Alfred H. S., assignor to Rochester Stamping Company, Rochester, N. Y. Percolator. No. 1,309,374; July 8; v. 264; p. 280.

Swan, Harry B., Detroit, Mich. Core-machine. No. 1,311,425; July 29; v. 264; p. 760.

Swan, Harrington, Kemerton, near Tewkesbury, England. Pen. No. 1,311,020; July 22; v. 264; p. 652.

Swanson, Theodore, Lynn Center, Ill. Ice-former device. No. 1,311,723; July 29; v. 264; p. 815.

Swayngim, James W., East Laport, N. C. Cane-stripper. No. 1,311,191; July 29; v. 264; p. 710.

Swartz, George W., assignor to Acme Harvesting Machine Company, Peoria, Ill. Self-propelled vehicle. No. 1,310,772; July 22; v. 264; p. 605.

Sweet, Parker H., Boonton, N. J. Gun or later saw. No. 1,308,907; July 8; v. 264; p. 204.

Sweetnam, Robert L., Arlington, Ill. Band-wheel for sausage-grinders. No. 1,308,968; July 8; v. 264; p. 204.

Sweltzer, Samuel K., New Freedom, Pa. Wrench. No. 1,311,724; July 29; v. 264; p. 816.

Swenson, George E., assignor to The Barrett Company, Philadelphia, Pa. Flashing-receptacle. No. 1,308,205; July 1; v. 264; p. 37.

Swett, Arthur H., assignor to American Tax Company, Chicago, Ill. Package-fastener. No. 1,309,402; July 8; v. 264; p. 302.

Swift, Charles S., assignor to C. O. Aldrich, Somerville, Mass. Reel for eyeglasses. No. 1,309,110; July 8; v. 264; p. 232.

Swinehart, James A., Akron, Ohio. Vehicle-tire. No. 1,309,308; July 8; v. 264; p. 208.

Swinglehurst, Harry, Laconia, N. H., assignor, by mesne assignments, to Scott & Williams, Incorporated. Dial-holding mechanism for knitting-machines. No. 1,311,099; July 22; v. 264; p. 666.

Swint, Wendell R., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Explosive. No. 1,302,553; July 8; v. 264; p. 314.

Swiss Magneto Company. (See Horning, Frederick H., assignor.)

Synthetic Patents Co. (See Heymann, Dressel, Kothe, and Ossebeck, assignors.)

Syracuse Chilled Plow Company. (See Lee, William H., assignor.)

Syrett, Herbert, Brooklyn, N. Y. Folding grill and appartenance. No. 1,309,049; July 8; v. 264; p. 221.

T. A. Gillespie Company. (See Coffey, Michael J., assignor.)

T. A. Gillespie Company. (See De Laval, George, assignor.)

T. L. Smith Company, The. (See Albrecht, John H., assignor.)

T. L. Smith Company. (See Draeger, Lloyd H., assignor.)

Tacy, Charles, Bafaria, N. Y. Floor-scraper. No. 1,311,538; July 29; v. 264; p. 782.

Taft, Robert C., Moline, Ill. Car-underframe. No. 1,311,102; July 29; v. 264; p. 710.

Talban Saito Kabushiki Kaisha. (See Nagashima, Hajime, assignor.)

Talton, Uriyn C., Doorfontein, Johannesburg, Transvaal, South Africa. Roasting ores or concentrates. No. 1,310,455; July 22; v. 264; p. 547.

Tait, Alfred D., Evanston, Ill. Dump-car. No. 1,311,140; July 22; v. 264; p. 673.

Taka, Otto R., Chicago, Ill. Motion-picture camera and projector. No. 1,309,695; July 15; v. 264; p. 372.

Takasaki, Shojiro, and J. Miyamoto, Shiga-Ken, Japan. Secondary coil. No. 1,311,725; July 29; v. 264; p. 810.

Takeuchi, Masayoshi, Seattle, Wash. Cot. No. 1,311,579; July 29; v. 264; p. 788.

Tanaka, Nawokichi, Boston, Mass. Crank-piston connector. No. 1,309,917; July 15; v. 264; p. 419.

Tanner, Albert E., Strelford, and E. A. Claremont, High Leigh, England. Joint for electric cables. No. 1,309,158; July 8; v. 264; p. 241.

Tanner, Harry L., Brooklyn, N. Y., assignor to The Sperry Gyroscope Company. Gyroscopic compass. No. 1,309,591; July 8; v. 264; p. 821.

Tanner, Harry L., and H. H. Thompson, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Gyroscopic compass. No. 1,309,592; July 8; v. 264; p. 821.

Tarrant, Walter G., and W. H. Barling, Byfleet, England. Landing-skid for aeroplanes or similar aircraft. No. 1,309,227; July 8; v. 264; p. 253.

Tate-Jones & Co. (See Richards and Watkins, assignors.)

Tavastila, Emil. (See Siren and Tavastila.)

Tawney, Rufus A., Grand Junction, Colo. Cam-lever coupling. No. 1,310,456; July 22; v. 264; p. 547.

Taylor, Burt E., Mount Vernon, N. Y., assignor to Borden's Condensed Milk Company, New York, N. Y. Evaporating apparatus. No. 1,308,819; July 8; v. 264; p. 177.

Taylor, Burt E., Mount Vernon, N. Y., assignor to Borden's Condensed Milk Company, New York, N. Y. Cleansing machine or apparatus. No. 1,309,785; July 15; v. 264; p. 394.

Taylor, Cecil A. (See Muir and Taylor.)

Taylor, Charles H., Toronto, Ontario, Canada. Metal-cutter. No. 1,308,126; July 1; v. 264; p. 22.

Taylor, Charles R., et al. (See Pagendam, John F., assignor.)

Taylor, Eli J., Edmonton, Alberta, Canada. Vehicle-tire. No. 1,310,513; July 22; v. 264; p. 557.

Taylor, Frank A., Beverly, Mass. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Die-support. No. 1,309,970; July 15; v. 264; p. 420.

Taylor, George, Roxborough, Pa. Rail-joint. No. 1,308,689; July 1; v. 264; p. 123.

Taylor, George A., Hyde Park, Mass. Twist-drill. No. 1,309,700; July 15; v. 264; p. 379.

Taylor, Henry F., New York, N. Y. Means for determining color combinations. No. 1,308,512; July 1; v. 264; p. 92.

Taylor, Herbert R., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Contact-shoe for automatic train-control systems. No. 1,308,534; July 1; v. 264; p. 90.

Taylor, Herbert R., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Contact-shoe for automatic train-control systems. No. 1,308,535; July 1; v. 264; p. 90.

Taylor, James A., Waco, Ky. Ereglass-support. No. 1,310,258; July 15; v. 264; p. 480.

Taylor, James T., Fort Worth, Tex. Hollow building-tile. No. 1,310,220; July 15; v. 264; p. 473.

Taylor, John, East Boldon, England. Ship's anchor. No. 1,310,308; July 15; v. 264; p. 489.

Taylor, Russell E., New York, N. Y. Electric motor. No. 1,309,150; July 8; v. 264; p. 241.

Taylor, William O., Montreal, Quebec, Canada. Motor-support for sewing-machines. No. 1,308,456; July 1; v. 264; p. 81.

Taylor, Wilton A., assignor to Edward Miller & Company, Meriden, Conn. Electric-lamp standard. No. 1,309,375; July 8; v. 264; p. 280.

Technical Supply Company. (See Hagerstrom, John A., assignor.)

Technicolor Motion Picture Corporation. (See Wescott, William R., assignor.)

Teepie, Oliver J., Jr., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing propellant powder. No. 1,310,848; July 22; v. 264; p. 620.

Teeters, Bert C., Ballclough, Minn. Life-preserving suit. No. 1,308,561; July 1; v. 264; p. 101.

Telch, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Casement-window holder. No. 1,311,426; July 29; v. 264; p. 760.

Tellin, Frank D., Kalona, Iowa. Cultivating implement. No. 1,309,228; July 8; v. 264; p. 253.

Templeton, Buren E., and G. T. England, Wessington Springs, S. D. Rotary plane. No. 1,311,471; July 29; v. 264; p. 769.

Terhune, Leonard B., Newark, assignor to The Arlington Company, Arlington, N. J. Table for brush-filling machines. No. 1,310,457; July 22; v. 264; p. 547.

Terminal Taxicab Company. (See Dunlop and Boobar, assignors.)

Ternquist, John, and E. Tragardh, Minneapolis, Minn. Safety watch-pocket. No. 1,308,375; July 1; v. 264; p. 08.

Terp, Clara A., Minneapolis, Minn. Picture-hanger. No. 1,310,690; July 15; v. 264; p. 450.

Terstedt Manufacturing Company. (See Gates and Allmand, assignors.)

Terstedt Manufacturing Company. (See Lawrence and Fleischauer, assignors.)

Terraciano, Carmine, New York, N. Y. Lock and bolt. No. 1,309,918; July 15; v. 264; p. 419.

Tesiero, Francisco, Unión de Reyes, Cuba. Tractor. No. 1,311,720; July 29; v. 264; p. 816.

Thacher, Sheldon P., Weehawken, N. J., assignor to New York Helting and Packing Company. Material for containers or other like articles. No. 1,309,971; July 15; v. 264; p. 429.

Thermal Appliance Company. (See Heusen, Charles C., assignor.)

Therion, Joseph H., assignor of one-half to L. Carrie, San Francisco, Calif. Automatic friction-clutch. No. 1,311,209; July 29; v. 264; p. 736.

Theixton, Henry A., assignor of one-half to E. H. Day, Minneapolis, Minn. Radiator foot-rest. No. 1,310,552; July 22; v. 264; p. 565.

Thierfelder, Richard, assignor to Phoenix Knitting Works, Milwaukee, Wis. Stocking. No. 1,311,255; July 29; v. 264; p. 728.

Thofehrn, Herman G. C., New York, N. Y., assignor to Light Metals Co., Elizabeth, N. J. Alloy. No. 1,310,309; July 15; v. 264; p. 489.

Thofehrn, Herman G. C., New York, N. Y., assignor to Light Metals Co., Elizabeth, N. J. Making alloys. No. 1,310,310; July 15; v. 264; p. 489.

Thomas, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe-bottom-filling machine. No. 1,310,588; July 22; v. 264; p. 571.

Thomas, Alfred. (See Holdsworth, Marmaduke, assignor.)

Thomas, Edward G., Toledo, Ohio. Child's play-table. No. 1,309,343; July 8; v. 264; p. 274.

Thomas, George P., Glenshaw, Pa. Punching machinery. No. 1,311,539; July 29; v. 264; p. 782.

Thomas, Gustav A., Sandusky, Ohio. Game apparatus. No. 1,310,259; July 15; v. 264; p. 450.

Thomas, Harry J., San Francisco, Calif., assignor to Bethlehem Shipbuilding Corporation, Ltd., Bethlehem, Pa. Hydraulic press for sizing turbine-blades. No. 1,311,540; July 29; v. 264; p. 782.

Thomas, Otto L. (See Calvert and Thomas.)

Thomas P. Taylor Co., The. (See Jameson, George P., assignor.)

Thomas, Stephen, New York, N. Y. Nut-lock. No. 1,311,727; July 29; v. 264; p. 816.

Thomassen, Harold. (See Boehringer and Thomassen.)

Thompson, Alfred T. (See Fredricksen, John C., assignor.)

Thompson, Arthur A., Oakland, Calif. Velocipede. No. 1,308,809; July 1; v. 264; p. 55.

Thompson, Arthur J., and H. R. Bunke, Mauntee, Mich. Basket-closure. No. 1,309,079; July 8; v. 264; p. 220.

Thompson, Frank B. (See Watson, Harry E., assignor.)

Thompson, Henry B., assignor to L. B. Koch, New York, N. Y. Cinematographic target. No. 1,308,870; July 8; v. 264; p. 187.

Thompson, Herbert H. (See Tanner and Thompson.)

Thompson, George S., Hockesay, Del. Means of communication between aviators. No. 1,310,810; July 22; v. 264; p. 613.

Thompson, Stanley P., Seattle, Wash. Interest-computing machine. No. 1,311,100; July 22; v. 264; p. 606.

Thompson, Stanley P., Seattle, Wash. Time and date indicator. No. 1,311,101; July 22; v. 264; p. 606.

Thompson, Thomas, Makoti, N. D. Lock. No. 1,311,102; July 22; v. 264; p. 606.

Thomson Electric Welding Company. (See Cutler, George A., assignor.)

Thomson Electric Welding Company. (See Gravell, James H., assignor.)

Thomson, John, New York, N. Y. Electric furnace for fusing metals. No. 1,308,877; July 8; v. 264; p. 187.

Thomson, John, New York, N. Y. Preventing electric carbon resistors from oxidizing. No. 1,308,878; July 8; v. 264; p. 188.

Thomson, John, New York, N. Y. Eliminating carbon dioxide and oxygen in electric smelting-furnaces. No. 1,308,879; July 8; v. 264; p. 188.

Thomson, John, New York, N. Y. Electric furnace for fusing metals contained in crucibles. No. 1,308,880; July 8; v. 264; p. 188.

Thorndike, Herbert A., assignor to Diadem Manufacturing Company, Fitchburg, Mass. Fan. No. 1,310,039; July 15; v. 264; p. 440.

Thornton, Florence A., Corsicana, Tex. Sanitary under-protector. No. 1,311,728; July 29; v. 264; p. 816.

Thornton, Frank, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Terminal device for electrical appliances. No. 1,308,127; July 1; v. 204; p. 22.

Thornton, George A., assignor to Adams-Ragnall Electric Company, Cleveland, Ohio. Method and apparatus for marking metal. No. 1,309,160; July 8; v. 204; p. 241.

Thornton, Joseph N., et al. (See McGinn, Jack, assignor.)

Thornton, Lela P., et al. (See McGinn, Jack, assignor.)

Thornycroft, Tom, assignor to John I. Thornycroft & Co., Westminster, England. Internal-combustion engine. No. 1,308,502; July 1; v. 204; p. 101.

Thorsen, Thorwald, Forest City, and F. M. Eller, Amen, Iowa. Mortar-joint raker and finisher. No. 1,310,630; July 22; v. 204; p. 531.

Thropp, Joseph W., Trenton, N. J. Pinion. No. 1,310,599; July 22; v. 204; p. 629.

Thwaites, Alfred J. (See Fromm and Thwaites.)

Thibault, Armand A., Omaha, Nebr. Lock. No. 1,309,060; July 8; v. 204; p. 221.

Tiberil, Giuseppe O., Genoa, Italy. Rotary gas-engine. No. 1,309,554; July 8; v. 204; p. 314.

Tidd Recording Clock Company. (See Tidd, Walter J., assignor.)

Tidd, Walter J., Springfield, Mass., assignor to Tidd Recording Clock Company. Time-recorder. No. 1,308,128; July 1; v. 204; p. 22.

Tidd, Walter J., Springfield, Mass. Antiskid device. No. 1,310,221; July 15; v. 204; p. 473.

Tideman, Sven, and J. W. Anderson, Columbus, Ohio. Electric-switch lock. No. 1,310,514; July 22; v. 204; p. 558.

Tiernan, Martin F. (See Wallace and Tiernan.)

Tierney, Philip W. (See Parkinson, Welles, and Tierney.)

Tilden, Ellsworth, Duluth, Minn. Stump-burner. No. 1,310,718; July 22; v. 204; p. 595.

Tilmon, William H., Quincy, Ill. Overshoe attachment. No. 1,308,206; July 1; v. 204; p. 37.

Tillyer, Edgar D., and H. H. Stylis, assignors to American Optical Company, Southbridge, Mass. Molding lenses. No. 1,308,820; July 8; v. 204; p. 178.

Timberlake, Daniel T., St. Louis, assignor to Universal Motor Truck and Traction Engine Company, St. Louis, Mo. Telescopic driving-shaft. No. 1,310,971; July 22; v. 204; p. 642.

Time-Systems Company. (See Hale, Charles R., assignor.)

Tinlin, David S., Washington, D. C. Cigarette-holder. No. 1,309,707; July 15; v. 204; p. 379.

Tinsman, Edgar A. (See Dettling and Tinsman.)

Tisserant, Auguste A. H., St. Cloud, France. Motor road-vehicle. No. 1,310,972; July 22; v. 204; p. 642.

Toaz, Glenn A., W. E. Wilber, and H. E. Maynard, Detroit, Mich. Steering-gear. No. 1,310,222; July 15; v. 204; p. 473.

Todd, Libanus M., assignor, by mesne assignments, to Todd Protectograph Company, Rochester, N. Y. Check-writer. No. 1,308,048; July 1; v. 204; p. 117.

Todd Protectograph Company. (See Milach, Gustav F., assignor.)

Todd Protectograph Company. (See Sampson, Charles H., assignor.)

Todd Protectograph Company. (See Todd, Libanus M., assignor.)

Toledo Scale Company. (See Bergen, Harry S., assignor.)

Toledo Scale Company. (See Hagood, Clarence H., assignor.)

Tollerton, William J. (See Chenoweth and Tollerton.)

Tolles, Harry A., and G. H. Ernberger, Florence, Colo. Assignors of one-half to J. D. Hunt and D. A. Hewick. Method and apparatus for producing motion-pictures. No. 1,308,207; July 1; v. 204; p. 37.

Tomasz Mfg. Co. (See Philpot, Albert D., assignor.)

Tomkinson, Charles C., Plainfield, N. J., assignor to J. E. Ogden, Mountville, Cornwall, N. Y. Movable column. No. 1,309,606; July 15; v. 204; p. 372.

Tomlinson, Roy E., Montclair, N. J., and H. H. Hungerford, Chicago, Ill., assignors to National Biscuit Company, New York, N. Y. Biscuit-container. No. 1,311,541; July 22; v. 204; p. 782.

Tone, Fred L., Indianapolis, Ind. Internal-combustion engine. No. 1,309,919; July 15; v. 204; p. 419.

Tonk, William H., assignor to William Tonk & Co., Inc., New York, N. Y. Combined horn and sound-box. No. 1,311,300; July 22; v. 204; p. 739.

Tooke, William A. (See Slipperly, John E., assignor.)

Toomey, John F., New York, and C. S. Demarest, Flatbush, N. Y., assignors to American Telephone and Telegraph Company. Selecting-circuit for artificial lines. No. 1,308,725; July 1; v. 204; p. 132.

Toomey, John F., New York, and C. S. Demarest, Flatbush, N. Y., assignors to American Telephone and Telegraph Company. Means for controlling artificial lines. No. 1,308,726; July 1; v. 204; p. 132.

Toomey, Patrick A., Chicago, Ill. Machine for casting stereotype printing-plates. No. 1,309,309; July 8; v. 204; p. 265.

Torrance, Henry, New York, N. Y. Absorption apparatus. No. 1,311,027; July 22; v. 204; p. 797.

Tower, Heber F., Santa Ana, Calif. Subsoiler, plow, and the like. No. 1,309,920; July 15; v. 204; p. 419.

Townsend, Charles R., Birmingham, England. Rodless band eroding and polishing machine. No. 1,308,610; July 1; v. 204; p. 110.

Townsend, Herbert, Gloucester, N. J., and W. B. Dixon, Nicetown, Pa. Hot-air heater. No. 1,309,000; July 8; v. 204; p. 210.

Trachte, Dietrich F., St. Louis, assignor to J. Blackburn, Webster Groves, Mo. Cable-hanger. No. 1,308,909; July 8; v. 204; p. 204.

Traders Metal Goods Co. (See Benedict, Bernard, assignor.)

Tragardh, Emil. (See Ternquist and Tragardh.)

Trager, Victor E. (See Longaker, Traker, and Rordam.)

Traub, Martin, Manchester, Mich. Silo-cleat. No. 1,311,300; July 22; v. 204; p. 748.

Trautman, Ray, Minneapolis, Minn. Artificial hand. No. 1,310,589; July 22; v. 204; p. 572.

Travis, Asber O., Del Ray, Va., assignor to H. M. Conger, Washington, D. C. Machine for manufacturing gelatin sheets or films. No. 1,310,311; July 15; v. 204; p. 489.

Treanor, Edward D., Pittsfield, Mass., assignor to General Electric Company. Water-cooled transformer. No. 1,310,097; July 15; v. 204; p. 450.

Tregoning, Joseph H., Greeley, Colo. Direction-indicator. No. 1,309,265; July 8; v. 204; p. 260.

Trenk, Henry F. (See Stillson, Herbert A., assignor.)

Treo Company, Inc. (See Schloss, Meyer W., assignor.)

Trettin, Carl, assignor to Siemens-Schuckert Werke G. m. b. H., Berlin, Germany. Rotary converter. No. 1,309,001; July 8; v. 204; p. 211.

Trettin, Carl, assignor to Siemens-Schuckert Werke, G. m. b. H., Berlin, Germany. Electric-motor system. No. 1,310,438; July 22; v. 204; p. 547.

Triggs, James M., and W. D. Redrup, assignors to The Majestic Company, Huntington, Ind. Furnace. No. 1,310,811; July 22; v. 204; p. 612.

Triggs, James M., and W. D. Redrup, assignors to The Majestic Company, Huntington, Ind. Duplex-register boot. No. 1,310,812; July 22; v. 204; p. 614.

Tripp, Hal E., Chattanooga, Tenn. Baking-pan. No. 1,308,821; July 8; v. 204; p. 177.

Trittle, John F., Schenectady, N. Y., assignor to General Electric Company. System of motor control. No. 1,310,040; July 15; v. 204; p. 440.

Trojan Powder Company. (See Skoglund, Jean V., assignor.)

Trojan Powder Company. (See Snelling, Walter O., assignor.)

Trost, William H., and F. Klein, assignors to Waterloo Playladder, Sike Company, Waterloo, Iowa. Sectional slide-ladder. No. 1,308,881; July 8; v. 204; p. 188.

Trostel, Albert O. (See Erlinger, George, assignor.)

Trout, William H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Feed-roll mechanism. No. 1,309,824; July 15; v. 204; p. 401.

Trout, William H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Air-cushion for steam-pistons. No. 1,309,823; July 15; v. 204; p. 401.

Truxel, Harvey H., Wooster, assignor of one-half to O. C. Billman, Cleveland, Ohio. Propeller-pencil. No. 1,310,260; July 15; v. 204; p. 460.

Troyer, Nelson, assignor to Seattle Astoria Iron Works, Seattle, Wash. Compound applying and drying machine. No. 1,308,208; July 1; v. 204; p. 37.

Trumbly, James G., Chicago, Ill. Automatic top. No. 1,308,209; July 1; v. 204; p. 37.

Trombui Electric Manufacturing Company, The. (See Knudsen, Knud, assignor.)

Trump, Eino H., Akron, Ohio. Making pneumatic-tire casings. No. 1,308,379; July 1; v. 204; p. 68.

Tropke, Julius. (See Goetter and Tropke.)

Tucker, George, Brockton, Mass. Insulating and waterproofing composition for electrical appliances. No. 1,311,301; July 22; v. 204; p. 736.

Tucker, Joseph P., Seattle, Wash. Garment-fastener. No. 1,308,611; July 1; v. 204; p. 110.

Tucker, Oliver P. (See Black, John L., assignor.)

Tullous, William R., Washington, D. C. Method of and apparatus for planting grain. No. 1,311,427; July 22; v. 204; p. 760.

Tully, Francis W., Brookline, Mass. Garment. No. 1,308,457; July 1; v. 204; p. 52.

Turbayne, William A., assignor to E. S. Light & Heat Corporation, Niagara Falls, N. Y. Dynamo-electric machine. No. 1,311,542; July 22; v. 204; p. 782.

Turnbull, William, Peoria, Ill., assignor to The Holt Manufacturing Company, Stockton, Calif. One-piece tractor frame and transmission unit. No. 1,309,972; July 15; v. 204; p. 429.

Turner, Mary E., Minneapolis, Minn. Child's slide. No. 1,311,580; July 22; v. 204; p. 759.

Turner, Roderick D., and W. G. Delolph, Mount Vernon, Wash. Camp-stove. No. 1,311,302; July 22; v. 204; p. 736.

Turner, Walter V., Wilkesburg, assignor to Westinghouse Air Brake Company, Wilkesburg, Pa. Fluid-pressure brake. No. 1,309,786; July 15; v. 204; p. 394.

Turner, Walter V., Wilkesburg, assignor to Westinghouse Air Brake Company, Wilkesburg, Pa. Brake-application-valve device. No. 1,309,787; July 15; v. 204; p. 394.

Turner, Walter V., Wilkesburg, assignor to Westinghouse Air Brake Company, Wilkesburg, Pa. Fluid-pressure brake. No. 1,309,788; July 15; v. 204; p. 394.

Tveden, Peder O., Watford City, N. D. Pulley. No. 1,309,921; July 15; v. 204; p. 410.

Tweedy, Edmund F., Glenbrook, Conn. Heater. No. 1,308,380; July 1; v. 204; p. 68.

Twin City Forge & Foundry Company. (See Keenan, Christensen, and Rosmell, assignors.)

Tybon Company. (See Kirkbride, Edmund, assignor.)

Tyler, James E., Helen, Ga. Convertible velocipede. No. 1,309,493; July 8; v. 204; p. 302.

Tyson, Homer N., Triford, Wash. Ax-handle guard. No. 1,310,312; July 15; v. 204; p. 480.

U. S. Ball Bearing Manufacturing Company. (See Lipfert-Bruenauer, Otto A. J. R., assignor.)

U. S. Light & Heat Corporation. (See Bliss, William L., assignor.)

U. S. Light & Heat Corporation. (See Turbayne, William A., assignor.)

U. S. Playing Card Company, The. (See Albert, Clifford E., assignor.)

U. S. Slicing Machine Company. (See Demoth, Alfred M., assignor.)

U. S. Slicing Machine Company. (See Luschka and Folk, assignors.)

U. S. Slicing Machine Company. (See Van Berkel, Cornelius F. M., assignor.)

Uchida, Yohtarō, Tokyo, Japan. Electric-current limiter. No. 1,311,027; July 22; v. 204; p. 652.

Uebelweiser, Charles, New York, N. Y., assignor to Cru Patents Corporation. Film-guide control. (Reissue.) No. 14,604; July 22; v. 204; p. 056.

Uecker, Charles F., New London, Wis. Motor. No. 1,311,193; July 22; v. 204; p. 716.

Ueffmann, Elmer, New York, N. Y. Container. No. 1,309,376; July 8; v. 204; p. 280.

Uhlmann, William R., Chicago, Ill. Eyeglass-mounting. No. 1,311,543; July 22; v. 204; p. 782.

Ullman, Hugo, St. Gallen, Switzerland. Telephonograph. No. 1,310,900; July 22; v. 204; p. 629.

Underhill, Charles R., New Haven, Conn. Brake mechanism. No. 1,309,377; July 8; v. 204; p. 281.

Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)

Underwood Computing Machine Company. (See Johnson, Arthur A., assignor.)

Underwood Computing Machine Company. (See Pitman, Henry L., assignor.)

Underwood Computing Machine Company. (See Whiting, Horatio, assignor.)

Underwood, Lawrence H., Youngstown, and R. B. Hitchcock, Struthers, Ohio. Flushing system for by-product coke plants. No. 1,309,161; July 8; v. 204; p. 241.

Underwood Typewriter Company. (See Burridge, Lee S., assignor.)

Underwood Typewriter Company. (See Fenton, Walter, assignor.)

Underwood Typewriter Company. (See McLaughlin, John C., assignor.)

Underwood, Weardon B., and J. H. Castle, assignors to Wilmet Castle Company, Rochester, N. Y. Receptacle. No. 1,308,563; July 1; v. 204; p. 101.

Union Carbide Company. (See Becket, Frederick M., assignor.)

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

Union Special Machine Company. (See Heap, Jesse J., assignor.)

Union Special Machine Company. (See Oosterdonk, Lansing, assignor.)

United Shoe Machinery Corporation. (See Hollis, Nils P., assignor.)

United Switch & Signal Company, The. (See Coe and Gilson, assignors.)

United Switch & Signal Company, The. (See Day, Albert V. T., assignor.)

United Switch & Signal Company, The. (See Harrington, Clinton O., assignor.)

United Switch & Signal Company, The. (See Holliday, John S., assignor.)

United Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)

United Switch & Signal Company, The. (See Neubert, Walter P., assignor.)

United Switch & Signal Company, The. (See Searey, Clarence S., assignor.)

United Gas Improvement Company. (See Fulweiler, Walter H., assignor.)

United Injector Company, The. (See Williston, Belvin T., assignor.)

United Printing Machinery Company. (See Upham, Burt F., assignor.)

United Shoe Machinery Corporation. (See Davenport, Herman A., assignor.)

United Shoe Machinery Corporation. (See Dyer, Newell V., assignor.)

United Shoe Machinery Corporation. (See Eppler, Andrew, assignor.)

United Shoe Machinery Corporation. (See Erickson, Edward, assignor.)

United Shoe Machinery Corporation. (See Fowler, Alfred H., assignor.)

United Shoe Machinery Corporation. (See Furber, Fredrick M., assignor.)

United Shoe Machinery Corporation. (See Glass, Perley R., assignor.)

United Shoe Machinery Corporation. (See Hill, George S., assignor.)

United Shoe Machinery Corporation. (See Knowlton, Cutler D., assignor.)

United Shoe Machinery Corporation. (See Latham, Albert, assignor.)

United Shoe Machinery Corporation. (See Loomer, Henry M., assignor.)

United Shoe Machinery Corporation. (See Merrill, Frank H., assignor.)

United Shoe Machinery Corporation. (See Morrill, Alfred H., assignor.)

United Shoe Machinery Corporation. (See Remick, Lloyd T., assignor.)

United Shoe Machinery Corporation. (See Taylor, Frank A., assignor.)

United Shoe Machinery Corporation. (See Webb, Horace D., assignor.)

United Shoe Machinery Corporation. (See Winkley, Erasmus E., assignor.)

United States Envelope Company. (See Haywood, Vincent E., assignor.)

United States Envelope Company. (See Novick, Abraham, assignor.)

United States Glue Company. (See Bates, Carleton, assignor.)

United States Graphotype Company. (See Nicholas and Ackerman, assignors.)

United States of America. (See Edwards, Vance P., assignor.)

United States of America. (See Lindauer, Alfred C., assignor.)

United States Ordnance Company. (See Aubury, Dorsey F., assignor.)

Universal Electric Welding Company. (See Lachman, Laurence S., assignor.)

Universal Glass Company. (See Debye, George C., assignor.)

Universal Hammer Company. (See Kollock and Martin, assignors.)

Universal Machinery Company, The. (See Maw and McLean, assignors.)

Universal Motor Truck and Traction Engine Company. (See Timberlake, Daniel T., assignor.)

Universal Rim Company. (See Baker, Eric K., assignor.)

Universal Spring Wheel and Manufacturing Company, The. (See Bowman, George W., assignor.)

Universal Stamping Machine Co. (See Poor, Frederick E., assignor.)

Universal Utilities Company of Illinois, The. (See Goodhue, Julian G., assignor.)

Universal Winding Company. (See Foster, George W., assignor.)

Upham, Burt F., assignor, by mesne assignments, to United Printing Machinery Company, Boston, Mass. Multicolor sheet-printing press. No. 1,309,553; July 8; v. 204; p. 314.

Urschel, Berlin H., Bowling Green, Ohio. Universal joint. No. 1,309,826; July 15; v. 204; p. 401.

Urestrom, Christian, Seattle, Wash. Fireplace-damper. No. 1,308,822; July 8; v. 204; p. 177.

Uebelweiser, Charles, New York, N. Y., assignor to Cru Patents Corporation. Automatic loop making and retaining device. No. 1,309,990; July 15; v. 204; p. 432.

Yall, Robert W., assignor of twenty per cent. to C. W. Hart-ridge, New York, N. Y. Rolling support for barrels. No. 1,309,667; July 15; v. 204; p. 373.

Valente, Vincenzino, and A. Micheletti, New York, N. Y. Hat-shaping apparatus. No. 1,311,194; July 22; v. 204; p. 716.

Vall, Carl, Rochester, N. Y. Can-server. No. 1,311,669; July 22; v. 204; p. 805.

Van Berkel, Cornelius F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Stack-former for slicing-machines. No. 1,310,261; July 15; v. 204; p. 480.

Van Berkel, Cornelius F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Stack-spacer for slicing-machines. No. 1,310,262; July 15; v. 204; p. 481.

Van Bloem, Paul S., New York, N. Y. Illuminated sign. No. 1,311,472; July 22; v. 204; p. 760.

Van Brunt, John, assignor to Combustion Engineering Corporation, New York, N. Y. Mechanical stoker. No. 1,309,344; July 8; v. 204; p. 275.

Van Buskirk, John S., et al. (See Kendrick, William D., assignor.)

Van Cott, Frank J., Unadilla, N. Y. Saddle for anchoring cables for slaw and the like. No. 1,311,141; July 22; v. 204; p. 074.

Van der Meulen, Sybrandus L., Leeuwarden, Netherlands. Apparatus for grinding facets of a predetermined width on glass plates. No. 1,310,263; July 15; v. 204; p. 481.

Van Densen, William A., Cleveland, Ohio. Flushing apparatus. No. 1,308,382; July 1; v. 204; p. 68.

Van Dresar, Elmer L., St. Paul, Minn., assignor to The Rail Joint Company, New York, N. Y. Rail-joint. No. 1,311,303; July 22; v. 204; p. 737.

Van Hensen, John M., Boston, Mass. Collar. No. 1,309,378; July 8; v. 204; p. 281.

Van Hensen, John M., Jamaica Plain, Mass. Collar. No. 1,309,379; July 8; v. 204; p. 281.

Van Hensen, John M., Boston, Mass. Collar. No. 1,309,380; July 8; v. 204; p. 281.

Van Hensen, John M., Boston, Mass. Collar. No. 1,309,381; July 8; v. 204; p. 281.

Van Horn, William H. (See Kemp and Van Horn.)

Van Nuy, Claude C. (See Roberts and Van Nuy.)
 Van Pelt, John B., Peoria, assignor of one-fourth to F. W. Volker and one-fourth to A. E. Volker, Macomb, Ill. Grain-weigher. No. 1,308,852; July 8; v. 264; p. 188.
 Van Ripper, Oscar, Hope, Ark. Boll-weevil catcher. No. 1,309,556; July 8; v. 264; p. 314.
 Van Valkenburg, Harold A., Oakland, Calif. Foot-pedal for automobiles. No. 1,309,557; July 8; v. 264; p. 314.
 Van Vleck, Charles E. (See Spohrer, Gregory J., assignor.)
 Van Voorhis, Norman, Rochester, N. Y. Combination gas and coal range. No. 1,308,970; July 8; v. 264; p. 205.
 Van Zandt, Paul C., Chicago, Ill. assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Roller-crusher. No. 1,309,827; July 15; v. 264; p. 401.
 Vanderwell, Charles A. (See Midgley, Albert H., assignor.)
 Vaughan, Henry H., Montreal, Quebec, Canada. System of heat generation and distribution for railway-cars. No. 1,311,783; July 29; v. 264; p. 826.
 Vasa, Joseph C., Buffalo, N. Y. Sash-fastener. No. 1,310,313; July 15; v. 264; p. 489.
 Varley, Richard, Englewood, N. J. X-ray system. No. 1,309,494; July 8; v. 264; p. 302.
 Vaa Dias, Joseph, Amsterdam, Netherlands. Suspension-belt for show-cards, maps, almanacs, and the like. No. 1,309,319; July 8; v. 264; p. 271.
 Velo, Anthony, Washington, D. C. assignor of one-third to E. S. Clark, Garden City, N. Y., and one-third to C. C. Hines, Washington, D. C. Aerial torpedo. No. 1,309,708; July 15; v. 264; p. 379.
 Venable, William M., Pittsburgh, Pa. assignor to Blaw Steel Construction Company. Extruding-bucket. No. 1,308,150; July 1; v. 264; p. 26.
 Venable, William M., Pittsburgh, Pa. assignor to Blaw-Knox Company. Transferring and unloading apparatus. No. 1,311,195; July 29; v. 264; p. 717.
 Venus Manufacturing Company. (See Milkes, Leah G., assignor.)
 Vernam, Gilbert S., Brooklyn, N. Y. assignor to American Telephone and Telegraph Company. Secret signaling system. No. 1,310,719; July 22; v. 264; p. 598.
 Vetter, Joseph, Toledo, Ohio. Top-frame for automobiles. No. 1,310,264; July 15; v. 264; p. 481.
 Viell, Ethel. (See Sverkerup and Viell.)
 Vickers, George, Dayton, Ohio. Gambrel. No. 1,311,361; July 29; v. 264; p. 748.
 Vickers Limited. (See Duncan, Thomas S., assignor.)
 Vickers Limited. (See North, Thomas K., assignor.)
 Vickers Limited. (See McKeeble and Wallis, assignors.)
 Vickers Limited. (See Webb, George W. C., assignor.)
 Vickers, Frederick W., London, England. Fuse for projectiles. No. 1,309,709; July 15; v. 264; p. 380.
 Victor Typewriter Company. (See Hagerstrom, John A., assignor.)
 Victory Bottle Capping Machine Co. Inc. (See Oliver, Ernest A., assignor.)
 Vleau, Cassimir J. (See Wagner, Hormel, and Vleau.)
 Vincent, Louis N., Seattle, Wash. Grease-cup. No. 1,309,828; July 15; v. 264; p. 402.
 Vis, Gerhard N., Paris, France. Transforming alkali-metal monochromates into dichromates. No. 1,310,720; July 22; v. 264; p. 596.
 Visible Measure Gasoline Dispenser Company of America. (See Brady, James H., assignor.)
 Viscaino, José, Guadalajara, Mexico. Combination-lock. No. 1,310,265; July 15; v. 264; p. 481.
 Vlasak, Christina M., Taboor, S. D. Nest-box. No. 1,309,345; July 8; v. 264; p. 275.
 Voegell, Friedrich, Berne, Switzerland. Traction-wheel. No. 1,308,513; July 1; v. 264; p. 92.
 Vogel, Frederick, Wyeth, Oreg. Track-holding jack. No. 1,308,310; July 1; v. 264; p. 55.
 Vogel, George, Washington, D. C. Griddle. No. 1,308,151; July 1; v. 264; p. 27.
 Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Padlock. No. 1,308,458; July 1; v. 264; p. 82.
 Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,308,459; July 1; v. 264; p. 82.
 Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Automatic door-holder. No. 1,309,310; July 15; v. 264; p. 269.
 Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Bolt-dogging means. No. 1,311,304; July 29; v. 264; p. 737.
 Volehradsky, Joseph, New York, N. Y. assignor to Automobile Company. Gearing for note-sheet propelling. No. 1,309,789; July 15; v. 264; p. 395.
 Volker, Alfred E., et al. (See Van Pelt, John B., assignor.)
 Volker, Frank W., et al. (See Van Pelt, John B., assignor.)
 Volz, Christian, St. Paul, Minn. Adjustable rail-clip for railway detector-bars. No. 1,310,098; July 15; v. 264; p. 450.
 Von Arco, Georg, and A. Melasner, Berlin, Germany. Transmitting apparatus for wireless telegraphy and telephony. No. 1,308,514; July 1; v. 264; p. 92.
 Von Hacht, William, et al. (See Pagendam, John T., assignor.)

Von Pein, Edward J., assignor to The National Cash Register Company, Dayton, Ohio. Check-lasung mechanism for cash-registers. No. 1,309,829; July 15; v. 264; p. 402.
 Von Schrenk, Arnold, St. Louis, Mo. Removable running-board for automobiles. No. 1,310,973; July 22; v. 264; p. 642.
 Von Stetten, Julius O., and H. J. Pressman, Philadelphia, Pa. assignors to Philadelphia Metal Drying Form Company, New Castle, Del. Garment-drying apparatus. No. 1,308,381; July 1; v. 264; p. 68.
 Voorhies, Felix E., Dallas, Tex. Cotton-seed filter. No. 1,308,823; July 8; v. 264; p. 177.
 Vossler, Henry, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Spacing-washer. No. 1,311,473; July 29; v. 264; p. 769.
 Vulcan Iron Works. (See Rinehimer, Ernest, assignor.)
 W. H. McKelwain Company. (See Grant, Reuben P., assignor.)
 W. M. Boyle Manufacturing Company. (See Boyle, William M., assignor.)
 Wachter, Louis E. F., New York, N. Y. Watch-bow. No. 1,308,210; July 1; v. 264; p. 37.
 Wachter, Louis E. F., New York, N. Y. Watch crystal and bezel. No. 1,308,090; July 1; v. 264; p. 125.
 Wackwitz, Henry E. J. (See Seaboldt and Wackwitz.)
 Wade, Perry W. (See Bowman, Edwin J., assignor.)
 Wadsworth, Frank L. O., Pittsburgh, Pa. assignor to Ball Brothers Glass Manufacturing Company, Muncie, Ind. Glass-working apparatus and process. No. 1,311,474; July 29; v. 264; p. 769.
 Wadsworth, Walter S., Eastend, Saskatchewan, Canada. Valve-grinding tool. No. 1,310,640; July 22; v. 264; p. 581.
 Waggoner, Chauncey W., assignor to W. A. Jones, Morgantown, W. Va. Headlight-lens. No. 1,310,721; July 22; v. 264; p. 596.
 Wagner, Charles, Grantwood, N. J. A. Hormel, New York, and C. J. Vleau, Brooklyn, N. Y. Container. No. 1,308,268; July 1; v. 264; p. 48.
 Wagner, Charles W., Milwaukee, Wis. Brush-handle attachment. No. 1,311,551; July 29; v. 264; p. 789.
 Wahl Company. (See Poole, Arthur F., assignor.)
 Wahl Company, The. (See Wahl, John C., assignor.)
 Wahl, John C., Chicago, Ill. assignor, by mesne assignments, to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,311,729; July 29; v. 264; p. 816.
 Wahl, John C., Chicago, Ill. assignor to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,311,730; July 29; v. 264; p. 817.
 Walte, Edwin K., Framingham, Mass. Bushing for bearings and making the same. No. 1,309,608; July 15; v. 264; p. 373.
 Walte, Ossian T., Oshkosh, Wis. Grass-twine machine. No. 1,308,536; July 1; v. 264; p. 90.
 Wak Novelty Company, The. (See Deane, Alexander, assignor.)
 Walder, Edward, Kansas City, Mo. Electric heater. No. 1,308,211; July 1; v. 264; p. 38.
 Waldon, Sidney D., assignor to Cadillac Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,308,460; July 1; v. 264; p. 82.
 Wales Adding Machine Company. (See Schnappe, Max, assignor.)
 Wales, Howland T., Seward, N. J. Mold for concrete construction. No. 1,308,269; July 1; v. 264; p. 48.
 Walker, Donald H., Detroit, Mich. Brush. No. 1,309,405; July 8; v. 264; p. 302.
 Walker, Frederick G., Detroit, Mich. Universal joint. No. 1,308,212; July 1; v. 264; p. 38.
 Walker, Gaines M., St. Louis, Mo. Basket. No. 1,308,824; July 8; v. 264; p. 177.
 Walker, George L., assignor to The Walls Frogless Switch & Manufacturing Company, Kansas City, Mo. Swing-rail switch-frog. No. 1,309,002; July 8; v. 264; p. 211.
 Walker, George L., assignor to The Walls Frogless Switch & Manufacturing Company, Kansas City, Mo. Actuating device for swing-rail switches. No. 1,309,003; July 8; v. 264; p. 211.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,099; July 15; v. 264; p. 451.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,102; July 15; v. 264; p. 451.
 Walker, George L., New York, N. Y. assignor to Air Reduction Company, Inc. Cutting-blowpipes. No. 1,310,103; July 15; v. 264; p. 451.
 Walker, James, Carnarvon, Western Australia, Australia. Attachment for discharge of liquid from containers. No. 1,311,103; July 22; v. 264; p. 666.
 Walker, Matthew S., Corning, N. Y. Electric-light fixture. No. 1,310,936; July 22; v. 264; p. 635.
 Walkos, Michael, Detroit, Mich. Rotary gas-engine. No. 1,310,459; July 22; v. 264; p. 547.
 Walker, Robert J. (See Parsons, Walker, Cook, and Douglas.)
 Walker, Samuel L., Concord, Calif. Device for turning trays. No. 1,310,379; July 15; v. 264; p. 501.
 Walker, Walter E., Garden Plain, Alberta, Canada. Bird-trap. No. 1,310,266; July 15; v. 264; p. 481.
 Walker, William B., New York, N. Y. Safety-razor. No. 1,311,428; July 29; v. 264; p. 760.

Walker, William R., New York, N. Y. Production of refined basic steel. No. 1,309,162; July 8; v. 264; p. 241.
 Walker, William R., New York, N. Y. Making acid steel. No. 1,309,496; July 8; v. 264; p. 308.
 Wallace, Charles F., Tompkinsville, and M. F. Tiernan, Jamaica, N. Y. Method of and apparatus for pumping corrosive liquids. No. 1,308,515; July 1; v. 264; p. 92.
 Walling, Carl H., Cat Spring, Tex. Clothes-rack. No. 1,308,584; July 1; v. 264; p. 102.
 Walling, William F., assignor to The Cementograph Company, Los Angeles, Calif. Producing imitative-tile flooring and the like. No. 1,311,362; July 29; v. 264; p. 748.
 Wallis, Barnes N. (See McKeeble and Wallis.)
 Wallis Frogless Switch and Manufacturing Company. (See Ennis, Charles E., assignor.)
 Wallis Frogless Switch & Manufacturing Company, The. (See Walker, George L., assignor.)
 Walpole, Nathaniel C., U. S. Army, assignor to the Secretary of War of the United States of America, in trust. Repeating cannon. No. 1,309,163; July 8; v. 264; p. 242.
 Walraven, Albert T., Dallas, Tex. Adjustable book-cover. No. 1,308,461; July 1; v. 264; p. 82.
 Walrus Manufacturing Company. (See Farley, Robert, assignor.) (Reissue.)
 Walsh, Frank, et al. (See Kanter, Jacob, assignor.)
 Walsh, Joseph A., West New York, N. J. Liquid-dispenser. No. 1,311,628; July 29; v. 264; p. 791.
 Walsh, Thomas J., et al. (See Kanter, Jacob, assignor.)
 Walsh, William E., Lowell, Mass. Means for removing buff or dust from spinning-frame guides. No. 1,309,760; July 15; v. 264; p. 395.
 Walter A. Wood Mowing & Reaping Machine Company. (See Smith, Ernest C., assignor.)
 Walter, George, Shelby township, Ripley county, Ind. Willow-bark remover. No. 1,310,223; July 15; v. 264; p. 473.
 Walter H. Bowes Co. (See Dodge, Otis W., assignor.)
 Walter, Maurice, New York, N. Y. Driving-wheel for motor-vehicles. No. 1,309,266; July 8; v. 264; p. 260.
 Waltham Watch Company. (See Ohlson, Olof, assignor.)
 Walther, Otto, Bloomington, Ill. Beet-topper. No. 1,310,849; July 22; v. 264; p. 620.
 Walton, William L., Bantny, N. D. Power-plow lift. No. 1,310,453; July 22; v. 264; p. 546.
 Wanamaker, Ernest, Chicago, Ill. Flexible-pipe coupling. No. 1,309,830; July 15; v. 264; p. 402.
 Wapner, Albert, Jr., New York, N. Y. Fitting-stool. No. 1,310,108; July 15; v. 264; p. 452.
 Wanstath, Theodore, New Point, Ind. Ensilage-packer. No. 1,308,129; July 1; v. 264; p. 28.
 Ward, Albert M., Rochester, N. Y. Signal. No. 1,310,813; July 22; v. 264; p. 614.
 Ward, Charles A., Mount Vernon, N. Y. Motor-vehicle. No. 1,309,164; July 8; v. 264; p. 242.
 Ward, Edward S., San Jose, Calif. Explosive shell. No. 1,309,669; July 15; v. 264; p. 373.
 Ward, Fred J., Long Beach, Calif. Gas-burner. No. 1,309,922; July 15; v. 264; p. 419.
 Ward, Garret H., Tillamook, Oreg. Cow-stanchion. No. 1,309,497; July 8; v. 264; p. 303.
 Ward, Harry I., Washington, Iowa. Eaves-trough protector. No. 1,308,311; July 1; v. 264; p. 56.
 Ward, William M., Wyandotte, Mich. Phonograph-disc-record-holding cabinet. No. 1,310,814; July 22; v. 264; p. 614.
 Warman, Percy S., Roselle, N. J. Mold for concrete ships. No. 1,308,565; July 1; v. 264; p. 102.
 Warner, James L., Girard, Kans. Violin-piano. No. 1,309,004; July 8; v. 264; p. 211.
 Warner Manufacturing Company. (See Cadman, Addie B., assignor.)
 Warnick, Clarence J. (See Shuttleworth, Charles J., assignor.)
 Warnke, Clarence F., Toledo, Ohio. Tacking-machine. No. 1,310,590; July 22; v. 264; p. 572.
 Warnock, Robert, assignor to Empire Cream Separator Company, Bloomfield, N. J. Muffler construction for air-pumps and the like. No. 1,310,722; July 22; v. 264; p. 596.
 Washburn, George P., Los Angeles, Calif. Acetylene-burner. No. 1,311,731; July 29; v. 264; p. 817.
 Wasserberger, Jacob, New York, N. Y. Fuse-link. No. 1,310,314; July 15; v. 264; p. 460.
 Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
 Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
 Waterlow Playford Silo Company. (See Trost and Kleis, assignors.)
 Waterman, Mande E., et al. (See Errington, George A., assignor.)
 Waterman, Willis E., et al. (See Errington, George A., assignor.)
 Waters, John C., Epworth, Ga. Plow. No. 1,309,408; July 8; v. 264; p. 303.
 Watkins, Arthur G., Philadelphia, Pa. Water-power plant. No. 1,308,649; July 1; v. 264; p. 117.
 Watkins, Charles P. (See Richards and Watkins.)
 Watkins, Charles D., Newark, N. J. Shoe-polisher. No. 1,308,462; July 1; v. 264; p. 83.

Watkins, Edward G., and C. A. Brown, assignors to Heywood Brothers and Wakefield Company, Gardner, Mass. Supporting-foot for articles of furniture. No. 1,309,808; July 15; v. 264; p. 409.
 Watson Arms Company. (See Watson, Charles P., assignor.)
 Watson, Charles P., assignor to Watson Arms Company, Inc., Philadelphia, Pa. Detonator for ordnance-projectiles. No. 1,311,104; July 22; v. 264; p. 688.
 Watson, Charles P., assignor to Watson Arms Company, Inc., Philadelphia, Pa. Detonating-fuse. No. 1,311,732; July 29; v. 264; p. 817.
 Watson, Harry E., assignor of one-half to F. H. Thompson, Richmond, Ind. Safety device for motion-picture machines. No. 1,311,363; July 29; v. 264; p. 748.
 Watson, Henry C., New York, N. Y. Chin-rest for violins. No. 1,311,670; July 29; v. 264; p. 805.
 Watson, John W., Wayne, Pa. Recall-check. No. 1,308,130; July 1; v. 264; p. 28.
 Watson, John W. (See Roberts, Henry H., Jr., assignor.) (Reissue.)
 Watson, John W., Wayne, Pa. Recall-check. No. 1,311,620; July 29; v. 264; p. 797.
 Wattman, George E. (See Seidel and Wattman.)
 Watts, Frank E., Detroit, Mich. assignor to Hupp Motor Car Corporation, Richmond, Va. Wind-shield construction. No. 1,311,582; July 29; v. 264; p. 789.
 Waugh, Edward H., assignor to Smith Cannery Machines Co., Seattle, Wash. Pneumatic scraper for cleaning fish. No. 1,309,923; July 15; v. 264; p. 420.
 Weatherly, William G., Los Angeles, Calif., assignor of forty-five per cent to W. P. Jones, Spokane, Wash. Adjustable radiator-fan. No. 1,309,605; July 8; v. 264; p. 212.
 Weaver, Bent L., Harrisburg, Pa. Dusting-machine. No. 1,310,815; July 22; v. 264; p. 614.
 Weaver, Charles R., assignor to Pneumatic Concrete Machinery Company, New York, N. Y. Concrete mixing and delivering apparatus. No. 1,309,071; July 15; v. 264; p. 375.
 Weaver, Clayton B., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Making irregularly-shaped stampings. No. 1,308,769; July 8; v. 264; p. 108.
 Weaver, Elverson W., Cleveland Heights, Ohio. Internal-combustion engine. No. 1,311,190; July 29; v. 264; p. 717.
 Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Towing device. No. 1,308,587; July 1; v. 264; p. 96.
 Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)
 Webb, Edwin W. (See Barber and Webb.)
 Webb, George W. C., Dartford, assignor to Vickers Limited, Westminster, England. Incendiary composition. No. 1,308,463; July 1; v. 264; p. 83.
 Webb, Horace D., Rochester, N. Y. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Trimming-machine. No. 1,311,197; July 29; v. 264; p. 717.
 Webb, Jean F., St. New York, N. Y. Aeroplane. No. 1,309,710; July 15; v. 264; p. 380.
 Webb, John E., Island Falls, Me. Tie-wire remover. No. 1,311,475; July 29; v. 264; p. 769.
 Weber, Anton. (See Leibing, William O., assignor.)
 Weber, Anton, Oakland, Calif. Display-case. No. 1,308,312; July 1; v. 264; p. 50.
 Weber, Carl M. (See Robinson, Joseph B., assignor.)
 Weber, Frederick C., New York, N. Y. Pumping system. No. 1,309,229; July 8; v. 264; p. 253.
 Webster Electric Company. (See Geist, Harry F., assignor.)
 Webster, Francis H., St. Louis, Mo. Nut-lock. No. 1,310,723; July 22; v. 264; p. 596.
 Webster, Hosea, Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Support for furnace-walls. No. 1,311,476; July 29; v. 264; p. 769.
 Webster, John E., Pittsburgh, Pa. assignor to Westinghouse Electric and Manufacturing Company. Pad for sheet-separating machines. No. 1,308,131; July 1; v. 264; p. 28.
 Webster, T. K., trustee. (See Yeomans, Lucien J., assignor.)
 Weed, Harry D., U. S. Army. Bomb-carrying gear. No. 1,311,630; July 29; v. 264; p. 798.
 Wegerer, John F., Marion, Kans. Blowpipe attachment for grain-separators. No. 1,308,825; July 8; v. 264; p. 178.
 Weidknecht, Amedée, Paris, France. Internal-combustion engine. No. 1,310,267; July 15; v. 264; p. 481.
 Weirich, Moritz, Yonkers, N. Y. Manufacturing carbonaceous filtering mediums. No. 1,308,826; July 8; v. 264; p. 178.
 Weinstein, Leon, St. Louis, Mo. Lace-flipping tool. No. 1,308,516; July 1; v. 264; p. 92.
 Weir, David H., Omaha, Neb. Adjustable vehicle-body. No. 1,311,429; July 29; v. 264; p. 761.
 Wels, Charles. (See Yablon and Wels.)
 Wels Fibre Container Corporation, The. (See Wels, William C., assignor.)
 Wels, William C., assignor to The Wels Fibre Container Corporation, Monroe, Mich. Fibre container. No. 1,308,883; July 8; v. 264; p. 186.

Weiss, Alexander, assignor of one-half to E. H. Beighlee, Cleveland, Ohio. Means for lubricating films. No. 1,309,385; July 1; v. 264; p. 69.

Weiss, Alfred H., Wilmette, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Cord-weight. No. 1,309,670; July 15; v. 264; p. 373.

Weiss, Louis T., Brooklyn, N. Y. Rewinding machine for fishing-lines. No. 1,310,816; July 22; v. 264; p. 614.

Weith, Archie J. (See Tedman, Kans. Wrench. No. 1,310,641; July 22; v. 264; p. 582.)

Welch, Herman A., Coldwater, Kans. Wrench. No. 1,310,641; July 22; v. 264; p. 582.

Wells, William A. (See Parkinson, Wells, and Tierney.)

Wellman, Charles A., Chicago, Ill. Self-cleaning spark-plug. No. 1,310,817; July 22; v. 264; p. 613.

Wells, Alfred A. (See Ellis and Wells.)

Wells, Clark H., Cedar Rapids, Iowa, assignor of one-half to H. H. Humble, Norfolk, Va. Flush-valve. No. 1,309,230; July 8; v. 264; p. 254.

Wells, Albert, Paoli, Ind. Automatic spark-timing mechanism. No. 1,309,024; July 15; v. 264; p. 420.

Wells, Ernest, New York, N. Y. Box. No. 1,309,499; July 8; v. 264; p. 308.

Welsh, Laurence W., Baltimore, Md. Automobile-lock. No. 1,309,925; July 15; v. 264; p. 420.

Welton, Harry A., and H. J. Hoyt, Detroit, Mich., assignors to Morgan & Wright. Attachment for plastic-mixing mills. No. 1,308,132; July 1; v. 264; p. 23.

Wenner, Wesley E., Stone Church, Pa. Tire-shield. No. 1,310,315; July 15; v. 264; p. 490.

Werner, Albert, Berlin, Germany, assignor to Siemens-Schuckertwerke, G. m. b. H., Berlin, Germany. Oil-cooled electric apparatus. No. 1,309,346; July 8; v. 264; p. 275.

Werner, Herbert A., et al. (See Rautson, Arthur J., assignor.)

Wernman, Milton A., Toledo, assignor to The Biggs-Watson Co., Cleveland, Ohio. Machine-tool. No. 1,308,152; July 1; v. 264; p. 27.

Westcott, William B., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Method and apparatus for producing motion-pictures. No. 1,309,672; July 15; v. 264; p. 373.

Westcott, William B., Wellesley, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Cinematography. No. 1,309,673; July 15; v. 264; p. 374.

West, Walter A., Elkhorn, Wis. Milk-cocoa compound and production same. No. 1,308,770; July 8; v. 264; p. 168.

Westad, Abraham G., and E. L. Hagg, Hufnagel, Norway. Circulating apparatus for cellulose-digesters. No. 1,309,267; July 8; v. 264; p. 260.

Westberg, Sigurd, Christiania, Norway. Reduction process. No. 1,310,724; July 22; v. 264; p. 596.

Westcott, Arthur W., Los Angeles, Calif. Magnetic fishing-tool. No. 1,310,149; July 15; v. 264; p. 464.

Westberg, Arvid. (See Hore and Skoglund, assignors.)

Westergaard, Einar, Hollyoak, Del. Glazier-box. No. 1,310,725; July 22; v. 264; p. 596.

Western Electric Company. (See Adams, Edgar W., assignor.)

Western Electric Company. (See Akin, Allison, assignor.)

Western Electric Company. (See Bell, John H., assignor.)

Western Electric Company. (See Clausen, Henry P., assignor.)

Western Electric Company. (See Goodrum, Charles L., assignor.)

Western Electric Company. (See Hosford, William F., assignor.)

Western Electric Company. (See Lowe, Charles W., assignor.)

Western Electric Company. (See Mathes, Robert C., assignor.)

Western Electric Company. (See Quass, Ralph L., assignor.)

Western Electric Company. (See Reynolds, John N., assignor.)

Western Electric Company. (See Reynolds and Hearn, assignors.)

Western Electric Company, Inc. (See Williams, Samuel H., Jr., assignor.)

Westinghouse Air Brake Company. (See Turner, Walter V., assignor.)

Westinghouse Electric and Manufacturing Company. (See Altmeppen, Theodore, assignor.)

Westinghouse Electric and Manufacturing Company. (See Aulborg, Christian, assignor.)

Westinghouse Electric and Manufacturing Company. (See Ahlburg, Frank, assignor.) (Release.)

Westinghouse Electric and Manufacturing Company. (See Axel and Pullney, assignors.)

Westinghouse Electric and Manufacturing Company. (See Austin, Walter M., assignor.)

Westinghouse Electric and Manufacturing Company. (See Brackett, Quincy A., assignor.)

Westinghouse Electric and Manufacturing Company. (See Chubb, Lewis W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Cook, Joel R., assignor.)

Westinghouse Electric and Manufacturing Company. (See Cooper, Peter P., assignor.)

Westinghouse Electric and Manufacturing Company. (See Crichton, Leslie N., assignor.)

Westinghouse Electric and Manufacturing Company. (See Deutsch, Edward L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Ehrhart, Raymond A., assignor.) (Release.)

Westinghouse Electric and Manufacturing Company. (See Fortescue, Charles L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Griffith, Israel L., assignor.)

Westinghouse Electric and Manufacturing Company. (See Harlow, George, assignor.)

Westinghouse Electric and Manufacturing Company. (See Hellmund, Rudolf E., assignor.)

Westinghouse Electric and Manufacturing Company. (See Hellmund and Morris, assignors.)

Westinghouse Electric and Manufacturing Company. (See Huey, George W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Kempton, Willard H., assignor.)

Westinghouse Electric and Manufacturing Company. (See Little, George M., assignor.)

Westinghouse Electric and Manufacturing Company. (See Mactaban, Paul, assignor.)

Westinghouse Electric and Manufacturing Company. (See Mardis and Hall, assignors.)

Westinghouse Electric and Manufacturing Company. (See Meyer, Friedrich W., assignor.)

Westinghouse Air Brake Company, The. (See Newell, Edward W., assignor.)

Westinghouse Electric and Manufacturing Company. (See Nikonow, John P., assignor.)

Westinghouse Electric and Manufacturing Company. (See Patten, Francis H., assignor.)

Westinghouse Electric and Manufacturing Company. (See Perkins, Laurence M., assignor.)

Westinghouse Electric and Manufacturing Company. (See Pierce, Raymond T., assignor.)

Westinghouse Electric and Manufacturing Company. (See Riley, Lynn G., assignor.)

Westinghouse Electric and Manufacturing Company. (See Sandfield, Michael, assignor.)

Westinghouse Electric and Manufacturing Company. (See Simmon and Asptwall, assignors.)

Westinghouse Electric and Manufacturing Company. (See Simmon and Riley, assignors.)

Westinghouse Electric and Manufacturing Company. (See Sipher, Edmund F., assignor.)

Westinghouse Electric and Manufacturing Company. (See Thornton, Frank, Jr., assignor.)

Westinghouse Electric and Manufacturing Company. (See Webster, John E., assignor.)

Westly, Jens, Lysaker, near Christiania, Norway, assignor to Spilteima Aktiebolag, Helsingborg, Sweden. Apparatus for pneumatic conveyance of materials. No. 1,308,464; July 1; v. 264; p. 83.

Weston, Ira, Pueblo, Colo. Ball-bearing caster. No. 1,311,477; July 29; v. 264; p. 770.

Wheary, George H., Racine, Wis. Solved-apparel receptacle. No. 1,310,974; July 22; v. 264; p. 642.

Wheary, George H., Racine, Wis. Shdable trunk-holder. No. 1,310,975; July 22; v. 264; p. 643.

Wheat, Levi M., Woodville, Tex. Wheel-tread. No. 1,308,153; July 1; v. 264; p. 27.

Wheeler, Clarence W., Chicago, Ill. Automatic elevator safety device. No. 1,310,224; July 15; v. 264; p. 474.

Wheeler, Roy S. (See Comstock, Frederick E., assignor.)

Wheeling Tile Company. (See Ames, Frank, assignor.)

Whitaker, Douglas, Leicester, England. Shield tunneling-machine. No. 1,311,142; July 22; v. 264; p. 674.

Whitaker, Douglas, Leicester, England. Shield tunneling-machine. No. 1,311,143; July 22; v. 264; p. 674.

Whitaker, John H., Denairville, N. J. Foldable ironing-board stand. No. 1,310,400; July 22; v. 264; p. 553.

Whitaker, Marvin H. (See Brien and Whitaker.)

Whitaker, Norman T., et al. (See Baumann, Leopold, Sr., and P., assignors.)

Whitbeck, John V., assignor to Chandler Motor Car Company, Cleveland, Ohio. Tire-carrier. No. 1,309,268; July 8; v. 264; p. 261.

White, Bruce C., assignor to R. Hoe and Co., New York, N. Y. Linking mechanism for printing-machines. No. 1,311,198; July 29; v. 264; p. 717.

White, Cyril H., Coventry, England. Recovery of brass from foundry-ash and the like. No. 1,309,165; July 8; v. 264; p. 242.

White, D'Orsay M., assignor to Cadillac Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,309,465; July 1; v. 264; p. 82.

White, Field, and J. B. Harbo, Detroit, Mich. Control mechanism. No. 1,309,928; July 15; v. 264; p. 420.

White, French R., Independence, Mo. Deposit-book. No. 1,309,809; July 15; v. 264; p. 409.

White, Floyd G. (See Brown, Walter A., assignor.)

White Flushing Valve Mfg. Co., The. (See White, William S., assignor.)

White, John F., London, Ontario, Canada. Valve. No. 1,311,364; July 29; v. 264; p. 749.

White, John P. F. (See Lynch and White.)

White, Louis A., Brooklyn, N. Y. Controller. No. 1,311,764; July 29; v. 264; p. 826.

White, Thomas H., South Chicago, Ill. Journal-box. No. 1,310,642; July 22; v. 264; p. 592.

White, William C., Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system. No. 1,310,041; July 15; v. 264; p. 440.

White, William D., El Paso, Tex. Collar-form. No. 1,311,105; July 22; v. 264; p. 667.

White, William S., assignor to The White Flushing Valve Mfg. Co., Denver, Colo. Flushing-valve. No. 1,311,365; July 29; v. 264; p. 749.

Whitehead Torpedo Works, (Weymouth) Limited, The. (See Lees and Ridsdale, assignors.)

Whitehouse, John N., assignor to Wm. Demuth & Co., New York, N. Y. Tobacco-pipe. No. 1,308,012; July 1; v. 264; p. 110.

Whiting, Horatio, assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,308,133; July 1; v. 264; p. 23.

Whiting, Theo. C., Philadelphia, Pa. Governor mechanism. No. 1,310,170; July 15; v. 264; p. 404.

Whitley, Edward O., and E. L. Knowlton, Williamstown, W. Va. Glass-blower. No. 1,309,166; July 8; v. 264; p. 242.

Whitney, William M., Wobchendon, Mass. Rotary cutter. No. 1,308,313; July 1; v. 264; p. 56.

Whitright, Lee. (See Shulenberger and Whitright.)

Whittemore, James, Detroit, Mich., assignor to The Owens Bottle Machine Company, Toledo, Ohio. Flowing molten glass. No. 1,310,225; July 15; v. 264; p. 474.

Whittingham, George H., Ranocroft Park, assignor to Monitor Controller Company, Baltimore, Md. Multi-value overload-switch. No. 1,310,380; July 15; v. 264; p. 502.

Wickham, Walter M., Chicago, Ill. Road grading and excavating machine. No. 1,308,383; July 1; v. 264; p. 68.

Widen, Elmer N., assignor to Everstick Anchor Company, St. Louis, Mo. Altimeter. No. 1,308,971; July 8; v. 264; p. 205.

Wiederholdt, Ernest F., St. Louis, Mo. Silo. No. 1,311,300; July 29; v. 264; p. 749.

Wiegand, Walter, Baltimore, Md. Direction-indicator. No. 1,310,316; July 15; v. 264; p. 490.

Wilber, Wallace E. (See Toaz, Wilber, and Maynard.)

Wilcox, Daniel A. and S. H. Garden City, N. Y. Utilization of tin-acrap. No. 1,310,381; July 15; v. 264; p. 502.

Wilcox, Howard, Washington, D. C. Front and rear driven motor-vehicle. No. 1,308,314; July 1; v. 264; p. 56.

Wilcox, Howard, Washington, D. C. Motor-driven-vehicle train. No. 1,308,315; July 1; v. 264; p. 56.

Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Feed mechanism. No. 1,309,749; July 15; v. 264; p. 388.

Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Hopper mechanism. No. 1,311,266; July 29; v. 264; p. 728.

Wilcox, Sidney H. (See Wilcox, Daniel A. and S. H.)

Wildrick, Meade. (See Straub and Wildrick.)

Wildrick, Meade, U. S. Army, assignor of one-half to O. I. Straub, Fort Howard, Md. Aerial torpedo or mine. No. 1,309,500; July 8; v. 264; p. 303.

Wildrick, Meade, U. S. Army, assignor of one-half to O. I. Straub, Fort Howard, Md. Aerial torpedo or mine. No. 1,311,785; July 29; v. 264; p. 826.

Wildrick, Meade, U. S. Army, assignor of one-half to O. I. Straub, Fort Howard, Md. Mobile mount for heavy artillery. No. 1,311,786; July 29; v. 264; p. 827.

Wiles, Harry W., Black Lick, Pa. Can-opener. No. 1,311,028; July 22; v. 264; p. 653.

Wiley, Roy R., assignor, by mesne assignments, to Flex-lume Sign Company, Buffalo, N. Y. Illuminated sign. (Release.) No. 1,310,779; July 1; v. 264; p. 137.

Wilfert, Christian J., Dorchester, assignor of one-half to himself and one-half to G. F. Wilfert, Jamaica Plain, Mass. Sound-reproducing apparatus. No. 1,308,566; July 1; v. 264; p. 102.

Wilfert, George F. (See Wilfert, Christian J., assignor.)

Wilkinson, Charles M., Middlefield, Ohio. Wrench. No. 1,311,850; July 29; v. 264; p. 839.

Wilkinson, Oscar E., Durham, N. C. Saw-oller. No. 1,311,851; July 29; v. 264; p. 839.

Wilkinson, Edward F., Gramercy, La. Dismantling-tool. No. 1,311,029; July 22; v. 264; p. 653.

Wilkinson, Henry O., Petteridge, England. Valve and valve mechanism. No. 1,309,081; July 8; v. 264; p. 226.

Willard, Charles F., New York, assignor, by mesne assignments, to L-W-F Engineering Company, Inc., College Point, Long Island, N. Y. Guy-wire attachment. No. 1,310,850; July 22; v. 264; p. 620.

Willert, Benedict E., Dayton, Ohio. Display-rack. No. 1,311,308; July 29; v. 264; p. 737.

William Tonk & Bro. Inc. (See Tonk, William H., assignor.)

Williams, Alexander E., U. S. Army. Combined motor tractor and cultivator. No. 1,308,691; July 1; v. 264; p. 123.

Williams, Alfred O., South Bend, Ind., assignor to Clark Equipment Company, Uxbridge, Mich. Differential gearing. No. 1,310,976; July 22; v. 264; p. 643.

Williams, Allen A., Lovelock, Nebr. Attachment for operating accelerators of automobiles, &c. No. 1,309,347; July 8; v. 264; p. 275.

Williams Articulator Company. (See Williams, Charles E., assignor.)

Williams Boltless Rail Joint Manufacturing Company. (See Condron, Daniel D., assignor.)

Williams, Charles E., Chicago, Ill., assignor to Williams Articulator Company. Portable audiphone-transmitter. No. 1,311,430; July 29; v. 264; p. 761.

Williams, Ernest C., Ruleville, Miss. Rail-joint. No. 1,308,827; July 8; v. 264; p. 178.

Williams, Evan O., Hamworthy, near Poole, assignor to Williams Foreign Patents, Limited, London, England. Construction of reinforced-concrete floors, decks, such as decks of ships, deck-floors for bridges, and the like. No. 1,310,315; July 22; v. 264; p. 558.

Williams Foreign Patents, Limited. (See Williams, Evan O., assignor.)

Williams Foundry & Machine Company, The. (See Arthur, James W., assignor.)

Williams Foundry & Machine Company, The. (See Shelton, William A., assignor.)

Williams Foundry and Machine Company, The. (See Williams, John K., assignor.)

Williams, Fred D., Ogden, Utah. Bass-drum and cymbal beater. No. 1,309,082; July 8; v. 264; p. 227.

Williams, Frederic S., Brooklyn, assignor to F. Klein, trustee, New York, N. Y. Sewing-machine. No. 1,310,460; July 22; v. 264; p. 548.

Williams, George R., Battle Creek, Mich. Token-holder. No. 1,309,601; July 15; v. 264; p. 432.

Williams, John K., Akron, Ohio, assignor to The Williams Foundry and Machine Company, Akron, Ohio. Vulcanizer. No. 1,308,517; July 1; v. 264; p. 98.

Williams, Joseph G. (See Drew, Leonard S., assignor.)

Williams, Joseph S., Director, N. J. Floatable concrete construction. No. 1,310,401; July 22; v. 264; p. 548.

Williams, Joseph S., Riverton, N. J. Reinforced concrete construction and constructing the same. No. 1,310,462; July 22; v. 264; p. 548.

Williams, Louis N. D., Ogonts, Pa. Facilitating mechanical transfer of stitches from the needles of knitting machines. No. 1,308,828; July 8; v. 264; p. 178.

Williams, Martin L., South Bend, Ind., assignor, by mesne assignments, to American Sleeve-Valve Motor Company, Engine. No. 1,308,466; July 1; v. 264; p. 83.

Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Cage for reducing-machines. No. 1,308,384; July 1; v. 264; p. 69.

Williams Patent Crusher and Pulverizer Co. (See Campbell, Edward R., assignor.)

Williams Patent Crusher and Pulverizer Company. (See Williams, Milton F., assignor.)

Williams, Rhea F., Lake Toraway, N. C. Container for manure or the like. No. 1,309,501; July 8; v. 264; p. 303.

Williams, Robert N., Norwich, England, assignor to Powers Accounting Machine Company, New York, N. Y. Perforating-machine. No. 1,309,927; July 15; v. 264; p. 420.

Williams, Robert N., London, England, assignor to Powers Accounting Machine Company, New York, N. Y. Perforating-machine. No. 1,311,544; July 29; v. 264; p. 783.

Williams, Samuel R., Jr., Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y. Call-distributing system. No. 1,310,226; July 15; v. 264; p. 474.

Williams, William S., Pittsfield, Mass., assignor to General Electric Company. Electrical apparatus. No. 1,310,042; July 15; v. 264; p. 441.

Williamson Heater Company, The. (See Richardson, John N., assignor.)

Williamson Heater Company, The. (See Richardson and Muller, assignors.)

Williamson Heater Company, The. (See Woodall, William J., assignor.)

Williamson, Belvin T., Somerville, assignor to The United Injector Company, Boston, Mass. Roller-feeding injector. No. 1,311,631; July 29; v. 264; p. 798.

Willman, Herman V., Chicago, Ill. Socket-carrier for electric fixtures. No. 1,309,051; July 8; v. 264; p. 221.

Wills, Walter B., Baltimore, Md. Strainer. No. 1,310,773; July 22; v. 264; p. 600.

Willson, Russell A., assignor of one-half to E. Simon, Spokane, Wash. Amplifying-horn. No. 1,311,478; July 29; v. 264; p. 770.

Willys-Overland Company, The. (See McKinley, Charles W., assignor.)

Willys-Overland Company, The. (See Rollins, Grant W., assignor.)

Willmore, Carlton A., Ben Avon, assignor of one-third to E. J. Schellenstrager and one-third to J. H. Schellenstrager, Pittsburgh, Pa. Rail-clamp. No. 1,310,851; July 22; v. 264; p. 620.

Willmot Castle Company. (See Underwood and Castle, assignors.)

Willmot, William P., Zion City, Ill. Fan-folded book. No. 1,311,743; July 29; v. 264; p. 817.

Wilson, Raster C., West Marion, S. C. Gasket-cutter. No. 1,308,650; July 1; v. 264; p. 117.

Wilson, Daniel S., West Somerville, assignor to Samson Electric Company, Canton, Mass. Polarized signaling mechanism. No. 1,309,159; July 15; v. 264; p. 388.
 Wilson, George D., Plainfield, N. J. Shutter-holder. No. 1,309,382; July 8; v. 264; p. 282.
 Wilson, J. Pearl, Jacksonville, Fla. Flexible knockdown container. No. 1,309,502; July 8; v. 264; p. 304.
 Wilson, James A., Central Falls, R. I. Combined reed and beddle-frame. No. 1,309,674; July 15; v. 264; p. 374.
 Wilson, James M., Newark, N. J. Magnetic inductor. No. 1,308,567; July 1; v. 264; p. 102.
 Wilson, John S., Westminster, and W. E. Dalby, Ealing, London, assignors of one-third to Sir W. G. Armstrong-Whitworth and Company Limited, Newcastle-upon-Tyne, England. Sighting of guns and apparatus for use therein. No. 1,308,134; July 1; v. 264; p. 24.
 Willson, Michael E., Detroit, Mich. Direction-indicator for automobiles. No. 1,311,257; July 1; v. 264; p. 728.
 Willson, Ralph A. (See Gagnon, Peter J., Jr., assignor.)
 Willson, William L., Zillah, Wash. Can-opener. No. 1,309,503; July 8; v. 264; p. 304.
 Willson, Arthur. (See Bolfrant, Knille, assignor.)
 Winby, Clifford E., St. Helens, England. Locomotive axle-box. No. 1,311,734; July 29; v. 264; p. 817.
 Winchell, Frank, Waterloo, Iowa. Hydrocarbon-heater for carburetors. No. 1,308,135; July 1; v. 264; p. 24.
 Winchester, Dorsey G., Pruden, Tenn. Trolley-wire clamp. No. 1,309,870; July 15; v. 264; p. 409.
 Wine, William E. (See Creneau and Wine.)
 Winkley, Erasmus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Automatic shoe-machine. No. 1,310,463; July 22; v. 264; p. 548.
 Winkley, Erasmus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Automatically-controlled shoe-machine. No. 1,310,491; July 22; v. 264; p. 553.
 Winne, Harry A., assignor to General Electric Company, Schenectady, N. Y. Electric-furnace-control apparatus. No. 1,310,109; July 15; v. 264; p. 452.
 Winnegrad, Morris, New York, N. Y. Lady's garment. No. 1,309,249; July 8; v. 264; p. 261.
 Winter, Daniel B. (See Parker and Winter.)
 Wireback, Joseph F., Pittsburgh, Pa. Positive or master cast for the reproduction of negative or socketed artificial limbs. No. 1,310,937; July 22; v. 264; p. 635.
 Wireless Hinge Manufacturing Company, The. (See Berry, George W., assignor.)
 Wirt, August H., Moylan, Pa. Bottle-stopper. No. 1,308,972; July 8; v. 264; p. 205.
 Wise, Charles H. (See Hixson, Charles H., assignor.)
 Wisternan, Joseph W., Gallon, Ohio. Box. No. 1,311,149; July 22; v. 264; p. 675.
 Wistner, John E., Crews, Va. Power-transmission device for motor-vehicles. No. 1,310,268; July 15; v. 264; p. 482.
 Wm. Ayres & Sons. (See Ayres, George R., assignor.)
 Wm. Demuth & Co. (See Whitehouse, John N., assignor.)
 Wolf, Andrew. (See Maloney, Edward J., assignor.)
 Wolf, Jacob D., London, England. Ore-concentrating apparatus. No. 1,310,492; July 22; v. 264; p. 554.
 Wolf, John, Topeka, Kans. Lock. No. 1,310,774; July 22; v. 264; p. 606.
 Wolf, John, Topeka, Kans. Lock. No. 1,310,775; July 22; v. 264; p. 606.
 Wolf, John, Topeka, Kans. Lock. No. 1,311,258; July 29; v. 264; p. 728.
 Wolfard, Merl R., Cambridge, Mass. Rotary hydroplane. No. 1,309,928; July 15; v. 264; p. 421.
 Wolfert, Maurice. (See Glaser, Charles J., assignor.)
 Wolff, Wallace B. (See Hood and Wolff.)
 Wolff, Wallace B., Chicago, Ill., and E. K. Hood, Indianapolis, Ind., assignors to American Slicing Machine Co., Chicago, Ill. Slicing-machine. No. 1,311,479; July 29; v. 264; p. 770.
 Wolff, Wallace B., Chicago, Ill., and E. K. Hood, Indianapolis, Ind., assignors to American Slicing Machine Co., Chicago, Ill. Slice-stacking device for slicing-machines. No. 1,311,480; July 29; v. 264; p. 770.
 Wolf, Willy, assignor to Radium Chemical Company, Milwaukee, Wis. Developer for dyed fabrics. No. 1,311,150; July 22; v. 264; p. 675.
 Wolffsohn, Louis M., Hoboken, N. J., assignor, by mesne assignments, to Bijur Motor Appliance Company, Electrical cut-out. No. 1,310,110; July 15; v. 264; p. 453.
 Wones, Raymond O., Maplewood, Ohio. Manifold-lock. No. 1,308,154; July 1; v. 264; p. 27.
 Wood, Albert B., et al. (See Earl, George G., assignor.)
 Wood, Frederick P., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Proofing materials. No. 1,310,815; July 22; v. 264; p. 615.
 Wood, Henry A. W., New York, and J. A. Isbell, Middletown, assignors to Wood Newspaper Machinery Corporation, New York, N. Y. Quadruple air-brake for rotary presses. No. 1,311,030; July 22; v. 264; p. 653.
 Wood, Henry A. W., New York, N. Y., and C. Nordfors, Jersey City Heights, N. J., assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Braking mechanism for rotary presses. No. 1,311,031; July 22; v. 264; p. 653.
 Wood Newspaper Machinery Corporation. (See Wood and Isbell, assignors.)

Wood Newspaper Machinery Corporation. (See Wood and Nordfors, assignors.)
 Wood, John H., Chicago, Ill., assignor to Osro Chemical Company, Paste calcimine. No. 1,308,136; July 1; v. 264; p. 24.
 Wood, Samuel, Parkers Landing, assignor of one-third to The Franklin Valveless Engine Co., Franklin, Pa. Sand-screen for pumps. No. 1,310,686; July 22; v. 264; p. 589.
 Wood, Sydney M., Upper Montclair, N. J. Food composition and preparing same. No. 1,311,843; July 29; v. 264; p. 837.
 Wood, Sydney M., Upper Montclair, N. J. Food composition and preparing same. No. 1,311,844; July 29; v. 264; p. 837.
 Wood, Joseph K., New York, N. Y. Measuring apparatus. No. 1,309,270; July 8; v. 264; p. 261.
 Woodall, William J., assignor to The Williamson Heater Company, Cincinnati, Ohio. Deflector for hot-air registers. No. 1,309,430; July 8; v. 264; p. 291.
 Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Bursting charge for containers intended to be exploded and forming said charges. No. 1,309,558; July 8; v. 264; p. 315.
 Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Reducing crude trinitrotoluol and other crude aromatic nitro compounds. No. 1,309,559; July 8; v. 264; p. 315.
 Woodcock, James S., New Lexington, Ohio. Car-wheel construction. No. 1,310,227; July 15; v. 264; p. 474.
 Woodhead, Daniel, Evanston, Ill. Shade-holder. No. 1,310,228; July 15; v. 264; p. 474.
 Woods, Charles L., Pensacola, Fla. Boat with stabilizing pontoons. No. 1,311,735; July 29; v. 264; p. 817.
 Woods, Homer A., Indianapolis, Ind. Lantern. No. 1,310,150; July 15; v. 264; p. 460.
 Woods, Homer A., Indianapolis, Ind. Egg-candling attachment for portable lanterns. No. 1,311,106; July 22; v. 264; p. 667.
 Woods, Hubert W., New York, N. Y. Sectional rail for pool-playing. No. 1,311,671; July 29; v. 264; p. 805.
 Woodstock Typewriter Company. (See Hokanson, Otto A., assignor.)
 Woodward, Arthur H., Altadena, Calif., assignor, by mesne assignments, to Johnson Fare Box Company, Chicago, Ill. Fare-register. No. 1,310,819; July 22; v. 264; p. 615.
 Woodridge, James L., Decatur, Tex. Mote-board for cotton-gins. No. 1,308,651; July 1; v. 264; p. 118.
 Woolley, Walton D., Chicago, Ill., assignor to Killark Electric Manufacturing Company, St. Louis, Mo. Fuse-plug. No. 1,308,518; July 1; v. 264; p. 93.
 Woolner, Charles A., Greenville, Tenn. Animal-trap. No. 1,311,736; July 29; v. 264; p. 818.
 Woolnma, W. H. (See Gumpfer, John K., assignor.)
 Workman, Harold, Glasgow, Scotland. Motion-picture apparatus. No. 1,309,992; July 15; v. 264; p. 432.
 Workman, Robert J., San Francisco, Calif. Can-stuffing machine. No. 1,311,144; July 22; v. 264; p. 674.
 Workman, Morris, New York, N. Y. Motor-car. No. 1,308,316; July 1; v. 264; p. 56.
 Worrell, Dwight E., assignor to Harter Manufacturing Company, Chicago, Ill. Electric-fixture support. No. 1,309,052; July 8; v. 264; p. 221.
 Woyton, Michael T., Jamaica, N. Y. Machine for gumming and moistening labels. No. 1,311,199; July 29; v. 264; p. 717.
 Wreiser, Peter J., Dassel, Minn. Swing. No. 1,308,568; July 1; v. 264; p. 102.
 Wright, Arthur. (See Wright, Henry C., assignor.)
 Wright, Arthur C. (See Moorehead, George F., assignor.)
 Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Jack. No. 1,309,973; July 15; v. 264; p. 429.
 Wright, Clyde S., assignor to The National Supply Company, Toledo, Ohio. Gage-cock. No. 1,309,974; July 15; v. 264; p. 429.
 Wright, George T., Marietta, Ill. Self-rolling truck-wheel. No. 1,310,229; July 15; v. 264; p. 475.
 Wright, Henry C., assignor of one-third to A. Wright, New York, N. Y. Motor-driven canoe. No. 1,309,975; July 15; v. 264; p. 429.
 Wright, Reuben I., assignor, by mesne assignments, to The Electric Controller & Manufacturing Company, Wickliffe-on-the-Lake, Ohio. Electromagnetic contactor. No. 1,310,209; July 15; v. 264; p. 482.
 Wright, Samuel M., Schenectady, N. Y. Water-beater. No. 1,309,983; July 8; v. 264; p. 227.
 Wright, Walter E., Cleveland, Ohio. Paint. No. 1,308,884; July 8; v. 264; p. 189.
 Wright, Wilbur L., Baltimore, Md., assignor to Sealright Co., Inc., Fulton, N. Y. Paper can and other container. No. 1,308,317; July 1; v. 264; p. 56.
 Wrinkle, Noah, and W. A. Kubert, San Francisco, Calif. Obtaining potassium chloride. No. 1,311,481; July 29; v. 264; p. 770.
 Wronski, Stanley, Cleveland, Ohio. Infant-rocker. No. 1,308,818; July 1; v. 264; p. 57.
 Wyatt, Herbert J., Longbranch, Wash. Spout-faucet base. No. 1,309,167; July 8; v. 264; p. 242.
 Wygant, Frederick A. (See Hlad and Wygant.)

Wygant, Lewis B., Vincennes, Ind. Electrical bail-tie welder. No. 1,309,168; July 8; v. 264; p. 243.
 Wylie, Thomas B., Pittsburgh, Pa. Apparatus for measuring gas and other fluids. No. 1,308,569; July 1; v. 264; p. 102.
 Wymen, Charles O., Anoka, Minn. Power-transmitting chain. No. 1,310,726; July 22; v. 264; p. 597.
 Wysong, Fannie I., executrix. (See Wysong, Olmedo C.)
 Wysong, Olmedo C., deceased, Greensboro, N. C.; F. I. Wysong, executrix. Case-clamp. No. 1,311,632; July 29; v. 264; p. 798.
 Xardell, Charles A., Utica, N. Y. Compartment-tank. No. 1,310,516; July 22; v. 264; p. 558.
 Xardell, Charles A., Utica, N. Y. Tank. No. 1,310,517; July 22; v. 264; p. 558.
 Yoblon, Isaac, and C. Wels, Lancaster, Pa. Skirt-supporter. No. 1,311,852; July 29; v. 264; p. 839.
 Yeomans, Lucien I., assignor to T. K. Webster, trustee, Chicago, Ill. Machine-tool. No. 1,309,883; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Planer. No. 1,309,384; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Pad-facing machine. No. 1,309,385; July 8; v. 264; p. 281.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Manufacturing long sectional machine-beds. No. 1,309,386; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. End-facing machine. No. 1,309,387; July 8; v. 264; p. 282.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Manufacturing the bearings of gun-boring machines. No. 1,309,388; July 8; v. 264; p. 283.
 Yeomans, Lucien I., assignor to Amalgamated Machinery Corporation, Chicago, Ill. Boring-machine. No. 1,309,389; July 8; v. 264; p. 283.
 Yingling, Frank R., Hamilton, Ohio. Tile-press. No. 1,308,213; July 1; v. 264; p. 38.
 Young, Charles D., Altoona, Pa. Apparatus for using powdered fuel. No. 1,308,137; July 1; v. 264; p. 24.
 Young, Charles D., Altoona, Pa. Feed-water heater. No. 1,308,138; July 1; v. 264; p. 24.
 Young, Daniel. (See Eggert and Young.)
 Young, Frederick J., Los Angeles, Calif. Lead-pencil. No. 1,309,929; July 15; v. 264; p. 421.
 Young, Harry H., Cincinnati, Ohio. Razor-blade holder. No. 1,309,169; July 8; v. 264; p. 243.
 Young, Harry L., and M. S. Finch, St. Joseph, Mo. Automatic mixing and antiscalding valve. No. 1,308,829; July 8; v. 264; p. 178.
 Young, Homer J., Dayton, Ohio. Electromagnetic speed-indicator for cream clarifiers and separators. No. 1,309,390; July 8; v. 264; p. 283.
 Young, John H., Bartlesville, Okla. Gun-support. No. 1,309,500; July 8; v. 264; p. 315.
 Young, Leonard A., and W. Miller, Detroit, Mich.; said Miller assignor to said Young. Pulley. No. 1,309,675; July 15; v. 264; p. 374.
 Young, Wilbur H., Keyport, N. J. Electrical connection. No. 1,308,214; July 1; v. 264; p. 38.
 Young, William A., Milwaukee, Wis., assignor of one-half to H. H. Erkelens, Milwaukee, Wis. Traveling crane. No. 1,309,504; July 8; v. 264; p. 304.

Zadotozny, Wasyli, Meacham, Saskatchewan, assignor of one-half to T. Zygiel, Hamilton, Ontario, Canada. Padlock. No. 1,308,319; July 1; v. 264; p. 57.
 Zageimyer, Frank, Bay City, Mich. Camping outfit. No. 1,308,139; July 1; v. 264; p. 24.
 Zanes, Delmar H., Irvington, N. J., assignor to Detroit-Cadillac Motor Car Company, New York, N. Y. Device for taking up slack in sprocket-chains. No. 1,308,570; July 1; v. 264; p. 103.
 Zang, Joseph E. (See Klorer, Charles P., assignor.)
 Zanzig, Charles F. (See Peterson, John N., assignor.)
 Zapis, Vasilios P., New York, N. Y. Lacing device. No. 1,300,271; July 8; v. 264; p. 261.
 Zartman, Charles M., assignor of one-third to J. W. Calloway and one-third to A. Hoban, Montrose, Colo. Wire-stretcher. No. 1,311,787; July 29; v. 264; p. 827.
 Zehrung, Harry A., Portland, Oreg. Package-tying device. No. 1,311,482; July 29; v. 264; p. 770.
 Zelmer, Jacob, et al. (See Light, Claus H., assignor.)
 Ziegler, Alfred A., Boston, Mass. Junction-box. No. 1,308,830; July 8; v. 264; p. 178.
 Ziegler, Edwin S., York, Pa. Transmission-extension means for automobiles. No. 1,309,676; July 15; v. 264; p. 374.
 Ziehlner, Werner, and J. E. Martin, Philadelphia, Pa. Coupling to be used for pipe, hose, folding crutches, and the like. No. 1,311,145; July 22; v. 264; p. 674.
 Zelopugna, Frank, Worcester, Mass. Shingle-making machine. No. 1,311,033; July 29; v. 264; p. 798.
 Zetterlund, Theodor, assignor to Harley-Bardison Motor Company, Milwaukee, Wis. Semi-automatic roller-retainer milling-machine. No. 1,311,583; July 29; v. 264; p. 789.
 Zloterman, Edgar A., Shamoklu, Pa. Spacing bar or core for plastic work. No. 1,309,054; July 8; v. 264; p. 227.
 Zink, Herman F. (See Martin and Zink.)
 Zippo, Benjamin S., and H. Singer, Philadelphia, Pa. Bedclothes-holder. No. 1,309,970; July 15; v. 264; p. 430.
 Zippler, Michael, Pittsburgh, Pa. Attachment for connectors. No. 1,310,230; July 15; v. 264; p. 475.
 Zisch, George, et al. (See Eisler, Charles, assignor.)
 Zoelly, Heinrich, Zurich, Switzerland. Steam-turbine plant with horizontal axis. No. 1,309,993; July 15; v. 264; p. 432.
 Zord, Carlo, Milan, Italy. Electrode. No. 1,310,727; July 22; v. 264; p. 597.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,100; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Cutting-blowpipe. No. 1,310,101; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,104; July 15; v. 264; p. 451.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,105; July 15; v. 264; p. 452.
 Zouck, George H., Orange, N. J., assignor to Air Reduction Company, Inc. Blowpipe. No. 1,310,107; July 15; v. 264; p. 452.
 Zuka, John, Greenville, Ohio. Railway-track. No. 1,309,170; July 8; v. 264; p. 242.
 Zwernman, Carl H., Newark, Ohio. Kilo. No. 1,308,978; July 8; v. 264; p. 205.
 Zygiel, Tony. (See Zadorozny, Wasyli, assignor.)

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

A. J. Deer Company, The. (See Wygant, Frederick A., assignor.)
 Adam, Harry C., St. Louis, Mo. Lighting-fixture urn. No. 53,481; July 8; v. 264; p. 327.
 Adams, Edwin B., Marion, Ind. Medicine-tray. No. 53,651; July 29; v. 264; p. 842.
 Allen, Edward E., Rutland, Vt. Statuette. No. 53,552; July 15; v. 264; p. 596.
 American Optical Company. (See Carson, Oswald B., assignor.)
 American Radiator Company. (See Mertzmann, André M., assignor.)
 Anderson, George S., Akron, Ohio. Elastic vehicle-tire. No. 53,553; July 15; v. 264; p. 598.
 Averill, William H., assignor to Owl Supply Company, Boston, Mass. Paper-clip. No. 53,554; July 15; v. 264; p. 598.
 B. & K. Manufacturing Co., The. (See Rockwell, Herbert O., assignor.)
 Baker, Corol R., Akron, Ohio. Rubber-tire casing. No. 53,555; July 15; v. 264; p. 598.
 Baker, Stephen D., New York, N. Y. Wall-receptacle for soap and other toilet articles. No. 53,556-7; July 15; v. 264; pp. 598-9.
 Barley, Albert C., Streator, Ill. Combined automobile body, hood, and radiator. No. 53,652; July 29; v. 264; p. 843.
 Bartelmeb, Leonard, Wilkinsburg, Pa. Service-batton. No. 53,482; July 8; v. 264; p. 327.

Becton Dickinson & Co. (See Schwidetsky, Oscar O. R., assignor.)
 Belmont, Ralph A., New York, N. Y. Casing for a pendant switch. No. 53,483; July 8; v. 264; p. 327.
 Blanck & Company. (See Davis, Elizabeth A., assignor.)
 Blanck & Company. (See Meyer, Felix, assignor.)
 Bloch, Leon, Brooklyn, N. Y. Bath-tub and basin fitting. No. 53,558; July 15; v. 264; p. 599.
 Blossom, Frederick F., et al., executors. (See Woodward, Henry J.)
 Brill, Lawrence M., and L. Lapides, assignors to United Smelting & Aluminum Co., Inc., New Haven, Conn. Cake of Babbitt metal. No. 53,484; July 8; v. 264; p. 327.
 Buckley, Warren B., Washington, D. C. Tire. No. 53,653; July 29; v. 264; p. 843.
 Bunting, James H., assignor to Susquehanna Silk Mills, New York, N. Y. Brocade. No. 53,485; July 8; v. 264; p. 327.
 Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y. Brocade. Nos. 53,559-60; July 15; v. 264; p. 599.
 Bunting, James H., Clifton, N. J., assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. Nos. 53,561-3; July 15; v. 264; pp. 599-10.
 Burstein, Barnett, Newark, N. J. Automobile-body. No. 53,654; July 29; v. 264; p. 843.
 Bye, Edwin A. (See Meyer and Bye.)

Campbell, Charles, Philadelphia, Pa. Pedestal for furniture or similar articles. No. 53,564; July 15; v. 264; p. 510.

Campbell, Charles and D., Philadelphia, Pa. Picture-frame. No. 53,565; July 15; v. 264; p. 510.

Campbell, Charles and D., and M. N. McGill, Philadelphia, Pa. Chatter-stand. No. 53,566; July 15; v. 264; p. 510.

Campbell, Duncan. (See Campbell, Charles and D.)

Capron, Horace M., assignor, by mesne assignments, to Equipment Corporation of America, Chicago, Ill. Industrial tractor. No. 53,627; July 22; v. 264; p. 676.

Carson, Oswald H., assignor to American Optical Company, Southbridge, Mass. Display-stand. No. 53,567; July 15; v. 264; p. 510.

Cass, Arthur E., assignor to Delta Electric Company, Marion, Ind. Electric lamp. No. 53,568; July 15; v. 264; p. 510.

Champion Spark Plug Company. (See Rohde, Otto C., assignor.)

Cheney Talking Machine Company. (See Eggsbrecht, William H., assignor.)

Claggett, Samuel A., and S. Derall, Los Angeles, Calif. Souvenir-badge. No. 53,486; July 8; v. 264; p. 327.

Cobb, Thomas S., Ormond, Fla. Combined wrench and screw-driver. No. 53,569; July 15; v. 264; p. 511.

Cook, Ernest C., Chicago, Ill. Phonograph-cabinet. No. 53,628; July 22; v. 264; p. 676.

Courtenay, Timothy R., New York, N. Y. Pennant, book-cover, or similar article. No. 53,457; July 9; v. 264; p. 328.

Davis, Elizabeth A., assignor to Blanck & Company, Inc., New York, N. Y. Lace. No. 53,488; July 8; v. 264; p. 328.

Davis, Meyer, Chicago, Ill. Phonograph-cabinet. No. 53,570; July 15; v. 264; p. 511.

De Tangle, Edward S., San Francisco, Calif. Auto-headlight lens. No. 53,489; July 8; v. 264; p. 328.

De Villbiss Manufacturing Company, The. (See Gradiolph, William F., assignor.)

Delta Electric Company. (See Cass, Arthur E., assignor.)

Dennis, Francis H., and H. W. Leavitt, Peoria, Ill. Tractor-hood. No. 53,571; July 15; v. 264; p. 511.

Deutsch, Harry J., Columbus, Ohio. Wind-wheel. No. 53,490; July 8; v. 264; p. 328.

Devall, Samuel. (See Claggett and Devall.)

Dirar, Bertie M., Indianapolis, Ind. Automobile fender and lamp. No. 53,572; July 15; v. 264; p. 511.

Divine, Charles A. (See Wyatt, De Witt H., assignor.)

Dommange, Harry F., Jr., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,491; July 8; v. 264; p. 328.

Dudley, William W., Lancaster, Pa. Movement-frame for watches. No. 53,492; June 8; v. 264; p. 328.

Eggsbrecht, William H., Grand Rapids, Mich., assignor to Cheney Talking Machine Company, Chicago, Ill. Casing for automatic sound-producing instruments. Nos. 53,573-4; July 15; v. 264; p. 511.

Elwe, Adolphe, assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,493; July 8; v. 264; p. 328.

Equipment Corporation of America. (See Capron, Horace M., assignor.)

Friedling, William H., Meyersdale, Pa. Graphophone-case. No. 53,575; July 15; v. 264; p. 512.

Fritch, Blue O., assignor to Hood Rubber Company, Watertown, Mass. Tire. No. 53,494; July 8; v. 264; p. 329.

Gaffney, James C., New York, N. Y. Set of playing cards. No. 53,576; July 15; v. 264; p. 512.

Gamache, Floris Jr., Nashua, N. H. Frame or plaque. No. 53,577; July 15; v. 264; p. 512.

Gerhardt, Leonard, assignor to Tin Decorating Company of Baltimore, Baltimore, Md. Sifter-top can or similar receptacle. No. 53,496; July 8; v. 264; p. 329.

Gerum, Peter, Vancouver, Wash. Tricycle. No. 53,495; July 8; v. 264; p. 329.

Godfrey, George H., Los Angeles, Calif. Ring. No. 53,578; July 15; v. 264; p. 512.

Goldberg, Abe, Chicago, Ill. Savings bank. No. 53,579; July 15; v. 264; p. 512.

Goldsmith, Wolf T. (See Jacobs, Leo, assignor.)

Goldsmith, Wolf T., Newark, N. J. Bag-frame. No. 53,629; July 22; v. 264; p. 676.

Goodwin, Edward W., Detroit, Mich. Instrument board for motor-vehicles. No. 53,630; July 22; v. 264; p. 676.

Gorham Manufacturing Company. (See Kingman, William F., assignor.)

Gorham Manufacturing Company. (See Ring, John H., assignor.)

Gradiolph, William F., assignor to The De Villbiss Manufacturing Company, Toledo, Ohio. Pressure regulator head for fluid-pressure tanks. No. 53,497; July 8; v. 264; p. 329.

Grashaber, Boniface A., Richmond, Va. Single-service wooden spoon. No. 53,587-8; July 15; v. 264; p. 514.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Handle for an automobile-lock or similar article of manufacture. No. 53,589; July 15; v. 264; p. 512.

Greene, Frederick E., Mount Vernon, N. Y., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Curtain-rod for an automobile or similar article of manufacture. No. 53,581; July 15; v. 264; p. 513.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Plate for an automobile-lock or similar article of manufacture. No. 53,582; July 15; v. 264; p. 513.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Rim for a speedometer or a dome-light for an automobile or similar article of manufacture. No. 53,583; July 15; v. 264; p. 513.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Handle for an automobile-seat or similar article of manufacture. No. 53,584; July 15; v. 264; p. 513.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Rim for a dome-light or a speedometer for an automobile or similar article of manufacture. No. 53,585; July 15; v. 264; p. 513.

Greene, Frederick E., assignor to The Mount Vernon Company, Silversmiths, Inc., Mount Vernon, N. Y. Vase for an automobile or similar article of manufacture. No. 53,586; July 15; v. 264; p. 513.

Greenspan, Marius, Chicago, Ill. Automobile-tire. No. 53,498; July 8; v. 264; p. 329.

Gruen, Frederick G., Cincinnati, Ohio. Wrist-watch case. No. 53,635; July 29; v. 264; p. 643.

H. Northwood Company. (See Taylor, Dent A., assignor.)

Hanson, John F., Concord, N. H. Novelty-box. No. 53,499; July 8; v. 264; p. 330.

Hardy, Emory E., Bayville, N. Y. Automobile steering-wheel. No. 53,636; July 29; v. 264; p. 643.

Harrison, Benjamin M., Little Rock, Ark. Perpetual calendar. No. 53,500; July 8; v. 264; p. 330.

Hartley, Bernard W., Halleybury, Ontario, Canada. Automobile-tire. No. 53,589; July 15; v. 264; p. 514.

Hartline, William A., Penna. Grove, N. J. Service-pin. No. 53,501; July 8; v. 264; p. 330.

Hendrickson, Walter H., Chicago, Ill. Dental-equipment pedestal. No. 53,590; July 15; v. 264; p. 514.

Henne, Isabelle, Brooklyn, N. Y. Tread-plate for shoe-heels. No. 53,502; July 8; v. 264; p. 330.

Hitchcock, Lynn N., Sioux City, Iowa. Crochet-needle. No. 53,591; July 15; v. 264; p. 514.

Holiden, Harry M., Jersey City, N. J. Flag. No. 53,503; July 8; v. 264; p. 330.

Hollywood, Joseph F., Brooklyn, N. Y. Candy tablet or similar article. No. 53,657; July 29; v. 264; p. 643.

Holken, Joseph J., Manitowoc, Wis. Combination-tool. No. 53,658; July 29; v. 264; p. 644.

Hood Rubber Company. (See Fritch, Blue O., assignor.)

Hubbard & Company. (See Pelree, Charles L., Jr., assignor.)

Huescher, John E., assignor of one-third to L. Parker and one-third to R. Morray, Vienna, Ill. Chart. No. 53,631; July 22; v. 264; p. 677.

International Silver Co. (See Ohl, George, assignor.)

Izzo, Francesco, Toronto, Ontario, Canada. Banana-display stand. No. 53,592; July 15; v. 264; p. 514.

J. Wlas & Sons Company. (See Rauch, Frederic H., assignor.)

J. H. Parker & Son. (See Parker, William M., assignor.)

Jacobs, Leo, New York, N. Y., assignor to W. T. Goldsmith, Newark, N. J. Hand-bag frame. Nos. 53,632-4; July 22; v. 264; p. 677.

Jeaks, Barton P., assignor to The Watson Company, Attleboro, Mass. Spoon, fork, or similar article. No. 53,659; July 29; v. 264; p. 644.

Johnson, Axel H., Brooklyn, N. Y. Display-rack. No. 53,603; July 15; v. 264; p. 514.

Jones, Meredith, Scranton, Pa. Stovepipe-reducer. No. 53,504; July 8; v. 264; p. 330.

Kammann, Karl. (See Stumpp and Kammann.)

Kays, Charles A., and J. Wilhelm, McKees Rocks, Pa. Frame for film-reels. No. 53,660; July 29; v. 264; p. 644.

Kent, William J., Brooklyn, N. Y., assignor to Rere Rubber Company, Horseshoe-pad. No. 53,635; July 22; v. 264; p. 677.

Kimball, Philip S., Milford, Mass. Lifting-jack. No. 53,595; July 8; v. 264; p. 330.

Kingman, William F., assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, forks, or similar articles. No. 53,594; July 15; v. 264; p. 515.

Kitt, William C., Cincinnati, Ohio. Box. No. 53,596; July 8; v. 264; p. 331.

Kohlsiek, John H., Kenmore, assignor to The Oldfield Tire Company, Cleveland, Ohio. Pneumatic tire. No. 53,661; July 29; v. 264; p. 644.

Krupicka, Ella, assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. No. 53,595; July 15; v. 264; p. 515.

Lapides, Louis. (See Brile and Lapides.)

Leavitt, Harry W. (See Dennis and Leavitt.)

Lehr, Max, Brooklyn, N. Y. Banner, flag, pennant, sign, emblem, or article of a similar nature. No. 53,597; July 8; v. 264; p. 331.

Lo Cascio, Pasquale, Brooklyn, N. Y. Permutation-padlock. No. 53,596; July 15; v. 264; p. 515.

Mansfield, Etta, New York, N. Y. Doll. No. 53,450; July 1; v. 264; p. 137.

Marcman, Jacob A., Irvington, N. J. Wrench. No. 53,597; July 15; v. 264; p. 515.

Marienthal, Isaac L., assignor to Modern Belt Co., Chicago, Ill. Belt-buckle. No. 53,598; July 15; v. 264; p. 513.

Mathison, Frederick W., New York, N. Y. Bowl for lighting-fixtures. No. 53,662; July 29; v. 264; p. 645.

Mayer Brothers Company. (See Mayer and Bye, assignors.)

Mayer, Lorenz L. (See Mayer and Bye.)

Mayer, Louis and E. L. and E. A. Bye, assignors to Mayer Brothers Company, Mankato, Minn. Tractor-body. No. 53,598; July 8; v. 264; p. 331.

Mayor, George, San Francisco, Calif. Optician's tool. No. 53,599; July 15; v. 264; p. 515.

McGee, Joseph O., Westpoint, Tenn. Hoe. No. 53,637; July 22; v. 264; p. 678.

McGill, M. N. (See Campbell and McGill.)

McKinley, Charles W., Toledo, Ohio. Automobile-hood. No. 53,604; July 29; v. 264; p. 645.

McLaren, Alexander, Chicago, Ill. Ice-cream cone. Nos. 53,599-10; July 8; v. 264; p. 331.

Meeks, Annie L., Gadsden, Ala. Tire. No. 53,511; July 8; v. 264; p. 331.

Mergenthaler Linotype Company. (See Mokarzel, Salloum A., assignor.)

Mertzanoff, André M., Buffalo, N. Y., assignor to American Radiator Company, Chicago, Ill. Boiler. No. 53,603; July 29; v. 264; p. 645.

Meyer, Felix, assignor to Blanck & Company, Inc., New York, N. Y. Lace. Nos. 53,512-13; July 8; v. 264; p. 332.

Meyer, Felix, assignor to Blanck & Company, Inc., New York, N. Y. Lace. No. 53,636; July 22; v. 264; p. 677.

Migel, Julius A., New York, N. Y. Textile fabric. Nos. 53,514-15; July 8; v. 264; p. 332.

Modern Belt Co. (See Marienthal, Isaac L., assignor.)

Mokarzel, Salloum A., New York, N. Y., assignor to Mergenthaler Linotype Company, Font of Arabic type. No. 53,638; July 22; v. 264; p. 678.

Moore, William J. P., New York, N. Y. Wheel. No. 53,639; July 22; v. 264; p. 678.

Morray, Ralph, et al. (See Hunsaker, John E., assignor.)

Mossion, Robert F., El Paso, Tex. Can. No. 53,665; July 29; v. 264; p. 645.

Mount Vernon Company, Silversmiths, The. (See Greene, Frederick E., assignor.)

Moutford, Thomas, Newark, N. J. Settling for precious stones. No. 53,600; July 15; v. 264; p. 515.

Mudge & Company. (See Vanatta, Jean K., assignor.)

Oberdorfer, Henry D., Quincy, Ill. Easel. No. 53,516; July 8; v. 264; p. 332.

Oestreicher, Maurice, New York, N. Y. Bedspread. No. 53,601; July 15; v. 264; p. 516.

Oestreicher, Maurice, New York, N. Y. Article of manufacture. No. 53,602; July 15; v. 264; p. 516.

Ohl, George, assignor to International Silver Co., Meriden, Conn. Napkin-holder. No. 53,603; July 15; v. 264; p. 516.

Oldfield Tire Company, The. (See Kohlsiek, John H., assignor.)

Onderdonk, Wesley N., Utica, N. Y. Steering-post support for automobiles. No. 53,517; July 8; v. 264; p. 332.

Orcutt, Leon F., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,518; July 8; v. 264; p. 333.

Owen, Raymond V., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo. Table-lamp. No. 53,519; July 8; v. 264; p. 333.

Owen, Raymond V., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo. Lighting-fixture. No. 53,520; July 8; v. 264; p. 333.

Owl Supply Company. (See Averill, William H., assignor.)

Pangborn, Leo D., Eau Claire, Wis. Doll or baby carriage body. No. 53,523; July 8; v. 264; p. 333.

Parker, Lucas, et al. (See Hunsaker, John E., assignor.)

Parker, William M., assignor to J. H. Parker & Son, Incorporated, Parkersburg, W. Va. Plural socket. No. 53,640; July 22; v. 264; p. 678.

Pelree, Charles L., Jr., Pittsburgh, Pa., assignor of one-half to Hubbard & Company, Insulator. No. 53,522; July 8; v. 264; p. 333.

Petibel, John F., Kona, Idaho. Match-scratcher. No. 53,521; July 8; v. 264; p. 333.

Pike, Charles W. (See Pike, Robert D., assignor.)

Pike, Robert D., assignor to C. W. Pike, San Francisco, Calif. Display-holder. No. 53,604; July 15; v. 264; p. 516.

Pike, Robert D., assignor to C. W. Pike, San Francisco, Calif. Multiple display-holder. No. 53,605; July 15; v. 264; p. 516.

Poczek, Joseph, Chocoma Falls, Mass. Picture-frame. No. 53,524; July 8; v. 264; p. 334.

Potter, Thomas J., Los Angeles, Calif. Gas-radiator. No. 53,525; July 8; v. 264; p. 334.

Racine Auto Tire Company. (See Wright, Clarence, assignor.)

Rauch, Frederic H., South Orange, assignor to J. Wlas & Sons Company, Newark, N. J. Pair of manicure-scissors. No. 53,606; July 15; v. 264; p. 516.

Rauch, Frederic H., South Orange, assignor to J. Wlas & Sons Company, Newark, N. J. Pair of scissors. No. 53,607; July 15; v. 264; p. 517.

Reele, Stephen, Houston, Tex. Automobile-tire. No. 53,608; July 15; v. 264; p. 517.

Reinhart, Ruby L., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,526; July 8; v. 264; p. 334.

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Reith, William G., assignor to Susquehanna Silk Mills, New York, N. Y. Printed silk. No. 53,527; July 8; v. 264; p. 334.

Reith, William G., assignor to Susquehanna Silk Mills, New York, N. Y. Silk fabric. No. 53,609; July 15; v. 264; p. 517.

Revere Rubber Company. (See Kent, William J., assignor.)

Reynolds, James W., Chicago, Ill. Artificial bait. No. 53,610; July 15; v. 264; p. 517.

Ring, John H., assignor to Gorham Manufacturing Company, Providence, R. I. Platter or similar article. No. 53,611; July 15; v. 264; p. 517.

Ring, John H., assignor to Gorham Manufacturing Company, Providence, R. I. Dish or similar article. No. 53,612; July 15; v. 264; p. 517.

Rowell, Byrd C., Camden, Ark. Screen-door. No. 53,528; July 8; v. 264; p. 334.

Rockwell, Herbert O., assignor to The B. & K. Manufacturing Co., New Britain, Conn. Combination-tool. No. 53,613; July 15; v. 264; p. 518.

Mohde, Otto C., assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plug. No. 53,529; July 8; v. 264; p. 334.

Rosel, William E., Columbus, Ohio. Spark-plug tool. No. 53,641; July 22; v. 264; p. 678.

Royal Art Glass Company. (See Willenbacher, August, assignor.)

Rustant, Ferdinand, Manila, Philippine Islands. Poison-bottle. No. 53,614; July 15; v. 264; p. 518.

Scalabrino, John, New York, N. Y., assignor to W. T. Goldsmith, Newark, N. J. Hand-bag frame. Nos. 53,642-3; July 22; v. 264; p. 678.

Schless, Maurice J., New York, N. Y. Ring or similar article of manufacture. Nos. 53,530-5; July 8; v. 264; p. 335.

Schultz, Bernard, Worcester, Mass. Waist. No. 53,536; July 8; v. 264; p. 335.

Schwidetzky, Oscar O. R., Hasbrouck Heights, assignor to Becton Dickinson & Co., Rutherford, N. J. Bottle. No. 53,609; July 29; v. 264; p. 645.

Scribner, George H. T., San Francisco, Calif. Faucet. No. 53,615; July 15; v. 264; p. 518.

Shaffer, Edwin F., Columbus, Ohio. Ink-well. No. 53,644; July 22; v. 264; p. 679.

Sills, Berton H., Toronto, Ontario, Canada. Front glass for automobile-headlights. No. 53,607; July 29; v. 264; p. 646.

Smith, Edward P., Pittston, Pa. Emblem, button, or article of similar nature. No. 53,616; July 15; v. 264; p. 518.

Sommerhof, William A., Erie, Pa. Article of manufacture—namely, screen for sound-outlets of graphophones. No. 53,617; July 15; v. 264; p. 518.

St. Louis Brass Manufacturing Company. (See Owen, Raymond V., assignor.)

Stank, Nicolas, Beaumont, Tex. Brake. No. 53,618; July 15; v. 264; p. 518.

Steiner, Albert, Cincinnati, Ohio. Cake of soap or similar article. No. 53,537; July 8; v. 264; p. 335.

Stumpp, Anthony J., Chicago, Ill. Vehicle-body. No. 53,608; July 29; v. 264; p. 646.

Stumpp, George E. M., and K. Kammann, Southampton, N. Y. Flower-holder. No. 53,609; July 29; v. 264; p. 646.

Stutz, Harry C., Indianapolis, Ind. Automobile-headlight. No. 53,619; July 15; v. 264; p. 519.

Susquehanna Silk Mills. (See Huntling, James H., assignor.)

Susquehanna Silk Mills. (See Dommange, Harry F., Jr., assignor.)

Susquehanna Silk Mills. (See Elwe, Adolphe, assignor.)

Susquehanna Silk Mills. (See Krupicka, Ella, assignor.)

Susquehanna Silk Mills. (See Orcutt, Leon F., assignor.)

Susquehanna Silk Mills. (See Reinhart, Ruby L., assignor.)

Susquehanna Silk Mills. (See Reith, William G., assignor.)

Taylor, Dent A., Wheeling, W. Va., assignor to H. Northwood Company, Lighting-fixture. No. 53,538; July 8; v. 264; p. 336.

Taylor, William W., Columbus, Ohio. Device for sharpening fish-hooks. No. 53,643; July 22; v. 264; p. 679.

Tebb, Ida E., Brooklyn, N. Y. Sweater. No. 53,646; July 22; v. 264; p. 679.

Templeman, Arthur E., Grand Junction, Colo. Badge, button, or similar article. No. 53,539; July 8; v. 264; p. 336.

Timmons, John S., New York, N. Y. Wall-telephone set. No. 53,540; July 8; v. 264; p. 336.

Tin Decorating Company of Baltimore. (See Gerhardt, Leonard, assignor.)

Tip Top Toy Company. (See Ziv, Abraham J., assignor.)

Turton, William, East Orange, N. J. Member for bag-frames, purse-frames, and similar articles. No. 53,647; July 22; v. 264; p. 679.

United Smelting & Aluminum Co. (See Brile and Lapides, assignors.)

Vanatta, Jean K., assignor to Mudge & Company, Chicago, Ill. Engine-base for motor-cars. No. 53,541; July 8; v. 264; p. 336.

Vandewalker, Earl R. (See Wells and Vandewalker.)

Velt, Berthold, Freeport, N. Y. Button. No. 53,648; July 22; v. 264; p. 679.

Walton, Luther L., Richmond, Va. Wrench. No. 53,620; July 15; v. 264; p. 519.
 Watson Company, The. (See Jenks, Barton P., assignor.)
 Weder, Hermann, Sr., and C. H. Wolf, Philadelphia, Pa. Tongue-depressor. No. 53,649; July 22; v. 264; p. 679.
 Welmar, Robert H., Denver, Colo. Button or badge. No. 53,650; July 22; v. 264; p. 679.
 Wells, Thomas, and E. R. Vandewalker, Watertown, N. Y. Lamp-standard. No. 53,542; July 8; v. 264; p. 336.
 Wertman, George W., Gary, Ind. Chandelier. No. 53,621; July 15; v. 264; p. 519.
 West, Ralph H., Cleveland, Ohio. Vehicle-wheel. Nos. 53,543-4; July 8; v. 264; p. 336.
 Widmer, Charles A., Paterson, N. J. Indicator, sign, or similar article. Nos. 53,545-7; July 8; v. 264; p. 337.
 Wilhelm, Joseph. (See Kays and Wilhelm.)
 Willenbacher, August, Hackensack, N. J., assignor to Royal Art Glass Company, New York, N. Y. Lamp-shade-bracket piece. No. 53,622; July 15; v. 264; p. 519.
 Wilson, Elihu C. and W. W., Los Angeles, Calif., assignors to said W. W. Wilson. Underreamer-cutter. No. 53,623; July 15; v. 264; p. 519.

Wilson, Harry A., Salisbury, Md. Wooden ice-cream spoon. No. 53,548; July 8; v. 264; p. 337.
 Wilson, William W. (See Wilson, Elihu C. and W. W., Wolf, Charles H., et al., executors.) (See Woodward, Elizabeth G., et al., executors.) (See Woodward, Henry J.)
 Woodward, Henry J., deceased, Peoria, Ill.; F. F. Blossom and E. G. Woodward, executors. Powder-box. No. 53,624; July 15; v. 264; p. 519.
 Wright, Clarence, assignor to Racine Auto Tire Company, Racine, Wis. Wheel or lift for boots, shoes, or articles of similar nature. No. 53,625; July 15; v. 264; p. 520.
 Wyatt, De Witt H., assignor to C. A. Divine, Columbus, Ohio. Combined lamp-bracket and sign-support. No. 53,549; July 8; v. 264; p. 337.
 Wyatt, De Witt H., assignor to C. A. Divine, Columbus, Ohio. Combined lamp-standard and street-indicator. No. 53,550; July 8; v. 264; p. 338.
 Wygant, Frederick A., assignor to The A. J. Deer Company, Incorporated, Hornell, N. Y. Frame for slicing-machines. No. 53,551; July 8; v. 264; p. 338.
 Ziv, Abraham J., assignor to Tip Top Toy Company, Chicago, Ill. Statuette, doll, or similar article. No. 53,626; July 15; v. 264; p. 520.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. Bourjois & Co., Inc., New York, N. Y. Face-powder. No. 125,930; July 15; v. 264; p. 531.
 A. Bourjois & Co., Inc., New York, N. Y. Rouge. No. 126,153; July 29; v. 264; p. 859.
 A. Briesmayer Shoe Company, Jefferson City, Mo. Galters or spats. No. 126,061; July 22; v. 264; p. 698.
 A. B. Ansbacher & Company, Inc., New York, N. Y. Soluble blue. No. 125,951; July 22; v. 264; p. 695.
 A. G. Spalding & Bros., New York, N. Y. Playing-balls. No. 126,090; July 22; v. 264; p. 699.
 Ace Waist Co., Inc., New York, N. Y. Ladies' waists. No. 125,940; July 22; v. 264; p. 695.
 Adie, Andrew, Newton, Mass. Sweaters. No. 125,947; July 22; v. 264; p. 695.
 Agra Company, Detroit, Mich. Talcum powder. No. 125,924; July 15; v. 264; p. 531.
 Alexander Hamilton Institute, New York, N. Y. Publications. No. 125,948; July 22; v. 264; p. 695.
 Allsup, Frederick M., Letchworth, England. Artificial leather. No. 126,118; July 29; v. 264; p. 859.
 Aluminum Ware Manufacturing Co., Inc., Elmira, N. Y. Aluminum utensils. No. 126,119; July 29; v. 264; p. 859.
 American Can Company, New York, N. Y. Cans, boxes, and cartons of paper or fiber. No. 126,120; July 29; v. 264; p. 859.
 American Core-Twine Company, Boston, Mass. Clothes-line. No. 125,949; July 22; v. 264; p. 695.
 American Lead Pencil Company, New York, N. Y. Lead-pencils. No. 125,889; July 8; v. 264; p. 349.
 American Lead Pencil Company, New York, N. Y. Lead and drawing pencils, chalk, crayons. No. 125,890; July 8; v. 264; p. 349.
 American Locomotive Company, New York, N. Y. Flexible stay-bolts. No. 126,121; July 29; v. 264; p. 859.
 American Nicanile Company, Los Angeles, Calif. Solid chemical compound for extracting copper and other metals from ores. No. 126,122; July 29; v. 264; p. 859.
 American Pin Company, Waterbury, Conn. Metal air-valves for general use. No. 126,123; July 29; v. 264; p. 859.
 American Pop Corn Company, Sioux City and Schaller, Iowa. Popping corn. Nos. 125,925-7; July 15; v. 264; p. 531.
 American Pop Corn Company, Sioux City and Schaller, Iowa. Popping-corn. No. 126,124; July 29; v. 264; p. 859.
 American Sheet & Tin Plate Company, Pittsburgh, Pa. Certain named metals and metal castings and forgings. No. 126,125; July 29; v. 264; p. 859.
 American Textile Products Company, Chicago, Ill. Garters and hose-supporters. No. 125,891; July 8; v. 264; p. 349.
 Anchor Leather Co., Chicago, Ill. Tanned leather hides for shoe-uppers. No. 125,892; July 8; v. 264; p. 349.
 Anchor Leather Co., Chicago, Ill. Tanned leather hides for shoe-uppers. No. 125,893; July 22; v. 264; p. 695.
 Apparel Manufacturing Company, Chicago, Ill. Men's and boys' athletic union-suits. No. 125,952; July 22; v. 264; p. 695.
 Armstrong Cork Company, Pittsburgh, Pa. Publications issued bimonthly. No. 125,953; July 22; v. 264; p. 695.
 Armstrong Cork Company, Pittsburgh, Pa. Composition soles for boots and shoes. No. 125,954; July 22; v. 264; p. 695.
 Arnheim, Walter, Pittsburgh, Pa. Cigars, cheroots, stogies, little cigars, cigarettes. No. 126,126; July 29; v. 264; p. 859.
 Associated Pharmacists, Inc., New York, N. Y. Talcum powder. No. 125,955; July 22; v. 264; p. 695.

Austin, Nichols & Co., Inc., Brooklyn and New York, N. Y. Certain named foods. No. 125,893; July 8; v. 264; p. 349.
 Avalon Farms Company, Chicago, Ill. Tonic and conditioner for use in hogs only. No. 125,956; July 22; v. 264; p. 695.
 Baldwin Perfumery Company, Chicago, Ill. Perfumery, toilet-water, sachet-powder. No. 125,928; July 15; v. 264; p. 531.
 Bates Manufacturing Company, Lewiston, Me. Cotton piece goods. No. 125,958; July 22; v. 264; p. 695.
 Bauman, Abraham, New York, N. Y. Men's, boys', and children's outer wearing-apparel. No. 125,959; July 22; v. 264; p. 695.
 Baush Machine Tool Company, Springfield, Mass. Certain named machinery and tools and parts thereof. No. 125,860; July 22; v. 264; p. 695.
 Becker Steel Co. of America, Charleston, W. Va. High-speed tool-steel. No. 126,127; July 29; v. 264; p. 859.
 Beltenman, W. W. Preparation for treatment of tan, sunburn, freckles, &c. No. 125,929; July 15; v. 264; p. 531.
 Beldani Packing & Rubber Company Limited, The, London, England. Packing made up of composite materials. No. 126,128; July 29; v. 264; p. 859.
 Bencoe Exporting & Importing Co., Inc., New York, N. Y. Canned condensed milk. No. 125,961; July 22; v. 264; p. 695.
 Benjamin Electric Manufacturing Company, Chicago, Ill. Wireless plural receptacles, cluster-bodies, reflector-sockets, &c. No. 125,962; July 22; v. 264; p. 695.
 Berger Manufacturing Company, Canton, Ohio. Black and galvanized steel. No. 125,963; July 22; v. 264; p. 695.
 Berger Manufacturing Company, The, Canton, Ohio. Black and galvanized steel. No. 126,129; July 29; v. 264; p. 859.
 Berger Manufacturing Company, The, Canton, Ohio. Steel office equipment and furniture. No. 126,130; July 29; v. 264; p. 859.
 Berkowitz, Herman. (See Berkowitz and Lobel, assignors.)
 Berkowitz & Lobel, assignors to H. Berkowitz, New York, N. Y. Suspenders. Nos. 125,887-8; July 1; v. 264; p. 133.
 Bernstein, David, Cleveland, Ohio. Metal-cleanser. No. 125,964; July 22; v. 264; p. 695.
 Blecker, William R., Albany, N. Y. Lubricating oils and greases. No. 125,965; July 22; v. 264; p. 695.
 Boddington, Henry D., Los Angeles, Calif. Substitute for eggs and baking-powder. No. 125,966; July 22; v. 264; p. 695.
 Bogalusa Paper Company, Inc., Bogalusa, La. Paper for container-liner. No. 125,894; July 8; v. 264; p. 349.
 Bona, Adriann, New York, N. Y. Dandruff-destroyer and hair-grower. No. 125,967; July 22; v. 264; p. 695.
 Booth Fisheries Sardinia Company, Chicago, Ill. Canned sardines. No. 125,968; July 22; v. 264; p. 695.
 Booth Mills, Lowell, Mass. Cotton crash fowling and towels. No. 126,184; July 29; v. 264; p. 861.
 Booth Mills, Lowell, Mass. Cotton drills. No. 126,185; July 29; v. 264; p. 861.
 Boston Woven Hose & Rubber Co., Cambridge, Mass. Rubber belting. No. 126,132; July 29; v. 264; p. 859.
 Boydston, C. D., Porterville, Calif. Fresh oranges. Nos. 125,961-2; July 15; v. 264; p. 531.
 Bore Needle Company, The, Chicago, Ill. Crochet-needles for hand use. No. 125,895; July 8; v. 264; p. 349.
 Bratton, Alvin A., Columbus, Ohio. Articles appearing in bulletins or lessons. No. 125,969; July 22; v. 264; p. 695.

Bryant, A. H., New York, N. Y. Safety-razors. No. 125,971; July 22; v. 264; p. 695.
 Buckley Macaroni Company, Inc., Kensington, Conn. Macaroni. No. 125,972; July 22; v. 264; p. 695.
 Burdett Oxygen Company, The, Denver, Colo. Hydrogen and oxygen gas. No. 126,134; July 29; v. 264; p. 859.
 Byron Weston Co., Dalton, Mass. Writing-paper. No. 125,886; July 8; v. 264; p. 349.
 Cascade Packing Company, Anacortes, Wash. Canned salmon. No. 125,973; July 22; v. 264; p. 695.
 Celluloid Company, New York, N. Y. Rosettes, &c., for harness and luggage-tags, all made of pyroxylin. Nos. 125,974-6; July 22; v. 264; p. 696.
 Celluloid Company, The, New York, N. Y. Certain named articles made of pyroxylin. Nos. 126,135-7; July 29; v. 264; p. 859.
 Central Steel & Wire Company, Chicago, Ill. Cast-iron-welding metal. No. 126,138; July 29; v. 264; p. 859.
 Chain Belt Company, Milwaukee, Wis. Cutlery, machinery, and tools, and parts thereof. Nos. 126,139-40; July 29; v. 264; p. 859.
 Charles E. Hires Company, Philadelphia, Pa. Coffee. No. 125,935; July 15; v. 264; p. 531.
 Chest-Neur Sock Co., Boston, Mass. Men's and children's hosiery. No. 125,977; July 22; v. 264; p. 696.
 Clark Thread Co., The, Newark, N. J. Cotton thread. No. 125,897; July 8; v. 264; p. 349.
 Clothier, Robert W., Washington, D. C. Medicinal preparations for colds, catarrh, &c. No. 125,978; July 22; v. 264; p. 696.
 Cohn-Hall-Marx Co., New York, N. Y. Cotton piece goods. No. 125,979; July 22; v. 264; p. 696.
 Congoleum Company, Philadelphia, Pa. Prepared door-covering of the oiled-cloth type. Nos. 125,980-1; July 22; v. 264; p. 696.
 Conover, John T., New Brunswick, N. J. Ladies' hosiery. No. 125,982; July 22; v. 264; p. 696.
 Cream City Brewing Co., Milwaukee, Wis. Certain named malt beverages, extracts, and liquors. Nos. 126,141-2; July 29; v. 264; p. 859.
 Crosby, Dorothy M., Duluth, Minn. Dolls. No. 126,143; July 29; v. 264; p. 859.
 Davis, Alvis H., Santa Maria, Calif. Medicinal preparation for typhoid fever, &c. No. 126,144; July 29; v. 264; p. 859.
 DeJond, Joseph, London, England. Imitation leather for use in making boots and shoes. No. 125,898; July 8; v. 264; p. 349.
 Denominator Adding Machine Company, Brooklyn, N. Y. Tabulating-machines. No. 126,145; July 29; v. 264; p. 859.
 Detroit Accessories Corporation, Detroit, Mich. Spark-plug-firing indicators. No. 126,146; July 29; v. 264; p. 860.
 Dick, Ralph C., Newark, N. J. Pins. No. 125,899; July 8; v. 264; p. 349.
 Dilks, Walter H., Philadelphia, Pa. Certain named clothing for men, women, and misses. No. 125,900; July 8; v. 264; p. 349.
 Doolger, Jacob, Brooklyn, N. Y. Depilatory. No. 125,985; July 22; v. 264; p. 696.
 Douthitt, Jas. W., Bedford, Ind. Remedy for the treatment of freckles, tan, &c. No. 125,980; July 22; v. 264; p. 696.
 Dry Milk Company, The, New York, N. Y. Desiccated milk. No. 125,987; July 22; v. 264; p. 696.
 Dry Milk Company, The, New York, N. Y. Desiccated milk. Nos. 126,147-8; July 29; v. 264; p. 860.
 Duboc Paper Company, Chicago, Ill. Certain named paper and stationery. No. 125,988; July 22; v. 264; p. 696.
 Dutch, Marie, Calata, Me. Candy. No. 126,149; July 29; v. 264; p. 860.
 E. Rosenfeld & Company, Baltimore, Md. Night-shirts, nightgowns, pajamas. No. 126,069; July 22; v. 264; p. 698.
 E. E. Taylor Company, Boston, Mass. Men's and women's leather boots and shoes. No. 126,096; July 22; v. 264; p. 699.
 Eastern Luminous Indicator Co., Inc., Waltham, Mass. Radium luminous buttons. No. 125,901; July 8; v. 264; p. 349.
 Eastland Studios, Philadelphia, Pa.; Baltimore, Md.; Wilmington, Del., and Washington, D. C. Photographs and framed and unframed pictures. No. 125,990; July 22; v. 264; p. 696.
 Edison Portland Cement Company, The, West Orange, N. J. Portland cement. Nos. 126,150-1; July 29; v. 264; p. 860.
 Elmer Candy Company, Inc., New Orleans, La. Candy. No. 125,933; July 15; v. 264; p. 531.
 Empire Silk Company, Wilmington, Del., and New York, N. Y. Silk piece goods. Nos. 125,991-126,000; July 22; v. 264; p. 696.
 Engel Aircraft Company, The, Niles, Ohio. Aeroplanes and flying-boats. No. 125,992; July 8; v. 264; p. 349.
 Enterprise Chemical Co., St. Louis, Mo. Certain named toilet preparations. No. 126,152; July 29; v. 264; p. 860.
 Ercole Marelli & Co., Milan, Italy. Electric oscillating fans. No. 126,037; July 22; v. 264; p. 697.
 Fagley, Oliver M., Philadelphia, Pa. Heating vessels for preserving and canning fruits, &c. No. 126,153; July 29; v. 264; p. 860.

Federal Rubber Company, Cudahy, Wis. Composition soles and heels. No. 125,901; July 22; v. 264; p. 696.
 Federal Snap Fastener Corporation, New York, N. Y. Snap and packet fasteners. No. 126,154; July 29; v. 264; p. 860.
 Feebery, James F., Collingdale, Pa. Compound for improving combustion of coal and coal-siftings. No. 126,155; July 29; v. 264; p. 860.
 Finch, Van Slyck & McConville, St. Paul, Minn. Hosiery and gloves. No. 126,002; July 22; v. 264; p. 696.
 Finch, Van Slyck & McConville, St. Paul, Minn. Certain named clothing for men, women, and children. No. 126,003; July 22; v. 264; p. 696.
 Fluke and Johnson, Fort Wayne, Ind. Preparation for the treatment of rheumatism and kidney disorders. No. 126,004; July 22; v. 264; p. 696.
 Fluke Brothers Rehnlog Co., New York, N. Y. Lubricating oils and greases. No. 126,156; July 29; v. 264; p. 860.
 Fitzgerald, Harry G., Columbus, Ohio. Preparation for the treatment of pyorrhea. No. 126,157; July 29; v. 264; p. 860.
 Forstmann & Hufmann Co., Passaic, N. J. Woolen piece goods. No. 126,158; July 29; v. 264; p. 860.
 Francis T. Simmons & Co., Chicago, Ill. Men's, women's, and children's underwear. No. 126,082; July 22; v. 264; p. 699.
 Frank A. Weeks Manufacturing Company, New York, N. Y. Stationers' supplies. No. 126,106; July 22; v. 264; p. 700.
 Franklin MacVeagh & Company, Pickles, apple-butter, mince-meat, &c. No. 125,934; July 15; v. 264; p. 531.
 Fredericks, Maurice B., New York, N. Y. Athletic goods, shirts, &c. No. 126,005; July 22; v. 264; p. 696.
 Friedman, Jean L., New York, N. Y. Toy dolls. No. 126,159; July 29; v. 264; p. 860.
 G. H. Dunbar & Sons, Inc., Gulfport, Miss. Canned molasses and sweet potatoes. No. 125,989; July 22; v. 264; p. 696.
 Gates, William, Norfolk, Va. Candy cough-drops. No. 126,160; July 29; v. 264; p. 860.
 General Appraisal Company, Seattle, Wash. Periodical published monthly. No. 126,006; July 22; v. 264; p. 696.
 General Cigar Co., Inc., New York, N. Y. Cigars, little cigars, cheroots, cigarettes. No. 126,161; July 29; v. 264; p. 860.
 General Electric Company, Schenectady, N. Y. Vacuum-tube discharge devices. No. 126,162; July 29; v. 264; p. 860.
 Geo. Rahmann & Co., New York, N. Y. Leather belting. No. 126,004; July 22; v. 264; p. 698.
 Goodman, Bertram J., Brooklyn, N. Y. Dressed and dyed furs. No. 125,903; July 8; v. 264; p. 349.
 Greissell Glazen Company, Detroit, Mich. Bread. No. 126,007; July 22; v. 264; p. 697.
 Guittard Company, San Francisco, Calif. Chocolates, chocolate and cocoa combined, cocoa. No. 126,008; July 22; v. 264; p. 697.
 Gulf Publishing Company, Inc., Houston, Tex. Weekly magazine. No. 126,009; July 22; v. 264; p. 697.
 Gutmann & Company, Chicago, Ill. Liquid chemicals for use in tanning processes. No. 126,010; July 29; v. 264; p. 697.
 H. Kobustamm & Co., New York, N. Y. Coloring for foods. No. 126,028; July 22; v. 264; p. 697.
 H. L. Brinkhoff Company, Pittsburgh, Pa. Corn remedy. No. 125,970; July 22; v. 264; p. 695.
 H. V. Smith & Company, Wauseon, Ohio. Medicinal preparation for influenza and pneumonia. No. 126,215; July 29; v. 264; p. 862.
 Hahirshaw Electric Cable Company, Inc., New York, N. Y. Electrically-insulated locomotive-headlight wire. No. 126,164; July 29; v. 264; p. 860.
 Harris and Herpin Co., Philadelphia, Pa. Nursing-nipples. No. 126,165; July 29; v. 264; p. 860.
 Hart Herbert H., Evanston, Ill. Railroad-tile plates. No. 126,166; July 29; v. 264; p. 860.
 Heider Manufacturing Company, Carroll, Iowa. Coaster-wagon. No. 126,011; July 22; v. 264; p. 697.
 Herzog, Charles, New York, N. Y. Preparation for the treatment of influenza. No. 126,012; July 22; v. 264; p. 697.
 Hodgson Oil Refining Company, Athens, Ga. Shortening composed of cotton-seed oil and cotton-seed-oil stearin. No. 126,013; July 22; v. 264; p. 697.
 Holden-Leonard Company, New York, N. Y. Woolen piece goods. Nos. 126,014-16; July 22; v. 264; p. 697.
 Honocof, P. Gary, Ind. Non-alcoholic maltless beverage. No. 126,167; July 29; v. 264; p. 860.
 Hooven & Allison Company, The, Xenia, Ohio. Hope of manila, sisal, lisle and hemp. No. 126,168; July 29; v. 264; p. 860.
 Howard Bros. Chemical Co., Buffalo, N. Y. Toilet cream. No. 126,017; July 22; v. 264; p. 697.
 Hughes, George W., Birmingham, England. Steel pens. No. 125,904; July 8; v. 264; p. 349.
 Hunter, Margaret J., Los Angeles, Calif. Corsets. No. 126,018; July 22; v. 264; p. 697.
 Hydraulic Pressed Steel Company, The, Cleveland, Ohio. Automobile-frames. No. 126,169; July 29; v. 264; p. 860.
 Hydraulic Pressed Steel Company, The, Cleveland, Ohio. Concrete-forms. No. 126,170; July 29; v. 264; p. 860.

Hyman & Ackerman, Lima, Ohio. Poultry food. No. 126,019; July 22; v. 264; p. 697.
Hyman & Ackerman, Lima, Ohio. Poultry feed. No. 126,020; July 22; v. 264; p. 697.
I. Ollendorff Company, New York, N. Y. Watches and watch-movements. No. 126,050; July 22; v. 264; p. 698.
Ideal Linen Mesh Company, Poughkeepsie, N. Y. Linen-mesh underwear. No. 126,021; July 22; v. 264; p. 697.
International Cotton Mills, Boston, Mass. Duck. No. 126,030; July 15; v. 264; p. 531.
Italian Drugs Importing Co., New York, N. Y. Tonic to alleviate neurasthenia, hysteria, &c. No. 126,022; July 22; v. 264; p. 697.
J. Baker & Sons Inc., Evansville, Ind. Work-clothes for men, boys, and children. No. 126,957; July 22; v. 264; p. 695.
J. E. Shoemaker Co., San Francisco, Calif. Cotton-seed salad-oil, mayonnaise dressing, &c. No. 126,080; July 22; v. 264; p. 699.
J. S. McKenzie & Co., Inc., New York, N. Y. Laundry bluing. No. 126,034; July 22; v. 264; p. 697.
James R. Keiser, Inc., New York, N. Y. Men's cravats. No. 126,026-7; July 22; v. 264; p. 697.
Jenckes Knitting Machine Co., Pawtucket, R. I. Knitting-machines. No. 126,171; July 29; v. 264; p. 560.
Johansson, Carl E., Eskilstuna, Sweden. Drills, dies, machine-tools, &c. No. 126,172; July 29; v. 264; p. 561.
John Scott & Co., Inc., Philadelphia, Pa. Canned fruits and vegetables. No. 126,941; July 15; v. 264; p. 531.
Johnson, Cowdin & Co., New York, N. Y. Ribbons. No. 126,023; July 22; v. 264; p. 697.
Johnson & Johnson, New Brunswick, N. J. Medical plasters. No. 126,024; July 22; v. 264; p. 697.
Joseph C. Paulus and Company, Philadelphia, Pa. Dressing for leather and belting. No. 126,193; July 29; v. 264; p. 561.
Joseph W. Sealous Co., New York, N. Y. Mechanical hair wavers or curlers. No. 126,015; July 8; v. 264; p. 349.
Jullus Schmil, Incorporated, New York, N. Y. Face-powders. Nos. 126,077-8; July 22; v. 264; p. 699.
Kaola Company, Portland, Oreg. Cocoa-butter. No. 126,025; July 22; v. 264; p. 697.
Keller Printing Company, New York, N. Y. Clothing-tickets. No. 126,905; July 8; v. 264; p. 349.
Keystone Lubricating Company, Philadelphia, Pa. Lubricants. No. 126,173; July 29; v. 264; p. 560.
Kidd, James W., Fort Wayne, Ind. Tonic to build up the human system. No. 126,174; July 29; v. 264; p. 560.
Kirschbaum, Michael H., Sioux City, Iowa. Face-cream. No. 126,175; July 29; v. 264; p. 560.
Kotler, Theodore, Elizabeth, N. J. Preparation for the alleviation of consumption and other lung diseases. No. 126,029; July 22; v. 264; p. 697.
Lancaster Mills, Clinton, Mass. Cotton piece goods. No. 126,176; July 29; v. 264; p. 560.
Lane, Norman A., Birmingham, England. Measuring and scientific appliances. No. 126,047; July 22; v. 264; p. 698.
Ledger Sons & Co., London, England. Cigarettes. No. 126,177; July 29; v. 264; p. 560.
Levy, Louis, New York, N. Y. Ladies' wearing-apparel. No. 126,033; July 22; v. 264; p. 697.
Lewis, Elia, St. Louis, Mo. Certain pharmaceutical preparations for the hair and scalp. No. 126,030; July 22; v. 264; p. 697.
Lloyd Brothers, Cincinnati, Ohio. Product of methyl salicylic acid for treatment of sores, ulcers, &c. No. 126,032; July 22; v. 264; p. 697.
Littner Oil Company, Guttenberg, N. J. Edible cotton-seed oil. No. 126,031; July 22; v. 264; p. 697.
Louis Roswell & Co., New York, N. Y. Muxhes. No. 126,057; July 22; v. 264; p. 698.
Louis Roswell & Co., New York, N. Y. Muxhes. No. 126,200; July 29; v. 264; p. 561.
Luckett-Wake Tobacco Co., Louisville, Ky. Leaf-tobacco. No. 126,178; July 29; v. 264; p. 560.
Maginn, Peter, Lyndhurst, N. J. Fruit extracts for non-alcoholic beverages. No. 126,180; July 29; v. 264; p. 561.
Magnolia Provision Company, Houston, Tex. Oleaginous compound, a substitute for lard. No. 126,179; July 29; v. 264; p. 560.
Marden, Orth & Hastings Corporation, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash., and San Francisco, Calif. Dyes and tanning extracts. No. 126,035; July 22; v. 264; p. 697.
Marden, Orth & Hastings Corporation, New York, N. Y.; Boston, Mass.; Chicago, Ill.; Philadelphia, Pa.; Cleveland, Ohio; Seattle, Wash., and San Francisco, Calif. Oil for the lubrication of yarn in the process of manufacture. No. 126,036; July 22; v. 264; p. 697.
Markovitz Bros., Philadelphia, Pa. Knitted, netted, and textile underwear. No. 126,180; July 29; v. 264; p. 561.
Marr, R. A., Norfolk, Va. Encysted wood. No. 126,039; July 22; v. 264; p. 697.
Marshall Field & Company, Chicago, Ill. Burlap bags. No. 126,187; July 29; v. 264; p. 561.
Mason, Hosen A., Taunton, Mass. Compound for preventing accumulation of dust or moisture upon windshields and windows. No. 126,181; July 29; v. 264; p. 561.

Mason, Ulysses G., Birmingham, Ala. Salve for coughs, croup, wounds, &c. No. 126,188; July 29; v. 264; p. 561.
Maxwell, Fletcher E., Dallas, Tex. Toy vehicles. No. 126,182; July 29; v. 264; p. 561.
McLoughlin Brothers, Incorporated, Brooklyn, N. Y. Games. No. 126,183; July 29; v. 264; p. 561.
Meadows, William H., Hoffman, Okla. Medicine used as a blood-purifier. No. 126,937; July 15; v. 264; p. 531.
Middletown Silver Company, Middletown, Conn. Silver-plated hollow ware and tableware. No. 126,040; July 22; v. 264; p. 698.
Miller Brothers Company, The, Newark, N. J. Writing and mailing envelopes. No. 126,900; July 8; v. 264; p. 349.
Milton Bradley Co., Springfield, Mass. Outfits of toy soldiers and pistols and games played by same. No. 126,189; July 29; v. 264; p. 561.
Milner, Head & Tullock, New Haven, Conn. Canned vegetables and fruits, coffees, and spices. No. 126,190; July 29; v. 264; p. 561.
Moser Paper Co., Chicago, Ill. Paper, cardboard, envelopes, &c. No. 126,041; July 22; v. 264; p. 698.
Munlay, Edgar F., London, England. Inks, type-writer ribbons, &c. No. 126,042; July 22; v. 264; p. 698.
Mutual Paint Company, (See Raymond, R., assignor.)
Naregan, J. Earl, Los Angeles, Calif. Ointment used as an anodyne, deodorant, &c. No. 126,043; July 22; v. 264; p. 698.
Nashua Gummed and Coated Paper Company, Nashua, N. H. Paper coated with a silver-like coating. No. 126,007; July 8; v. 264; p. 349.
National Biscuit Company, Jersey City, N. J., and New York, N. Y. Biscuits. No. 126,938; July 15; v. 264; p. 531.
National Papeterie Company, Springfield, Mass. Printing and writing paper and envelopes. No. 126,908; July 8; v. 264; p. 349.
National Veneer Products Company, Milwaukee, Ind. Trunks. No. 126,044; July 22; v. 264; p. 698.
National Watch Company, Inc., New York, N. Y. Watch-movements. No. 126,045; July 22; v. 264; p. 698.
Nelson, Baker & Co., Detroit, Mich. Antiseptic dusting-powders, catarrhal nasal points, &c. No. 126,923; July 8; v. 264; p. 350.
New Process Metals Co., Inc., New York, N. Y. Pyrophoric or sparking metal alloys. No. 126,191; July 29; v. 264; p. 561.
Noll-Hauworth Company, Quincy, Ill. Clothing for men, women, and children. No. 126,046; July 22; v. 264; p. 698.
Nyal Company, Detroit, Mich. Alternative, hematic stimulant, and medicine for coughs, &c. No. 126,048; July 22; v. 264; p. 698.
Okada & Company, Ltd., San Francisco, Calif. Canned crab. No. 126,049; July 22; v. 264; p. 698.
Olson Rug Company, Chicago, Ill. Woven rugs. No. 126,051; July 22; v. 264; p. 698.
Oshkosh Muslin Underwear Co., Oshkosh, Wis. Ladies' and children's underwear and aprons. No. 126,052; July 22; v. 264; p. 698.
Oswego River Paper Mills, Phoenix, N. Y. Toilet-paper. No. 126,909; July 8; v. 264; p. 349.
Otis Co., Ware, Mass. Kilt and women underwear for men. No. 126,053; July 22; v. 264; p. 698.
Otis Co., Ware, Mass. Cotton piece goods. No. 126,054; July 22; v. 264; p. 698.
Otto Heinemann Phonograph Supply Co., Inc., New York, N. Y. Motors for talking-machines, &c. No. 126,055; July 22; v. 264; p. 698.
P. L. M. Corporation, New York, N. Y. Ink in tablet form. No. 126,059; July 22; v. 264; p. 698.
Pabst Pure Extract Co., Inc., Reading, Pa. Food-flavoring extracts. No. 126,056; July 22; v. 264; p. 698.
Paragon Tool Company, Seattle, Wash. Certain named cutlery, machinery, and tools and parts thereof. No. 126,192; July 29; v. 264; p. 561.
People's Outfitting Company, Detroit, Mich. Imitation leather. No. 126,910; July 8; v. 264; p. 349.
Perfection Tire & Rubber Co., Fort Madison, Iowa. Pneumatic tires. No. 126,911; July 8; v. 264; p. 349.
Pfefferkorn, Willy, Zug, Switzerland. Skinning apparatus for killed animals. No. 126,194; July 29; v. 264; p. 561.
Pharmaceutische en Chemische Handelvereeniging "Rotterdam," Rotterdam, Netherlands. Medicinal wadding for treatment of rheumatism. No. 126,939; July 15; v. 264; p. 531.
Phillips-Jones Company, Inc., New York, N. Y. Men's outer and night shirts, pajamas, underwear, collars and cuffs. No. 126,057; July 22; v. 264; p. 698.
Piedmont Chemical Works, Atlanta, Ga. Laxative wafer. No. 126,058; July 22; v. 264; p. 698.
Porter, Henry K., Brookline and Everett, Mass. Bolt and rivet chippers. No. 126,195; July 29; v. 264; p. 561.
Poughkeepsie Paint Co., Poughkeepsie, N. Y. Varnishes and sanding-billers. No. 126,060; July 22; v. 264; p. 698.
Propper, Harry, New York, N. Y. Laundry blue. No. 126,062; July 22; v. 264; p. 698.
Public Bottling Works, New York, N. Y. Non-alcoholic maltless beverages. No. 126,196; July 29; v. 264; p. 561.
R. R. Davis Company, Hoboken, N. J. Baking powder. Nos. 126,983-4; July 22; v. 264; p. 696.

Racine Auto Tire Company, Racine, Wis. Rubber heels or lifts for footwear. No. 126,063; July 22; v. 264; p. 698.
Rauville, Loova A., Grand Rapids, Mich. Leather belt-log. No. 126,912; July 8; v. 264; p. 349.
Raymond, R., assignor to Mutual Paint Company, St. Paul, Minn. Ready-mixed paints and varnishes. No. 126,197; July 29; v. 264; p. 561.
Redlands Mutual Orange Company, Redlands, Calif. Fresh oranges. No. 126,940; July 15; v. 264; p. 531.
Reversible Collar Company, Boston, Mass. Collars, cuffs, shirt-bosoms. No. 126,065; July 22; v. 264; p. 698.
Richards & Co., Incorporated, Boston, Mass. Mineral-surface asphalt shingles. No. 126,198; July 29; v. 264; p. 561.
Rock, Hazel, Salt Lake City, Utah. Children's underwear, dresses, nightgowns, pajamas. No. 126,066; July 22; v. 264; p. 698.
Rockwell Manufacturing Company, Camden, Ark. Hardware and fittings for doors. No. 126,199; July 29; v. 264; p. 561.
Rosa, Thomas, New York, N. Y. Laxative pills. No. 126,068; July 22; v. 264; p. 698.
Rosenson, David, Brooklyn, N. Y. Paints, japans, colors, putty, &c. No. 126,201; July 29; v. 264; p. 561.
Rosin & Co., Philadelphia, Pa. Glue. No. 126,070; July 22; v. 264; p. 698.
Ross, John, Glasgow, Scotland. Woolen piece goods. No. 126,071; July 22; v. 264; p. 699.
Ruff, Adolph, New York, N. Y. Women's and misses' dress-skirts. No. 126,913; July 8; v. 264; p. 349.
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y. Bolts, nuts, rivets, metal washers. No. 126,202; July 29; v. 264; p. 561.
Russo, A., Chicago, Ill. Olive-oil. No. 126,072; July 22; v. 264; p. 699.
S. D. Warren Company, Boston, Mass. Printing-paper. Nos. 126,921-2; July 8; v. 264; p. 350.
S. D. Warren Company, Boston, Mass. Printing-paper. No. 126,105; July 22; v. 264; p. 700.
Saleme, Frank L., Joplat, Pa. Preparation for sore throat, tonsillitis, catarrh, &c. No. 126,073; July 22; v. 264; p. 699.
Salsina Canning & Packing Co., San Jose, Calif. Tomato pulp. No. 126,074; July 22; v. 264; p. 699.
Sametaz & Hilder Bros., New York, N. Y. Dress-shields. No. 126,914; July 8; v. 264; p. 349.
Sametaz & Hilder Bros., New York, N. Y. Hair-plas. No. 126,203; July 29; v. 264; p. 561.
San Antonio Drug Co., San Antonio, Tex., and New York, N. Y. Cold-cream, pomade, hair-dressing, &c. No. 126,204; July 29; v. 264; p. 561.
Sanitary Knitting Company, Grand Rapids, Mich. Knit underwear. No. 126,075; July 22; v. 264; p. 699.
Schaeffer and Hadenberg Mfg. Co., Brooklyn, N. Y. Dial-thermometers. No. 126,205; July 29; v. 264; p. 561.
Schaeffer and Hadenberg Mfg. Co., Brooklyn, N. Y. Gage-glasses. No. 126,206; July 29; v. 264; p. 561.
Schlesler Brothers, St. Louis, Mo. Patch kits for automobile tires. No. 126,207; July 29; v. 264; p. 561.
Schlesinger, Maurice F., New York, N. Y. Medical jelly for the nose. No. 126,076; July 22; v. 264; p. 699.
Scully, Cornelius A., Leominster, Mass. Liquid polish for furniture, automobiles, &c. No. 126,916; July 8; v. 264; p. 349.
Seib, Frank L., Philadelphia, Pa. Ointment for rheumatism, bronchitis, &c. No. 126,208; July 29; v. 264; p. 561.
Seneca Falls Mfg. Co., Inc., Seneca Falls, N. Y. Lathes and parts thereof. No. 126,209; July 29; v. 264; p. 561.
Shane Bros. & Willson Co., Inc., Minneapolis, Minn. Wheat-flour. No. 126,210; July 29; v. 264; p. 561.
Scherer-Gillett Co., Chicago, Ill. Removable price and article tag holders to be secured to shelves. No. 126,211; July 29; v. 264; p. 561.
Sheridan Investment Company, Sheridan, Oreg. Fresh apples. No. 126,079; July 22; v. 264; p. 699.
Shingle Agency of British Columbia, Vancouver, British Columbia, Canada. Shingles. No. 126,212; July 29; v. 264; p. 562.
Shasta, Daniel, Cleveland, Ohio. Tonic or medicinal beverage for colds, debility, and measles. No. 126,213; July 29; v. 264; p. 562.
Sidel-Rattner manufacturing Company, Brooklyn, N. Y. Automobile-tire pumps. No. 126,081; July 22; v. 264; p. 699.
Sidney Blumenthal & Co., Inc., New York, N. Y. Pile fabrics to the piece. No. 126,131; July 29; v. 264; p. 559.
Simmons Hardware Company, St. Louis, Mo. Galvanized-iron baskets. No. 126,214; July 29; v. 264; p. 562.
Sinclear Refining Company, Chicago, Ill. Certain named oils for illumination, burning, power, fuel, &c. No. 126,083; July 22; v. 264; p. 699.
Skintex Co., New York and Forest Hills, N. Y. Face-cream. No. 126,084; July 22; v. 264; p. 699.
Sleep-In-Peace Company, Savannah, Ga. Insecticides and poisons for rodents and insect pests. No. 126,085; July 22; v. 264; p. 699.
Smith, Sam. Tombridge, England. Composition of fatty substances used as a base for toilet cream. No. 126,942; July 15; v. 264; p. 531.

Sobers, Addie E., Washington, D. C. Hair-dressing. No. 126,216; July 29; v. 264; p. 562.
Society of Chemical Industry in Basle, Basel, Switzerland. Coal-tar colors. No. 126,086; July 22; v. 264; p. 699.
Society of Chemical Industry in Basle, Basel, Switzerland. Indigo. No. 126,087; July 22; v. 264; p. 699.
Society of Chemical Industry in Basle, Basel, Switzerland. Pharmaceutical product. No. 126,088; July 22; v. 264; p. 699.
Sonora Phonograph Sales Company, Inc., New York, N. Y. Talking-machines, phonographs, gramophones, &c. No. 126,089; July 22; v. 264; p. 699.
Stability Motors Company, Philadelphia, Pa. Motor-trucks and trailers. No. 126,917; July 8; v. 264; p. 349.
Standard Oil Company, Bayonne, N. J. White mineral oil for use by confectioners as a slab-oil. No. 126,217; July 29; v. 264; p. 562.
Standard Oil Company of New York, New York, N. Y. Refined oil for lighting, heating, and power purposes. No. 126,091; July 22; v. 264; p. 699.
Standard Paint Company, Roundbrook, N. J., and New York, N. Y. Waterproofed fabrics for roofing, flooring, &c. Nos. 126,218-19; July 29; v. 264; p. 562.
Standard Paper Company, Indianapolis, Ind. Paper bags. No. 126,220; July 29; v. 264; p. 562.
Stearns Tire & Tube Company, St. Louis, Mo. Inner tubes for pneumatic tires. No. 126,018; July 8; v. 264; p. 350.
Steru & Klemer, New York, N. Y. Children's overalls. No. 126,092; July 22; v. 264; p. 699.
Sunsilver Cloak & Suit Company, Cleveland, Ohio. Children's dresses, coats, and suits. No. 126,093; July 22; v. 264; p. 699.
Swartz Electric Company, Indianapolis, Ind. Electric power and light systems. No. 126,221; July 29; v. 264; p. 562.
Tallard Medicine Co., Belvidere, Ill. Non-alcoholic maltless beverage. No. 126,222; July 29; v. 264; p. 562.
Tann, James H., Dayton, Ohio. Medicinal preparation for disorders of stomach and bowels. No. 126,094; July 22; v. 264; p. 699.
Taplex Corporation, New York, N. Y. Dry fuel containing charcoal as a base. No. 126,095; July 22; v. 264; p. 699.
Templeton, Walter B., Chicago, Ill. Blank forms designed to contain office, shop, and other records. No. 126,919; July 8; v. 264; p. 350.
Thermosept Products Corporation, New York, N. Y. Tea, coffee, dried vegetables, cheese, &c. No. 126,920; July 8; v. 264; p. 350.
Thomas Gill Soap Company, Inc., Brooklyn, N. Y. Foot-soaps. No. 126,103; July 29; v. 264; p. 560.
Thompson, Thos. R., New Haven, Conn. Wooden toys. No. 126,097; July 22; v. 264; p. 699.
Toomer, Hugh L. S., Louisville, Ky. Medicine for corns, bunions, and calluses. No. 126,098; July 22; v. 264; p. 699.
Trent, C. E., Santa Ana, Calif. Electric plugs. No. 126,099; July 22; v. 264; p. 699.
Union Twist Drill Co., Athol, Mass. Cutters, mills, bobs, saws, &c. No. 126,223; July 29; v. 264; p. 562.
United Drug Company, Boston, Mass. Writing-paper. No. 126,100; July 29; v. 264; p. 699.
United States Steel Products Company, New York, N. Y. Ammonium sulfate. No. 126,101; July 22; v. 264; p. 699.
V. Marrone & Company Inc., Utica, N. Y. Cotton-seed, salad-oil or lard substitute. No. 126,099; July 22; v. 264; p. 698.
Valentine & Company, New York, N. Y. Varnish stains and enamels, color and clear varnishes, paint. No. 126,224; July 29; v. 264; p. 562.
Van Sant & Co., San Francisco, Calif. Canned sardines. No. 126,102; July 22; v. 264; p. 700.
Van Schnack Bros. Chemical Works, Chicago, Ill. Waterproof cement for use on leather, paper, &c. No. 126,103; July 22; v. 264; p. 700.
Waite Grass Carpet Company, Oshkosh, Wis. Grass rugs. No. 126,225; July 29; v. 264; p. 562.
Walser, John O., Los Angeles, Calif. Cotton, medicinal. No. 126,943; July 15; v. 264; p. 531.
Weinstock-Nichols Co., San Francisco, Oakland, and Los Angeles, Calif. Publication issued monthly. No. 126,107; July 22; v. 264; p. 700.
Welch Grape Juice Company, Westfield, N. Y. Jam or conserve. No. 126,944; July 15; v. 264; p. 531.
Welch Grape Juice Company, Westfield, N. Y. Jam or conserve. Nos. 126,104-9; July 22; v. 264; p. 700.
Wheat's Ice Cream Company, Buffalo, N. Y. Canned sweetened condensed milk. No. 126,110; July 22; v. 264; p. 700.
Whitmore, William H., Cleveland, Ohio. Ointment for the treatment of rough or coarse skin, burns, &c. No. 126,111; July 22; v. 264; p. 700.
Wireless Press Inc., New York, N. Y. Books, magazines, manuals, &c. printed monthly. No. 126,112; July 22; v. 264; p. 700.

Wiss, Albert, Peekskill, N. Y. Trading stamps or coupons. No. 126,113; July 22; v. 264; p. 700.
Wm. H. Warner & Company, Inc., New York, N. Y. Medical tonic remedial in convalescence. No. 126,104; July 22; v. 264; p. 700.
Wolf, Edwin E., New York, N. Y. Blouses, shirt-waists, shirts, &c. No. 125,945; July 15; v. 264; p. 531.
World Film Corporation, New York, N. Y. Cinematographic films. No. 126,220; July 29; v. 264; p. 802.

Wright, Vernon, Detroit, Mich. Chemical compound for removing or destroying soot. No. 126,227; July 29; v. 264; p. 802.
Yale Daily News, New Haven, Conn. Newspapers. No. 126,114; July 22; v. 264; p. 700.
Young Brothers, New York, N. Y. Men's hats. Nos. 126,115-16; July 22; v. 264; p. 700.
Youth Craft Co., Chicago, Ill. Preparation for the relief of excessive perspiration. No. 126,117; July 22; v. 264; p. 700.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Armour and Company, Chicago, Ill. "Sylvan Carnation Toilet Soap." (For Toilet Soap.) No. 21,280; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Sylvan Heliotrope Toilet Soap." (For Toilet Soap.) No. 21,281; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Sandalwood." (For Toilet Soap.) No. 21,282; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Heliotrope." (For Toilet Soap.) No. 21,283; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Sylvan Rose Toilet Soap." (For Toilet Soap.) No. 21,284; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Rose." (For Toilet Soap.) No. 21,285; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Carob." (For Toilet Soap.) No. 21,286; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Sylvan Lilac Toilet Soap." (For Toilet Soap.) No. 21,287; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Lilac." (For Toilet Soap.) No. 21,288; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Sylvan Sandalwood Toilet Soap." (For Toilet Soap.) No. 21,289; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Natural Odor Violet." (For Violet Soap.) No. 21,290; July 1; v. 264; p. 154.
Armour and Company, Chicago, Ill. "Sylvan Violet Toilet Soap." (For Toilet Soap.) No. 21,291; July 1; v. 264; p. 154.
Baker, J. Harvey, Portales, N. Mex. "Baker's Foot Ease." (For Foot-Powder.) No. 21,293; July 1; v. 264; p. 154.
Bell, Claude A., Lowell, Mass. "Harvard Brouchia Syrup." (For Brouchia Syrup.) No. 21,294; July 1; v. 264; p. 154.
Bell, Claude A., Lowell, Mass. "Bell's Sarsaparilla." (For Sarsaparilla.) No. 21,295; July 1; v. 264; p. 154.
Bell, Claude A., Lowell, Mass. "Bell's Extract of Spices." (For Extract of Spices.) No. 21,296; July 1; v. 264; p. 154.
Bell, Claude A., Lowell, Mass. "Bell's Lung Balm." (For Lung-Balm.) No. 21,297; July 1; v. 264; p. 154.
Betsey Ross Candy Shops, Indianapolis, Ind. "Betsey Ross Candies." (For Candy.) No. 21,298; July 1; v. 264; p. 154.
Boomer, Charles G., Fresno, Calif. "Holly." (For Raisins.) No. 21,351; July 8; v. 264; p. 351.
Brookton Raml Company, Brookton, Mass. "Harbour Grooves Endless Welting." (For Welting.) No. 21,300; July 1; v. 264; p. 154.
C. E. and B. M. De Croes, Indianapolis, Ind. "De Croes Hair Stimulant and Dandruff Remedy." (For a Hair-Tonic.) No. 21,307; July 1; v. 264; p. 154.
Cannard, B., Los Angeles, Calif. "Dr. Cannard's Futra-Hel Foot Lotion." (For a Foot-Lotion.) No. 21,352; July 8; v. 264; p. 351.
Caroline Company, The. (See Carroll, Thomas L., assignor.)
Carroll, Thomas L., Chicago, Ill., assignor, by mesne assignments, to The Caroline Company. "Caroline." (For a Compound of Refined Nut-Oils and Evaporated Skimmed Milk.) No. 21,353; July 8; v. 264; p. 351.
Celro-Kola Co., Portland, Oreg. "Mint-U-Lip." (For Syrup.) No. 21,354; July 8; v. 264; p. 351.
Chateau Bottling Co., New York, N. Y. "Chateau." (For Soft Drinks.) No. 21,301; July 1; v. 264; p. 154.
Christian Moerlein Brewing Company, The, Cincinnati, Ohio. "Moerleio." (For a Non-Intoxicating Cereal Beverage.) No. 21,302; July 1; v. 264; p. 154.
Crutchfield & Woolfolk, Pittsburgh, Pa. "Cactus Brand Cantaloupes." (For Cantaloupes.) No. 21,304; July 1; v. 264; p. 154.
Cumberland Maranoni Mfg. Co., Cumberland, Md. "L'Aquila Alpina Brand." (For Semolina Macaroni.) No. 21,303; July 1; v. 264; p. 154.
Czajkowski, Joseph F., Chicago, Ill. "Liberty Bunting." (For Bunting.) No. 21,305; July 1; v. 264; p. 154.

D. Auerbach & Sons, New York, N. Y. "Auerbach Finest Lemon Drops." (For Candy.) No. 21,292; July 1; v. 264; p. 154.
Davis & Geck, Inc., Brooklyn, N. Y. "Sterile Surgical Sutures." (For Sterile Surgical Sutures and Ligatures.) No. 21,306; July 1; v. 264; p. 154.
Dechant, William H., Toledo, Ohio. "Champion." (For Hair-Tonic.) No. 21,308; July 1; v. 264; p. 154.
Donald Company, The, Grand Island, Nebr. "Rob Roy." (For Coffee.) No. 21,355; July 8; v. 264; p. 351.
Dorothy Dodd Shoe Company, Boston, Mass. "Gold Medal." (For Boots and Shoes.) No. 21,356; July 8; v. 264; p. 351.
El Reno Wholesale Grocery Co., Oklahoma, Okla. "Over-The-Top." (For Coffee.) No. 21,309; July 1; v. 264; p. 154.
Empire Bottling Works, El Paso, Tex. "Broncho The Drink With a Kick." (For a Non-Alcoholic Beverage.) No. 21,357; July 8; v. 264; p. 351.
F. E. Booth Co., San Francisco, Calif. "Comet." (For Canned Sardines.) No. 21,299; July 1; v. 264; p. 154.
Food Products Co., The, Binghamton, N. Y. "Egg Cream." (For Egg Substitute.) No. 21,310; July 1; v. 264; p. 154.
Freedman, Louis J., Baltimore, Md. "Victory Boys' Wash Suits." (For Boys' Wash-Suits.) No. 21,311; July 1; v. 264; p. 154.
Garland Co., The, Cleveland, Ohio. "Permanite." (For Glazing Compounds.) No. 21,312; July 1; v. 264; p. 154.
Glenn, William H., New York, N. Y. "Par." (For Cigarettes.) No. 21,313; July 1; v. 264; p. 154.
Guska Company, Vidalia, Ga. "Guska." (For a Soft Drink.) No. 21,314; July 1; v. 264; p. 154.
Jones & Pettigrew, San Francisco, Calif. "Poppy Brand." (For Fresh Asparagus.) No. 21,315; July 1; v. 264; p. 154.
Kachel-Lenhardt Company, Ephrata borough, Pa. "It Wears and Wears." (For Hosiery.) No. 21,316; July 1; v. 264; p. 154.
Keefe, Nellie T., New York, N. Y. "Pasco." (For Canned Pineapples.) No. 21,317; July 1; v. 264; p. 154.
Koop, Fred, Westmont, N. J. "Koop's Lightning." (For Hair-Renewer.) No. 21,318; July 1; v. 264; p. 154.
La Sierra Heights Canning Company, Los Angeles, Calif. "Twin Buttes." (For Canned Tomatoes.) No. 21,319; July 1; v. 264; p. 154.
Leavitt, Michael L., Philadelphia, Pa. "Lev-I-Tone." (For Eye-Lotion.) No. 21,320; July 1; v. 264; p. 154.
Lever, Victor, Attica, Ind. "No Protest." (For Cigars.) No. 21,358; July 8; v. 264; p. 351.
Lion Brewing Company, Wilkes-Barre, Pa. "Hock-O." (For a Non-Intoxicating Cereal Beverage.) No. 21,321; July 1; v. 264; p. 155.
Lyons Chemical Works, Chicago, Ill. "Tru-Blu." (For Dyeing.) No. 21,322; July 1; v. 264; p. 155.
McLoughlin Bros., Incorporated, New York and Brooklyn, N. Y. "The Pretty Village." (For Toy Villages.) No. 21,323; July 1; v. 264; p. 155.
Mills, Harry, New York, N. Y. "Doriana." (For Cigars.) No. 21,324; July 1; v. 264; p. 155.
Milwaukee Paper Box Company, Milwaukee, Wis. "Lace Design." (For Boxes Containing Candy.) No. 21,325; July 1; v. 264; p. 155.
Milwaukee Paper Box Company, Milwaukee, Wis. "Peacock Border." (For Candy.) No. 21,326; July 1; v. 264; p. 155.
Mint Products Company, Inc., New York, N. Y. "Cough Drop Life Savers, The Candy Mint With The Hole, a Minty Confection." (For Medicinal Candies.) No. 21,327; July 1; v. 264; p. 155.
Moco Laboratories, Inc., Oklahoma, Okla. "Moco Monkey Grip." (For Patches for Automobile-Tires.) No. 21,328; July 1; v. 264; p. 155.
Moneta Canning Company, Moneta, Calif. "Polly." (For Canned Tomatoes with Purée from Trimmings.) No. 21,359; July 8; v. 264; p. 351.
Moneta Canning Company, Moneta, Calif. "Gold Beam." (For Canned Tomatoes.) No. 21,360; July 8; v. 264; p. 351.
Narragansett Dairy Co. Ltd., Providence, R. I. "Nut-Butter Brand Not Margarine." (For Margarine.) No. 21,330; July 1; v. 264; p. 155.

Narragansett Dairy Co. Ltd., Providence, R. I. "Guernsey Brand Oleomargarine." (For Oleomargarine.) No. 21,331; July 1; v. 264; p. 155.
National Sulfur Soap Co., The, Denver, Colo. "Sulfur Soap." (For Soap.) No. 21,329; July 1; v. 264; p. 155.
Mellin, Maana N., Rockford, Ill. "M. N. Peanut Fluff." (For Candy Confection.) No. 21,332; July 1; v. 264; p. 155.
Nevins, Thomas F., New York, N. Y., and Merritt, Fla. "Indian River Fruit, Nevins Merritt's Island Brand." (For Fruit.) No. 21,333; July 1; v. 264; p. 155.
Nielsen & Kittle Canning Co. Ltd., Terminal, Calif. "Norwegian." (For Canned Sardines.) No. 21,361; July 8; v. 264; p. 351.
North Ontario Packing Co., Los Angeles, Calif. "Glen Rosa Brand." (For Orange Marmalade.) No. 21,334; July 1; v. 264; p. 155.
Pennsylvania Chocolate Company, Pittsburgh, Pa. "Chocolat Supérieur." (For Chocolate.) No. 21,335; July 1; v. 264; p. 155.
Perfection Corporation, The, Philadelphia, Pa. "Perfection." (For Talking-Machines.) No. 21,336; July 1; v. 264; p. 155.
Pickett, J. M., St. Louis, Mo. "Bone Dry Brand." (For Weatherproof Clothing.) No. 21,337; July 1; v. 264; p. 155.
Ralo Toy Company, Worcester, Mass. "Rallie-Stone Blocks." (For Toy Building-Blocks.) No. 21,338; July 1; v. 264; p. 155.
Randall, J. W. H., Piedmont, W. Va., and New York, N. Y. "Pep." (For a Non-Alcoholic Beverage.) No. 21,363; July 8; v. 264; p. 351.
Redondo Packing Co., Redondo, Calif. "Redondo." (For Canned Sardines.) No. 21,364; July 8; v. 264; p. 351.
Rieder & Freudenberger, Louisville, Ky. "Kosine Hair Tonic." (For a Hair-Tonic Preparation.) No. 21,365; July 8; v. 264; p. 351.
Robins, Max, Chicago, Ill. "Neo." (For Nasal Jelly.) No. 21,339; July 1; v. 264; p. 155.
Roth, Joseph S., Monongahela, Pa. "Tip Top." (For Ginger-Beer.) No. 21,366; July 8; v. 264; p. 351.
Royal Worcester Corset Co., Worcester, Mass. "Serviceable Adjusto Corsets, Comfortable." (For Corsets.) No. 21,340; July 1; v. 264; p. 155.

Royal Worcester Corset Co., Worcester, Mass. "Fashionable Royal Worcester Corsets, Graceful." (For Corsets.) No. 21,341; July 1; v. 264; p. 155.
Rubin, Mayer, Hammond, Ind. "Old Taylor Bourbon." (For a Non-Alcoholic Distilled Beverage.) No. 21,342; July 1; v. 264; p. 155.
Russell Jobbers' Mills, The, Oklahoma, Okla. "Rusdun." (For Bunting.) No. 21,367; July 8; v. 264; p. 351.
Saadi, John, Allentown, Pa. "Tan-Sav." (For Preparations for Relief of Colds and Catarrhs.) No. 21,343; July 1; v. 264; p. 155.
Samuel W. Peck & Co., New York, N. Y. "Sampack Triple-Service Suit." (For Men's, Young Men's, Boys', Children's, and Juveniles' Outer Suits.) No. 21,362; July 8; v. 264; p. 351.
San Joaquin Fruit Co., Tustin, Calif. "President." (For Oranges.) No. 21,368; July 8; v. 264; p. 351.
San Joaquin Fruit Co., Tustin, Calif. "Senator." (For Oranges.) No. 21,369; July 8; v. 264; p. 351.
Stern, Paul J., Milwaukee, Wis. "It's Quality." (For Bread.) No. 21,344; July 1; v. 264; p. 155.
Stuart Fish Products Co., Inc., Seattle, Wash. "Pacific." (For Canned Fish Balls.) No. 21,345; July 1; v. 264; p. 155.
Terrik, John, Lebanon, Pa. "Terrik." (For White Dye Bleach for Panamas and Straw Hata.) No. 21,346; July 1; v. 264; p. 155.
United States Rubber Company, New York, N. Y. "Usco Kold-Pak." (For Jar-Holders.) No. 21,370; July 8; v. 264; p. 351.
Virginia Fruit Juice Company, Inc., Norfolk, Va. "A Pip-ple of a Drink." (For Pure Apple-Juice.) No. 21,347; July 1; v. 264; p. 155.
Wallie Dorr Company, New York, N. Y. "Pig-Me." (For Toy Furniture.) No. 21,348; July 1; v. 264; p. 155.
Well Color and Chemical Company & Well and Company, New York, N. Y. "Best Everyway Milk." (For Condensed Milk.) No. 21,349; July 1; v. 264; p. 155.
William Cluff Co., San Francisco, Calif. "Yosemite." (For Canned Peaches.) No. 21,371; July 8; v. 264; p. 351.
Wilson, Charles A., New York, N. Y. "Wilson Sun-Beam Auto Polish." (For a Liquid to Polish Bodies of Automobiles, Musical Instruments, Furniture, and Fixtures.) No. 21,350; July 1; v. 264; p. 155.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

American Cigar Company, New York, N. Y. "Sen-Sen makes my cigar taste like a 25c Perfecto." (For Sen-Sen Pellets.) No. 5,107; July 1; v. 264; p. 156.
American Druggists Syndicate, Long Island City, N. Y. "A. D. S. Cold and Grippe Tablets." (For Cold and Grippe Tablets.) Nos. 5,108-10; July 1; v. 264; p. 156.
American Druggists Syndicate, Long Island City, N. Y. "A. D. S. Beef Iron and Wine." (For Beef, Iron, and Wine.) Nos. 5,111-13; July 1; v. 264; p. 156.
B. V. D. Company, The, New York, N. Y. "Get Wise, Dad, Wear B. V. D." (For Athletic Underwear.) No. 5,126; July 8; v. 264; p. 351.
Breckway, C. L., Seattle, Wash. "Saving Service, Satisfaction." (For Automobile-Tires.) No. 5,124; July 8; v. 264; p. 351.
Bunte Brothers, Chicago, Ill. "Buote The Quality Cocoa." (For Cocoa.) No. 5,125; July 8; v. 264; p. 351.
California Paint Company, Oakland, Calif. "Pacific Coast Stacks." (For Stack-Paints.) No. 5,114; July 1; v. 264; p. 156.
Johnson, Chase G., Sioux City, Iowa. "The Pickwick Service Stores." (For Self-Service Stores.) No. 5,115; July 1; v. 264; p. 156.
M. G. Scoville Soap Company, Ogden, Utah. "Mother Goose Brooms." (For Brooms.) No. 5,133; July 8; v. 264; p. 351.
McKinnle, Henry, Pittsburgh, Pa. "Have you Max-Well Known Round Stove with a Flue?" (For Gascoos, Liquid, and Solid Fuel Burning Stoves and Heaters, Not Electrical.) No. 5,116; July 1; v. 264; p. 156.
Perfection Corporation, The, Philadelphia, Pa. "Perfeka Tonic." (For Talking-Machines.) No. 5,117; July 1; v. 264; p. 156.
R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "I'll say it is!" (For Smoking-Tobacco.) No. 5,127; July 8; v. 264; p. 351.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "I. A. is such a scuttie full of sunshine!" (For Smoking-Tobacco.) No. 5,128; July 8; v. 264; p. 351.
R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "Tell it to your old Jimmy pipe!" (For Smoking-Tobacco.) No. 5,129; July 8; v. 264; p. 351.
R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "Scrub up your smokedecks and cut for a new pipe deal!" (For Smoking-Tobacco.) No. 5,130; July 8; v. 264; p. 351.
R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "When you nail the grand idea." (For Smoking-Tobacco.) No. 5,131; July 8; v. 264; p. 351.
R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "Talk about indoor and outdoor sports." (For Smoking-Tobacco.) No. 5,132; July 8; v. 264; p. 351.
Stern, Paul J., Milwaukee, Wis. "It's Quality." (For Bread.) No. 5,118; July 1; v. 264; p. 156.
Sunbeam Chemical Company, Chicago, Ill. "New Colors for Your Waists." (For Dye-Soap.) No. 5,119; July 1; v. 264; p. 156.
Sunbeam Chemical Company, Chicago, Ill. "Fashionable Colors Instantly." (For Dye-Soap.) No. 5,120; July 1; v. 264; p. 156.
Sunbeam Chemical Company, Chicago, Ill. "Don't Buy New Corsets." (For Dye-Soap.) No. 5,121; July 1; v. 264; p. 156.
Sunbeam Chemical Company, Chicago, Ill. "Cleanses and Colors Instantly." (For Dye-Soap.) No. 5,122; July 1; v. 264; p. 156.
Sunbeam Chemical Company, Chicago, Ill. "Dye It the Easiest Way." (For Dye-Soap.) No. 5,123; July 1; v. 264; p. 156.
Thoms, C., San Francisco, Calif. "Thomas Awning Company." (For Awnings.) No. 5,134; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF JULY, 1919.

- Abdominal support I. Allison. No. 1,309,007; July 8; v. 264; p. 212.
- Abrasive wheel H. C. Martin. No. 1,310,360; July 15; v. 264; p. 498.
- Abrasive wheel H. R. Power. No. 1,310,291; July 15; v. 264; p. 486.
- Abrasive wheel H. R. Power. No. 1,310,292; July 15; v. 264; p. 486.
- Absorption apparatus H. Torrance. No. 1,311,027; July 29; v. 264; p. 797.
- Accordion reed-box Z. Burch. No. 1,311,752; July 29; v. 264; p. 821.
- Accounting and paying machine, Pay-roll M. H. Mann. No. 1,311,174; July 29; v. 264; p. 713.
- Accounting-machine handle A. H. Hawley. No. 1,311,384; July 29; v. 264; p. 754.
- Acetic aldehyde, Manufacture of H. Dreyfus. No. 1,310,743; July 22; v. 264; p. 600.
- Acetic aldehyde, Manufacture of H. Dreyfus. No. 1,310,884; July 22; v. 264; p. 644.
- Acetic anhydride, Concentrating L. S. Finch. No. 1,311,158; July 29; v. 264; p. 710.
- Acetylene-burner G. P. Washburn. No. 1,311,731; July 29; v. 264; p. 817.
- Acid and producing phenol, Recovering benzene monosulfonic M. L. Hamlin. No. 1,309,683; July 15; v. 264; p. 370.
- Acid from acetaldehyde, Manufacture of acetic H. Dreyfus. No. 1,308,173; July 1; v. 264; p. 31.
- Acid from crude sodium nitrate, Production of methyl borate and boric R. P. Calvert and O. L. Thomas. No. 1,308,576; July 1; v. 264; p. 104.
- Acid from mixtures containing borates, Obtaining boric R. P. Calvert and O. L. Thomas. No. 1,308,577; July 1; v. 264; p. 104.
- Acid from sludge, Process of producing hydrochloric H. M. Lasher. No. 1,309,206; July 8; v. 264; p. 249.
- Acid, Manufacture of naphthalene trisulfonic L. A. Pratt and F. N. Brink. No. 1,311,050; July 22; v. 264; p. 664.
- Acid, Manufacturing oxalic H. C. Reed. No. 1,310,713; July 22; v. 264; p. 594.
- Acid mine-water, Recovering by-products from E. C. Auld and J. R. Campbell. No. 1,310,384; July 15; v. 264; p. 502.
- Acid mine-water, Treating E. C. Auld and J. R. Campbell. No. 1,310,383; July 15; v. 264; p. 502.
- Acid, Oxidation of ammonia to nitric A. Greenwood. No. 1,309,622; July 15; v. 264; p. 364.
- Acid steel, Making W. R. Walker. No. 1,309,406; July 8; v. 264; p. 303.
- Adding-machine A. A. Horton. No. 1,308,787; July 8; v. 264; p. 171.
- Adding-machine F. A. Niemann. No. 1,309,692; July 15; v. 264; p. 377.
- Adding-machine H. C. Peters. No. 1,310,903; July 22; v. 264; p. 610.
- Adding-machine time-switch F. C. Rinsche. No. 1,310,906; July 22; v. 264; p. 641.
- Adding-machines, Automatic brought-stop for W. W. Lasker. No. 1,309,898; July 15; v. 264; p. 415.
- Adding or calculating machine D. S. McElroy. No. 1,308,548; July 1; v. 264; p. 98.
- Adjustable hanger I. F. Shank. No. 1,311,779; July 29; v. 264; p. 825.
- Adjustable level-stand D. Hatch. No. 1,308,630; July 1; v. 264; p. 114.
- Advertising attachment to wheel-rims C. F. Deuchlau. No. 1,309,464; July 8; v. 264; p. 297.
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Battery-box.
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Electric-wire-outlet box.
Fireproof box.
Folding box.
Food container or lunch-box.
Glasser-box.
Horn and sound-box.
Journal-box.
Junction-box.
Locomotive axle-box.
Mail-box.
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Drum-brake.
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Hammer, Automatic. G. L. Kollock and R. P. Martin. No. 1,310,575; July 22; v. 264; p. 569.

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Basket-handle. Wrench-handle.

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Brake-rod safety bracket-hanger. Paint-bucket hanger.
Brush-hanger. Picture-hanger.
Cable-hanger. Railway-brake hanger.
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Cotton-sack hanger. Shoe-hanger.

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Cane-julce heater. Manifold-heater.
Car-heater. Manifold-intake heater.
Electric heater. Tank-heater.
Feed-water heater. Water-heater.

Heater. P. J. H. Bernard. No. 1,308,836; July 8; v. 264; p. 180.

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Hydrocarbons, Oxidizing. K. P. McElroy. No. 1,308,797; July 8; v. 264; p. 173.

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 Tag-fastener. M. B. Behrman. No. 1,308,771; July 8; v. 264; p. 168.
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 Fuel-tank. Settling and separating tank.
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 Telegraph, Machine. L. M. Potta. No. 1,309,745; July 15; v. 264; p. 357.
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 Ventilator. L. J. Duffon. No. 1,310,327; July 15; v. 264; p. 492.
 Ventilator. J. A. Glass. No. 1,308,236; July 1; v. 264; p. 42.
 Ventilator. N. A. and C. S. Lichty and H. F. Campbell. No. 1,309,037; July 8; v. 264; p. 218.
 Ventilator. J. Merkel. No. 1,310,537; July 22; v. 264; p. 562.
 Ventilator. M. J. Morehouse. No. 1,309,897; July 15; v. 264; p. 409.
 Ventilator. W. W. Nobbs. No. 1,310,429; July 22; v. 264; p. 542.
 Ventilator. W. J. Smith. No. 1,308,264; July 1; v. 264; p. 47.
 Vessel-ld. J. Smolarski. No. 1,308,533; July 1; v. 264; p. 95.
 Vessel, Transparent-sided curved-walled. J. Distler. No. 1,309,615; July 15; v. 264; p. 363.
 Vessels, Invisible, Device for making. M. Chaddick. No. 1,310,290; Aug. 12; v. 265; p. 484.
 Vial, Level. R. B. Bosser. No. 1,309,762; July 15; v. 264; p. 388.
 Vibration-recorder. H. Sattler. No. 1,309,813; July 15; v. 264; p. 399.
 Violon, Chlo-rest for. H. C. Watson. No. 1,311,670; July 29; v. 264; p. 805.
 Vise. V. R. Koonit. No. 1,310,351; July 15; v. 264; p. 495.
 Vise and stop for work-benches, Automatic. W. Sophar and I. A. Hammond. No. 1,308,922; July 8; v. 264; p. 196.
 Vise, Attachment to saw. A. F. McKenzie. No. 1,308,248; July 1; v. 264; p. 44.
 Voltage-regulating means, instantaneous. E. O. Schweitzer. No. 1,309,514; July 15; v. 264; p. 309.
 Voting machine, Assembly. F. L. Dyer. No. 1,308,279; July 1; v. 264; p. 50.
 Voting mechanism, Second-choice. S. Lee. No. 1,310,196; July 15; v. 264; p. 468.
 Vulcanizer. E. T. Horsey. No. 1,311,560; July 29; v. 264; p. 785.
 Vulcanizer. J. K. Williams. No. 1,308,517; July 1; v. 264; p. 93.
 Vulcanizer, Electric. O. C. Dennis. No. 1,309,845; July 15; v. 264; p. 405.
 Vulcanizing apparatus. J. W. Arthur. No. 1,308,834; July 8; v. 264; p. 179.
 Vulcanizing-machine. J. Porzel. No. 1,308,111; July 1; v. 264; p. 19.
 Vulcanizing-press mold. J. H. Birkenbeuel. No. 1,311,375; July 29; v. 264; p. 751.
 Wagon-bed, Knockdown extension covered. C. J. Joly. No. 1,309,556; July 15; v. 264; p. 407.
 Wagon, Dump. M. V. Liddell. No. 1,310,916; July 22; v. 264; p. 632.

Walat, Child's and miss's. G. P. Jameson. No. 1,309,138; July 8; v. 264; p. 237.
 Wall construction and channel brick or block therefor. A. Hardoncourt, Jr. No. 1,311,080; July 22; v. 264; p. 661.
 Wall-finishing composition. R. Sharp. No. 1,309,782; July 15; v. 264; p. 393.
 Wall-hatting element. S. D. Baker. No. 1,311,635; July 29; v. 264; p. 790.
 Walls, Support for furnace. H. Webster. No. 1,311,476; July 29; v. 264; p. 769.
 Wardrobe, Automatic. J. Choma. No. 1,308,333; July 1; v. 264; p. 60.
 Washboard. G. W. Shoemaker. No. 1,311,624; July 29; v. 264; p. 797.
 Washboller. J. Bowman. No. 1,310,734; July 22; v. 264; p. 508.
 Washer. See—
 Nut-lock washer. Vegetable-washer.
 Spacing-washer.
 Washing, disinfecting, and dyeing machine. W. A. E. Henrich. No. 1,309,411; July 8; v. 264; p. 287.
 Washing-machine. W. A. E. Henrich. No. 1,309,412; July 8; v. 264; p. 287.
 Washing machine, Dish. A. Ratner. No. 1,311,179; July 29; v. 264; p. 714.
 Washing-machine mechanism. A. Boby. No. 1,310,558; July 22; v. 264; p. 566.
 Washing-machines, Alternating rotary drive for. G. K. Parsons. No. 1,308,104; July 1; v. 264; p. 18.
 Washing-machines, Operating means for. F. Michalick. No. 1,311,093; July 22; v. 264; p. 648.
 Washing plant, Portable. J. P. Dovel. No. 1,309,754; July 15; v. 264; p. 388.
 Washing pulp-wood, Machine for. J. L. Phillips. No. 1,309,542; July 8; v. 264; p. 312.
 Washub-bung attachment. B. E. Beermann. No. 1,311,745; July 29; v. 264; p. 810.
 Waste fixture, Basin. W. G. Newton. No. 1,311,241; July 29; v. 264; p. 725.
 Watch-bow. L. E. Wachter. No. 1,308,210; July 1; v. 264; p. 37.
 Watch crystal and bezel. L. E. F. Wachter. No. 1,308,690; July 1; v. 264; p. 125.
 Watch-holder. A. Milne. No. 1,309,865; July 15; v. 264; p. 408.
 Watch, Wrist. R. H. Knyvett. No. 1,309,988; July 15; v. 264; p. 432.
 Watches and the like, Dial and dial-holder for. G. F. Eberhard. No. 1,310,523; July 22; v. 264; p. 559.
 Watches, Stem-winding and stem-setting mechanism for. G. F. Eberhard, W. T. Maloney, and F. W. Hold. No. 1,310,524; July 22; v. 264; p. 559.
 Water bottle and douche-bag combined, Hot. A. Laborde. No. 1,308,427; July 1; v. 264; p. 76.
 Water-closet seat, Sanitary. C. Engelman. No. 1,308,406; July 1; v. 264; p. 73.
 Water-closet seats, Attachment for. A. Klein. No. 1,308,506; July 1; v. 264; p. 107.
 Water-cut-off valve. W. D. Mohr. No. 1,311,830; July 29; v. 264; p. 835.
 Water-heater. C. C. Hansen. No. 1,311,391; July 29; v. 264; p. 754.
 Water-heater. H. S. Humphrey. No. 1,308,078; July 1; v. 264; p. 15.
 Water-heater. S. M. Wright. No. 1,309,083; July 8; v. 264; p. 227.
 Water heater and filter. C. Joerin, Jr. and A. E. Joerin. No. 1,309,892; July 15; v. 264; p. 414.
 Water-heater, Automatic. E. S. Hoyt. No. 1,310,180; July 15; v. 264; p. 462.
 Water-heater, Electric. A. Guy. No. 1,309,284; July 8; v. 264; p. 254.
 Water-heaters, Gas and water controlling device for. F. W. Magee. No. 1,309,295; July 8; v. 264; p. 266.
 Water-heating attachment for stoves. P. Mathis. No. 1,311,702; July 29; v. 264; p. 811.
 Water-level indicator. C. E. Broad. No. 1,308,620; July 1; v. 264; p. 112.
 Water-power plant. A. C. Watkins. No. 1,308,640; July 1; v. 264; p. 117.
 Water-purifying apparatus. J. W. Brenkert. No. 1,309,876; July 15; v. 264; p. 410.
 Water, Separating hydrocarbons from. W. A. Brown. No. 1,309,784; July 15; v. 264; p. 395.
 Water-tube boiler. F. Sargent and H. C. Heaton. No. 1,311,467; July 29; v. 264; p. 767.
 Waterproof composition and product and the like and producing same. A. W. Schorger. No. 1,310,376; July 15; v. 264; p. 501.
 Waterproof glue. A. C. Lindauer. No. 1,310,706; July 22; v. 264; p. 593.
 Waterproofing compositions, Purifying. O. E. Gelertsen. No. 1,310,158; July 15; v. 264; p. 462.
 Waves, Method of and apparatus for producing asymmetric potential. L. W. Chubb. No. 1,308,041; July 1; v. 264; p. 7.
 Wax from sugar-cane, Recovering. R. U. Bunker. No. 1,309,999; July 15; v. 264; p. 433.
 Weather-strip. W. D. Kendrick. No. 1,311,127; June 22; v. 264; p. 671.

Weaving crimped or wire-mesh work material. D. S. Birrell and G. Smith. No. 1,311,746; July 29; v. 264; p. 819.

Web-perfecting machine, Offset. D. J. Scott. No. 1,311,138; July 22; v. 264; p. 673.

Web-roll support. R. C. Hawk. No. 1,309,621; July 15; v. 264; p. 363.

Weight Cord. A. H. Weiss. No. 1,309,670; July 15; v. 264; p. 373.

Weight-motor. L. H. Artz. No. 1,311,203; July 29; v. 264; p. 718.

Weight, Saab. M. E. Mather. No. 1,310,165; July 15; v. 264; p. 493.

Welding and apparatus for use thereon. Electric. J. O. Kjellgren and G. H. Stephenson. No. 1,309,947; July 15; v. 264; p. 424.

Welding and cutting equipment, Carrying-case for. H. Cave. No. 1,309,273; July 8; v. 264; p. 262.

Welding apparatus. W. G. Abbott, Jr. No. 1,311,789; July 29; v. 264; p. 827.

Welding apparatus. W. L. Merrill. No. 1,310,127; July 15; v. 264; p. 456.

Welding apparatus. Electric. J. H. Gravell. No. 1,308,778; July 8; v. 264; p. 109.

Welding-clamp. J. W. Heltzel. No. 1,309,067; July 8; v. 264; p. 224.

Welding. Electric. C. H. Kiehlhoffer. No. 1,310,418; July 22; v. 264; p. 541.

Welding. Electric. P. O. Noble. No. 1,310,131; July 15; v. 264; p. 457.

Welding. Electric. M. H. Roberts and C. C. Van Noy. No. 1,309,666; July 15; v. 264; p. 378.

Welding-machine. Electric. O. J. Armstrong. No. 1,310,554; July 22; v. 264; p. 565.

Welding-machine. Electric. G. J. Armstrong. No. 1,310,555; July 22; v. 264; p. 565.

Welding-machine. Seam. A. D. Elliott. No. 1,310,610; July 22; v. 264; p. 576.

Welding metal plates. Electric. C. H. Kiehlhoffer. No. 1,310,419; July 22; v. 264; p. 541.

Welding plates. T. J. Shea. No. 1,311,422; July 29; v. 264; p. 759.

Welding thin plates. J. H. Gravell. No. 1,308,781; July 8; v. 264; p. 170.

Wells. Apparatus for separating fluid in. M. E. Layne. No. 1,311,169; July 29; v. 264; p. 712.

Wells. Internal works of tubular. M. N. Latta. No. 1,309,738; July 15; v. 264; p. 385.

Welt grooving and beveling machine. A. Eppler. No. 1,309,567; July 8; v. 264; p. 317.

Welt-strip. J. N. Monilton. No. 1,308,804; July 8; v. 264; p. 174.

Weltins. Machine for preparing. A. R. Morrill. No. 1,309,583; July 8; v. 264; p. 320.

Wheel. See—

Abrasive wheel.	Resilient wheel.
Automobile emergency-wheel.	Spring-wheel.
Automobile or truck wheel.	Steering-wheel.
Automobile steering-wheel.	Traction-wheel.
Caster-wheel.	Tractor-wheel.
Collapsible wheel.	Vehicle-wheel.
Demountable wheel.	Wind-wheel.
Metal wheel.	

Wheel. F. W. French. No. 1,310,069; July 15; v. 264; p. 445.

Wheel. R. Hoopes. No. 1,310,189; July 15; v. 264; p. 467.

Wheel. E. H. Jones. No. 1,309,094; July 8; v. 264; p. 220.

Wheel. E. H. Jones. No. 1,309,095; July 8; v. 264; p. 220.

Wheel. R. L. Sandlers. No. 1,311,468; July 29; v. 264; p. 708.

Wheel and making same. Steering. B. C. Fitch. No. 1,311,684; July 29; v. 264; p. 808.

Wheel-carrier. E. R. Draver. No. 1,311,267; July 29; v. 264; p. 730.

Wheel-lock. L. Kilmer. No. 1,311,404; July 29; v. 264; p. 750.

Wheel of vehicles, driving-pullers, and the like. D. T. Staggs. No. 1,311,537; July 29; v. 264; p. 791.

Wheel-puller. E. B. Cantrell and G. E. Miller. No. 1,310,154; July 15; v. 264; p. 461.

Wheel-removing tool. J. K. Gumpfer. No. 1,311,272; July 29; v. 264; p. 731.

Wheel-rim, Demountable. E. K. Baker. No. 1,310,047; July 15; v. 264; p. 441.

Wheel-rim-tread attachment. H. N. Eklens. No. 1,311,683; July 29; v. 264; p. 808.

Wheel rim. Vehicle. L. V. Annable. No. 1,309,751; July 15; v. 264; p. 388.

Wheel rim. Vehicle. C. W. Gressle. No. 1,311,269; July 29; v. 264; p. 730.

Wheel-tightening device. T. N. Gibson and A. O. Friday. No. 1,309,639; July 15; v. 264; p. 423.

Wheel-tread. L. M. Wheat. No. 1,308,133; July 1; v. 264; p. 27.

Wheel-vehicle. J. W. Gelling. No. 1,308,409; July 1; v. 264; p. 73.

Wheels. Counterbalance for locomotive driving. K. Rush-ton. No. 1,310,136; July 15; v. 264; p. 458.

Wheels. Demountable rim for. C. De C. and G. A. Moll. No. 1,310,364; July 15; v. 264; p. 498.

Wheels, Fastening for detachable. J. L. Edwards. No. 1,308,488; July 1; v. 264; p. 87.

Wheels, Gripping attachment for automobile. W. Creek. No. 1,309,020; July 8; v. 264; p. 215.

Wheels, Journal for car. J. E. Downer. No. 1,309,467; July 8; v. 264; p. 297.

Wheels, Making tendon. W. J. P. Moore. No. 1,310,246; July 15; v. 264; p. 478.

Wheels, Non-skid attachment for. J. Gajan. No. 1,308,705; July 1; v. 264; p. 128.

Wheels, Self-cleaning groover for tractor. S. T. Allen. No. 1,309,006; July 8; v. 264; p. 212.

Whistle. E. G. Raff. No. 1,309,303; July 8; v. 264; p. 267.

Whistle diaphragm. Steam. J. Kropacz. No. 1,311,355; July 29; v. 264; p. 747.

Wind or air-currents. Instrument for indicating the velocity of the. F. H. Clift. No. 1,310,648; July 22; v. 264; p. 583.

Wind-shield construction. F. E. Watts. No. 1,311,582; July 29; v. 264; p. 789.

Wind-wheel, Ornamental. P. F. Denning. No. 1,310,234; July 15; v. 264; p. 475.

Winder. H. D. Colman. No. 1,311,498; July 29; v. 264; p. 774.

Winding and rewinding mechanism. L. E. Mackey and F. W. Ormiston. No. 1,309,256; July 8; v. 264; p. 258.

Winding-machine. O. W. Foster. No. 1,309,404; July 8; v. 264; p. 286.

Window-cleaner. G. Racz. No. 1,309,302; July 8; v. 264; p. 267.

Window-closure. J. F. O'Brien. No. 1,310,367; July 15; v. 264; p. 499.

Window. Extension. C. S. Johanson. No. 1,310,797; July 22; v. 264; p. 611.

Window. Folding and sliding. A. A. Sebastian. No. 1,310,842; July 22; v. 264; p. 619.

Window for cabs. Booths. Safety. G. W. Clingan. No. 1,311,317; July 29; v. 264; p. 739.

Window-glass protector. H. Horn. No. 1,309,136; July 8; v. 264; p. 237.

Window holder. Casement. E. L. Teich. No. 1,311,420; July 29; v. 264; p. 760.

Window-lifter stop. J. D. Lawrence and W. G. Fleisch-auser. No. 1,311,168; July 29; v. 264; p. 712.

Window-lock. O. L. Danforth. No. 1,311,052; July 22; v. 264; p. 657.

Window-lock. E. S. Ensign. No. 1,311,597; July 29; v. 264; p. 792.

Window-lock. J. E. Phillips. No. 1,311,708; July 29; v. 264; p. 812.

Window-screen. J. Roch. No. 1,311,248; July 29; v. 264; p. 726.

Window-steadying device. L. W. Gates and J. T. Al-maud. No. 1,311,162; July 29; v. 264; p. 711.

Window. Swinging and sliding. A. A. Sebastian. No. 1,310,843; July 22; v. 264; p. 619.

Window-ventilator. A. B. Fuhr. No. 1,309,886; July 15; v. 264; p. 412.

Window-ventilator. J. Gruber. No. 1,310,475; July 22; v. 264; p. 560.

Wire attachment. Gay. C. F. Willard. No. 1,310,850; July 22; v. 264; p. 620.

Wire-cutting device. H. P. Smith. No. 1,309,664; July 15; v. 264; p. 372.

Wire-drawing machines. Apparatus for hammering the dies of. R. D. Connor and R. P. Slinger. No. 1,310,968; July 22; v. 264; p. 641.

Wire-line clamp. T. W. Bell and T. C. Rogers. No. 1,308,924; July 8; v. 264; p. 196.

Wire-netting. Apparatus for the manufacture of. F. and P. Riviere. No. 1,310,066; July 22; v. 264; p. 641.

Wire remover. Tie. J. E. Webb. No. 1,311,475; July 29; v. 264; p. 769.

Wire-stretcher. C. A. Hall. No. 1,311,390; July 29; v. 264; p. 753.

Wire-stretcher. C. M. Zartman. No. 1,311,787; July 29; v. 264; p. 827.

Wire-twisting machine. J. Cogozzo. No. 1,310,003; July 15; v. 264; p. 434.

Wires. System of multiplying trunk. W. Althen. No. 1,311,432; July 29; v. 264; p. 761.

Wireless system. J. Mills and J. R. Carson. No. 1,309,538; July 8; v. 264; p. 311.

Wood-splitting machine. E. B. Inman. No. 1,310,060; July 22; v. 264; p. 585.

Wooden-structure joint. B. C. Rockwell. No. 1,308,372; July 1; v. 264; p. 67.

Work centering device. J. Rathern. No. 1,309,217; July 8; v. 264; p. 251.

Woven fabric. O. R. Ayres. No. 1,310,902; July 22; v. 264; p. 629.

Woven garter pad. W. Achtmeyer. No. 1,310,271; July 15; v. 264; p. 482.

Wrapping-machine. H. Y. Armstrong. No. 1,308,320; July 1; v. 264; p. 57.

Wrapping-machine. H. Y. Armstrong. No. 1,308,321; July 1; v. 264; p. 57.

Wrench. See—

Automatic wrench.	Pipe-wrench.
Monkey-wrench.	Socket-wrench.

Wrench. A. T. Anderson. No. 1,309,811; July 8; v. 264; p. 269.

Wrench. J. T. Campbell. No. 1,310,050; July 15; v. 264; p. 443.

Wrench. F. W. Drews. No. 1,311,801; July 29; v. 264; p. 830.

Wrench. J. A. Greig and W. F. Balkenol. N. 1,309,727; July 15; v. 264; p. 383.

Wrench. F. M. Kleine. No. 1,309,860; July 15; v. 264; p. 467.

Wrench. J. S. Morrison. No. 1,308,440; July 1; v. 264; p. 78.

Wrench. S. K. Sweltzer. No. 1,311,724; July 29; v. 264; p. 816.

Wrench. H. A. Welch. No. 1,310,041; July 22; v. 264; p. 582.

Wrench. C. M. Wilkerson. No. 1,311,850; July 29; v. 264; p. 839.

Wrench and piler. Combined. W. D. Arnot. No. 1,309,874; July 15; v. 264; p. 410.

Wrench-handle. E. K. Coes. No. 1,311,110; July 22; v. 264; p. 608.

Wrench-handle. E. R. Coes. No. 1,311,111; July 22; v. 264; p. 608.

Wringer. G. W. Lewis. (Reissue.) No. 14,683; July 8; v. 264; p. 326.

Wringer. H. Roemer. No. 1,308,868; July 8; v. 264; p. 186.

Writing guide and rest. Roller. D. M. Hollins. No. 1,308,355; July 1; v. 264; p. 64.

Writing instrument. Illuminated. L. F. Hart. No. 1,310,476; July 22; v. 264; p. 550.

X-ray apparatus. W. D. Coolidge. No. 1,310,061; July 15; v. 264; p. 444.

X-ray system. R. Varley. No. 1,309,494; July 8; v. 264; p. 302.

X-ray tube. T. R. Elder. No. 1,310,714; July 22; v. 264; p. 584.

Yarn. Producing intermittently-dyed. F. Longthorne. No. 1,311,131; July 22; v. 264; p. 672.

Yielding supporting and vertically-guiding apparatus. W. O. Renkin. No. 1,308,870; July 1; v. 264; p. 66.

Yoke and box. Meter. L. McNutt. No. 1,310,460; July 15; v. 264; p. 508.

Yoke. Draft. J. H. Miliken. No. 1,309,297; July 8; v. 264; p. 266.

Zither. Keyed. J. Krawczyk. No. 1,310,024; July 15; v. 264; p. 437.

ALPHABETICAL LIST OF DESIGNS.

Article of manufacture. M. Oestreich. No. 53,602; July 15; v. 264; p. 516.

Automobile-body. B. Burstein. No. 53,654; July 29; v. 264; p. 843.

Automobile body, hood, and radiator. Combined. A. C. Barley. No. 53,652; July 29; v. 264; p. 843.

Automobile-hood. C. W. McKinley. No. 53,664; July 29; v. 264; p. 845.

Automobile-lock or similar article of manufacture. Handle for an. F. E. Greene. No. 53,580; July 15; v. 264; p. 512.

Automobile-lock or similar article of manufacture. Plate for an. F. E. Greene. No. 53,582; July 15; v. 264; p. 512.

Automobile or similar article of manufacture. Curtain-fixture for an. F. E. Greene. No. 53,581; July 15; v. 264; p. 513.

Automobile or similar article of manufacture. Rim for a dome-light or a speedometer for an. F. E. Greene. No. 53,585; July 15; v. 264; p. 513.

Automobile or similar article of manufacture. Rim for a speedometer or a dome-light for an. F. E. Greene. No. 53,583; July 15; v. 264; p. 513.

Automobile or similar article of manufacture. Vase for an. F. E. Greene. No. 53,586; July 15; v. 264; p. 513.

Automobile-seat or similar article of manufacture. Handle for an. F. E. Greene. No. 53,584; July 15; v. 264; p. 513.

Automobile steering-post support. W. N. Onderdonk. No. 53,517; July 8; v. 264; p. 232.

Automobile steering-wheel. E. E. Hardy. No. 53,656; July 29; v. 264; p. 843.

Babbitt metal. Cake of. L. M. Brille and L. Lapides. No. 53,484; July 8; v. 264; p. 327.

Badge, button, or similar article. A. E. Templeman. No. 53,539; July 8; v. 264; p. 336.

Badge. Souvenir. S. A. Claggett and S. Devall. No. 53,486; July 8; v. 264; p. 327.

Bag-frame. W. T. Goldsmith. No. 53,629; July 22; v. 264; p. 676.

Bag frame, hand. L. Jacobs. Nos. 53,632-4; July 22; v. 264; p. 677.

Bag frame, hand. J. Scalabrino. Nos. 53,642-3; July 22; v. 264; p. 678.

Bag-frames, purse-frames, and similar articles. Member for. W. Turton. No. 53,647; July 22; v. 264; p. 679.

Rail. Artificial. J. W. Reynolds. No. 53,610; July 15; v. 264; p. 517.

Bank. Savings. A. Goldberg. No. 53,579; July 15; v. 264; p. 512.

Banner, flag, pennant, sign, emblem, or article of a similar nature. M. Lehr. No. 53,507; July 8; v. 264; p. 331.

Bedspread. M. Oestreich. No. 53,601; July 15; v. 264; p. 516.

Boller. A. M. Mertzsoff. No. 53,603; July 29; v. 264; p. 845.

Bottle. O. O. R. Schwidetzky. No. 53,666; July 29; v. 264; p. 845.

Bottle. Poison. F. Bastard. No. 53,614; July 15; v. 264; p. 518.

Box. W. C. Kilt. No. 53,506; July 8; v. 264; p. 331.

Box. Novelty. J. F. Hanson. No. 53,499; July 8; v. 264; p. 330.

Box. Powder. H. J. Woodward. No. 53,624; July 15; v. 264; p. 519.

Brake. N. Staafa. No. 53,618; July 15; v. 264; p. 518.

Brocade. J. H. Bunting. No. 53,485; July 8; v. 264; p. 327.

Brocade. J. H. Bunting. Nos. 53,559-60; July 15; v. 264; p. 509.

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 Stovepipe-racer. M. Jones. No. 53,504; July 8; v. 264; p. 330.
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 Floor-coverings. Prepared. Congoleum Company. No. 125,980; July 22; v. 264; p. 696.
 Floor. Wheat. Rhane Bros. & Wilson Co. No. 126,210; July 29; v. 264; p. 861.
 Food. Poultry. Hyman & Ackerman. No. 126,019; July 22; v. 264; p. 697.
 Foods. Certain named. Agustin, Nichols & Co., Inc. No. 125,893; July 8; v. 264; p. 349.
 Foods. Certain named. Thermokept Products Corporation. No. 125,920; July 8; v. 264; p. 350.
 Fuel containing charcoal as a base. Dry. Taplex Corporation. No. 126,095; July 22; v. 264; p. 699.
 Furs, dressed and dyed. B. J. Goodman. No. 125,908; July 8; v. 264; p. 349.
 Gage-glasses. Schaeffer and Rudenberg Mfg. Co. No. 126,204; July 29; v. 264; p. 861.
 Galters or spata. A. Priesmeyer Shoe Company. No. 126,061; July 22; v. 264; p. 698.
 Games. McLoughlin Brothers, Incorporated. No. 126,183; July 29; v. 264; p. 861.
 Garters and hose-supporters. American Textile Products Company. No. 125,891; July 8; v. 264; p. 349.
 Glee. Rowin & Co. No. 126,079; July 22; v. 264; p. 698.
 Hair-dressing. A. E. Sobers. No. 126,216; July 29; v. 264; p. 862.
 Hair-plugs. Samstag & Hilder Bros. No. 126,203; July 29; v. 264; p. 861.
 Hair wavers or curlers. Joseph W. Schloss Co. No. 125,915; July 8; v. 264; p. 349.
 Harness-rosettes, &c., and luggage-tags made of pyroxylia. Celluloid Company. No. 125,976; July 22; v. 264; p. 696.
 Hats, Men's. Young Brothers. Nos. 126,115-16; July 22; v. 264; p. 700.
 Headlight wire. Locomotive. Hahirshaw Electric Cable Company. No. 126,164; July 29; v. 264; p. 860.
 Hides for shoe-uppers, Tanned. Anchor Leather Company. No. 125,980; July 22; v. 264; p. 695.
 Hollow ware and tableware. Silver-plated. Middletown Silver Company. No. 126,040; July 22; v. 264; p. 698.
 Hosiers. Chest-Hour Stock Co. No. 125,977; July 22; v. 264; p. 696.
 Hosiers and gloves. Finch, Van Slyck & McConville. No. 126,002; July 22; v. 264; p. 696.
 Hosiers. Ladies. J. T. Conover. No. 125,982; July 22; v. 264; p. 696.
 Hydrogen and oxygen gas. Bartlett Oxygen Company. No. 126,134; July 29; v. 264; p. 859.
 Indigo. Society of Chemical Industry in Basle. No. 126,087; July 22; v. 264; p. 699.
 Ink in tablet form. P. L. M. Corporation. No. 126,059; July 22; v. 264; p. 698.
 Inks, type-writer ribbons, &c. E. F. Munday. No. 126,042; July 22; v. 264; p. 698.
 Insecticides and poisons for rodents and insect pests. Sleep-In-Peace Company. No. 126,085; July 22; v. 264; p. 699.
 Jam or conserve. Welch Grape Juice Company. Nos. 126,168-9; July 22; v. 264; p. 700.
 Jams or conserve. Welch Grape Juice Company. No. 125,944; July 15; v. 264; p. 531.
 Knit undershirts, undershirts, union-suits, undersuits. Sanitary Knitting Company. No. 126,075; July 22; v. 264; p. 699.
 Knitted, netted, and textile underwear. Markovitz Bros. No. 126,180; July 29; v. 264; p. 861.
 Knitting machines. Jenckes Knitting Machine Co. No. 126,171; July 29; v. 264; p. 860.
 Lard substitute. Magnolia Provision Company. No. 126,179; July 29; v. 264; p. 860.

Lathes and parts thereof. Seneca Falls Mfg. Co. No. 126,209; July 29; v. 264; p. 861.
 Leather and belting dressing. J. C. Paulson and Company. No. 126,193; July 29; v. 264; p. 861.
 Leather, Artificial. F. M. Allsopp. No. 126,118; July 29; v. 264; p. 859.
 Leather hides for shoe-uppers, Tanned. Anchor Leather Co. No. 125,892; July 8; v. 264; p. 349.
 Leather, Imitation. J. DeJond. No. 125,898; July 8; v. 264; p. 349.
 Leather, Imitation. People's Outfitting Company. No. 125,910; July 8; v. 264; p. 349.
 Liquid polish for furniture and all finished surfaces. No. 125,916; July 8; v. 264; p. 349.
 Lubricants. Keystone Lubricating Company. No. 126,173; July 29; v. 264; p. 860.
 Macaroni. Buckley Macaroni Company. No. 125,972; July 22; v. 264; p. 695.
 Machinery and tools and parts thereof. Baush Machine Tool Company. No. 125,960; July 22; v. 264; p. 695.
 Magazine, Weekly. Gulf Publishing Company. No. 126,009; July 22; v. 264; p. 697.
 Measuring and scientific appliances. Norman A. Lane. No. 126,047; July 22; v. 264; p. 698.
 Medical jelly for the nose. M. F. Schlesinger. No. 126,076; July 22; v. 264; p. 699.
 Medicinal preparation. J. H. Tano. No. 126,094; July 22; v. 264; p. 699.
 Medicinal preparation for colds, catarrh, &c. R. W. Clothier. No. 125,978; July 22; v. 264; p. 696.
 Medicinal preparation for influenza and pneumonia. H. V. Smith & Company. No. 126,215; July 29; v. 264; p. 862.
 Medicinal preparation for typhoid fever, malaria, &c. A. H. Davis. No. 126,144; July 29; v. 264; p. 859.
 Medicine for corns, bunions, and calluses. H. L. S. Toomer. No. 126,098; July 22; v. 264; p. 699.
 Medicine used as a blood-purifier. W. H. Meadows. No. 125,937; July 15; v. 264; p. 531.
 Metal, Cast-iron-welding. Central Steel & Wire Company. No. 126,138; July 29; v. 264; p. 859.
 Metals and metal castings and forgings, Certain named. American Sheet & Tin Plate Company. No. 126,125; July 29; v. 264; p. 859.
 Methyl salicylic acid for treatment of sores, &c. Product of. Lloyd Brothers. No. 126,032; July 22; v. 264; p. 697.
 Milk, Decalcified. Dry Milk Company. No. 125,987; July 22; v. 264; p. 696.
 Milk, Decalcified. Dry Milk Company. Nos. 126,147-8; July 29; v. 264; p. 860.
 Motors, Musical-Instrument. Otto Heineken Photograph Supply Co. No. 126,055; July 22; v. 264; p. 692.
 Needles, Crochet. The Boye Needle Company. No. 125,895; July 8; v. 264; p. 349.
 Newspapers. Yale Daily News. No. 126,114; July 22; v. 264; p. 700.
 Nipples, Nursing. Harria and Bernta Co. No. 126,165; July 29; v. 264; p. 860.
 Office equipment and furniture. Steel. Berger Manufacturing Company. No. 126,136; July 29; v. 264; p. 859.
 Oil, Edible cotton-seed. Littauer Oil Company. No. 126,031; July 22; v. 264; p. 697.
 Oil for lighting, heating, and power. Standard Oil Company of New York. No. 126,091; July 22; v. 264; p. 699.
 Oil for lubricating yarn in the process of manufacture. Marden, Orth & Hastings Corporation. No. 126,036; July 22; v. 264; p. 697.
 Oil, mayonaisse dressing, olives, &c. Cotton-seed. J. E. Shoemaker Co. No. 126,080; July 22; v. 264; p. 699.
 Oil, Olive. A. Russo. No. 126,072; July 22; v. 264; p. 699.
 Oil, White mineral. Standard Oil Company. No. 126,217; July 29; v. 264; p. 862.
 Oils and greases, Lubricating. W. R. Bleeker. No. 125,905; July 22; v. 264; p. 695.
 Oils and greases, Lubricating. Flake Brothers Refining Co. No. 126,136; July 29; v. 264; p. 860.
 Oils for illuminating, burning, power, fuel, &c. Certain named. Sinclair Refining Company. No. 126,083; July 22; v. 264; p. 699.
 Ointment. J. E. Naregan. No. 126,043; July 22; v. 264; p. 698.
 Ointment. W. H. Whitmore. No. 126,111; July 22; v. 264; p. 700.
 Ointment for rheumatism, bronchitis, &c. F. L. Selb. No. 126,208; July 29; v. 264; p. 861.
 Oranges, Fresh. C. D. Boydeton. No. 125,931-332; July 15; v. 264; p. 531.
 Oranges, Fresh. Redlands Mutual Orange Company. No. 125,940; July 15; v. 264; p. 531.
 Overalls. Stern & Biemer. No. 126,002; July 22; v. 264; p. 699.
 Packing. Beklam Packing & Rubber Company. No. 126,128; July 29; v. 264; p. 859.
 Paints and varnishes. R. Raymond. No. 126,197; July 29; v. 264; p. 861.
 Paints, Japan, &c. D. Rosensohn. No. 126,201; July 29; v. 264; p. 861.
 Paper and envelope, Printing and writing. National Paperette Company. No. 125,908; July 8; v. 264; p. 349.

Paper and stationery, Certain named. Duboc Paper Company. No. 125,988; July 22; v. 264; p. 698.
 Paper and stationery, Certain named. W. R. Templeton. No. 125,919; July 8; v. 264; p. 350.
 Paper bags. Standard Paper Company. No. 126,220; July 29; v. 264; p. 862.
 Paper, cardboard, &c. Moore Paper Company. No. 126,041; July 22; v. 264; p. 698.
 Paper for container-liner. Bogalusa Paper Company. No. 125,894; July 8; v. 264; p. 349.
 Paper or fiber cans, boxes, and cartons. American Can Company. No. 126,120; July 29; v. 264; p. 859.
 Paper, Printing. S. D. Warren Company. Nos. 125,921-2; July 8; v. 264; p. 350.
 Paper, Printing. S. D. Warren Company. No. 126,105; July 22; v. 264; p. 698.
 Paper, Toilet. Oswego River Paper Milla. No. 125,909; July 8; v. 264; p. 349.
 Paper with a silver-like coating. Nashua Gummed and Coated Paper Company. No. 125,907; July 8; v. 264; p. 349.
 Paper, Writing. Byron Weston Co. No. 125,896; July 8; v. 264; p. 349.
 Paper, Writing. United Drug Company. No. 126,100; July 22; v. 264; p. 699.
 Pencils, chalk, crayons, Lead and drawing. American Lead Pencil Company. No. 125,890; July 8; v. 264; p. 349.
 Pencils, Lead. American Lead Pencil Company. No. 125,889; July 8; v. 264; p. 349.
 Pens, Steel. G. W. Hughes. No. 125,904; July 8; v. 264; p. 349.
 Perfumery, toilet water, sachet-powder. Baldwin Perfumery Company, The. No. 125,925; July 15; v. 264; p. 531.
 Periodical, Monthly. General Appraisal Company. No. 126,006; July 22; v. 264; p. 697.
 Pharmaceutical preparation. Nelson, Baker & Co. No. 125,923; July 8; v. 264; p. 350.
 Pharmaceutical preparations for toilet purposes, Certain named. Enterprise Chemical Co. No. 126,152; July 29; v. 264; p. 860.
 Pharmaceutical product. Society of Chemical Industry in Basle. No. 126,088; July 22; v. 264; p. 699.
 Photographs and pictures. Eastland Studios. No. 125,990; July 22; v. 264; p. 696.
 Pickles, apple-butter, mince-meat, etc. Franklin Mac Veagh and Company. No. 125,934; July 15; v. 264; p. 531.
 Pills, Laxative. T. Rosa. No. 126,068; July 22; v. 264; p. 698.
 Pins. R. C. Dick. No. 125,899; July 8; v. 264; p. 349.
 Plasters, Medicinal. Johnson & Johnson. No. 126,024; July 22; v. 264; p. 697.
 Plugs, Electric. C. E. Treat. No. 126,099; July 22; v. 264; p. 699.
 Plushes. L. Hoesel & Co. No. 126,067; July 22; v. 264; p. 698.
 Plushes. L. Hoesel & Co. No. 126,200; July 29; v. 264; p. 861.
 Powder, Face. A. Bourjois & Co. No. 125,930; July 15; v. 264; p. 531.
 Powder, Face. Julius Schmid Incorporated. Nos. 126,077-8; July 22; v. 264; p. 699.
 Powder, Talcum. Agra Company, The. No. 125,924; July 15; v. 264; p. 531.
 Powder, Talcum. Associated Pharmacists. No. 125,955; July 22; v. 264; p. 695.
 Preparation for sore throat, tonsillitis, &c. F. P. Saleme. No. 126,073; July 22; v. 264; p. 699.
 Preparation for the alleviation of consumption, &c. T. Kotlar. No. 126,029; July 22; v. 264; p. 697.
 Preparation for the relief of excessive perspiration. Youth Craft Co. No. 126,117; July 22; v. 264; p. 700.
 Preparation for the treatment of indigestion. C. Herrog. No. 126,012; July 22; v. 264; p. 697.
 Preparation for the treatment of pyorrhea. H. G. Fitzgerald. No. 126,157; July 29; v. 264; p. 860.
 Preparation for treatment of rheumatism and kidney disorders. Finke and Johnson. No. 126,004; July 22; v. 264; p. 696.
 Preparation for treatment of tan, sunburn, freckles, etc. W. W. Reitenman. No. 125,929; July 15; v. 264; p. 531.
 Preparations for dressing the hair and cleansing the scalp. E. Lewis. No. 126,030; July 22; v. 264; p. 697.
 Preserving and canning fruits, &c. Vessels for. O. M. Fagley. No. 126,153; July 29; v. 264; p. 860.
 Publication, Monthly. Weinstein-Nichols Co. No. 126,107; July 22; v. 264; p. 700.
 Publications. Alexander Hamilton Institute. No. 125,948; July 22; v. 264; p. 695.
 Publications, Monthly. Armstrong Cork Company. No. 125,983; July 22; v. 264; p. 695.
 Pyroxylia, Certain named articles made of. Celluloid Company. Nos. 126,135-7; July 29; v. 264; p. 859.
 Railway-tie plates. H. H. Hart. No. 126,166; July 29; v. 264; p. 860.
 Razors, Safety. A. H. Bryant. No. 125,971; July 22; v. 264; p. 695.
 Remedy for the treatment of freckles, tan, &c. J. W. Douthitt. No. 125,986; July 22; v. 264; p. 696.

Ribbons. Johnson, Cowdin & Co. No. 126,023; July 22; v. 264; p. 697.
 Rope. Hooven & Allison Company. No. 126,168; July 29; v. 264; p. 860.
 Rosettes, &c., for harness and luggage-tags all made of pyroxylia. Celluloid Company. Nos. 125,974-5; July 22; v. 264; p. 696.
 Rouge. A. Bourjois & Co. No. 126,133; July 29; v. 264; p. 859.
 Rubber belting. Boston Woven Hose & Rubber Co. No. 126,152; July 29; v. 264; p. 859.
 Rubber heels or lifts. Machine Auto Tire Company. No. 126,063; July 22; v. 264; p. 698.
 Rugs, Grass. Waite Grass Carpet Company. No. 126,225; July 29; v. 264; p. 862.
 Rugs, Woven. Olson Rug Company. No. 126,051; July 22; v. 264; p. 698.
 Salve for coughs, croup, &c. U. G. Mason. No. 126,188; July 29; v. 264; p. 861.
 Shingles. Shingle Agency of British Columbia. No. 126,212; July 29; v. 264; p. 862.
 Shingles, Mineral-surface asphalt. Richards & Co. No. 126,198; July 29; v. 264; p. 861.
 Shirts, nightgowns, pajamas, Night. E. Rosenfeld & Company. No. 126,069; July 22; v. 264; p. 698.
 Shirts, pajamas, underwear, collars, and cuffs, Men's. Phillips-Jones Company. No. 126,057; July 22; v. 264; p. 698.
 Shortening. Hodgson Oil Refining Company. No. 126,013; July 22; v. 264; p. 697.
 Silk piece goods. Empire Silk Company. Nos. 125,991-126,000; July 22; v. 264; p. 696.
 Skinning apparatus. W. Pfederkorn. No. 126,194; July 29; v. 264; p. 861.
 Skirts, Dress. A. Huff. No. 125,913; July 8; v. 264; p. 349.
 Soap and packet fasteners. Federal Snap Fastener Corporation. No. 126,164; July 29; v. 264; p. 860.
 Soaps, Foot. Thomas Gill Soap Company. No. 126,103; July 29; v. 264; p. 860.
 Soles and heels, Composition. Federal Rubber Company. No. 125,001; July 22; v. 264; p. 696.
 Soot removing or destroying compound. V. Wright. No. 126,227; July 29; v. 264; p. 862.
 Spark-plug-riding indicators. Detroit Accessories Corporation. No. 126,146; July 29; v. 264; p. 860.
 Stamps or coupons, Trading. A. Wisa. No. 126,113; July 22; v. 264; p. 700.
 Stationery supplies. Frank A. Weeks Mfg. Co. No. 126,106; July 22; v. 264; p. 700.
 Stay-beds, Flexible. American Locomotive Company. No. 126,121; July 29; v. 264; p. 859.
 Steel, Black and galvanized. Berger Manufacturing Company. No. 125,903; July 22; v. 264; p. 695.
 Steel, Black and galvanized. Berger Manufacturing Company. No. 126,120; July 29; v. 264; p. 859.
 Steel, Tool. Becker Steel Co. of America. No. 126,127; July 29; v. 264; p. 859.
 Suspenders. Berkowitz & Label. Nos. 125,887-8; July 1; v. 264; p. 153.
 Sweaters. A. Adie. No. 126,947; July 22; v. 264; p. 695.
 Tabulating-machines. Denominator Adding Machine Company. No. 126,145; July 29; v. 264; p. 859.
 Tag holders, Removable price and article. Sherer-Gillett Co. No. 126,211; July 29; v. 264; p. 861.
 Talking-machines, phonographs, &c. Sonora Phonograph Sales Company. No. 126,089; July 22; v. 264; p. 699.
 Thread, Cotton. The Clark Thread Co. No. 126,897; July 8; v. 264; p. 349.
 Tickets, Clothing. Keller Printing Company. No. 126,905; July 8; v. 264; p. 349.
 Tire patch kit. Automobile. Schliser Brothers. No. 126,207; July 29; v. 264; p. 861.
 Tire pumps, Automobile. Sidel Rattner Manufacturing Company. No. 126,081; July 22; v. 264; p. 699.
 Tires, Inner tubes for pneumatic. Stearns Tire & Tube Company. No. 125,918; July 8; v. 264; p. 350.
 Tires, Pneumatic. Perfection Tire & Rubber Co. No. 125,911; July 8; v. 264; p. 349.
 Tobacco, Leaf. Luckett-Wake Tobacco Co. No. 126,178; July 29; v. 264; p. 860.
 Tomato pulp. Salsina Canning & Packing Co. No. 126,074; July 22; v. 264; p. 699.
 Tonic. J. W. Kidd. No. 126,174; July 29; v. 264; p. 860.
 Tonic and conditioner for dogs only. Aralon Farms Company. No. 125,956; July 22; v. 264; p. 695.
 Tonic, Medicinal. Wm. H. Warner & Company. No. 126,104; July 22; v. 264; p. 700.
 Tonic or medicinal beverage for colds, &c. D. Shusta. No. 126,213; July 29; v. 264; p. 862.
 Tonic to alleviate neurasthenia, &c. Italian Drugs Importing Co. No. 126,022; July 22; v. 264; p. 697.
 Tumbling and towels. Cotton crash. Boot Milla. No. 126,184; July 29; v. 264; p. 861.
 Toy dolls. J. L. Friedman. No. 126,159; July 29; v. 264; p. 860.
 Toy soldiers and pistols and games played by means of same. Milton Bradley Co. No. 126,159; July 29; v. 264; p. 861.
 Toy vehicles. F. E. Maxwell. No. 126,182; July 29; v. 264; p. 861.
 Toys, Wooden. T. R. Thompson. No. 126,097; July 22; v. 264; p. 699.

Trucks and trailers, Motor-. Stability Motors Company. No. 125,917; July 8; v. 264; p. 349.
 Trunks. National Veneer Products Company. No. 126,044; July 22; v. 264; p. 698.
 Underwear. Francis T. Simmons & Co. No. 126,082; July 22; v. 264; p. 699.
 Underwear and aprons, Ladies' and children's. Oshkosh Muxlin Underwear Co. No. 126,062; July 22; v. 264; p. 698.
 Underwear, dresses, &c. Children's. H. Rock. No. 126,060; July 22; v. 264; p. 698.
 Underwear for men. Otis Co. No. 126,053; July 22; v. 264; p. 698.
 Underwear, Linen-mesh. Ideal Linen Mesh Company. No. 126,021; July 22; v. 264; p. 697.
 Union-suits. Athletic. Apparel Manufacturing Company. No. 125,952; July 22; v. 264; p. 695.
 Vacuum-tube discharge devices. General Electric Company. No. 126,102; July 29; v. 264; p. 860.
 Valves for general use, Metal air-. American Pin Company. No. 126,123; July 29; v. 264; p. 859.
 Varnish stains and enamels, varnishes, paint. Valentine & Company. No. 126,224; July 29; v. 264; p. 862.
 Varnishes and sanding-fillers. Poughkeepsie Paint Co. No. 126,060; July 22; v. 264; p. 698.
 Wadding for treatment of rheumatism, Medicinal. Pharmaceutische en Chemische Handelsvereniging "Rotterdam." No. 125,939; July 15; v. 264; p. 631.

Wafer, Laxative. Piedmont Chemical Works. No. 126,058; July 22; v. 264; p. 698.
 Wagon, Coaster-. Helder Manufacturing Company. No. 126,011; July 22; v. 264; p. 697.
 Waist, Ladies'. Ace Waist Co. No. 125,946; July 22; v. 264; p. 695.
 Watch-movements. National Watch Company. No. 126,045; July 22; v. 264; p. 695.
 Watches and watch-movements. I. Ollendorff Company. No. 126,050; July 22; v. 264; p. 698.
 Waterproof cement for use on leather, cloth, &c. Van Schasck Bros. Chemical Works. No. 126,103; July 22; v. 264; p. 700.
 Waterproofed fabrics for roofing, flooring, &c. Standard Patent Company. Nos. 126,218-19; July 29; v. 264; p. 862.
 Wireless ploral receptacles, cluster-bodies, &c. Benjamin Electric Manufacturing Company. No. 125,962; July 22; v. 264; p. 695.
 Wood, Encysted. R. A. Marr. No. 126,038; July 22; v. 264; p. 697.
 Woolen piece goods. Forstmann & Hoffmann Co. No. 126,158; July 29; v. 264; p. 860.
 Woolen piece goods. Holden-Leonard Company. Nos. 126,014-16; July 22; v. 264; p. 697.
 Woolen piece goods. J. Ross. No. 126,071; July 22; v. 264; p. 699.

ALPHABETICAL LIST OF LABELS.

"A Pippin of a Drink." (For Pure Apple-Juice.) Virginia Fruit Juice Company, Inc. No. 21,347; July 1; v. 264; p. 155.
 "Auerbach Finest Lemon Drops." (For Candy.) D. Auerbach & Sons. No. 21,292; July 1; v. 264; p. 154.
 "Baker's Foot Ease." (For Foot-Powder.) J. H. Baker. No. 21,293; July 1; v. 264; p. 154.
 "Barbour Grooved Endless Weltink." (For Weltink.) Brockton Road Company. No. 21,300; July 1; v. 264; p. 154.
 "Bell's Extract of Spices." (For Extract of Spices.) C. A. Bell. No. 21,296; July 1; v. 264; p. 154.
 "Bell's Lung Balm." (For Lung-Balm.) C. A. Bell. No. 21,297; July 1; v. 264; p. 154.
 "Bell's Sarsaparilla." (For Sarsaparilla.) C. A. Bell. No. 21,295; July 1; v. 264; p. 154.
 "Best Everyway Milk." (For Condensed Milk.) Well Color and Chemical Company & Well and Company. No. 21,349; July 1; v. 264; p. 155.
 "Betsy Ross Candies." (For Candy.) Betsy Ross Candy Shops. No. 21,298; July 1; v. 264; p. 154.
 "Bone Dry Brand." (For Weatherproof Clothing.) J. M. Pickrell. No. 21,337; July 1; v. 264; p. 155.
 "Broncho The Drink With a Kick." (For a Non-Alcoholic Beverage.) Empire Bottling Works. No. 21,357; July 8; v. 264; p. 351.
 "Buck-O." (For a Non-Intoxicating Cereal Beverage.) Lion Brewing Company. No. 21,321; July 1; v. 264; p. 155.
 "Cactus Brand Cantaloupes." (For Cantaloupes.) Crutchfield & Woolfolk. No. 21,304; July 1; v. 264; p. 154.
 "Caroleus." (For a Compound of Refined Nut-Oils and Evaporated Skimmed Milk.) T. L. Carroll. No. 21,353; July 8; v. 264; p. 351.
 "Champloo." (For a Hair-Tonic.) Wm. H. Dechant. No. 21,308; July 1; v. 264; p. 154.
 "Chateau." (For Soft Drinks.) Chateau Bottling Co. No. 21,301; July 1; v. 264; p. 154.
 "Chocolate Supérieur." (For Chocolate.) Pennsylvania Chocolate Company. No. 21,335; July 1; v. 264; p. 155.
 "Comet." (For Canned Sardines.) F. E. Booth Co. No. 21,299; July 1; v. 264; p. 154.
 "Cough Drop Life Savers, The Candy Mint With The Hole, a Dainty Confection." (For Medicinal Candies.) Mint Products Company, Inc. No. 21,327; July 1; v. 264; p. 155.
 "De Croes Hair Stimulant and Dandruff Remedy." (For a Hair-Tonic.) C. E. and B. M. De Croes. No. 21,307; July 1; v. 264; p. 154.
 "Doriana." (For Cigars.) H. Mülla. No. 21,324; July 1; v. 264; p. 155.
 "Dr. Cannard's Futcellet Foot Lotion." (For a Foot-Lotion.) B. Cannard. No. 21,352; July 8; v. 264; p. 351.
 "Egg Cream." (For Egg Substitute.) The Food Products Co. No. 21,310; July 1; v. 264; p. 154.
 "Fashionable, Royal Worcester Corsets, Graceful." (For Corsets.) Royal Worcester Corset Co. No. 21,341; July 1; v. 264; p. 155.
 "Glen Ross Brand." (For Orange Marmalade.) North Ontario Packing Co. No. 21,334; July 1; v. 264; p. 155.
 "Gold Beam." (For Canned Tomatoes.) Moneta Canning Company. No. 21,360; July 8; v. 264; p. 351.

"Gold Medal." (For Boots and Shoes.) Dorothy Dodd Shoe Company. No. 21,356; July 8; v. 264; p. 351.
 "Guernsey Brand Oleomargarine." (For Oleomargarine.) Narragansett Dairy Co. Ltd. No. 21,331; July 1; v. 264; p. 155.
 "Guess." (For a Soft Drink.) Guess Company. No. 21,314; July 1; v. 264; p. 154.
 "Harvard Bronchial Syrup." (For Bronchial Syrup.) C. A. Bell. No. 21,294; July 1; v. 264; p. 154.
 "Holly." (For Balm.) C. G. Bonner. No. 21,351; July 8; v. 264; p. 351.
 "Indian River Fruit, Nevins Merritt's Island Brand." (For Fruits.) T. F. Nevins. No. 21,333; July 1; v. 264; p. 155.
 "It Weave and Weave." (For Hosiery.) Kachel-Lenhart Company. No. 21,316; July 1; v. 264; p. 154.
 "Its Quality." (For Bread.) P. J. Stern. No. 21,344; July 1; v. 264; p. 155.
 "Koop's Lightning." (For Hair-Renewer.) F. Koop. No. 21,318; July 1; v. 264; p. 154.
 "Kosine Hair Tonic." (For a Hair-Tonic Preparation.) Rieder & Freudenberger. No. 21,365; July 8; v. 264; p. 351.
 "L'Aquila Alpina Brand." (For Semolina Macaroni.) Cumberland Macaroni Mfg Co. No. 21,303; July 1; v. 264; p. 154.
 "Lace Design." (For Boxes Containing Candy.) Milwaukee Paper Box Company. No. 21,325; July 1; v. 264; p. 155.
 "Lev-I-Tone." (For Eye-Lotion.) M. L. Levitt. No. 21,320; July 1; v. 264; p. 154.
 "Liberty Bluing." (For Bluing.) J. F. Czaigowski. No. 21,305; July 1; v. 264; p. 154.
 "M N Peanut Fluff." (For Candy Confection.) M. N. Nello. No. 21,332; July 1; v. 264; p. 155.
 "Mint-U-Lip." (For Syrup.) Celro-Kola Co. No. 21,354; July 8; v. 264; p. 351.
 "Moco Monkey Grip." (For Patches for Automobile-Tires.) Moco Laboratories Inc. No. 21,328; July 1; v. 264; p. 155.
 "Moer-Lo." (For a Non-Intoxicating Cereal Beverage.) The Christian Moerlein Brewing Company. No. 21,302; July 1; v. 264; p. 154.
 "Natural Odor Carnation." (For Toilet Soap.) Armour and Company. No. 21,286; July 1; v. 264; p. 154.
 "Natural Odor Heliotrope." (For Toilet Soap.) Armour and Company. No. 21,283; July 1; v. 264; p. 154.
 "Natural Odor Lilac." (For Toilet Soap.) Armour and Company. No. 21,288; July 1; v. 264; p. 154.
 "Natural Odor Rose." (For Toilet Soap.) Armour and Company. No. 21,285; July 1; v. 264; p. 154.
 "Natural Odor Sandalwood." (For Toilet Soap.) Armour and Company. No. 21,282; July 1; v. 264; p. 154.
 "Natural Odor Violet." (For Violet Soap.) Armour and Company. No. 21,290; July 1; v. 264; p. 154.
 "Neo." (For Nasal Jelly.) M. Rohlin. No. 21,339; July 1; v. 264; p. 155.
 "No Protest." (For Cigars.) V. Levor. No. 21,358; July 8; v. 264; p. 351.
 "Norwegian." (For Canned Sardines.) Nielsen & Kittle Canulog Co. Ltd. No. 21,361; July 8; v. 264; p. 351.
 "Nut-Butter Brand Nut Margarine." (For Margarine.) Narragansett Dairy Co. Ltd. No. 21,330; July 1; v. 264; p. 155.

"Old Tailor Bourbon." (For a Non-Alcoholic Distilled Beverage.) M. Rohlin. No. 21,342; July 1; v. 264; p. 155.
 "Over-The-Top." (For Coffee.) El Reno Wholesale Grocery Co. No. 21,309; July 1; v. 264; p. 154.
 "Pacific." (For Canned Fish-Balls.) Stuart Fish Products Co., Inc. No. 21,345; July 1; v. 264; p. 155.
 "Par." (For Cigarettes.) W. B. Glenn. No. 21,313; July 1; v. 264; p. 154.
 "Pasco." (For Canned Pimientos.) N. T. Keefe. No. 21,317; July 1; v. 264; p. 154.
 "Peacock Border." (For Candy.) Milwaukee Paper Box Company. No. 21,320; July 1; v. 264; p. 155.
 "Pep." (For a Non-Alcoholic Beverage.) J. W. H. Randall. No. 21,363; July 8; v. 264; p. 351.
 "Perfektone." (For Talking-Machines.) The Perfektone Corporation. No. 21,336; July 1; v. 264; p. 155.
 "Permanite." (For Glazing Compounds.) The Garland Co. No. 21,312; July 1; v. 264; p. 154.
 "Pig-Me." (For Toy Furniture.) Wallie Dorr Company. No. 21,348; July 1; v. 264; p. 155.
 "Polly." (For Canned Tomatoes with Purée from Trimings.) Moneta Canning Company. No. 21,359; July 8; v. 264; p. 351.
 "Poppy Brand." (For Fresh Asparagus.) Jones & Pettigrew. No. 21,315; July 1; v. 264; p. 154.
 "President." (For Oranges.) San Joaquin Fruit Co. No. 21,368; July 8; v. 264; p. 351.
 "Railite-Stone Blocks." (For Toy Building-Blocks.) Ralo Toy Company. No. 21,338; July 1; v. 264; p. 155.
 "Redondo." (For Canned Sardines.) Redondo Packing Co. No. 21,364; July 8; v. 264; p. 351.
 "Rob Roy." (For Coffee.) The Donald Company. No. 21,355; July 8; v. 264; p. 351.
 "Roadrun." (For Bluing.) The Russell Jobbers' Mill. No. 21,367; July 8; v. 264; p. 351.
 "Sampeck Triple-Service Suit." (For Men's, Young Men's, Boys', Children's, and Juveniles' Outer Suits.) Samuel W. Peck & Co. No. 21,362; July 8; v. 264; p. 351.
 "Senator." (For Oranges.) San Joaquin Fruit Co. No. 21,369; July 8; v. 264; p. 351.
 "Serviceable, Adjusto Corsets, Comfortable." (For Corsets.) Royal Worcester Corset Co. No. 21,340; July 1; v. 264; p. 155.
 "Sterile Surgical Sutures." (For Sterile Surgical Sutures and Ligatures.) Davis & Geck, Inc. No. 21,306; July 1; v. 264; p. 154.

"Sulfern Soap." (For Soap.) The National Sulfern Soap Co. No. 21,329; July 1; v. 264; p. 155.
 "Sylvan Carnation Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,280; July 1; v. 264; p. 154.
 "Sylvan Heliotrope Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,281; July 1; v. 264; p. 154.
 "Sylvan Lilac Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,287; July 1; v. 264; p. 154.
 "Sylvan Rose Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,284; July 1; v. 264; p. 154.
 "Sylvan Sandalwood Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,287; July 1; v. 264; p. 154.
 "Sylvan Violet Toilet Soap." (For Toilet Soap.) Armour and Company. No. 21,291; July 1; v. 264; p. 154.
 "Tan-Sav." (For Preparations for Relief of Colds and Catarrhs.) J. Saad. No. 21,343; July 1; v. 264; p. 155.
 "Terris." (For White Dye Bleach for Panamas and Straw Hats.) J. Terris. No. 21,846; July 1; v. 264; p. 155.
 "The Pretty Village." (For Toy Villages.) McLoughlin Bros. Incorporated. No. 21,323; July 1; v. 264; p. 155.
 "Tip Top." (For Ginger-Beer.) J. S. Roth. No. 21,866; July 8; v. 264; p. 351.
 "Tru-Blu." (For Bluing.) Lyons Chemical Works. No. 21,822; July 1; v. 264; p. 155.
 "Twin Bottles." (For Canned Tomatoes.) La Sierra Heights Canning Company. No. 21,819; July 1; v. 264; p. 154.
 "Usco Kold-Pak." (For Jar-Rubbers.) United States Rubber Company. No. 21,370; July 8; v. 264; p. 351.
 "Victory Boys' Wash Suits." (For Boys' Wash-Suits.) J. J. Freedman. No. 21,311; July 1; v. 264; p. 154.
 "Wilson Sun-Beam Auto Polish." (For a Liquid to Polish Bodies of Automobiles, Musical Instruments, Furniture, and Fixtures.) C. A. Wilson. No. 21,350; July 1; v. 264; p. 155.
 "Yosemite." (For Canned Peaches.) William Cluff Co. No. 21,371; July 8; v. 264; p. 351.

ALPHABETICAL LIST OF PRINTS.

"A. D. S. Reef Iron and Wine." (For Reef, Iron, and Wine.) American Druggists Syndicate. Nos. 5,111-13; July 1; v. 264; p. 156.
 "A. D. S. Cold and Grippe Tablets." (For Cold and Grippe Tablets.) American Druggists Syndicate. Nos. 5,108-10; July 1; v. 264; p. 156.
 "Bunte The Quality Cocoa." (For Cocoa.) Bunte Brothers. No. 5,125; July 8; v. 264; p. 351.
 "Cleanser and Colors Instantly." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,122; July 1; v. 264; p. 156.
 "Don't Buy New Corsets." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,121; July 1; v. 264; p. 156.
 "Dye It the Easiest Way." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,123; July 1; v. 264; p. 156.
 "Fashionable Colors Instantly." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,120; July 1; v. 264; p. 156.
 "Get Wise, Dad, Wear R. V. D." (For Athletic Underwear.) The B. V. D. Company. No. 5,126; July 8; v. 264; p. 351.
 "Have You Max-Well Known Round Stove With a Flue?" (For Gaseous, Liquid, and Solid Fuel Burning Stoves and Heaters, Not Electrical.) H. McKinnic. No. 5,116; July 1; v. 264; p. 156.
 "I'll say it is!" (For Smoking-Tobacco.) R. J. Reynolds. No. 5,127; July 8; v. 264; p. 351.
 "Its Quality." (For Bread.) P. J. Stern. No. 5,118; July 1; v. 264; p. 156.
 "Mother Goose Brooms." (For Brooms.) M. G. Seville Sons Company. No. 5,133; July 8; v. 264; p. 351.

"New Colors for Your Waist." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,119; July 1; v. 264; p. 156.
 "P. A. In such a scuttle full of sunshine!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,128; July 8; v. 264; p. 351.
 "Pacific Coast Stacks." (For Stack-Paints.) California Paint Company. No. 5,114; July 1; v. 264; p. 156.
 "Perfektone." (For Talking-Machines.) The Perfektone Corporation. No. 5,117; July 1; v. 264; p. 156.
 "Saving, Service, Satisfaction." (For Automobile-Tires.) C. L. Brockway. No. 5,124; July 8; v. 264; p. 351.
 "Scrub up your smoke decks and cut for a new pipe deal!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,130; July 8; v. 264; p. 351.
 "Sen-Sen makes my cigar taste like a 25¢ Perfecto!" (For Sen-Sen Cigarettes.) American Cible Company. No. 5,107; July 1; v. 264; p. 156.
 "Talk about indoor and outdoor sports." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,132; July 8; v. 264; p. 351.
 "Tell it to your old jimmy pipe!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,129; July 8; v. 264; p. 351.
 "The Pickwick Service Stores." (For Self-Service Stores.) C. G. Johnson. No. 5,115; July 1; v. 264; p. 156.
 "Thomas Awning Company." (For Awnings.) C. Thomas. No. 5,134; July 8; v. 264; p. 351.
 "When you nail the grand idea." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 5,131; July 8; v. 264; p. 351.

CLASSIFICATION OF PATENTS

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		1,309,955	1,308,536	1,308,537	
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		1,309,980	1,308,586	1,308,587	
		1,309,981	1,308,588	1,308,589	
		1,309,982	1,308,590	1,308,591	
		1,309,983	1,308,592	1,308,593	
		1,309,984	1,308,594	1,308,595	
		1,309,985	1,308,596	1,308,597	
		1,309,986	1,308,598	1,308,599	
		1,309,987	1,308,600	1,308,601	
		1,309,988	1,308,602	1,308,603	
		1,309,989	1,308,604	1,308,605	
		1,309,990	1,308,606	1,308,607	
		1,309,991	1,308,608	1,308,609	
		1,309,992	1,308,610	1,308,611	
		1,309,993	1,308,612	1,308,613	
		1,309,994	1,308,614	1,308,615	
		1,309,995	1,308,616	1,308,617	
		1,309,996	1,308,618	1,308,619	
		1,309,997	1,308,620	1,308,621	
		1,309,998	1,308,622	1,308,623	
		1,309,999	1,308,624	1,308,625	
		1,309,000	1,308,626	1,308,627	
		1,309,001	1,308,628	1,308,629	
		1,309,002	1,308,630	1,308,631	
		1,309,003	1,308,632	1,308,633	
		1,309,004	1,308,634	1,308,635	
		1,309,005	1,308,636	1,308,637	
		1,309,006	1,308,638	1,308,639	
		1,309,007	1,308,640	1,308,641	
		1,309,008	1,308,642	1,308,643	
		1,309,009	1,308,644	1,308,645	

30- 12: 1,311,428	40- 11: 1,310,202	46- 21: 1,311,810	51- 13: 1,308,610	58- 91: 1,308,090	66- 22: 1,311,099
14: 1,310,428	20: 1,308,771	22: 1,309,547	96: 1,308,762	96: 1,308,210	96: 1,308,134
14: 1,309,325	27: 1,308,792	27: 1,310,177	10: 1,308,191	109: 1,311,502	21: 1,300,545
14: 1,311,616	27: 1,309,319	27: 1,308,568	17: 1,310,744	115: 1,311,501	21: 1,308,215
30: 1,309,746	31: 1,308,698	35: 1,308,254	127: 1,310,323	127: 1,310,323	30: 1,308,334
1,309,951	1,310,689	1,309,240	140: 1,310,038	140: 1,310,038	36: 1,311,599
31- 22: 1,309,525	43: 1,310,975	35: 1,311,337	50- 80: 1,009,657	63: 1,310,991	63: 1,310,991
77: 1,308,047	62: 1,310,361	37: 1,308,183	60- 13: 1,308,373	72: 1,309,089	1,310,540
98: 1,308,051	63: 1,308,200	37: 1,311,171	1,309,549	1,311,823	1,310,739
1,308,052	1,309,222	37: 1,311,580	1,310,682	1,310,545	1,310,545
1,308,053	1,309,226	38: 1,308,854	1,310,858	1,311,324	1,311,324
1,309,457	1,311,634	40: 1,308,405	1,310,858	1,311,324	1,311,324
102: 1,308,082	61: 1,308,323	1,308,432	1,310,858	1,311,324	1,311,324
77: 1,308,047	67: 1,308,198	1,309,191	1,310,858	1,311,324	1,311,324
1,310,237	1,310,654	1,309,551	1,310,858	1,311,324	1,311,324
1,310,654	1,311,755	1,309,553	1,310,858	1,311,324	1,311,324
10: 1,310,014	1,311,755	1,309,553	1,310,858	1,311,324	1,311,324
19: 1,311,456	76: 1,308,658	1,310,205	1,310,858	1,311,324	1,311,324
88: 1,311,423	77: 1,311,289	1,310,205	1,310,858	1,311,324	1,311,324
143: 1,311,349	86: 1,308,914	1,310,205	1,310,858	1,311,324	1,311,324
164: 1,311,348	87: 1,310,279	1,310,205	1,310,858	1,311,324	1,311,324
173: 1,311,662	113: 1,311,056	1,310,205	1,310,858	1,311,324	1,311,324
1: 1,311,641	113: 1,311,101	1,310,205	1,310,858	1,311,324	1,311,324
33- 19: 1,309,568	117: 1,310,428	1,310,205	1,310,858	1,311,324	1,311,324
25: 1,309,600	125: 1,308,592	1,310,205	1,310,858	1,311,324	1,311,324
42: 1,309,900	130: 1,309,464	1,310,205	1,310,858	1,311,324	1,311,324
46: 1,308,474	132: 1,311,679	1,310,205	1,310,858	1,311,324	1,311,324
48: 1,308,134	133: 1,311,472	1,310,205	1,310,858	1,311,324	1,311,324
69: 1,308,056	145: 1,310,066	1,310,205	1,310,858	1,311,324	1,311,324
70: 1,308,971	148: 1,308,605	1,310,205	1,310,858	1,311,324	1,311,324
73: 1,308,795	149: 1,309,705	1,310,205	1,310,858	1,311,324	1,311,324
80: 1,310,566	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
85: 1,308,699	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
93: 1,308,451	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
98: 1,310,547	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
107: 1,308,654	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
120: 1,308,815	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
132: 1,308,295	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
153: 1,309,131	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
163: 1,309,700	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
164: 1,308,179	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
165: 1,310,491	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
168: 1,308,698	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
173: 1,310,685	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
174: 1,309,270	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
178: 1,308,324	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
180: 1,309,429	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
101: 1,309,654	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
204: 1,308,692	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
211: 1,309,752	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
215: 1,308,795	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
262: 1,308,247	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
5: 1,310,184	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
6: 1,311,667	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
11: 1,308,208	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
12: 1,308,837	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
12: 1,310,824	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
16: 1,310,453	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
17: 1,309,096	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
18: 1,308,380	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
19: 1,310,176	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
20: 1,308,253	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
23: 1,308,468	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
27: 1,308,292	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
29: 1,308,943	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
48: 1,308,951	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
2: 1,310,997	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
12: 1,308,167	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
13: 1,311,457	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
4: 1,309,047	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
13: 1,308,395	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
16: 1,311,356	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
22: 1,311,154	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
35: 1,311,545	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
38: 1,309,480	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
40: 1,310,614	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
54: 1,309,958	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
58: 1,308,206	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
60: 1,310,358	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
71: 1,311,240	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
72: 1,311,046	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
74: 1,310,060	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
78: 1,308,804	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
7: 1,308,174	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
11: 1,308,383	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
23: 1,310,370	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
25: 1,308,353	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
29: 1,310,738	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
30: 1,309,846	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
31: 1,311,621	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
33: 1,308,666	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
40: 1,311,338	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
61: 1,310,546	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
1: 1,310,804	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
2: 1,309,904	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324
10: 1,310,309	152: 1,309,153	1,310,205	1,310,858	1,311,324	1,311,324

52: 1,310,276	74- 78: 1,309,489	83- 8: 1,310,031	88- 17: 1,311,363	91- 68: 1,309,454	100- 54: 1,311,160
1,311,132	1,309,591	1,311,614	18: 1,311,694	1,309,581	56: 1,308,129
82: 1,308,620	1,309,592	9: 1,309,471	18: 1,311,694	1,309,581	57: 1,309,189
1,308,905	1,309,636	1,309,211	18.5: 1,311,238	1,309,653	1,310,297
110: 1,310,648	1,309,637	1,309,212	18.8: 1,308,964	1,310,037	1,310,357
111: 1,309,517	1,310,562	1,309,800	18.7: 1,308,203	1,310,624	1,310,306
151: 1,309,574	1,311,509	1,308,038	19.3: 1,308,494	1,310,703	1,308,954
1,310,940	1,311,716	1,309,104	23: 1,310,255	1,311,188	95: 1,308,149
167: 1,308,569	1,311,768	1,310,798	1,310,256	1,311,585	112: 1,311,273
1,308,626	1,308,559	1,308,454	24: 1,308,454	1,311,862	113: 1,311,189
1,310,739	1,309,700	1,309,805	1,310,032	1,308,231	180: 1,310,658
1,311,861	1,309,547	1,311,535	28: 1,309,358	1,310,818	188: 1,309,555
168: 1,308,862	1,309,557	12: 1,309,827	33: 1,308,283	1,310,567	198: 1,310,546
178: 1,308,855	1,310,156	1,311,352	38: 1,309,486	1,311,491	220: 1,311,031
8: 1,309,917	1,311,400	40: 1,309,879	39: 1,308,248	3: 1,311,563	235: 1,309,655
1,310,090	1,309,553	52: 1,308,900	41: 1,309,793	7: 1,309,267	296: 1,308,628
1,310,365	1,309,832	53: 1,309,807	43: 1,308,396	11: 1,310,694	362: 1,310,635
7: 1,308,520	1,310,312	54: 1,308,920	47: 1,308,064	31: 1,310,376	365: 1,308,111
1,308,752	1,311,124	1,310,912	1,310,273	22: 1,309,402	1,311,191
1,309,010	1,311,242	56: 1,309,754	1,311,543	33: 1,310,625	2: 1,309,156
1,309,299	1,311,525	57: 1,310,645	50: 1,309,072	38: 1,311,564	1,309,500
1,309,451	1,311,346	57: 1,310,526	51: 1,310,258	93- 2: 1,308,320	1,309,708
1,309,722	1,309,614	60: 1,308,303	53: 1,310,203	1,308,321	1,310,586
1,309,759	1,309,978	1,308,963	56: 1,309,359	3: 1,309,122	3: 1,309,120
1,310,009	1,310,976	1,310,543	57: 1,309,847	6: 1,308,361	1,309,121
1,310,091	1,308,290	64: 1,308,081	67: 1,311,278	30: 1,308,540	1,309,391
1,310,092	1,309,474	1,308,221	80- 1: 1,309,302	1,310,697	1,309,909
1,310,093	1,308,751	1,308,222	1,309,791	1,311,321	1,311,751
1,310,558	1,310,464	1,310,525	1,311,608	37: 1,311,608	6: 1,310,666
1,311,343	1,310,948	71: 1,310,802	1,311,780	56: 1,310,580	20: 1,309,040
1,311,547	1,309,827	73: 1,309,671	1,311,866	61: 1,311,636	28: 1,310,073
13: 1,309,945	1,311,080	75: 1,311,117	4: 1,310,579	66: 1,308,767	1,310,076
1,309,968	1,309,481	84: 1,310,939	10: 1,309,129	32: 1,311,485	29: 1,308,545
1,310,992	1,310,298	85: 1,308,040	1,311,465	95- 1.1: 1,309,747	1,309,280
1,311,030	1,311,339	1,310,051	1,311,492	1,311,676	1,309,630
14: 1,308,832	75- 1: 1,308,907	1,310,492	20: 1,310,044	2: 1,308,538	1,309,669
1,309,257	1,309,165	88: 1,309,307	1,310,045	1,309,745	1,309,745
1,309,564	1,310,309	1,308,063	27: 1,310,043	5.7: 1,310,385	1,309,773
1,309,842	1,310,310	92: 1,309,086	1,310,637	31: 1,308,617	1,309,982
1,310,561	1,310,363	1,310,433	36: 1,308,285	45: 1,308,965	1,310,129
1,310,760	1,310,528	1,310,837	1,309,620	1,309,087	1,310,132
16: 1,308,332	1,311,619	84- 1: 1,311,752	37: 1,310,583	53: 1,308,642	1,310,708
17: 1,308,499	1,311,620	7: 1,308,903	1,310,894	64: 1,309,398	1,310,790
1,308,992	17: 1,308,735	10: 1,309,082	28: 1,308,453	82: 1,308,708	1,311,006
1,309,220	1,310,455	17: 1,308,248	1,309,560	97- 6: 1,311,230	1,311,021
26: 1,308,556	1,310,724	1,308,555	40: 1,309,914	6: 1,308,676	1,311,286
1,309,277	1,311,380	1,311,123	1,310,140	7: 1,308,445	1,311,521
1,311,592	27: 1,309,496	46: 1,309,004	1,310,143	10: 1,310,095	1,311,739
27: 1,311,003	48: 1,309,162	71: 1,311,670	1,310,144	13: 1,311,530	1,311,740
28: 1,308,160	61: 1,311,645	78: 1,309,658	1,310,145	1,311,829	1,311,785
1,309,837	4: 1,310,965	85: 1,309,915	1,310,146	25: 1,309,969	36: 1,309,333
1,310,899	4.4: 1,308,067	89: 1,309,116	1,310,147	26: 1,309,468	1,309,770
32: 1,308,843	59: 1,311,308	116: 1,310,024	1,310,178	27: 1,309,498	1,309,771
1,309,142	101: 1,308,548	135: 1,311,765	1,310,582	30: 1,308,691	1,310,844
1,310,726	3: 1,308,125	161: 1,311,045	1,310,885	32: 1,309,920	1,310,892
33: R 14, 084	4: 1,309,383	162: 1,308,692	1,310,888	35: 1,310,583	1,310,865
1,309,123	6: 1,310,084	166: 1,310,889	1,310,889	38: 1,309,693	1,311,837
1,311,135	18: 1,308,898	168: 1,309,915	1,310,897	39: 1,310,539	1,311,838
1,311,394	18: 1,309,217	178: 1,308,150	1,311,777	38: 1,310,924	37: 1,311,792
34: R 14, 698	55: 1,309,290	193: 1,308,110	1,311,778	40: 1,308,109	39: 1,309,098
1,310,711	58: 1,308,304	1,310,473	1,311,779	41: 1,309,228	1,309,768
1,311,236	69: 1,310,319	1,311,663	41: 1,310,584	42: 1,309,831	1,309,769
1,311,310	70: 1,309,706	233: 1,308,736	43: 1,309,968	45: 1,311,411	1,309,773
35: 1,310,590	72: 1,311,406	1,310,185	1,310,141	55: 1,309,299	1,310,046
36: 1,309,902	73.5: 1,309,571	1,308,186	1,310,881	62: 1,309,801	1,310,743
1,310,329	27: 1,310,373	1,308,186	1,310,893	70: 1,308,228	1,310,743
37: 1,310,617	30: 1,309,295	8: 1,310,909	1,310,893	1,308,744	1,310,792
38: 1,308,465	38: 1,310,674	32: 1,309,616	1,310,891	1,310,453	1,310,835
1,309,900	50: 1,308,134	39: 1,308,712	4: 1,308,126	81: 1,310,664	1,311,054
1,310,302	60: 1,309,347	49: 1,310,908	1,310,781	83: 1,311,318	1,311,081
40: 1,310,732	83: 1,310,610	50: 1,311,344	1,310,781	89: 1,308,888	1,311,104
41: R 14, 700	96: 1,308,563	1,311,473	11: 1,308,329	3: 1,309,037	1,311,672
45: 1,310,170	25: 1,310,206	20: 1,308,347	12: 1,309,385	4: 1,310,470	1,311,672
46: 1,308,447	3: 1,310,222	1,311,176	13: 1,311,583	22: 1,308,757	1,311,674
1,308,775	1,310,588	45: 1,310,256	16: 1,308,029	23: 1,308,188	1,311,676
1,309,266	7: 1,311,414	87- 6: 1,309,585	28.1: 1,310,933	27: 1,309,867	1,311,732
1,309,621	13: 1,308,516	12: 1,310,977	1,310,934	1,310,429	1,311,750
1,309,741	20: 1,310,351	17: 1,310,705	1,311,107	1,310,537	1,311,794
1,310,015	52: 1,308,490	19: 1,309,999	1,311,584	1,310,537	1,311,795
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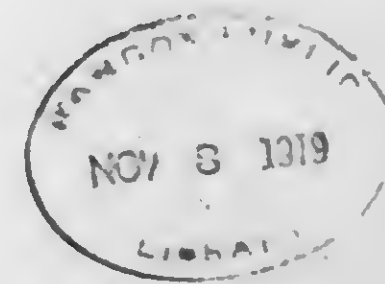
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ERRATA.

1,313,009, page 252, in heading, after residence of patentee insert *assignor to Standard Oil Company, a Corporation of Indiana.*

1,314,024, page 495, second cut under 1,314,024, read under 1,314,025; that now under 1,314,025 read under 1,314,026; that under 1,314,026 read under 1,314,027; that under 1,314,027 read under 1,314,028; and that under 1,314,028 read under 1,314,029.

Commissioner's Decisions, page 634, Ruppel v. Bogart, in syllabus, line 1, for the word "Concerning" read *Concurring.*

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"Waste is worse than loss. The time is coming when every person who lays claim to ability will keep the question of waste before him constantly."—Thomas Edison. Edison BUYS War Savings Stamps.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

A. B. Clark Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Anchor Leather Co., of 1001 West Division street, Chicago, Ill., for registration of a trade-mark and trade-mark registered May 29, 1906, No. 53,265, to A. B. Clark Co., of 29 Spruce street, New York, N. Y., and a notice of such declaration sent by registered mail to said A. B. Clark Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said A. B. Clark Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 9, 1919.

Jose Vila Fernandez, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Gilbert Jackson, of 1751 Amster-

dam avenue, New York, N. Y., for patent and a patent granted January 29, 1918, No. 1,264,806, to Jose Vila Fernandez, of Central Dos Amigos, Camaguey, Oriente, Cuba, and a notice of such declaration sent by registered mail to said Jose Vila Fernandez at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Jose Vila Fernandez, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 10, 1919.

Edward T. Wills and David B. Macdonald, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of S. Hirsch Distilling Co., of No. 417 Delaware street, Kansas City, Mo., for registration of a trade-mark and trade-mark registered March 25, 1890, No. 17,721, to Edward T. Wills and David B. Macdonald, and a notice of such declaration sent by registered mail to said Edward T. Wills and David B. Macdonald at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Edward T. Wills and David B. Macdonald, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Adverse Decisions in Interference.

PATENT NO. 1,288,961.

On June 21, 1919, a decision was rendered that Benjamin F. Moore was not the first inventor of the subject-matter covered by claims 1 and 2 of his Patent No. 1,288,961, subject, "Wrench-plate," and no appeal having been taken within the time allowed such decision has become final.

Interference Defined.

RULE 93. An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention. In order to ascertain whether any question of priority arises the Commissioner may call upon any junior applicant to state in writing the date when he conceived the invention under consideration. All statements filed in compliance with this rule will be returned to the parties filing them. In case the applicant makes no reply within the time specified, not less than ten days, the Commissioner will proceed upon the assumption that the said date is the date of the oath attached to the application. The fact that one of the parties has already obtained a patent will not prevent an interference, for, although the Commissioner has no power to cancel a patent, he may grant another patent for the same invention to a person who proves to be the prior inventor.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business August 1, 1919.

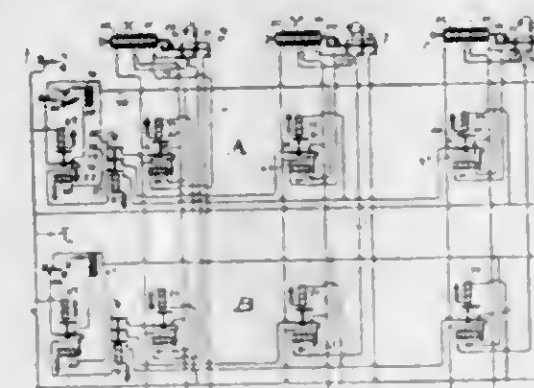
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318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 24	Apr. 21	404
412	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	May 16	June 30	335
121	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 22	June 25	231
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Mar. 1	Apr. 11	312
235	10. Carriages and Wagons; Motor Vehicles.	Mar. 28	May 31	860
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 3	June 15	312
322	12. Journal-Bones, Pulleys, and Shafting; Machine Elements.	Dec. 30	Mar. 1	1161
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fasteners; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements; Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 22	Mar. 22	706
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabric and Structure; Wire-Working.	Mar. 24	May 3	310
306	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glaze; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Lamination; Plastic Block and Earthenware Apparatus; Plastic.	Mar. 25	May 21	648
113	16. Radiant Energy; Telegraphy; Telephony.	Feb. 24	Mar. 14	721
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 1	May 28	249
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 4	May 2	537
204	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 19	Apr. 14	342
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	June 26	June 23	339
112	21. Brakes and Guns; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 13	Mar. 27	408
249	22. Astronautics; Firearms; Ordnance.	May 16	July 2	285
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanisms.	Apr. 22	May 21	488
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 9	Apr. 4	467
313	25. Agitating; Batching; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 24	June 19	173
103	26. Electricity; Generation; Motive Power; Prime Mover and Dynamo Plants.	Dec. 24	Feb. 24	639
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	May 7	June 12	437
225	28. Internal-Combustion Engines.	Feb. 12	May 7	584
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Engines; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 18	703
132	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 5	July 9	370
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 31	Mar. 22	480
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Feb. 4	May 16	553
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Paving; Roofs.	Mar. 5	Apr. 7	358
304	34. Railways; Railway Rails and Fasteners; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 23	May 14	186
37	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	June 9	July 9	317
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	May 26	May 7	759
107	37. Electric Lamps; Electricity; Circuit Makers and Breakers; Electricity, General Applications.	Mar. 29	Apr. 21	710
373	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stationery; Stone-Working; Wells.	June 23	June 17	202
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 18	Feb. 17	724
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles, Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	May 6	Mar. 24	446
125	41. Railway Draft Appliances; Railroad Tires and Wheels.	Apr. 3	Apr. 3	436
114	42. Electricity, Conductors; Electricity, Transmission to Vehicles; Electricity, Conduits; Electric Signaling.	Mar. 27	Mar. 19	560
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 8	June 21	155
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	June 6	June 16	106
179	45. Clutches; Lubrication; Motors; Railway Brakes.	Mar. 14	May 23	302

Oldest new case, Dec. 24; oldest amended, Jan. 16.
Total number of applications awaiting action..... 20 473

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:	June 3	July 7	1831
	Trade-Marks.....	May 13	June 17	718
	Designs.....	July 3	July 14	197
	Labels and Prints.....			

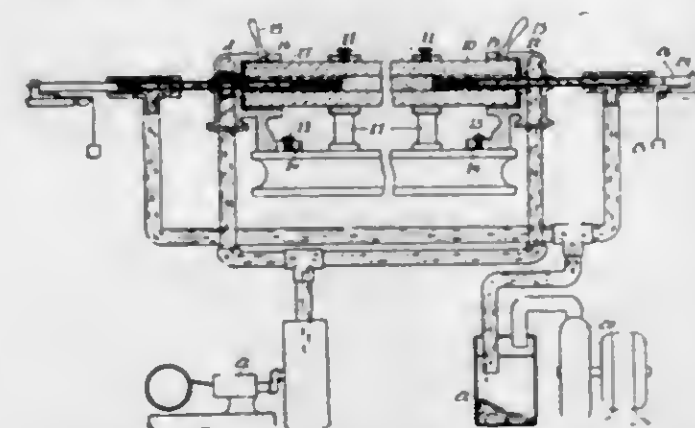
PATENTS GRANTED AUGUST 5, 1919.

1,311,865. COMBINATION ORGAN-STOP ACTION. JOSEPH S. ALLEN, Chicago, Ill., assignor to Kellong Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 9, 1915. Serial No. 54,941. 16 Claims. (Cl. 84-54.)



1. A combination organ stop action including a plurality of electromagnetically movable organ stops having off and on positions, mechanism associated with said stops and adapted to be actuated by a combination stop setting member to set up a combination of said organ stops, and electromagnetic means for cooperation with said mechanism for actuating the said electromagnetically movable organ stops to cause the said stops to assume their set up combination.

1,311,866. PROCESS OF AND APPARATUS FOR REMOVING SAND FROM HOLLOW DRILL-RODS AND THE LIKE. PERCY A. E. ARMSTRONG, Londonville, N. Y. Filed Jan. 17, 1919. Serial No. 271,613. 9 Claims. (Cl. 137-70.)

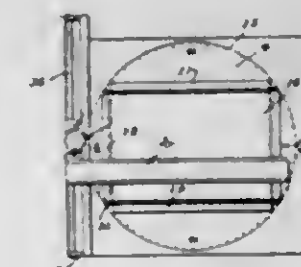


1. The process of removing core sand from bores of tubular bodies which consists in forcing compressed air into the bore while confining same so as to discharge primarily against the sand adjacent to the bore walls and loosen it therefrom, and in removing the loosened sand.

1,311,867. UNIVERSAL DRAFTING-MACHINE. VICTOR ALEXA, Chicago, Ill. Filed July 27, 1916. Serial No. 111,617. 9 Claims. (Cl. 33-78.)

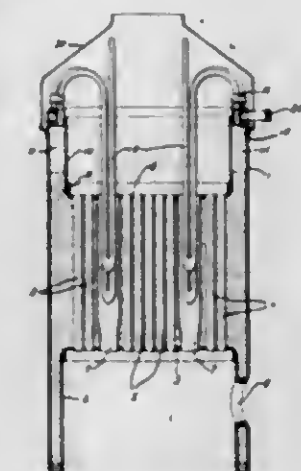
1. A device of the class described, comprising a supporting frame, a drawing board mounted thereon to rotate in its own plane, a ruling blade mounted for adjustment transversely of the axis of said drawing board, means for adjusting said ruling blade, comprising a fixed rack, a

rotatable pinion carried by said ruling blade in position to engage said rack, means for rotating said pinion, and



means for guiding said ruling blade as driven by said pinion.

1,311,868. SUPERHEATER. JOHN A. BARNES, West New Brighton, N. Y., and SAMUEL W. SCHOFIELD, Paterson, N. J., assignors to Locomotive Superheater Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1919. Serial No. 292,908. 6 Claims. (Cl. 122-467.)

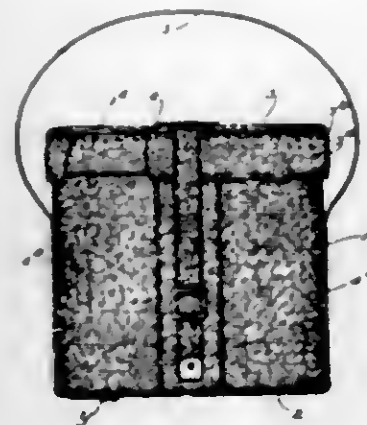


1. In a vertical boiler having a cylindrical shell, a lower and an upper tube sheet, tubes and flues connecting them, and a cylindrical sheet extending upward from the outer edge of the upper tube sheet and, with the shell, enclosing an annular steam space, the combination with said shell and said cylindrical sheet of an annular superheater header, means to secure it between the upper portions of the shell and the sheet so that it serves as a closure for the steam space, the header having an annular space from which openings extend to its upper surface and having other openings through it whose inner ends communicate with the steam space, and tubular superheater elements extending into the flues and with their ends secured to the header openings.

1,311,869. CARRIER FOR MACHINE-GUN MAGAZINES. FRANK H. HATCHER, Worcester, Mass., assignor, by mesne assignments, to Mills Woven Cartridge Belt Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 7, 1917. Serial No. 167,046. 1 Claim. (Cl. 150-48.)

A carrier for machine-gun magazines having a carrier-body of woven fabric, and a cover comprising a disk of

woven fabric and a depending flange which fits the top of the carrier-body and is constituted by a U-shaped strip



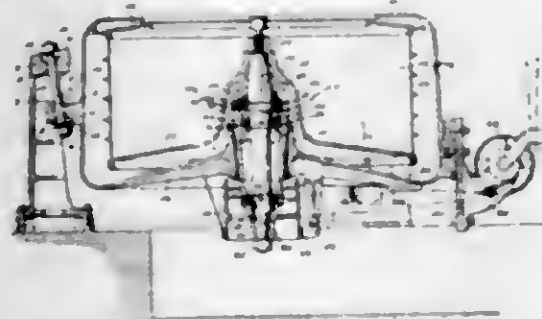
embracing between its two piles or sides the margin of the said disk.

1,311,870. AUTOMOBILE SUNSHADE. WILLIAM R. HEATY, Chicago, Ill. Filed July 23, 1917. Serial No. 182,114. 20 Claims. (Cl. 21-62.)



1. The combination of an automobile body, a wind-shield therefor, a folding top at the rear of the body, pivoted portions for supporting said folding top, a sunshade covering stretched rearward from the top of the wind-shield, oppositely arranged and upwardly extending devices movably connected together at their upper ends and forming a support for holding the rear end of said covering a distance above the folded top, so that the space below said covering is open at both sides and at the rear thereof, said devices having provisions to permit adjustment of said support bodily, whereby allowance is made for variations in the length of the covering because of stretching or shrinkage, and means to support the front end of said covering on the wind-shield, so that said sunshade and said folding top can be interchangeably connected to said wind-shield, the overhead sunshade thus provided being removable in its entirety to permit unfolding of said folding top, and said pivotal portions forming means to detachably support said devices.

1,311,871. CENTRIFUGAL DRYING-MACHINE. TANDY A. BAYRON, Troy, N. Y., assignor to Tolhurst Machine Works, a Corporation of New York. Filed Nov. 13, 1916. Serial No. 131,182. 11 Claims. (Cl. 64-48.)



1. A centrifugal drying machine including in combination, a casing, a rotatable basket within the casing, a

plurality of horizontally movable casing supporting devices connected to the casing in a horizontal plane substantially through the middle portion of the basket.

1,311,872. CHARGE FOR PRIMERS. WILLIAM H. BUCKLE, New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1917. Serial No. 189,116. 11 Claims. (Cl. 52-2.)

1. A priming charge containing trinitrotrianilid.

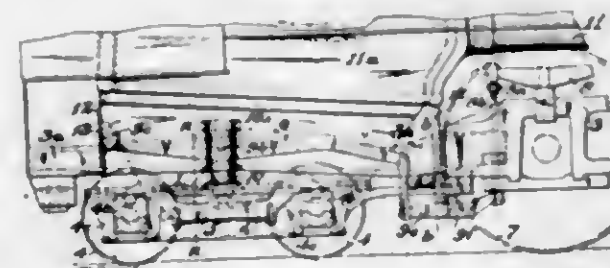
1,311,873. FUSIBLE LINK. JAY W. HUTLER, Glencoe, Ill. Filed Nov. 30, 1917. Serial No. 204,588. 3 Claims. (Cl. 169-26.)



1. A device of the character described comprising two outer and one intermediate plate, there being semi-cylindrical grooves in said plates adjacent opposite ends of said outer plates, there being corresponding semi-cylindrical grooves on opposite faces of the intermediate plate adapted to register with the grooves in the outer plates, rollers which are fitted to and coact with said grooves mounted therein and a fusible substance connecting the inner faces of two outer plates with the two faces of the intermediate plate and the rollers.

1,311,874. [WITHDRAWN.]

1,311,875. LOCOMOTIVE TRAILING TRUCK. FRANCIS J. COLE, Schenectady, N. Y. Filed May 10, 1919. Serial No. 206,075. 4 Claims. (Cl. 105-174.)



4. In a locomotive engine trailing truck, a truck frame comprising side members having pedestals for the boxes of two truck axles; a transverse front member having a radius bar at its forward end, adapted to be coupled to a locomotive main frame; and a transverse central member, located between the pedestals, and adapted to receive weight transmitted from a locomotive main frame, only at bearing points located in planes exterior to such main frame.

1,311,876. REGISTERING ATTACHMENT FOR FLUSH-TANKS. JAMES W. COX, Chicago, Ill., assignor to Pacific Flush Tank Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 31, 1917. Serial No. 158,894. 3 Claims. (Cl. 235-91.)



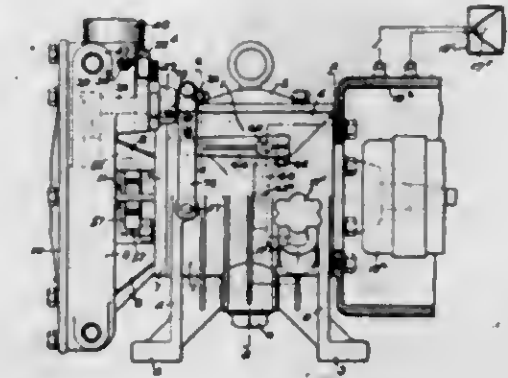
1. A device of the class described comprising a float, a register mounted on the float, means for actuating the register including a means for connecting the register to a stationary element.

1,311,877. POWER-GENERATOR. WILLIAM F. COY, Boston, Mass. Filed July 24, 1918. Serial No. 246,477. 12 Claims. (Cl. 123-65.)



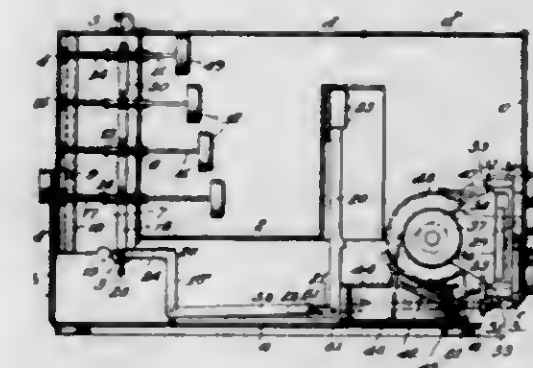
10. An explosion engine comprising a fixed cylinder having an annular valve seat, an annular valve adapted to engage said seat to close a passage for the admission of fuel gas, a reciprocating piston within said valve, having longitudinal grooves opening on the periphery of the piston, bearings movable in said grooves and projecting from the piston, the valve being provided with a split normally contracted and tapering extension, the parts of which are engaged with said bearings to open the valve, by a movement of the piston in one direction, the bearings being disengaged from said extension parts when the piston moves in the opposite direction, and valve-closing springs engaged with the parts of the valve extension, said springs being inclined to exert extension-closing pressure on said parts.

1,311,878. POWER-GENERATOR. LEWIS A. DARLING, Boston, Mass., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 24, 1910. Serial No. 105,661. 30 Claims. (Cl. 253-52.)



1. A power generator comprising a turbine wheel, a shaft therefor, a fluid feeding nozzle, and speed regulating and fluid feeding means comprising governor weights on the shaft, a rotatable fluid feeding nozzle shaft; and means connecting the weights and nozzle shaft for controlling by the wheel shaft the position of the nozzle shaft and nozzle and the feeding of fluid to the wheel.

1,311,879. FOLDABLE TYPE-WRITING MACHINE. PHILIPPE DE CLAMECY, Charlestown, Mass., assignor to Corona Typewriter Company, Inc., Groton, N. Y., a Corporation of New York. Filed July 5, 1917. Serial No. 178,557. Renewed Dec. 31, 1918. Serial No. 209,170. 28 Claims. (Cl. 197-180.)



1. A typewriting machine comprising a main frame section, type bars mounted therein, a keyboard frame adapted to be swung upwardly and rearwardly into the main frame section, keys mounted on said keyboard frame, a carriage bed, a pivoted case or frame section supporting said carriage bed, a carriage mounted on said bed, said pivoted frame section being arranged to swing upwardly and forwardly to place the platen carriage within the main frame section, and means for connecting the keys to the type bars.

1,311,880. FEEDING MECHANISM FOR SEWING-MACHINES. ALBERT H. DE VOR, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Dec. 8, 1917. Serial No. 200,200. 6 Claims. (Cl. 112-8.)

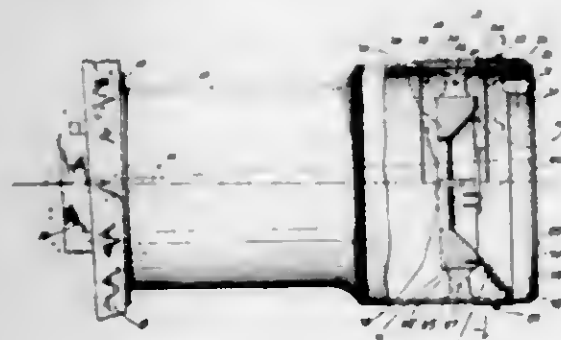
1. A four-motion upper feeding mechanism for sewing machines comprising a feed-dog, a supporting rock-lever, a feed-dog carrier fulcrumed upon and sustained solely by

said rock-lever, actuating means acting through said rock-lever to impart feeding movements to said feed-dog, and



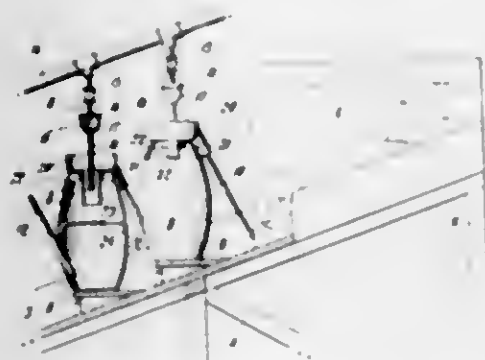
means for rocking said carrier upon its fulcrum for imparting rising and falling movements to said feed-dog.

1,311,881. ATTACHMENT FOR FIRE-ALARM BOXES. PETAR EHRHARD, Passaic, N. J. Filed Nov. 16, 1918. Serial No. 262,808. 3 Claims. (Cl. 177-379.)



1. In an alarm box attachment, the combination with a hollow cylindrical casing, and means for connecting said casing with an alarm box, said casing having an opening formed transversely in its wall, covers for the mentioned opening, means for securing said covers in position, a plurality of yieldingly mounted segmental elements secured within said casing, other similar segments pivoted to the inner side of said covers, means for holding said segmental elements in an operative position, and means for releasing the said segments mounted upon said cover plate.

1,311,882. ORE CONCENTRATING PROCESS AND APPARATUS. EDWARD HOPKINS EMERSON, Mountain Lakes, N. J., assignor to Minerals Separation North American Corporation, New York, N. Y., a Corporation of Maryland. Filed Aug. 3, 1918. Serial No. 248,129. 12 Claims. (Cl. 83-85.)



1. The process of ore concentration which consists in producing a stream of mixed air and liquid, conveying said

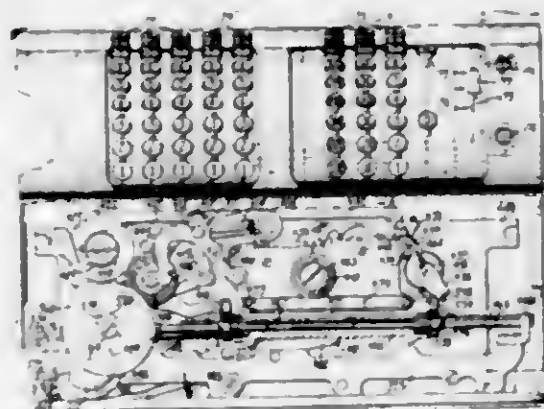
air-and liquid stream at high velocity into a stream of ore pulp so as to impart velocity to the combined air-and-liquid and pulp streams, and projecting the combined streams violently into a body of ore pulp in the presence of a mineral-frothing agent in a manner to distribute air through the pulp and agitate the pulp to form a mineral-carrying froth, and separating the froth.

1,311,883. PNEUMATIC TIRE. JUDSON C. EUBANK, Chicago, Ill. Filed Aug. 23, 1916. Serial No. 116,454. 2 Claims. (Cl. 152-18.)



1. In a pneumatic tire casing, the combination of a carcass comprising annular base members, transverse metallic members having their ends anchored to the base members and comprising flexibly joined links extending around the sides and tread, and a rubber body in which the transverse members are directly completely and individually embedded, said transverse members being spaced apart and disposed to support substantially all portions of the rubber covering without fabric reinforcement.

1,311,884. REGISTERING AND RECORDING MECHANISM. FREDERICK L. FULLER, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio. Filed Sept. 2, 1913. Serial No. 48,620. 45 Claims. (Cl. 235-3.)



1. In a machine of the class described, the combination with a plurality of type carriers, of a main operating mechanism, mechanism operated by the main operating mechanism for moving said type carriers differentially, manipulative means controlling the extent of movement of the type carriers, and means operated by the main operating mechanism for shifting the type carriers to print in different columns on record material.

11. In a machine of the class described, the combination with a plurality of type carriers, of differentially movable actuated racks therefor, and means automatically controlled by the rack of highest order moved out of zero position for moving the racks of higher orders one step to eliminate zero printing.

16. In a machine of the class described, the combination with a main operating mechanism, of means normally locking the same against operation, manipulative means for rendering said locking means ineffective, printing mechanism comprising means for printing on a detail strip and means for feeding the detail strip, and

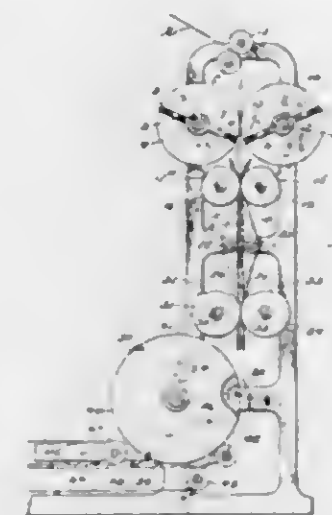
means controlled by said detail strip for locking said manipulative means against operation when said detail strip is exhausted.

1,311,885. MAGAZINE-ROCKET. ROBERT H. GODDARD, Worcester, Mass. Filed Apr. 26, 1918. Serial No. 230,872. 15 Claims. (Cl. 102-23.)



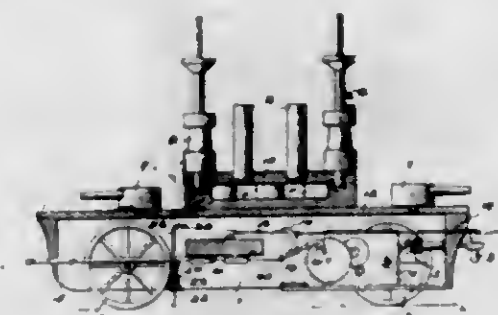
1. A magazine rocket having a casing, a combustion chamber, a nozzle, a relatively movable breech block, means to lock said breech block in said chamber, and separately movable devices operated by direct engagement therewith, of gases moving rapidly through said nozzle effective to unlock said breech block and to produce relative separation of said breech block and chamber after said parts are unlocked.

1,311,886. SHEET-HANDLING MACHINE. SAMUEL G. GOSS, Glenview, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Oct. 12, 1915. Serial No. 55,397. 17 Claims. (Cl. 270-60.)



1. A sheet handling machine for use with printing presses including in combination web supplying means, web cutting means intermittently operating sheet feeding means adjacent to the web cutting means and running at the speed of the web supply, sheet collecting means running faster than the web supply, and means for feeding the sheets to the collecting means at the speed of the collecting means.

1,311,887. UPSETTING EXPLOSIVE TOY. OSCAR F. HABERLAND, Philadelphia, Pa. Filed Oct. 23, 1917. Serial No. 198,036. 9 Claims. (Cl. 46-48.)



1. In a blow-up toy, a body portion, parts thereof adapted to be blown up, mechanism for throwing the parts in the air, and means for upsetting the body portion in its entirety, operated by said mechanism.

1,311,888. LAMP-CHIMNEY HOLDER. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Co., a Corporation of Illinois. Filed Mar. 8, 1918. Serial No. 221,183. 5 Claims. (Cl. 240-98.)



5. In combination, a lamp burner, an annularly disposed series of fingers rising from the burner for inclosing a chimney and each having a shoulder adapted to engage an annular groove therein, and an elastically contractible ring surrounding the fingers.

1,311,889. PETCOCK-WRENCH. LOUIS G. HARTDOBN, New York, N. Y. Filed July 2, 1918. Serial No. 242,987. 2 Claims. (Cl. 137-139.)

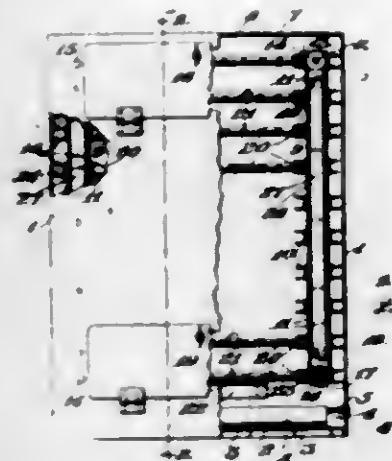


1. A pet cock wrench comprising a head formed of sheet metal and providing substantially an inclosure for the pet cock thumb piece and adapted to be loosely but permanently engaged with the thumb-piece of the pet cock in such manner as to permit its being used to exert both a pulling and a turning action thereon, a shaft and a handle extending to an accessible position, and means for resiliently holding said handle in position for keeping the pet cock closed.

1,311,890. EVAPORATOR. JOHN HELM, St. Louis, Mo. Filed Oct. 6, 1917. Serial No. 195,076. 9 Claims. (Cl. 34-11.)

1. In a device of the character described, an oven, means for movably supporting a column of trays therein, and means for the releasable engagement of the respective trays in succession, serving as a stop for and per-

mitting an intermittent movement of said column of trays with its support, and controllable by the removal



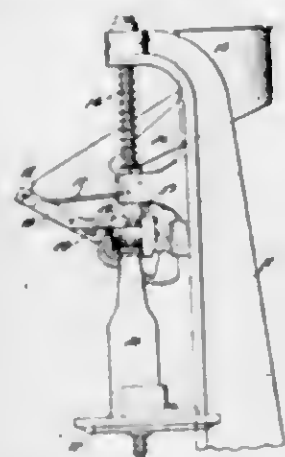
of a tray from one end of the column and the placing of a tray at the opposite end thereof.

1,311,891. STOVE DOOR. HERMAN HERRENBRUCK and FREDERICK ANDREAS, St. Louis, Mo., assignors to Bridge & Beach Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 15, 1919. Serial No. 277,215. 7 Claims. (Cl. 126—191.)



1. A stove door provided adjacent its pivotal edge with a rearwardly projecting arm, and a compression spring combined with said arm in such a manner that it will counterbalance the door and will be compressed when the door is moved into its open position.

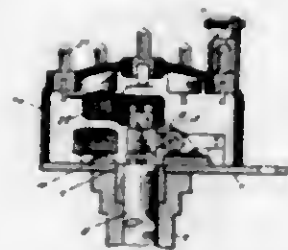
1,311,892. FEEDING DEVICE FOR BOTTLE-CAPPING MACHINES. EDMUND A. HAY, La Grange, Ill., assignor to The Williams Sealing Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 1, 1917. Serial No. 189,243. 3 Claims. (Cl. 113—2.)



1. The combination with a chuck, of a chute supported therefrom and inclined downwardly toward said chuck, the lower end of said chute being in close proximity to said chuck, said chute having a central guiding slot, and

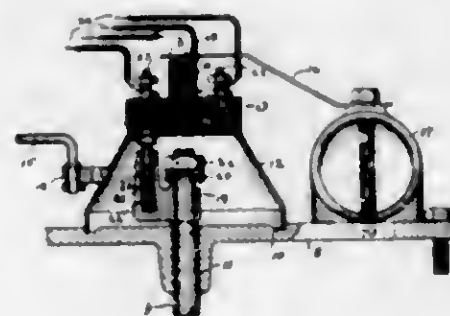
converging supporting fingers attached to the chute and extending beyond the lower end of same, said fingers approaching each other in line with said guiding slot.

1,311,893. TIMER-DISTRIBUTER MECHANISM. EDWARD H. HODGES, Irvington, N. J., assignor to Spittler Electrical Company, Newark, N. J. Filed Nov. 19, 1917. Serial No. 202,712. 8 Claims. (Cl. 123—168.)



1. In an ignition timer, the combination of a driving shaft, a cam carried by said shaft, a contact member operated by said cam, means for adjusting and locking in position said cam on said shaft consisting of balls supported by said shaft with means for spreading said balls outward into engagement with said cam.

1,311,894. COMMUTATOR. ARTHUR C. HOPKINS, Minneapolis, Minn., assignor to Mid-West Manufacturing Company, Minneapolis, Minn. Filed Jan. 17, 1919. Serial No. 271,620. 1 Claim. (Cl. 123—167.)

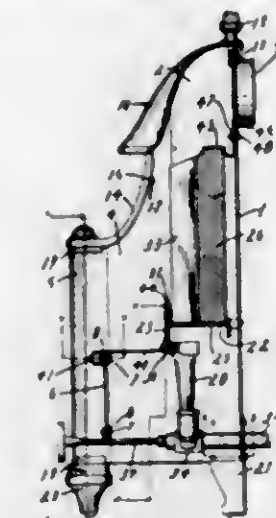


In a commutator, the combination with a cam shaft, of a wall having a bearing supporting one end of the cam shaft and having a groove made in one face of the wall with a shoulder at the outer periphery of the groove and an inclined surface at the inner periphery of the groove, a frusto-conical casing having its base seated in said groove and lying inside said shoulder, means whereby the casing may be turned in said groove, an insulating block fastened in the top of said casing, contact pins carried by said block, a cam turning with said cam shaft having a recess, a headed contact plunger fitted loosely in said recess and arranged to move over the first-named pins, a spring in the recess beneath the headed plunger, a projection on the block having a depression, and a flat spring having a convex knob resting in said depression and serving to yieldingly hold the casing in the groove while allowing the same to be turned.

1,311,895. GAS-STOVE. ALFRED H. HUMPHREY, New York, N. Y. Filed Oct. 16, 1917. Serial No. 196,862. 10 Claims. (Cl. 126—127.)

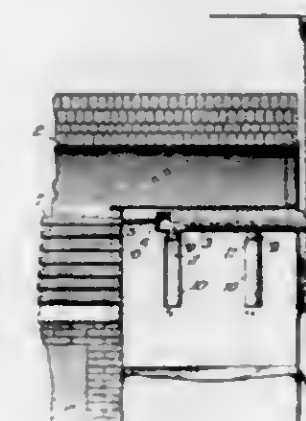
6. In a gas stove, the combination of back and side walls, the side walls having rolls constituting uprights at their front ends, a front plate having beads at its top and bottom edges and secured to said side walls by bolts disposed longitudinally through said beads, a top, front legs disposed below said uprights, bolts disposed longitudinally through said uprights and constituting top and leg retain-

ing members, a supporting plate mounted within said walls, a hearth plate mounted on said supporting plate to project forwardly therefrom, radiants disposed upon said support-



ing plate, a fire back mounted on said supporting plate at the rear of said radiants, and a burner mounted on said supporting plate.

1,311,896. FURNACE. ABRAHAM MILKY LAMB, GRY. Ind. Filed Dec. 10, 1917. Serial No. 206,446. 1 Claim. (Cl. 110—75.)



The combination with a furnace having surrounding walls forming a fire box, horizontal flues extending rearwardly from said fire box, an air heating appliance comprising a horizontal air conduit located in the upper part of the fire box and extending through the front wall of the furnace, said conduit having a supporting projection extending into one of said flues, a pair of downwardly projecting nipples formed on said conduit, a pair of depending outlet pipes communicating with said conduit through said nipples, and pins extending through said nipples and the upper ends of said outlet pipes for detachably supporting said pipes on said nipples.

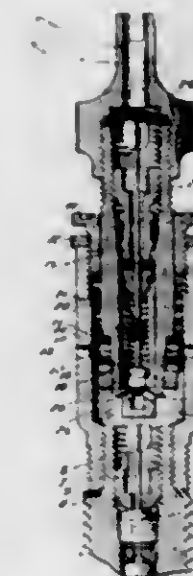
1,311,897. TOOL-HOLDER. CHARLES GIBSON HERMARK, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 27, 1917. Serial No. 193,487. 2 Claims. (Cl. 20—100.)



1. In a tool of the class described, in combination, a tool holder having a shank and a head, said head being

provided with a transverse slot, a tool having a projection fitting said slot and clamping means for said tool comprising a wedge block having upwardly and outwardly slanting ends respectively engaging the shank and tool, and means for securely holding said wedge block in position.

1,311,898. INDICATOR FOR PNEUMATIC TIRES. JOHN L. JACKSON, River Forest, Ill. Filed Mar. 20, 1919. Serial No. 283,823. 21 Claims. (Cl. 152—115.)



1. An indicator for pneumatic tires comprising a member adapted to be applied to the valve stem of a tire and to rotate with the tire when the same is in use, and means in said member normally operating to open the tire valve and actuated by tire pressure above a critical point to close the tire valve.

1,311,899. FLASH-LIGHT. MORRIS L. KAPLAN, Brooklyn, N. Y., assignor, by mesne assignments, to National Carbon Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed Sept. 18, 1914. Serial No. 862,259. Renewed Dec. 14, 1918. Serial No. 266,841. 16 Claims. (Cl. 240—8.5.)



1. In a flash-light comprising an exterior casing having a lamp at one end and the other end constituting a handle, said casing containing a battery for the lamp and a spring at the handle end of the casing engaging the battery, a disk of insulating material within the casing at the outer end of said spring and through which a terminal of said spring passes and thence extends laterally, and circuit closing mechanism comprising a slide within said casing having

a laterally extending rod overlapping the laterally extending terminal of said spring, and an exterior sliding member for manual operation connected with said inner slide and in electrical engagement with said casing, the casing being a conductor and in electrical connection with a terminal of the lamp.

1,311,900. TIE-HOLDER. TOMASZ M. KOSINSKI, Chicago, Ill. Filed Feb. 16, 1916. Serial No. 78,732. 2 Claims. (Cl. 2—84.)



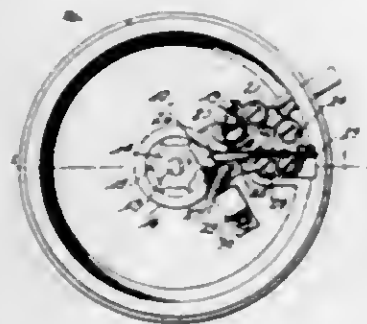
1. A tie holder comprising a piece of wire bent centrally into a substantially heart-shaped loop, said wires being crossed at the lower end of said loop to give the same a spring effect, the wires extending thence downwardly and reliant on themselves and extended outwardly and upwardly to form a tie receiving recess between said downwardly and upwardly extending portions; and wings at the upper ends of said wires adapted to be inserted in the folds of a collar, substantially as described.

1,311,901. LOCKING DEVICE FOR COAL-CUTTING TRUCKS. MICHAEL KAUPA, Jerome, Pa., assignor of one-fourth to Joseph Dzingel, Jerome, Pa. Filed Dec. 4, 1917. Serial No. 205,320. 1 Claim. (Cl. 254—100.)



In combination, a support, a vertically-extending threaded stem secured upon said support, a sleeve longitudinally slidable upon said threaded stem, a disk formed with a central enlarged opening in which said stem is adapted to project loosely, said opening being formed with a lateral enlargement to provide a radial recess, a block slidable in said recess enlargement and formed with an arcuate surface having teeth, a plurality of handle bars mounted radially of said disk, and carrying balls upon their free ends, a screw-bolt threaded into said disk and advanceable therein, said screw bolt having a head rotatably secured in said block so as to support said block within said recess, and a ball head upon said screw-bolt, said screw-bolt adapted to move said head within said recess enlargement and so that its teeth may mesh with the threads of said stem where upon said disk may screw upon said stem, said disk supporting said sleeve.

1,311,902. ELECTRIC MAKE-AND-BREAK DEVICE. JOSEPH H. LEHMAN, Hasbrouck Heights, N. J. Filed Nov. 6, 1917. Serial No. 200,504. 20 Claims. (Cl. 123—166.)



1. In a contact device, the combination of a pair of relatively movable contacts, a rotary member, and an oscill-

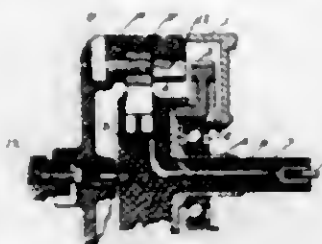
latory member adapted to be moved in one direction by said rotary member and to effect relative movement of said contacts during movement in the opposite direction past normal position.

1,311,903. STAPLE. AUSTIN C. LESCHANDER, Port Blakely, Wash. Filed Aug. 21, 1917. Serial No. 187,394. 1 Claim. (Cl. 85—49.)



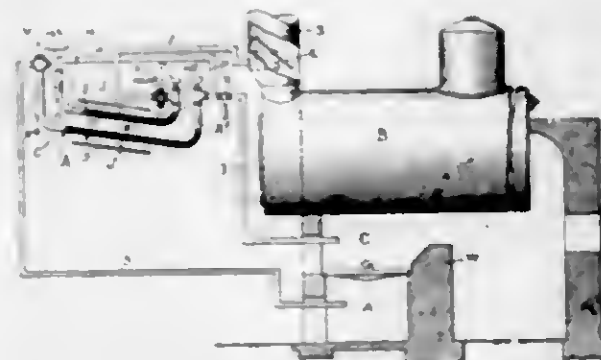
A staple, each leg of which is provided with a projection centrally located on the outer side near the point and terminating at the point, the apex of the projection lying in the plane of the longitudinal axes of the legs of the staple, said projections adapted to bend the legs downwardly, in the plane thereof, when the staple is driven.

1,311,904. BRUSH-HOLDER. SAMUEL C. MCKEOWN, East Orange, N. J., assignor to Splittorf Electrical Company, Newark, N. J. Filed Sept. 25, 1917. Serial No. 193,119. 5 Claims. (Cl. 200—24.)



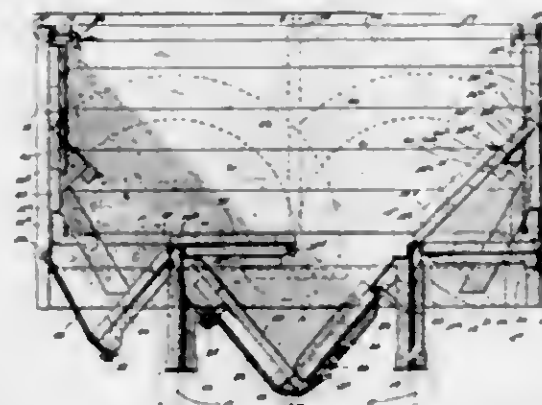
1. In a device of the class described, a brush having a channel therein, a retainer for the brush having a guide adapted to cooperate with said channel, a holder for the retainer, a spring mounted within the retainer for moving the brush outward to take up wear, and means associated with the brush and retainer for limiting the outward movement of the brush as described.

1,311,905. COMBUSTION-INDICATOR. DON A. McNAUGHTON, Maryville, Tenn. Filed Aug. 17, 1915. Serial No. 40,003. 4 Claims. (Cl. 73—31.)



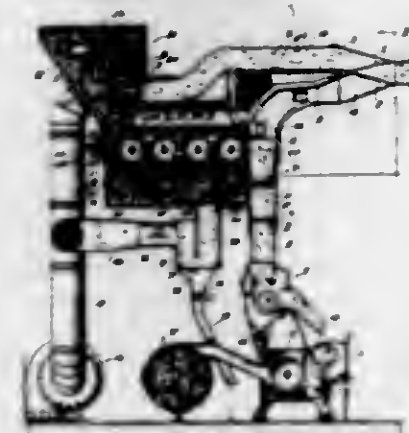
3. In an apparatus of the nature described, the combination with a furnace having a damper space and a combustion space and an ash-pit space, of two observation tubes normally cut off from the outer atmosphere and each containing liquid, conductor piping connecting one end of one of said tubes with said damper space and conductor tubing connecting one end of the other of said observation tubes with the ash-pit, and conductor tubing connecting the other ends of said observation tubes with the combustion space, and means for indicating the positions of the liquid columns under test firing substantially as described.

1,311,906. CONVERTIBLE FREIGHT-CAR. WILLIAM E. MONK, Chicago, Ill., assignor to Rodger Ballast Car Company, a Corporation of Maine. Filed Sept. 13, 1915. Serial No. 50,481. 10 Claims. (Cl. 105—243.)



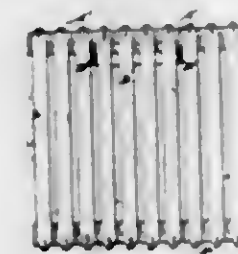
1. In a freight car, a longitudinal sill located inwardly from the side of the car, and a convertible door having an extension hinged thereto, said door being hinged along said sill and movable to positions on either side of said sill.

1,311,907. COTTON-CLEANER. ROBERT S. MUXER, Birmingham, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed Sept. 4, 1917. Serial No. 189,651. 29 Claims. (Cl. 13—19.)



13. In a cotton cleaner, a cleaning chamber, a series of rotating toothed cylinders working therein, a screen bed below said cylinders carrying concave screen pockets under the cylinders, means to adjust said bed toward and from the cylinders, an outlet door for the removal of the bed when disposed to clear the cylinders, and a hopper below said screen bed comprising a wall movable to permit the removal of the bed.

1,311,908. HANGER FOR RADIATORS. FRANKLIN P. MURDOCH, East Orange, N. J., assignor to GHM & Geoghegan, New York, N. Y., a Firm. Filed May 3, 1919. Serial No. 294,453. 1 Claim. (Cl. 248—30.)



The holder described comprising a single plate of sheet metal bent at each end to form outwardly extended parallel brackets, and having longitudinally disposed slots

adapted to receive bolts for the attachment of said plate to a wall, said brackets having their upper edges in the form of notches and adapted to project into the spaces between adjacent sections of a radiator at separated points in the latter, said notches adapted to receive the bosses of said sections and thereby support such radiator.

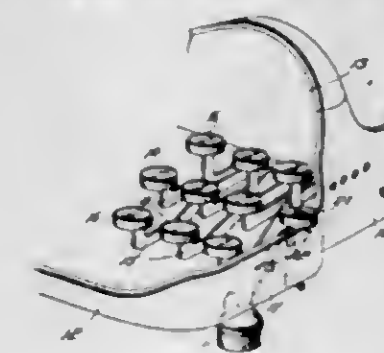
1,311,909. PROCESS OF PRODUCING PROPELLANT EXPLOSIVES. ARTHUR SAMUEL O'NEIL, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 17, 1916. Serial No. 115,451. 12 Claims. (Cl. 52—3.)

1. The process which comprises applying to nitro-cellulose powder grains a nitro-hydrocarbon having a solvent action on the nitrocellulose grains, said nitro-hydrocarbon containing an aromatic compound which lowers the melting point thereof, and heating the materials to a temperature materially below the melting point of the nitro-hydrocarbon used.

1,311,910. PROPELLANT EXPLOSIVE. ARTHUR SAMUEL O'NEIL, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 17, 1916. Serial No. 115,452. 10 Claims. (Cl. 52—3.)

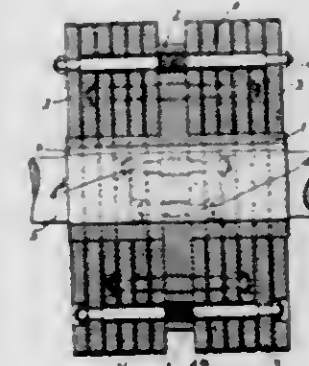
1. A nitrocellulose powder grain having a surface layer comprising a dinitrotoluene and camphor.

1,311,911. TYPE-WRITING MACHINE. OTTO PETERMANN, Groton, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed Dec. 30, 1915. Serial No. 69,410. 9 Claims. (Cl. 197—98.)



1. A hand-positioning finger-rest key for a typewriting machine, comprising a stem formed with integral means for detachably holding the same to a part of the machine, an angularly extending portion adapted to engage a fixed part of the machine to brace the key and position the same relatively to the keys of the keyboard, a laterally and upwardly extending part, and a keylike finger-supporting part held to said laterally and upwardly extending part.

1,311,912. FLEXIBLE GEAR-WHEEL. PER ARVID PETERSON, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed Sept. 17, 1918. Serial No. 254,400. 2 Claims. (Cl. 74—29.)



3. A flexible gear comprising a plurality of laminae, a support, and flexible pins connecting such laminae longitudinally to said support and adapted by flexure to per-

mit individual yielding of the laminae, the pins for outer laminae passing with clearance through apertures in the lamina or laminae intermediate such outer laminae and the support.

1,311,913. VEHICLE-SPRING. JEAN PICHON, New York, N. Y. Filed June 1, 1918. Serial No. 237,812. 12 Claims. (Cl. 267-19.)



1. In vehicle springs, a spring secured to a vehicle and having its outer end attached thereto, the inner end of said spring being positively free, and means for supporting said free end which includes a bolster having a vertically movable block therein having a slideway adapted to receive and support said free end, resilient means supporting said vertically movable blocks in said bolster, said bolster being provided with a fixed slide adjacent and a short distance below the end of the spring when the same is held in normal position by the resilient means which support said movable blocks.

5. In a spring, the combination with a pair of opposed springs having rigid supports at their outer ends, and a beam pivotally engaged with the center of said springs, of a bolster fixed centrally of said beam, said bolster having compartments into which the adjacent ends of said springs enter, blocks freely slidable within the mentioned compartment, said blocks being hollow and having tapered seats formed therein receptive of the ends of said springs, and pairs of compression springs mounted in said compartments, above and below said blocks whereby the effect of said springs is materially cushioned.

1,311,914. DETACHABLE SHOE ELEMENT. WILLIAM TURNHAGEN, St. Louis, Mo. Filed Mar. 17, 1919. Serial No. 283,257. 2 Claims. (Cl. 36-41.)

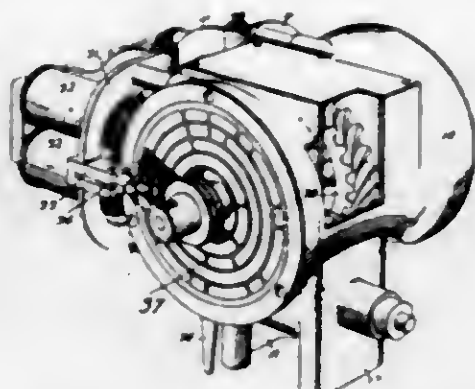


1. In combination with a shoe, a heel, and bolts, said heel secured to said shoe by means of said bolts, and means formed integral with said heel for locating the bolt holes of said shoe through which one of said securing bolts is positioned, said means so positioned relative to the plane of contact between said heel and said shoe that the positioning of said heel on said shoe will indicate the position of said bolt securing means on said shoe by indicating thereon by an indentation the position of said bolt holding means.

1,311,915. DISTRIBUTING APPARATUS. PAUL M. RAINES, Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1919. Serial No. 288,197. 4 Claims. (Cl. 178-33.)

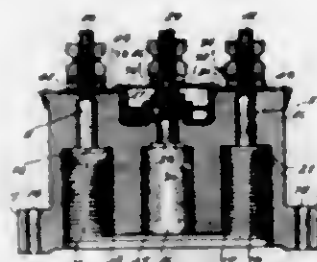
1. A current impulse distributing mechanism comprising a distributor face consisting of continuous and segmented rings, a rotary member, distributor brushes carried by said rotary member for interconnecting predetermined ones of said rings, a revolving shaft on which said

member is frictionally mounted, driving means for said shaft, adjustable means carried by said revolving shaft



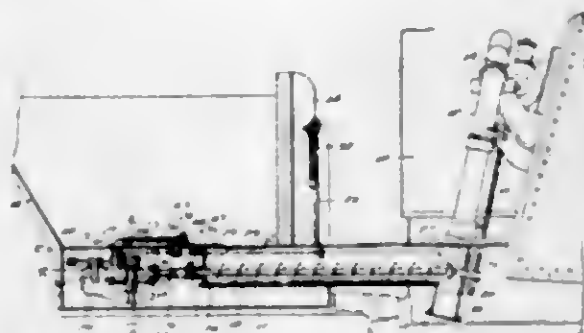
for altering the speed of said driving means, and means for altering the adjustment of said adjustable means while the shaft is in motion.

1,311,916. LIGHTNING-ARRESTER. WILLIAM REID, Chicago, Ill. Filed Dec. 14, 1918. Serial No. 266,803. 4 Claims. (Cl. 175-30.)



1. A lightning arrester comprising, in combination, an insulating base, apertures in said base, choke-coils in each of said apertures, exposed line terminals connected with said coils, an aperture positioned between said line terminals, a ground connection located in said last-mentioned aperture, conducting bars connected to said line terminals and extending into said last-mentioned aperture and in close proximity to said ground terminal and means to cover said aperture to inclose said ground terminal and the adjacent portions of said conducting bars.

1,311,917. LOCOMOTIVE-TENDER. EDWARD RYAN, Chicago, Ill., assignor to Locomotive Stoker Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1916. Serial No. 135,772. 9 Claims. (Cl. 214-17.)



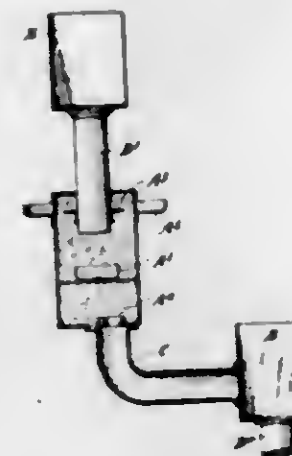
1. In a locomotive tender having a fuel bin, in combination, a fuel conveyor located below the fuel bin and receiving therefrom and leading forwardly, and means in the bin for advancing fuel to the receiving end of the conveyor.

1,311,918. STAND. HARRY M. SEAGERS and SAMUEL H. DRAKE, Groton, N. Y., assignors to Corona Typewriter Company, Inc., a Corporation of New York. Filed Mar. 27, 1916. Serial No. 87,021. Renewed Dec. 31, 1918. Serial No. 269,174. 6 Claims. (Cl. 248-43.)



2. A stand having a plurality of telescopic legs each comprising a plurality of members, certain of said members having elongated cylindrical reduced portions at their lower ends, and certain others having elongated enlarged portions at their upper ends provided with three spaced and extended bearing surfaces adapted to fit within said reduced portions in adjacent members when the members are in extended position, and spring-pressed latches held to one side of the enlarged portions of the members adapted to engage the reduced portions of adjacent members to lock the members in extended position, said latches being also adapted to engage the interior of adjacent members when the members are telescoped and force one of said spaced bearing surfaces of each of said enlarged portions into frictional engagement with the interior of the adjacent member.

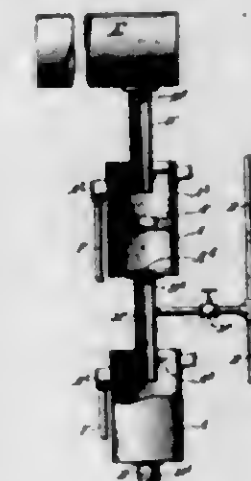
1,311,919. CONCENTRATION OF ORES. HARRY VERNON SEALE and WILTON SHELLSHEAR, Broken Hill, New South Wales, Australia, assignors, by mesne assignments, to Minerals Separation North American Corporation. Filed June 30, 1915. Serial No. 37,350. 17 Claims. (Cl. 83-85.)



2. The process of concentrating ores which consists in producing a violent gravity flow of ore pulp into a relatively quiescent body of pulp in the presence of a mineral frothing agent, by dropping the pulp into said relatively quiescent body and below the liquid level of said relatively quiescent body, with inclosure of the pulp at its point of entrance into said relatively quiescent body, and thereby carrying air into said relatively quiescent body with such hydraulic violence of pulp flow as to subdivide the entrained air and agitate and aerate the pulp in that

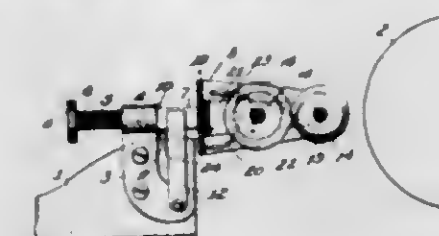
degree necessary for mineral-froth-fotation, and removing the mineral froth by flotation from the surface of such relatively quiescent body of pulp.

1,311,920. CONCENTRATION OF ORES. HARRY VERNON SEALE, East Maitland, New South Wales, Australia, and WILTON SHELLSHEAR, Nam-tu, Burma, India, assignors to Minerals Separation American Syndicate (1913) Limited, London, England, a Corporation of Great Britain. Filed May 23, 1917. Serial No. 170,562. 5 Claims. (Cl. 83-85.)



1. Apparatus for the concentration of ores by flotation-separation comprising a froth-separating vessel, a pulp conduit leading into the froth-separating vessel and including an inner jet-discharging nozzle surrounded by the outer conduit-wall with an intervening air-induction space surrounding the nozzle, one or more air inlets leading to the air-induction space from the outer air, and means for producing a flow of pulp through the conduit and its nozzle and into the froth-separating vessel, with such velocity that the flow of pulp through the nozzle and conduit will induce irruption of air to aerate the pulp, and the hydraulic violence of pulp flow will effect that degree of agitation necessary for the formation of mineral-carrying froth.

1,311,921. LINE-RULING DEVICE FOR TYPE-WRITING MACHINES. JAMES E. SIMPSON, Brooklyn, N. Y., assignor to Corona Typewriter Company, Inc., Groton, N. Y., a Corporation of New York. Filed July 17, 1917. Serial No. 180,074. Renewed Dec. 31, 1918. Serial No. 269,176. 13 Claims. (Cl. 197-113.)

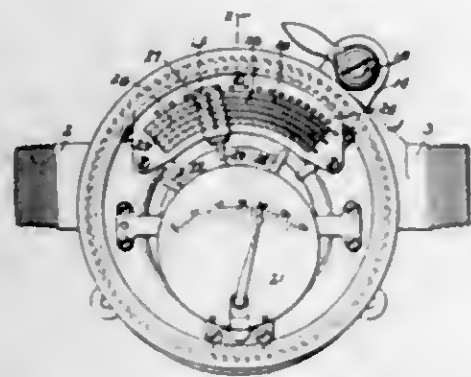


1. A line-forming device comprising a line marking wheel, an ink roll engaging said marking wheel, and means operated by the marking wheel for laterally shifting the ink roll during the rotation of the marking wheel.

1,311,922. FLUID-CURRENT METER. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 27, 1917. Serial No. 193,498. 5 Claims. (Cl. 73-167.)

1. In a fluid current meter, a base, a chamber in said base, having a measuring orifice, a movable vane in said chamber adapted to enlarge and diminish said orifice,

said chamber having no outlet to atmosphere, and means comprising a stop cock in said base opening and closing



said outlet to atmosphere from a point beyond the above mentioned orifice whereby said measuring orifice may be enlarged to a definite degree for a given pressure.

1,311,923. CARRIER OR COVER FOR CANTEENS OR WATER-BOTTLES, &c. CLARENCE E. SMITH, Worcester, Mass. Filed June 24, 1916. Serial No. 105,536. 3 Claims. (Cl. 150-7.)



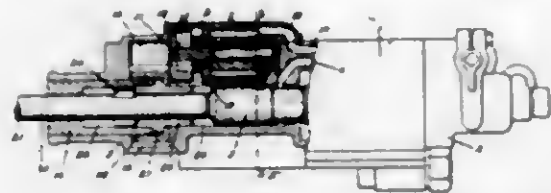
1. A carrier or cover for a canteen, water bottle, or the like, having opposite ears or flaps extending from one side of the same and adapted to be bent or folded over the shoulders of the contained canteen, water-bottle, or other article so as to encircle the upstanding neck thereof, and overlapped at their free ends against the opposite side of the carrier or cover, and provided with fastener means for said overlapping ends to hold the carrier or cover in closed condition and having in its closed and fastened condition an opening that is occupied by the said upstanding neck.

1,311,924. FASTENER FOR WEARING-APPAREL. HENRY SMITH, Philadelphia, Pa. Filed Nov. 20, 1918. Serial No. 264,131. 2 Claims. (Cl. 24-268.)



2. In combination with the proximate edge portions of an article of apparel; a loop mounted upon one of said portions adjacent to the edge thereof; the other of said portions being provided with a slot; an elastic member secured at one extremity to said last mentioned portion and having a free end capable of extension to the region of said slot; a hook mounted upon the free portion of said elastic member and adapted to engage said loop; a button also mounted upon said elastic member; and means whereby said button and said hook are connected to one another and to the elastic member, by an attachment which extends through the slot, substantially as set forth.

1,311,925. PERCUSSIVE TOOL. WILLIAM A. SMITH, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 19, 1918. Serial No. 229,621. 6 Claims. (Cl. 121-10.)

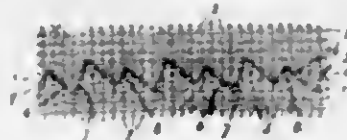


1. In a cylinder for percussive tools, in combination, a cylinder body, a motor casing bolted thereto at one side of said cylinder body, a spacing member attached to said motor casing at its forward end and a front head joining said spacing member and cylinder body.

1,311,926. METHOD OF PRODUCING EXPLOSIVE COMPOUNDS AND PRODUCT THEREOF. CHARLES M. STING, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1917. Serial No. 172,691. 24 Claims. (Cl. 52-3.)

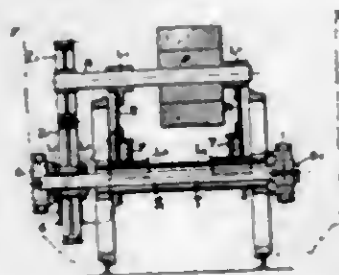
21. A composition comprising an organic compound having therein a nitro group, at least two hydroxyl groups and a nitrate group.

1,311,927. SEAM. WALTER G. TROTMAN, West Springfield, Mass., assignor to C. H. Smith Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1917. Serial No. 201,146. 1 Claim. (Cl. 245-10.)



The combination, in a seam of the class described, with adjacent edge portions of woven-wire fabric, of a plurality of short stitches on one side of said fabric, each of said stitches crossing the joint in said fabric and a single transverse wire and engaging longitudinal wires which are immediately adjacent to said joint, a long stitch on the opposite side of said fabric from said short stitches, extending from each end of each of said short stitches, crossing three transverse wires and said joint and engaging the second longitudinal wire which is on the opposite side of said joint from the end of the short stitch with which said long stitch is connected, and a long stitch on the same side of said fabric with said short stitches, crossing a single transverse wire and said joint and connecting adjacent ends of said first-named long stitches.

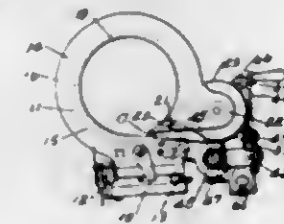
1,311,928. DRIVING MECHANISM FOR RAILWAY-VEHICLES WITH ELECTRIC MOTORS RIGIDLY MOUNTED ON SPRING-SUPPORTED FRAMES. OTTO TUCHANX, Berne, Switzerland. Filed Nov. 25, 1916. Serial No. 133,333. 8 Claims. (Cl. 105-89.)



6. In combination, a driving axle, driving wheels carried thereby, a vehicle frame relatively movable in re-

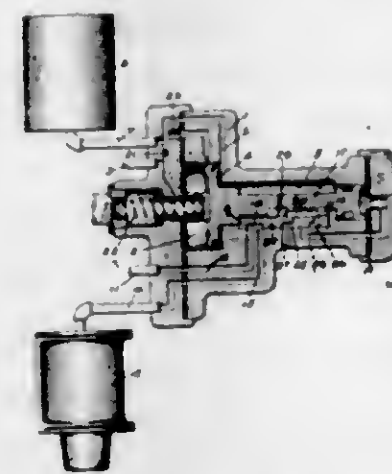
spect to said axle and including a bearing outside of said driving wheels, a gear member carried by said bearing, a shaft extending lengthwise through said bearing, and a pair of universal joints at opposite ends of said shaft, one connected to said gear member and the other to said axle.

1,311,929. TYPE-WRITING MACHINE. BENJAMIN W. TUCKER, South Orange, N. J., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed May 26, 1916. Serial No. 100,037. 8 Claims. (Cl. 197-60.)



1. In a typewriting machine, the combination of a platen carriage, a tubular open-ended work sheet holder mounted on the carriage and formed with a throat extending throughout its length, a platen rotatably supported on the carriage adjacent said throat at the reverse side of the path of the work sheet, a pressure roll, yieldable means mounted on the carriage at the impression side of the path of the work sheet for supporting said roll and normally forcing the same against the platen, and line-spacing mechanism operatively connected to rotate the pressure roll and mounted on said yieldable roll-supporting means at the impression side of the path of the work sheet.

1,311,930. STRAIGHT-AIR EMERGENCY-VALVE DEVICE. WALTER V. TURNER, Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 28, 1918. Serial No. 255,995. 4 Claims. (Cl. 188-1.)

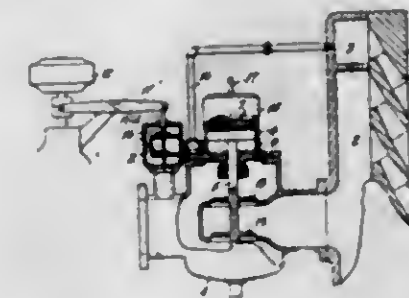


2. In a fluid pressure brake, the combination with a brake pipe, of an emergency valve device comprising valve means for effecting an emergency application of the brakes, a main piston subject to brake pipe pressure and a differential piston for operating said valve means, one side of said differential piston being connected to the atmosphere upon the initial movement of said valve means from emergency application position.

1,311,931. GOVERNING MECHANISM FOR FLUID-PRESSURE MOTORS. CARL RICHARD WALLER, Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1916. Serial No. 89,373. 2 Claims. (Cl. 137-140.)

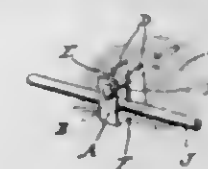
2. Governing means for elastic fluid motors comprising in combination a main valve casing and a main govern-

ing valve therein, a pressure cylinder mounted on said main valve casing and pressure-actuated means for operating said governing valve, a pilot valve casing mounted on said main valve casing to receive working fluid therefrom, said pilot valve casing comprising an outer cham-



ber, and an inner chamber ported for a double balanced puppet pilot valve, the axes of movement of said main valve and pilot valve being generally parallel, a duct connecting the inner chamber of said pilot valve casing with said pressure cylinder, and open bleeding off means for said pressure cylinder.

1,311,932. HOLDING-CLIP FOR CONCRETE-REINFORCEMENT. CARL WENZ, Chicago, Ill., assignor to Cement-Gun Construction Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1918. Serial No. 227,159. 3 Claims. (Cl. 72-122.)



1. As a new article of manufacture a U-shaped holding clip for concrete reinforcing members having a top provided at its forward edge with a hole to receive the securing nail and two side flaps provided with bottom edges to give a long bearing against the wall and provided each with a deep notch entering from its front edge for the reception of the reinforcing member the parts so proportioned that the nail when in position closes the notches so as to hold the reinforcing member in place.

1,311,933. HORSE'S NOSE PROTECTOR OR SHIELD. FRANK P. WEIGEL, Flondreau, S. D. Filed Oct. 17, 1918. Serial No. 258,490. 5 Claims. (Cl. 54-80.)



1. A fly shield for horses comprising a supporting rod of substantially U-shape and bent to pass below the horse's mouth, a screen fabric secured to the said rod and shaped to fit over the nostrils of a horse, and a flexible arch, the ends of which are secured to the said U-shaped rod and to which flexible arch the screen fabric is also secured, the ends of the U-shaped rod being projected to form pivot members by which the shield may be pivoted to the head harness and to gravitate over the horse's mouth.

1,311,934. TOY PISTOL. PAUL WEINHOLT, St. Louis, Mo., assignor of one-half to Oscar George Kostelt, St. Louis, Mo. Filed Mar. 20, 1919. Serial No. 283,752. 4 Claims. (Cl. 124—12.)



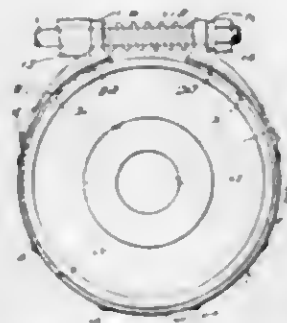
2. In a toy pistol, a barrel, the inner portion of which is tubular and the outer portion of which is channelled, a spring pressed plunger in said barrel, the spring for actuating said plunger serving as a stop therefor, and having an extension formed to afford a catch to hold the plunger retracted, the extreme end portion of said extension constituting a trigger.

1,311,935. HAIR-CLIPPER. FRED C. WHITE, Kansas City, Mo., assignor, by mesne assignments, to The Electric Clipper Company, Fredonia, Kans., a Corporation of Kansas. Filed Nov. 22, 1918. Serial No. 263,662. 7 Claims. (Cl. 30—1.)



1. A power hair clipper comprising a tube or stem, a stationary jaw secured to said stem and extending convergently upward and forward with respect thereto, a reciprocating jaw mounted upon the stationary jaw and movable to cooperate therewith in a shearing cutting action, a power transmission shaft journaled in the tube, connections at the front end of said shaft for transforming rotary movement thereof into reciprocatory movement of the upper jaw, a cap fitting over the said power-transmitting connections and the front end of said tube, and yielding means tending to advance the cap and cause the same to hold the jaws pressed yieldingly together.

1,311,936. BRAKE BAND. GEORGE C. WHITMORE, Portland, Me., assignor of one-half to Urban A. Towle, Portland, Me. Filed Aug. 25, 1917. Serial No. 189,248. 5 Claims. (Cl. 74—37.)



2. A brake lining for band brakes, consisting of a strip of the usual fibrous material, and end extensions thereof of nonfrictional vulcanized fiber substantially equal in thickness to said fibrous strip.

1,311,937. METHOD OF MANUFACTURING PISTON-RINGS. WILLIAM ERASTUS WILLIAMS, Chicago, Ill. Filed Feb. 13, 1917. Serial No. 148,457. 14 Claims. (Cl. 29—1541.)

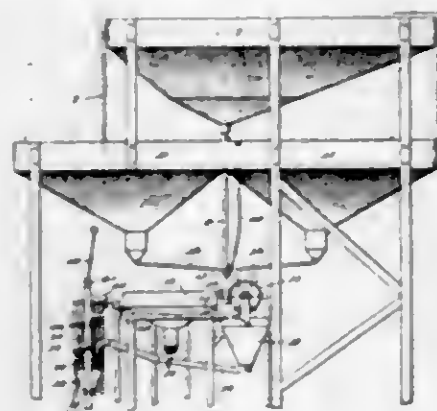
4. The method of making piston rings which consists in forming from resilient metal a longitudinally slotted

tube of noncircular cross section, compressing the tube to the form of a circular cylinder, machining the cylindrical surface of the tube while so compressed, and dividing the tube into rings.



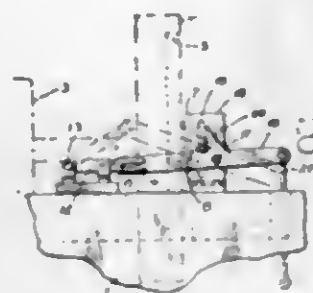
drical surface of the tube while so compressed, and dividing the tube into rings.

1,311,938. MEANS FOR SPRAYING WATER. WILLIAM F. WITT, Chicago, Ill. Filed Aug. 14, 1915. Serial No. 45,578. 3 Claims. (Cl. 137—66.)



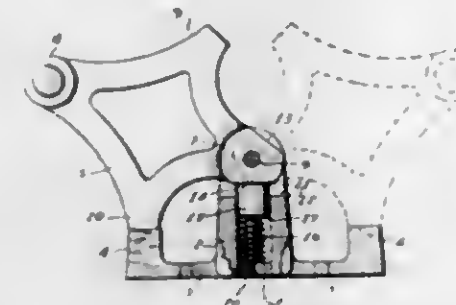
1. Spraying means comprising a collapsible chamber; means for supplying fluid to said chamber; a check valve preventing back flow; a spraying nozzle operatively connected with said chamber; and a clock work mechanism for collapsing said chamber, substantially as described.

1,311,939. BRAKE AND DRIVE-CONTROL MECHANISM. FLOYD WORLEY, JOHN H. TAOWARIDGE, and CHARLES WURTENBERG, Naugatuck, Conn., and CLYFORD LEE, New Brunswick, N. J., assignors to The Goodyear's Metallic Rubber Shoe Company, a Corporation of Connecticut. Continuation of application Serial No. 21,590, filed Apr. 15, 1915. This application filed Dec. 30, 1916. Serial No. 139,813. 4 Claims. (Cl. 74—40.)



4. In combination, a machine, a brake comprising a brake shoe and a tension brake-lever, a drive for the machine comprising an electric motor, a circuit-breaking switch and a switch-lever, said switch-lever and said brake-lever being interlocked during the driving of the machine by a hook on said switch-lever engaging said brake-lever and holding it in open position against the tension thereon, and means to actuate said switch-lever to open said switch and to unhook said brake-lever to permit thereby a substantially instantaneous application of the brake.

1,311,940. MOVABLE FOOT-RAIL. HUGO H. YOUNG, Loudonville, Ohio. Filed June 6, 1918. Serial No. 238,575. 5 Claims. (Cl. 21—15.)



5. In a movable footrail, a support in which the foot-rail is mounted for swinging in an arc to a limit of substantially opposed positions, and means for yieldingly locking the footrail in either of such positions.

1,311,941. BITUMINIZED FABRIC. HERBERT ABRAHAM, New York, N. Y., assignor to The Standard Paint Company, a Corporation of New Jersey. Filed Nov. 26, 1917. Serial No. 203,926. 2 Claims. (Cl. 154—51.)

1. A bituminized fabric comprising a felted sheet, composed of paper fibers and sea grass fibers, saturated with at least an equal amount by weight of bituminous substance.

1,311,942. ELECTROMAGNETICALLY-CONTROLLED BOARD DROP-HAMMER. ARTHUR ALDRIDGE and HOWARD TEAHUNE, Chambersburg, Pa., assignors to Chambersburg Engineering Company, Chambersburg, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1917. Serial No. 109,259. 25 Claims. (Cl. 78—29.)



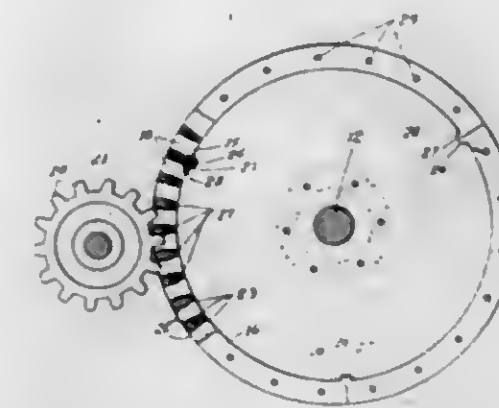
1. A board drop hammer, comprising a frame, board-lifting mechanism, clamp mechanism and a release for the clamp in combination with an electromagnetic device and connections for drawing the lifting rolls together for engagement with the board and contact devices operated by movement of the ram for making and breaking the electric circuit.

1,311,943. DRIVING-GEAR FOR TRACTION-WHEELS. GEORGE C. ANDREWS, Minneapolis, Minn. Original application filed Aug. 21, 1914. Serial No. 857,853. Divided and this application filed Sept. 4, 1917. Serial No. 189,663. 2 Claims. (Cl. 74—41.)

1. A driving gear comprising a pair of annular rims, and tooth members extending across between the rims and uniting the same, said tooth members having re-

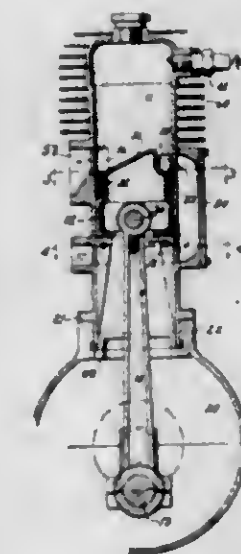
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versely beveled side walls for engagement with the teeth of a driving pinion so that the apertures separating the



tooth members extend through between the rims and are larger at the inner side of said apertures.

1,311,944. INTERNAL-COMBUSTION ENGINE. DANIEL APPEL, Cleveland Heights, Ohio. Filed Mar. 10, 1916. Serial No. 83,283. 26 Claims. (Cl. 123—74.)

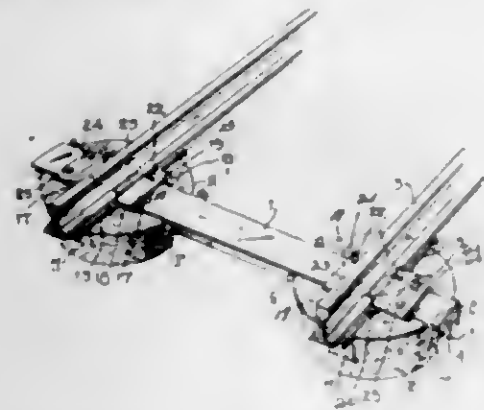


1. In an internal combustion engine, the combination, with a single-diameter cylinder, a single-diameter piston, a crank and a connecting rod, of a base partition across the cylinder between the piston and crank and having an elongated opening in which the connecting rod swings, and means surrounding the connecting rod and extending between the base partition and piston and extending transversely clear across the cylinder to divide it into two chambers independent of the space in which the connecting rod operates.

1,311,945. PAINT. EDWIN B. BARNES, Boston, Mass., assignor of one-third to Ida M. Damrell and one-third to Olga E. E. Blawie, Boston, Mass. Filed Dec. 20, 1918. Serial No. 267,708. 4 Claims. (Cl. 134—53.)

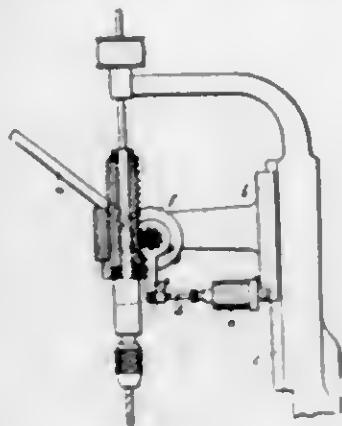
1. A paint composed essentially of china clay, beeswax and turpentine, the china clay being materially in excess of the beeswax.

1,311,946. RAILROAD-TIE. WILLIE BURCH, Lowell, Mich. Filed Nov. 1, 1918. Serial No. 260,687. 5 Claims. (Cl. 238-115.)



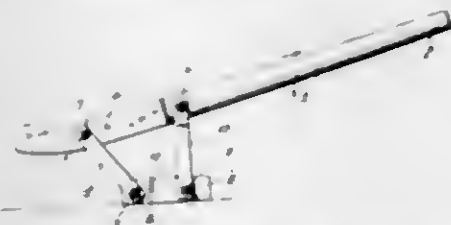
1. The combination of a plastic anchor, a tie bar T-shaped in cross section having the stem of the T embedded in the anchor, and a U-shaped bed plate disposed longitudinally of the tie bar and having its ends secured to the tie bar at the sides of the stem thereof.

1,311,947. CONTROLLED LEVER-FEED FOR MACHINE TOOLS. JOHN CHAMBERLIN, London, England. Filed Aug. 5, 1918. Serial No. 248,454. 5 Claims. (Cl. 77-32.)



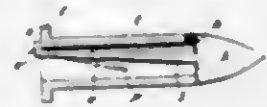
1. A controlled lever feed for machine tools comprising in combination a feed lever, a retarding device, connecting means therebetween, means operated by the feed lever to actuate said retarding device, and setting means for controlling the actuation of the retarding device whereby the said retarding device does not become operative until the tool has been brought into or nearly into contact with the work, for the purpose described.

1,311,948. SPIKE PULLER. WILLIAM H. CHERRY, New Wood, Ill. Filed Apr. 28, 1919. Serial No. 293,240. 2 Claims. (Cl. 254-27.)



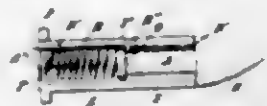
1. An implement of the character described comprising a shank having a head formed at one end, and equipped with transverse openings, a pair of bolts inserted through any of the said openings, a base block, a pair of parallel links connected to each of the said bolts, and means for pivotally connecting the said links to the said base blocks.

1,311,949. TOY CARTRIDGE. JAMES J. G. COOPER, Jacksonville, Fla. Filed Feb. 13, 1919. Serial No. 276,791. 8 Claims. (Cl. 102-26.)



1. A cartridge comprising a shell, a bullet having a head of the size of a shell and a reduced shank extending into the shell, ejecting means carried by the shell and adapted to be put under tension by the insertion of said shank therein, and means for retaining the bullet in place.

1,311,950. TOY CARTRIDGE. JAMES J. G. COOPER, Jacksonville, Fla. Filed Feb. 13, 1919. Serial No. 276,792. 5 Claims. (Cl. 102-26.)



1. A cartridge comprising a shell open at the front and having a slot in its wall, a bullet having a shank extending into the shell and offset at its rear end, ejecting means within the shell contacting at its front end with said offset and connected at its rear end with the wall of the shell, and retaining mechanism movably mounted within said slot and adapted to engage in front of said offset.

1,311,951. HEADLIGHT-DIMMER. MILO CRAWFORD, Springfield, Mo. Filed Mar. 27, 1918. Serial No. 224,988. 2 Claims. (Cl. 240-45.2.)

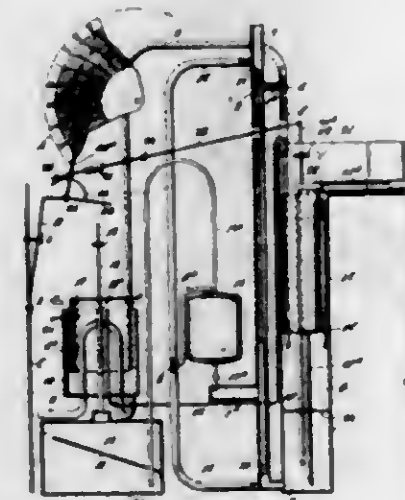


2. A headlight dimmer comprising a pair of curved shutters located opposite each other when open and movable toward each other to a closed position, a vertically disposed approximately U-shaped bracket having upper and lower arms and a vertical connecting portion adapted to be arranged in rear of and form a support for a headlight and provided adjacent one of its arms with a guide opening, vertically aligned pivots located at the upper and lower arms and connecting the shutters to the said bracket and supporting the said shutters for pivotal movement, an operating rod extending through the guide opening of the bracket, and means for connecting the operating arm with the shutters for enabling the latter to be actuated simultaneously by the said rod.

1,311,952. GAS ANALYZING AND RECORDING APPARATUS. ARTHUR R. CUNNINGHAM, Toledo, Ohio. Filed Apr. 8, 1919. Serial No. 288,446. 4 Claims. (Cl. 234-34.)

2. In apparatus of the character specified, a recording mechanism including a lever, a tank comprising a relatively deep and a relatively shallow portion, a vessel disposed in the deep portion of the tank and opened at its

top, a siphon coacting with such vessel for relieving the same of water whereby the vessel may be caused to rise and fall, a pipe extending into the deep portion of the tank, a waste pipe leading from the shallow portion of the tank, a flexible tubing connecting the two pipes, a vessel disposed in the tank and having a relatively small opening in its bottom, a recording mechanism including a lever which has the said vessel connected thereto, means



for supplying water and gas, a float controlled valve in the gas supplying pipe, a measuring chamber connected with the pipe containing the float controlled valve, a separator having connection with the measuring chamber and a variable gas receiver having connection with the separator and adapted to control the movements of the said lever in conjunction with the fluid controlled vessel.

1,311,953. BROOM ATTACHMENT. JOHN C. DAHL, Pine River, Minn., assignor of one-half to Elmer B. Dahl, Pine River, Minn. Filed Mar. 10, 1917. Serial No. 153,948. Renewed Feb. 24, 1919. Serial No. 278,932. 2 Claims. (Cl. 15-47.)

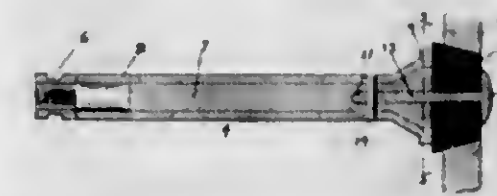


1. A broom attachment, comprising a receptacle at one side of the broom head and having a lateral opening at its lower end normally closed by the broom fiber, the discharge of the material being controlled by the movement of the broom fiber into and out of contact with the lower end of the receptacle, due to the flexing of the broom in sweeping operation.

1,311,954. VALVE FOR USE WITH CORROSIVE LIQUIDS. CHARLES T. DALLY, West Orange, N. J. Filed Mar. 16, 1917. Serial No. 155,210. 11 Claims. (251-158.)

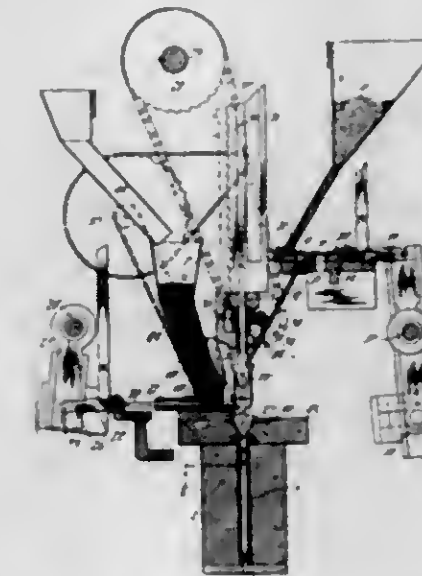
4. A valve of the class described having a suitable stem provided with a longitudinally extending passage, and which stem comprises a central core incased in a pro-

ductive non-corrodible sheathing; a valve securing member having a head, and a reduced portion extending into the passage aforesaid; a valve formed from a yielding non-corrodible material; and a key extending through holes



provided in said stem and the reduced portion of said valve securing member, said key holding said valve in compressed condition between a portion of said stem and the head of said valve securing member, substantially as described.

1,311,955. TUBE FILLING AND TAMPING MACHINE. THOMAS A. EDISON, Llewellyn Park, West Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Original application filed Aug. 31, 1914. Serial No. 859,362. (Patent No. 1,198,420, dated Sept. 19, 1916.) Divided and this application filed Mar. 6, 1916. Serial No. 82,370. 9 Claims. (Cl. 100-57.)



1. In a tube filling machine, the combination with a tube support, of means for feeding material to a tube held in the same, and means for giving a centrifugal motion to said material as it enters said tube, substantially as described.

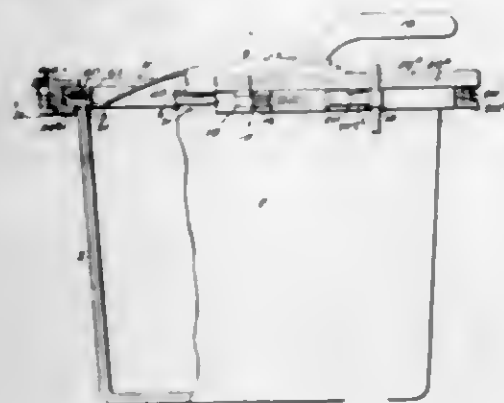
1,311,956. REELING AND UNREELING DEVICE. FRANCIS W. ELSINGER and OSCAR SCHMIDT, Hartford, Wis. Filed Sept. 9, 1918. Serial No. 253,233. 3 Claims. (Cl. 242-91.)



1. In a device of the character described, the combination with a two-wheeled truck, of a shaft, means for removably journaling said shaft upon said truck, a drum mounted on and free to rotate on said shaft, a receiver secured to one side of the drum and adjacent said shaft, a spring actuated locking pin adapted to be passed through

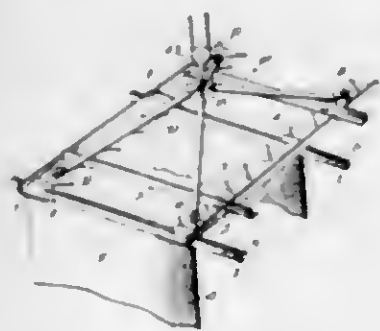
said shaft and said receiver to detachably lock the drum to said shaft, and a driving connection between said drum and one of the wheels of the truck.

1,311,957. STEAM-COOKER. WALTON C. FERRIS, Lincoln, Nebr., assignor to The National Manufacturing Company, Lincoln, Nebr. Original application filed Sept. 18, 1917, Serial No. 192,009. Divided and this application filed Apr. 11, 1918. Serial No. 227,882. 2 Claims. (Cl. 53—1.)



1. In a pressure cooker which includes a pot having an annular rim, a cover having a rim for engaging the annular rim, and means for clamping the parts together, the said means comprising a two-part ring-shaped clamp adapted to extend around the outer edge of the annular pot rim and the cover rim, each part of the said clamping ring comprising an upper member for clamping down onto the cover rim, a lower member for clamping up against the aforesaid annular pot rim and tension devices for normally forcing the said upper and lower parts of the clamping ring together to hold the opposing bearing portions of the ring-shaped clamp in tight engagement with the cover rim and the annular rim of the pot and adapted when the steam pressure in the cooker exceeds the stress of the tension devices to yield and permit the excess steam pressure within the cooker to escape.

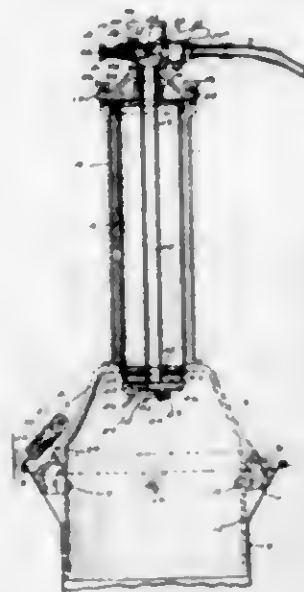
1,311,958. ELECTRODE-RACK. JOHN SPENNER FINLAY, Great Falls, Mont., assignor to Anaconda Copper Mining Company, Anaconda, Mont., a Corporation of Montana. Filed Jan. 9, 1918. Serial No. 211,065. 8 Claims. (Cl. 57—9.)



1. An electrode lifting rack comprising side-pieces having spaced notches adapted to receive electrode hooks and a horizontal member adapted to support said hooks, suspending means connected to said side-pieces, and means for maintaining said side-pieces in parallelism.

1,311,959. MILKING-MACHINE. PETER A. FAIMAND, Wilmette, Ill., assignor to The Burton Page Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1915. Serial No. 50,294. 10 Claims. (Cl. 31—98.)
6. In a milking machine, the combination with a teat cup connection, of apparatus for exhausting the air from

said connection in recurring pulsations, comprising a substantially vertical exhaust pump which produces suction



on the down stroke, and which is operable by hand, thereby permitting variations in the length and rapidity of the strokes.

1,311,960. FLOATING-TOOL HOLDER. EMIL GATINO, Detroit, Mich., assignor to The Gatring-Needham Tool Co., Inc., Detroit, Mich., a Corporation of Michigan. Filed May 31, 1918. Serial No. 237,615. 5 Claims. (Cl. 279—16.)



1. In a device of the character described, a tool holder having a socket to receive a tool shank, a tool having a shank loosely fitted to the socket of the holder and provided with a convex end articulating with the holder to adapt it for a limited universal movement with respect to the holder to permit a tilting of the tool in any direction, and a ball lodged in a bore provided in the holder adapted to enter a groove formed in the convex end of the tool shank, whereby the tool may be locked in the holder without interfering with the limited universal movement of the tool.

1,311,961. GAGE FOR FLOATING-TOOL HOLDERS. EMIL GATINO, Detroit, Mich., assignor to The Gatring-Needham Tool Co., Inc., Detroit, Mich., a Corporation of Michigan. Original application filed May 31, 1918. Serial No. 237,615. Divided and this application filed Mar. 27, 1919. Serial No. 285,480. 2 Claims. (Cl. 279—22.)

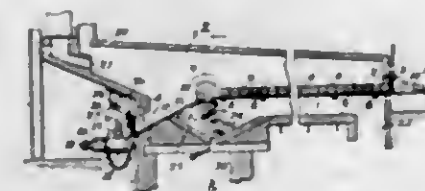
1. In a device of the character described, a tool holder having a socket adapted to receive a tool shank, a ball lodged in the tool holder, an adjustable thrust pin threaded into the holder and having a concave head with a kerf to receive a screw driver for purposes of adjustment, and a removable tubular sleeve or gage arranged in the holder and having a projecting flange to limit the extent of its entry into the said holder, and said sleeve having a grooved and rounded end to fit the concave head of the

said thrust pin whereby the thrust pin may be adjusted to articulate with the sleeve, said sleeve being also pro-



vided with a groove to receive the said ball and the latter being adapted to lock the sleeve holder without interfering with the articulating movement of the said sleeve.

1,311,962. METAL-HEATING FURNACE. JESSE R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1916. Serial No. 85,734. 11 Claims. (Cl. 263—6.)



1. In a furnace of the class described, a heating chamber having a delivery opening, a longitudinal track, means for advancing a continuous row of ingots along said track, a horizontal support for an individual ingot, on a lower level than said track, an inclined track leading from said horizontal support to said delivery opening, a door closing the delivery opening, means for moving an ingot from said horizontal support to said inclined track, means for opening said door, and means for operatively connecting said door opening means with the means for moving the ingot from said horizontal support to said inclined track.

1,311,963. GUN-SIGHT. LEONARD GREENWALT, Antioch, Nebr. Filed Jan. 9, 1919. Serial No. 270,330. 2 Claims. (Cl. 33—53.)

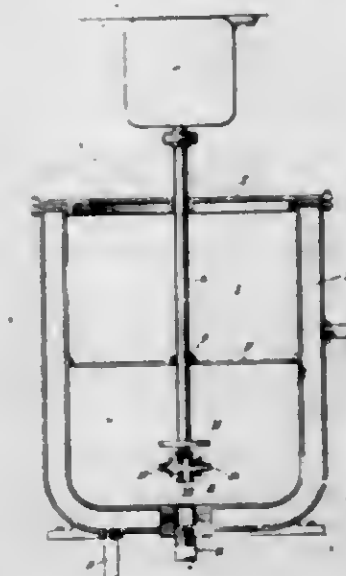


1. A sighting device for a firearm including a tubular member detachably mounted above the barrel of the arm and spaced therefrom, a front sight in the forward end of the tubular member, and a movable peep sight member mounted on the front and rear ends of the tubular member.

1,311,964. ADHESIVE. WILLIAM M. GROSVENOR, Ridge-wood, N. J., assignor to Perkins Glue Company, a Corporation of Pennsylvania. Filed Feb. 25, 1916. Serial No. 80,353. 23 Claims. (Cl. 134—22.)

2. The improved process of making coating or size which consists in mixing with water about 10 parts of starch and

about 4 parts of finely ground mixed wax, comprising about 50% paraffin and 20% carnauba wax, then raising the temperature of the batch to melt the wax and burst



the starch, and agitating the batch to emulsify the wax therein, a filler being added to give body to the coating or size.

1,311,965. VEGETABLE GLUE AND PROCESS OF MAKING THE SAME. WILLIAM M. GROSVENOR, New York, N. Y., assignor to Perkins Glue Company, a Corporation of Pennsylvania. Filed Dec. 8, 1917. Serial No. 206,143. Renewed Feb. 17, 1919. Serial No. 277,045. 21 Claims. (Cl. 87—17.)

1. The improved vegetable glue comprising a starchy carbohydrate in solution in about 3 parts or less by weight of water and containing a salt of an alkali metal and a resinous body and having substantially the properties of animal glue for gluing up veneers.

1,311,966. MILK-BOTTLE CONTAINER. JOSEPH JOHN HANNON, Maynard, Mass. Filed May 16, 1919. Serial No. 297,570. 6 Claims. (Cl. 248—20.)



5. As a new article of manufacture, a milk bottle container comprising a body having an end portion bent at right angles and slit to provide parallel arms, said arms being folded at their outer ends to provide retaining sleeves, whereby a milk bottle may be supported upon said arms and held against displacement by said sleeves.

1,311,967. AEROPLANE. RENE HANRIOT, Neuilly-sur-Seine and FERNAND GRATIET, Paris, France, assignors to Societe R. Hanriot et Cie, Billancourt, France. Filed Nov. 23, 1917. Serial No. 203,551. 1 Claim. (Cl. 244—29.)

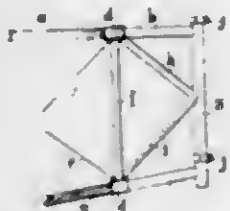
In combination with an aeroplane elevator a control mechanism comprising a control lever pivoted near its lower end on the aeroplane frame, cables attached to said control lever respectively above and below the said pivot

and extending the length of the fuselage, a vertical rod at the rear of the fuselage pivoted at its center to the frame in its longitudinal axial plane, and having the aforesaid cables attached to its upper and to its lower end re-



spectively, and an adjustable connecting tube attached at its front end to one end of the aforesaid vertical rod and at its rear end to a lever keyed on the rotatable axis of the aeroplane elevator.

1,311,968. AEROPLANE. RENE HANRIOT, Neuilly-sur-Seine, and FERNAND GRATIEUX, Paris, France, assignors to Societe R. Hanriot et Cie., Billancourt, France. Filed Nov. 23, 1917. Serial No. 203,552. 1 Claim. (Cl. 244—31.)



A rear-end closure for aeroplane comprising the rudder sternpost, the landing shoes support and the support of the fuselage girders consisting in the combination of a vertical stern tube, two pairs of horizontal tubes connected to said stern tube, sockets on said tubes adapted to receive the ends of the fuselage girders, a pair of vertical tubes adapted to connect vertically the upper horizontal tubes to the lower horizontal tubes, a horizontal tube connecting together the upper tube sockets at the insertion of the girders of the fuselage, and a plurality of inclined tubes each attached at one end to the vertical stern tube and at their other end to the end of one of the horizontal tubes.

1,311,969. COUNTER-SHAFT. FRANKLIN HARDING, Oak Park, Ill., assignor to Harding Brothers, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1918. Serial No. 213,860. 2 Claims. (Cl. 64—14.)

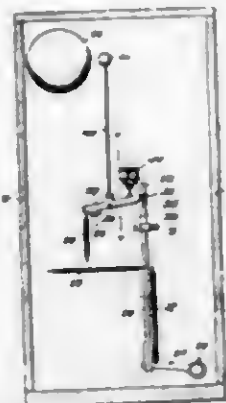


1. A countershaft construction comprising a pair of hangers, a supporting means therefor, a pair of pulley shafts having their axes substantially coaxial and their inner ends in proximity, a central support having a bearing for said inner ends, and a pair of supporting rods extending between the hangers and secured to the central support.

1,311,970. RAILROAD-CROSSING SIGNAL. ROBERT L. HARRIS and GLENN H. SMITH, Jacksonville, Fla. Filed Oct. 29, 1917. Serial No. 198,948. 2 Claims. (Cl. 116—1.)

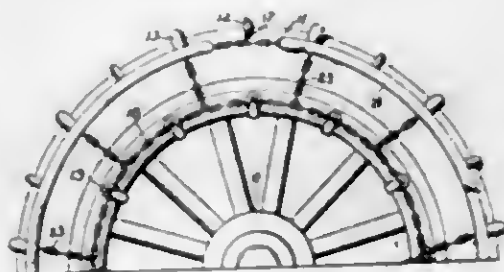
2. A signal device embodying a vertically movable member mounted transversely across a roadway and adapted to be depressed by a vehicle, a rock shaft operated by said

member, a rod mounted for reciprocation and operated by the rock shaft, a spring actuated pivoted lever having one



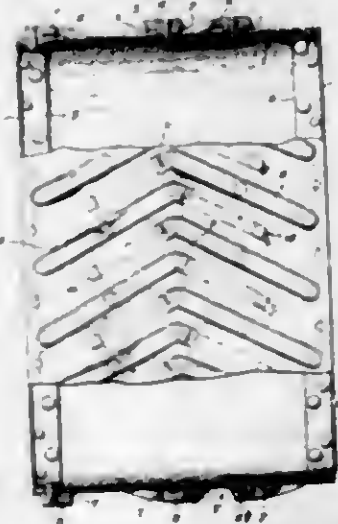
end detachably engaging a notch in said rod and operated by the latter against the tension of the spring and a signal operated by said lever.

1,311,971. AUTOMOBILE-TIRE ENLARGER. JOHN ELMER JOHNSON, Ruth, Nev. Filed Oct. 24, 1916. Serial No. 127,454. 1 Claim. (Cl. 152—14.)



In a chain tightening device for use on tires, a member having apertures in different positions with relation to the periphery of said member, links adapted to be connected to the said apertures so that the anchorage thereof is nearer to or farther from the said periphery to shorten or lengthen a chain, members extending through the links and through the apertures of the member for attaching the said links to the said member, said member having a central aperture and an anchoring device extending there-through on which the said member is rotatable.

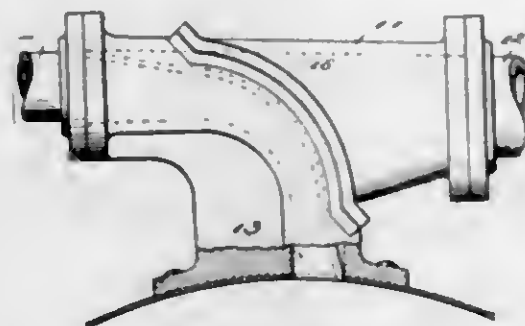
1,311,972. GROUND-ENGAGING SURFACE OF TRACTION-WHEELS. OLIVER W. JOHNSON, Cleveland, Ohio. Filed Mar. 29, 1916. Serial No. 87,603. Renewed Jan. 10, 1919. Serial No. 270,584. 9 Claims. (Cl. 21—161.)



1. In a traction wheel, the combination of a shell, having closed ends, spaced ribs on the shell, fillers movable endwise to engage between some of said ribs, cover-

ing plates secured to and carried by said fillers and extending over the ribs, and interengaging means on the fillers, the covering plates, and the shell to lock the fillers and covering plates to the shell, said means being housed by the fillers and the covering plates.

1,311,973. PNEUMATIC SEPARATOR. WILLIAM GEORGE JORSON, Abington, Mass., assignor to Anglo-American Textile Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1918. Serial No. 235,029. 8 Claims. (Cl. 183—79.)



6. In an apparatus for the purpose described, the combination of a conduit through which a current of air is induced including a separating chamber of enlarged cross section having inlet and outlet openings in its end walls and a branch outlet through its bottom, a receiving chamber arranged below and communicating with the branch outlet of the separating chamber, and a deflector within the separating chamber comprising a metal plate extending from the inlet end of the chamber to the branch outlet thereof, and having its side edges bent toward the inlet end of the chamber, the width of said deflector being greater than that of the inlet and less than the chamber in which it is arranged.

1,311,974. ELECTRIC SWITCH. FRANK KRAATZ, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1914. Serial No. 835,347. 1 Claim. (Cl. 175—282.)

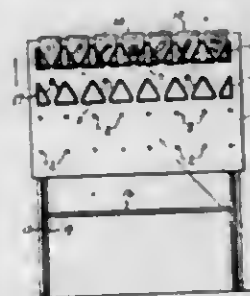


In an electric switch having studs with smooth contact faces, a conducting bridge member adapted for perpendicular switching movements relatively to said contact faces and comprising a plurality of superposed cut out and bent spring plates having forked ends with the prongs thereof extending substantially in the direction of the switching movement, and a conducting circuit breaking member having contacts at its ends between said prongs and normally projecting beyond the ends of the prongs to disengage said contact faces after the prongs are disengaged therefrom, said circuit breaking member comprising two separated and parallel spring plates fastened at their central portions to the bridge member so as to produce between the contacts and studs circuit breaking movements of substantially parallel translation.

1,311,975. RACK FOR SEED-PACKETS. LEONARD D. KROFF, Sterling, Ill., assignor to Evan L. Reed Manufacturing Company, Sterling, Ill. Filed Mar. 14, 1918. Serial No. 222,351. 2 Claims. (Cl. 211—14.)

2. In a device of the class described, in combination with a supporting board, provided with suitable perforations, a packet supporting member formed of a continu-

ous piece of wire, and comprising a pair of parallel bars united at one end by a cross bar, diagonal arms at the opposite ends of said bars, united in a coiled arm at a



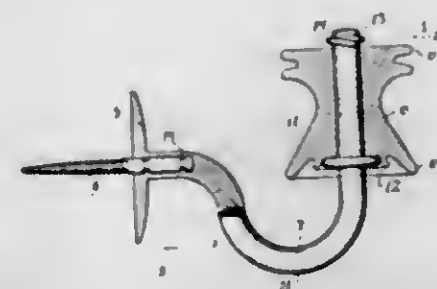
point midway of said parallel bars, and means on the end of said coiled arm for engagement with one of said perforations.

1,311,976. DISPLAY-RACK FOR GOODS. LEONARD D. KROFF, Sterling, Ill., assignor to Evan L. Reed Manufacturing Company, Sterling, Ill. Filed Mar. 14, 1918. Serial No. 222,352. 2 Claims. (Cl. 211—14.)



1. In a device of the class described, two pair of standards provided with suitable supporting means, and having series of notches at desired intervals in their inner edges, and a plurality of frames provided with swinging braces adapted for engagement with said notches, whereby said frames are held at established heights, and said frames and standards are united in a substantially rigid structure.

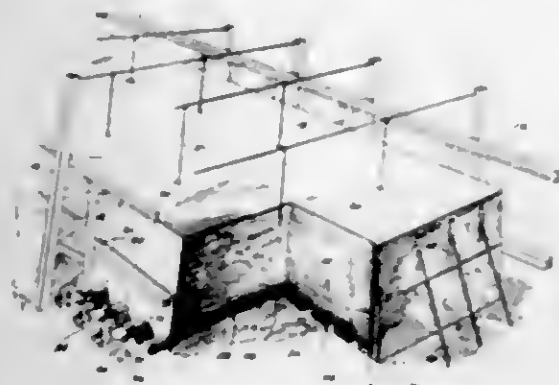
1,311,977. INSULATOR-BRACKET. WILLIAM D. KYLE, Milwaukee, Wis. Filed Aug. 2, 1915. Serial No. 43,079. 1 Claim. (Cl. 173—321.)



An insulator bracket, comprising a comparatively large base member, a threaded member around one end portion of which the base member has been formed by casting to permit attachment to a support, said base member also having a downwardly and upwardly extending arm with its upper end portion extending in a straight line at approximately right angles to the threaded means, the lower end portion of the straight part having an integral supporting shoulder formed thereon and the upper end of the arm provided with a transverse opening, an insulating spool having a bore through which the straight portion of the arm extends to permit the spool to rest directly upon the shoulder, and a wire pin extending

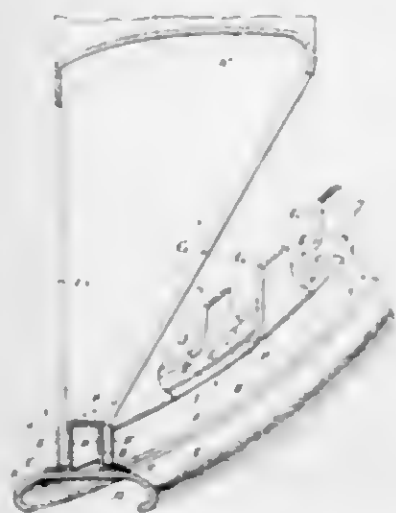
through the transverse opening of the arm and having its end portions bent around the arm to lock the pin to the arm and the apertures between the shoulder and the pin.

1,311,978. PROCESS FOR BURNING BRICK. FRANK B. LAMBERT, Chicago, Ill., assignor, by mesne assignments, to Charles A. Brown, Hinsdale, Ill. Filed Mar. 5, 1912. Serial No. 681,720. 35 Claims. (Cl. 25—157.)



1. A process for burning clay products consisting in first arranging the same in a kiln, next applying heat to said kiln and the products for a time sufficient to create a heating zone of the required temperature, then discontinuing the application of such heat and next applying gaseous fluid to said kiln and permitting said heating zone to traverse a portion thereof.

1,311,979. SHEET-METAL WHEEL. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 2, 1917. Serial No. 151,943. 7 Claims. (Cl. 21—69.)

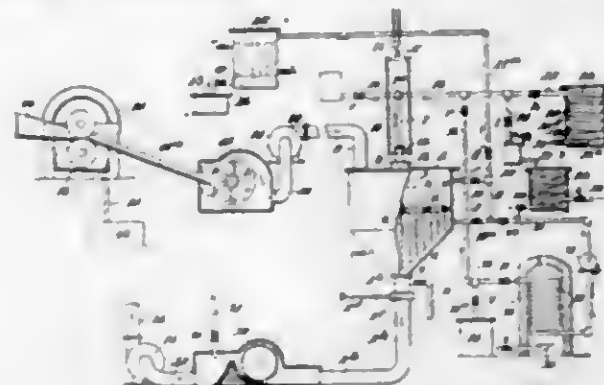


1. In a sheet metal wheel, a hub sleeve portion having integral spokes at the respective ends thereof, in combination with a ring of U-shape in cross section, the channel of said ring presenting outwardly, the outer or free ends of the spokes being applied flatwise against and secured to the outer radial side surfaces of said channel ring, and a rim member secured to the outer periphery of said channel ring.

1,311,980. PROCESS OF MAKING CELLULOSE. BRADY L. LOMIS, Hartford, Conn., assignor to Grace L. Loomis, Hartford, Conn. Filed Nov. 1, 1916. Serial No. 129,011. 6 Claims. (Cl. 32—2.)

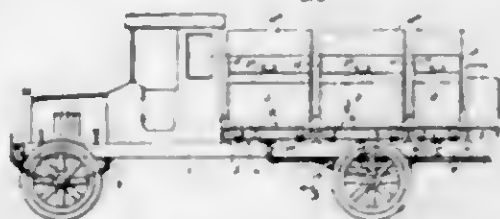
1. The process of making cellulose, which consists in subjecting shredded green plant material to maceration

in a closed chamber at a temperature below the boiling point and circulating the liquid in streams through the material, then drawing off the liquid extract, adding fresh



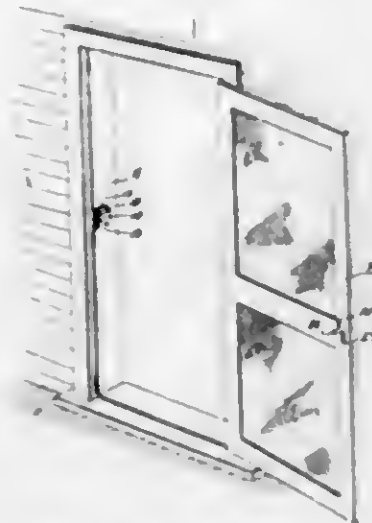
water and an alkaline chemical to the material and raising the temperature to about 212° F. to dissolve gummy and resinous matter and finish the cooking operation, whereby cellulose of strong fiber is produced.

1,311,981. TANK-VEHICLE. CHRISTIAN V. LUCIER, Massillon, Ohio. Filed Dec. 10, 1918. Serial No. 267,449. 4 Claims. (Cl. 21—7.)



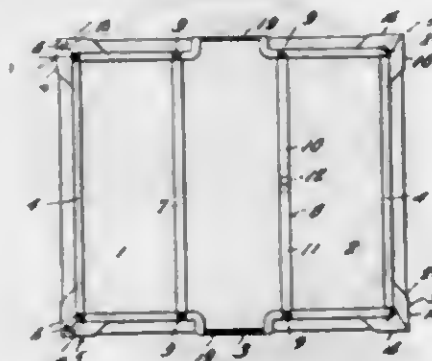
1. A tank-vehicle, comprising a chassis including laterally projecting cross bars carrying tank-supporting side members, hangers carried by the latter, and tanks mounted on said hangers and seated between and spaced by said cross bars.

1,311,982. DOOR-CATCH. JOSEPH J. LYNN, Moose Jaw, Saskatchewan, Canada. Filed May 28, 1917. Serial No. 171,536. Renewed May 23, 1919. Serial No. 299,382. 3 Claims. (Cl. 70—119.)



1. In a door catch, the combination, of a supporting casing, a fixed jaw secured to said casing, a movable jaw pivoted at its innermost end to the support above the fixed jaw, said jaws having opposed notches in their facing sides and beveled faces at their outer ends, means for guiding the free end of the movable jaw in its movement toward and from the fixed jaw, spring means between the support and the free end of the movable jaw for urging it toward the fixed jaw, and a co-acting member adapted to project between the beveled faces of said jaws and into said notches.

1,311,983. BOOK-COVER PROTECTOR. ALBERT H. MCCLATCHY, Baltimore, Md. Filed July 31, 1917. Serial No. 183,738. Renewed Apr. 4, 1919. Serial No. 287,618. 4 Claims. (Cl. 281—34.)



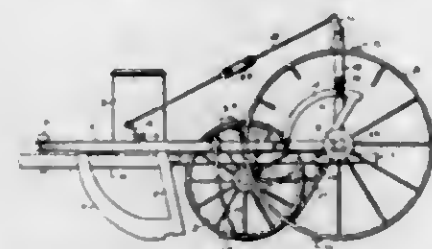
4. A book cover protector having reinforcing corner pieces, two of which have overlapping edges connected by snaps, said corner pieces overlapping the protector at the corners thereof.

1,311,984. PROPULSION OF AUTOMOBILE TORPEDOES. HUDSON MAXIM, Hightstown, N. J. Filed Feb. 14, 1917. Serial No. 148,558. 16 Claims. (Cl. 60—42.)



1. The process of producing a motive fluid for driving torpedoes which consists in commingling water with a fuel continuously burning the fuel in an atmosphere mainly of oxygen under pressure, and thereby evaporating the water and then utilizing the products of combustion and steam combined for propelling a torpedo.

1,311,985. ATTACHMENT FOR CORN-PLANTERS. HARRY J. METZ, Davenport, Iowa, assignor of one-half to John P. Birdel, Rock Island, Ill. Filed Apr. 26, 1918. Serial No. 230,942. 2 Claims. (Cl. 111—23.)



1. In combination with the frame of a corn-planter, and seed-dropping devices thereof; an auxiliary frame, adapted for attachment to said main frame; a marking wheel on said auxiliary frame; an arm mounted on said auxiliary frame, and capable of adjustment thereon; trip mechanism carried by said arm, and adapted to be operated by said marking wheel; and means for imparting the movement of said trip mechanism to said dropping mechanism, to suitably actuate the same; said means being provided with devices for extension or contraction thereof, to conform with the adjustment of said arm.

1,311,986. VISE. EDWARD J. MILES, Newton, Iowa. Filed Oct. 22, 1918. Serial No. 259,272. 2 Claims. (Cl. 81—19.)

1. A vise comprising a base having a central opening, and having opposite upwardly extending curved flanges, and having at the lower parts of said flanges inwardly extending shelf portions, the shelf portion on one side of

the opening being lower than the shelf portion on the other side of said opening, a gripping member above the lower shelf portion slidably mounted, provided at its

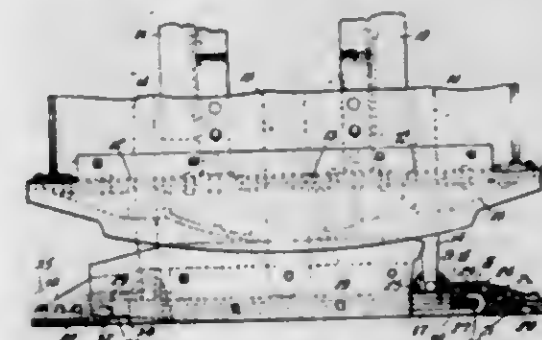


lower part with an inwardly extending shelf, the upper surface of which is level with the higher shelf portion, and means for adjusting said gripping member.

1,311,987. PROCESS OF PURIFYING OIL. ALBERT E. MILLER, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 26, 1917. Serial No. 177,051. 6 Claims. (Cl. 190—26.)

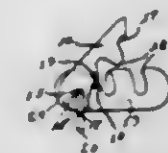
1. In the further treatment of oils which have been subjected to the action of aluminum chlorid and which still contain suspended or dissolved aluminum chlorid, the process which comprises air-blowing such an oil until the aluminum chlorid is converted into a form readily settling out.

1,311,988. BUFFER-PLATE FOR PASSENGER-CARS. JOHN R. MITCHELL, Evanston, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 22, 1918. Serial No. 263,070. 8 Claims. (Cl. 213—30.)



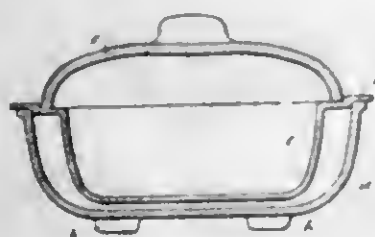
1. A buffer plate for passenger car equipment, said buffer plate having an inherently resilient central portion adapting the buffer plate to flex without permanent set, about the usual central buffer stem.

1,311,989. CHAIN MAT FOR WHEEL-TIRES. WILLIAM H. MITCHELL, East St. Johnsbury, Vt. Filed Oct. 8, 1915. Serial No. 54,844. 1 Claim. (Cl. 24—242.)



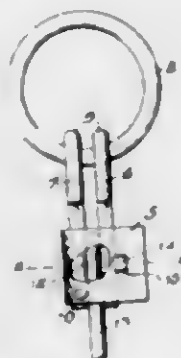
A hook, comprising an elongated body having a rounded end and lateral notches along an edge thereof, and having a centrally disposed slot in the rounded end and a pocket in the edge thereof opening into the adjacent lateral notch, a pivotal and longitudinal movable latch disposed at one side of the body and closing the lateral notches thereof, a U-shaped member, a pivot connecting the ends of the U-shaped member and passing through the latch and longitudinal slot of the body, an element connecting the parts of the U-shaped member and adapted to ride on the rounded end of the body and effect a longitudinal movement of the latch, and a pin carried by the latch to enter the pocket formed in the edge of the rounded end of the body and held therein by the action of the U-shaped member and the element carried thereby engaging the rounded end of the body.

- 1,311,990. COOLING UTENSIL. SUNE MÖLLER, Göteborg, Sweden. Filed Jan. 5, 1917. Serial No. 140,862. 1 Claim. (Cl. 62—91.)



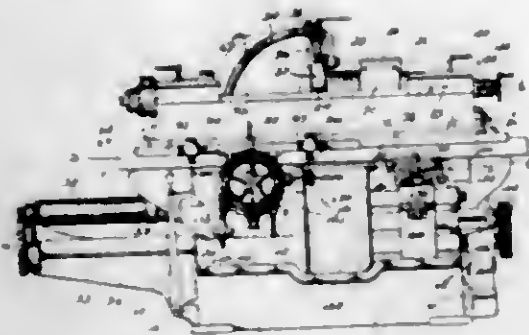
A cooling utensil comprising in combination an outer porous vessel and an inner non-porous receptacle carried by said outer vessel and spaced therefrom so as to permit the insertion of a fluid between them and having a non-porous flange projecting outwardly beyond the wall of the outer porous vessel for preventing the contents of the inner receptacle from reaching the outer vessel.

- 1,311,991. GRIPPING-TOOL. JESSE D. NOTER, Pleasantville, Pa. Filed June 26, 1918. Serial No. 242,034. 2 Claims. (Cl. 24—135.)



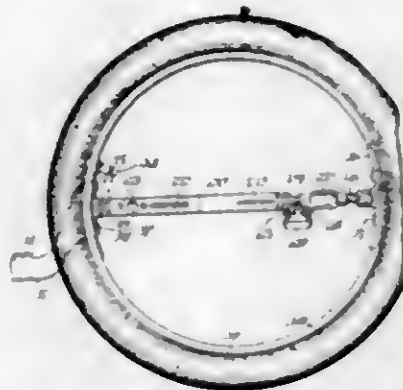
1. A gripping tool comprising a pair of parallel elongated clamping bars, a support in which said bars are mounted, one bar being pivotally connected to the support and the other bar being free in the support for movement toward and from the first mentioned bar, means for forcing the second mentioned bar toward the first mentioned bar to grip an object lengthwise therebetween, and a suspension means connected to the outer ends of the bars.

- 1,311,992. GRINDING-MACHINE. HARRY J. PEAKINA, Grand Rapids, Mich. Filed Sept. 1, 1916. Serial No. 115,019. 13 Claims. (Cl. 51—4.)



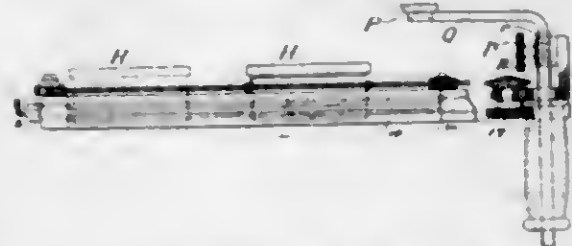
1. In a grinding machine, a support, a work holding table mounted to traverse lengthwise of the support, means to rotatably mount a cylinder on the table, means for moving the table, a master gearing for driving both the table in its movements and the cylinder in its rotation, and control mechanism for connecting said master gearing with the driving means for said table and cylinder, said control mechanism being operable for each independent one of the other.

- 1,311,993. TIRE-CARRIER. ETIENNE PLANCHÉ, Flint, Mich. Filed Mar. 20, 1918. Serial No. 223,494. 7 Claims. (Cl. 224—29.)



3. In a tire-rim holding device, the combination of a pair of flexible arms, a shoe secured to the outer end of each arm, one shoe having a recess within which the rim is received by a lateral movement of the rim, the other shoe being unflanged at its outer edge to permit of the sliding engagement of the rim therewith without lateral movement of the rim, means associated with the latter shoe adapted to engage a projection on the rim or tire by a rotary movement of the rim, and means for holding the rim with the projection in engagement with said means, substantially as described.

- 1,311,994. AERIAL-OBSERVATION INSTRUMENT. RICHARD FITZ POWERS, Doveridge, England. Filed Aug. 6, 1917. Serial No. 184,723. 8 Claims. (Cl. 33—46.)



1. In an aerial observation instrument, a support, a transparent plate provided with position identification lines, and universally mounted thereon so as always to remain horizontal, and sighting means vertically adjustable on said support and adapted to sight objects through said plate.

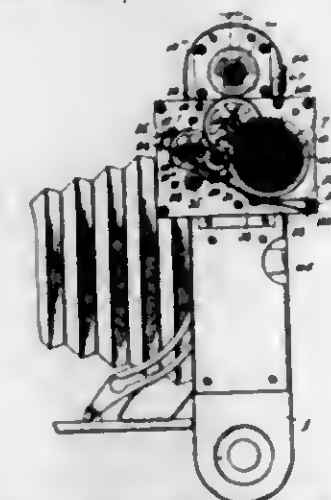
- 1,311,995. SIGNALING DEVICE. RICHARD FITZ POWERS, Doveridge, England. Filed Apr. 9, 1918. Serial No. 227,607. 6 Claims. (Cl. 33—1.)



1. The combination, in a device for translating signals from one system to another, of a transparent plate having

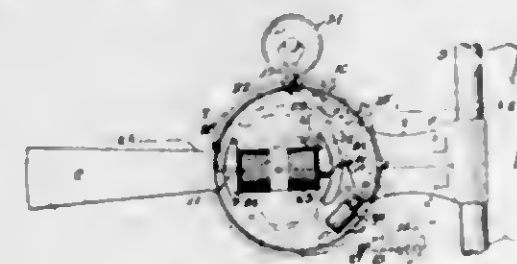
position identification lines marked thereon of predetermined scale, one of which lines is intended to correspond to a north to south line, and a weight attached to the said plate opposite one end of the said north to south line, for the purpose set forth.

- 1,311,996. FILM-WINDING MECHANISM FOR CAMERAS. FRANK F. PULVER, Rochester, N. Y., assignor of one-half to Libbie H. Pulver, Adams Basin, N. Y. Filed Jan. 6, 1919. Serial No. 269,870. 18 Claims. (Cl. 242—55.)



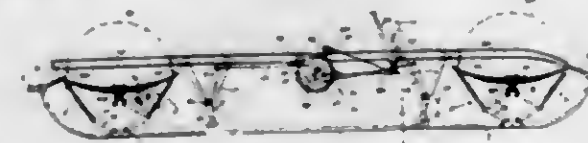
1. A film winding mechanism comprising a motor for driving the film, a stop for the motor, and means operated by the motor during the winding of the film for effecting the operation of the stop to stop the motor, said means having a provision, independent of the stop, for varying the action of the motor to correspond with the amount of film wound on the spool of the film winding mechanism.

- 1,311,997. SIGNAL DEVICE. JOSEPH A. REISCHMANN, Jr., Milwaukee, Wis. Filed Oct. 2, 1916. Serial No. 123,252. 2 Claims. (Cl. 177—329.)



1. In a device of the described class, the combination of a signal arm, a stationary electromagnet, a pair of circular members secured to the respective ends of said electromagnet, an armature revolvably supported upon said stationary electromagnet, and adapted to revolve a partial revolution only around said electromagnet, a switch, pair of terminals connected with said switch, said armature being adapted to move said signal arm in an upward direction, and means for holding said signal arm when raised, said signal arm being moved downwardly by gravity after having been released from its holding means.

- 1,311,998. COMBINED BRAKE AND JACK FOR VEHICLES. GUY ALLEN ROGERS, Portland, Oreg. Filed Feb. 18, 1918. Serial No. 217,991. 2 Claims. (Cl. 21—8.)



1. A combined brake and jack for vehicles comprising brake shoes capable of supporting the weight of a vehicle

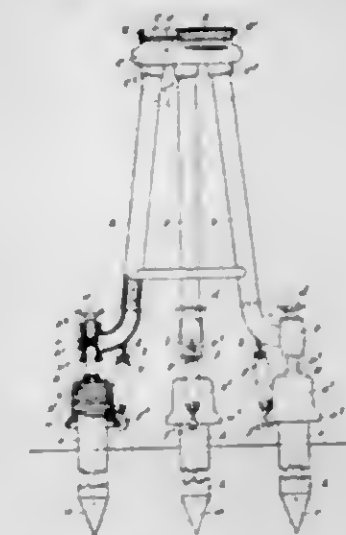
on a roadway, toggle links connecting the brake shoes with the main springs of a vehicle, and tension springs between the ends of the main springs and the elbows of said toggles to keep the brake shoes normally in an elevated or idle position.

- 1,311,999. RESILIENT WHEEL. WALTER BOKOSZ, Calumet, Mich. Filed Apr. 15, 1919. Serial No. 290,254. 1 Claim. (Cl. 152—52.)



In a flexible wheel, the combination with a rigid hub formed in sections, a rim circumferential thereto, and a tire disposed around said rim, of an annular recess formed in said hub, a ring set therein, bushings fixed in said rim, screws rotatable in said bushings, other screws in said hub extending through said ring, helically wound compression springs engaged by said screws, means for securing the heads of said screws when adjusted, and flexible coverings encircling said springs so as to form a complete closure.

- 1,312,000. SUPPORT FOR AIMING DEVICES, TELEMETERS, AND OTHER APPLICATIONS. JOSEPH LOUIS ROUTIN, Paris, France. Filed May 3, 1918. Serial No. 232,353. 4 Claims. (Cl. 248—43.)



1. A support for aiming and other devices of precision, comprising a base element consisting of a plurality of posts adapted to be anchored in the ground, an upper element consisting of a platform provided with legs adjustably supported on said posts, and resilient means between said posts and legs for holding the elements in position.

- 1,312,001. FLUID-TIGHT PLUG OR SOCKET. ARTHUR JOHN ROWLEGE, London, England, assignor to D. Napier & Son Limited, London, England. Filed Sept. 10, 1917. Serial No. 190,644. 9 Claims. (Cl. 285—50.)

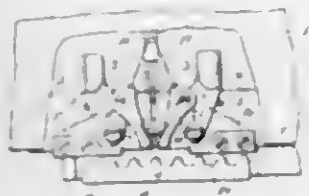
1. The combination with the cylinder of an internal combustion motor having a conical opening through its

wall of a fluid tight socket having a conical periphery fitted in said opening, and means for forcing said socket



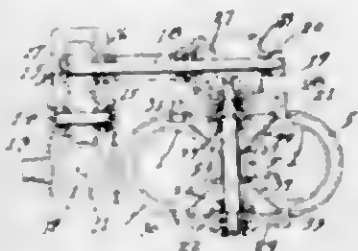
into said opening including a member threaded to said socket, and means to hold the socket against rotation, as the member is screwed up.

1,312,002. STEP-BY-STEP MECHANISM IN CALCULATING-MACHINES. KARL VIKTOR RUDIN, Stockholm, Sweden. Filed Mar. 18, 1918. Serial No. 233,232. 3 Claims. (Cl. 235-63.)



1. A step-by-step mechanism in calculating machines including a framework provided with a horizontal row of notches, a sliding carriage capable of step-by-step movement, a locking device therefor including a member arranged upon the carriage, such member being movable in a vertical plane and normally engaging said notches on the framework of the machine, a pair of projections arranged on the sliding carriage, a toothed bar, such projections being adapted to engage therewith, each projection comprising two parts pivotally connected with each other, movable in a vertical plane, one of said parts being intended to be caused to engage with the toothed bar when actuated.

1,312,003. VALVE FOR HYDROCARBON ENGINES. RICHARD SCHMITZ, Chicago, Ill., assignor to Schmitz Engine Company, a Corporation of South Dakota. Filed July 12, 1915. Serial No. 39,221. 3 Claims. (Cl. 123-39.)



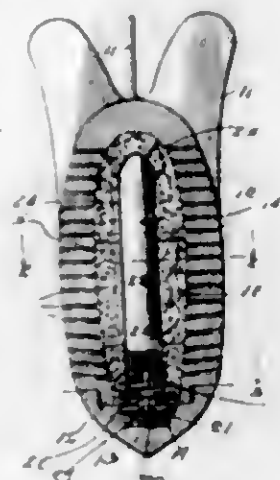
1. The combination with a gas engine of a pair of rotary valves, a shaft mounted intermediate adjacent cylinders to drive said valves, the seats for said valves being formed on the side walls of the cylinders, there being ports in said valves and ports in the cylinders of the engine with which the ports of the valves register during rotation, means actuated by the crank shaft to rotate said valves, a plurality of sealing plates mounted in said valves intermediate said ports, and means to hold said plates yieldingly against the face of the valve seat.

1,312,004. HAND-GRENADE. GEORGE A. SHAW, Toronto, Ontario, Canada. Filed Aug. 31, 1917. Serial No. 189,226. 5 Claims. (Cl. 102-29.)



1. A hand grenade formed of a double convex disk-shaped shell, an explosive containing receptacle arranged within said shell, means for detonating the explosive and a plurality of projectiles arranged loosely within said shell adapted to operate said detonating means.

1,312,005. AERIAL BOMB. ROYD A. SIGLER, Sioux Falls, S. D. Filed Aug. 5, 1918. Serial No. 248,360. 2 Claims. (Cl. 102-2.)



2. A device of the character described, comprising an outer casing having a plurality of transverse openings, projectiles for insertion within the openings, an inner tube extending longitudinally within the outer casing, an exploding charge arranged within the outer casing exteriorly of the inner tube, an inner casing arranged within the longitudinal tube and adapted to move forwardly therein, means to oppose the forward movement of the inner casing, an exploding charge within the inner casing, and means operated by the forward movement of the inner casing to fire the first named exploding charge and subsequently fire the second named exploding charge.

1,312,006. CARPENTER'S IMPLEMENT. EVANDER A. SMITH, Houston, Tex. Filed Apr. 1, 1918. Serial No. 225,857. 1 Claim. (Cl. 33-42.)



A device of the character described, including a tubular member, having resilient sides, one end of which is

closed, and the other end of which is open, said closed end being provided with an orifice, a member one end of which is fitted through said orifice, and is provided with a slot, and means passing through the tubular member and through said slot whereby the resilient sides of the tubular member may be clamped against the member fitted through said orifice and to secure said last mentioned member against movement and a tong carried by the other end of said last mentioned member.

1,312,007. PRESERVATIVE COMPOSITION FOR TREATING RUBBER FABRIC. RICHARD E. THIERFELDER and JOHN SCHMARZLE, Jr., Milwaukee, Wis. Filed Nov. 10, 1917. Serial No. 201,225. 6 Claims. (Cl. 134-17.)

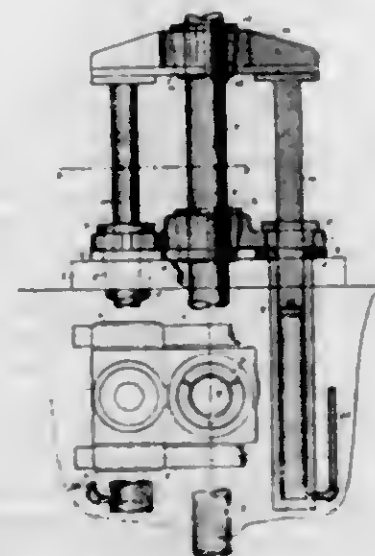
2. A preservative composition comprising a mixture of tar, pitch, resin, rubber-cement, fish-glue, glycerin and turpentine.

1,312,008. RESETTING MECHANISM FOR COUNTING-MACHINES. CHARLES F. THOMPSON, Washington, D. C. Filed Apr. 23, 1917. Serial No. 163,996. 4 Claims. (Cl. 235-144.)



2. In mechanism of the class described, a shaft, number wheels upon the shaft, means for rotating the said wheels, a member movable into and out of coöperative relation to said wheels, means upon the wheels and the said member adapted for coaction to prevent rotation of the wheels beyond zero position, rotation of the said shaft in one direction serving to reset the wheels to zero position, means for rotating the said shaft in said direction and then in the opposite direction, a cam carried by said shaft, adapted to actuate the member into coactive relation to the number wheels at a predetermined point in the rotation of the shaft in the first-mentioned direction, the said member being adapted to be actuated by said cam during the return movement of the shaft to be forced out of said coactive relation.

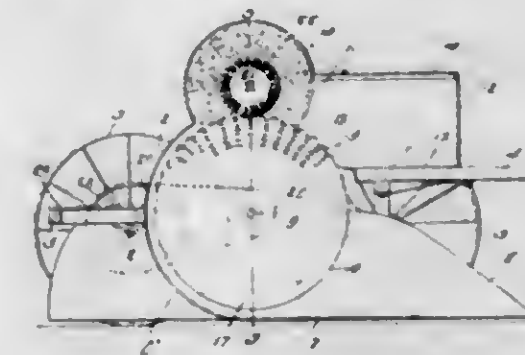
1,312,009. PIPE-PULLING DEVICE. HOMER C. THURFT, Goose Creek, Tex. Filed Dec. 16, 1918. Serial No. 264,978. 2 Claims. (Cl. 254-30.)



2. A device for pulling pipe from a well, comprising an oblong base, having a central opening, arches which sup-

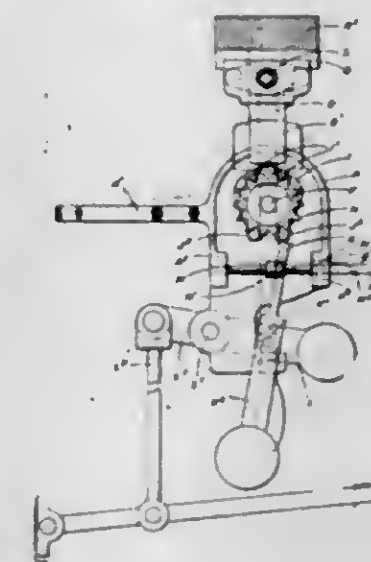
port the respective ends of said base, and which rest upon a suitable foundation, hydraulic jacks fitted through the ends of said base and through said arches, the upper end of each jack having an annular flange, which engages the base and holds the jacks suspended therefrom, a head block having a central opening mounted upon said jacks, to be operated thereby, said central openings of said base and block admitting the pipe to be pulled, means within said respective openings fitted around said pipe, said means in the opening of the base engaging the pipe to hold it elevated, and the means within the opening of the head block engaging the pipe to elevate it when the head block is elevated.

1,312,010. COTTON-PICKER. ALBERT J. THAWAN, Dexter, Mo. Filed Mar. 29, 1919. Serial No. 286,011. 4 Claims. (Cl. 56-40.)



1. A machine for picking cotton, including a housing, means for directing plants into the housing, spaced wheels mounted for rotation in the housing and adapted to receive plants therebetween, picking teeth upon the periphery and the sides of each wheel and projecting in the direction of rotation of the wheel, and a revoluble doffing brush straddling each wheel and movable at a higher speed than the picking wheel.

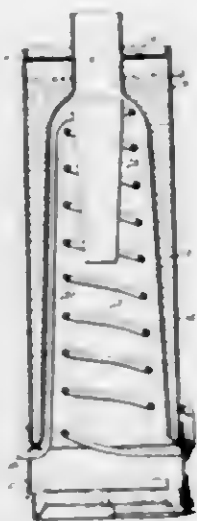
1,312,011. VISE OR LIKE WORK-HOLDER. ALBERT RICHARD JAMES WILKINSON, Twickenham, England. Filed Aug. 15, 1918. Serial No. 250,026. 11 Claims. (Cl. 81-41.)



1. In a work holding device the combination of a fixed bracket, a member so mounted on the bracket that its angle of inclination relatively to the bracket can be adjusted, a member rotatably carried on the adjustable member, means for mounting work on the rotatable member, and treadle operated mechanism by means of which the rotatable member can be turned in either direction irrespective of the angular position of the adjustable member as set forth.

11. In a work holding device the combination of a fixed bracket, a horizontal spindle carried by this bracket, a member pivoted about this spindle so that its angle of inclination relatively to the fixed bracket can be adjusted, means for locking the pivoted member after its angular position has been adjusted, a bevel wheel on one end of the horizontal spindle, a spindle rotatably mounted on the pivoted member, a table on one end of this spindle, a bevel wheel on the other end of this spindle gearing with the bevel wheel on the horizontal spindle, means for mounting work on the table, a toothed wheel on the horizontal spindle, a treadle operated lever, a pawl carried on this lever and adapted to engage the toothed wheel so as to cause rotation thereof when the treadle is operated, means for swinging the pawl from one side to the other of the axis of the toothed wheel so as to reverse the direction in which the table will be turned when the treadle is operated, and a sliding member which is adapted to move automatically into engagement with the toothed wheel and to be moved out of engagement with this wheel by the pawl when the lever on which the pawl is carried is actuated by the treadle as set forth.

1,312,612. WATER-HEATER. JOHN LOW ZACHARY, Atlanta, Ga. Filed Apr. 25, 1918. Serial No. 230,777. 1 Claim. (Cl. 122-169.)



A water heater comprising a substantially cylindrical casing having a central flue extending from near the bottom of the casing through the top thereof and spaced apart from the wall of the casing to form a water chamber of relatively small thickness, said central flue being connected to the wall of the casing at its lower end, a water supply pipe extending into the casing below the flue from one side and out at the other side and having a spiral portion within the flue extending from the bottom to near the top thereof, the coils of the spiral being spaced apart from each other and from the wall of the flue, and the said pipe opening into the water chamber, a heater at the bottom of the casing, and a baffle at the top of the spiral, the flue having a reduced portion at its upper end just above the baffle.

1,312,613. SELF-CONTAINED BASE SINGLE-OBSERVER HEIGHT-MEASURING INSTRUMENT OF THE RANGE-FINDER TYPE. ARCHIBALD BARR and WILLIAM STROUD, Anniesland, Glasgow, Scotland. Filed Mar. 26, 1919. Serial No. 285,369. 2 Claims. (Cl. 88-27.)

1. A self-contained base single-observer height measuring instrument of the range-finder type having a double telescope system and associated eyepiece system, the objective of each telescope being arranged so that its principal focal plane is situated at a position between the objective and the eyepiece system, a lens situated at a position between the focal plane of the objective and the eyepiece system, a refracting prism in each telescope,

means for translating each prism along the axis of its telescope between the objective and the lens, and means whereby each refracting prism is so maintained that the angle which its principal plane of refraction makes with



the plane of triangulation varies in such a manner as to be always equal to the angle between the line of sight and the vertical at which the instrument may be directed, for the purposes set forth.

1,312,614. SELF-CONTAINED BASE SINGLE-OBSERVER HEIGHT-MEASURING INSTRUMENT OF THE RANGE-FINDER TYPE. ARCHIBALD BARR and WILLIAM STROUD, Anniesland, Glasgow, Scotland. Filed Mar. 26, 1919. Serial No. 285,370. 8 Claims. (Cl. 88-27.)

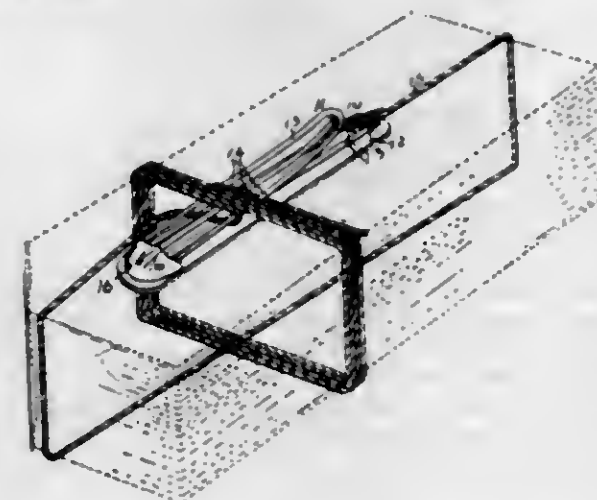


1. A self-contained base single-observer height measuring instrument of the range-finder type having a double telescope system and associated eyepiece system, a refracting prism in each telescope, means for translating each refracting prism along the axis of its telescope, an auxiliary prism provided in one of the telescopes fixed at a position on the axis of the telescope with which it is associated, by which deviation equal to or slightly greater or less than that obtained by the two refracting prisms of the telescopes is produced, and means whereby each refracting prism and the auxiliary prism is so maintained that the angle which its principal plane of refraction makes with the plane of triangulation varies in such a manner as to be always equal to the angle between the line of sight and the vertical, for the purposes set forth.

1,312,615. PACKAGE-TIE. JOHN C. BEDINGFIELD, Carl, Ga., assignor of one-half to E. L. Williamson, Jefferson, Ga. Filed July 14, 1917. Serial No. 188,677. Renewed Mar. 5, 1919. Serial No. 280,818. 6 Claims. (Cl. 24-18.)

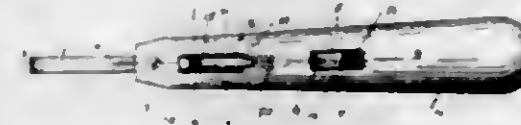
4. A package tie having a cord engaging member consisting of a base to bear on a bundle and a co-acting yield-

ing jaw, between which and the base the cord may be engaged, and said jaw having a back forming a seat for transverse cord wraps, the base consisting of a plate having longitudinal ribs, and the jaw consisting of spaced longitudinal wire strands disposed intercurrently with and respectively outside of and between the base ribs, said base ribs and jaw strands comprising a continuous length of wire of which said rib portions are secured to the surface of plate.



6. A package tie having a cord engaging member consisting of yieldingly related jaws one of which constitutes a base which is substantially flat and is adapted for contact with the surface of a bundle to be tied and is provided with terminal means for the attachment of a wrapping cord, each of said jaws consisting of a plurality of wire strands extending longitudinally of the jaws, the strands of one jaw being disposed intercurrently with relation to those of the other jaw and normally disposed substantially throughout their lengths in a common plane, and the other jaw, which is yieldingly movable toward and from the jaw forming the base, having an outwardly deflected free-end forming a concave back adapted to provide a seat for cord wraps extending around a bundle in a plane transverse to the length of the jaw, to secure the second named jaw in a fixed relation with the jaw forming the base.

1,312,616. ADJUSTABLE SPARK-PLUG TESTER. RALPH E. BEZMAN, Minneapolis, Minn. Filed Oct. 28, 1918. Serial No. 260,028. 4 Claims. (Cl. 175-183.)

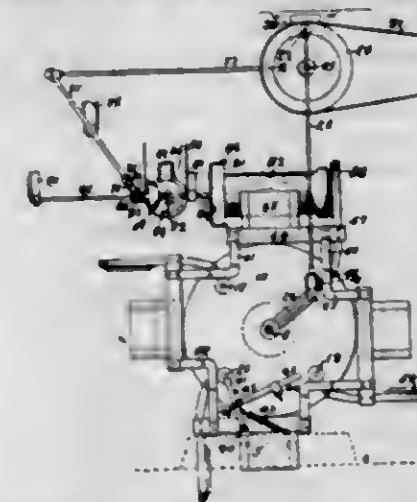


1. A spark gap tester comprising an insulated handle, current-conducting contacts applied to said handle, a spark gap point connected to one of said conducting contacts, a relatively movable spark gap point electrically connected with the other conducting contact, but movable toward and from the cooperating spark gap point, and an insulated adjusting element connected to said movable spark gap point and mounted on said handle in position to be engaged by the operator.

1,312,617. MACHINE FOR INVERTING PIPE. MAASALL CAINE, Barberton, Ohio. Filed Feb. 15, 1919. Serial No. 277,346. 11 Claims. (Cl. 25-40.)

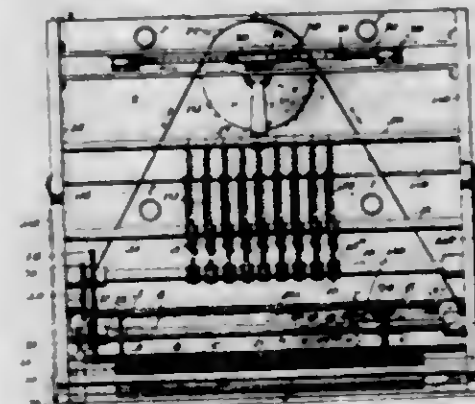
1. A device of the class described embodying a frame revoluble in a vertical plane, cradles for holding pipe mounted on said frame and disposed near the peripheral portion thereof, said cradles arranged to hold said pipe during the orbital movement of said pipe about the axis

of revolution of said frame during the inverting operation, automatic means operable only to revolve said frame



intermittently a fractional portion of a revolution at a time, and means to operate said frame revolving means.

1,312,618. CALCULATING-MACHINE. SAMUEL EDWARD CARLIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, a Corporation of New York. Filed Feb. 26, 1906. Serial No. 302,845. 16 Claims. (Cl. 235-59.)

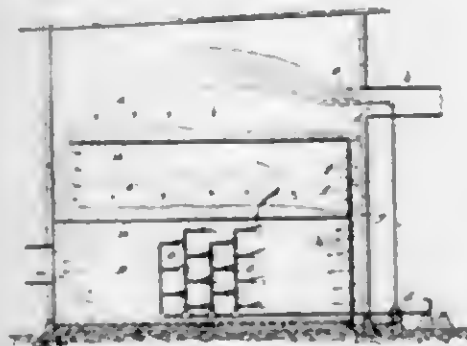


1. In a combined typewriting and computing machine, in combination, a printing mechanism comprising a traveling character-spacing carriage, a computing mechanism comprising totalizing mechanism and means for operating the same, said operating means and said totalizing mechanism being relatively movable, a constantly effective connection from said carriage to the movable element of said computing mechanism to cause said element to move in accordance with movements of said carriage throughout the whole range of movement of the latter, said connection including motion multiplying mechanism for amplifying the movements of the movable element of the computing mechanism relatively to the corresponding movements of the carriage, and means operatively connecting the totalizer operating means with said printing mechanism.

1,312,619. METHOD OF AND APPARATUS FOR EVAPORATING LIQUIDS. OMA CARR, New York, N. Y., assignor of one-half to Eugene W. Deming, New Orleans, La. Substitute for application Serial No. 850,413, filed July 11, 1914. This application filed Sept. 24, 1917. Serial No. 192,936. 5 Claims. (Cl. 127-9.)

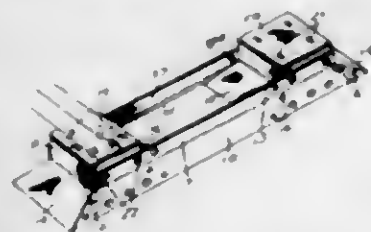
1. A method of drying which comprises continuously removing moisture from sprayed liquid concentrate carrying the solids to be recovered by a current of gas much greater in volume than is sufficient to remove the moisture contained in said concentrate and which current moves at a low velocity uniformly over the cross-section of the drying-chamber, settling the dry particles from the current of gas so controlled, thereafter causing the partly saturated gas to pass at low velocity uniformly

over the cross-section of another wet chamber in which a more dilute solution of the substance to be dried is sprayed to fully saturate said gas, to thereby not only collect the entrained dry particles carried into said wet chamber by said gas but also to utilize the surplus moisture-absorbing capacity of the gas to preliminarily concentrate said more dilute solution, the proportions of gas and liquid being such that the greater part of the water is removed in said wet chamber.



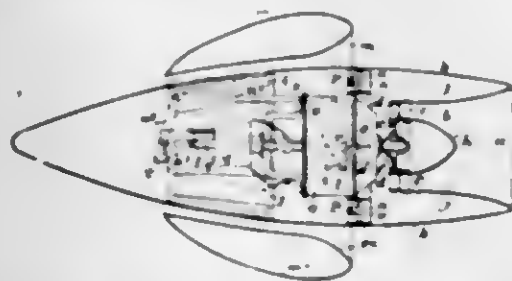
3. In an apparatus of the class set forth, a lower wet chamber into which extends a spraying apparatus and which has its front wall perforated, an upper drying chamber divided horizontally into an upper commingling chamber and a lower settling chamber, the front wall of the latter being perforated and a flue being provided at the front end of the apparatus for conveying the partly-saturated gas from the settling chamber into the wet chamber, and means for stomizing the concentrate formed in the wet chamber in the commingling compartment and for simultaneously introducing heated gas into said commingling compartment.

1,312,020. RAILROAD-TIE. JOHN OWEN DAVIS, Cushing, Okla. Filed May 1, 1919. Serial No. 293,932. 9 Claims. (Cl. 238-30.)



1. A rail tie consisting of a metallic shell formed with downwardly opening hopper-shaped end portions, and a plastic reinforcement within the said hopper-like end portions to cooperate with the shell in forming end seats at the ends thereof.

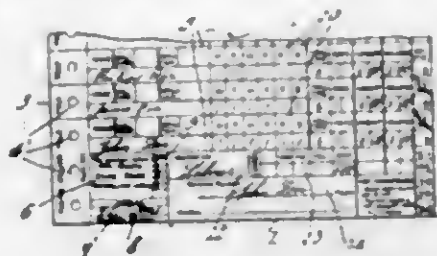
1,312,021. MOTIVE-POWER MEANS FOR UTILIZING THE ENERGY OF AIR-CURRENTS. WILLIAM JOHN DICKINSON, Erith, and ARTHUR HERBERT STARK, Leytonstone, England. Filed Feb. 21, 1918. Serial No. 218,602. 12 Claims. (Cl. 290-55.)



5. Means for utilizing the kinetic energy of air currents comprising in combination a mouth piece device of vena contracta formation, a turbine arranged at the throat of

said device, a dynamo operatively connected with said turbine, and a stream line casing inclosing the parts substantially as set forth.

1,312,022. BOOK. HAROLD C. DWELTZ, Lexington, N. C. Filed Feb. 11, 1915. Serial No. 7,529. 1 Claim. (Cl. 283-66.)



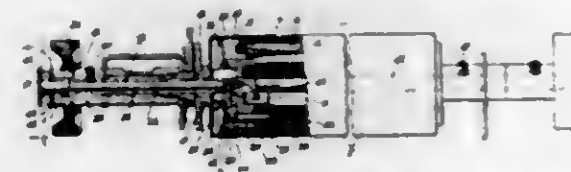
A book including separate pages or groups of similar original checks, all of the checks of each page or group being of the same width and length and all of the pages or groups being bound together along one edge and being superposed one upon the other, each check of each of said pages or groups having a longitudinal row of spaces parallel with and adjacent the upper edge thereof, said spaces being suitably designated and being adapted to receive the name of the payee, data indicating actual time put in, rate of payment, total amount earned, and balance due, the said spaces on all of the checks of each group being constantly exposed to view, there being additional spaces upon each check and below said constantly exposed row, for the reception of detailed information relative to the data in said exposed row of spaces and for the reception of the signature of the payee, the checks of each group being arranged in lapped relation and at different distances from opposed ends of the group thereby to form a page and each check, in each group, when turned, being adapted to turn all the remaining checks located beyond one edge thereof, all of the checks having their corresponding ends flush and being secured together at one of said ends, the lapping upper and lower edges of the checks being at right angles to the line on which the checks are bent when turned.

1,312,023. FAN. JOHN DOMINA, Chicago, Ill. Filed Jan. 19, 1917. Serial No. 143,338. 1 Claim. (Cl. 185-37.)



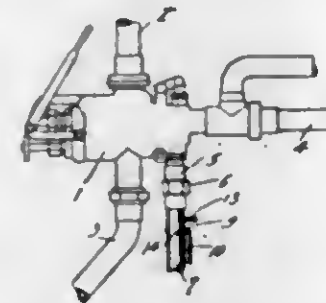
A device of the character described comprising a base, an upstanding arm carried by the base, a casing in contact with the upper portion of the arm, brackets secured to the casing and the arm for holding the casing to the arm whereby said arm serves as a head for the casing, a plate positioned within the casing and supported by the arm in predetermined spaced relation relative to the arm, a spring operated driving wheel rotatably supported by the arm and the plate within the casing, a winding and fan shafts rotatably supported by the arm and a braking plate within the casing and operatively connected with the spring operated wheel, and a fanning element carried by the shaft exteriorly of the casing.

1,312,024. PLATEN-RELEASE MECHANISM. BENARD J. DOWN, Hartford, Conn., assignor to Royal Type-Writer Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 7, 1918. Serial No. 253,005. 2 Claims. (Cl. 197-123.)



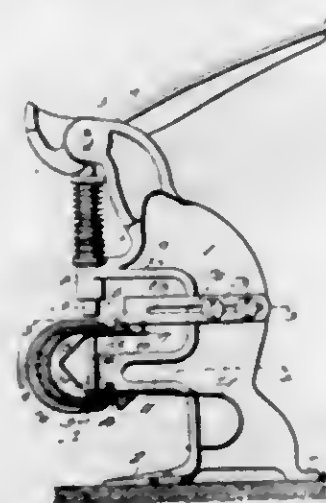
1. A platen shaft, an actuating member for releasing line spacing mechanism rotatable on its own axis and extending longitudinally of the platen shaft and movable lengthwise thereof, and complementary means on said actuating member and said shaft for preventing or admitting at the will of the operator of lengthwise movement of the actuating member including an arcuate slot near the outer end of the platen shaft having a restricted opening extending from said slot to the outer end of the platen shaft, and a pin rotatable and lengthwise movable with said member which when positioned circumferentially in line with the slot is movable from a point outside of the shaft through said opening into the slot and vice versa.

1,312,025. OVERFLOW-PIPE FOR INJECTORS. PERN EVANS, Lexington, Tenn., assignor of one-half to S. L. Herndon, Lexington, Tenn. Filed Nov. 14, 1917. Serial No. 202,003. 3 Claims. (Cl. 116-22.)



1. An overflow for injectors comprising a pipe, an eccentrically mounted butterfly valve within the pipe, the valve having apertures situated to one side of the valve stem, the stem of the valve extending beyond the pipe in one direction, an indicator on the extending end of the stem, and stops for limiting the movement of the valve.

1,312,026. TIRE-STAPLING MACHINE. ARNO A. EWALD, Oakfield, Wis. Filed Sept. 10, 1918. Serial No. 254,301. 3 Claims. (Cl. 1-47.)

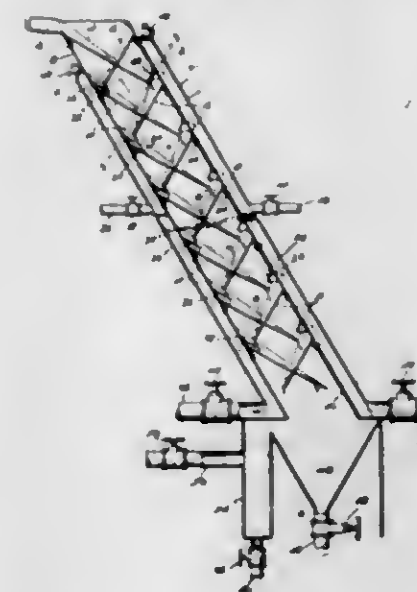


1. In a device for stapling one tire casing upon another, a wedge-shaped spreader for reception between the sides of the inner casing, a staple guide, a staple

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driver upon which said guide is slidable, said guide and spreader being movable bodily as a single unit, means yieldably resisting the movement of said guide and spreader, and an anvil movable against the outer casing to shift the guide and cause said staple driver to project the staple through both casings, and clench it against the anvil.

1,312,027. APPARATUS FOR DEWATERING AND SEPARATING ORES, SANDS, &c. LEWIS H. FALLET, Kansas City, Mo. Filed July 29, 1918. Serial No. 247,125. 9 Claims. (Cl. 210-16.)



1. An apparatus of the character described comprising a tank, a plurality of baffle members arranged at different elevations to impart a zigzag flow to the material passing through the tank, said tank being provided with an outlet opening for each of said baffle members, and a conduit communicating with a given number of said outlet openings for collecting and carrying away the discharge therefrom.

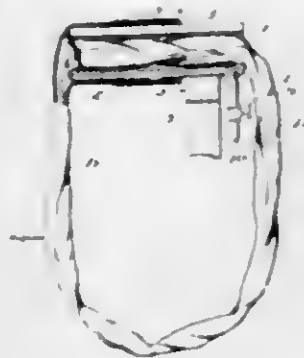
1,312,028. ORE CLEANING AND CONCENTRATING APPARATUS. LEWIS H. FALLET, Kansas City, Mo. Filed Aug. 1, 1918. Serial No. 247,559. 7 Claims. (Cl. 83-82.)



1. An ore cleaning and concentrating apparatus comprising a tank provided with an inclined imperforate partition dividing the tank into a downflow compartment and a water compartment above and below said partition respectively, a second inclined troughlike perforated partition located within said downflow compartment, means providing an upflow passage communicating with said wa-

ter compartment and also with said downflow compartment both below and above said perforated partition, and water supply means leading into said water compartment.

1,312,029. VULCANIZING APPARATUS AND PROCESS. EDWARD FETTER, Baltimore, Md. Filed Nov. 13, 1918. Serial No. 262,351. 4 Claims. (Cl. 18-45.)



1. A vulcanizing device comprising a hollow cylinder having double walls to provide a steam space, and a slot to permit the entrance of a rubber tube, a closure for the slot having flanges arranged to engage the walls of the slot for positioning the closure, said closure being movable into and out of position in a radial direction, and the outer and inner faces of the closure forming a continuation of the outer and inner faces of the cylinder, and being flush therewith throughout the length of the cylinder.

1,312,030. ARM-CUSHION FOR CRITCHES AND FASTENINGS THEREFOR. TIMOTHY MCGILDRICK, Lincoln, N. H. Filed Apr. 16, 1910. Serial No. 290,371. 3 Claims. (Cl. 135-52.)



2. The combination with a crutch having an arm rest provided with lateral extensions, of a cushion engaging and conforming to the arm rest, a pair of frame sockets connected to the opposite ends of the cushion and receiving said extensions of the arm rest, one of said frame sockets comprising a metallic band encircling the extension that it receives, and a U-shaped metallic strap connected to the band and straddling the end of the extension received by the band, the other frame socket comprising a plate having oppositely arranged opening straps movable whereby they may encircle the other extension, said plate having another strap positioned on the plate at right angles to the opposite straps and being movable to engage the end of the other extension of the arm rest, and means for detachably connecting the ends of said straps.

1,312,031. LOCOMOTIVE GRATE. WALLACE FAZZELL GLOUS, Meadville, Pa. Filed Mar. 10, 1910. Serial No. 283,518. 4 Claims. (Cl. 120-177.)

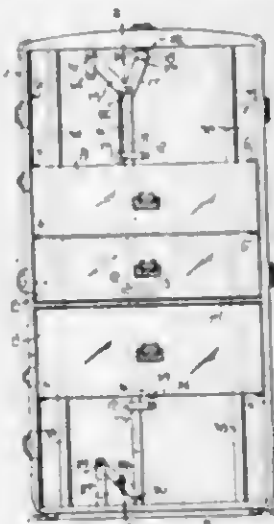
2. The combination of a series of grate bars, a dumping frame in which the series of grate bars are movably mounted, said frame being hinged adjacent one side, connections for controlling and supporting the frame, a shaking bar pivotally connected to the several grate bars of the series

and connections for actuating the said shaker bar, said shaker bar extending along the frame adjacent to the hinge



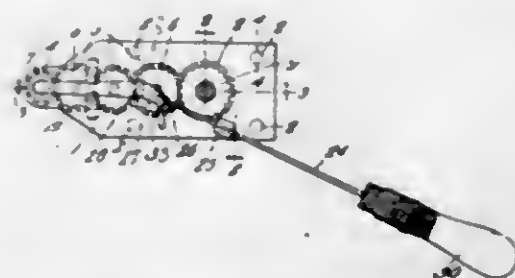
thereof and said shaking connections including a universal joint for the purpose described.

1,312,032. DRAWER-LOCK. THOMAS M. HOUDE, Richmond, Va., assignor to Seward Trunk and Bag Company, Petersburg, Va., a Corporation of Virginia. Filed Sept. 19, 1917. Serial No. 192,132. 14 Claims. (Cl. 45-04.)



1. The combination with a structure having a plurality of removable drawers, of locking means for said drawers including a movable locking member, a rigid element mounted at one of its ends upon one wall of said structure and operatively connected at a point intermediate of its ends to said locking member, means on the drawers for operative engagement by said locking member, and drawer actuated means coacting with the other end of said element to move said member to its effective locking position upon the insertion of the drawer.

1,312,033. COUNTERBORING TOOL. MURRAY J. HUGGINS, Bridgeport, Conn., and RICHARD B. HUGGINS, Middletown, N. Y. Filed Jan. 24, 1918. Serial No. 213,576. 6 Claims. (Cl. 77-7.)



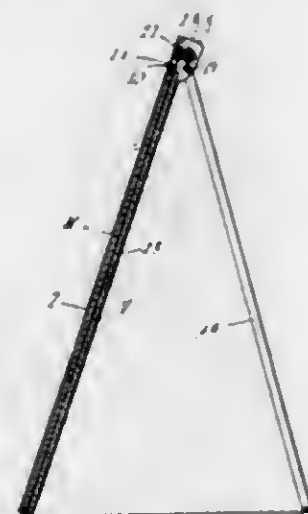
1. In a device of the class described, a base plate, a shaft extending therethrough, a cutter fixed to said shaft and positioned on one side of said base plate, a spring mounted on said shaft on the other side of said base plate and adapted to hold said cutter in close proximity to said base plate, a rocking lever having one end positioned over said shaft for moving it against the tension of said spring, and a feed lever fulcrumed on said plate and adapted to engage said rocking lever for actuating it to project said cutter.

1,312,034. ATTACHMENT FOR COATING-MACHINES. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 23, 1917. Serial No. 182,121. 7 Claims. (Cl. 91-53.)



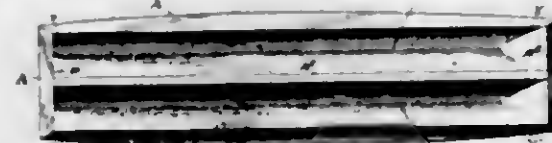
1. In a coating machine, the combination with a bar having a groove across which a web of paper to be coated passes, of a scraper arranged to cooperate with the web between the edges of the groove in said bar.

1,312,035. COPY-HOLDER. THEODORE H. KRUSE, Arvada, Colo., assignor of one-half to Maurice G. Demets, Arvada, Colo. Filed Nov. 6, 1918. Serial No. 201,372. 4 Claims. (Cl. 120-30.)



1. A copy holder comprising side members, each including a main strip bent to form a trough having an outer wall offset to form a flange; a plate having its longitudinal edges fixed in the troughs; a slide cooperating with the plate, the slide being mounted removably between the flanges and the plate; and means for advancing the copy with respect to the plate.

1,312,036. HYDROPLANE-BOAT. STANLEY LEE LERRY, Charleston, S. C. Filed Jan. 16, 1910. Serial No. 271,407. 9 Claims. (Cl. 114-66.5.)

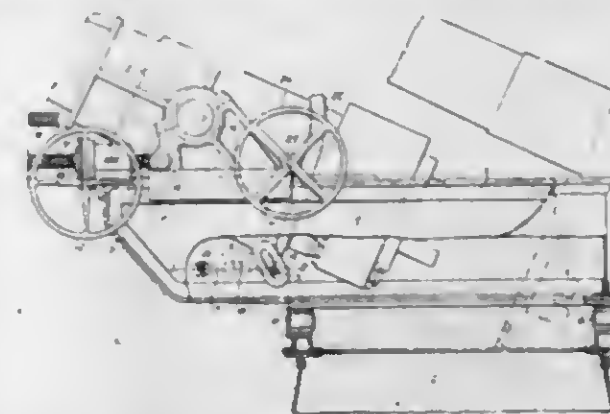


5. A boat hull having a convex bottom portion intermediate two concave portions extending substantially the full length of the hull, said portions gradually flattening from an intermediate point toward the stern.

1,312,037. PEDESTAL GUN-MOUNTING. HUGH WARREN LEE, Newcastle-upon-Tyne, England, assignor to Sir W. G. Armstrong, Whitworth and Company, Limited, Newcastle-upon-Tyne, England. Filed Mar. 12, 1910. Serial No. 282,158. 5 Claims. (Cl. 89-37.)

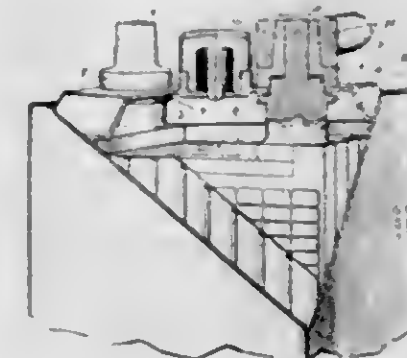
4. In a gun mounting, a hollow pedestal, a horizontal girder rotatably mounted upon the hollow pedestal and

having a part projecting beyond the pedestal adapted to support the gun when fired at low elevations, a frame sup-



ported by and movable along the girder, a cradle trunnioned in the frame, means for moving the frame along the girder and means for elevating the cradle.

1,312,038. STORAGE-BATTERY CONNECTION. ALBERT H. LUHMANN, Cincinnati, Ohio. Filed Nov. 23, 1917. Serial No. 203,474. 1 Claim. (Cl. 204-20.)



A battery connection consisting of a plate holder having a reduced upper end, a flange and a screw-threaded portion between the reduced end and the flange, a cover resting upon the flange, a nut engaging the screw-threads clamping the cover against the flange and having an extension fitting the reduced end, and a connector bar having a bore fitting the extension of the nut, the reduced end of the plate holder, the nut and the bar being fused together.

1,312,039. ELECTRIC WELDING. CHARLES F. MEILINK, Toledo, Ohio. Filed May 22, 1916. Serial No. 69,020. 3 Claims. (Cl. 219-10.)

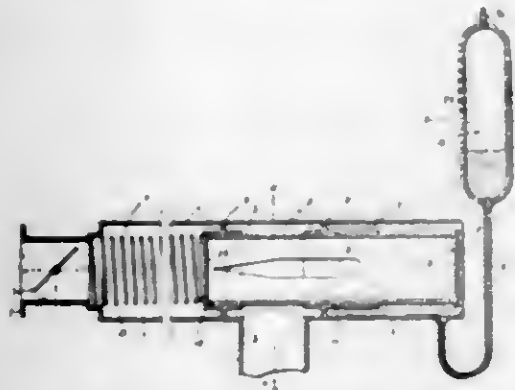


1. The process of electric welding which consists in applying a voltage to the work greatly in excess of that required to effect the weld, and dissipating the excess voltage in the work between the contacting welding electrode and a remote non-welding contacting electrode.

1,312,040. AUTOMATIC THROTTLE FOR HIGH-COMPRESSION MOTORS. HENRI MERCIER, Paris, France. Filed Mar. 28, 1919. Serial No. 285,924. 5 Claims. (Cl. 137-153.)

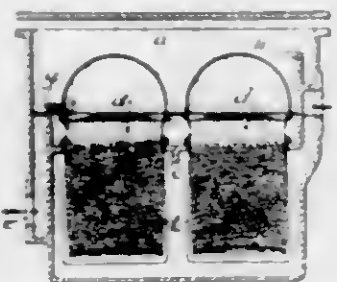
5. An automatic throttle for high compression motors interposed between the motor and carburetor, comprising

a slide valve controlling the admission of gas from the carburetor to the motor, means tending to maintain said valve closed, said means acting on one end of the valve, an air confiner, and a fluid interposed between the air



confiner and the opposite end of the valve, whereby the pressure of the air is transmitted through the fluid to move the valve in the opposite direction, and means for establishing and destroying communication between the air confiner and the atmosphere.

1,312,041. APPARATUS FOR FILTERING LIQUIDS. DONALD BARNES MORISON, Hartlepool, England. Filed Feb. 8, 1918. Serial No. 216,097. 2 Claims. (Cl. 210-5.)



2. In apparatus for filtering liquids comprising a portable filtering bucket perforated at the top and bottom and resting to a hole in a supporting plate, the combination therewith of a bag of textile material so arranged as to envelop the lower part of said bucket, the upper edge of the bag extending upwardly through the hole in the supporting plate and terminating in an incased ring of rope which is held between the supporting plate and a ring attached to the circumference of said bucket.

1,312,042. PIPE COVER. FRANKLIN G. NEUBERTH, Anderson, and ERNEST MYRON GAILLEY, Waterbury, Conn., assignors to The Waterbury Jewel Company, Waterbury, Conn., a Corporation. Filed Apr. 4, 1919. Serial No. 287,045. 3 Claims. (Cl. 131-12.)



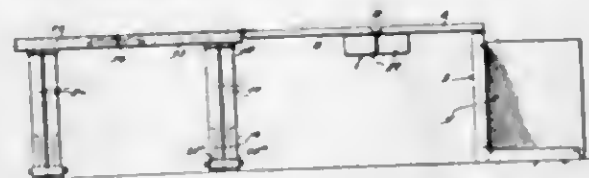
1. In a pipe cover structure, a cover proper and a supporting device therefor, and the said supporting device being in the form of a single piece of wire, the parts being constructed and arranged so that the said piece of wire serves to provide a pair of bearings for the cover, to provide spring clamping arms for engaging with the side wall of the bowl of a pipe, and also to provide means for resiliently positioning the said cover relatively to the supporting device.

1,312,043. DISPLAY STAND. WILLIAM NIXON, Dixon, Ill. Filed Apr. 21, 1919. Serial No. 291,607. 2 Claims. (Cl. 211-24.)



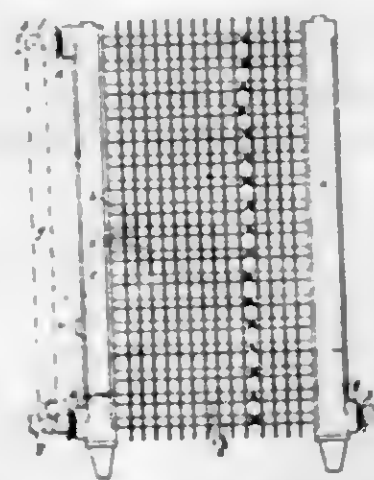
1. A display stand, comprising an upright standard, a tubular cross piece curved from end to end, but curved to a less extent at its outer ends, a knob on the upper end of the standard through which the cross piece extends and in which it turns about a horizontal axis, and extensible curved arms carried by the cross piece which are mounted to turn therein when extended and which are formed with hooks at their outer ends.

1,312,044. COMBINATION TRUNK. HERBERT L. OSBORN, Seattle, Wash. Filed Nov. 27, 1917. Serial No. 204,222. 2 Claims. (Cl. 100-11.)



1. In a combination trunk of the class described, the combination with a body-structure having an open top, an open front, and a non-open back, of a plurality of leaves hingedly connected together and one hingedly secured to the upper portion of said back, said leaves adapted to be folded upon the body-structure to close said open top and front to produce a complete box, part of said leaves resting under the other leaves when folded, all of the leaves adapted to be unfolded for producing a table, and legs for said leaves when in said table-forming position, substantially as shown and described.

1,312,045. TUBULAR HEAT-INTERCHANGING APPARATUS. EDWARD LLOYD FRANK, Darlington, England. Filed Oct. 14, 1915. Serial No. 55,814. 10 Claims. (Cl. 257-150.)



2. Heat interchanging apparatus comprising vertical inlet and outlet side headers, a series of horizontal tubes

connecting said headers and arranged at different heights with no two tubes at the same height, and through which fluid can flow simultaneously in the same horizontal direction from the one header to the other header, and a series of vertical flat metal strips each fixed to all the tubes and forming between them vertical uninterrupted passages for flow therethrough of external fluid.

1,312,046. INCANDESCENT GAS-LIGHTING. FRANK PERRY, Tipton, England, assignor to Industrial Inventions Limited, Tipton, Stafford, England. Filed Jan. 18, 1919. Serial No. 271,799. 1 Claim. (Cl. 67-89.)

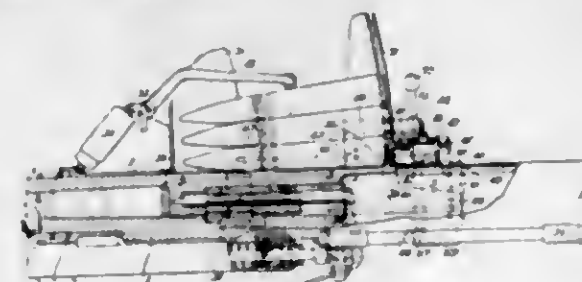


An illuminating device comprising in combination a small gas burner from which the gas issues without previous admixture of air, a flat piece of refractory mesh, a light sheet metal frame having its edges bent over to grip the mesh, a stem formed integral with the frame, and a slotted cylindrical gripping piece formed with the stem and adapted to grip the body of the burner, substantially as described.

1,312,047. OINTMENT. NEWTON N. READ, Albuquerque, N. Mex. Filed Oct. 31, 1916. Serial No. 128,775. 2 Claims. (Cl. 107-9.)

2. A composition consisting of six parts castile soap, four parts rosin, four parts beeswax, three parts spirits of camphor, two parts tincture of capsicum and one part oil of hemlock substantially as described and for the purpose specified.

1,312,048. CARTRIDGE-FEED MECHANISM ESPECIALLY APPLICABLE FOR AUTOMATIC GUNS. ROBERT REUFATH, Coventry, England, assignor to The Coventry Ordnance Works, Limited, Coventry, England. Filed Oct. 10, 1917. Serial No. 195,736. 3 Claims. (Cl. 89-33.)



1. In cartridge feed mechanism, a magazine adapted to contain a number of cartridges, a pair of longitudinal spindles arranged one on each side of the magazine, a toothed quadrant upon each spindle, a transverse rack meshing with each quadrant, a lever pivoted to the two racks, a feed cam fast on the forward end of each spindle and adapted to support the cartridges in the magazine and to move them toward the gun one at a time and means for rotating one of the spindles.

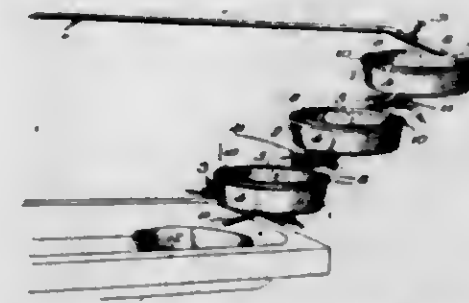
1,312,049. RAILWAY-TIE AND CHAIR. ALBERT HEMAN, Maynard, Ohio. Filed Apr. 14, 1919. Serial No. 289,929. 4 Claims. (Cl. 238-48.)



1. In combination with a tie having L-shaped recesses in the bottom thereof providing ledges extending in the same direction, the said ledges having a plurality of slots, a channel-shaped chair with the tie positioned be-

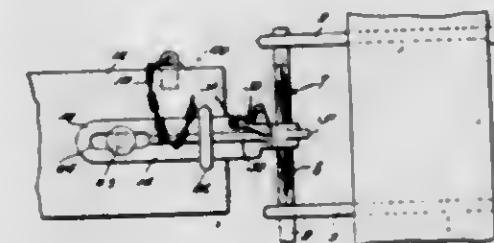
tween the opposite sides thereof, springs upon said chair with the tie normally seated thereon and movement limiting means at the ends of the chair adjustably secured in said recesses.

1,312,050. PHOTOGRAPHIC-PRINT WASHER. GLEASON W. ROMER, Lake Helen, Fla. Filed June 24, 1918. Serial No. 241,585. 3 Claims. (Cl. 95-97.)



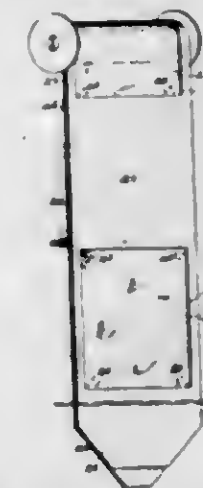
1. A device for washing photographic prints comprising a receptacle having an annular outer wall and an annular inner wall, the inner wall having a series of staggered discharge openings therethrough, and a discharge nozzle connected to its bottom portion between said inner and outer walls and arranged tangentially with respect to the periphery of said receptacle.

1,312,051. GATE-LATCH. CHARLEY CLIFTON ROSS, Springfield, Mo. Filed Jan. 3, 1919. Serial No. 269,445. 2 Claims. (Cl. 70-28.)



2. In a device of the class described, a gate; a latch on the gate and comprising a shank and a head; a rotatably mounted keeper wherewith the head interlocks; and a guard pivoted to the shank for lateral movement to permit the head and the keeper to interlock, the guard having an inclined surface cooperating with the shank to restore the keeper to retaining position with respect to the gate and the head thereby to maintain them in interlocked relation.

1,312,052. FILM FOR CAMERAS. OTON SABTORIUS, JOSE F. GANDARA, and BENITO COLONNA, El Paso, Tex. Filed Jan. 22, 1916. Serial No. 73,619. 4 Claims. (Cl. 95-9.)



4. A camera film comprising a protective backing having spaced openings and alternating sensitized and non-

sensitized portions having their adjacent edges secured together to form a continuous strip one end of which is secured to said backing, said non-sensitized portion being provided with a plurality of openings, substantially for the purpose set forth.

1,312,053. PROCESS OF DECOMPOSING POTASSIUM SILICATES. SAMUEL R. SCHOLER, Beaver, Pa., assignor to H. C. Fry Glass Company, Rochester, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1918. Serial No. 263,022. 7 Claims. (Cl. 23-22.)

1. The process of extracting a combined alkali metal from silicate minerals containing the same combined with aluminum in an insoluble form, which consists in mixing the finely divided mineral with an alkali metal carbonate; heating the mixture until a glass like mass is formed; finely dividing said glass like mass; and digesting with water said finely divided glass like mass under super atmospheric pressure and at a corresponding temperature exceeding 100° C. to dissolve out the combined alkali metal present, for a time sufficient to convert the alumina into the form of a colloid, substantially as described.

1,312,054. AUTOMOBILE HEADLIGHT. EDWARD M. SELIGA, St. Louis, Mo. Filed July 5, 1917. Serial No. 178,615. 1 Claim. (Cl. 240-62.)



The combination with the channeled chassis of an automobile, of a headlight support including a substantially L-shaped member having a vertical bore therethrough, the horizontal portion of the L-shaped member being vertically apertured and seated in the channel of the chassis and secured therein against movement with respect thereto, a lamp post disposed for rotation in said bore and extending below the lower end of the L-shaped member, said post having a flange bearing on the upper end of the vertical portion of the L-shaped member, a crank arm secured on the lower end of the said post and rotatable therewith, said arm having a boss on the upper side engaging with the lower end of the L-shaped member to space the remaining portion of the arm below and out of contact with the chassis, and connections between the arm and steering mechanism of the automobile.

1,312,055. [WITHDRAWN.]

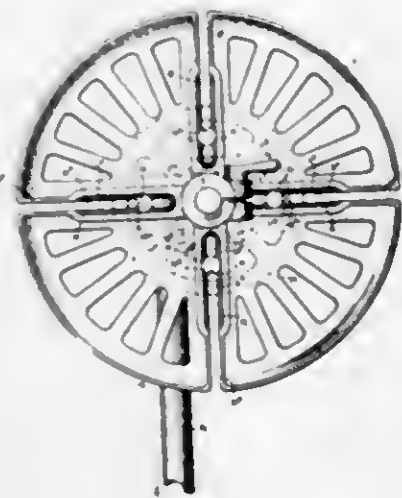
1,312,056. ORNAMENTAL PANEL OR COVERING. JOHN K. SHAW, Minneapolis, Minn., assignor to H. G. Dahlberg, St. Paul, Minn. Filed May 23, 1918. Serial No. 236,165. 5 Claims. (Cl. 20-15.)



1. In an ornamental covering, the combination of a plurality of body portions composed of porous paper

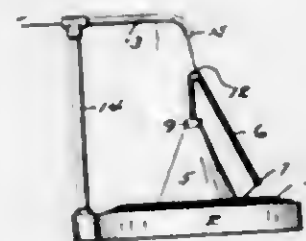
board material known as insulite, having fragile edges disposed with adjoining meeting edges; and a fastening strip provided with prongs engaging said fragile edges occupying the space between said meeting edges, and with a head contacting with and overlying and concealing the material adjacent said meeting edges, substantially as described.

1,312,057. SCRAP-WINDING REEL. HOWARD B. SHZMAN, Battle Creek, Mich. Filed Aug. 25, 1917. Serial No. 188,166. 11 Claims. (Cl. 242-77.)



7. In a scrap winding reel, the combination of opposite relatively adjustable reel members having radially disposed open ended slots extending therethrough for the accommodation of bundle ties; with adjustable reel fingers engaged with said slots and extending between the members.

1,312,058. WIRE-UNCOILING APPARATUS. ROBERT J. SMITH, San Francisco, Calif. Filed Mar. 13, 1919. Serial No. 282,264. 7 Claims. (Cl. 242-128.)

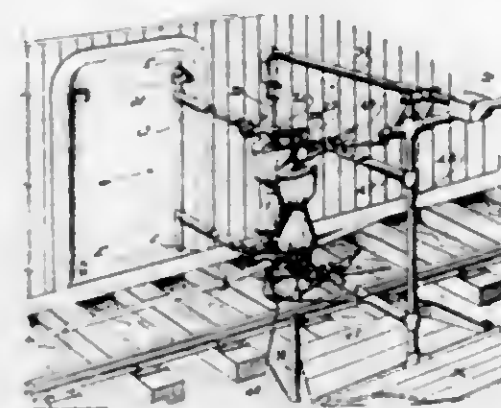


1. A wire uncoiling apparatus comprising a base, a stud arranged centrally on said base and adapted to be surrounded by the coil of wire, and a conduit rotatably mounted on said stud and movable vertically with respect thereto having its lower end overlying the coil of wire and curved forward to receive the wire as it uncoils.

1,312,059. MAIL-EXCHANGING DEVICE. HERBERT E. SMITH, Spokane, Wash. Filed Aug. 29, 1916. Serial No. 117,447. 9 Claims. (Cl. 258-17.)

1. In a car apparatus of the character described, the combination of extendible arms, upright supporting means for the said arms, revolvable shafts for the said supporting means, a gear mounted upon one of the said shafts, a second gear meshing with the first mentioned gear, a pivotally mounted fluid compression cylinder, piston and

connecting rod, a lever mounted upon the remaining shaft, a lever secured to the said second gear, and connecting means between the said levers.

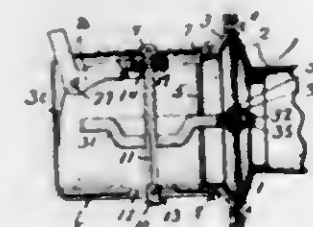


6. In combination with flexible mail bag suspending and retaining members, a supporting and releasing device therefor consisting of a bifurcated plate member having split or forked ends and a curvilinear socket-like recess; a curved spring member adapted to seat within the said recess and having its ends mounted in said forked ends and so formed as to provide a restricted compressible passage from the said recess.

7. In a car apparatus of the character described, the combination of extendible arms, upright supporting means for the arms, revolvable shafts for said supporting means disposed at either side of the car door, means for rotating said revolvable shafts simultaneously in opposite directions of rotation, and a shock absorbing means connected to and adapted to cooperate with said rotating means.

9. In a device of the character described, the combination of extendible mail bag supporting arms, a revolvable upright standard for said arms, and fluid compression and spring controlled shock absorbing means adapted to cooperate with the movement of said arms, said means comprising a swinging cylinder supporting member fixedly mounted upon said standard, a compression cylinder having one end pivotally supported by said supporting member, a piston and connecting rod for the cylinder the outer end of said rod being connected to a retaining means, and tensioning means adapted to exert tension in opposition to the resistance of said cylinder and piston to balance the action thereof and to return and retain said bag supporting arms in nonextended or inoperative position.

1,312,060. SIGNAL. WILLIAM SPARKS, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Michigan. Filed Nov. 14, 1913. Serial No. 800,955. 15 Claims. (Cl. 116-1.)



1. A signal comprising a diaphragm, a resonator at the front of the diaphragm, a casing at the rear of the diaphragm, a shaft within the casing and rotatably mounted in substantial parallelism with the diaphragm, a diaphragm actuator mounted upon the shaft and rotating with the shaft and in a plane substantially perpendicular to the diaphragm and adapted to coact with the diaphragm to force vibration of the latter as the former is rotated, a nut movable longitudinally of said shaft, a handle having a portion disposed outside the casing and an

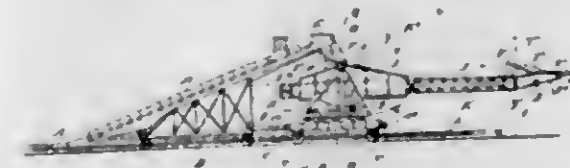
other portion within the casing and adapted to move said nut longitudinally of the shaft, means for holding the nut from rotation when moved longitudinally in one direction whereby the shaft is rotated and allowing free rotation of the nut when moved in a reverse direction whereby the shaft may remain stationary, and spring means supported independent of the diaphragm actuator for effecting such reverse movement without materially decreasing the momentum of said actuator.

5. In a signaling device, a diaphragm, a rotary actuator for vibrating said diaphragm, a spiral shaft upon which said actuator is mounted, a shaft actuator, a casing carrying the shaft actuator, and normally spaced parts on the shaft actuator and said casing adapted to interengage upon movement of said casing in one direction.

10. In a signaling device, a casing, a diaphragm, a diaphragm actuator, a shaft upon which said actuator is mounted, said shaft formed with a spirally disposed pathway and having its ends supported from said casing, a member movable longitudinally of the shaft for rotating the same, said member having plinths projecting from spaced portions thereof, said casing provided with an elongated slot and a handle pivotally supported from the casing and having one end projecting outwardly through said slot, and its other end formed in a yoke, the arms of said yoke provided with jaws for engaging the respective plinths for moving said member along the shaft as the said handle is rocked about its pivot, and means for returning the handle and thereby the said member to starting position after each rocking movement.

15. A signal comprising a diaphragm, a resonator at the front of the diaphragm, a casing at the rear of the diaphragm, a shaft within the casing and rotatably mounted in substantial parallelism with the diaphragm, a diaphragm actuator mounted upon the shaft and rotating with the shaft and in a plane substantially perpendicular to the diaphragm and adapted to coact with the diaphragm to force vibration of the latter as the former is rotated, a nut movable longitudinally of said shaft, a pivoted handle having a portion disposed outside the casing and another portion within the casing and adapted to move said nut longitudinally of the shaft, means for holding the nut from rotation when moved longitudinally in one direction whereby the shaft is rotated and allowing free rotation of the nut when moved in a reverse direction whereby the shaft may remain stationary, and a spring having one end supported by the casing and its intermediate portion wrapped around the pivot of the lever and its opposite end engaged with the lever for effecting such reverse movement without materially decreasing the momentum of said actuator.

1,312,061. CONVEYER. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y., a Corporation of New York. Original application filed June 3, 1918. Serial No. 237,580. Divided and this application filed Oct. 3, 1918. Serial No. 256,678. 8 Claims. (Cl. 193-3.)



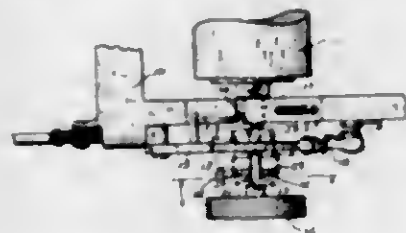
1. Apparatus for receiving and delivering material, comprising a main conveyor belt, a pivotally mounted conveyor receiving material therefrom, means for moving said last mentioned conveyor in opposite directions to deliver material received from said main conveyor belt to storage or to convey material and deliver it to said main conveyor belt, and means for adjusting said pivotally mounted conveyor longitudinally or endwise.

1,312,062. BOILER. JOSEPH SULWESKI and GOTTLIEB RARCH, Decatur, Ill. Filed May 2, 1919. Serial No. 295,978. 4 Claims. (Cl. 68—20.)



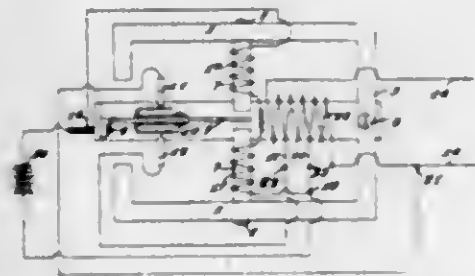
3. A boiler comprising a receptacle, a false bottom arranged therein, expansion springs arranged between the bottom of the boiler and said false bottom normally to force the false bottom upwardly, and a latch rod pivoted in said boiler adapted to engage said false bottom to hold the same in lowered position and to limit the upward movement thereof.

1,312,063. RE-ALIGNING MECHANISM FOR WRITING-MACHINES. PHILIP B. TINOLEY, New York, N. Y. Filed Dec. 28, 1918. Serial No. 268,596. 9 Claims. (Cl. 197—123.)



1. Mechanism of the character described comprising a hub, a clamp rigidly secured to the hub and adapted to grip a shaft, a ratchet rotatably mounted on the hub, a clutch secured to the ratchet and having jaws inclosing the hub, means for causing the jaws to grip and release the hub, and a pawl for locking the ratchet against rotation when released.

1,312,064. ELECTRICAL APPARATUS. CHAS. L. VOLZ, Cleveland, Ohio. Filed Feb. 15, 1919. Serial No. 277,246. 3 Claims. (Cl. 175—365.)



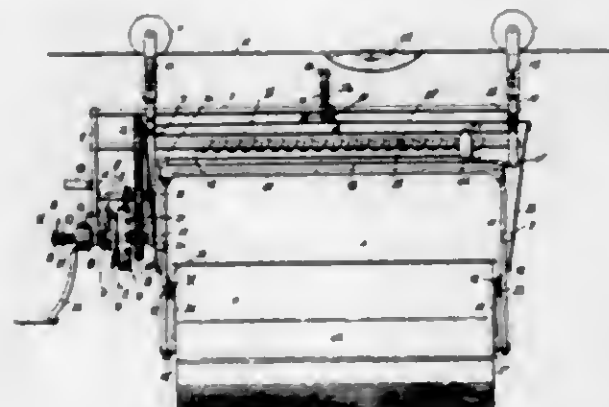
1. An alternating current rectifier, comprising, in combination with a battery and a source of supply, a core, a core secured to said first core, a pair of poles carried by said second core and extending toward each other, a vibratory armature secured to said first core and extending between the poles carried by said second core, a contact brush supported adjacent to each side of said armature and adapted to make contact therewith, a coil wound upon said first core and connected to said source of supply, a pair of electromagnet coils wound on said poles, and connections between said last coils and the battery and the source of supply whereby a substantially continuous exciting current is supplied to said coils.

1,312,065. TEMPORARY OR PORTABLE STRUCTURE OR BUILDING. CHARLES STAFFORD WAKEFIELD, Hampstead, London, England. Filed Feb. 4, 1919. Serial No. 274,923. 4 Claims. (Cl. 20—2.)



1. A portable building structure section constructed of slats arranged side by side and so close together and in such relation to a flexible connection that if curved or arched the flexible connection will be put under stress and the abutting edges of the slats will be caused to bear against each other, whereby the slats support each other, said section embodying a binding cable backing the same throughout the length thereof and confined thereto, said cable provided with adjustable end means for tightening the cable with respect to the section to force the abutting edges of the slats toward each other, in combination with means to maintain the relative positioning of the section ends when the section is arched and thereby render it self supporting.

1,312,066. LITTER-CARRIER. OTTO F. WALLMAN, Stratford, Wis. Filed Aug. 30, 1918. Serial No. 252,980. 5 Claims. (Cl. 214—61.)

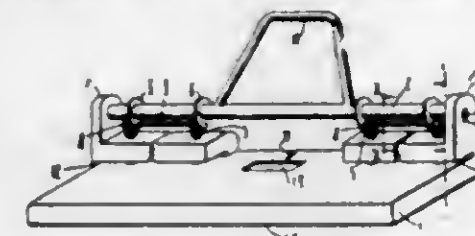


1. In a device of the character described, the combination of a ball, means for movably supporting said ball, a bucket eccentrically mounted upon said ball and having recessed members at its ends, detents carried by said ball and normally fitting within said recesses for normally holding said bucket in an upright position, links connected to said detents, levers pivotally mounted upon said ball and being connected to said links, rods carried by said supporting means and having bent ends engaging said levers, an arm connected to the inner end of said rods, and having a lever extending therefrom at an angle, a spring pressed plunger carried by said supporting means and engaged with said last mentioned lever, whereby when said plunger is depressed said last mentioned lever will swing the arm, thus drawing upon said rods whereby the rods will swing said levers to cause said links to lift said detents from said recessed members, thus releasing the bucket and allowing the same to swing due to its eccentric support.

1,312,067. PERFORATOR. BRADFORD WEBSTER, Newark, N. J., assignor, by mesne assignments, to Paragon Blunder Corporation, Newark, N. J., a Corporation of New York. Filed Dec. 4, 1915. Serial No. 65,957. 5 Claims. (Cl. 164—91.)

1. In a perforator, in combination: a body member, a drive shaft provided with end extensions eccentrically

placed with respect to the axis of said shaft, and a bearing member; said drive shaft holding said bearing member within said body member; said bearing member holding said drive shaft positively in driving position and positively within said body member.



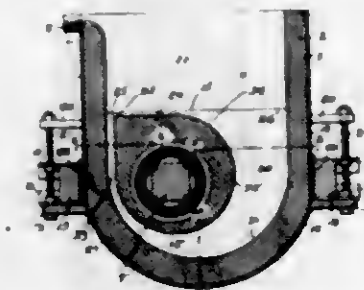
member within said body member; said bearing member holding said drive shaft positively in driving position and positively within said body member.

1,312,068. INDUCTIVE WIRELESS TELEPHONE SYSTEM FOR RAILROADS AND THE LIKE. VICTOR GABRIEL WERNER, Boden, and KARL HJALMAR WASFVINGE, Stockholm, Sweden. Filed May 10, 1910. Serial No. 96,491. 7 Claims. (Cl. 179—82.)



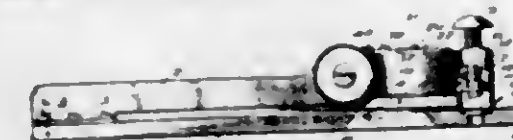
1. In an inductive wireless telephone system for railroads, the combination of a circuit on the train comprising a microphone, a receiver, and a source of current, and a stationary circuit in inductive relation to the first named circuit and comprising an aerial line along the railroad track connected to a fixed telephone station, said aerial line being divided into two approximately equal branches connected in parallel and extending in opposite directions from the fixed telephone station, for the purpose of equalizing disturbing inductive effects on adjacent circuits and also disturbances caused by earth-currents, substantially as described.

1,312,069. INDUCTION-FURNACE HAVING UNIDIRECTIONAL CIRCULATION. JAMES R. WYATT, Philadelphia, Pa., assignor to The Ajax Metal Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1918. Serial No. 251,882. 42 Claims. (Cl. 204—64.)



1. In an induction electric furnace, walls forming a furnace chamber, and a resistor channel for molten metal beneath the furnace chamber and connecting therewith, of restricted cross section in one part of the channel, in combination with an alternating current transformer having one leg threaded through the channel, said leg being nearer the metal at the more constricted part of the channel than other parts thereof.

1,312,070. BALLOT-SEAL PUNCH. SANFORD C. YOUNG, Hartford, W. Va. Filed Oct. 10, 1916. Serial No. 124,813. Renewed Nov. 17, 1917. Serial No. 202,642. 19 Claims. (Cl. 235—50.)



1. In a ballot seal punch, in combination, a punching and stamping device, a pivoted frame in which said de-

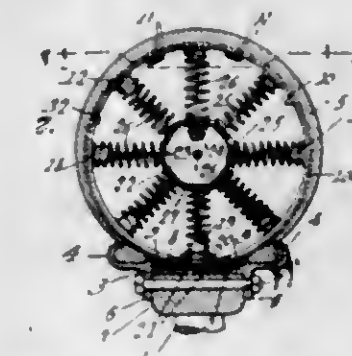
vice is mounted, a time limiting disk mounted in said frame, in restraining relation to said device, and means for actuating said disk.

1,312,071. TIE-HOLDER. LEO ATANASOFF, Milwaukee, Wis. Filed Oct. 3, 1918. Serial No. 256,686. 4 Claims. (Cl. 24—56.)



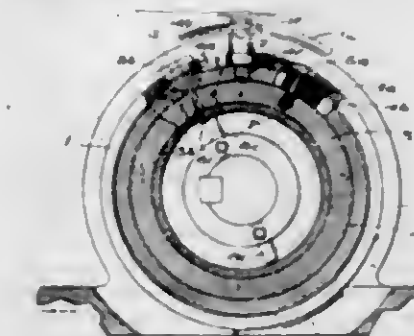
1. A neck-tie holding device comprising a V-shaped body member adapted to receive portions of a neck-tie thereabout for securement thereto, and a pin extending laterally from the apex portion of said body member for securement to a collar button.

1,312,072. INNER TUBE. JOHN W. BASSHAM, Columbia, Tenn. Filed June 20, 1918. Serial No. 241,009. 4 Claims. (Cl. 152—8.)



4. In a device of the class described, a circumferential base member; transverse resilient rings; means for securing the rings detachably to the base member; a core block in each ring; hinges uniting the edges of the rings; helical compression springs disposed radially of each ring, the outer ends of the springs abutting against the ring, and the inner ends of the springs abutting against the block; plates at the opposite ends of each block and projecting beyond the periphery thereof to act as retainers for the inner ends of the springs; and a securing element passing through each block and engaged at its ends with the plates of said block.

1,312,073. MEANS FOR CLAMPING STEREOTYPE-PLATES IN PLATE-FINISHING MACHINES. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed Apr. 26, 1916. Serial No. 93,690. 15 Claims. (Cl. 29—21.)



1. In combination, a stereotype plate holder, abutments therein adapted to engage opposite edges of a stereotype

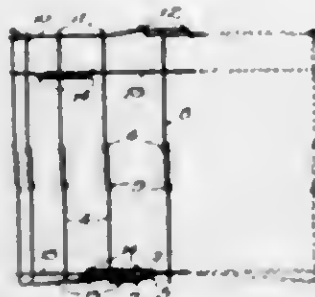
plate, and spring means operatively acting upon both abutments for causing these abutments to move oppositely and clamp the plate in the holder.

1,312,074. TIRE-INFLATING MECHANISM. WILLIAM GORDON CUMMING, Montreal, Quebec, Canada. Filed June 4, 1917. Serial No. 172,798. 9 Claims. (Cl. 152-11.)



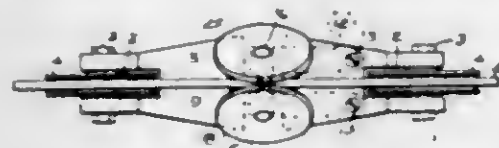
1. In a device of the class described, the combination of a plunger cylinder, a plunger secured at one end to the tread of a tire, a suction pump adjacent to the plunger cylinder, comprising a cylinder with a valve in the cylinder head leading from an air supply, a piston normally in contact with the cylinder head, with a valve therein leading to a passage to the interior of the tire, a lever pivoted to a slot between the cylinders, and a spring bearing on the piston as described.

1,312,075. COOKING BASKET. GEORGE GROVER, South Norwalk, Conn., assignor of one-half to Frank W. Buchholz, South Norwalk, Conn. Filed Feb. 14, 1919. Serial No. 276,884. 5 Claims. (Cl. 53-1.)



3. An adjustable cooking basket having its bottom formed of radially extensible connected wires, vertical side wires connected with the outer portions of the bottom wires, and an expansible ring encircling the side wires and comprising sections slidably connected together and secured to certain only of said side wires and movable relative to the other side wires.

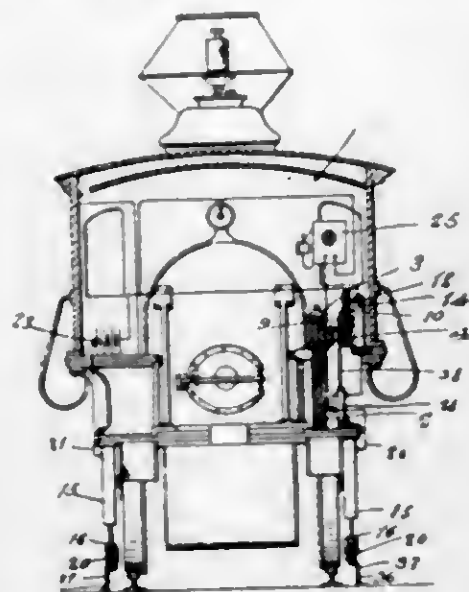
1,312,076. TROLLEY. STEVE KALMA, Bradlock, Pa. Filed Feb. 28, 1919. Serial No. 279,778. 1 Claim. (Cl. 191-80.)



A trolley comprising a body portion provided with a groove at its top and having each of its ends bifurcated, spaced arms overlapping said groove, a trolley wheel mounted in each of said bifurcated ends, spring controlled angle shaped supporting members pivotally connected to said body portion arranged in said groove and extending

up between said arms, inclined and flanged retaining members revolvably mounted on said supporting members and adapted to overlap the trolley wire to maintain said wheels in contact with the wire and pulling members connected to said supporting members.

1,312,077. RAILROAD-TRAIN STOP. JAMES L. KEITH, St. Louis, Mo. Filed July 6, 1917. Serial No. 178,981. 1 Claim. (Cl. 246-66.)



A railroad train stop including an engine having an electrical brake operating means and an open electric circuit associated therewith, spring pressed members connected to the engine and to the circuit, block forming members engaged by said spring pressed members and having their ends elevated, and ratchet means affected by the elevated ends for holding the spring pressed members elevated when the engine passes from one block to another.

1,312,078. AUTOMOBILE HOOD CLAMP. GEORGE W. KERN and LUTUAN A. PRAT, Racine, Wis. Filed Apr. 30, 1919. Serial No. 293,834. 6 Claims. (Cl. 70-82.)

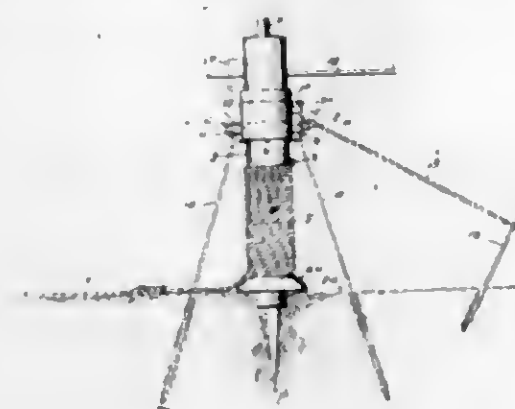


3. In an automobile hood clamp, the combination of a hold down hook, a side clamping member, a lever upon which the clamping member is mounted, a rod pivotally connected to the lever, and a spring connection between said rod and said hook whereby both hook and side clamp are yieldingly maintained in clamping engagement with the hood.

1,312,079. DEVICE FOR PULLING AUTOMOBILES OUT OF MUDHOLES. ARTHUR P. MORAN, Centos, Mont. Filed May 28, 1915. Serial No. 30,929. 1 Claim. (Cl. 254-150.)

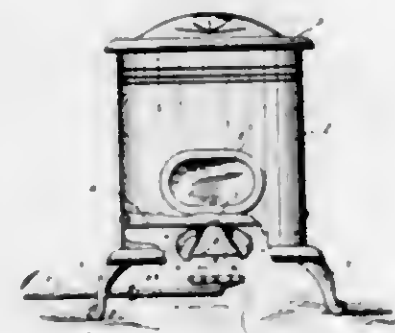
A device of the type described, comprising a shaft having a pointed lower end arranged to be driven into the

ground, a cylinder revolvably mounted upon said shaft, said shaft being cylindrical in cross-section, a nut provided therefor a short distance from its pointed end, said cylinder having integral with its lower end a flared annular base adapted to rest and rotate upon said nut, a ring encircling the cylinder comprising apertured lugs secured thereto, looped rods, the upper ends of which rods are connected to said lugs, their lower ends extending into the ground, studs protruding from the cylinder to retain the



ring in elevated position, a second ring, a flexible member arranged adjacently above the first ring, said second ring being held against rotation by said flexible member one end of which flexible member is secured to said second ring the other end being anchored to a stake in the ground, means adapted to be interposed between the cylinder and an automobile, and means for rotating said cylinder.

1,312,080. COMBINED GASEOUS-FUEL AND WATER-VAPOR BURNING HEATING APPARATUS. HENRY WOOSTER PATRICK, Mansfield, Ohio, assignor of one-fourth to Evan F. Cleland and one-fourth to Forrest A. Cleland, Mansfield, Ohio. Filed Jan. 4, 1917. Serial No. 140,542. 7 Claims. (Cl. 158-13.)

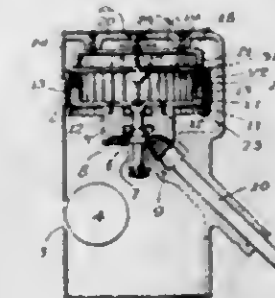


1. In a heating apparatus comprising a burner; a water vaporizer located adjacent the burner and above the combustion zone, said vaporizer, during operation of the heating apparatus, being adapted to flash water into superheated steam; and means for conducting such superheated steam into contact with the outside of the vaporizer without prior admixture with the fuel in the combustion zone.

1,312,081. MAGNETIC SPEEDOMETER. CHARLES G. SMITH, Washington, D. C., assignor to Charles Fischer, Brooklyn, N. Y. Filed Aug. 8, 1918. Serial No. 248,983. 8 Claims. (Cl. 264-13.)

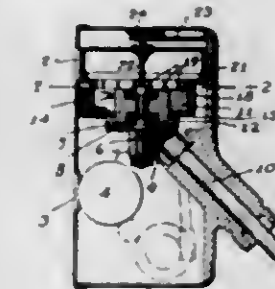
1. In a magnetic speedometer, the combination of a rotating magnet having pole faces whose centers are located outside of the axis of rotation of the magnet, thereby producing a traveling field, an armature, one of said members having a series of concentrating teeth which are

magnetized at or above saturation, and an oscillatory conductor slotted to obstruct the flow of eddy currents due



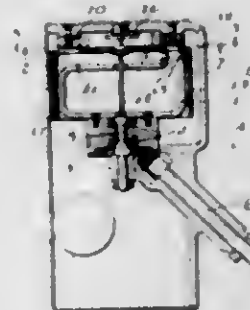
to the general field, while permitting eddy currents to be set up by the teeth within the regions between the slots.

1,312,082. MAGNETIC SPEEDOMETER. CHARLES G. SMITH, Washington, D. C., assignor to Charles Fischer, Brooklyn, N. Y. Filed Aug. 8, 1918. Serial No. 248,984. 7 Claims. (Cl. 264-13.)



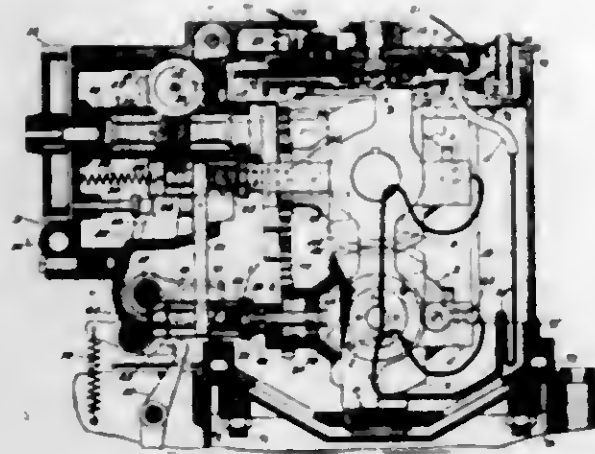
1. In a magnetic speedometer, the combination of two members of a magnetic circuit coupled and mounted so that both rotate and having poles at one side of the axis of rotation so as to produce a traveling field, one of said members being provided with a series of concentrating teeth, and an oscillatory conductor slotted transversely to the circumferential direction with open slots, the width of the regions or bars between the slots being greater than that of the teeth, whereby the teeth set up eddy currents within said bars.

1,312,083. MAGNETIC SPEEDOMETER. CHARLES G. SMITH, Washington, D. C., assignor to Charles Fischer, Brooklyn, N. Y. Filed Dec. 24, 1918. Serial No. 268,198. 7 Claims. (Cl. 264-13.)



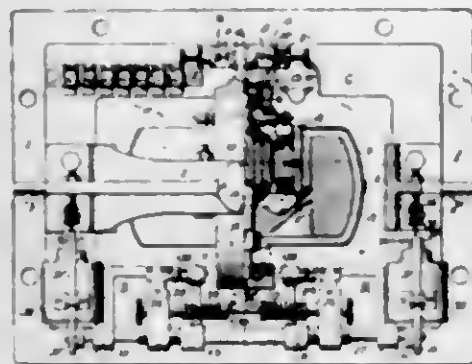
1. A magnetic speedometer, comprising a rotary magnet having its north and south poles adjacent to each other and at the same side of the axis of rotation, an armature, one of the members of the magnetic circuit being provided with concentrating teeth which revolve about the axis, and an oscillatory conductor slotted transversely to the direction of rotation, whereby the opposing electromotive forces of the poles neutralize each other whereas the teeth set up eddy currents within the regions between the slots.

1,312,084. TORPEDO-GYROSCOPE. ELMER A. SPERRY and ELMER MEITNER, Brooklyn, N. Y., assignors to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 25, 1915. Serial No. 57,815. 28 Claims. (Cl. 114-24.)



1. In a torpedo, adapted for angle firing, an electrically driven gyroscope pivotally mounted about a vertical axis, a rotatably mounted suspension element, a wire suspended from said element and connected with the gyroscope, and means whereby said element may be initially turned so that said wire will hang substantially vertically when the torpedo straightens upon its course.

1,312,085. STABILIZING-GYROSCOPE. ELMER A. SPERRY, Brooklyn, N. Y., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 11, 1917. Serial No. 185,718. 14 Claims. (Cl. 74-78.)

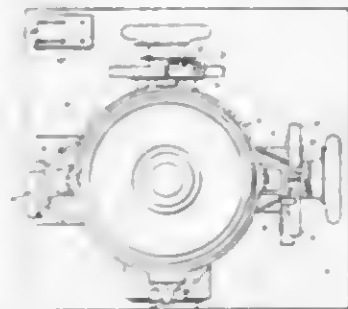


1. The combination with a main and an auxiliary gyroscope, of connecting means between said two gyroscopes whereby the latter controls the precession of the former, and means responsive to the position of the former for altering the relation of said means to the auxiliary gyroscope.

1,312,086. GYROSCOPIC PENDULUM FOR AEROPLANES, TORPEDOES, AND THE LIKE. HARRY L. TANNA, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed May 26, 1916. Serial No. 100,148. 4 Claims. (Cl. 244-29.)

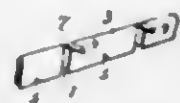
2. The combination with a vehicle capable of turning in known periods, of a stabilizing gyroscope therefor comprising a universally mounted rotor bearing frame, which together with its contained parts has a predetermined pendulous factor, a motor driven rotor of predetermined moment of inertia mounted on a normally vertical spin-

ning axis in said frame, said rotor being adapted to be driven at a predetermined speed, the said factors being



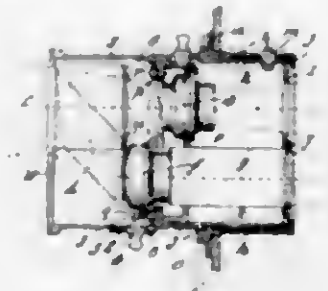
such that the period of oscillation of the gyroscope pendulum is in excess of the usual maximum period of turning of the vehicle.

1,312,087. CURTAIN-LIGHT. RUSSELL E. TUPPER, Cohasset, Mass. Filed Nov. 19, 1918. Serial No. 263,205. 3 Claims. (Cl. 21-220.)



1. The combination with a fabric having an opening through it and a sheet to be attached over the opening, of a clamping strip composed of sheet metal folded over upon itself along a longitudinal line and inclosing the edges of the said sheet, the clamping strip having pointed projections for engaging said sheet, and pointed tongues for engaging the fabric.

1,312,088. PRODUCTION OF COLOR CINEMATOGRAPHIC BANDS AND MEANS THEREFOR. FRANK TWYMAN, London, England, and HAROLD WORKMAN, Glasgow, Scotland. Filed Nov. 21, 1916. Serial No. 132,591. 1 Claim. (Cl. 88-16.4.)

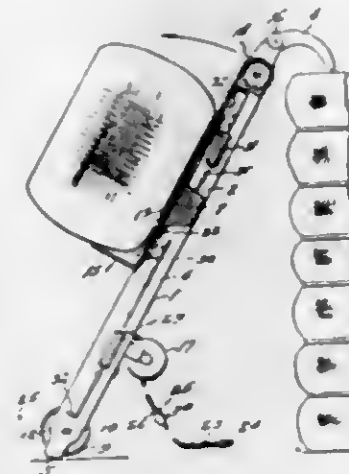


The process of standardizing cameras for taking a plurality of color value negatives concomitantly from the same point of view which consists in taking a series of color value images, projecting the color value images through a standard projector so that they substantially superpose on a screen and then relatively adjusting the lens elements of the camera so as to correct for lack of proper superposition of images as viewed on the screen.

1,312,089. ELEVATING-TRUCK. JOHN L. ANDERSON, Italy, Texas, assignor of one-half to R. W. J. WOFFORD, Italy, Texas. Filed Apr. 18, 1918. Serial No. 229,253. 2 Claims. (Cl. 187-10.)

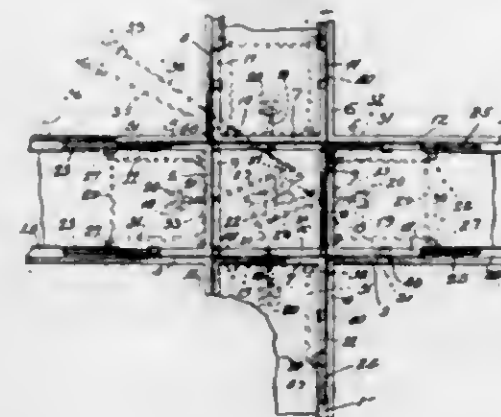
1. In an elevating truck, the combination of a portable truck frame, truck wheels at the lower end of the frame supporting it for transportation, the lower ends of the frame being serrated to engage the floor when the frame is disposed at an angle and the truck wheels elevated from the floor, supporting members at the upper end of the truck frame, sprockets mounted at each end of the

frame on each side thereof, endless chains traveling on the sprockets, load carriers mounted on the chains, an electric motor mounted on the frame, driving connections between the motor and the sprockets of the endless



chains, a reversing switch mounted on the frame and connected with the motor, a tripping device operated by one of the endless chains, and operating means connected with the reversing switch and also with the tripping device.

1,312,090. RAILWAY-CROSSING. HARVEY H. ASKEW, Los Angeles, Calif. Filed Nov. 27, 1915. Serial No. 63,755. 3 Claims. (Cl. 246-273.)

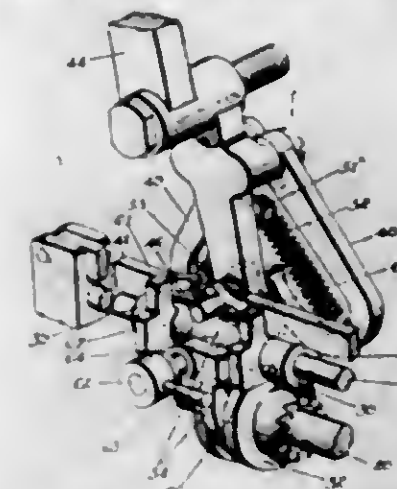


1. A railway crossing having transverse sections adapted to bridge the space between the adjacent ends of crossing road ways, movable members adapted to be rocked back and forth beneath said transverse sections, movable means adapted to move said rocking members whereby flanges of wheels may operate the said members in one direction, and springs normally moving said rocking members in the opposite direction.

1,312,091. AUTOMATIC REVERSING MECHANISM. WILLIAM ARTER, Worcester, Mass., assignor to The Person-Arter Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 8, 1916. Serial No. 96,101. 7 Claims. (Cl. 74-59.)

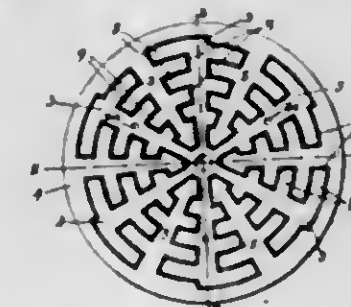
1. A mechanism of the character described, comprising a driving shaft, a driven member mounted for movement in either of two directions, and a reversing mechanism connecting said shaft and member, said mechanism comprising a device shiftable from one operative position to another to effect a reversal of the movement of said

member, spring means operative normally to shift said device from one of said positions to another, and posi-



tively acting means operative to initiate the shifting movement of said device.

1,312,092. MAGNETIC CHUCK. WILLIAM ARTER, Worcester, Mass., assignor to The Person-Arter Machine Company, Worcester, Mass., a Corporation of Massachusetts. Continuation in part of application Serial No. 48,018, filed Aug. 30, 1915. This application filed June 28, 1917. Serial No. 177,505. 16 Claims. (Cl. 175-367.)



16. A magnetic chuck having a work holding face comprising a series of arms radiating from a center and projections extending laterally from said arms, a second series of arms extending inwardly from the perimeter of the chuck alternating with the arms of the first series and provided with lateral projections lying between the projections of the next adjacent arms, the two series of arms and their projections forming pole members of opposite polarities, and non-magnetic material separating said pole pieces.

1,312,093. TREATING TUNG-OIL AND COATING OR IMPREGNATING OBJECTS THEREWITH. LEO H. BARKER, Yonkers, N. Y., assignor to General Bakelite Company, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1917. Serial No. 142,693. 11 Claims. (Cl. 91-70.)

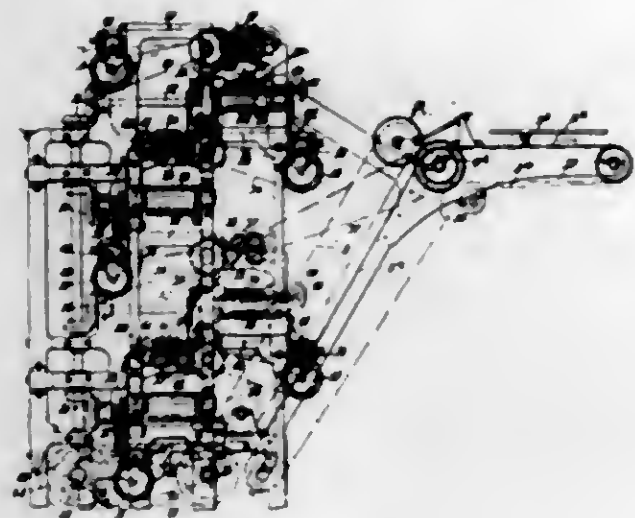
3. As a new article of manufacture, modified tung oil, practically stable at temperatures up to 80-100° C., but solidifying at about 150-160° C.

5. A method of treating tung oil, consisting in heating the oil to a relatively high temperature while avoiding solidification thereof, and thereafter solidifying the oil by application of heat at a temperature below that of the initial heating.

8. A method of treating tung oil and impregnating or coating objects therewith, consisting in heating the oil to a temperature of approximately 200° C. while avoiding solidification thereof, and thereafter solidifying the oil by application of heat in presence of the object to be coated or impregnated, at a materially lower temperature.

11. An article coated or impregnated with solidified tung oil, and provided with an external coating of an infusible and insoluble phenolic condensation product.

1,312,094. PROCESS OF BREAD-MAKING. GEORGE RALPH BAKER, London, and JOSEPH WILLIAM OWEN, Plymouth, England. Filed Mar. 28, 1917. Serial No. 158,043. 5 Claims. (Cl. 197-54.)



1. A process of producing dough of high quality in a minimum period of time consisting in mixing the dough with a fermenting agent and also with an acidifying medium and then directly without proving sheeting and folding the dough a large number of times sufficient to thoroughly refine same by inducing throughout it a large number of evenly distributed fermentation centers.

2. A process of producing dough of high quality in a minimum period of time consisting in mixing the dough with a fermenting agent and also with an acidifying medium, and then directly without proving sheeting and folding the dough successively at right angles a large number of times sufficient to thoroughly refine same by inducing throughout it a large number of evenly distributed fermentation centers.

3. A process of producing bread of high quality in a minimum period of time consisting in mixing the dough with a fermenting agent, directly without proving sheeting and folding the dough a large number of times sufficient to thoroughly refine same by inducing therein a large number of evenly distributed fermentation centers, proving the dough, and baking the same.

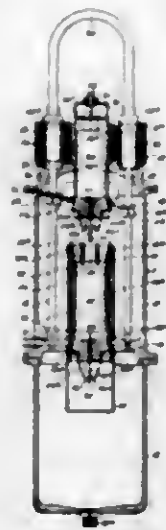
4. A process of producing bread of high quality in a minimum period of time consisting in mixing the dough with a fermenting agent and also with an acidifying medium, dividing the dough into pieces, directly without proving sheeting and folding the pieces of dough a large number of times sufficient to induce throughout same a large number of evenly distributed fermentation centers, molding the dough into loaves, subjecting said loaves to a proving operation and baking the same.

5. A process of producing bread of high quality in a minimum period of time, consisting in mixing dough with a fermenting agent and also with an acidifying medium, dividing the dough into pieces, directly and without proving, sheeting and folding the pieces of dough successively in directions at right angles a large number of times sufficient to induce throughout same a large number of evenly distributed fermentation centers, the folding operations being performed by the gravity of the dough alone, molding the dough into loaves and baking the latter.

1,312,095. LIQUID-METER. WILLIAM BOWDEN, Manchester, England. Filed June 5, 1917. Serial No. 172,884. 34 Claims. (Cl. 73-28.)

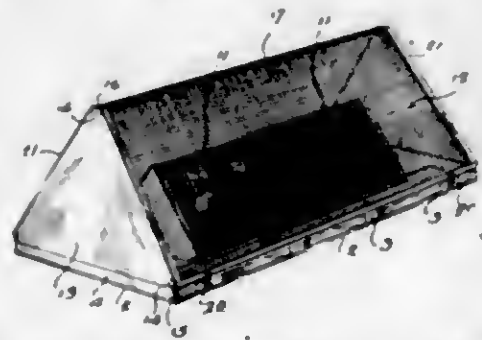
1. A liquid meter comprising in combination, a measuring vessel provided with an inlet and an outlet, a receiving vessel communicating with said measuring vessel by means of said outlet when open and provided with a draw-off outlet, valves adapted to open and close said inlet and outlet alternately, means for operating said valves, means for automatically controlling said valve-

operating means to render same operative when the measuring vessel is filled and emptied, and means for



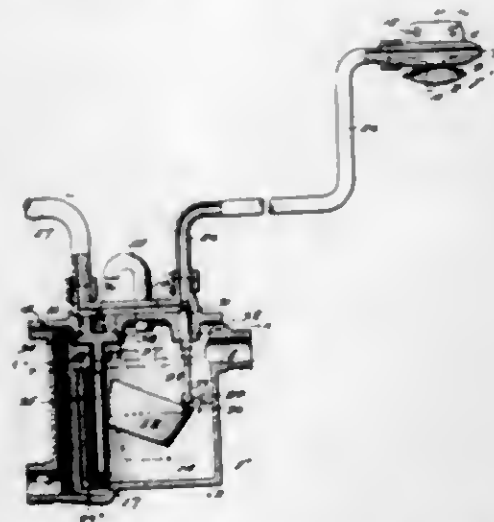
venting said vessels during the filling and emptying thereof.

1,312,096. INSECT-TRAP. CHARLES W. HOYLE, Pittsburgh, Pa. Filed Nov. 25, 1918. Serial No. 264,066. 4 Claims. (Cl. 43-22.)



1. In an insect trap, the combination, of a base structure comprising a bottom board, a plurality of blocks attached to the upper surface of said board about its side edges, the facing ends of said blocks being angled to provide converging lead openings opening out through constricted openings into the space between the inner edges of the blocks, a confining cage hingedly connected to said base structure and means to prevent insects escaping from said confining cage.

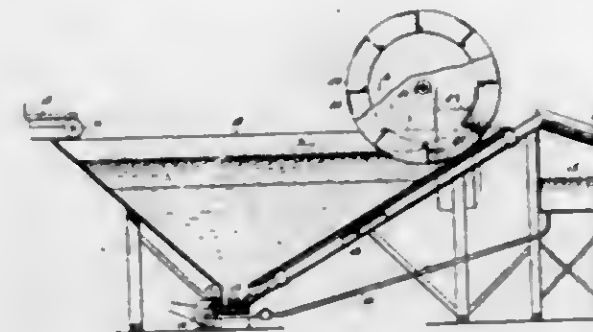
1,312,097. AUTOMATIC SIGNAL APPARATUS TO INDICATE FAILURE OF LUBRICATING SYSTEMS. LEVI G. BUCKNER and SAMUEL J. SIBLEY, Memphis, Tenn. Filed Dec. 9, 1916. Serial No. 130,003. 15 Claims. (Cl. 116-15.)



13. An indicator for low liquid levels, comprising in combination, an indicating device, a conduit connecting

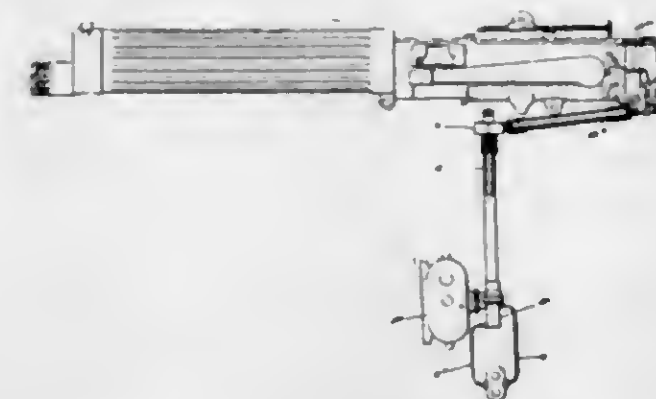
said device and a source of reduced air pressure, and a valve in said conduit controlled by the liquid, substantially as described.

1,312,098. APPARATUS FOR SORTING ARTICLES ACCORDING TO RELATIVE BUOYANCY. ANTONIO CER-
AUTI, San Francisco, Calif. Filed Apr. 10, 1918. Serial
No. 227,701. 1 Claim. (Cl. 130-32.)



In a machine for sorting fruits or vegetables, a brine tank having a chamber below its bottom and in communication with the tank interior, said tank and chamber each having a completely unobstructed interior, means to receive the uncontaminated fruits or vegetables, a conduit having a completely unobstructed inlet and leading from said chamber to said receiving means, means to force brine through said chamber so as to convey the fruits and vegetables through said conduit, means to remove the fruits and vegetables floating on the surface of the brine, and means to convey the brine from said receiving means back to said forcing means so as to recirculate said brine to force further fruits and vegetables through the conduit.

1,312,099. AIRCRAFT. GEORGE HENRY CHALLENGER, Westminster, London, and HAROLD ARTHUR SAVAGE, Hextley Heath, England, assignors to Vickers Limited, Westminster, England. Filed July 6, 1917. Serial No. 179,080. 4 Claims. (Cl. 89-40.)

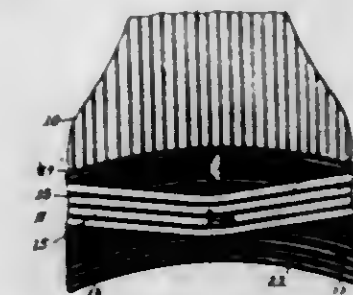


1. The combination with an aircraft gun adapted to fire between the propeller blades, of means controlled by the movements of the propeller for firing said gun and a governing device for automatically varying the instant at which the said means come into operation in accordance with the speed variations of the propeller.

1,312,100. REVERSIBLE CUFF. ALBERT E. CLOTHIER, Swarthmore, Pa. Filed July 22, 1915. Serial No. 41,236. 8 Claims. (Cl. 2-79.)

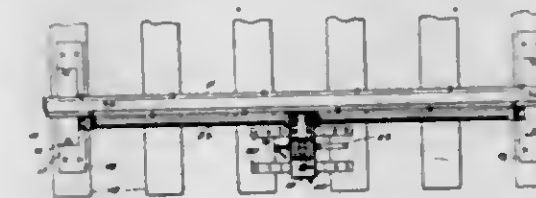
1. An article of manufacture, a detachable cuff for shirt sleeves comprising a cuff portion foldable to present different surfaces outwardly, in combination with a connecting band joining those ends of the cuff which extend

parallel to the length of the wearer's arm and adapted to be turned inside out to present different surfaces toward



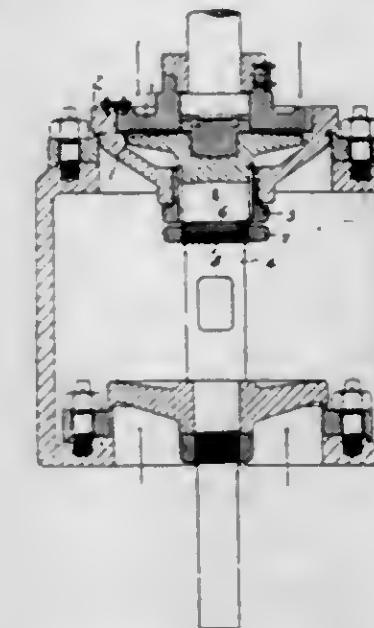
the cuff, extending circumferentially of the wrist of the wearer in either position and means for securing the same to a shirt sleeve.

1,312,101. RAIL-CONTACT CIRCUIT-CONTROLLER. JAMES E. CLOUGH and WILSON H. STILWELL, Paris, and ARTHUR R. FRANA, Louisville, Ky. Filed Aug. 15, 1917. Serial No. 180,334. 18 Claims. (Cl. 246-251.)



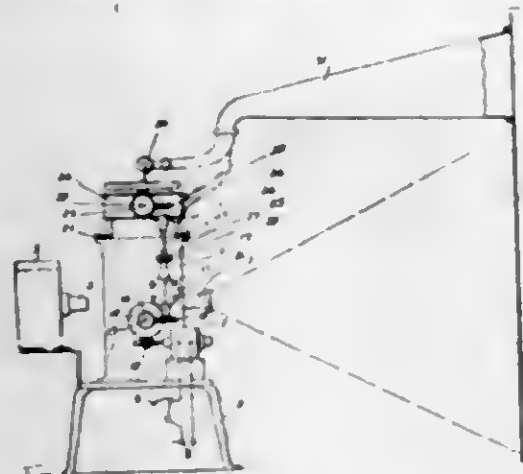
18. In apparatus as characterized, a movable contact member, selectively operatable means adapted to act sequentially upon said member, initially operated means moving the member in a predetermined direction, and subsequently operated means holding the member in the actuated position.

1,312,102. VALVE. DAVID COCKBURN and DONALD MACNICOLL, Cardonald, near Glasgow, Scotland, assignors to Cockburns, Limited, Cardonald, near Glasgow, Scotland. Filed Feb. 14, 1919. Serial No. 276,918. 2 Claims. (Cl. 251-82.)



2. In a double beat valve, in combination with two valve elements, a spindle between said elements, a covering member secured to one of said elements and affording in conjunction with said last named element a cell, a flexible diaphragm within said cell, a sleeve threaded into said last named element, said sleeve surrounding and spaced from said spindle, and a nut fitted to said spindle between said sleeve and the other valve element.

1,312,103. COMBINED MOVING-PICTURE MACHINERY AND PHONOGRAPHIC APPARATUS. CLYDE J. COLEMAN, New Rochelle, N. Y. Filed Aug. 21, 1915. Serial No. 46,629. 4 Claims. (Cl. 88-16.2.)



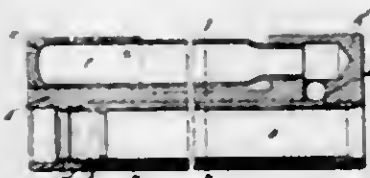
1. In an apparatus of the class described, the combination of a translucent screen, a sound reproducing machine, a moving picture machine arranged behind said screen, one of said machines being mounted on the top of the other, means for driving one from the other, and means for preventing the transmission of vibration from one to the other.

1,312,104. APPARATUS FOR MANIPULATING METAL INGOTS IN ROLLING MILLS. EVAN WALTER DAVIES, Glamorganshire, Wales. Filed June 22, 1915. Serial No. 35,648. 4 Claims. (Cl. 80-48.)



1. Apparatus of the type described, including sliding members, operating means for said sliding members, a clutch having pivotal connection with one of said sliding members, a two armed lever having arms of unequal lengths mounted upon the second sliding member, a carriage linked to the shorter arm of said lever, quadrant-shaped tumblers having pin-and-quadrant-shaped slotted connection with said carriage, a second clutch linked to the longer arm of said lever, said tumblers having pivotal and quadrant-shaped-slotted connection through the link 25, its slot 26, and pivot 28 with said second clutch.

1,312,105. RECOIL AND RUN OUT APPARATUS FOR GUNS. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, London, England. Filed June 21, 1917. Serial No. 170,101. 3 Claims. (Cl. 80-43.)



3. In recoil and run out apparatus for ordnance, the combination of a forging constituting the body of the recuperator and brake cylinders and having lateral lugs substantially at each end thereof, air cylinders attached to said lugs so that said cylinders are external to the forging for the major portion of their length, a recuperator liner attached to the forging and disposed in a hole therein so

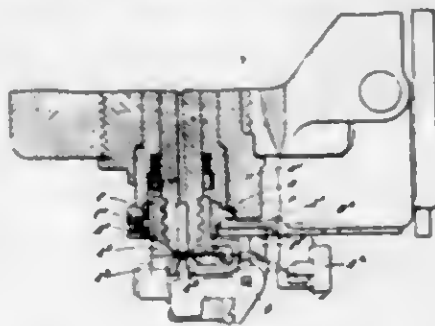
as to leave an annulus by which the liquid passes from the liner to the air cylinders through apertures in the forging when the apparatus is in operation.

1,312,106. MACHINE-GUN. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, London, England. Filed June 21, 1917. Serial No. 170,108. 6 Claims. (Cl. 80-2.)



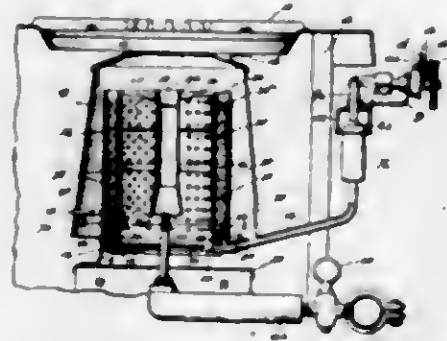
1. For use in a machine gun having a cartridge magazine and an extractor movably mounted on a reciprocating lock and adapted to engage with a cartridge in the magazine, a cartridge retainer for engaging with the head of the cartridge that is in position for extraction from the magazine, when the lock is in any but its forward or firing position.

1,312,107. FIRING MECHANISM OF ORDNANCE. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, London, England. Filed Apr. 18, 1915. Serial No. 229,472. 5 Claims. (Cl. 89-27.)



1. In ordnance breech mechanism, the combination with a hand operated lock frame having no operative connection with the breech actuating mechanism, and a rocking firing hammer carried by the lock frame, of a safety device, means for causing this device to move angularly with the breech screw so as to engage with the hammer when the breech screw is in the unlocked position, and means whereby such engagement prevents rearward movement of the hammer from occurring.

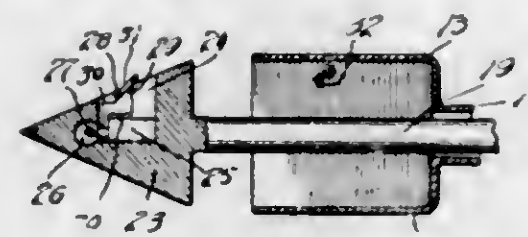
1,312,108. BURNER AND STOVE CONSTRUCTION. WILLIAM F. DEWEY, Kansas City, Mo. Filed Oct. 12, 1917. Serial No. 196,303. 6 Claims. (Cl. 158-56.)



1. A stove construction comprising, in combination, a burner, a valve for regulating the supply of fuel to said burner, and a fuel supply pipe leading from said burner into proximity to said valve, said valve being provided with an outlet tube having its outlet end positioned for

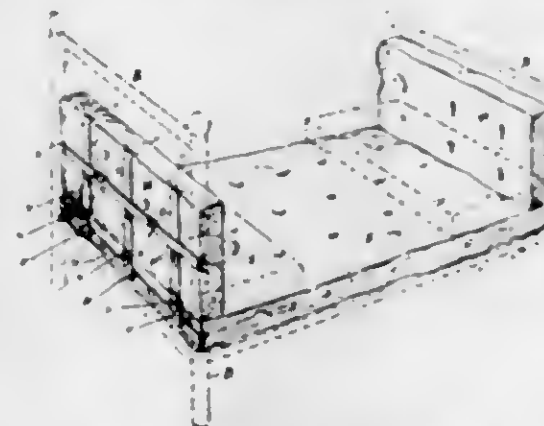
feeding into said supply pipe, said outlet tube being movable with relation to said supply pipe for permitting the outlet end of said tube to be brought either into or out of the line of flow of the fuel.

1,312,109. AUTOMOBILE-SIGNAL. VERNON A. DOTT, West Springfield, Mass. Filed Jan. 7, 1916. Serial No. 70,865. 1 Claim. (Cl. 177-329.)



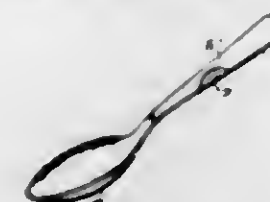
In a signaling device, an illuminating element, a housing therefor, means for moving said illuminating element from its non-signaling position to its signaling position, a switch arm carried by and projecting above the upper edge of said illuminating element, and an actuating member mounted within the housing adjacent the upper edge of the illuminating element, adapted in the normal operation of the device to contact with the switch arm to effect illumination by said illuminating element at the beginning of movement of the latter to a signaling position, said member being capable of oscillatory movement whereby the same may be positioned so as to allow the said switch arm to pass without contacting therewith.

1,312,110. MATTRESS ATTACHMENT. JOHN W. DUNCAN and JOHN A. SHUTE, Greenwood, Miss. Filed May 24, 1919. Serial No. 299,459. 5 Claims. (Cl. 5-13.)



1. The combination with a mattress, of a protecting pad provided with fastening devices connected with the rear or outer side of the pad near the middle portion thereof between its upper and lower ends and connected also with the adjacent end of the mattress.

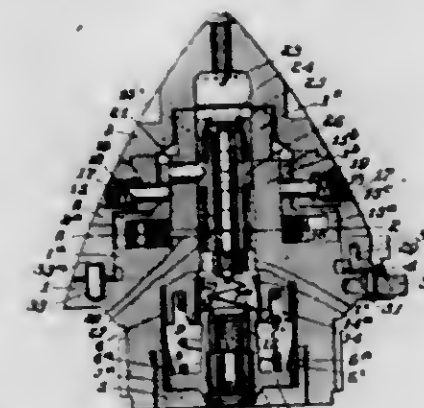
1,312,111. SANITARY SPOON. ALEXANDER J. FRANKLAND, Berkeley, Calif. Filed Aug. 27, 1918. Serial No. 251,707. 1 Claim. (Cl. 91-68.)



As a new article of manufacture, a sanitary tableware article adapted to be discarded after use formed of a base composed of 50% sand mixed with 40% diatomaceous earth, 10% plaster of Paris and silicate of soda molded into form coated with a waterproofing material.

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1,312,112. MECHANICAL TIME-FUSE. HOWARD M. GHOFF, Frankford, Pa. Filed July 6, 1918. Serial No. 243,577. 13 Claims. (Cl. 102-30.)



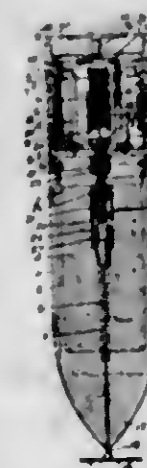
1. A mechanical time fuse comprising a suitable body, a spring pressed time firing plunger therein, a plunger release pin carried by the body having a beveled end engaging a corresponding recess in the plunger, a spring barrel having an annular flange normally holding said release pin in locking position and having an opening adapted to register with said pin, a spring tending to rotate said barrel, an adjustable time ring encircling said barrel, radially movable pins normally connecting said spring barrel and time ring, springs bearing on said pins, and means for varying the tension on said springs.

1,312,113. INDIVIDUAL THERMOSTATIC CONTROL FOR RADIATORS. EDWARD S. HALEY, Yonkers, N. Y. Filed Aug. 29, 1916. Serial No. 117,394. 11 Claims. (Cl. 236-42.)



1. In a composite thermostatic room temperature regulating steam supply valve a valve body; a detachable bonnet therefor; a cool expansive liquid filled bulb constituting an atmospheric thermostat fixed to and carried by said bonnet through heat insulating means; a throttle within said valve; a flexible throttle actuating expansion chamber connecting with said throttle; and a small heat insulating tube communicating the actuating pressure from said cool bulb to said expansion chamber.

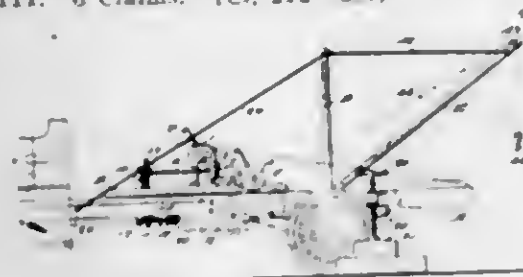
1,312,114. PROJECTILE. RICHARD S. HARVEY, Washington, D. C. Filed May 21, 1917. Serial No. 170,040. 12 Claims. (Cl. 102-2.)



7. In a projectile or bomb designed to be submerged, the combination of an explosive shell having a separable

portion, blades carried by the separable portion operable through water resistance to separate said portion from the shell, a plunger operable on water impact to release said blades to work, a percussion device carried by the shell to ignite the shell charge, a flexible member carried by the separable portion and connected to said percussion device to actuate the same for igniting the explosive charge, and an adjustable device mounted on the base of the projectile coöperable with the flexible member for fixing the operating length of said flexible connection to explode the shell charge, substantially as set forth.

1,312,115. HOISTING MECHANISM. NEIL F. HAVENS, Alexandria, Va. Filed Feb. 2, 1918. Serial No. 215,111. 3 Claims. (Cl. 212-38.)

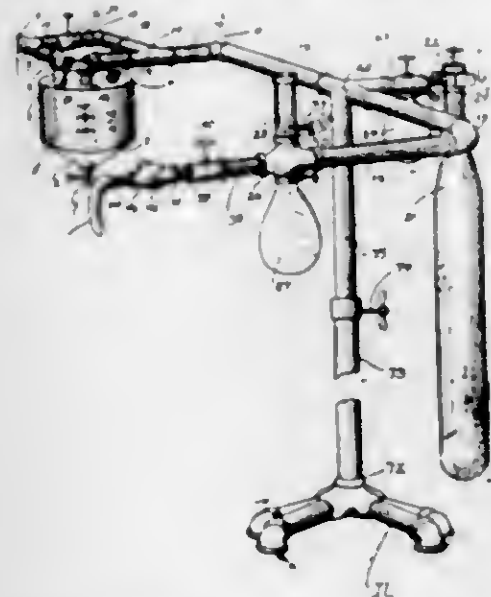


1. In a hoisting device, the combination with an ordinary motor truck including a chassis having side rails, of a supporting frame removably mounted upon said chassis, a boom detachably carried by said chassis, a hoisting mechanism carried by said supporting frame, bearing members carried by said side rails, bracing means for said boom adapted to be detachably connected to said bearing members, whereby the hoisting mechanism, boom and bracing members may be removed from connection with said truck.

1,312,116. METHOD OF HYDROLYZING CYANID TO AMMONIA. CHARLES P. HUBBEN, Providence, R. I., assignor to Nitrogen Products Company, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 3, 1918. Serial No. 256,729. 4 Claims. (Cl. 23-21.)

2. The method of forming ammonia which comprises treating a porous briquetted cyanized charge with dry steam, under a pressure substantially below that of the atmosphere, to hydrolyze to ammonia the cyanogen compound present in said charge.

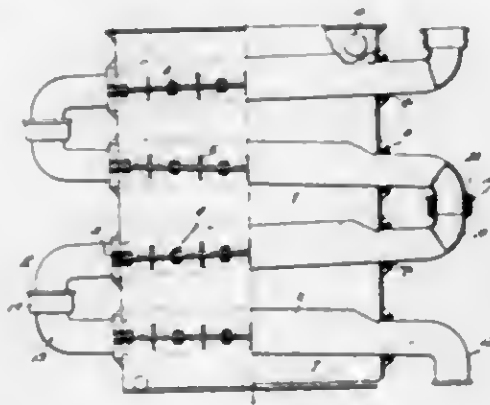
1,312,117. ANESTHETIC MACHINE. JONATHAN G. E. HUSKLE, Bethany, Mo. Filed Nov. 12, 1914. Serial No. 871,730. 7 Claims. (Cl. 128-196.)



7. In an anesthetic machine in combination, means for forming a solution of anesthetic vapor in air, a pipe for

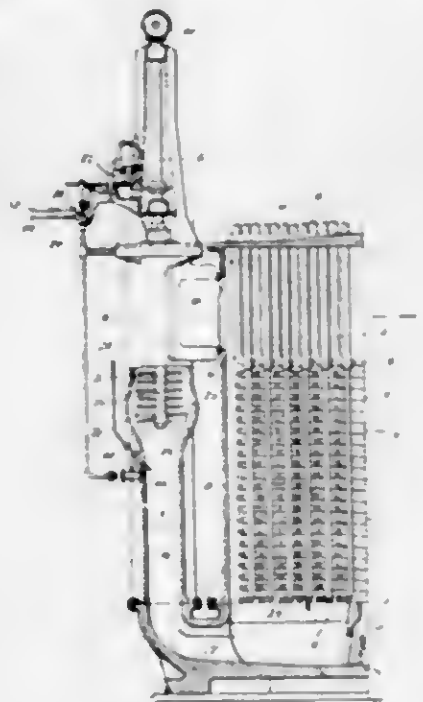
supplying pressure air to said means, connections for leading said solution to a patient, and a valve by-pass between said pipe and the said connection so arranged that air may be delivered into said connection without passing through said means and while said vapor forming means is in action.

1,312,118. CONDENSER. ARTHUR HUGH, New York, N. Y. Filed Apr. 9, 1918. Serial No. 227,408. 4 Claims. (Cl. 23-1.)



1. A condenser of the type described, including an inclosure comprising a plurality of separable or portable sections, with their meeting edges formed with flanges adapted to provide for the disassociation of said sections and the reassembling thereof, said flanges having portions adapted to guide the superposed sections to place during the reassembling of said sections.

1,312,119. APPARATUS FOR NITRATION OF ORGANIC LIQUIDS. ARTHUR HUGH, New York, N. Y. Filed May 18, 1918. Serial No. 235,399. 7 Claims. (Cl. 23-24.)



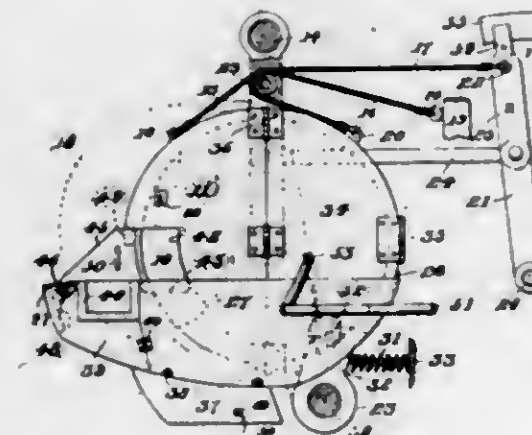
1. An apparatus for nitrating organic liquids, comprising a tank, a circulating connection between the lower portion and the upper portion thereof, cooling coils in said tank and means for passing a cooling fluid therethrough, said circulating connection being provided with propelling means adapted to cause the liquid to flow upwardly through said connection, and with stirring means adapted to completely mix the materials passing therethrough, an inlet for the organic liquid to be nitrated located below said stirring means, and a tangential inlet from said circulating connection to said tank.

1,312,120. POINT FOR NERVE-CANALS OF TEETH. SPENCE M. HURTT, Ridley Park, Pa., assignor to The Mynol Chemical Company, a Corporation of Delaware. Filed June 2, 1917. Serial No. 172,385. 1 Claim. (Cl. 32-32.)



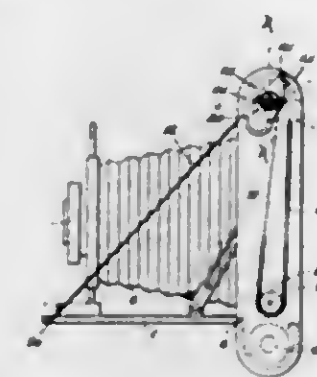
A point for nerve canals of teeth comprising an elongated body of conical shape from relatively near the base thereof toward the apex, the part between said conical portion and the base having two relatively wide, flat and roughened parallel faces adapting them to be readily grasped and held by pliers.

1,312,121. AUTOMATIC SPARK-ARRESTER FOR SAWS. JAMES T. JOHNSON, Chicago, Ill. Filed Aug. 2, 1917. Serial No. 184,178. 8 Claims. (Cl. 20-69.)



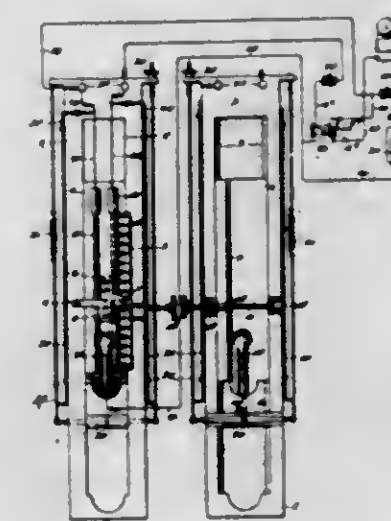
1. A spark collector for saws comprising an electro-magnet adapted for positioning adjacent a saw, a pneumatic draft appliance directed toward the said electro-magnet whereby oncoming metallic particles are baffled adjacent the electro-magnet.

1,312,122. CAMERA. ARTHUR L. JONES, Auburn, N. Y. Filed July 16, 1915. Serial No. 40,230. 6 Claims. (Cl. 95-32.)



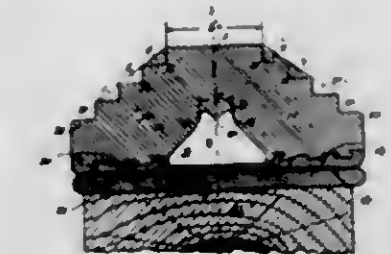
1. In a folding camera, the combination of a folding member, means for feeding the film including a winding spool, an axle connected to the spool, a ratchet wheel mounted on the axle, a wheel loosely mounted concentric with the axle, a pawl supported by the wheel and coacting with the ratchet wheel, a flexible connection secured to the folding member and passing over the pawl carrying wheel, and clutch for connecting the ratchet wheel and the axle and being shiftable out of connection with one of the parts it connects, and means for shifting the clutch, substantially as and for the purpose set forth.

1,312,123. AUTOMATIC HEAT AND COLD REGULATOR ALAHI. BENNETT W. JORDAN, Mullins, S. C., assignor of one-half to H. L. Buck, Horry county, S. C. Filed Dec. 22, 1914. Serial No. 878,624. 13 Claims. (Cl. 200-32.)



3. A circuit closer comprising containers, a thermally sensitive fluid conductor therein, a pivoted bar, relatively movable electric terminals mounted thereon in alignment with the fluid conductor, and means to move the terminals in opposite directions with respect to the fluid to simultaneously position the terminals at maximum and minimum points of contact therewith.

1,312,124. RUBBER TIRE. EDWARD BRICE KILLEN, London, England. Filed June 29, 1918. Serial No. 242,620. 1 Claim. (Cl. 152-1.)



A rubber tire having an internal air chamber and constructed in cross section with three special widths, a relatively narrow flat extreme circumferential tread part, a relatively wide gable-like tread part inside of said flat tread part, and rubber ribs or buffers which form the widest inner part of the tire, said gable-like tread part having transverse cavities and intervening ribs of equal width and which are staggered or alternated with each other on opposite sides of said flat tread part, substantially as described.

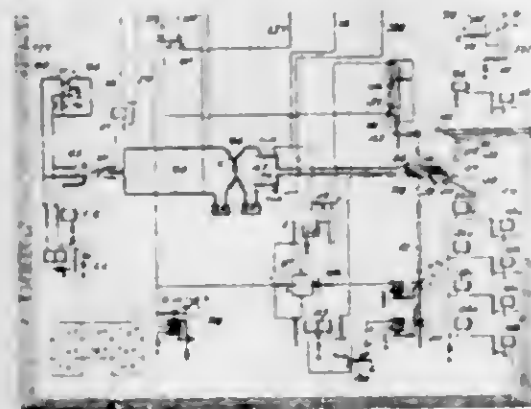
1,312,125. SPRING-MATRESS AND THE LIKE. SAMUEL R. KITCHEN, Buffalo, N. Y. Filed Feb. 25, 1918. Serial No. 219,000. 1 Claim. (Cl. 5-40.)



In spring mattresses and the like, the combination of a frame, opposite sides of which are formed by angle bars with their external angles forming the outer upper edges of the sides; cross bars secured to the inner angles of said angle bars; rock arms having coils formed thereon

through which the cross bars pass, the ends of each coil being straight and engaging the inner surface of the downwardly directed leg of the angle bar; said arms normally substantially engaging the upper leg of the angle bar and then extending diagonally upward from the angle bar toward the opposite side of the frame; and a flexible substantially inelastic mattress fabric connected at its edges to said rock arms.

1,312,126. TELEPHONE EXCHANGE SYSTEM. ALLEN E. LUNDRELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1917. Serial No. 157,100. 9 Claims. (Cl. 179-27.)

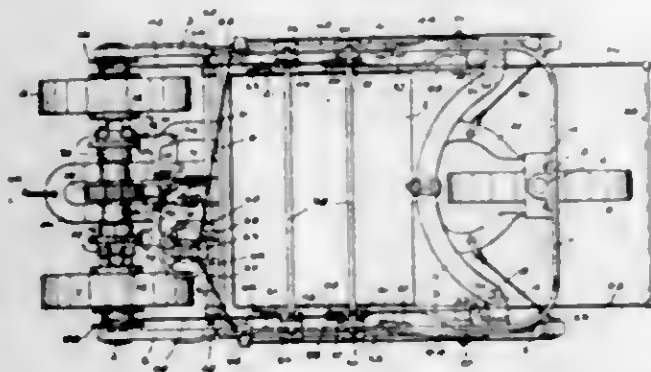


1. In a telephone exchange system, a plurality of lines, means including a connecting circuit for establishing a connection between a calling and a called line, an operator's telephone set, a listening-key switch having two definite stopping positions, means operable in one of said positions for connecting said telephone set to said connecting circuit, other means controllable in the other position of said switch for connecting said telephone set to said connecting circuit, and means controlled in the latter position of said switch for cooperating in the establishment of said connecting circuit.

1,312,127. PROCESS OF MAKING PHENOL. RALPH H. McKEE, Ridgefield Park, N. J. Filed Nov. 17, 1917. Serial No. 202,548. 5 Claims. (Cl. 23-24.)

4. In the herein described process of producing phenol from benzol, fusing sodium benzene sulfonate with caustic soda and dissolving the mass or melt in water containing phenol, the distillate containing the greater portion of the phenol contained in the sludge.

1,312,128. SCRAPER. RODERICK P. McNEIL, Seattle, Wash. Filed Jan. 28, 1919. Serial No. 273,616. 7 Claims. (Cl. 37-19.)

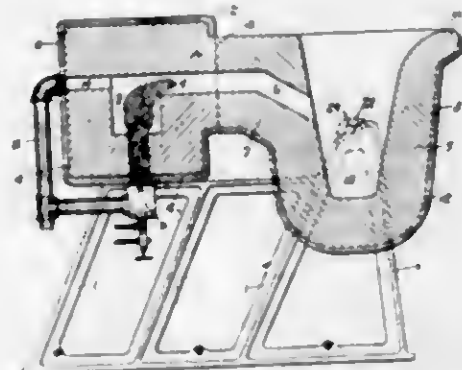


1. A scraper of the class described comprising a frame, a scraper bowl, links pivotally connecting said bowl to said frame, arms pivoted at one end to said frame and

having hooks on their opposite end, draw means connected with the hooked ends of said arms, and means on said scraper bowl adapted to be engaged by said hooked arms when said scraper bowl is in a filling position and disengaged from said arms when said scraper bowl is in a raised or dumping position.

7. A scraper of the class described comprising a frame, a guide wheel at the front end thereof for supporting the same, means operable from the rear of said frame for actuating the guide wheel to steer the scraper, a transverse shaft journaled in the rear end of said frame, wheels rotatable on said transverse shaft, drums secured on said shaft, means for locking said shaft to said wheels whereby said drums may be rotated, means for locking said shaft in a fixed position when said shaft is disconnected from said wheels, truss members extending upwardly from the sides of said frame, grooved rollers journaled on said truss members, a scraper bowl disposed within said frame; a grooved roller disposed on each side of said scraper bowl, links disposed on each side of said bowl and pivotally connecting said bowl with said frame, pins projecting outwardly from the sides of said bowl adjacent the lowermost front corners of said bowl, arms pivoted at one end to said frame and having hooks at the other end to engage said pins, draw members connected with said arms, and cables secured to said arms on each side of said frame thence passing upwardly over one of the pulleys on each of said upright truss members, thence downwardly around said pulleys on said scraper bowl, thence upwardly over the other pulley on said upright truss members and thence rearwardly to said drums.

1,312,129. FURNACE FOR MELTING METALS. WALTER MACLEOD, Cincinnati, Ohio. Filed Dec. 2, 1916. Serial No. 134,751. 2 Claims. (Cl. 263-13.)

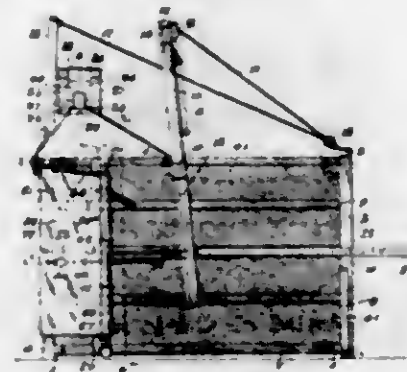


1. In a furnace for melting metal, two separate sections, one having a chamber for producing heat and the other having a chamber for melting the metal, a passage way leading into the heat producing chamber from below, a passage way extending between the chambers for transmitting the heat waves for melting the metal, a burner under the heating chamber arranged so that the flames will pass up into the heating chamber, a passage way from the heating chamber extending to the outside thereof for the intake of air to produce intensity of heat and quicken the heat waves through said passage way into the melting chamber, said air intake approximately in the same horizontal line as the passage way to the melting chamber, a jump joint between said heating chamber and melting chamber, and means for tilting the melting chamber.

1,312,130. FLY TRAP FOR CATTLE. CHARLES F. MERRILL, Jasper, Mo., and EVERETT E. HALL, Bayard, Kans. Filed May 6, 1918. Serial No. 232,840. 11 Claims. (Cl. 119-156.)

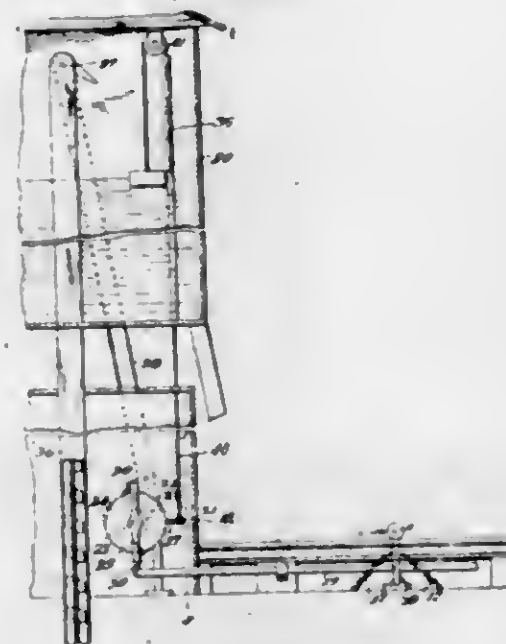
1. In a fly trap for animals, a structure through which the animals may travel, means at the entering end of the structure responsive to the entrance of an animal, and a closure for the exit end connected to and movable by the

means at the entering end for spreading the closure to produce an exit opening for the animal, said closure being



constructed to wipe off flies from the animal passing through the exit.

1,312,131. AUTOMATIC RAIL-POWER. HERRIS M. MORTON, Koshkonong, Mo. Filed Nov. 14, 1918. Serial No. 262,473. 2 Claims. (Cl. 103-51.)

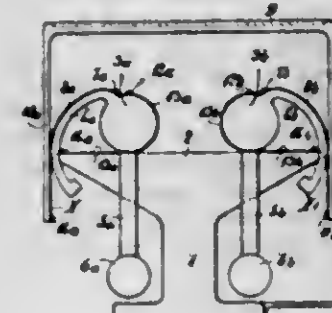


2. In a device of the character described including in combination with a rail of a transversely secured shaft ending in a crank arm at one end the other having a collar, an upstanding arm secure in said collar, held adjacent to the head of said rail to be actuated by a passing car wheel a spring at the upper end of said arm to hold the same in vertical position, a link secured to said crank, stub shaft, a ratchet wheel loosely mounted on said stub shaft having a clutch, a coacting clutch splined on said shaft, a shipper lever mounted adjacent to said splined clutch and in connection therewith, a rock lever mounted on said shaft adjacent to said ratchet having its lower end secured to said link, a spring pawl secure to the end of said lever for coaction with said ratchet, a gear wheel fixed to said stub shaft, a gear wheel in mesh with said fixed gear having a sprocket on said tank shaft, a chain passing over said sprockets, and a water elevator actuated by said tank shaft, all arranged as and in the manner set forth.

1,312,132. WEIGHING APPARATUS. TORR LENSART NYLON, Sattys-Storlingen, Sweden. Filed Feb. 14, 1917. Serial No. 148,602. 4 Claims. (Cl. 265-70.)

1. A weighing apparatus comprising a support having a surface disposed in a horizontal plane, members movable on said surface and biased to one position, a platform mounted for rectilinear movement, and flexible strips

connecting said platform and said members and said support and said members for imparting oscillatory move-



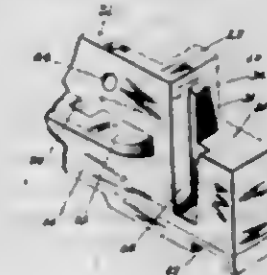
ment to said members in opposite directions when said platform is subjected to pressure.

1,312,133. MAIL-ROUTING CASE. ISAAC W. PICKROAD, Brooklyn, N. Y., assignor to George Ford, Brooklyn, N. Y. Filed May 18, 1915. Serial No. 28,847. 12 Claims. (Cl. 211-36.)



2. A mail routing case comprising a mail-receiving shelf, a series of partitions dividing the top of the shelf into mail-receiving spaces, backing means extending between the partitions, the partitions and the backing means being mounted for relative forward and backward movement, and means assuring the forward projection of the partitions to mail-supporting position at the front of the backing means in all relative positions of the partitions and backing means.

1,312,134. CAR CONSTRUCTION. JOSEPH PIERCE, Brainerd, Minn. Filed July 2, 1918. Serial No. 242,996. 1 Claim. (Cl. 105-404.)



A car bottom construction of the character described consisting of end and side elements to which the car bottom proper is to be secured, said end elements comprising a right angular body, an extension formed with said body, recessed at its lower face, a vertical dove-tailed projection having beveled walls formed on the flat vertical face

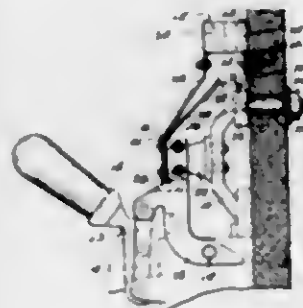
of said body at the side of the extension, said projection extending into a recess formed in said extension and by said flat face of the body, said side element comprising an angular body, having an undercut recess for the reception of the vertical dove-tailed projection of said end elements, and a flat face adapted to engage with the flat face of the extension of said end elements, the body of said side element having a recess at its lower face, securing plates adapted to fit into the recess of the lower face of said end and side elements, and lower side extensions on said end elements provided with openings for the reception of the vertical stakes to which the boards of the car body are to be secured, substantially as described and for the purpose set forth.

1,312,135. BOILER-HANDLE. JACOB SCHAFER, Brooklyn, N. Y. Filed Dec. 4, 1917. Serial No. 205,297. 5 Claims. (Cl. 16—10.)



1. The combination of a receptacle, an open pivoted handle for the receptacle, a pivoted latch having its axis of rotation at an angle to the axis of rotation of the handle, adapted to hold said handle in a distended position and so located with respect to said handle that when the handle is in undistended position it surrounds said latch.

1,312,136. CIRCUIT-BREAKER. DANIEL M. SCHIFFERT, Boston, Mass., assignor to S. B. Condit, Jr., Brookline, Mass. Filed Dec. 9, 1916. Serial No. 136,084. 7 Claims. (Cl. 175—282.)

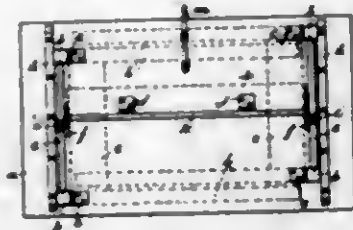


1. A circuit breaker, including stationary switch members, a pivoted contact-bearing member composed of two side frames, a block rigidly secured between the upper end-portion of said frames and substantially flush with the forward edges thereof, and extended rearwardly of said upper end portions, a brush contact member for co-operation with certain of said stationary switch-members rigidly fixed to said block, and auxiliary contact-members secured to the front side of said block and extended thereabove for contact with others of said stationary switch members.

1,312,137. FOLDING TABLE. EDWIN G. SCHLORA, New York, N. Y. Filed Oct. 15, 1917. Serial No. 193,623. 2 Claims. (Cl. 45—11.)

1. A folding table comprising a top, pairs of legs swingingly connected to the lower portion of the top, each pair

having a transverse bar, a wedge member carried by each bar, means including a screw secured to the wedge



for adjusting the wedge laterally, and a longitudinal flap swingingly mounted on the lower surface of the top for engagement with the wedges.

1,312,138. CURTAIN-FASTENER. EUGENE F. SCHOLL, New Britain, Conn. Filed May 12, 1917. Serial No. 168,194. Renewed Dec. 26, 1918. Serial No. 268,414. 3 Claims. (Cl. 24—213.)



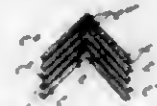
2. In a curtain fastener, a socket member having an opening for receiving a stud member, and a stud member for co-operating with said socket member, said stud member formed of a single piece of strip sheet material with its middle portion serving as a base and having reinforcing end portions formed by return bends at the ends of said base, the ends of said return bends extending outwardly in parallelism and in spaced relation and supported by the return bends, said ends provided with co-operating outwardly directed rigid lugs for engaging the socket member.

1,312,139. LEAF-SPRING. CONSTANTINE P. SCHWAB, Cleveland, Ohio. Filed Mar. 29, 1917. Serial No. 158,249. 2 Claims. (Cl. 267—33.)



1. A composite leaf spring comprising a main spring and a counter spring, said springs being normally of opposite curvature, an insert between said two spring parts, said insert having yielding surfaces which prevent noise when the spring parts contact therewith and being of lower specific gravity than steel, and means for clamping said counter spring and said main spring into engagement with said insert.

1,312,140. LEAF-SPRING. CONSTANTINE P. SCHWAB, Indianapolis, Ind. Filed Dec. 15, 1917. Serial No. 207,356. 4 Claims. (Cl. 267—33.)



1. A leaf spring comprising a plurality of spring leaves having side portions extending lengthwise of the leaves and inclined toward each other to cause the entire pressure between adjacent spring leaves to be transmitted through the contacting inclined sides thereof, whereby the friction between the adjacent leaves is increased.

1,312,141. ARTIFICIAL TOOTH. WILLIE F. SLACK, Manchester, N. H. Filed Feb. 24, 1919. Serial No. 278,671. 2 Claims. (Cl. 32—9.)



1. An artificial tooth provided with an anchor or keeper comprising a pin having one end embedded in the material of the tooth and provided with a slot extending longitudinally of the anchor or keeper to permit contraction of the tooth as it is cooled.

1,312,142. PLATE-TONGS. ANDREW SMITH, Pescadero, Calif. Filed Jan. 25, 1919. Serial No. 272,987. 1 Claim. (Cl. 65—32.)

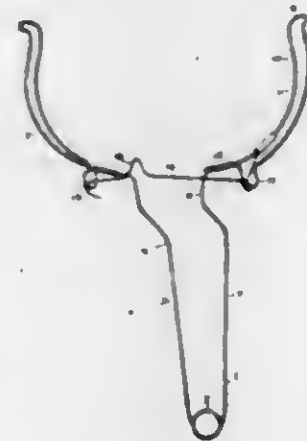
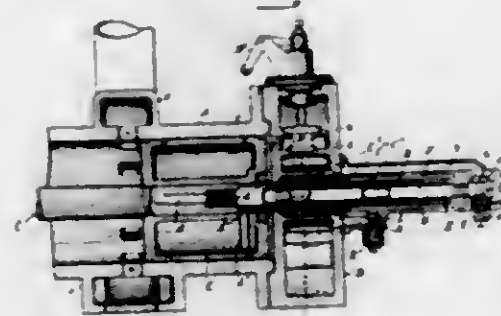


Plate tongs comprising a piece of spring wire bent in the middle and extending from said bend in approximately parallel directions, the sides of the wire then extending upward and back on themselves to form curved fingers between which opposite portions of a plate can be received, the upper portions of said bent fingers having therein bent portions, a spring wire catch secured to the bent portion of one of said fingers, its free end having a hook engaging the bent portion of the other finger to limit the outward movement of the finger, said wire catch having a hook-shaped intermediate portion adapted to engage said latter bend, and hold the fingers in the closed position.

1,312,143. STEAM-ENGINE. ALLAN D. SKINNER, Erie, Pa. Filed Dec. 20, 1917. Serial No. 208,115. 6 Claims. (Cl. 121—105.)



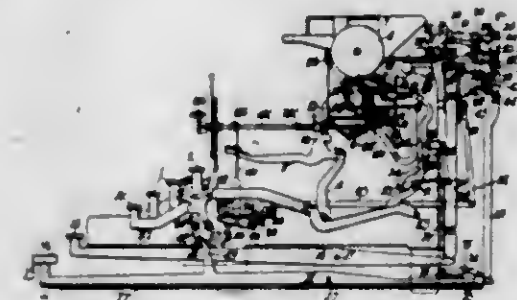
3. The combination with a steam engine cylinder having a steam supply passage thereto, a hollow piston in the cylinder, of a steam chamber on the cylinder head, a valved connection between said passage and chamber, a hollow tail rod projecting from the piston and connecting

the interior of said piston and the chamber, to admit steam to the former, and means to return steam from the piston to said passage, including a check valve opening toward said passage.

1,312,144. PROCESS FOR VULCANIZING RUBBER AND PRODUCT OBTAINED THEREBY. SHELDON P. THACHER, Weehawken, N. J., assignor to Revere Rubber Company, a Corporation of Rhode Island. Original application filed July 11, 1917. Serial No. 179,801. Divided and this application filed Jan. 5, 1918. Serial No. 210,518. 7 Claims. (Cl. 18—53.)

1. A process for treating rubber or similar material which comprises mixing an organic vulcanizing agent and red lead with rubber and vulcanizing the mixture.

1,312,145. TYPE-WRITING MACHINE. EDWARD THOMAS, New York, N. Y., and BURNHAM C. STICKNEY, Elizabeth, N. J., assignors, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Original application filed Jan. 22, 1915, Serial No. 3,691. Divided and this application filed Dec. 21, 1916. Serial No. 138,159. 14 Claims. (Cl. 240—71.)



6. In a typewriter machine, the combination of a platen movable longitudinally and vertically, letter-feeding devices effective to cause longitudinal movement, but ineffective to cause transverse movement, manually-operated mechanism operable to cause the platen to move longitudinally, and means connected to said manually-operated mechanism to be effective only at an operation thereof, for shifting the platen vertically.

1,312,146. CAR-INDICATOR. JOSEPH URSANEK, Chicago, Ill. Filed Apr. 11, 1919. Serial No. 280,306. 3 Claims. (Cl. 40—46.)



1. In a street car registering device, the combination with a pair of indicators at both ends of the car, geared connections extending downward below the platform thereof, a pair of rods slidably mounted below the platform, racks formed with said rods, pinions intervening between said racks, a segment moving the lowermost of said racks, a roller carried at the extending ends of said segment, and track-side connections adapted to engage with said roller when the wheels of the car pass thereover.

1,312,147. GAS AND AIR MIXER. JONAH MOWER WALLWIN, Warwick, England. Filed Apr. 30, 1918. Serial No. 231,777. 4 Claims. (Cl. 158—109.)

1. In pressure gas and air burners and mixing apparatus therefor a conduit, pairs of forwardly inclined and

perforated baffle plates on the opposite inner faces of the conduit, the inner edges of the plates on one face lying between the inner edges of the plates on the other face,



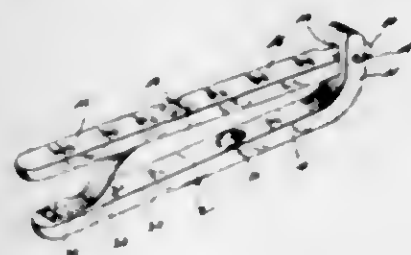
and the area of the space between the edges of the adjoining plates being larger than the area of the gas and air inlets combined, and also larger than the collective area of the holes in the burner head, as set forth.

1,312,148. PLIERS. WILLIAM R. WELDR, North East, Md. Filed Oct. 2, 1917. Serial No. 194,376. 1 Claim. (Cl. 156-6.)



A fire setting and replacing tool comprising a pair of crossed pivoted handles, a jaw upon the forward end of each handle, one jaw being shorter than the other, the transverse end of the short jaw being forwardly and diagonally concave to conform to a portion of a fire, a forwardly extending portion on said jaw adjacent the co-acting jaw and extending approximately longitudinally of the axis of the tool, and the co-acting longer jaw extending forwardly and beyond the shorter jaw and being provided with a hooked end curved away from the short jaw whereby said hooked end may be engaged with a rim of a wheel.

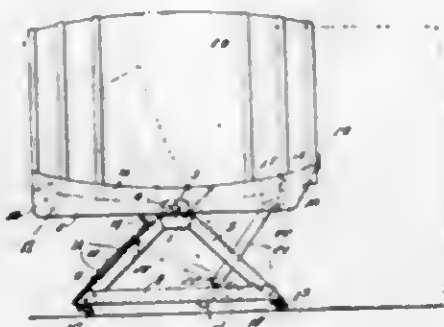
1,312,149. NUTCRACKER. FRANK ZALJA, Chester, Pa. Filed Sept. 16, 1918. Serial No. 264,263. 1 Claim. (Cl. 146-3.)



In a nut cracker, the combination with a lever having an angularly turned end, a second lever pivoted in said end, a recess formed in the upper surface of the first named lever adapted to receive a nut to be cracked, a pair of handles extending outwardly from said levers, hinges connecting between said handles and said levers, a

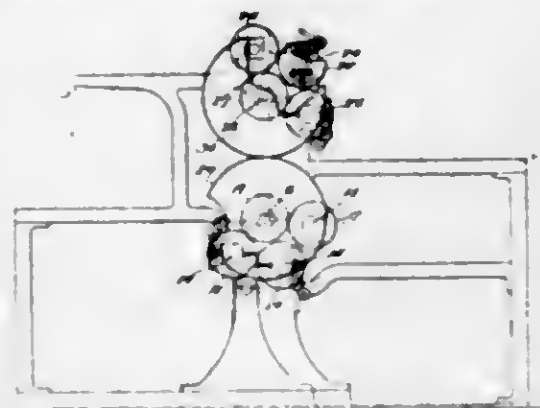
clip containing a socket secured to one of said handles, and a bent flat spring engageable within the socket of said clip adapted to press said handles normally apart.

1,312,150. BARREL-HACK. JOSEPH G. ZIMLICH, Cleveland, Ohio. Filed Aug. 21, 1917. Serial No. 187,451. 2 Claims. (Cl. 248-58.)



1. In an apparatus of the character described, the combination of two pairs of side frames, the rear ends of said frames being bridged by a horizontal stop member in substantial alignment with the upper edges of said side frames, the bottoms of said frames being bridged by an angle iron at points removed from the forward ends thereof, a cradle comprising two side girders having cross pieces at the ends thereof, said girders being journaled substantially midway of their lengths on bearings carried by the top of said frames and having their forward ends tapered for engagement with the floor when tilted, the forward ends of said frames being adapted to receive therebetween and against said angle iron the forward ends of the girders when tilted, and a locking arm freely pivoted to the forward cross pieces of said girders and having a notch at its free end for cooperation with said angle iron as a latch for automatically locking said cradle when returned to a horizontal position.

1,312,151. PRINTING-PRESS. HOWARD M. BARBER, Stonington, Conn., assignor, by mesne assignments, to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 23, 1913. Serial No. 791,334. 12 Claims. (Cl. 101-180.)

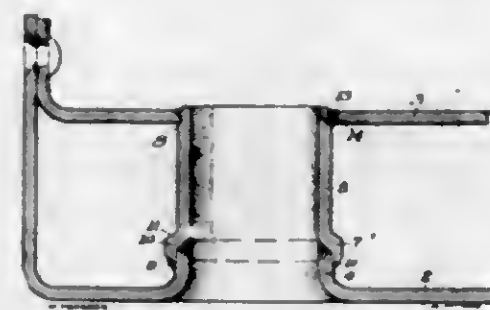


1. A printing press consisting of only two multicolor printing mechanisms, each of which consists of only two printing couples, said printing mechanisms being operable to print a plurality of colors on each side of one web or one color on each side of two separate webs without the use of turners.

1,312,152. HOLLOW SHEET METAL STRUCTURE AND THE MANUFACTURE THEREOF. THOMAS BARROW, Wheatland, Pa., assignor to Blaw Knox Company, Hoboken, Pa., a Corporation of New Jersey. Filed Feb. 20, 1918. Serial No. 218,348. 5 Claims. (Cl. 285-111.)

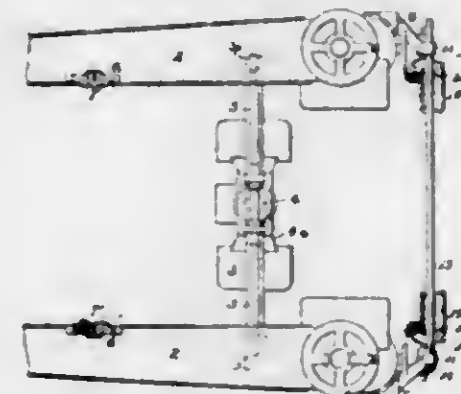
1. A structure of the character described, having one of its walls provided with an intumed flange in which

the thickness of the metal has not been materially reduced, and a hollow member provided with an enlarged portion telescopically engaging said flange and welded



thereto and having its opposite end portion seated in and secured to the opposite wall of the structure, substantially as described.

1,312,153. CLOTH-GUIDING DEVICE FOR TEXTILE MACHINES. GEORGE BAUNTON, Easthampton, Mass., assignor to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Feb. 7, 1918. Serial No. 215,818. 11 Claims. (Cl. 26-18.)



9. In an apparatus of the character stated, the combination of two longitudinal oppositely reciprocating frames and cloth clamps carried thereby, with means for guiding a web of cloth to the cloth clamps, said means comprising a vertical shaft journaled adjacent to the receiving ends of the respective frames, means for imparting to said shafts reciprocating motions to maintain them in substantially the same relative position to the reciprocating frames while being reciprocated, a transverse guide shaft forming a connection between the vertical shafts whereby they are both simultaneously rocked about their vertical axes, a guide device secured to each of the vertical rocking shafts, said guiders directed toward each other, and means to adjust the guiders, relatively to their vertical shafts whereby they may be adjusted relatively to or from each other without changing the relative adjustment of the vertical shafts.

1,312,154. ALUMINUM-SOLDER FLUX. CHARLES LESLIE BONSTEEL, Moose Jaw, Saskatchewan, Canada. Filed Jan. 11, 1919. Serial No. 270,733. 3 Claims. (Cl. 148-25.)

3. An aluminum solder flux, consisting of an admixture in or about the following proportions, aluminum chloride, 265 parts, zinc chloride, 820 parts, borax, 2 parts, sulfur, 25 parts, paraffin wax, 67 parts, beef tallow, 25 parts.

1,312,155. DOOR. GEORGE F. A. BAUEGEMAN, St. Louis, Mo. Filed Apr. 22, 1918. Serial No. 230,093. 4 Claims. (Cl. 20-19.)

1. A door composed of a plurality of sets of supporting arms, the arms of each set being spaced apart, said arms

being of different lengths, and panels pivotally connected to the outer ends of said arms, intermediate panels having

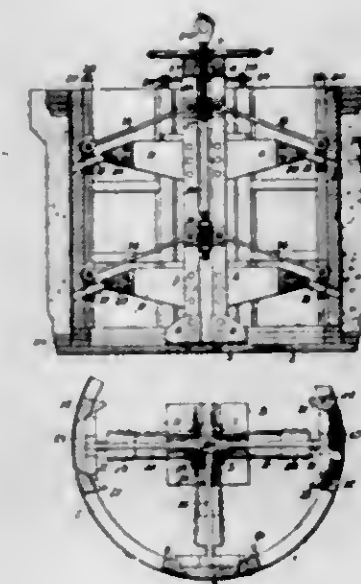


flanges at their outer edges lying in the plane of movement of said arms, in combination with means for supporting said door.

1,312,156. PRIMING CHARGE. WILLIAM H. BUELL, New Haven, Conn. Filed July 21, 1916. Serial No. 110,493. 9 Claims. (Cl. 52-2.)

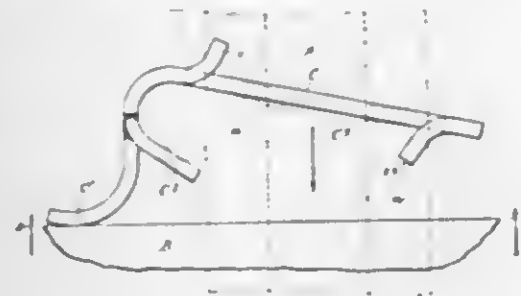
1. A priming charge containing a mixture of a detonating salt of trinitroresorcinol and a nitrated organic body, substantially as and for the purpose described.

1,312,157. COLLAPSIBLE CORE FOR MOLDS. CHARLES E. BUENTE, Avalon, Pa. Filed Oct. 2, 1917. Serial No. 194,389. 9 Claims. (Cl. 25-128.)



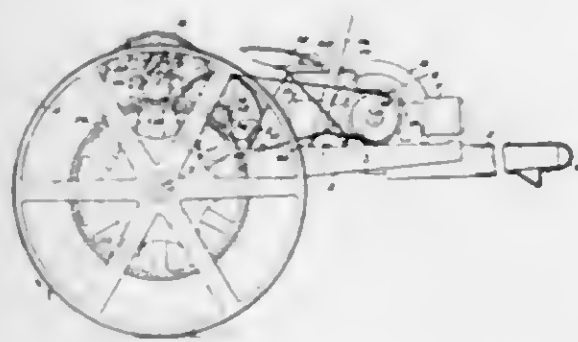
1. A collapsible core for a mold comprising a plurality of main segments, a plurality of key segments and means to move the key segments toward each other and then move the main segments toward each other, substantially as described.

1,312,158. RAIL-ANCHOR. EDWIN G. HUSSE and ALBIN P. RIASLER, Chicago, Ill., assignors to Chicago Railway Equipment Company, Chicago, Ill., a Corporation. Filed Oct. 18, 1917. Serial No. 167,186. 6 Claims. (Cl. 238-330.)



1. A rail anchor comprising a body portion having jaws at its ends to engage the base flanges of the rail, the body portion of said anchor being formed with a bent portion which under straightening strain tends to draw the jaws of the anchor toward each other.

1,312,159. TRACTOR. CHARLES H. CHALMERS, Minneapolis, Minn., assignor to F. E. Holton, Charles M. Andriest, John M. Sieberg, and Charles H. Chalmers, trustees, Minneapolis, Minn. Filed Aug. 19, 1916. Serial No. 115,831. 3 Claims. (Cl. 180-54.)



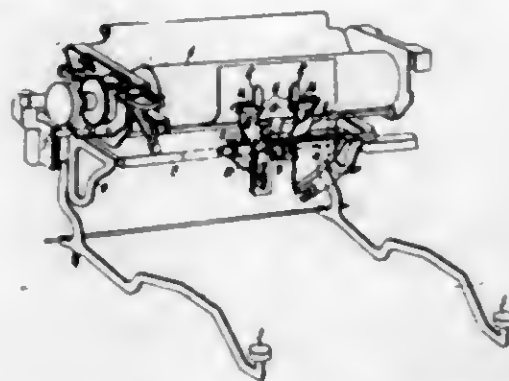
1. The combination, with a tractor frame, provided with traction wheels, of a motor mounted on said frame, a ratchet connection between said motor and each of said wheels whereby either of said wheels may remain stationary or turn slowly in turning the tractor, means permitting the attachment of a team to said frame to guide the tractor, and applying, at will, animal power thereto to assist the motor in moving the tractor.

1,312,160. DOOR LATCH AND LOCK. LOYD E. CHAINSTY, Monticello, Ind. Filed Mar. 24, 1919. Serial No. 284,571. 4 Claims. (Cl. 70-102.)



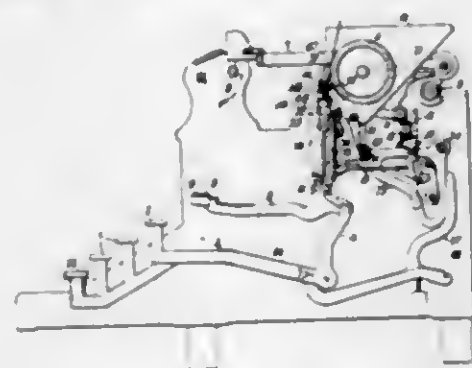
2. A combined door latch and lock comprising a member having an inclined face terminating in a roll, a companion member carried by the object to which the door is latched, a swinging tongue carried by the companion member and adapted to impinge the adjacent side of the roll on the first member, means for holding the tongue in a determined position with the door unlatched, and means for limiting the travel of the tongue in one direction.

1,312,161. TYPE-WRITING MACHINE. CORNELIUS B. CORCORAN, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 24, 1918. Serial No. 236,298. 7 Claims. (Cl. 197-135.)



1. In a platen scale for typewriters, a supporting member, the free end of which lies adjacent the line of writing; and a wing scale located adjacent and pivotally secured to the free end of said supporting member, and having a plurality of graduated portions extending at an angle to one another.

1,312,162. TYPE-WRITING MACHINE. CORNELIUS B. CORCORAN, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1917. Serial No. 140,499. 13 Claims. (Cl. 197-135.)



1. The combination with a main type-writer frame and a traveling carriage frame, of a platen mounted on said carriage for case-shift movement, a work-member holder on said main frame but moving with said platen from a normal lower case position to an upper-case position which will lie in the path of the movement of said carriage frame, and a depressible mounting for said holder enabling said holder to be cammed down bodily out of the way by said carriage frame.

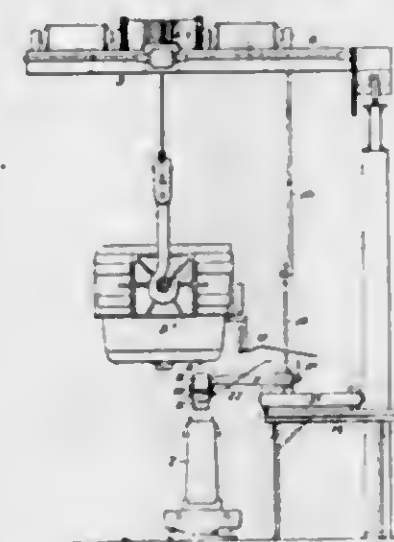
1,312,163. TRAIN-CONTROL MECHANISM. JAMES H. CORRIEN, Bay City, Mich. Filed May 22, 1916. Serial No. 99,179. 7 Claims. (Cl. 246-102.)



7. In a train controlling mechanism, throttle operating means, brake operating means, each of said means including driven shafts, a shaft transmitting motion to said driven shafts, a shaft having a flexible connection with the first mentioned shaft, a slidably supported block form-

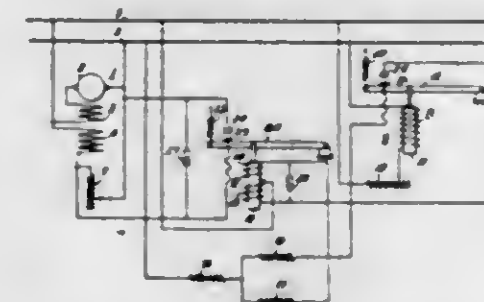
ing a bearing for said last mentioned shaft, said block including a sectional bearing, a shaft passing through said bearing, a worm mounted on said shaft and engaging the bearing to move the block, the sections of said bearing being provided with extensions, resilient means normally forcing said extensions toward each other whereby the bearings are maintained in contact with the worm, a rod provided with a cam surface insertible between the bearings whereby the same may be separated to bring the bearings out of contact with the worm, a rod having a pivotal connection with the first mentioned rod, a lever having sliding connection with the last-mentioned rod, means for locking said lever to said rod whereby the rod may be reciprocated to actuate the cam, resilient means normally bearing against the block to maintain the same at substantially the center of the shaft on which the same is mounted, and means arranged at the side of the track for rotating said shaft.

1,312,164. METAL-CASTING APPARATUS. JOHN C. CROMWELL, Cleveland, Ohio. Filed June 15, 1917. Serial No. 174,909. 3 Claims. (Cl. 22-79.)



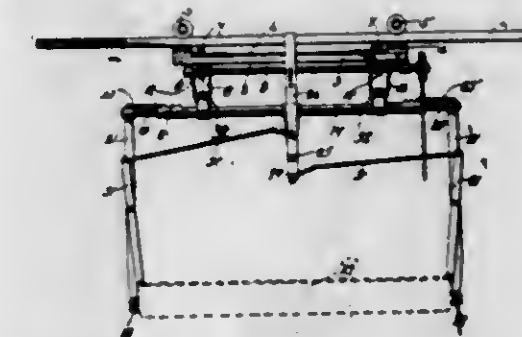
1. The combination with a movable casting ladle of the bottom-pour type, of a system of runners or troughs, having a plurality of discharges, and a car or carriage upon which said runners or troughs are supported, said car or carriage movable both with and independently of the casting ladle; substantially as described.

1,312,165. VOLTAGE-REGULATING SYSTEM. HOWELL E. CULLINER, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 10, 1918. Serial No. 249,354. 6 Claims. (Cl. 171-229.)



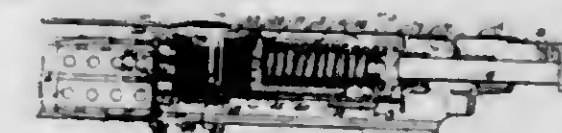
1. In a voltage regulator, a relay having two differential windings, contact members for governing the operation of the relay, resistors severally connected in series with said windings for increasing the speed of operation of the relay, and a condenser for establishing a short circuit through the windings to prevent contact-terminal arcing and sticking.

1,312,166. CONVEYER. ARTHUR E. DANKE, Neenah, Wis., assignor of one-half to John F. Stroebel, Neenah, Wis. Filed Jan. 11, 1918. Serial No. 211,340. 5 Claims. (Cl. 212-137.)



1. A pan carrier comprising in combination with a carriage, a tubular member adjustably suspended therefrom, a pair of holding arms slidably arranged in said member, said member being formed with teeth, means provided on said arms and adapted to engage said teeth for locking said arms in adjusted position, means for locking the pan carried by said arms against movement, and adjustable means for automatically releasing said locking means.

1,312,167. PLATFORM BUFFING-GEAR. ARTHUR C. DAVIDSON, Chicago, Ill., assignor to Waugh Draft Gear Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1915. Serial No. 18,678. 7 Claims. (Cl. 213-39.)



1. A buffing mechanism for railway cars, comprising a plurality of longitudinal sills, a buffing member at the end of the sills provided with a pair of auxiliary supporting stems and an intermediate main stem, a bracket mounted on the outer face of each sill and engaging the auxiliary stems, an abutment plate connected to the inner face of each sill, shock absorber means interposed between the main stem and said abutment plate, supporting means for said shock absorbing means attached to said sills, a follower block interposed between said shock absorbing means and said abutment plate, and means on said abutment plate for centralizing said follower block.

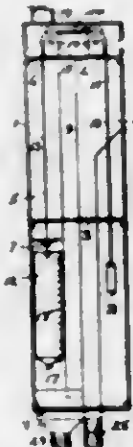
1,312,168. WATER-COOLED DOOR FOR FURNACES. GEORGE F. DOWNS, Buffalo, N. Y. Filed Nov. 14, 1918. Serial No. 262,475. 5 Claims. (Cl. 122-408.)



1. A door for furnaces comprising a water cooled, front metal piece, provided with a top and with side

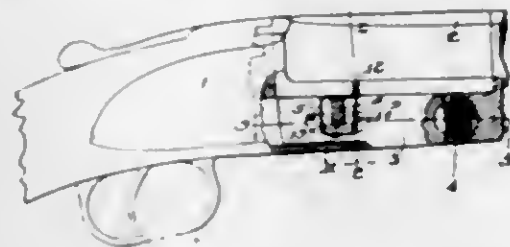
flanges on its inner face, and a second water cooled piece consisting of a conduit having two side branches and a bottom branch, the side branches being engaged against the side flanges of the front piece and extending through openings provided in the top flange of said front piece, and means for detachably supporting said second piece upon the top flange of said front piece.

1,312,169. AUTOMATIC CUT-OUT FOR RAIN-SPOUTS. HENRY C. EITEL, Fort Wayne, Ind. Filed Feb. 5, 1917. Serial No. 146,592. 1 Claim. (Cl. 137-9.)



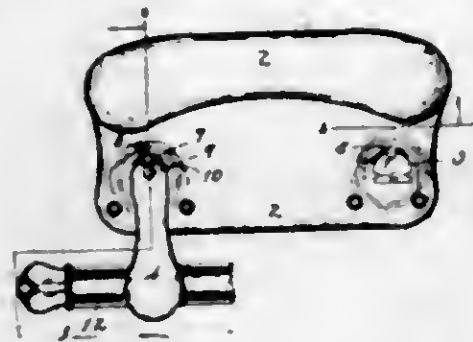
In apparatus of the class described, a frame; a casing mounted in the frame having two passage-ways extending therethrough, a tank adjacent one of said passage-ways, the tank having a drain outlet in its bottom, an inlet-spout leading into the casing at a point over the tank; a funnel having communication with the passage-way adjacent the tank and extending beneath the latter; a movable receptacle located between the tank and funnel, having a drain outlet in its bottom and also an overflow pipe, each of which are adapted to discharge into the funnel; a screen at the top of the tank; a horizontally movable chute within the casing adapted to be interposed between the inlet spout and tank to deflect the flow of water from the inlet spout into the opposite passage-way; and a counterbalance including a weight and cables, the latter having connection with the movable receptacle and also with the chute.

1,312,170. AUTOMATIC COMPENSATING BOLT FOR FIREARMS OF THE BREAKDOWN TYPE. EMIL F. FLETCHER, Buffalo, N. Y. Filed Nov. 22, 1917. Serial No. 203,563. 10 Claims. (Cl. 42-44.)



10. In a firearm, the combination of a frame provided with a pair of curved shoulders, a barrel hingedly connected with said frame, and a compensating bolt having a pair of curved shoulders adapted to automatically contact with the first said shoulders and force said frame and barrel into complete engagement, the construction and arrangement being such that said curved shoulders are all arcuate and have a common normal center, and that one of said pairs of shoulders is movable in a straight line with relation to the other of said pairs of shoulders.

1,312,171. CASKET-HANDLE. JOHN P. FOLEY, Galesburg, Ill. Filed Apr. 22, 1918. Serial No. 230,034. 2 Claims. (Cl. 16-103.)



2. In a device of the class described, an escutcheon-plate having a hanger arm receiving aperture, a tongue formed integrally with said plate projecting outwardly therefrom and downwardly over said aperture and formed in a concavo-convex shape both laterally and longitudinally, a hanger arm pivotally associated with said escutcheon plate having a channel formed on the end thereof conforming to the contour of the said tongue whereby said channel guides on said tongue for adjustment of the handle and an abutment formed on said hanger arm at the end of said channel to contact against said tongue and transmit a lifting stress applied at said handle to said escutcheon plate.

1,312,172. MEASURING TAPE. EDWIN FRANK, Philadelphia, Pa. Filed Aug. 20, 1917. Serial No. 187,274. 5 Claims. (Cl. 242-84.8.)



1. A winding instrument having a plurality of axes spaced apart, an endless band surrounding said axes, means to attach a band to be wound on said endless band, and means for moving said endless band.

1,312,173. PROCESS AND MACHINE FOR RECLAIMING RETORT-WASTE. OACAS GERLACH, Danville, and CHRISTIAN B. LUDWIG, Chicago, Ill., assignors to The Industrial Research Laboratories, a Corporation of Illinois. Filed Dec. 17, 1917. Serial No. 207,557. 12 Claims. (Cl. 44-1.)



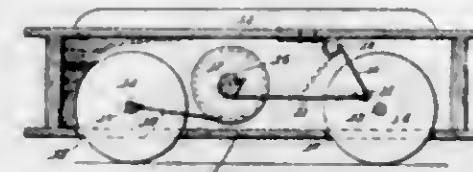
1. The process of making tar coated coke comprising spraying sufficient water into retort waste to cool the material, screening the slag from material, and coating the coke with tar.

7. In a device of the class described, means for cooling retort waste, means separating the slag and gangue from the coke, and means for coating the coke with hot tar.

1,312,174. ROLLING TOY. MILFRED L. GREENSTREET, Maplewood, Mo., assignor to Hinkley Manufacturing Company, Maplewood, Mo. Filed May 31, 1919. Serial No. 300,809. 2 Claims. (Cl. 46-48.)

1. In a toy of the class described, a body, wheel carrying axles supporting said body, a shaft journaled in the

body, a winding drum carried by said shaft, a flexible member secured to said winding drum and to one of the



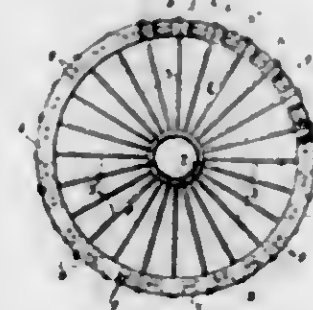
axles, a spring carried by said body, and a cable secured to said spring and to said shaft.

1,312,175. LOW-WATER-ALARM APPARATUS FOR STEAM-BOILERS. EIGIL AAGE HANSEN, Frederiksberg, near Copenhagen, Denmark. Filed Dec. 22, 1917. Serial No. 208,374. 2 Claims. (Cl. 116-15.)



1. An alarm device for indicating low water level in a boiler, comprising a casing adapted to communicate with the water space of a boiler, said casing having a passage therethrough, an alarm device secured to said casing over the passage therein, a frangible diaphragm adapted to normally close communication between the casing and the alarm device, thermostatic means within the casing and means under control of said thermostatic means and adapted to be projected against and to disrupt said frangible diaphragm upon the presence of unduly high temperatures within the casing.

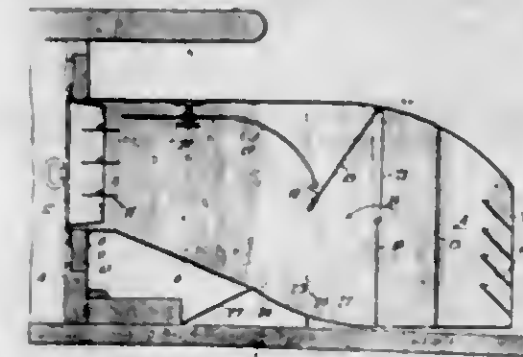
1,312,176. TRACTION-WHEEL. JOSEPH L. HECHT, Davenport, Iowa, assignor to G. Watson French, Nathaniel French, Joseph L. Hecht, and W. H. Stackhouse, Davenport, Iowa, composing the Firm of French & Hecht, Davenport, Iowa. Filed Dec. 20, 1915. Serial No. 67,747. 2 Claims. (Cl. 21-216.)



2. In a traction wheel, the combination of two spaced annular end members constituting the rim of the wheel and formed each with a horizontal flange and with a con-

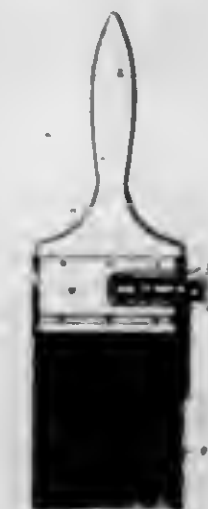
ected vertical flange, said members being disposed with the horizontal flanges extending inwardly toward each other at the perimeter of the wheel to form flat tread surfaces, and a series of traction members constituting each of a flat-plate with lateral feet at its ends, said plates being disposed edgewise to the tread surfaces with the feet thereon connected to the vertical flanges, and with the outer edges of the plates adjacent the feet bearing against the inner faces of the horizontal flanges.

1,312,177. VENTILATOR FOR CARS. EARL V. HILL, Chicago, Ill. Filed Jan. 7, 1916. Serial No. 70,803. 3 Claims. (Cl. 98-27.)



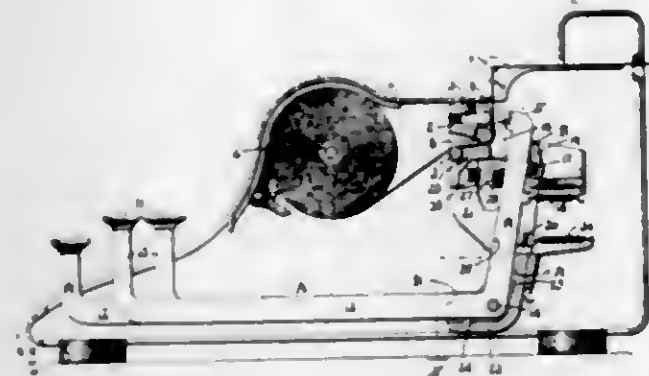
4. An intake ventilator comprising a casing, a plate 15 pivoted and adjustable therein, a plate 16 pivotally suspended upon the same axis as the axis of the plate 15 in the ventilator and cooperating with said plate 15 to control the passage of air through the ventilator, such swinging plate being movable under air pressure to restrict the passage of air.

1,312,178. BRUSH-SUSPENDING DEVICE. HOWARD H. HILL, Montclair, N. J., assignor of one-half to Maxwell Maybury, Montclair, N. J. Filed Aug. 24, 1917. Serial No. 187,937. 2 Claims. (Cl. 248-50.)



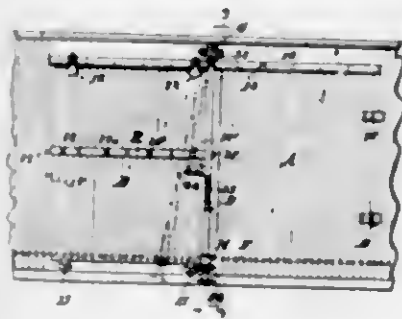
1. A device of the character described comprising a tubular casing arranged to be transversely inserted into a brush and having an axial length less than the transverse width of said brush, a suspending device comprising a shank engaging the inner surface of said tubular casing and a resilient member frictionally engaging the inner surface of said tubular casing, said suspending device being slidable out of said bushing and into the same and being entirely contained therein in its inner position, a head carried by said shank and located exteriorly of the brush and arranged to arrest the inward movement of said suspending device, and a stop carried by said tubular casing whereby the outward movement of said suspending device is arrested.

1,312,179. TYPEWRITING MACHINE. WARD S. INGLAND, St. Louis, Mo., and WALTER E. LIPPERT, Cincinnati, Ohio, assignors, by direct and mesne assignments, to National Shorthand Machine Company, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 18, 1916. Serial No. 132,077. 8 Claims. (Cl. 240—41.)



1. A shorthand machine having angular key levers, and a key lever guide in the form of an angular pocket for said angular key levers, said pocket having walls arranged at an angle to each other and provided with angular comb-like teeth which engage said angular key levers.

1,312,180. MECHANISM FOR OPERATING FREIGHT-CAR DOORS. HENRY F. JEROLAMAN, Chicago, Ill. Filed May 5, 1919. Serial No. 294,702. 6 Claims. (Cl. 208—6.)

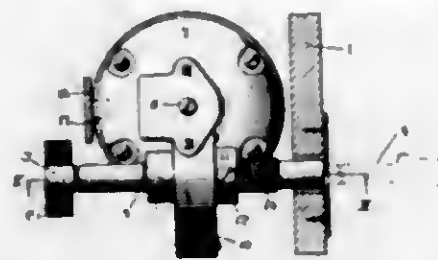


1. Mechanism for opening and closing the doors of box cars, comprising, in combination, a car body, a slidable door on said car body, a fulcrum secured to said car body above said door, a lever pivotally connected to said fulcrum, a bar, said bar being longitudinally secured to the face of the door above the middle of the door, said bar having a series of spaced apart projections which said lever is constructed to engage to open and close the door by a step-by-step movement of said lever, and means connected with said fulcrum to prevent outward movement of said lever beyond a predetermined distance, said latter means including a spool, said spool having at its outer end a flange, a bolt passing through said spool and projecting therefrom, and a washer at the outer end of said bolt, said washer being spaced from said flange sufficiently to permit said pendulum lever to attain a position slightly inclined to the axis of said bolt.

1,312,181. WINDING DEVICE FOR THE SPRING-MOTORS OF TALKING-MACHINES. JOSEPH W. JONES, New York, N. Y., assignor to Jones Motrols, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1917. Serial No. 204,675. 4 Claims. (Cl. 185—40.)

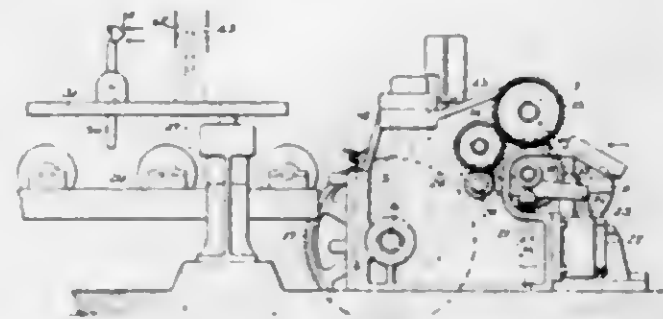
1. In a talking machine, a spring motor and its winding motor, both located within the talking machine casing,

a spring motor shaft, a removable extension shaft substituted for the usual winding crank, connecting the spring



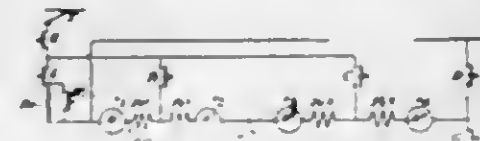
motor and the winding motor, and means for removably securing the winding motor to the casing.

1,312,182. SHEAR MECHANISM. LLOYD JONES, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 11, 1918. Serial No. 257,803. 5 Claims. (Cl. 164—49.)



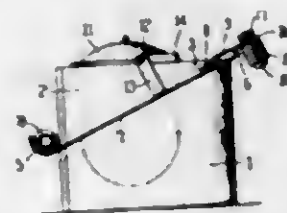
1. Shear mechanism of the character described, comprising a pair of feed-in rolls, a hold-down device, a shear, an adjustable trip arranged to be actuated by the work-piece, and means controlled by said trip for controlling the action of the feed-in rolls, the hold-down device and the shear, substantially as described.

1,312,183. CONTROL OF ELECTRIC MOTORS. PEARL N. JONES, Pittsburgh, and JAMES W. WELSH, Oakmont, Pa. Filed Dec. 17, 1915. Serial No. 67,303. 8 Claims. (Cl. 172—179.)



1. In the control of a plurality of electric motors, the method of control which comprises weakening of the fields of one group of motors before increasing the voltage applied to the other group of motors and then increasing the voltage applied to such other group of motors, substantially as described.

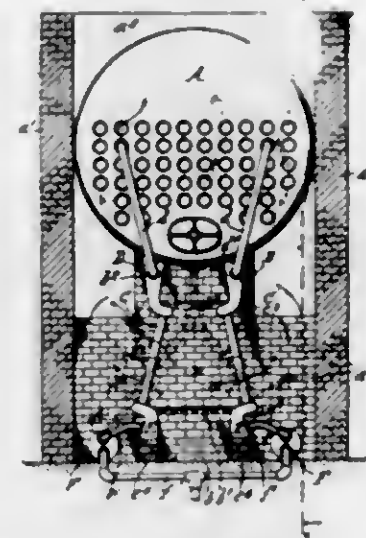
1,312,184. INKSTAND. STEPHEN KELTONIK, Conemaugh, Pa. Filed June 8, 1916. Serial No. 102,497. 3 Claims. (Cl. 120—5.)



1. An inkstand having a well and a groove in its upper face, a frame provided with a pen rack and a member for

supporting the frame, said member coacting with said groove to support the frame in a rocking position, and a cover pivoted in said frame and arranged to close on the well when a pen is placed on the rack.

1,312,185. BOILER-FURNACE. GEORGE SAMUEL KENT, Buffalo, N. Y. Filed Oct. 10, 1916. Serial No. 126,491. 11 Claims. (Cl. 122—373.)

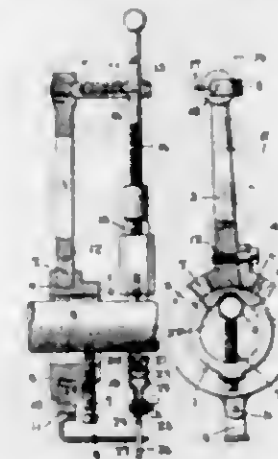


1. The combination with a boiler, of a furnace arranged under the boiler, a plurality of substantially upright water bars spaced at intervals and forming the sides of said furnace, water headers with which the upper ends of said bars connect and which are arranged in engagement with said boiler and extend downwardly from the boiler to form the upper portions of the sides of said furnace, means for admitting air to the furnace into the space between said headers, and connections for permitting water to flow from said headers to said boiler.

1,312,186. MANUFACTURE OF ACETALS. ALBERT THEODORE KING, Wimbledon, and FREDERICK ALFRED MASON, London, England. Filed Jan. 2, 1917. Serial No. 140,285. 4 Claims. (Cl. 23—24.)

1. In the manufacture of acetals derived from acetaldehyde and an aliphatic alcohol, the process which consists in treating a mixture of acetaldehyde and an aliphatic alcohol with a condensing agent capable of effecting simultaneously the condensation of the alcohol and aldehyde and the separation therefrom of the acetal, the acetal being separated from the mixture as an upper layer which can be removed in a substantially pure condition.

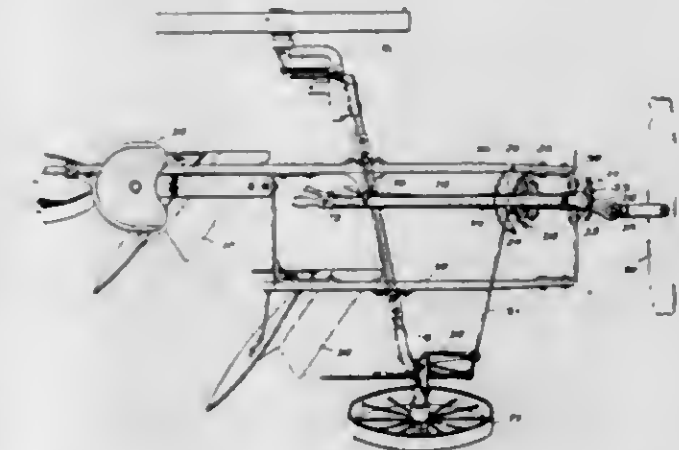
1,312,187. GUIDE FOR PIPE-CUTTERS. JOSEPH KONIGSBERG, New York, N. Y., assignor to Lena Konigsberg, New York, N. Y. Filed May 8, 1919. Serial No. 295,523. 10 Claims. (Cl. 81—192.)



1. A guide for pipe cutters comprising, a collet for the pipe to be cut, a strap rotatably mounted on said collet, an arm on said strap and a swivel on said arm for receiving the handle of the pipe cutter.

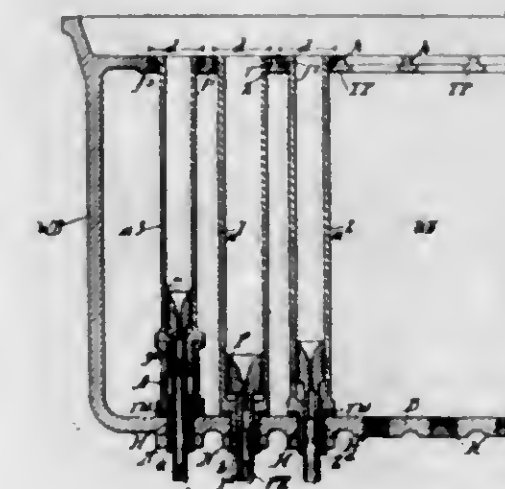
10. In combination, a pipe cutter and a guide therefor comprising, a collet for the pipe to be cut, means for securing said collet to the pipe, a strap rotatably mounted on the collet, arms diametrically opposed on said strap, one of said arms having a swivel for receiving the handle of the pipe cutter, side plates, a guide bar, and a common means for securing the side plates to the cutter and the guide bar to the side plates, said guide bar being adapted to engage the other arm for holding the cutter in alignment with the strap.

1,312,188. WHEELED PLOW. ALEXUS C. LANDGREN, Moline, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed July 2, 1914. Serial No. 848,538. 4 Claims. (Cl. 97—73.)



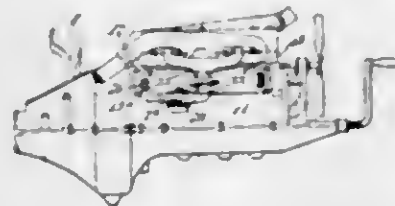
1. In a wheeled plow, a frame, a swinging draft connection therefor, a plurality of connected adjusting levers arranged to swing in substantially horizontal planes and carried on said frame and having a connection with said draft connection, a pivoted furrow wheel, and means whereby said furrow wheel may be actuated by any one of said levers.

1,312,189. MACHINE FOR THE MANUFACTURE OF CANDLES AND THE LIKE. FRANK LOUIS BESTRAM LOCKE, Harpenden, England. Filed Sept. 30, 1918. Serial No. 256,337. 3 Claims. (Cl. 18—27.)



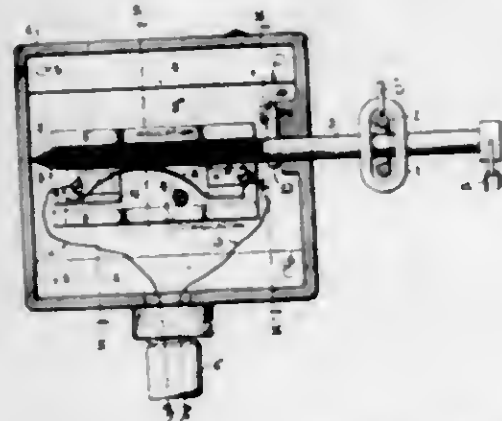
1. In a molding machine of the character described, the combination with a water-box having two opposite walls each provided therethrough with an opening in alignment and with the other, of a tubular adapter having one end fitting into the opening provided in one of said walls, and a mold having one end fitting into the other end of said adapter and its other end fitting into the opening provided in the other of said walls.

1,312,190. LUBRICATING AND COOLING DEVICE FOR INTERNAL-COMBUSTION ENGINES. FRED LUNDBERGEN, Los Angeles, Calif. Filed Jan. 20, 1919. Serial No. 272,216. 4 Claims. (Cl. 123-110.)



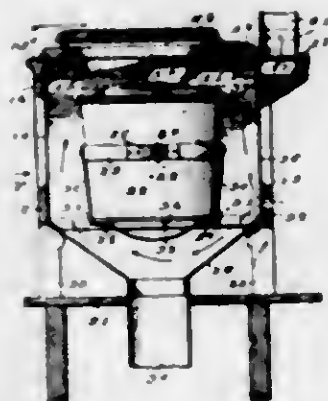
1. In combination with an internal combustion engine having two valve stem chambers, a cover for each chamber, each of said covers having two openings therein, a filtering medium in one of the openings of one of said covers, means connecting the other opening of said cover with one opening of the second cover, and means connecting the other opening of said second cover with the air intake of the carburetor of said engine.

1,312,191. SIGNALING SEALING DEVICE FOR VALVES, &c. GEORGE P. McDONNELL, St. Louis, Mo. Filed Oct. 10, 1918. Serial No. 257,617. 13 Claims. (Cl. 177-311.)



1. In a sealing device, a housing, a sealing member extending into said housing to detachably fasten the article to be sealed, said sealing member being removable from said housing to unseal the article, and means for preventing the restoration of said sealing member after it has been withdrawn from said housing.

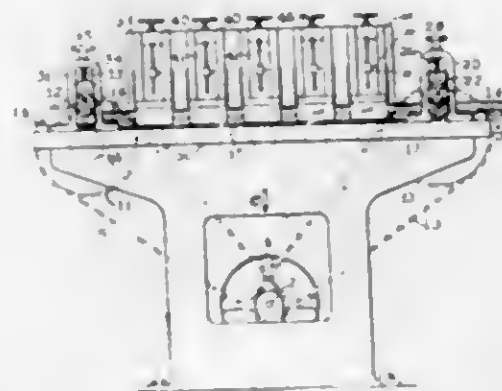
1,312,192. SANITARY CLOSET CABINET. GEORGE D. McILVOY, Oklahoma, Okla., assignor to James S. Wakefield, Oklahoma, Okla. Filed Mar. 11, 1919. Serial No. 282,758. 1 Claim. (Cl. 4-20.)



An inclosing cabinet having an opening in its top, a support in the receptacle comprising a ring having pintles journaled in the side walls of the cabinet, a hanger depending from the ring, said hanger comprising a bottom portion of strap metal formed with upstanding end portions whose upper ends are riveted to the ring, the

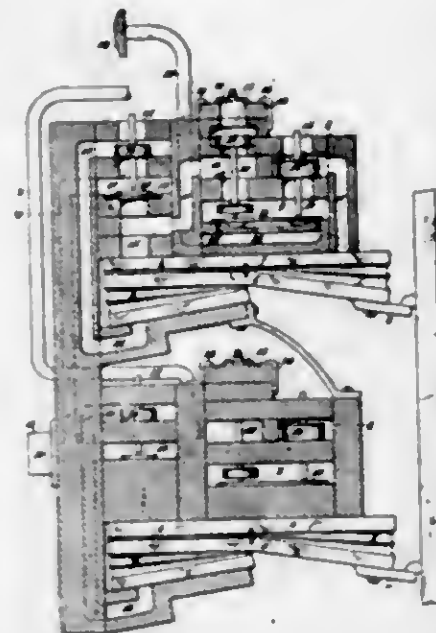
lower ends of the upstanding portions of the hanger being upset, a receptacle resting in the ring and hanger and having at its lower edge a head engaging the upset portions of the hanger, the lower portion of the hanger being formed with an elastic loop to allow disengagement of the head of the receptacle from the upset portion of the hanger.

1,312,193. MACHINE FOR SANDPAPERING OR SMOOTHING WOOD MOLDINGS. JOSHUA ROSCOE MARSDEN, Huddersfield, England. Filed Feb. 25, 1919. Serial No. 279,112. 4 Claims. (Cl. 51-5.)



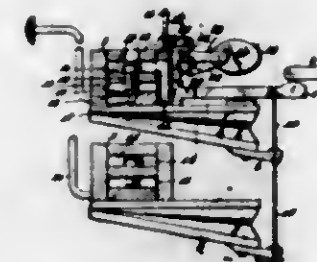
1. In a sandpapering machine, a stationary bed provided with a series of vertical guides, a series of slides separately adjustable in the said guides, a series of holders pivoted at one end to the slides and provided with blocks for the abrasive material, means for locking the holders to the slides after the holders have been adjusted pivotally, and means for sliding the work along the bed in contact with the abrasive material on the blocks.

1,312,194. OPERATING AND CONTROLLING MECHANISM FOR PLAYER-PIANOS. PHILIP J. MEHL, Summit, N. J. Filed Aug. 13, 1917. Serial No. 185,880. 7 Claims. (Cl. 84-160.)



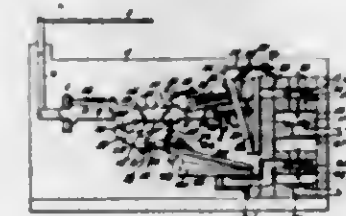
1. In a player piano, in combination, a pair of co-operable striking pneumatics, a restoring pneumatic, a common suction chamber for one of said striking pneumatics and said restoring pneumatic, a separate suction chamber for the other striking pneumatic, and a pressure responsive diaphragm in communication on one side with said separate suction chamber and on the other side with said restoring pneumatic whereby said diaphragm is affected in closing by the opposed sub-atmospheric pressures of said suction chambers.

1,312,195. PLAYER-PIANO. PHILIP J. MEHL, Summit, N. J. Filed Aug. 13, 1917. Serial No. 185,881. 4 Claims. (Cl. 84-160.)



1. In a player piano, in combination, a series of striking pneumatics, a corresponding series of pivoted strikers actuated thereby, a corresponding series of wippen arranged for engagement and movement by said strikers, and a plurality of eccentrically mounted rotatable members extending horizontally above said strikers and capable of independent graduated movement within the range of movement of said strikers, each of said members being adapted to govern the extent of movement of a plurality of said strikers.

1,312,196. MECHANISM FOR PLAYER-PIANOS. PHILIP J. MEHL, Summit, N. J. Filed Aug. 13, 1917. Serial No. 185,882. 13 Claims. (Cl. 84-160.)



7. In a player piano, in combination, a pneumatic having a fixed leaf and a movable leaf, a pneumatic mounted on said movable leaf at substantially right angles thereto and having one leaf fixed and one leaf movable with respect thereto, and an air passage connecting said pneumatics.

1,312,197. PIPE-MAKING APPARATUS. WILLIAM M. NECKERMAN, Youngstown, Ohio. Continuation in part of application Serial No. 597,193, filed Dec. 14, 1910. This application filed July 2, 1912. Serial No. 707,285. 17 Claims. (Cl. 205-3.)



1. In a pipe-drawing apparatus, the combination of a welding die, skelp-engaging tongs and a draw bench having an endless draw chain having travel thereon, one or more forked dogs having endless travel with the draw chain and adapted to engage the end of said tongs while the chain is travelling and pull the skelp through the welding die, and centering means for the tongs arranged to position them in the path of the dog or dogs, substantially as described.

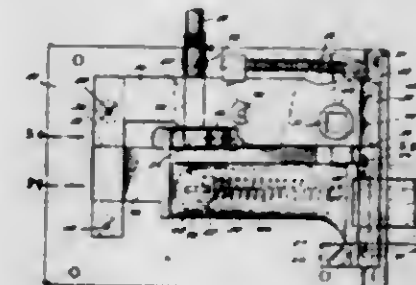
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1,312,198. CUE-TIP. JOHN NELSON and ALBERT SCHRIWER, Erie, Pa. Filed Jan. 23, 1919. Serial No. 273,060. 1 Claim. (Cl. 40-9.)



In combination, a cue having its tip end provided with a longitudinally disposed threaded stud, a metallic sleeve engaged with said stud, said sleeve and stud being substantially of the same length so that when the sleeve is applied on the stud, the outer end of the stud and the outer edge of the sleeve are flush, a coating of porcelain engaged with the periphery of the sleeve, and a tip cemented to the outer ends of the assembled stud and sleeve, the outer end of the sleeve being knurled to facilitate the cementing of the tip thereto.

1,312,199. FASTENING DEVICE. LEON OTTINGER, New York, N. Y. Filed Apr. 3, 1918. Serial No. 220,411. 21 Claims. (Cl. 70-42.)



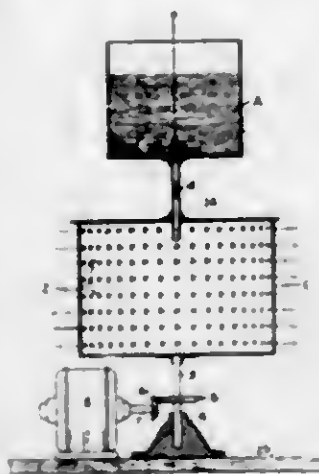
1. In a latch, a latching member adapted to be projected and retracted, latching member carried means adapted to expand the same in its transverse dimension during projection, and means cooperating with said latching member carried means, and adapted to prevent return movement of said latching member carried means, said latching member carried means adapted to be returned only by retraction movement initially applied to said latching member.

1,312,200. RESPIRATOR. ALEXANDER PAYUS, South Bend, Ind., assignor of one-half to Harry H. Mandel, South Bend, Ind. Filed Apr. 20, 1918. Serial No. 231,408. 3 Claims. (Cl. 128-146.)



1. A respirator including a shell having an air inlet valve, a vent valve, and a detachable cap overlying the vent valve transverse of the shell and extending partly around the shell to a point remote from said valve, the cap with the shell forming a vent passage open to the atmosphere at said remote point.

1,312,201. CAUSTIC MATERIAL IN SUBDIVIDED FORM. RAY P. PERRY, Upper Montclair, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed Dec. 3, 1917. Serial No. 205,144. 2 Claims. (Cl. 23-22.)



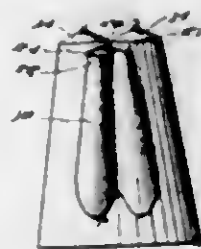
1. The herein described product, comprising caustic alkali in the form of comparatively short, solid fiber-like particles.

1,312,202. RETAINER MEMBER FOR ROOFING-FABRIC ROLLS. RAY P. PERRY, Upper Montclair, N. J., assignor to The Barrett Company, a Corporation of New Jersey. Filed Mar. 12, 1918. Serial No. 221,935. 6 Claims. (Cl. 206-59.)



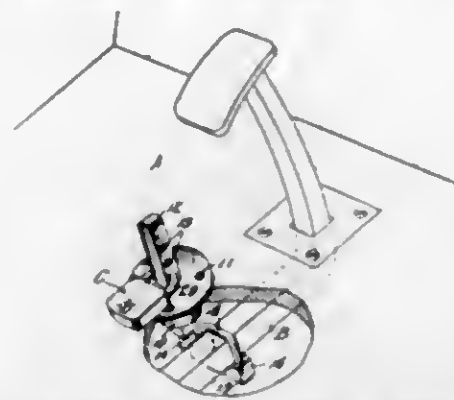
2. As an article of manufacture, a retainer member for a roll of construction material comprising in combination a plurality of end members of smaller diameter than the inner cavity of the roll, and lateral tension means associated with said end members and of a larger transverse dimension than the inner diameter of the cavity of the roll, one of said end members constituting a hollow container for holding material for applying the roll, whereby when the retainer member is inserted into the cavity of the roll the lateral tension means will serve to locate and position said member within the roll.

1,312,203. COMBINED TEA AND COFFEE POT. ALBERT PICARD, Orléans, Me. Filed May 7, 1919. Serial No. 295,295. 2 Claims. (Cl. 53-3.)



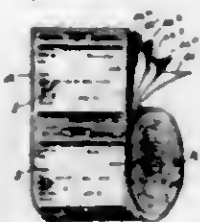
1. In a combined tea and coffee pot, the combination, of a body, a partition in the body divided into a plurality of compartments, a spout including a plurality of passage ways communicating with said compartments, a support carried by said spout, a closure member pivotally carried by said support and adapted to be moved to form a closure for the outlet of either of said passage ways, and a spring carried by said support and engaging said closure member to maintain it in firm closing engagement with the outlet of the spout.

1,312,204. AUTOMOBILE LOCK. RUSSELL C. PRICE, Frankfort, Ind. Filed Apr. 2, 1919. Serial No. 280,821. 2 Claims. (Cl. 70-128.)



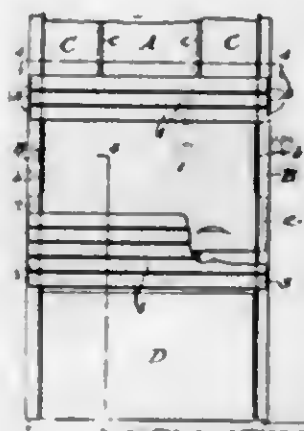
1. An automobile lock comprising a member clamped to the clutch operating lever beneath the foot board of the car, a socket member mounted in said foot board of the car, another member pivoted to said first mentioned member which is clamped to said lever and extending up through said socket member, said other member being provided with apertures in its upper end, and a lock mounted in said apertures, substantially as set forth.

1,312,205. RAILWAY TICKET AND FORM THEREFOR. FRED ALEXANDER PURDY, Vancouver, British Columbia, Canada. Filed Oct. 14, 1915. Serial No. 55,817. 5 Claims. (Cl. 283-23.)



1. A universal railway ticket form consisting of an indefinite series of coupons of the same size all containing facsimile printed blank ticket forms and provided with corresponding blank spaces adapted to receive appropriate entries, said coupons being detachable singly or in series and all of said coupons to be numbered consecutively whether detached singly or in series, substantially as described.

1,312,206. INDEX. JAMES H. RAND, North Tonawanda, N. Y. Filed Apr. 17, 1918. Serial No. 229,031. 15 Claims. (Cl. 129-16.)



1. An index device comprising a frame having inwardly extending flanges forming opposed channels, a series of index elements arranged in overlapped spaced relation, each having means adjacent to one edge to engage said channels and hold the index element in the frame, the other edge being free to be swung away from

the frame, and lateral projections at the free margin of each index element adapted to bear against the front of the flanges.

11. An index frame of sheet metal comprising a back and inwardly extending marginal flanges forming opposed channels, each flange being bent forwardly to form side bearing surfaces for the card edges, and thence being bent laterally and outwardly.

1,312,207. METHOD OF AND APPARATUS FOR MIXING CONCRETE. RAYMOND G. RANDALL, Grinnell, Iowa, assignor of one-fourth to Eugene F. Wolcott and one-fourth to Charles Wolcott, Grinnell, Iowa. Filed Nov. 15, 1916. Serial No. 131,382. 5 Claims. (Cl. 83-73.)



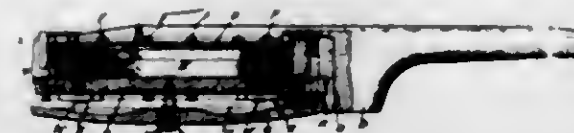
3. The method of making concrete which consists in discharging cement and sand in the order named to the surface of a flowing stream of water.

1,312,208. ELECTRIC CIRCUIT MAKER AND BREAKER. CHRISTIAN RASMUSSEN, Cleveland, Ohio. Filed Mar. 26, 1919. Serial No. 285,192. 3 Claims. (Cl. 200-24.)



1. In a device as described, a bracket, a contact finger having a recessed pivot end, a pivot screw for said finger, and a locking device for said pivot screw enclosed within and covered by said recessed end of said finger.

1,312,209. BANJO AND SIMILAR STRINGED INSTRUMENTS. WILLIAM P. RETTRENG and WILLIAM L. LANGR, Brooklyn, N. Y. Filed Jan. 22, 1910. Serial No. 73,510. 6 Claims. (Cl. 84-121.)



1. A banjo comprising a casing having a neck and fingerboard rigidly connected thereto, an inner frame comprising a ring, a membrane stretched on said ring and attached thereto, said inner frame being supported in adjustable relation to the casing and fingerboard.

1,312,210. SAFETY DEVICE FOR MACHINERY. LOUIS J. RITCH, Cleveland, and JOHN V. HOAN, East Cleveland, Ohio, assignors of one-third to Jacob Kaufman, East Cleveland, Ohio. Filed Dec. 20, 1918. Serial No. 267,015. 8 Claims. (Cl. 74-56.)

1. A guard for a sewing or like machine having a top with driving means, including belt and pulley, located beneath such top, said guard comprising a main longitudinally extending member adapted to be attached to

and wholly supported from the under side of such table, and a separate member adapted to be attached to such

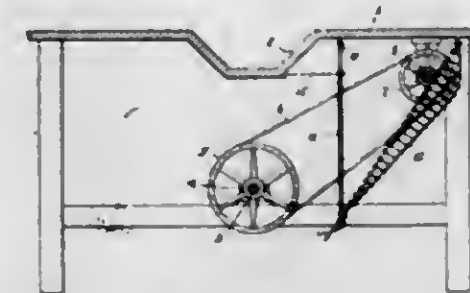


table forwardly of said main member and to incline rearwardly into engagement therewith, whereby said main member is held in place.

1,312,211. RETAINER MEMBER FOR ROOFING-FABRIC ROLLS. CURTIS J. ROTHMEL, Philadelphia, Pa., assignor to The Barrett Company, a Corporation of New Jersey. Filed May 19, 1917. Serial No. 169,788. 11 Claims. (Cl. 206-59.)



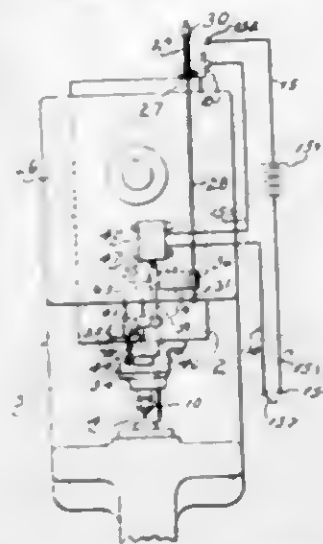
1. A retainer member for a roll of construction material, comprising two end members of smaller size than the inner diameter of the roll, and a plurality of lateral tension members connecting the end members and having the greatest transverse distance between them greater than the inner diameter of the roll, whereby when the retainer member is inserted in the roll the lateral tension members serve to position the retainer member within the roll.

1,312,212. AERIAL BOMB. MARTIN SALOON, Chicago, Ill. Filed Jan. 28, 1918. Serial No. 214,214. 1 Claim. (Cl. 102-2.)



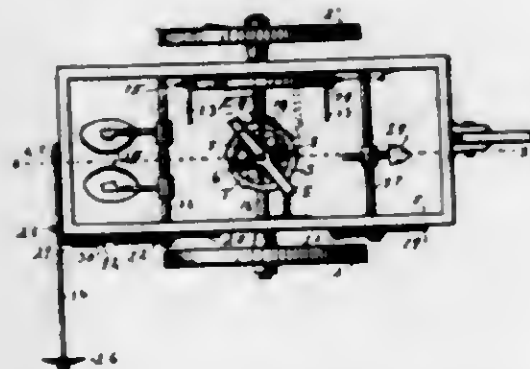
A firing means for bombs comprising spaced concentric sleeves providing an ignition charge space between them, the inner sleeve being formed with a longitudinally arranged series of openings leading to said space, an adjusting cap rotatably mounted on the end of the inner sleeve, a firing cylinder held against other than sliding movement in the inner sleeve and having threaded connection with the cap, the wall of the cylinder having a set of openings to register with any of the sets of openings in the inner sleeve, and flame producing means in the cylinder arranged to ignite before the launching of the bomb.

1,312,213. PUNCH-PRESS. WILLARD T. SEARS, New York, N. Y. Filed July 18, 1918. Serial No. 245,456. 12 Claims. (Cl. 164-104.)



1. A punch press including a reciprocating head, a tool and its shank rigid with each other and both loosely carried by the head, means operable at will, for putting the tool into working relation with the head, to cause the tool to punch the stock on the advance of the head, and means automatically operable independently of the movement of the tool and also of the shank which carries said tool, for positively preventing the movement of the tool into working relation with the head after the latter has reached a certain point in its advancing movement.

1,312,214. POTATO-PLANTER. GEORGE J. SMITH, Grand Rapids, Mich. Filed Apr. 1, 1918. Serial No. 226,110. 3 Claims. (Cl. 275-9.)

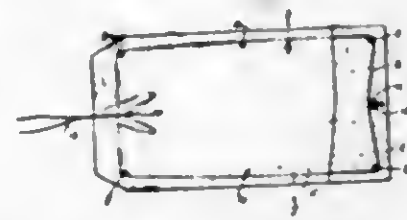


1. In a potato planter, a carrying frame mounted upon two wheels, a revolvable axle-tree mounted in said frame and revolutely connected with one of the wheels, the other wheel revolutely mounted on said axle-tree, a disk loosely mounted on said axle-tree near one end inside of the frame, a pawl and ratchet so connecting the disk and the axle-tree that the disk will be made to revolve with the axle-tree when the machine is moving forward, and to stand idle when the machine is moving backward, pins projecting at right angles from one side of the disk, a feeding tube mounted upon the frame, a horizontal disk integrally mounted upon the upper end of the tube and having an opening into the tube for the passage of seed potato, a feeding disk revolutely mounted upon the stationary disk, and means connected with the feeding disk whereby it is actuated by the pins of the axle-tree mounted disk to carry potato seed to and drop it through the tube.

1,312,215. IDENTIFICATION-TAG. GEORGE T. SPAULDING, Cambridge, N. Y. Filed Sept. 11, 1918. Serial No. 253,561. 2 Claims. (Cl. 40-27.)

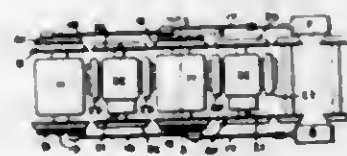
1. A tag of the character described, comprising superimposed laminations adhesively secured together, and a reinforcing strand interposed between said laminations in spaced relation to the marginal edges thereof and sub-

stantially conforming to the configuration of the tag; said strand having a coil adjacent an end of the tag and



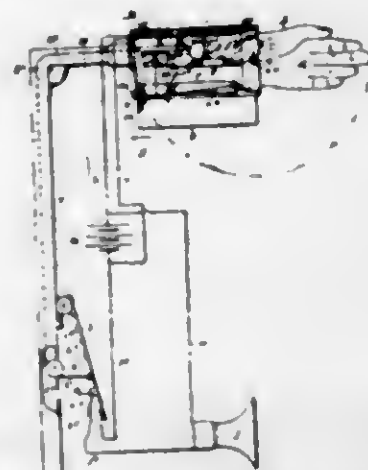
substantially midway thereof to afford an eye, the tag being provided with an opening disposed through the eye of the reinforcing member.

1,312,216. LOCOMOTIVE. HENRY W. STOCK, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 15, 1919. Serial No. 297,298. 5 Claims. (Cl. 105-35.)



1. In a locomotive, an engine, a pair of wheels, a generator comprising a frame having a field winding thereon and an armature, said frame connecting said pair of wheels together, a shaft for the armature, means connecting the engine to said shaft, a second pair of wheels, a motor mechanically connected to said second pair of wheels, and means electrically connecting the generator to the motor.

1,312,217. SIGNAL. JOHN D. THOMPSON, Rochester, N. Y. Filed Oct. 17, 1917. Serial No. 196,987. 5 Claims. (Cl. 116-31.)



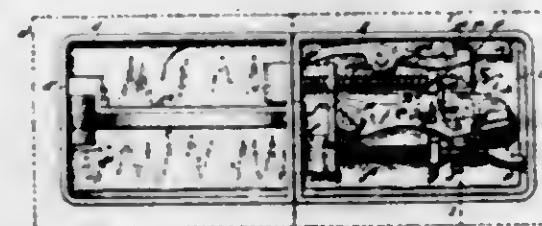
1. In an apparatus of the kind described, a casing, a pivoted signal in said casing adapted to extend beyond the same when turned in one position and to be inclosed in said casing with its outer end forming the inclosing wall to the end of said casing when turned to the other position, a door adapted to open and close a side portion of said casing to permit the passage of said signal and to inclose the same, and automatic means for locking said door when the signal is turned within said casing.

1,312,218. BRIQUETING BLUE-DUST. FELIX A. VOGEL, New York, N. Y., assignor to General Briquetting Company, New York, N. Y., a Corporation of Maine. Filed Oct. 26, 1918. Serial No. 259,806. 5 Claims. (Cl. 75-65.)

5. The process of treating wet blue dust which consists in mechanically extracting readily removable surplus wa-

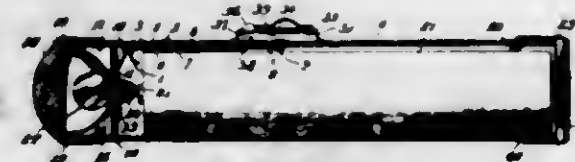
ter therefrom and thus reducing it to a pulp, then mixing the pulp with an excess of material in the form of relatively dry particles and subjecting the mixture to a grinding, mixing and masticating action until the dry and wet particles are intimately and uniformly mixed and the water contents of the mixture is uniformly distributed throughout and the mass has acquired a cohering or cementing characteristic and facility and then briquetting the product.

1,312,219. DOOR-LOCK. FRITZ VOGELIANG, Charlottenburg, near Berlin, Germany. Filed Mar. 16, 1915. Serial No. 14,758. 9 Claims. (Cl. 70-29.)



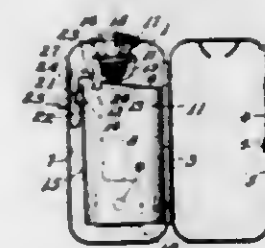
1. In a door lock, the combination of a locking-mechanism, a keeper, a safety-bolt mounted on said locking-mechanism and having a vertical movement to disengage said keeper and a horizontal movement to permit movement of the lock relative to said keeper, means interposed between said safety-bolt and said locking-mechanism to release said safety-bolt, said locking means including a latch-bolt, and means to positively lock the latch-bolt when the door is completely closed.

1,312,220. PORTABLE ELECTRIC LIGHT. GEORGE W. WACKER, Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1918. Serial No. 220,890. 14 Claims. (Cl. 240-8.5.)



1. A portable electric light having, in combination, a battery-containing and lamp-carrying casing, and a circuit-completing contact strip mounted on the casing at the inside thereof and provided with means engageable with the forward end of the battery and also with means engageable with the side of the battery inward from the forward end thereof, both of such means being adapted to prevent the electrical connection of the upper part of the zinc battery cup with said circuit-completing contact strip.

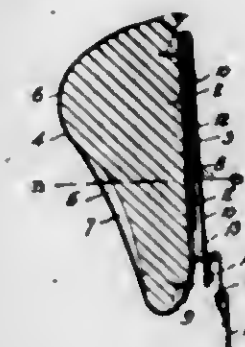
1,312,221. PORTABLE ELECTRIC LIGHT. GEORGE W. WACKER, Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y., a Corporation of New York. Filed May 25, 1918. Serial No. 236,454. 11 Claims. (Cl. 240-8.5.)



1. A portable electric light comprising a flat battery-containing and lamp-carrying casing divided into front

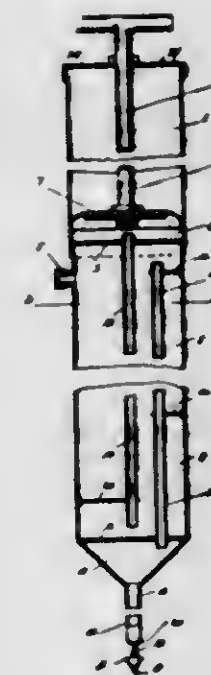
and rear parts between its flat sides, a supporting member secured within one of the casing parts, and a circuit-controlling slide mounted upon and carried by said member, said casing part having a slot therein and said slide being provided with a manually operable part projecting to the outside of the casing through said slot.

1,312,222. TRUSS-PAD. CHARLES S. WAHLSTROM, Boulder, Colo. Filed Oct. 10, 1917. Serial No. 195,761. 2 Claims. (Cl. 128-121.)



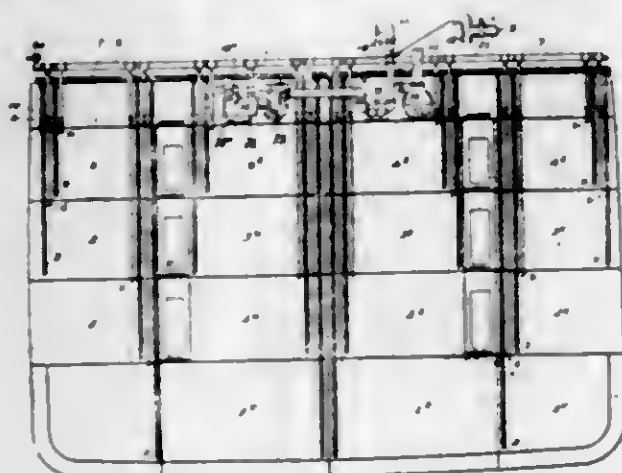
2. In combination, a truss-pad, a resilient hasp fastened upon a face thereof, a staple on the pad over which the hasp passes, and a bolt having a loop for the attachment of a strap and adapted to cooperate with the staple to hold the hasp at a suitable distance from the face of the pad to provide a loop for the passage of a belt.

1,312,223. VERMIN-EXTERMINATOR. WILL RUSSEL WOODRUFF, Stanton, Nebr. Filed Dec. 24, 1918. Serial No. 268,118. 1 Claim. (Cl. 43-5.)



In a vermin exterminator, a chamber for volatile poison provided with means for forcing air through it and having a gas discharge pipe at its lower end, a guide arranged within the lower end portion of the discharge pipe and having a perforated plate which secures it to the said pipe, a conical plug which overlaps the end of the discharge pipe and which has a stem which is slidable in the said guide, and a spring arranged around the said guide and stem between the perforated plate and the base of the conical plug and permitting the plug to be pressed back to close the delivery pipe.

1,312,224. APPARATUS FOR CHARGING COMPARTMENTS WITH GAS, &c. WILLIAM WALLACE WOTHERBROOK, New York, N. Y. Filed Oct. 3, 1913. Serial No. 793,137. Renewed Jan. 11, 1919. Serial No. 270,750. 3 Claims. (Cl. 169-20.)



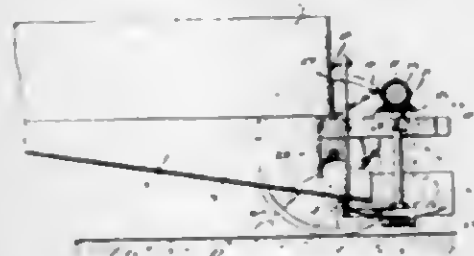
1. In combination with a compartment, a compressor, a source of extinguishing gas, a valved connection between the latter and intake side of the compressor, a valved distributing pipe connected with the discharge side of the compressor and communicating with the compartment, a valved exhaust pipe leading from the compartment and connected with the discharge side of the compressor, said exhaust pipe communicating also with the atmosphere, a valve controlling said communication, and a valved connection between said exhaust pipe and the intake side of the compressor.

1,312,225. STABILIZER FOR AIRPLANES. THOMAS YAMADA, New York, N. Y. Filed Aug. 23, 1918. Serial No. 251,117. 14 Claims. (Cl. 244-29.)



1. An airplane stabilizer consisting of a hemispherical hood, adjustable means for tilting said hood, a fan for forcing air into the hood, the shaft of which is located in an upright position, said fan being located below the mouth of said hood, and means for operating said fan.

1,312,226. MATERIAL-SPREADER. HENRY J. HANGERT, Ferguson, Mo. Filed Feb. 19, 1916. Serial No. 79,358. 3 Claims. (Cl. 275-15.)



1. In a spreader, a body for containing material to be spread, a horizontally disposed spreader disk rotatably supported by said body at the rear thereof, means for delivering material to be spread onto the upper face of said disk, means for rotating said disk, and a guard member extending about the forward portion and the sides of the disk, said guard member extending rearwardly at each side of the disk beyond the rear edge

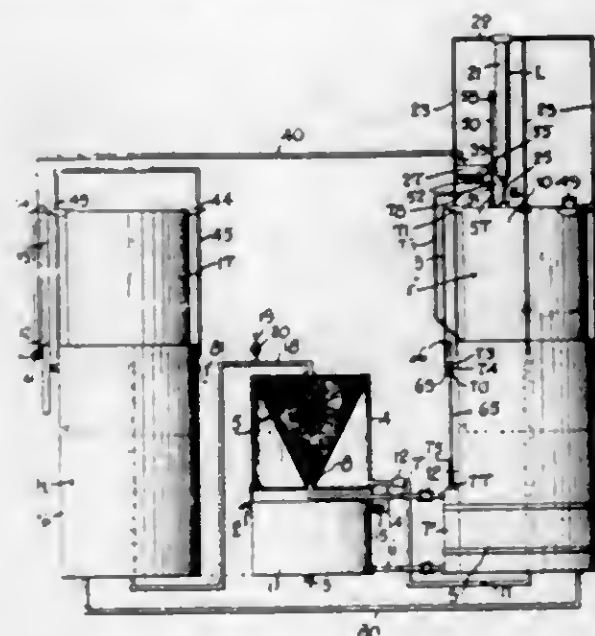
thereof so as to insure spreading of material discharged from the disk in a well defined strip corresponding in width to the distance between the sides of the guard member.

1,312,227. DEPTH-SHELL. LINDELL T. BATER, New York, N. Y. Filed Jan. 23, 1918. Serial No. 213,325. 7 Claims. (Cl. 102-3.)



3. In combination with a shell; a striker; a centrifugal guard preventing initial forward movement of the striker; a plunger; a spring interposed between said striker and plunger; a lock for holding the plunger forward and the spring under compression after impact; a barrier for the striker; and means, associated with the barrier and adapted, when the shell has moved a given depth into a body of water, to remove the barrier and to permit the striker to be forced forwardly.

1,312,228. CARBURETING APPARATUS. REUBEN BRENNING, North Yakima, Wash. Filed Jan. 26, 1916. Serial No. 74,448. 4 Claims. (Cl. 230-17.)



1. An apparatus of the character described including an air compressor comprising a movable member, pressure operated means for imparting movement to the movable member in one direction, a conduit leading from a source of pressure in communication with said last named means, a valve interposed in said conduit for controlling the flow therethrough and including an arm, a second movable member, said member being substantially U-shaped in cross section and receiving the arm of the valve, said member being provided with an opening in its rear wall at a point adjacent its upper end, an inwardly disposed depending flange partially overlying said opening, and means for imparting reverse movements to the second movable member.

1,312,229. ELECTRIC IGNITING DEVICE. ALFRED W. HELL, Milan, Tenn. Filed Nov. 1, 1916. Serial No. 128,983. 2 Claims. (Cl. 175-91.)

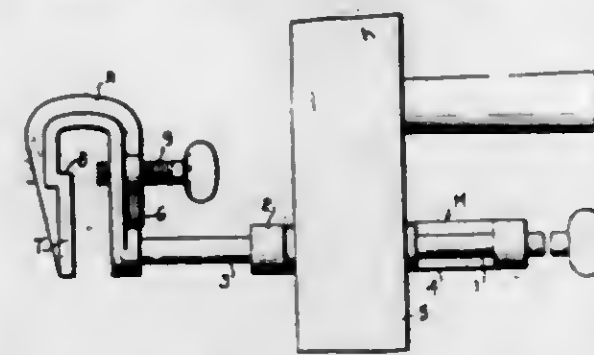
1. An ignition device, including, in combination with a portable casing carrying a source of electrical energy,

which is connected thereto, an insulating base removably secured to said casing, binding terminals on said base, a sparking coil carried by the base and connected with one of said circuit terminals and said source of electrical



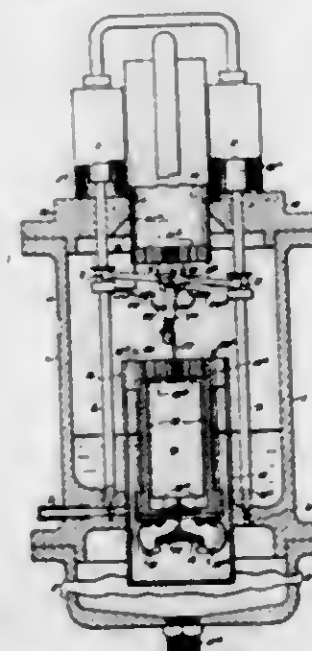
energy, and a pivotal switch arm arranged upon the remaining terminal adapted for engagement with the casing whereby the passage of current through said terminals may be controlled.

1,312,230. SUPPORTING DEVICE. HENRY STC. BOOTH, Muskegon Heights, Mich. Filed Apr. 17, 1918. Serial No. 229,148. 2 Claims. (Cl. 144-297.)



1. A supporting device of the class described, comprising a substantially U-shaped member, and outwardly disposed rod secured at one extremity to an outer extremity of an arm of the U-shaped member and substantially perpendicularly thereto, the rod and arms of the U-shaped member being arranged in the same plane longitudinally of the rod, anchoring means, the opposite end portion of the rod being in swivel engagement with said anchoring means, and a member threaded through said first named arm of the U-shaped member and coacting with the second arm of said U-shaped member.

1,312,231. LIQUID-METER. WILLIAM BOWDEN, Manchester, England. Filed Oct. 15, 1918. Serial No. 238,232. 3 Claims. (Cl. 277-13.)

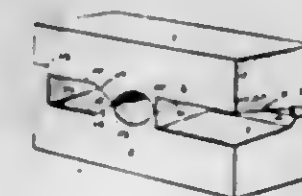


2. In a meter of the kind referred to, the combination of inlet and outlet valves, electro-magnetic means adapted

to positively open and close said valves, and means whereby the movement of the valves by said means will also open the circuit of said electro-magnetic means.

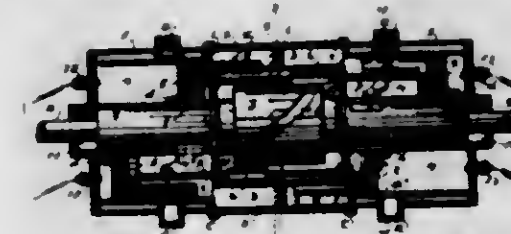
1,312,232. [WITHDRAWN.]

1,312,233. FULLERING-BLOCK FOR ROCK-DRILL BITS. ORRIN B. CAMP, Englemin, Calif., assignor of one-half to Roy A. Lennon, Englemin, Calif. Filed July 24, 1917. Serial No. 182,448. 1 Claim. (Cl. 76-95.)



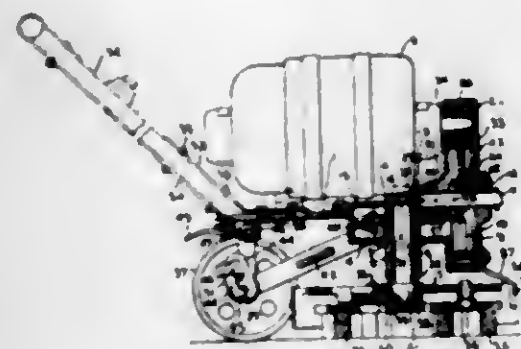
Means for fullering a corner of a drill bit having two beveled cutting surfaces, comprising two blocks, each having a depressed, flat, swaging surface, one of said blocks having a wall or stop, an inner side of which is at right angles to the swaging surface of the block and the other having a mortise into which the upper portion of the block fits tightly, said blocks also having surfaces sloping upwardly from said swaging surfaces at an acute angle, the longitudinal directions of said sloping surfaces making an acute angle with said wall.

1,312,234. ENGINE. THEODORE A. CARLSON, Muskegon, Mich., assignor to Anna Carlson, Muskegon, Mich. Filed July 11, 1917. Serial No. 179,989. 3 Claims. (Cl. 123-58.)



1. In an engine having reciprocating pistons, two cylinder cases each having several cylinders therein arranged in a circle, a cam case set longitudinally between the cylinder cases, means for securing said cylinders firmly together endwise, so that corresponding cylinders in the two cylinder cases will stand in direct alignment, the cam case having compression chambers in proper alignment with the pairs of cylinders, piston rods passing through the cam case into both cylinders of a pair, a piston mounted upon each end of each piston rod, a main shaft centrally located in the cases concentric with the circle of cylinders, cylindrical valves mounted upon the shaft within the cylinder cases and concentric with the circle of cylinders, and having openings through the cylindrical walls near the back ends of the valves, the cylinder walls having corresponding openings to be opened and closed by the revolutions of the valves, a cam mounted on the shaft within the cam case, and having an irregular groove formed in its periphery around the cam and extending practically from end to end of the cam, a cross-head mounted at the longitudinal center of each piston rod, an antifriction roller mounted on each cross head in position to travel in the groove in the cam to cause the cam to revolve by the reciprocating movement of the cross-heads, guideways for carrying the cross-heads in direct alignment in their reciprocal movement, carbureters, igniters and spark plugs connected with the several cylinders, and cooling appliances connected with the cylinders.

1,312,235.—GRINDING OR POLISHING MACHINE. ERICOLE CAVICCHI, Quincy, Mass. Original application filed Nov. 22, 1915, Serial No. 62,755. Divided and this application filed July 15, 1918. Serial No. 244,860. 7 Claims. (Cl. 51—11.)



1. In a machine of the class described comprising a rotary grinding head having abrasive means connected thereto, a truck having two wheels, a platform carried by said wheels and said rotary grinding head, a motor located upon said platform, said wheels and grinding head being arranged to form a triangular support for said motor, the motor being carried mainly by said rotary grinding head, said grinding head having a vertical shaft journaled in bearings in said platform beneath said motor, a gear on said vertical shaft and a system of gearing positioned to transmit power from the shaft of the motor to the gear upon the vertical shaft.

1,312,236. STOCKING-DRYING MACHINE. HARRY CORLETON, Philadelphia, Pa., assignor to The Philadelphia Textile Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 2, 1918. Serial No. 232,082. 10 Claims. (Cl. 20—16.)



8. The combination in a machine for drying stockings, of standards; a horizontal shaft mounted in the standards; means for driving the shaft; pivoted forms on the standards, each form having a roller; an annular cam on which the roller travels, said cam having a depressed portion at one point so as to cause the form to be elevated to allow the operator to place a stocking on the form.

1,312,237. ADVERTISING SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed Aug. 21, 1917. Serial No. 187,413. 5 Claims. (Cl. 40—32.)

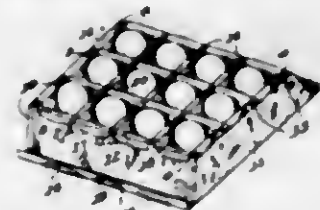
1. A device of the class described including a surface bearing in different colors and in superposed relation different positions or shapes of the same symbol, object, or the like to be displayed, and means for displaying said

surface in the presence of a light medium capable of absorbing one of said colors and then displaying said surface



in the presence of a light medium capable of absorbing another one of said colors.

1,312,238. EGG-CARRIER. MARIANO DE YCAZA, Ithaca, N. Y. Filed Mar. 14, 1919. Serial No. 252,597. 5 Claims. (Cl. 217—26.)



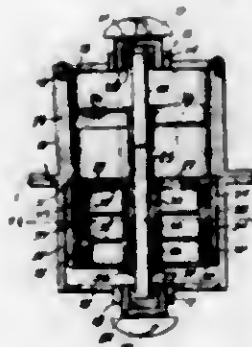
1. An egg-carrier comprising a tray formed of folded stiff material having opposite parallel ribs, fabric material secured transversely of said ribs with pockets between the ribs, two of the trays being adapted to be superposed with eggs protectively inclosed within the pockets.

1,312,239. METHOD OF EXTRACTING CONES FROM THEIR BAKING-MOLDS. ALBERT E. DIETERICH, Washington, D. C. Filed June 14, 1918. Serial No. 240,004. 5 Claims. (Cl. 107—54.)



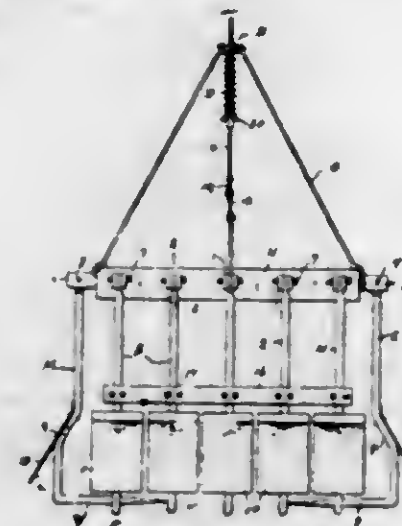
3. The method of releasing stiff frangible ice cream cones or other similar cup pastry articles from split molds which consists in rolling the article out of the mold cavity, the rolling motion being imparted to the article around its longitudinal axis.

1,312,240. MIXER. CHARLES W. ERVIN and WILLIAM E. MACGIBBY, Anacosta, Mont. Filed Feb. 20, 1919. Serial No. 279,376. 5 Claims. (Cl. 48—180.)



4. In a mixing device, the combination with a revolvable sleeve, of a plurality of fuel mixing elements mounted on the sleeve super-imposed in spaced relation to each other and provided with marginal portions, means engaging within and exteriorly of the portions, to hold the elements spaced, the means exteriorly of the portions being carried by the sleeve, and means on the lower end of the sleeve for supporting the interior means in position.

1,312,241. GRAPPLE. CHARLES J. FAULKNER, Ball Ground, Ga. Filed Apr. 26, 1919. Serial No. 292,813. 5 Claims. (Cl. 57—9.)



1. A grapple of the class described comprising a head, article engaging members pivotally secured to said head, and wings carried by said members, each of said wings having flat faces substantially at right angles to the path of travel of the coasting article engaging member.

3. A device of the class described comprising a head, elongated shanks pivotally engaged with said head and provided with inwardly directed work engaging portions, a part of each of the shanks adjacent its outer end being outwardly offset, and a wing secured to said offset portion.

5. A grapple of the class described comprising a head, article engaging members pivotally secured to said head, means for causing said engaging members to swing in unison, a lifting member engaged with said means, a member through which the lifting member is loosely directed, connections between said last named member and the head, an abutment carried by the lifting member inwardly of the member through which said lifting member is directed, and an expansible member interposed between said abutment and the member through which the lifting member is directed.

1,312,242. PIGPEN. HOWARD J. FERRIS, Harvard, Ill., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill., a Corporation of Illinois. Filed Nov. 18, 1918. Serial No. 262,993. 2 Claims. (Cl. 256—22.)

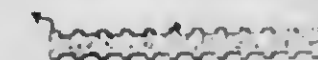


1. In a pig-pen, slides comprising horizontal members at top and bottom, main vertical members extending between and supported by the horizontal members, and T-shaped members, each consisting of a horizontal head and a vertical stem, the ends of the horizontal heads being set in perforations in the main vertical members midway between their ends, and the depending lower ends of the stems of the T-shaped members being set in perforations in the lower vertical member midway between the two adjacent main vertical members.

1,312,243. METHOD OF PRODUCING WOOD SEPARATORS. THOMAS F. FERRY, St. Louis, Mo. Filed Dec. 7, 1918. Serial No. 265,747. 2 Claims. (Cl. 204—20.)

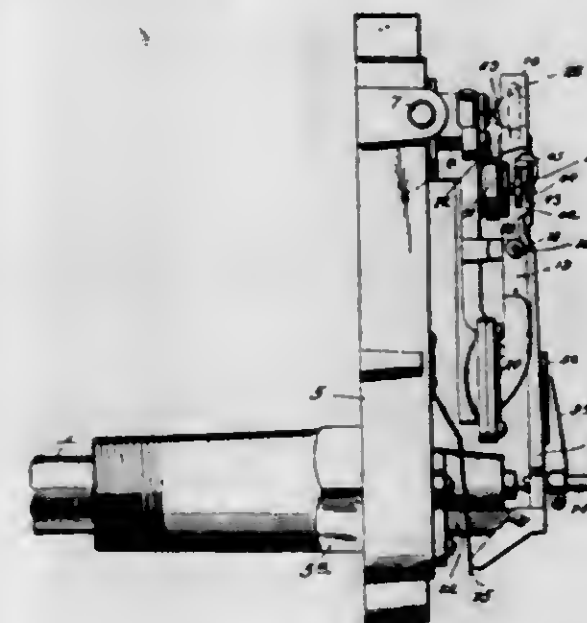
1. A method of producing a wood separator for storage batteries or the like, which consists, first, in producing a

veneer with its faces substantially at right angles to the sap lines; second, serrating the opposite faces of the



veneer; and, third, separating the veneer between the serrated faces to produce roughened backs.

1,312,244. AUTOMATIC CONTROL DEVICE. CHARLES L. FORTER, Milwaukee, Wis. Filed Mar. 18, 1918. Serial No. 223,153. 7 Claims. (Cl. 236—82.)



1. In a control device of the leak port type, the combination with a movable leak port member of a closure for said port responsive to atmospheric conditions and bodily movable with said leak port member.

1,312,245. GEAR-CUTTING MACHINE. ROBERT E. GARNETT, Nashville, Tenn. Original application filed May 10, 1917. Serial No. 167,081. Divided and this application filed Sept. 9, 1918. Serial No. 253,190. 3 Claims. (Cl. 90—57.)



1. The combination with a slotted index head, of a perforated index plate secured thereto, a lever revoluble on said plate and provided with a pointer to engage the perforated plate, a blank-supporting mandrel, said plate having a lug with extension means adjustable in the slot of said head, and means operable through the lever for turning said mandrel to index the blank.

1,312,246. WEED-EXTERMINATOR. JOHN GUNNINGER, Ann Arbor, Mich. Filed Sept. 16, 1916. Serial No. 126,508. 1 Claim. (Cl. 47—37.)

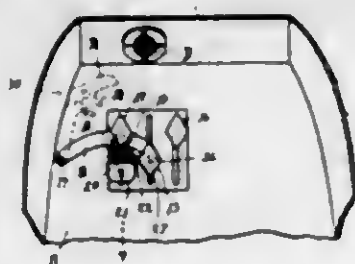
A device of the character described comprising, a body portion having its forward end portion screw threaded, a spout having an enlarged head adapted for threaded engagement with said body portion, said spout being cy-

indrical and of a uniform diameter, a valve disposed at the inner end of said spout, an operating stem connected with said valve intermediate its ends and extending



through said spout, a U-shaped frame connected to said body portion and having an opening for receiving said stem, and a roll spring interposed between said valve and the U-shaped frame.

1,312,247. PEDAL-LOCKING MECHANISM. LEONARD GRISER, Cincinnati, Ohio. Filed May 19, 1919. Serial No. 298,259. 1 Claim. (Cl. 70-126.)



A pedal lock comprising a curved lever pivotally connected at one end to the floor of a car at one side of the pedals to be locked, said lever having an idle position along the side margin of the floor and an active position transversely to its idle position in engagement with the pedals, and being provided with projections intermediate of its length and spaced apart to embrace the shank of one of the pedals to be locked with the free end of the lever in position to prevent movement of another pedal, and a locking member to engage and lock said projections to the shank of said pedal.

1,312,248. MARKER. PEDRO GIORDANO, Buenos Aires, Argentina. Filed Oct. 10, 1918. Serial No. 237,612. 3 Claims. (Cl. 40-3.)



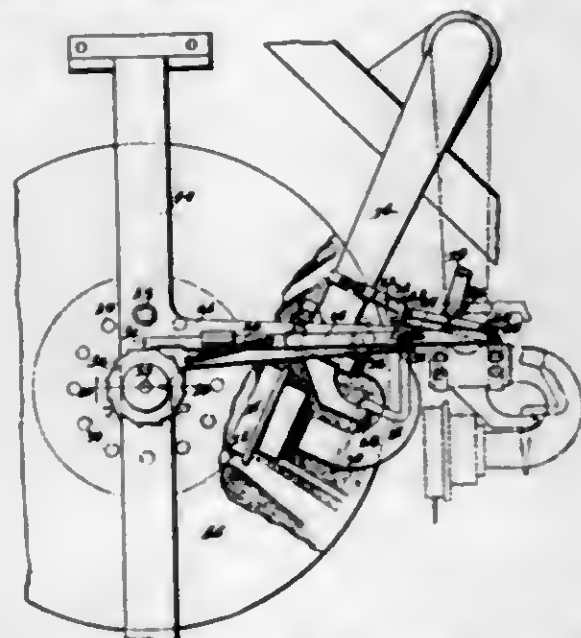
1. A marking device including a pair of identical indicating plates each having one end portion offset and arranged parallel to the main portion and contacting with the straight end portion of the adjacent plate so as to leave a space between the plates, and means for fastening the end portions of the plates together.

1,312,249. ELECTRICAL BLOCK TRAIN-STOPPAGE AND SIGNAL-SETTING SYSTEM. HUTLER J. HASKINS, Kansas City, Mo., assignor of three-fourths to Archie Josephson and Reuben Finkelstein, Kansas City, Mo., and Allen H. Rubin, Chicago, Ill. Filed Aug. 2, 1918. Serial No. 247,913. 11 Claims. (Cl. 246-63.)



1. In an electric block system for railways, a pair of electrically connected coils located within each block, means for normally preventing flow of current through said coils simultaneously, and means actuated by the electrical connection or a break in one of the rails of the block in advance of the block containing such coils for making the latter coils susceptible to simultaneous energization.

1,312,250. TALKING-MACHINE. LAURENCE SCOFIELD HOLMBROOK, Oklahoma, Okla. Filed Mar. 10, 1916. Serial No. 83,375. 26 Claims. (Cl. 274-10.)



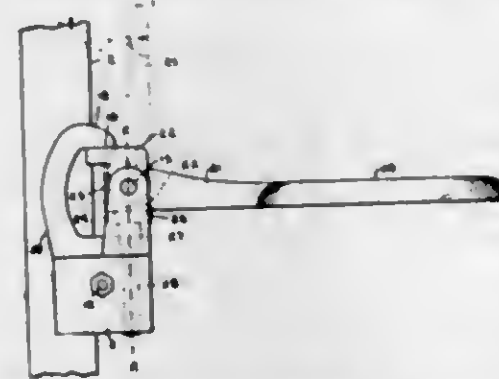
1. In a talking machine, the combination of the tone arm, a sound box carried thereby, a bracket on the tone arm, a sound box lifting device pivoted on the bracket, a lever disposed in position to be approached by the lifting device and engaged at the end of a reproduction, a revoluble member having an operating connection with said lever, for actuating the lever and swinging the lifting device, a latch normally holding the revoluble member from rotation, and means on the tone arm for engaging the latch to release said revoluble member at the end of a reproduction.

9. In a talking machine, the combination of a turn-table, a swinging tone arm, a sound box carried thereby, a frame mounted above said turn-table, a rotatable shaft carried by said frame, record supporting arms secured to said shaft, a plurality of records mounted on said arms and provided with openings adapted to register therewith when said shaft is rotated, and means carried by said frame and adjustable relative thereto to rotate said shaft after a completion of the reproduction of a record on said turn-table to permit one of the records supported on said arms to be lowered onto said turn-table.

1,312,251. LOOM-SEAT. ROBERT JAMIESON, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 13, 1918. Serial No. 249,042. 7 Claims. (Cl. 155-22.)

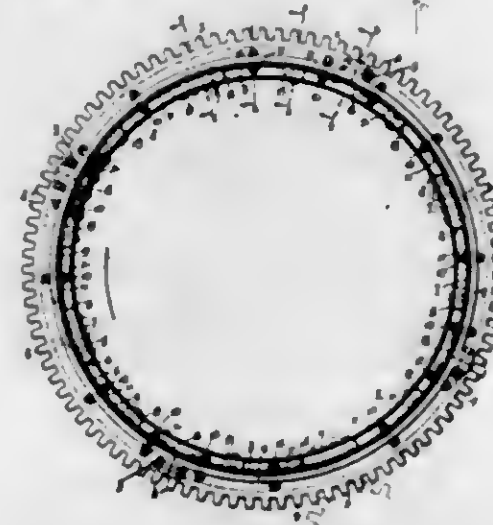
1. A folding seat for looms comprising a bracket and means for adjustably attaching the same to the loom

frame, a seat having an integral arm mounted on said bracket and presenting flat under and end surfaces adjacent said pivot and a spring actuated plunger adapted



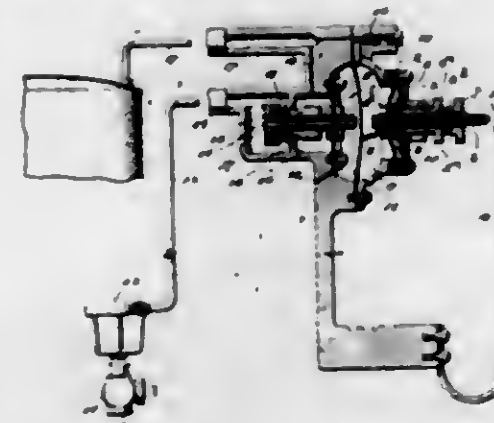
alternatively to cooperate with either of said flat surfaces to lock the same in horizontal operative position or in a substantially vertical inoperative position.

1,312,252. GEAR-RING FOR ROTARY KILNS. JOHN T. JETER, Dallas, Pa., assignor to Vulcan Iron Works, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Nov. 28, 1917. Serial No. 204,430. 2 Claims. (Cl. 74-28.)



1. The combination in a rotary kiln, of a drum; a driving gear ring mounted on the drum; anchor blocks secured to the drum; a flexible connecting plate secured to each anchor block and to the ring; and means located at intervals between the anchor blocks for spacing the plates so that the driving ring will be concentric with the drum.

1,312,253. AUTOMATIC CONTROL DEVICE. CARL F. JOHNSON, Milwaukee, Wis. Filed Mar. 12, 1918. Serial No. 221,988. 17 Claims. (Cl. 236-82.)



1. The combination of a fluid-pressure motor; a source of fluid pressure in communication therewith; a leak port

member for said motor, adapted to be moved by pressure within said motor; a closure for said leak port member located in line therewith, having automatic actuating means responsive to changes in atmospheric condition, said leak port member being movable toward said closure upon a rise of pressure in said motor, whereby a quick sealing is effected; and an adjustable stop for the movable leak port member, whereby the range within which opening and closing of the leak port is effected may be varied.

1,312,254. ELECTRODE FOR ELECTRIC-ARC SOLDERING. ERNEST HENRY JONES, London, England. Filed Apr. 11, 1918. Serial No. 227,014. 5 Claims. (Cl. 219-12.)



1. In the manufacture of electrodes for electric arc soldering, applying to the wire in open spirals a second class conductor of uniform section, and subsequently filling the spaces between the open spirals with a second class conductor compound, as set forth.

1,312,255. ELECTRODE AND PROCESS OF MAKING SAME. JESSE CRITZ KING, Montreal, Quebec, Canada. Filed May 22, 1916. Serial No. 99,104. 8 Claims. (Cl. 204-65.)



1. An electric furnace electrode having a roughened surface, and a protective coating overlying and baked on to the surface of the electrode, substantially as described.

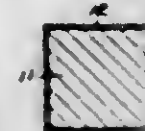
1,312,256. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,574. 3 Claims. (Cl. 204-65.)

3. An electrode for an electric furnace comprising a core, a non-oxidizing protective coating bonded or baked on to the core, and an outer coating of cementitious material applied to the non-oxidizing coating, substantially as described.

1,312,257. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,575. 4 Claims. (Cl. 204-65.)

4. An electrode for electric furnaces comprising a carbon core having a roughened surface, and a coating of non-oxidizing material and metal particles bonded or baked on to the roughened surface.

1,312,258. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,576. 1 Claim. (Cl. 204-65.)



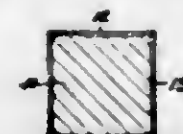
An electrode comprising a carbon core having a roughened surface, and a coating of magnesite mixed with a carbonaceous binding material bonded or baked on the roughened surface.

1,312,259. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,577. 5 Claims. (Cl. 204—65.)



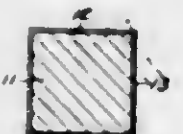
5. An electrode comprising a carbon core having a roughened surface, and a coating of dolomite mixed with a carbonaceous binding material bonded or baked on to the roughened surface.

1,312,260. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,578. 3 Claims. (Cl. 204—65.)



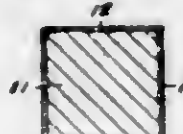
3. An electric furnace electrode comprising a carbon core having a roughened surface, and a coating of bauxite mixed with a carbonaceous binding material bonded or baked on to the roughened surface.

1,312,261. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,579. 5 Claims. (Cl. 204—65.)



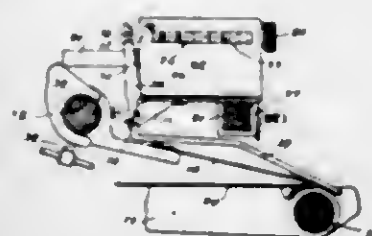
5. An electrode for electric furnaces comprising a carbon core having a roughened surface, and a coating of chrome iron mixed with a binding material bonded or baked on to the roughened surface.

1,312,262. ELECTRODE. JESSE C. KING, Montreal, Quebec, Canada. Filed Oct. 9, 1917. Serial No. 195,580. 3 Claims. (Cl. 204—65.)



3. An electric furnace electrode comprising a carbon core having a roughened surface, and a coating of aluminum mixed with a carbonaceous binding material bonded or baked on to the roughened surface.

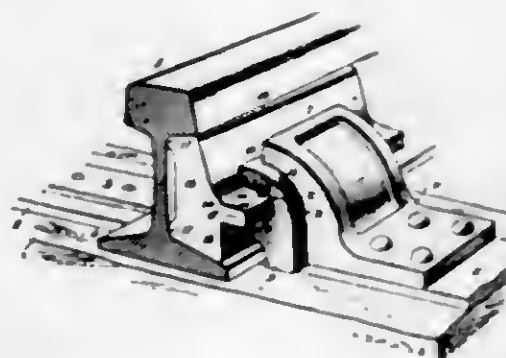
1,312,263. ATTACHMENT TO PRINTING-MACHINES. JOSEPH LEWIS, Winnipeg, Manitoba, Canada. Filed Aug. 10, 1918. Serial No. 249,293. 6 Claims. (Cl. 235—98.)



1. The combination with a press presenting a reciprocating sheet delivery carriage and means for stopping the

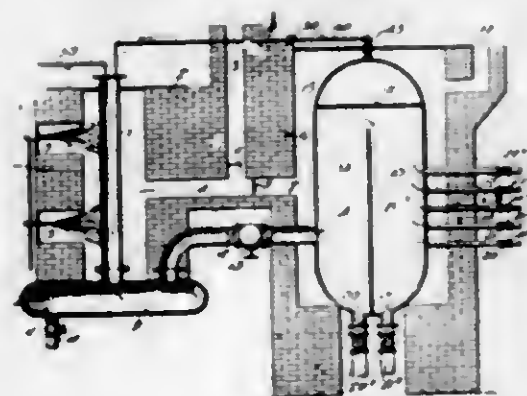
advancing edge of the sheet delivered by the carriage, of a counter mounted on the carriage and moving therewith and an operating mechanism for the counter, said operating mechanism being actuated by engagement with the stopped sheet.

1,312,264. ADJUSTABLE RAIL-BRACE. CHARLES G. McCULLY, Washington, D. C. Filed Sept. 6, 1918. Serial No. 252,940. 4 Claims. (Cl. 238—207.)



4. In an adjustable rail brace the combination with a tie plate of a horizontally rotatable chair connected with said bracket by an abutting joint and having a horizontal groove therein, a rail-supporting block of wedge formation having a tongue slidably positioned in the groove aforesaid, and means for locking said supporting block in adjusted positions.

1,312,265. PROCESS AND APPARATUS FOR REFINING OILS. JAMES ROY MILLER, Okmulgee, Okla. Filed Mar. 13, 1918. Serial No. 222,176. 9 Claims. (Cl. 196—25.)

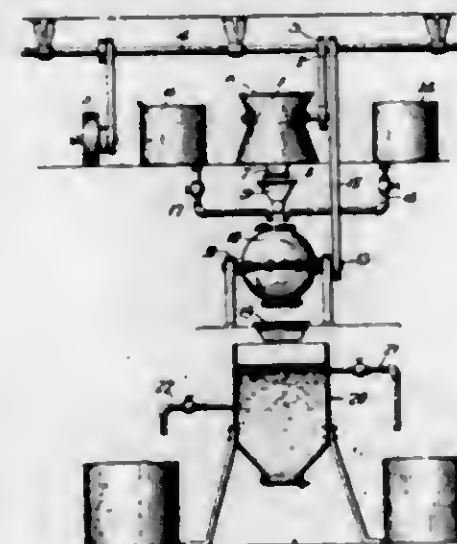


8. The herein described process of refining oil which consists in cracking the oil, removing a portion of the gas and vapor thus formed, separating the gas thus removed into light fixed gases, heavy oils and vapors of a specific gravity between the light and the heavy products, fractionating the vapors, and condensing the lighter portions of the vapors thus fractionated.

1,312,266. ART OF SEPARATING THE PETROLEUM CONTENTS FROM PETROLEUM-BEARING SANDS OR SHALE. FRANK NAVIN, Salt Lake City, Utah. Filed Apr. 15, 1918. Serial No. 228,748. 3 Claims. (Cl. 196—25.)

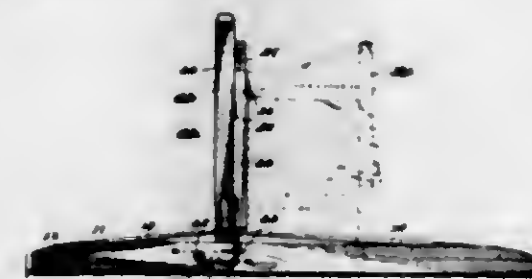
1. The method of extracting petroleum from petroleum bearing sand or shale, which consists in adding water and

a solvent for the petroleum to the sand or shale, thoroughly admixing the constituents of the mass thus formed



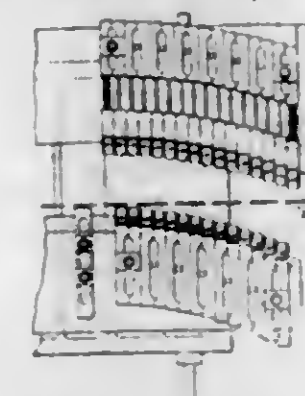
and causing the constituents thereof to arrange themselves according to their densities.

1,312,267. AUTOMATIC GATE. FERNAND OLINER, Edmonton, Alberta, Canada. Filed Sept. 12, 1918. Serial No. 253,768. 1 Claim. (Cl. 39—18.)



A device of the class described, comprising a rectangular frame having end beams, a transverse strip between the said beams, a platform hinged to one of said beams, a relatively shorter platform swingingly mounted adjacent the other of said beams, hinge connections between the adjacent inner ends of said platforms, springs upon said strip upon which one of said platforms is seated, a shaft transversely secured beneath one of said platforms having terminal rings outwardly of said frame, opposite upright posts adjacent the inner ends of the platforms, a gate hingedly carried by each of said posts, a rocker for each gate pivoted to the side rails with the shorter portion of each rocker freely extending through the said rings, and operative connections between the longer resilient portion of said rockers operatively connected to the said gates.

1,312,268. MACHINE FOR BENDING LEAF-SPRINGS. HENRY POPPINKAWA, Pontiac, Mich. Filed Apr. 14, 1919. Serial No. 289,798. 2 Claims. (Cl. 153—51.)



1. A die member or "key" for a spring bending machine, comprising a shaft having a recessed head with a

lower projecting jaw adapted to bear against a spring at the lower edge thereof, an adjustable part slidable transversely in said recess and having an upper projecting jaw adapted to bear against the spring at the upper edge thereof, and an adjusting screw connecting said head and adjustable part.

1,312,269. BEAM-LOCKING DEVICE FOR LOOMS. ALONZO E. RHODAMA, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 29, 1918. Serial No. 264,518. 8 Claims. (Cl. 64—10.)



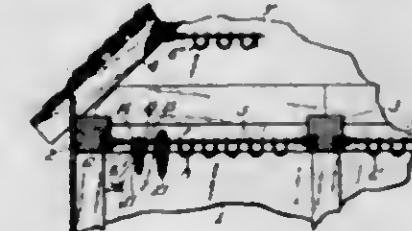
1. In a loom, beam-locking mechanism comprising aligned journal bearings upon the loom sides, having openings in their walls to permit the introduction of the beam shaft and means carried by said shaft operable to prevent removal of the shaft from said journal bearings.

1,312,270. DENTAL IMPLEMENT. PERCY HUNNELL, Philadelphia, Pa., assignor to Electric Dental Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 2, 1916. Serial No. 129,249. 8 Claims. (Cl. 219—21.)



1. The combination of an inner and an outer tube, of which the first is closed and connected to the second tube adjacent one end thereof only; a point to be heated mounted on the closed end of the first tube; and a heating element within the inner tube.

1,312,271. SEED-CORN HANGER. ERNEST M. SALLERT, Wayne township, Owen county, Ind. Filed Jan. 27, 1917. Serial No. 144,984. 2 Claims. (Cl. 34—26.)



1. A seed-corn hanger comprising a horizontal rod, and hanger devices for corn ears having suspension rods that are adjustable each toward or from the other on and in connection with the horizontal rod to freely receive the ears between a pair of the suspension rods, each pair having a supporting member connected thereto and spaced apart from the suspension rod to freely receive the ear, the suspension rods of each device being adapted to receive ears of different sizes between them and to permit the ear to freely tilt on the supporting member into contact with the horizontal rod.

1,312,272. BOAT-DAVIT. THORALF SCHROEDER-NIELSEN, Horten, Norway, assignor to Christoffer Haaevig and Haavevig Brothers, A/S., Christiania, Norway. Filed Mar. 27, 1918. Serial No. 224,092. 5 Claims. (Cl. 9—22.)

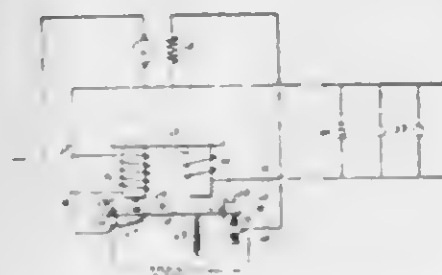
2. A boat davit mounted to turn in inclined sockets, the angle of the socket and the form of the davit being

so proportioned that the boat rib is lowered approximately to the level of the ship's deck, when the davits are



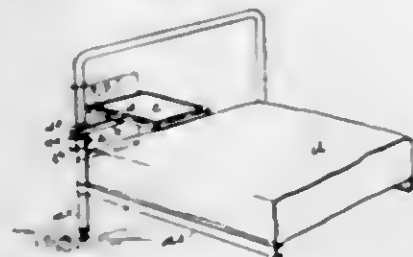
swung out, the davit ribs being connected by means of a rod or bar, the ends of which are mounted on trunnions at the top of each rib

1,312,273. ELECTRIC CONTROLLING APPARATUS. WILLIAM SCHWABEMANN, Yonkers, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Apr. 24, 1917. Serial No. 164,127. 16 Claims. (Cl. 171-313.)



11. In combination, a generator, a magnet, an armature, a retractile spring therefor, one end of the armature being adapted to be drawn against the magnet and the engagement therewith to serve as a fulcrum for movement of the other end of the armature.

1,312,274. BEDSIDE TABLE. WILLIAM J. SCULTHORP, Detroit, Mich. Filed Feb. 21, 1918. Serial No. 218,410. 1 Claim. (Cl. 45-82.)

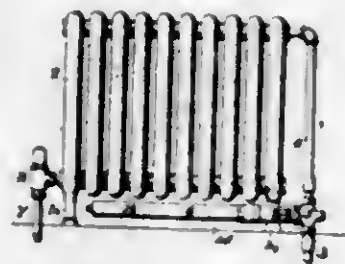


The combination of a platen, an arm pivoted thereto, a fixed socket, the other end of said arm having a pinle adapted to engage in said socket, a second arm, a securing eye at one end of said second arm, the pinle of said first named arm passing through said eye and into said socket, a socket on the underside of said platen, the other end of said second arm being adapted to engage in said last-named socket, the pivotal movement of said platen being adapted to bring said last-named socket into engagement with said second arm.

1,312,275. STEAM-HEATING APPARATUS. JOHN A. SERBELL, North Plainfield, and JAMES LAMIAN FITTA, Passaic, N. J., assignors to Warren Webster & Co., a Corporation of New Jersey. Filed Jan. 7, 1916. Serial No. 70,706. 7 Claims. (Cl. 236-42.)

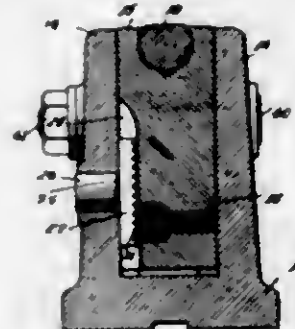
1. In an apparatus of the character stated, the combination of a radiator or coils, means for supplying steam

thereto, a valve device for controlling the flow of steam to the radiator or coils, an elongated horizontally arranged thermostatic motor device placed below the bottom of radiator or coils and along the entire length of the bottom part thereof so as to be acted upon by the air



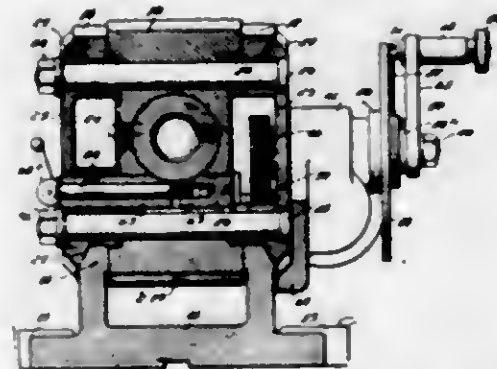
passing from the room first to the thermostat and which on leaving the thermostatic motor device passes directly upward to the under part of the radiator or coils substantially throughout its entire length, and a connection from the thermostatic motor for operating the valve device.

1,312,276. MACHINE-TOOL. FRANK S. SHIELDS and JOHN A. CAMM, Cleveland, Ohio. Filed Aug. 6, 1917. Serial No. 184,550. 7 Claims. (Cl. 90-23.)



1. In an apparatus of the type set forth, a tailstock comprising a base and two upright clamping members thereon and spaced from each other, an angularly and vertically adjustable head adapted to be clamped between said uprights, a rack carried by one of said uprights and trunnioned thereon, said head being adjustable longitudinally of said rack but fixed to said rack to turn therewith on its trunnion; and elevating means carried by said head comprising a pinion in mesh with said rack.

1,312,277. DIVIDING-HEAD FOR MILLING-MACHINES. FRANK S. SHIELDS and JOHN A. CAMM, Cleveland, Ohio. Filed Aug. 6, 1917. Serial No. 184,551. 8 Claims. (Cl. 90-57.)



1. In an apparatus of the type described, the combination of a base and two upright parallel guiding rings thereon, a pair of clamping plates embracing said rings, said rings having their outer edges tapered and said plates having reversely tapered engaging surfaces corresponding to and cooperating with the tapered edges of said rings, a head carried by said plates and adapted to

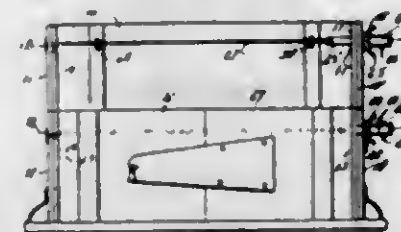
be damped between said rings, a spindle journaled therein, clamping bolts passing through said plates and head for wedging the clamping plates on to said rings and clamping the head between said rings, and means to turn the spindle.

1,312,278. CARD GAME. JEANNETTE C. SHINN, Paducah, Ky. Filed Nov. 21, 1918. Serial No. 263,640. 3 Claims. (Cl. 46-25.)



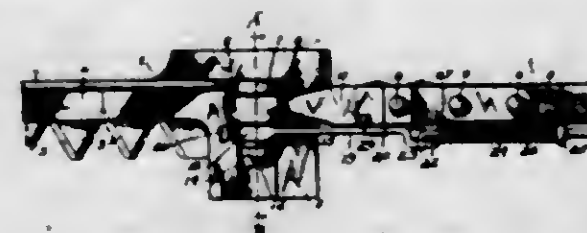
3. A deck of playing cards, comprising two sets of cards; one set having objects pictorially displayed thereon, and the other set having letters whereby the names of such objects may be spelled.

1,312,279. END-GATE FASTENER. PHILIP H. SPAULDING, Hinsdale, Ill. Filed Nov. 27, 1916. Serial No. 133,646. 1 Claim. (Cl. 21-21.)



In an end gate fastener, the combination with the sides and end gate of a wagon, said sides being formed with transverse openings, a staple member disposed inwardly through the opening of one of the sides, a sleeve disposed through the opening of the other side, a flat rod disposed slidably through the said sleeve and having mutilated threads on a portion of its length, the opening through the sleeve being of a shape like that of the cross section of the rod and slightly larger than said section, the inner end of the rod being formed with a longitudinally extending keyhole slot, a nut engaged on the rod outwardly of the outer end of the sleeve, and a rod having a hook on one end for engagement in the said staple member, and a laterally directed keyhead for engagement in the slot of the rod.

1,312,280. PITMAN CONNECTION. HERBERT R. SPERRY, Chicago, Ill., assignor, by means assignments, to International Harvester Company, a Corporation of New Jersey. Filed Apr. 10, 1916. Serial No. 90,117. 16 Claims. (Cl. 74-17.)



1. A pitman connection including a ball and socket joint, means movable in a plane transverse to the longitudinal axis of the pitman for taking up the wear on said joint, and toggle mechanism for actuating said take-up means.

1,312,281. GANG-PLOW. WILLIAM N. SPRINSON, Peoria, Ill., assignor to Avery Company, Peoria, Ill., a Corporation of Illinois. Filed July 2, 1912. Serial No. 707,307. 34 Claims. (Cl. 97-70.)



1. In a gang plow, the combination of a main frame, an individual plow having a beam pivotally connected at its forward end to the main frame, a plow body pivotally connected to the rear end of the beam, means for swinging the plow body about its pivotal connection forward and upward with respect to the beam, mechanism for lifting the beam about its pivotal connection with the frame, and means for automatically actuating the said beam lifting mechanism after a predetermined movement of the plow body with respect to the beam.

21. The combination of a main frame mounted in fixed relation to the ground, a beam having a vertically fixed horizontal pivotal connection at its forward end with the main frame, a plow body connected with the beam, a ground wheel with respect to which the beam is vertically movable, a carrier connected at its lower end with the ground wheel and having slidable engagement with the beam, means for moving the beam upward with respect to the ground wheel and the carrier, and a hook pivoted on the beam at a point adjacent the carrier and adapted to be swung independently of the beam moving means into engagement with the carrier when the beam is raised to hold the beam in raised position.

1,312,282. CIRCUIT-BREAKER. JOHN R. SPRINGER, Bethlehem, Pa., assignor to Roller-Smith Company, a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,433. 15 Claims. (Cl. 175-294.)

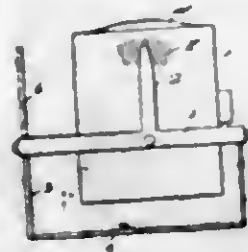


1. A plurality of main conductors, respective circuit breakers therefor, coils comprised in said conductors for actuating said breakers respectively, additional electromagnetic means also adapted to actuate said breakers, a circuit adapted to energize said additional electromagnetic means, means to effect a transient closure of said circuit by the actuation of any one of the breakers and to prolong the effect of such closure for a limited duration of time.

1,312,283. CAMERA-FINDER. ERNST H. W. STAHLHUTH, Columbus, Ind. Filed June 2, 1917. Serial No. 172,423. 4 Claims. (Cl. 88-15.)

1. In combination with a finder, a square frame arranged about the sides thereof and pivotally connected

at opposite points thereto, a second frame pivoted to said first frame at points at right angles to its respective piv-



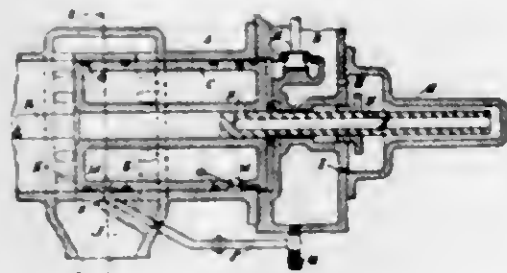
otal mounting, and indicating means carried on each of said frames.

1,312,284. SPRING SUSPENSION FOR VEHICLES. GAY A. STANTON, Battle Creek, Mich. Filed Sept. 3, 1918. Serial No. 252,307. 6 Claims. (Cl. 267-8.)



1. In a device of the character described, a member adapted to be secured to the axle of a vehicle having an inclined edge on one side and a vertical edge on its opposite side, a swinging arm journaled in a supporting frame, its free end bearing upon the inclined edge of said member, a friction roll adapted to traverse the vertical edge of said member journaled in spaced relation to the journal of the swinging arm, and a spring suspended by a hanger from the swinging arm to maintain said swinging arm in cooperative relation with the inclined edge of the first named member.

1,312,285. STEAM-HEATED PISTON. ROBERT C. STEVENS, Erie, Pa. Filed Dec. 17, 1917. Serial No. 207,572. Renewed June 7, 1919. Serial No. 302,594. 3 Claims. (Cl. 121-105.)

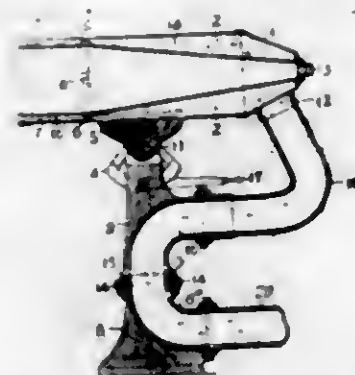


1. The combination with a steam engine cylinder and a hollow piston therein, of a steam chamber on the cylinder head, a hollow tail rod projecting from the piston and communicating with the interior thereof and working through the cylinder head into said chamber, and a return pipe communicating with said chamber and having a port in the cylinder wall, the piston wall having a port which registers with said port at a certain time during the stroke of the piston, to permit outflow from the piston to said pipe.

1,312,286. APPARATUS FOR EXCLUDING DENSE FOG. JUKICHI TEJIMA, Ibe, and KEIKUZO KIASHIDA, Toyohigashi Yamaguchi, Japan. Filed July 26, 1917. Serial No. 183,011. 2 Claims. (Cl. 88-1.)

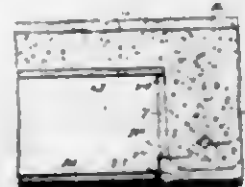
2. In a device of the character described the combination with a sighting tube, a standard upon which the sighting tube is adjustably mounted, an outer tube surrounding the sighting tube and spaced therefrom to provide an annular chamber which is mounted at the forward end of the sighting tube, a compressed air pipe in

the standard, and a flexible tube connecting the compressed air pipe to the chamber of the outer tube, the



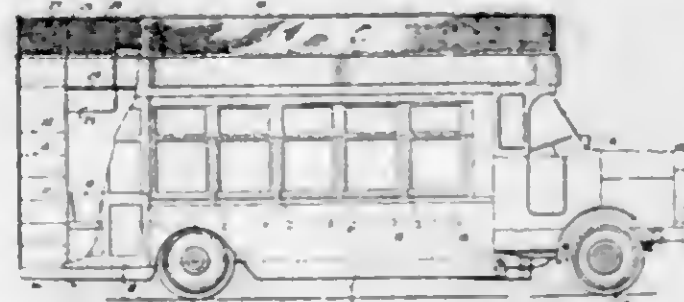
air being ejected from the open end of the outer tube in a tubular jet which surrounds the line of sight and serves to exclude fog therefrom.

1,312,287. FLOOR CONSTRUCTION. CLARENCE W. UZMAN, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 30, 1915. Serial No. 47,968. 1 Claim. (Cl. 72-71.)



A floor construction, comprising a plurality of channel-shaped members extending in two directions throughout the floor area, said members being securely fastened together at their points of intersection so as to produce continuous and intersecting channels, means for covering the spaces between said members, plastic material disposed over said covering means and filling said channel members to produce a continuous floor structure having integral beams extending longitudinally and transversely in the floor, fastening devices carried by said channel members, ceiling boards or blocks disposed beneath the members, and clips detachably engageable with said fastening devices for holding said ceiling boards or blocks to position.

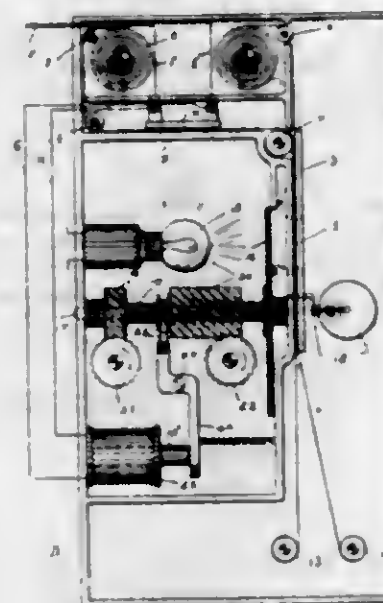
1,312,288. OMNIBUS. HAROLD BREADY WEAVER, New York, N. Y., assignor to American Motorbus Corporation, a Corporation of New York. Filed May 15, 1917. Serial No. 168,638. 6 Claims. (Cl. 21-14.)



1. In a double deck motor omnibus, the combination with an upper deck and a lower deck having inclosing sides extended above said upper deck, of a transverse stairway within the inclosure of said sides comprising a substantially straight flight of stairs starting from the lower deck and extending transversely across the body of the omnibus, and a pair of landing steps within said inclosing sides and making a 180° turn to terminate at the

upper deck in a central landing space in a direction transverse to the body and protecting siding making a 180° turn to said top central landing platform so that the approach to said stairway will be transverse of the direction of movement of the omnibus and the passengers traversing said steps will be protected by the inclosing sides.

1,312,289. PHOTOGRAPHIC-PRINTING APPARATUS. WILLIAM WANDERHOLD, New York, N. Y., assignor to Cru Patents Corporation, a Corporation of New York. Filed Sept. 19, 1917. Serial No. 192,071. 4 Claims. (Cl. 95-75.)



1. In a photographic printing apparatus, the combination with a negative film, of means for guiding and simultaneously moving said negative film and an unexposed positive film, a source of light for effecting the exposure of said unexposed film, a shutter positioned between said source of light and said films, and means controlled by the density of the negative film to the light from said source for regulating the opening of said shutter.

1,312,290. PIPE-WRENCH. ARCHIBALD WHITE, Dunbar, Pa. Filed Nov. 4, 1916. Serial No. 129,503. 1 Claim. (Cl. 81-69.)



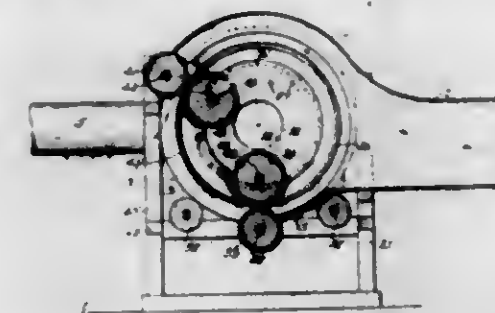
A pipe wrench comprising a handle, a head pivotally connected with the forward end portion of the handle and extending forward of and to one side of the handle, the forward portion of the head being cut to provide a chain receiving pocket to receive and hold the free end of a chain, the side portion of the head being cut to provide a relatively deep pocket having its inner wall extending longitudinally of the handle and its forward wall extending transversely of the handle, the head being provided with gripping teeth at the outer ends of the pocket walls, and a chain loosely connected with the handle adjacent the head and intermediate the ends of the handle.

1,312,291. COTTON-LINT CONDENSER AND FLUE. CLAUDE WILSON WICKER, Memphis, Tenn. Filed July 19, 1918. Serial No. 245,742. 5 Claims. (Cl. 12-17.)

4. In a lint condenser, a cylindrical rotatable screen, spaced rollers arranged within the screen and adapted to contact with one side thereof at spaced points, an air

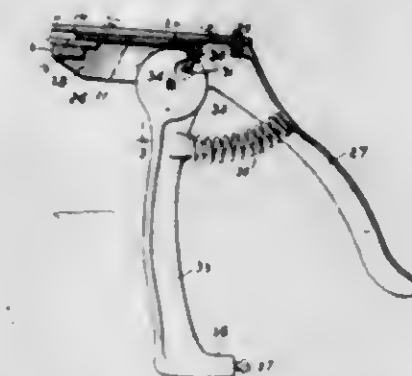
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excluding guard arranged within the cylindrical screen between the spaced rollers, means to produce suction



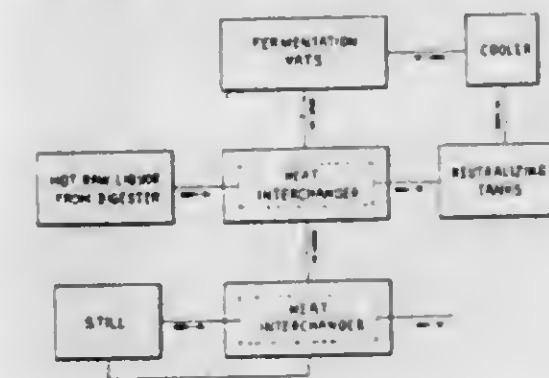
within the screen to cause the lint to adhere thereto, and means to supply the lint in proximity to the exterior of the screen.

1,312,292. TIP-ATTACHING IMPLEMENT. ALEXANDER YODELMAN, New York, N. Y. Filed Apr. 10, 1919. Serial No. 288,969. 3 Claims. (Cl. 81-15.)



1. A tool of the type described, comprising a pair of cooperating fixed and movable jaws, the said fixed jaw being in the form of a plate having at its forward end a return bent member forming with the plate a guide for the said movable jaw, a frame provided with a handle and on which the said plate is secured, the frame having a crossbar forming a bearing for the said return bent member, and means mounted on the said frame to actuate the said movable jaw.

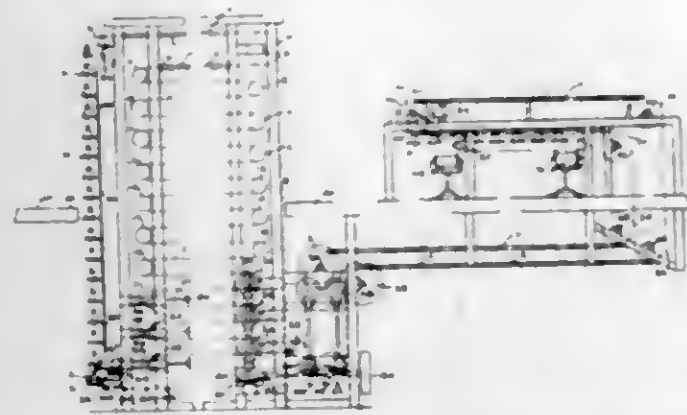
1,312,293. TREATMENT OF WASTE SULFITE LIQUORS. OSWIN W. WILLCOX, Dover, N. J. Filed Sept. 8, 1915. Serial No. 49,628. Renewed Dec. 14, 1918. Serial No. 266,842. 3 Claims. (Cl. 195-6.)



1. In the fermentation of waste sulfite liquors and the recovery by distillation of the resulting alcohol, the method of promoting the economic efficiency of the operation, which comprises supplying the fermented liquor to the still, and, during the transit of the fermented liquor to the still circulating said fermented liquor into heat-interchanging relation to the hot raw liquor from the digester and the hot spent liquor from the still, thereby preheating the fermented liquor so that it will enter the

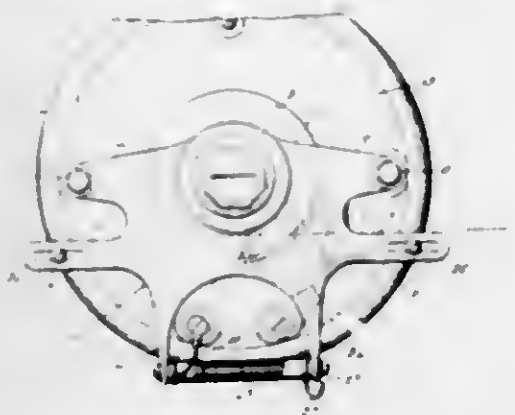
still at a temperature approximating the temperature of distillation, and supplying to the fermenting vats the cooled hot raw liquor; substantially as described.

1,312,294. MACHINE FOR COOLING BREAD. DANIEL K. ALLISON, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Nov. 20, 1917. Serial No. 203,926. Divided and this application filed June 28, 1918. Serial No. 242,487. 5 Claims. (Cl. 193-2.)



1. In a bread cooling machine comprising an endless conveyor and a plurality of pans suspended therefrom, a pan tipping mechanism consisting of a pair of cams arranged so that when one is engaging a pan the other is out of engagement and means controlling the movement of the cams to cause them to tip the pans alternately and successively.

1,312,295. LICENSE PLATE BRACKET FOR AUTOMOBILES. VINCENT G. APPLE, Dayton, Ohio. Original application filed Apr. 23, 1917. Serial No. 163,803. Divided and this application filed Feb. 14, 1918. Serial No. 217,151. 2 Claims. (Cl. 248-20.)



2. In combination with a dynamo electric machine having an end hub, a license plate bracket having means for supporting a license plate and means of attachment for securing it to the end of said dynamo electric machine including a part extending around said hub and means for supporting a resistance coil, behind the license plate.

1,312,296. SHAFT-COUPLING. VINCENT G. APPLE, Dayton, Ohio. Filed Oct. 21, 1918. Serial No. 259,009. 4 Claims. (Cl. 64-86.)

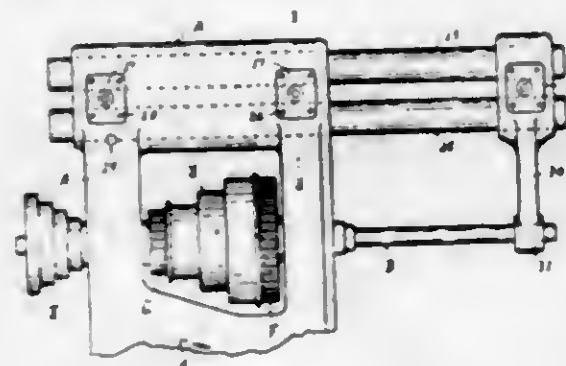
4. A shaft coupling comprising two helically wound parallel springs, each spring having its terminals at right angles to each other for connection to two shafts to be coupled together; means to connect said springs positively to the respective coaxially arranged shafts, and means positively connected to one shaft and having lost

motion connection to the other shaft whereby to positively connect both shafts together irrespective of the



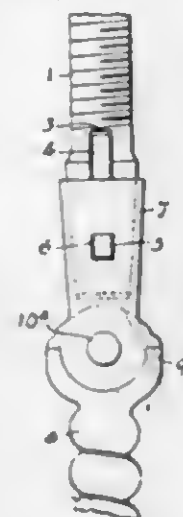
springs when the said shafts have been rotatively displaced with respect to each other to a predetermined extent.

1,312,297. MACHINE-TOOL. CHARLES A. BICKETT, Cincinnati, Ohio. Filed Mar. 10, 1918. Serial No. 222,601. 5 Claims. (Cl. 90-18.)



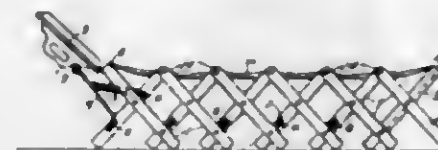
1. A machine tool comprising a main frame, a rotary spindle, a plurality of over-arms mounted upon said main frame with their axes in substantially one plane with the spindle axis, one of said over-arms being adjustable endwise relative to the main frame, a spindle out bearing hanger adjustably mounted upon said over-arms, means to rigidly clamp said respective over-arms to the main frame, and means to rigidly clamp said hanger to the respective over-arms.

1,312,298. DRILL CONNECTION. WILLIAM STANISLAU BILECK, Franklin, Kans. Filed Oct. 3, 1916. Serial No. 123,572. Renewed Jan. 9, 1919. Serial No. 270,444. 5 Claims. (Cl. 279-77.)



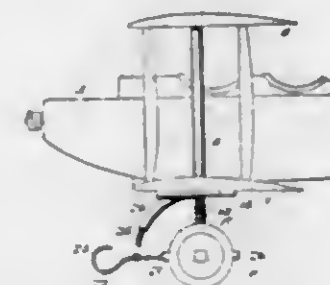
1. In a device of the character described, the combination of a feed screw having a polygonal head at one end thereof, a drill provided with a socket adapted to receive the polygonal head and having a lateral opening in one side thereof, a pivoted latch member mounted upon the head and formed with a nose to engage the lateral opening of the socket to lock the members together, and means engaging the latch member to relieve the pivot of excessive longitudinal thrust.

1,312,299. COMBINATION COT AND BENCH. AUGUST A. ALMEX, Minneapolis, Minn. Filed May 8, 1919. Serial No. 294,590. 1 Claim. (Cl. 5-5.)



A combination cot and bench consisting of a double set of longitudinally arranged parallel lazy tong supports adapted to be folded up when used as a bench and extended when used as a cot, a flexible sheet adapted to be stretched between the upper ends of said supports when in their extended positions, a cover hingedly secured to said supports, notched brackets fixed on said cover near each end thereof, a panel at one end of the device hingedly secured at its bottom, and adapted to swing out at its top so as to engage the notched brackets on the cover when the latter is swung back to be used as a pillow support for the cot, slotted links pivotally secured upon the inner side of said panel and slidably engaging pins secured in opposite lazy tong members, said links being adapted to limit the outward swinging movement of said panel to the position where it will best act as a support for said cover.

1,312,300. AEROPLANE. ANTHONY AMIA, Corona, N. Y. Filed Feb. 28, 1919. Serial No. 279,704. 2 Claims. (Cl. 244-2.)

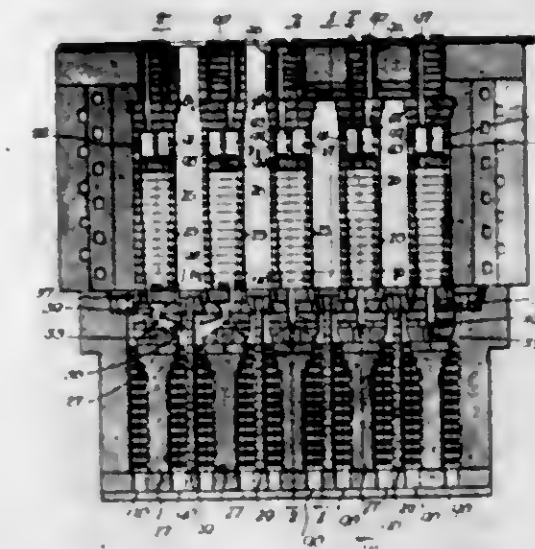


1. In an aeroplane, a pair of traction wheels, an axle for said wheel, uprights connected with said axle, tubular members receiving the ends of said uprights, springs in said tubular members engaging the ends of the uprights and shock absorber springs through which the uprights pass below the tubular members and located between the axle and a stationary part of the device.

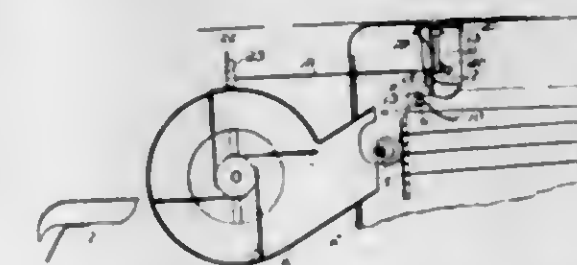
1,312,301. COKING RETORT-OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 7, 1917. Serial No. 147,134. 29 Claims. (Cl. 202-9.)

25. In a coking retort oven, in combination: a series of elongated coking-chambers with intermediate heating-walls constituted of series of combustion-flues; cross-regenerators for preheating air and other cross-regenerators for preheating gas, both positioned under the series of coking-chambers and heating-walls and having ducts communicating with each of said flues; other gas-conduits to lead an alternative gas-supply to said flues independently of said gas-regenerators; means for employing said alternating gas-supply and converting said gas-regenerators into supplemental air-regenerators; and removable plugs for reducing the orifices of the aforesaid regenerator-ducts into said flues when such alternative gas-supply and supplemental air-regenerator are employed, the said plugs being adapted to reduce the cross-section of the inflowing air-streams without deflecting

them from substantial parallelism with the gas-streams issuing into the flues from said alternative gas-supply; substantially as specified.

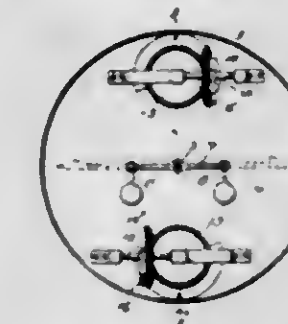


1,312,302. GRAIN-DISTRIBUTING MECHANISM. BENJAMIN R. BENJAMIN, Oak Park, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Jan. 17, 1916. Serial No. 72,509. 14 Claims. (Cl. 130-15.)



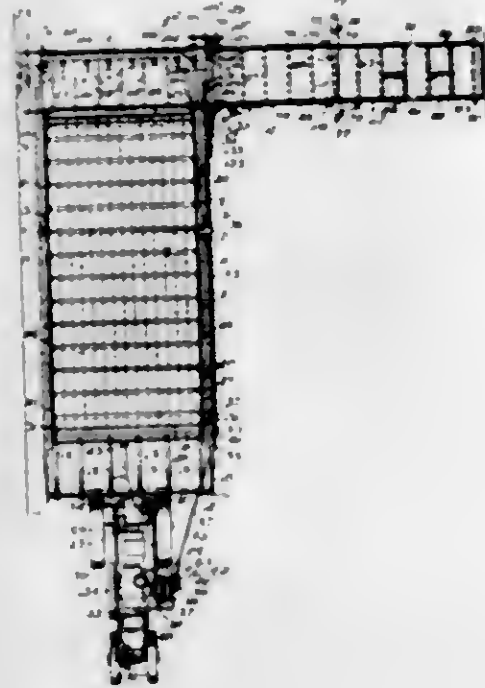
2. In combination, a separator casing, a screen therein, an elevator, a swinging distributor disposed above said screen, means connected to the elevator for moving said distributor relative to said screen, and a deflector disposed across the path of the grain delivered by said elevator.

1,312,303. AIRCRAFT-INCLINOMETER. GEORGE W. DEAN, Brooklyn, N. Y. Filed Sept. 21, 1917. Serial No. 102,526. 1 Claim. (Cl. 33-215.)



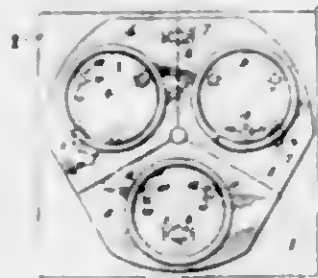
In an inclinometer for aircraft, the combination of a rasing, a dial in said rasing and graduated to indicate the degree of inclination of the craft, an indicator co-operating with said dial, a shaft carrying said indicator, an arm having its center secured to said shaft, and a pendant weight swiveled on each end of said arm and adapted to sweep through an arc of three hundred and sixty degrees about an axis extending longitudinally of said arm.

1,312,301. GRAIN-HARVESTING MACHINERY. EDWARD W. BRAGG, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Dec. 9, 1915. Serial No. 66,003. 3 Claims. (Cl. 214—83.)



1. A power propelled vehicle, an elevating equipment including, in combination, a receptacle having a movable bottom for discharging material therefrom, elevating mechanism carried by said receptacle and extending substantially at right angles to the receptacle for receiving the discharged material and elevating the same, and means whereby said movable bottom and elevating mechanism may be actuated simultaneously or the elevating mechanism alone from the source of power when the equipment is being propelled or when it is stationary.

1,312,305. METHOD AND APPARATUS FOR MANUFACTURING WINDOW-GLASS CYLINDERS. JAMES H. CAMPBELL, Lancaster, Ohio, assignor to The Columbus Glass Company, Lancaster, Ohio. Filed Jan. 3, 1919. Serial No. 269,524. 5 Claims. (Cl. 40—53.)

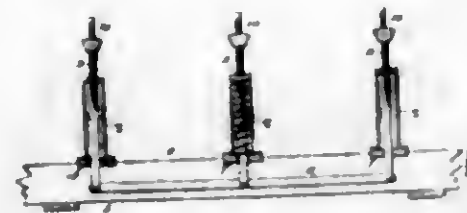


5. In a glass drawing apparatus, the combination of a turn table, a plurality of pots thereon and three point screw supports for each pot, the said screw supports being carried by the turn table and each screw being adjustable independently of the other.

1,312,306. HORSE FOR GLASS CYLINDERS. JAMES H. CAMPBELL, Lancaster, Ohio, assignor to The Columbus Glass Company, Lancaster, Ohio. Filed Jan. 7, 1919. Serial No. 270,023. 3 Claims. (Cl. 40—48.)

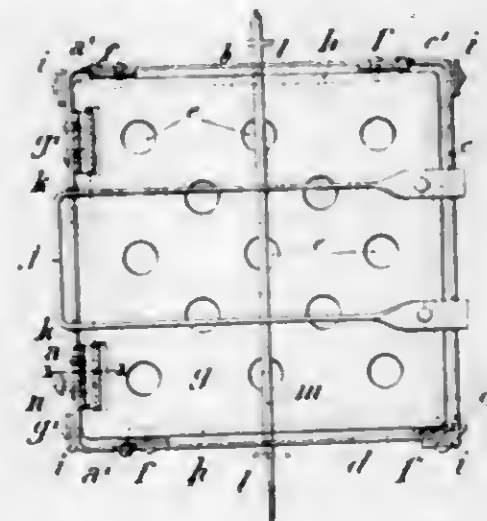
5. In a horse for glass cylinders, the combination of two standards, a saddle for each, each saddle having a

shank passing through its standard and free to move vertically thereon, a rocking beam connecting the two saddles



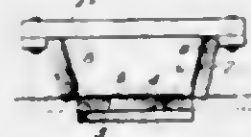
at their lower ends, a third saddle and its shank the latter forming the fulcrum for the rocking beam, and a spring supporting the shank of said third saddle.

1,312,307. FOLDING BRAZIER. JEAN COUDON, Lyon, France. Filed Aug. 6, 1918. Serial No. 248,042. 1 Claim. (Cl. 126—30.)



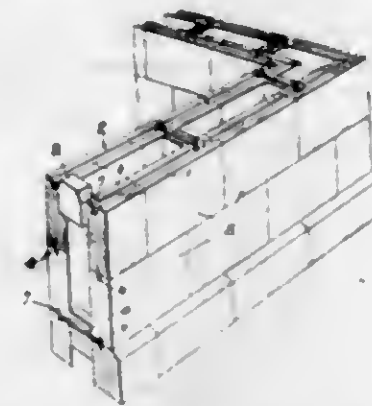
A folding brazier comprising four sheet metal side walls provided with air admission orifices, two of said side walls being each provided adjacent each end with two longitudinal openings, metal strips riveted to the other two side walls, said strips being bent to form closed loops engaging in said longitudinal openings, inwardly projecting flanges extending along the bottom edges of said side walls, a bottom plate, hinges connecting said bottom plate to the bottom edge of said side walls, the said bottom plate resting on said flanges when the stove is in use, feet for supporting the brazier, a U-shaped strip, and loops on the open ends of said strip engaging in openings in the top of one of said side walls so that said strip can be turned over and lie across the top of the brazier and engage in slots in the opposite side wall for the purpose of maintaining the whole rigid and also for supporting cooking vessels.

1,312,308. APPARATUS FOR CRYSTALLIZING SUGAR. RAYMOND E. DALY, Chicago, Ill., assignor to American Malt Products Company, a Corporation of Maine. Filed Feb. 27, 1917. Serial No. 151,200. 7 Claims. (Cl. 107—19.)



1. A mold for sugar liquor and the like having a bottom, sides hinged thereto, an end piece hinged to said bottom and having flexible portions attached to the ends of said sides, straps attached to said end piece, and means for fastening said straps to said sides when the mold is closed.

1,312,309. WALL STRUCTURE. CHARLES DIERCKMANS, Little Ferry, N. J. Filed Oct. 3, 1916. Serial No. 123,470. 4 Claims. (Cl. 72—16.)



2. A spacing block for wall structures comprising a block having a tie-rod extending through the block from side to side with the portions of the side faces of the block containing the ends of the tie-rod parallel to each other on one side of the tie-rod and with the portions of the faces of the block to the other side of the tie-rod slightly cut away, substantially as described.

1,312,310. ILLUMINATING MEANS. EYHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,742. 1 Claim. (Cl. 240—1.)



A lamp structure, comprising a lamp fixture, a tube and a globe supported by said fixture, said tube closing both ends of the globe, phosphorescent material disposed between said tube and globe so as to be inclosed and protected by the same, and a source of light within said tube for activating the phosphorescent material disposed between said tube and globe.

1,312,311. MEANS FOR AND METHOD OF UTILIZING GAS FROM ELECTRIC STORAGE BATTERIES. EYHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,745. 3 Claims. (Cl. 240—1.)



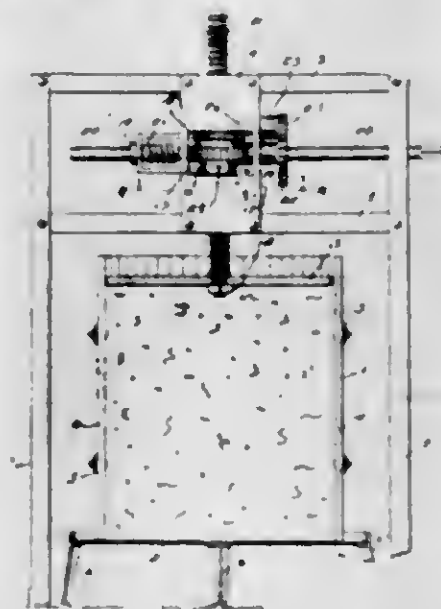
1. The herein described method of utilizing gas from an electric battery consisting in conveying gas escaping from an electric battery to a burner, inclosing said burner in a body of light-penetrating material having a coating of phosphorescent material, and burning said gas at the burner to activate said phosphorescent material.

1,312,312. ILLUMINATING DEVICE. EYHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Aug. 1, 1917. Serial No. 188,943. 3 Claims. (Cl. 240—1.)



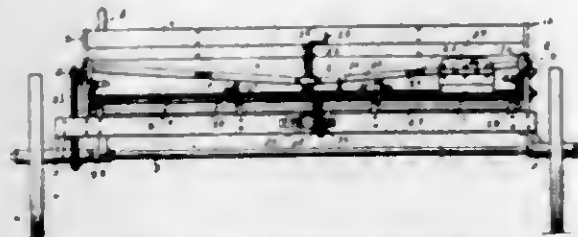
1. In an illuminating device, the combination with a lamp fixture and a source of light therein, of a curved diaphragm of light-penetrating material closing the front of said lamp fixture and phosphorescent material behind said diaphragm and inclosed thereby.

1,312,313. FRUIT-PRESS. JOHN T. DOVE, Milwaukee, Wis. Filed July 5, 1917. Serial No. 178,504. 1 Claim. (Cl. 100—44.)



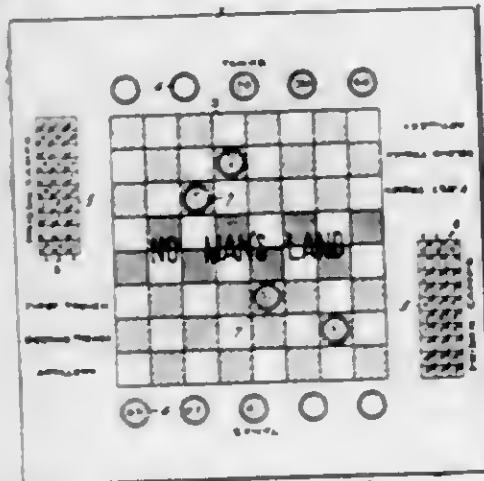
In a press, a pressing element including a feed screw having a longitudinal keyway, means for either shifting the element to or from pressing position without rotation at either one of two selective speeds or rotating said element without moving the same to or from the latter position at either one of said selective speeds, the first mentioned means comprising a pivoted relatively stationary dog slidably engaged in said keyway, a worm wheel having its bore threaded for engagement with the threads of the feed screw, a shiftable drive shaft slidably journaled substantially at right angles to the feed screw, a worm on the drive shaft intermittently engageable with the worm wheel, said worm and worm wheel constituting means for shifting the feed screw at one speed, the other speed being imparted by a bevel gear fixed to said worm wheel, an auxiliary drive shaft journaled substantially at right angles to the feed screw and parallel to the other drive shaft, a bevel gear on said auxiliary shaft and meshed with the other bevel gear, a pinion fixed to the auxiliary shaft, and a spur gear secured to the drive shaft and intermittently engageable with the pinion upon shifting said drive shaft, the second mentioned means comprising the foregoing element and means for locking the worm wheel to the feed screw, the pivoted dog being swung out of the keyway whereby the pressing element may be rotated at one speed by the rotation of the drive shaft and the engagement of the worm and worm wheel, and a second speed when the pinion and spur gear are engaged.

- 1,312,314. FEED-REGULATOR. CHARLES W. EISENMANN, JOHN S. HODEL, and GEORGE W. BAIZA, Cressna Park, Ill., assignors to Charles W. Eisenmann and John S. Hodel, Cressna Park, Ill. Filed Mar. 20, 1916. Serial No. 85,397. 7 Claims. (Cl. 83-44.)



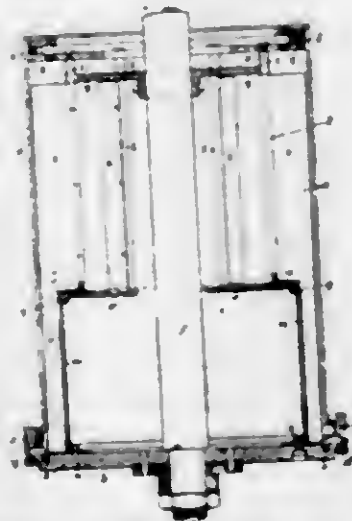
1. In a machine of the character described, in combination, a hopper, a gate board to control the discharge of material from said hopper, lever bars connected with said board and supporting the same on the hopper, means operatively connected with the inner ends of said lever bars for raising and lowering said board, and means for moving the lower part of said board in and out, said boards swingable on said lever bars.

- 1,312,315. GAME-BOARD. ALBERT F. EMMONS, Swisvale, Pa., assignor to I. Leonard Atkinson, Pittsburgh, Pa. Filed Dec. 28, 1917. Serial No. 209,209. 4 Claims. (Cl. 46-64.)



1. A game apparatus comprising a checker-board, a plurality of game-pieces having numbers on the bottom faces and bearing insignia on their upper faces characteristic of different countries, and one of said pieces having such insignia instead of a number on the bottom face.

- 1,312,316. METHOD OF SEPARATING SOLIDS FROM SUSPENSION IN LIQUIDS AND APPARATUS THEREFOR. WILLIAM JOHN GEE, London, England. Filed June 15, 1916. Serial No. 103,878. 7 Claims. (Cl. 210-25.)



1. A centrifugal separator, comprising a drum having two separated top plates, there being an inlet space be-

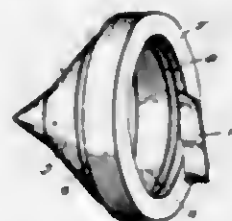
tween said top plates, a bottom plate for said drum, a filter drum mounted on the bottom plate and having a cover plate therefor, there being a space between the cover plate for the filter drum and the inner top plate for the main drum, a shaft connected to the drum, there being an outlet from the interior of the filter drum, and a plurality of radially disposed blades supported within the drum and having portions extending between the inner wall of the main drum and the outer wall of the filter drum, substantially as described.

- 1,312,317. SPARK-PLUG. FREDERICK GAEKEN, New York, N. Y. Filed Feb. 26, 1917. Serial No. 150,903. 1 Claim. (Cl. 123-169.)



In a spark plug, the combination with an outer spark terminal consisting of an annular member having a number of slots extending axially from one end thereof so as to give said annular member a castellated form, of an inner spark terminal comprising a smooth-edged disk having an edge of appreciable width, and a center rod supporting said disk, there being an open space between the interior of said outer spark terminal and said rod at least equal in width to the diameter of said rod, whereby a space for collection of explosive gas in rear of the inner terminal adequate to maintain a clear gap between said terminals, is provided, said outer spark terminal being provided with secondary spark points, which are screws, the ends of which face the inner spark terminal, which screws may be advanced or retracted individually toward or from said inner spark terminal.

- 1,312,318. SEALING-STRIP-SOLDERING GUIDE. JACOB I. GLICKERMAN, Chicago, Ill. Filed July 18, 1918. Serial No. 245,579. 1 Claim. (Cl. 113-111.)



An appliance for holding bands in soldering relation to reduced cylindrical necks of bottles comprising a one-piece collar having major and minor bore portions, the former snugly receiving the body and the latter the neck, the diameter of the minor portion being sufficiently in excess of the neck to afford a space to receive and frictionally hold the band with the ends thereof overlapped whereby one end is left free after the soldering operation to form a hand hold to permit subsequent ripping of the band.

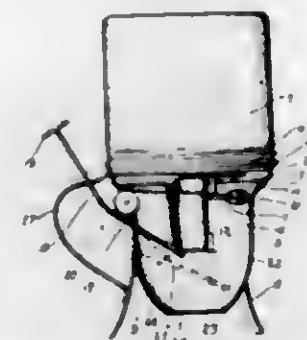
- 1,312,319. DRAFT DEVICE FOR FURNACES. MELVILLE M. GRANT, Alliance, Ohio. Filed Mar. 9, 1918. Serial No. 221,438. 3 Claims. (Cl. 110-175.)



1. A draft device for furnaces including a casing provided at one side with an air outlet port and in the opposite side with a circular series of air inlet ports, a heat radiating plate carried by the casing located centrally of the circular series of ports, and an annular air conducting

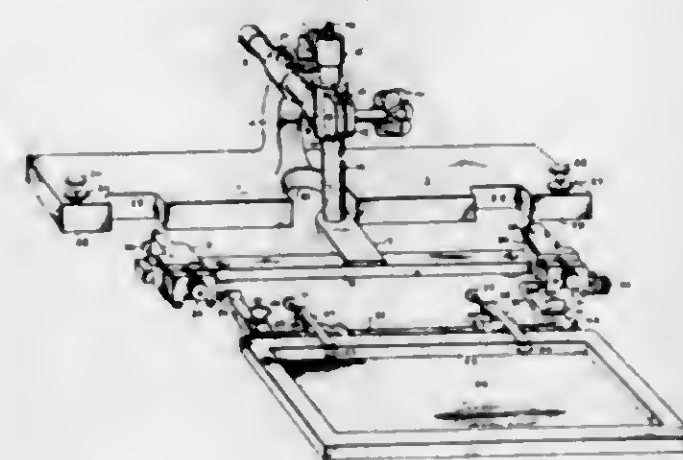
member surrounding the outlet port and flared inwardly toward the inner surface of the radiating plate whereby to draw heated air from the entire area of the plate.

- 1,312,320. SUGAR-DISPENSING DEVICE. HENRY JOSEPH GARNIER, Bridgeport, Conn. Filed May 16, 1919. Serial No. 297,518. 2 Claims. (Cl. 211-8.)



1. A device of the character described comprising a base, a receptacle movably secured to said base, a horizontal partition carried by said base, a spout carried by said partition, a hinged closure for the lower end of said spout, a sliding closure for the upper end of said spout, and means comprising a slotted plunger and a flexible connection for simultaneously operating said hinged closure and said sliding closure.

- 1,312,321. PRINTING AND MARKING APPARATUS. JOSEPH FREDERICK GAEKEN, New York, N. Y. Filed Nov. 19, 1917. Serial No. 202,844. 2 Claims. (Cl. 41-45.)

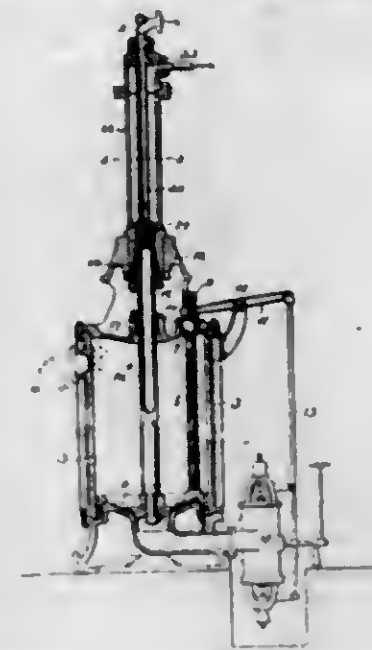


1. A printing film holder comprising a transverse weighted base, a standard projecting upwardly from the same, a bar longitudinally adjustable within said standard, a second bar vertically adjustable upon said first mentioned bar, a film holding mechanism secured to the lower end of said second bar, said mechanism having clamps for securing a framed film, and means for securing said clamps longitudinally for a rectangular film or at an angle to the longitude for a circular film.

- 1,312,322. HYDRAULIC INTENSIFIER. HUGO HATZ, Alliance, Ohio, assignor to The Morgan Engineering Company, Alliance, Ohio. Filed June 9, 1916. Serial No. 102,787. 2 Claims. (Cl. 138-17.)

1. The combination of a hydraulic cylinder open at one end, a stationary hollow plunger secured within said cylinder, each having an outlet pipe, a hollow movable plunger open at one end and embracing the free end of the stationary plunger, and means for actuating said movable plunger, the surface area of the free end of the hollow

movable plunger and the surface area of the free end of the hollow stationary plunger being substantially the same whereby fluid will be discharged from the hydraulic cylinder and plunger in equal volumes.

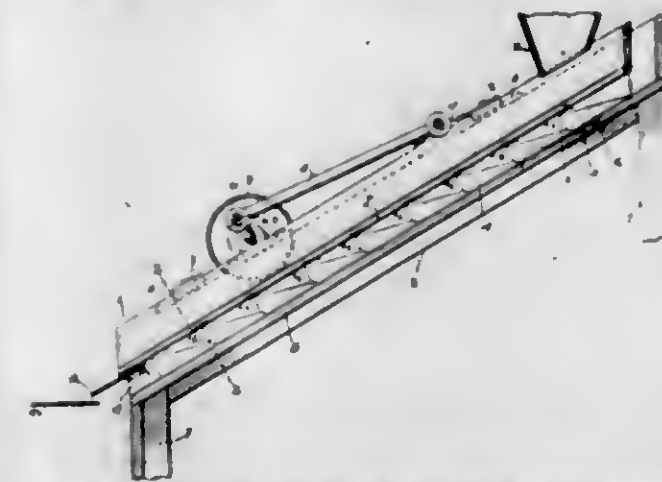


same whereby fluid will be discharged from the hydraulic cylinder and plunger in equal volumes.

- 1,312,323. MEANS FOR FASTENING RUGS ON CARPETS. MARY H. HANNAH, Chicago, Ill. Filed Oct. 11, 1918. Serial No. 257,052. 1 Claim. (Cl. 16-71.)

The combination of a floor, a carpet on said floor, a rug laid thereon, with the carpet extending beyond the edge of the rug, and retaining means in the form of a fastener having a single long sharp pointed portion extending inwardly and downwardly at an angle through the carpet and rug, so that the sharp point is below the surface of the carpet, and whereby practically this entire portion is embedded in the fabric of the rug and carpet, a curved portion extending snugly over and around said edge from the outer end of said long portion, and a much shorter portion extending inwardly under said edge from said curved portion to form a head that limits the straight endwise insertion of the fastener and which is held by the edge of the rug against twisting around, the two portions of unequal length being respectively insertible successively into the double thickness formed by the rug and carpet and under the edge of the rug, and the fastener being removable by a straight pull on the head thereof.

- 1,312,324. OIL-SEPARATOR. OWEN HAWKINS, Globe, Ariz. Filed Mar. 12, 1919. Serial No. 282,098. 6 Claims. (Cl. 83-56.)



6. In a separating device for screening crushed ore carried in a liquid, a frame member, a screen therefor, a

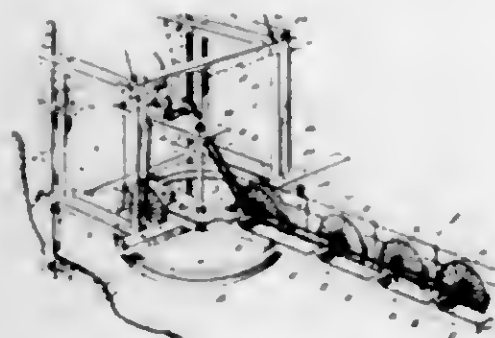
trough, steps therefor having the edges thereof separated from the screen a sufficient distance to form as the liquid flows thereover a series of impinging waves or crests which strike the screen and means for obtaining relative motion between the steps and the screen member.

1,312,325. MOLD FOR THE FORMATION OF CANDIED STICKS. HENRY M. HINCK, Brooklyn, N. Y., assignor to Clarence B. Hart, Brooklyn, N. Y. Filed Feb. 26, 1919. Serial No. 279,275. 2 Claims. (Cl. 107-19.)



2. A mold for the formation of candied sticks having its side wall formed with a radial channel communicating with the interior of the mold, the bottom of the said channel being disposed above the bottom of the interior of the mold.

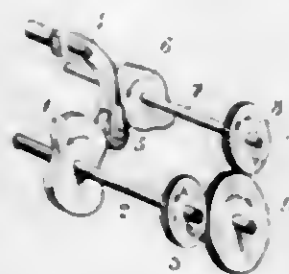
1,312,326. WATER-MOTOR. OLAF L. HOWE, Missoula, Mont. Filed Feb. 12, 1917. Serial No. 148,070. 4 Claims. (Cl. 170-131.)



1. In a water motor, a frame, a valve carrier mounted on said projecting outwardly from said frame, said carrier being adapted for horizontal turning on said frame, a shore support for said frame, means for vertically adjusting the frame on said shore support relative to the current, said means forming a pivotal connection between said frame and said support to permit of the raising of said frame from the water.

1,312,327. [WITHDRAWN.]

1,312,328. CAM WHEEL TRANSMISSION. JORAN PETER JOHANSSON, Fannalund, Enköpings, Sweden. Filed Aug. 6, 1918. Serial No. 248,505. 3 Claims. (Cl. 74-1.)



1. A transmission mechanism comprising a movable member, a pair of shafts, a pair of cam wheels fixed to said shafts and having the cam surfaces thereof arranged parallel to the shafts, and a roller carried by the member and constantly contacting with the cam surfaces of the wheels.

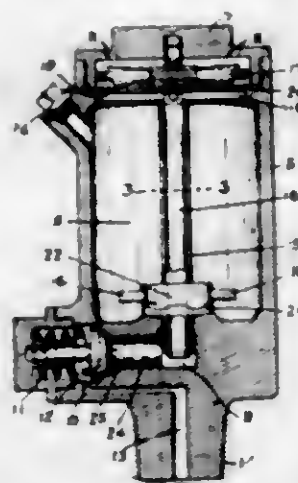
1,312,329. BALL COCK. OWEN H. JONES, Hartford, Conn. Filed Mar. 1, 1919. Serial No. 280,052. 7 Claims. (Cl. 137-104.)



2. A ball cock including a case, a plunger projecting through one wall thereof, a float rod, a hood to overlie the end of said plunger to obstruct spouting of liquid from the case, and a pivot pin pivotally securing said rod on the case and removably securing said hood in place.

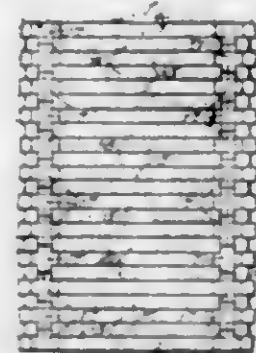
4. A ball cock including a case, a plunger projecting through one wall thereof, a hood secured to the end of the case and overlying the end of said plunger, a lug projecting from the inner side of the hood to support it against vertical movement, a lug projecting from said hood to support it against horizontal movement, and means for removably securing the hood in place.

1,312,330. LUBRICATOR FOR AIR-COMPRESSORS. JOHN P. KELLY, Pittsfield, Mass. Filed Jan. 20, 1919. Serial No. 272,004. 13 Claims. (Cl. 184-55.)



6. In a lubricator for air pumps, the combination of a casing having an oil chamber, a feed passage leading therefrom, a check valve in said feed passage, and agitating means located in said oil chamber, both the agitating means and the check valve being operated by the suction of the air pump.

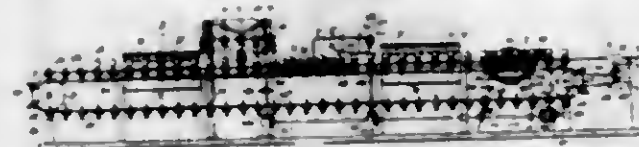
1,312,331. CRIBBING. PAUL KIRCHER, Chicago, Ill., assignor, by mesne assignments, to Massey Concrete Products Corporation, a Corporation of Virginia. Filed Sept. 20, 1918. Serial No. 234,909. 9 Claims. (Cl. 61-47.)



8. A cribbing comprising a plurality of headers arranged in a vertical tier, and a plurality of stretchers

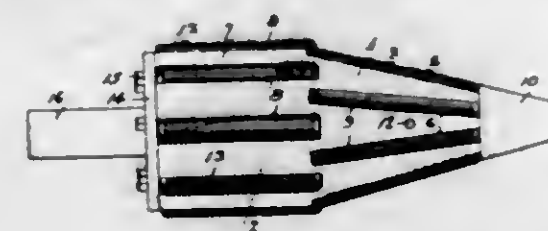
and fillers alternately arranged in a second tier, and provided at one end with means formed integrally therewith for interlocking with the adjacent ends of said headers, the outer ends of said headers and the outer faces of said stretchers and fillers lying in the same plane.

1,312,332. METHOD AND MACHINE FOR PEELING TOMATOES. CHARLES KIRINO, Ogden, Utah. Filed Nov. 8, 1918. Serial No. 261,605. 10 Claims. (Cl. 146-14.)



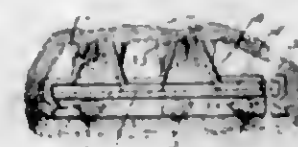
1. In a method of peeling fruits or vegetables as characterized, the steps of slitting the unpeeled vegetable or fruit skin deep, on lines running from points near the top to points near the bottom, removing the top on a line approximately adjacent to the upper terminals of the slits, rupturing the skin on a transverse line adjacent to the lower ends of the slits, scalding the article thus slit and then removing the skin in sections between the slits.

1,312,333. DEVICE FOR SMOOTHING AND SIZING PIPE. SIMON LEBOW, Bellaire, Ohio. Filed Apr. 23, 1919. Serial No. 292,222. 5 Claims. (Cl. 153-81.)



1. In a device of the character described, the combination of a body having a straight portion and a conical end, longitudinally extending circular seats formed in said straight and conical portions, smooth-faced rollers engaging said seats, and means for holding said rollers in position.

1,312,334. TOOTH-CLEANING DEVICE. EMANUEL LOEWENBERG, Chicago, Ill. Filed Oct. 1, 1915. Serial No. 53,594. 4 Claims. (Cl. 15-39.)

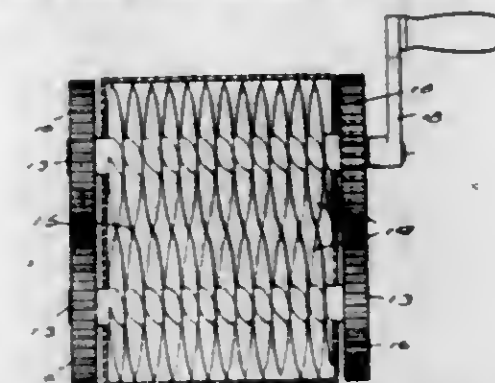


2. In a tooth cleaning device the combination of a metal back provided with a longitudinal slot, a flange projecting upwardly from said back and rigidly connected therewith, another flange in opposition to said first named flange and oscillatably mounted on said back, a pad removably inserted between said flanges, and a detachable means releasably connected with the back for forcing said movable flange in direction toward the stationary flange.

1,312,335. SOAP-CUTTER. JOHN E. MCKERRIE, Waterford, Ontario, Canada. Filed Nov. 18, 1918. Serial No. 263,026. 1 Claim. (Cl. 146-11.)

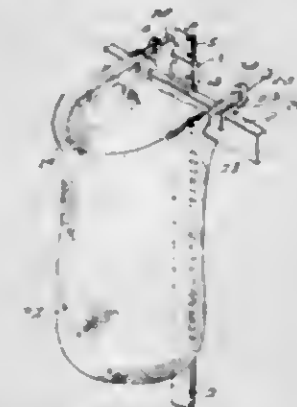
A soap cutter comprising a casing having side walls, parallel shafts extending through the casing intermediate its height in spaced relation and in the same horizontal plane, spiral cutting blades extending about the shafts

and having their cutting edges extending adjacent the walls of the casing and between the shafts extending in



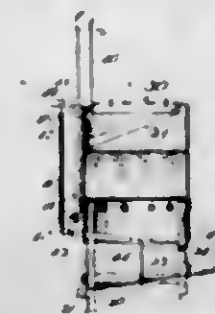
close relation but out of contacting relation, means for rotating one of said shafts, and means for transmitting rotary movement from one shaft to the second shaft.

1,312,336. SACK-HOLDER. ROBERT I. McNAUGHTON, Minot, N. D. Filed Nov. 12, 1918. Serial No. 262,183. 3 Claims. (Cl. 83-26.)



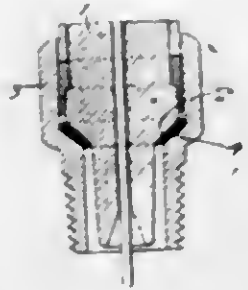
1. The combination with a support including a cross bar, of a U-shaped carrier having its arms extending across the cross bar, and clamps connecting the arms of the carrier with the cross bar, said clamps each comprising side arms extending in spaced relation, spaced jaws depending from the side arms upon opposite sides of the cross bar and connecting the side arms, a bridge connecting the outer ends of the side arms, and a resilient strip extending between the cross bar and one of said jaws and having its free end portion bent to extend between the side arms, the resilient strip of the clamps engaging the side arms of the carrier to hold the same in engagement with the bridges.

1,312,337. EGG-TREATING MACHINE. AUGUST MARTIN and HENRY H. DOERING, Chicago, Ill.; said Doering assignor to said Martin. Filed June 5, 1918. Serial No. 238,263. 7 Claims. (Cl. 99-15.)



1. A machine of the class described, comprising a tank portion provided with a plurality of chambers, means whereby the chambers are insulated from each other, a tray mounted in each chamber, means whereby the trays may be moved vertically in their respective chambers, and means whereby the trays are normally maintained at the top of their respective chambers.

1,312,338. GASKET. ARTHUR R. MOSLER, New York, N. Y. Filed Sept. 16, 1916. Serial No. 120,524. 2 Claims. (Cl. 123-169.)



1. The combination with the shell and insulator of a spark plug, of a gasket interposed between a shoulder on the insulator and a seat on the shell, said gasket comprising a casing of suitable soft or pliable sheet metal bent to form a lateral bottom wall, inner and outer side walls and a lateral top wall having an annular slot therein, and a filling of suitable yielding packing material for the casing projecting through said annular slot into engagement with the insulator shoulder, the bore of the gasket being made sufficiently greater than the diameter of the insulator in the same plane, to insure the spacing of the inner periphery of the gasket from the outer periphery of the insulator for preventing lateral pressure against the insulator.

1,312,339. COMPOSITION FOR CASE-HARDENING. CHARLES F. MEBANE, Cleveland, Ohio, assignor to The Carbonizing Engineering Company, a Corporation of Ohio. Filed Dec. 24, 1914. Serial No. 878,972. 3 Claims. (Cl. 118-30.)

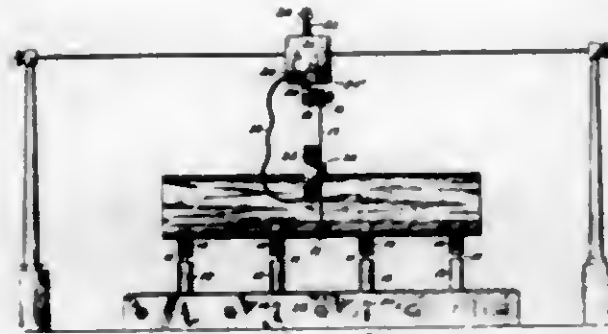
1. A composition of matter for the purpose specified comprising a mixture of charcoal and sawdust impregnated and coated with carbonate, the ingredients being mingled in about the following proportions:
Charcoal, 100 parts by weight.
Sawdust, 3 to 35 parts by weight.
Carbonate, 3 to 35 parts by weight.

1,312,340. EXTRACTION FLASK OR TUBE. JULIUS JOHN MOJONNIE, Oak Park, Ill., assignor to Mojonnier Bros. Co., Chicago, Ill., a Corporation of Maine. Filed Sept. 22, 1917. Serial No. 192,766. 14 Claims. (Cl. 23-3.)



1. An extraction tube or flask comprising a settling chamber and an extraction chamber arranged at an angle one to the other.

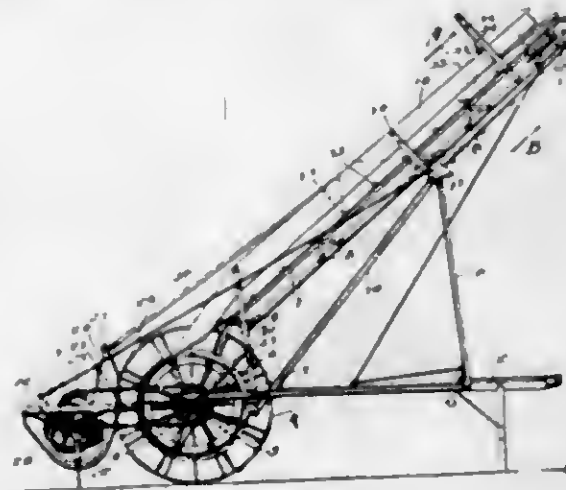
1,312,341. CAPPING-OFF DEVICE. CHARLES T. MOORE, Lancaster, Ohio, assignor to The Columbus Glass Company, Lancaster, Ohio. Filed Jan. 24, 1919. Serial No. 272,848. 8 Claims. (Cl. 49-50.)



1. In an apparatus for severing glass cylinders, the combination of a horse composed of a series of saddles for supporting a cylinder, means for moving intermediate saddles away from the cylinder, a looped heating wire secured at its ends to a carrier and adapted to embrace the cylinder, and means for directing the electric current through the looped wire for heating the latter.

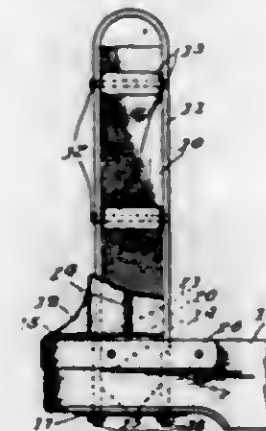
7. Glass severing apparatus comprising an overhead track, a trolley thereon, a cross head yieldably carried by the trolley, a heating wire loop secured at its ends to said cross head and a combined wire tightener and switch adapted to engage the loop for tightening the same around the glass cylinder and for closing an electric circuit through the wire loop.

1,312,342. HAY-LOADER. EDWARD MOWAT, Steeple, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed June 1, 1915. Serial No. 31,568. 2 Claims. (Cl. 193-14.)



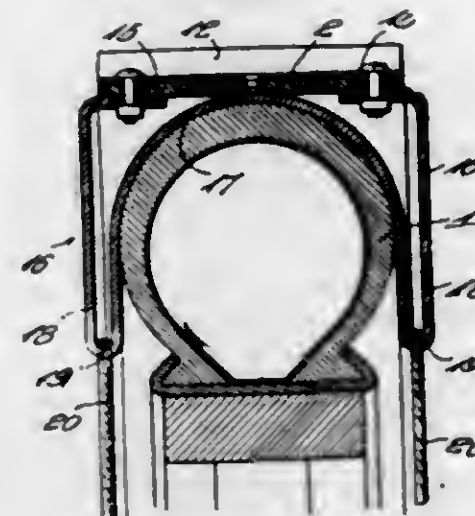
1. In a hay loader, elevator mechanism including a relatively fixed frame and hay elevating means thereon, a rising and falling compressor disposed above said elevating means, and laterally extending resilient supporting members upon the opposite sides of said frame, each of said members having one end secured to said fixed frame and having its opposite end pivotally connected with said compressor, said resilient members being bowed outwardly beyond the frame and elevating means and extending upwardly over said compressor, whereby a lateral movement of said compressor is permitted and whereby overhauling hay may be fed upwardly and delivered without clogging the elevating mechanism.

1,312,343. REMOVABLE STANDARD FOR WAGON-BOLSTERS. JAMES A. MOXEY, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Aug. 13, 1917. Serial No. 185,939. 10 Claims. (Cl. 21-54.)



10. In combination, a supporting member, a metallic socket bracket resting thereon but not directly secured thereto, a stake seated in said bracket, and means carried by said stake for securing said stake and socket to said supporting member.

1,312,344. TIRE-GUARD. CHARLES A. NETHERCUTT, Burnetts Creek, Ind. Filed Aug. 17, 1917. Serial No. 186,782. 1 Claim. (Cl. 152-16.)

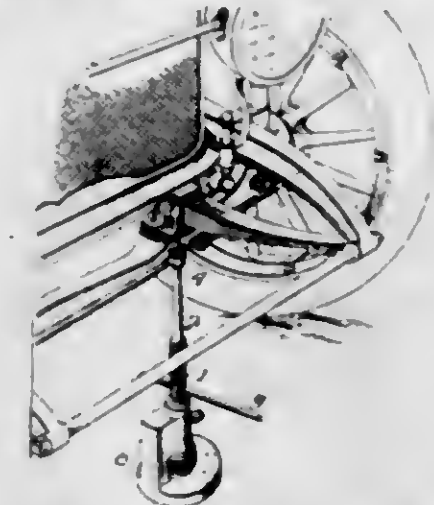


A tire guard comprising a band, means for connecting the band, saddles arranged transversely and in spaced relation at the inner side of the band and each formed of a single piece of metal and including an intermediate curvilinear portion that straddles and snugly fits the cross-section of a tire and terminates in inwardly-extending inner side arms, outer side arms opposite to and spaced from said inner side arms, transverse bights joining the inner ends of said inner and outer side arms, and transverse, inwardly-directed terminal portions at the outer ends of said outer side arms, connected to the band; the curvilinear intermediate portion and the inner and outer side arms forming loops that are adapted to rest parallel to and at opposite sides of a tire and are open at their comparatively large outer ends and cables seated in the bights of said loops and having their ends detachably connected together.

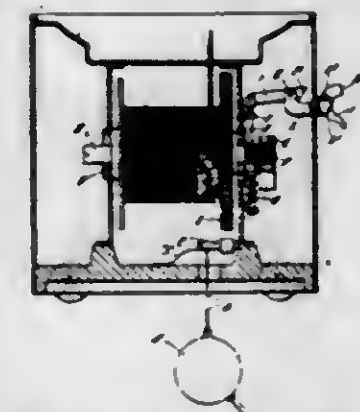
1,312,345. THREAD-CUTTING TOOL. MALCOLM A. NEWMAN, Floresville, Tex. Filed Sept. 25, 1916. Serial No. 122,005. 3 Claims. (Cl. 10-1.)

3. In a screw threading tool, a thread cutting member, a support therefor having one extremity screw threaded

for engaging the threads of said cutting member, and a shoulder adjacent said screw threaded extremity for limiting the extent of engagement between said cutting member and said support to provide a freeway for the initial engagement of the cutting member with the work.



1,312,346. SUBMARINE MINE. THOMAS KEPPEL NORTH, Westminster, London, England, assignor to Vickers Limited, Westminster, England. Filed June 21, 1917. Serial No. 176,059. 5 Claims. (Cl. 102-3.)



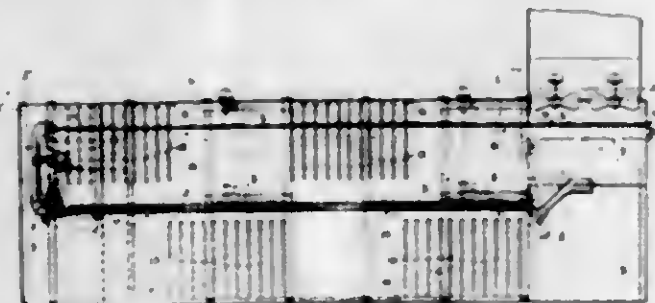
3. A submarine mine comprising a flotation chamber, an anchor, a mooring cable connecting said anchor to said flotation chamber, paying out gear for said mooring cable, a drum forming part of said paying out gear, an axle for said drum formed with a screw threaded portion, an axially movable screw threaded nut mounted on the screw threaded portion of said axle, means for restraining said nut against rotary motion, a plummet, a plummet supporting device on the anchor casing, and locking means controlled by the paying out of said mooring cable and the axial movement of said nut which cause the said plummet supporting device to release the plummet when the mine has been launched and a predetermined length of the mooring cable has been paid out.

1,312,347. SEALING-WAX APPLIER. WILLIAM H. OGDEN, Philadelphia, Pa. Filed Apr. 19, 1919. Serial No. 291,374. 2 Claims. (Cl. 219-21.)



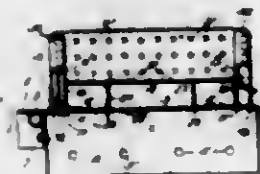
1. A sealing wax applier, consisting of a wax receptacle, having its forward end open and unobstructed and formed by converging top, side and bottom walls, said bottom wall being of less length than said other walls so as to form an elongated outlet for the melted wax, and an electric heating device carried by said receptacle.

1,312,348. MACHINE FOR DRYING HANKS OR WARPS OF YARN, WOVEN OR FELTED FABRICS, LEATHER, AND FIBROUS MATERIALS. THOMAS OGLE, Bramley, near Leeds, England. Filed Oct. 5, 1918. Serial No. 256,949. 3 Claims. (Cl. 34—12.)



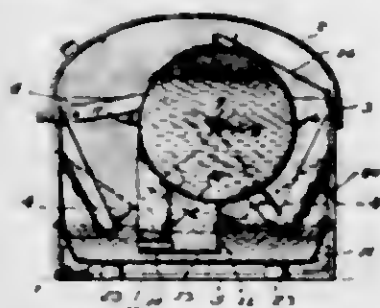
1. In a machine for drying hanks or warps of yarn, woven or felted fabrics, leather and fibrous materials, the combination of a longitudinal drying chamber fitted with traveling chains for conducting the moist goods through said drying chamber, side compartments contiguous to said drying chamber, fans for circulating air among the goods during their passage through said drying chamber, and heaters for warming the air circulated by said fans, there being slots or openings so located in the side walls or partitions of said drying chamber leading into said side compartments as to cause the air set in motion by said fans to circulate across said drying chamber in a diagonal direction, either upward or downward or both.

1,312,349. IRON STAND. DAVID OSSBY, New York, N. Y. Filed May 3, 1919. Serial No. 294,561. 3 Claims. (Cl. 68—27.)



1. An iron stand, including a plate, an iron-supporting plate above and in spaced relationship to said first-named plate, inner walls extending around the rear and longitudinal edges of such supporting plate, and outer walls having their upper edges secured to the upper edges of the inner walls, the lower edges of all such walls being secured to the first-named plate.

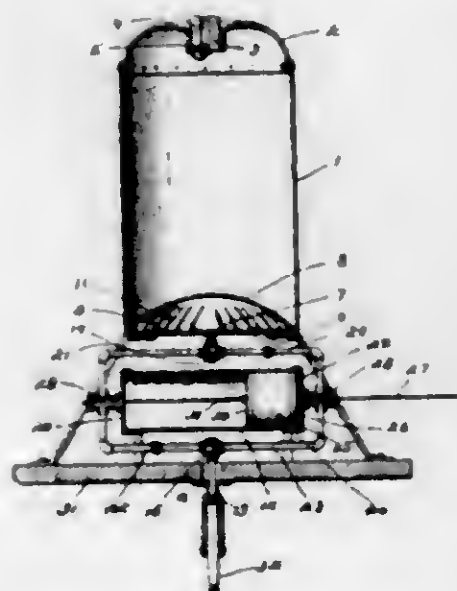
1,312,350. STOCK WATERER. PETER PAULSEN, Schleswig, Iowa. Filed Apr. 4, 1919. Serial No. 287,466. 3 Claims. (Cl. 110—72.)



1. A stock waterer, comprising a casing, a drinking trough supported in the lower portion of the casing, a closed cover for the casing, a brace for holding the cover in raised position, a cylindrical reservoir mounted within the casing to turn about a horizontal axis and provided with an opening in its periphery for the flow of water, and a hood outside the reservoir surrounding said opening provided with an inner closed chamber communicating with the reservoir through said opening, and an outer open

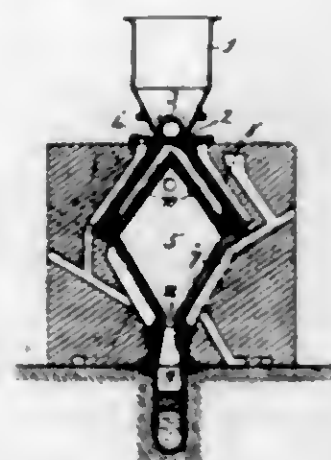
chamber separated from the inner chamber by a partition above the water line in the reservoir when the latter is in filling position and having openings for the passage of air and water, and means for holding the reservoir in filling position with the hood and partition projecting horizontally from the reservoir.

1,312,351. MEASURING APPARATUS. LAWRENCE W. PECK, Wichita, Kans. Filed Apr. 23, 1918. Serial No. 93,517. Renewed Jan. 15, 1919. Serial No. 271,342. 1 Claim. (Cl. 221—102.)



In a measuring apparatus of the class described, a measuring cylinder having tubular extensions at the ends, valved feed connections discharging into said tubular extensions, valved discharge connections leading from said tubular extensions, a piston arranged to reciprocate in the cylinder and a rod attached to and movable with said piston, said rod extending through and reciprocating in said tubular extensions, and being of less diameter than said tubular extensions, and said tubular extensions being provided with guides for said rod.

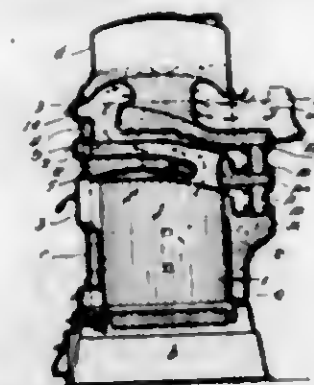
1,312,352. APPARATUS FOR THE DISTILLATION OF COAL. ALBERT PINET and ALBERT DEBOUT, Paris, France. Filed July 17, 1915. Serial No. 40,525. 7 Claims. (Cl. 48—101.)



1. An apparatus for distilling pulverized coal, comprising a distilling chamber having the shape of a horizontal prism of transversely lozenge-like section, means for heating the lower inclined walls of said chamber, channels made in the upper inclined walls of the chamber and opening into the chamber above the upper ends of said lower inclined walls, and feeding means for continuously bringing

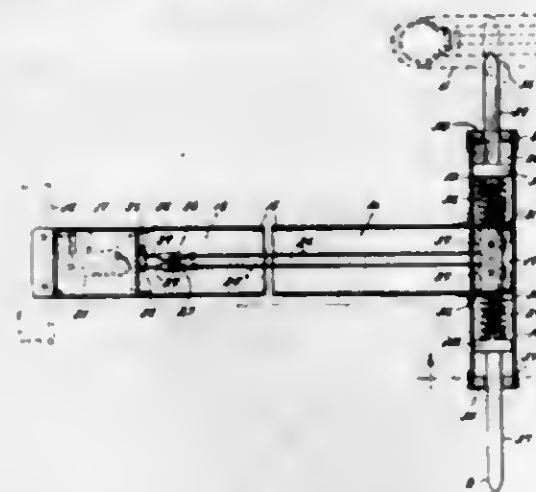
pulverized coal to said channels, the inclination of said channels and of said lower inclined walls being such that pulverized coal may slide thereon by its own weight.

1,312,353. BOILER. RICHARD D. REED, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1915. Serial No. 51,163. 5 Claims. (Cl. 122—218.)



1. A sectional boiler including a water jacketed fire pot section, an upper section fitted thereto and forming a water chamber, said water chamber having a bottom adapted to form a top for said fire pot section, and a flue extending transversely through said water chamber, said flue being branched in its central portion to surround a portion of said water chamber and being open at one end through said bottom to the fire pot section.

1,312,354. LOCKING DEVICE FOR AUTOMOBILES. GEORGE RADZIKOV and WILLIAM H. H. ZENTMYER, Philadelphia, Pa. Filed May 26, 1919. Serial No. 290,772. 3 Claims. (Cl. 70—90.)

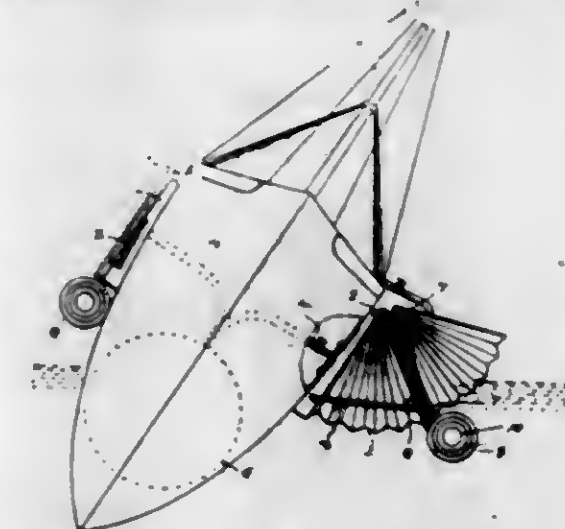


1. A locking device for vehicles adapted to be secured to the underframe and comprising in combination, a T-shaped casing, a lock disposed in the leg portion, flexible connections from the bolt of said lock connecting with spring influenced plungers located in the cross portion of said T-shaped casing and having protruding members adapted to be projected between the spokes of the wheels to lock the vehicle against traveling movement.

1,312,355. PNEUMATIC FOLDING ATTACHMENT FOR KEEPING DAMAGED VESSELS AFLOAT. JOHN T. REID, Lovelock, Nev. Filed July 6, 1918. Serial No. 248,596. 2 Claims. (Cl. 114—65.)

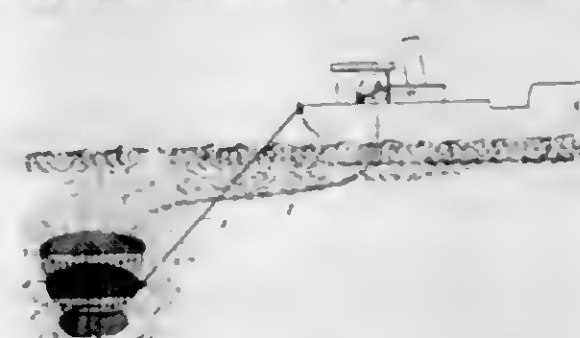
1. A pneumatic vessel attachment comprising a bellows member adapted to be applied to the side of the vessel,

means for inflating the bellows member, means for holding the bellows member in extended position, a bar at-



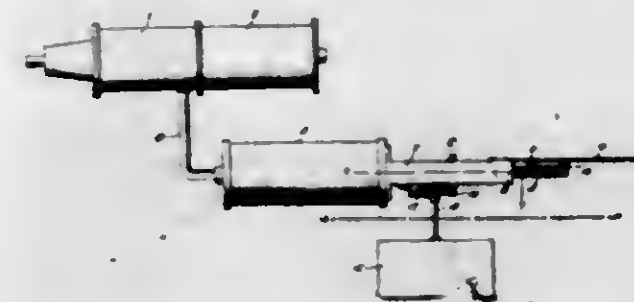
tached to the side of the bellows member and a second bellows member having a clip adapted to receive said bar.

1,312,356. SUBMERSIBLE CARGO CARRIER OR TRANSPORT. JOHN T. REID, Lovelock, Nev. Filed Sept. 21, 1917. Serial No. 192,535. Renewed Jan. 10, 1919. Serial No. 279,587. 3 Claims. (Cl. 114—72.)



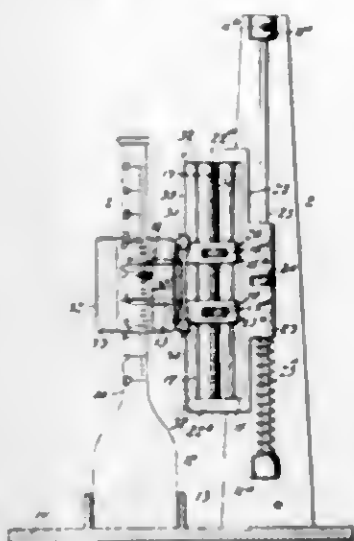
1. A carrier of the class described comprising an oil container, a cargo container flexibly connected therewith and means for regulating the buoyancy of the same.

1,312,357. AIR-BRAKE APPARATUS. ZALA RIDDLE and NORMAN F. WILKINS, Dunsmuir, Calif. Filed Dec. 22, 1910. Serial No. 138,400. Renewed Apr. 22, 1919. Serial No. 291,953. 3 Claims. (Cl. 188—11.)



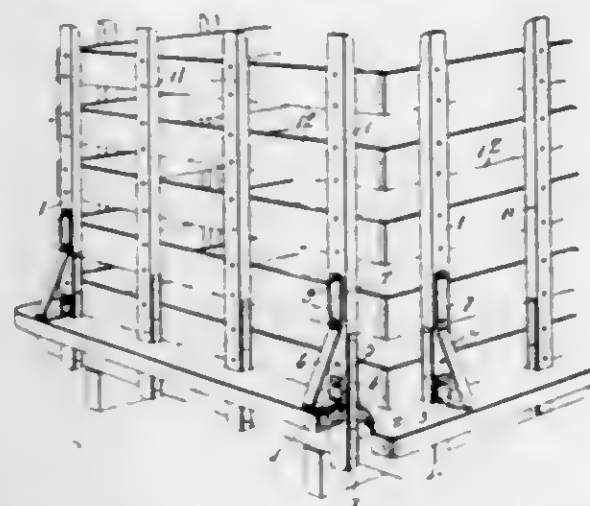
3. The combination with a brake cylinder, of a second cylinder connected with said brake cylinder and in open communication therewith, a piston in said second cylinder, a piston rod connected to said piston and projecting outwardly through one end of the second cylinder, a sleeve threaded onto said piston rod and rotatable thereon to slide the piston rod longitudinally to change the position of the piston in the cylinder whereby the space for the expansion of the air in the brake cylinder may be increased or decreased, manually operable means for rotating said sleeve, and means associated with said piston rod for indicating the position of the piston in said cylinder.

1,312,355. BUTTER-FAT GAGE. ERNEST R. ROBINSON, Carneys Point, N. J. Filed Nov. 5, 1918. Serial No. 261,270. 5 Claims. (Cl. 33-143.)



1. A gage of the character described including a support, a frame vertically adjustable on the support, guides on said frame, fingers separately adjustable vertically on said guides, a fixed screw in said frame, and nuts on said screw and engaging respectively with said fingers to move the latter by the turning of the respective nuts.

1,312,359. STAKE SUPPORT AND BRACE. ROBERT F. ROBINSON, Dallas, Tex. Filed Dec. 28, 1918. Serial No. 268,597. 2 Claims. (Cl. 21-7.)



1. The combination with a vehicle platform having an approximately vertical socket opening formed therein and arranged near and spaced a substantial distance from the edge of the platform to provide a ledge, of an approximately straight stake having its lower end adapted for insertion within the socket opening by a downward movement of the stake, and a combined abutment and brace carried by the stake and bodily movable therewith, said combined abutment and stake being spaced a substantial distance from the lower end of the stake and serving to limit its downward movement and to hold it against lateral displacement.

1,312,360. LAMP-SOCKET. RALPH R. ROOT, Cleveland, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Filed Feb. 3, 1917. Serial No. 146,353. 8 Claims. (Cl. 206-1.)

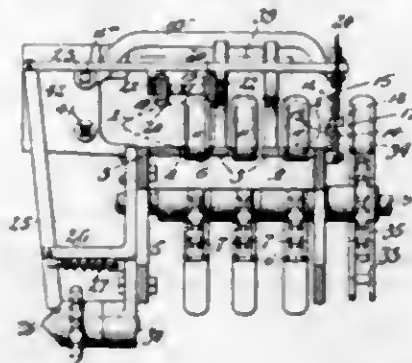
1. A lamp socket contrivance comprising in combination with a lamp having a pair of lateral projections, of a pair of members adapted to afford a yielding relative

action which is mutually inherent, one of said members being provided with an opening including notches, the



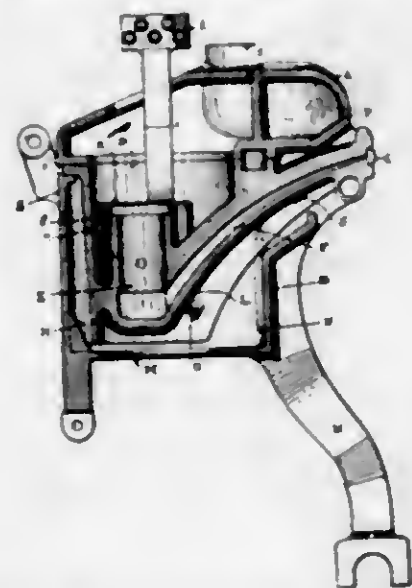
other of said members having similarly spaced but differently located recesses adapted to be occupied by said projections.

1,312,361. BUTT-REMOVER FOR CORN-HUSKERS. WILLIAM H. SELLS, Buffalo, N. Y. Filed Dec. 18, 1916. Serial No. 137,527. 15 Claims. (Cl. 146-7.)



1. A butt remover comprising a cutter adapted to cut the butt ends of ears of corn, a longitudinally movable conveyor for moving said ears in a crosswise position past said cutter, and a positioning device for shifting said ears transversely relative to said conveyor and cutter comprising a shifting roller arranged above the path of the ears with its axis transversely of the direction of movement of said conveyor and adapted to engage with the upper side of said ears, and means for moving said shifting roller transversely relative to the conveyor and cutter.

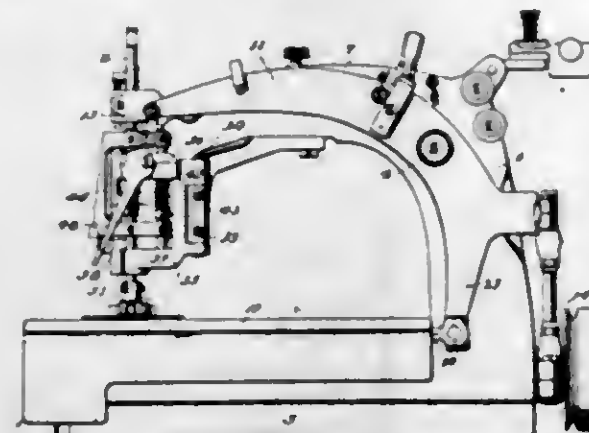
1,312,362. TYPE-MAKING MACHINE. BARTOLOME SERRA, VINCENTE SERRA, MELCHOR SERRA, and JOSE SERRA, Buenos Aires, Argentina. Filed Oct. 21, 1918. Serial No. 258,975. 1 Claim. (Cl. 22-71.)



The combination with the melting pot of a linotype machine, of a dash-pot disposed within said melting pot in spaced relation thereto and having an inclined throat which is spaced from the top of the dash-pot, an approximately vertical double walled metallic casing arranged within the melting pot and being longitudinally curved into an approximately semi-circular form to partly surround the dash-pot and adapted to be lifted out of the

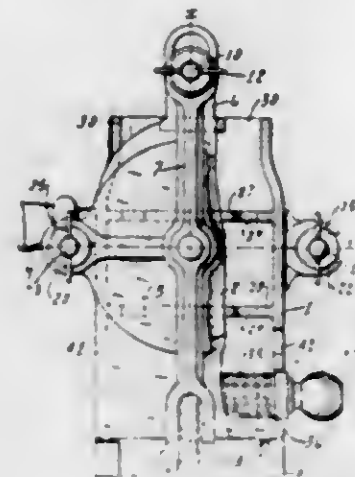
melting pot, an auxiliary transverse double walled metallic casing secured to the first named metallic casing and disposed upon the opposite side of the dash-pot near its top and contacting with the inclined throat, a resistance arranged within each double walled metallic casing and insulated therefrom, an approximately vertical member connected with the first named double walled metallic casing and extending above and exteriorly of the melting pot and serving as a handle to remove the two double walled metallic casings, and electric terminals connected with the upstanding member and having electrical connection with the resistances.

1,312,363. SEWING-MACHINE. DUDLEY S. SEYMOUR, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1916. Serial No. 115,205. 12 Claims. (Cl. 112-29.)



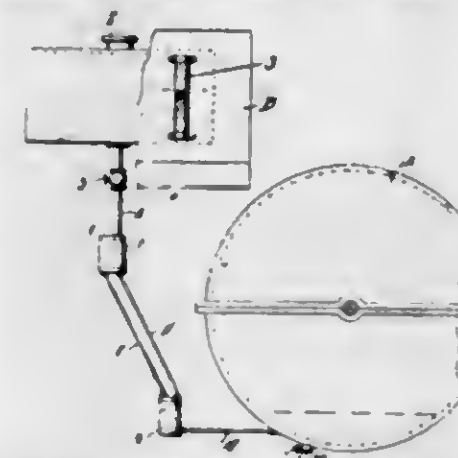
1. In a sewing machine for securing a stay strip to a previously seamed article, the combination with a presser foot, a stitch-forming mechanism and a feeding mechanism, of a device disposed in advance of the presser foot and vertically movable independently thereof for flattening the seam of the article previous to the strip being secured thereto by the stitch-forming mechanism.

1,312,364. VULCANIZING APPARATUS. CLARENCE A. SHALER, Waukegan, Wis. Filed Dec. 15, 1915. Serial No. 60,850. 6 Claims. (Cl. 18-18.)



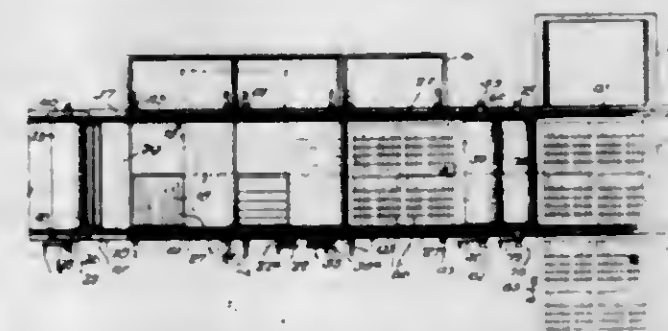
1. A vulcanizer including a heater casing having one side face adapted to receive the article to be vulcanized, in combination with a clamping member adapted to engage and hold the article against said face, an operating lever pivoted to the lower end of the casing, and loosely connected intermediate of its ends with said clamping member, a clamping bolt adjustably secured to the upper end of the lever and adapted to removably engage with the upper end of the casing, and means for maintaining combustion for a limited period in the lower portion of the casing.

1,312,365. LUBRICATING SYSTEM. FREDERICK A. SHATTUCK, Norwich, N. Y. Filed Aug. 11, 1917. Serial No. 185,712. 5 Claims. (Cl. 184-108.)



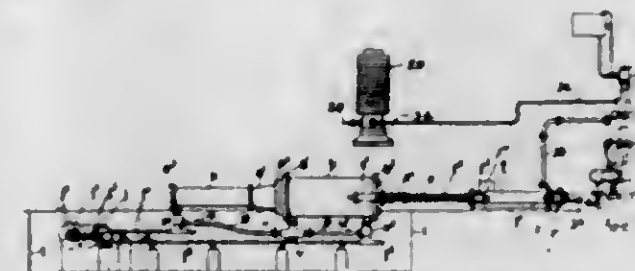
5. In combination with a supply tank and the crank case of an automobile motor, a supplementary container in open communication with the crank case and adapted to receive a quantity of the contents of the tank equal in depth to the quantity disposed in the crank case, an auxiliary reservoir, and means connecting the reservoir and the tank with the said supplementary container including an air pipe adapted to create an air pressure within the said auxiliary reservoir when a predetermined depth has been provided in the supplementary container.

1,312,366. PROOF AND TRANSFER PRESS. LOUIS SMITH, Chicago, Ill., assignor of one-half to William L. Hall, Chicago, Ill. Filed Sept. 14, 1918. Serial No. 254,151. 22 Claims. (Cl. 101-252.)



1. A proof and transfer press comprising an adjustable bed adapted to support a printing form, a fixed bed adapted to support a printing element, a proof roller travelable over the printing form, and a transfer roller travelable across the printing element and over the printing form to receive an impression from said form and to transfer said impression to the printing element.

1,312,367. PRESS APPLICABLE FOR THE PRODUCTION OF BRIQUETTES AND FOR OTHER PURPOSES. EDGAR ROUSE SUTCLIFFE, Leigh, England, assignor to Pure Coal Briquettes Limited, Cardiff, Wales. Filed Oct. 30, 1915. Serial No. 58,866. 12 Claims. (Cl. 25-84.)



1. In combination with a hydraulic press a reciprocating fluid pressure motor, comprising a piston, a plurality

of connected motor units, means applicable to one of the said units whereby the motive fluid may be admitted upon both sides of its piston at the commencement of its stroke, means whereby it may be exhausted from in front of the said piston after the commencement of its stroke and means to cause the commencement of movement of the said piston and its return, substantially as described.

10. An apparatus for pressing, comprising a hydraulic fluid pressure engine, a hydraulic actuating pump operated by the said engine and a connection between said actuating pump and the cylinder of the main plunger of the press, an accumulator, means for admitting liquid under pressure from the said accumulator to supplement the pressure in the cylinder of the main plunger of the press comprising a valve in position to be operated on an abnormal stroke of the said pump plunger, substantially as described.

1,312,368. SPARK-INTENSIFIER. OSCAR A. THOMPSON, Redwing, Kans. Filed Sept. 26, 1918. Serial No. 255,863. 3 Claims. (Cl. 175-183.)



2. A spark plug intensifier, comprising a contact of approximately circular form having a central opening and securing means passing through the opening of the contact and of such relative proportions to the central opening as to admit of the contact being adjusted circularly to bring new points in sparking position and laterally in any adjusted circular position to vary the spark gap.

1,312,369. HULL OF WATER-CRAFT. FRANCIS J. THUMANN, Baltimore, Md. Filed May 4, 1917. Serial No. 166,282. 2 Claims. (Cl. 114-67.)

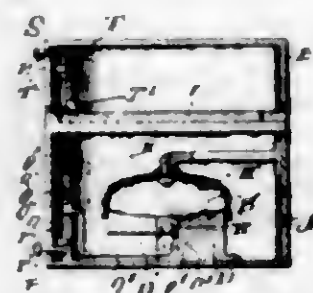


2. A water craft having a hull with a deck and provided with center keel,—the bottom of the hull spreading and increasing in width from a point near the bow toward the stern and from the stern the bottom having parallel side edges that extend forward to and merge with the spreading portions of the bottom the parallel side edge portion of the bottom projecting rearwardly of the deck and means for discharging air from the projecting stern portion at a point below the water line.

1,312,370. SOUNDING SIGNAL DEVICE FOR AUTO-MOBILES. ELSWORTH TILDEN, Duluth, Minn. Filed Feb. 10, 1919. Serial No. 277,938. 3 Claims. (Cl. 116-1.)

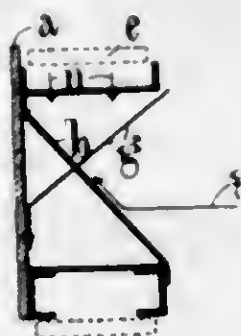
1. A sounding signal of the type described, comprising a casing made up of two sections spaced apart, rotatable disks with perforations therein mounted within the spaces between the disks and having peripheral numerals identifying the perforations in the disks, a block within the lower section having its upper surface dished and provided with a central aperture, a ball positioned over said dished portion of the block, a ball and support

therefor, and means having a part extending outside the casing for raising said support and which will raise the



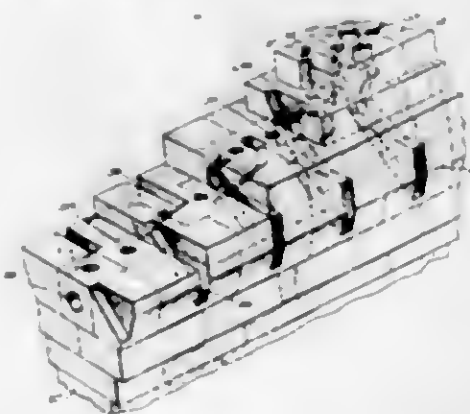
ball through the aperture in the block and permit the ball to roll against the bell, and means for returning the ball to its normal position.

1,312,371. ARMOR-PLATING. WILLIAM ABHORE TRITTON, Lincoln, England. Filed July 24, 1917. Serial No. 182,564. 2 Claims. (Cl. 80-40.)



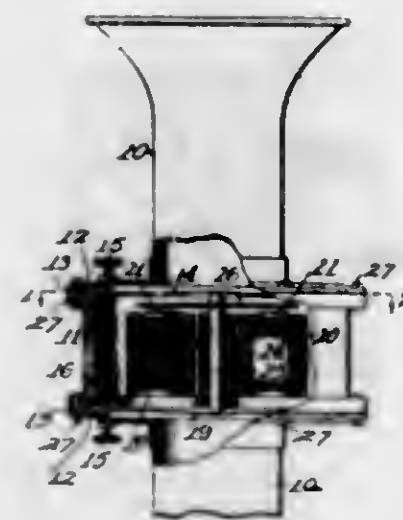
1. A track frame for endless moving chain tracks comprising an inner member and an outer member which is out of parallelism with the first member, the said second member comprising a series of panels arranged lengthwise of the frame.

1,312,372. COKING RETORT-OVEN. JOSEF VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 7, 1917. Serial No. 147,123. 32 Claims. (Cl. 202-9.)



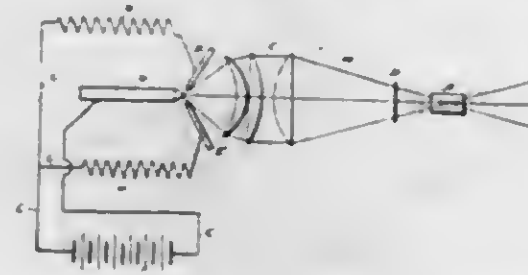
32. In a coking retort oven, in combination: a series of coking chambers with intermediate heating walls, said walls being constituted of two series of substantially triangular combustion-flues, the series laterally abutting each other and being respectively contiguous to the coking-chambers on either side of each such wall; air-regenerators and gas-regenerators; and communications that directly connect each of the triangular flues with both an air-regenerator and a gas-regenerator that simultaneously serve such flue; substantially as specified.

1,312,373. SOUND-PRODUCER. JOHN H. WHELOCK, Worcester, Mass., assignor to Klaxon Company, Newark, N. J., a Corporation of Delaware. Filed July 18, 1917. Serial No. 181,194. 6 Claims. (Cl. 177-7.)



5. In a horn, two parallel similar diaphragms and a plunger between and perpendicular to both of them, said diaphragms being initially sprung outwardly at the center by said plunger acting as a thrust member.

1,312,374. PICTURE-PROJECTING APPARATUS. JOSEPH ROGER WHITE, Washington, D. C., assignor to The Graphoscope Company, Washington, D. C., a Corporation of Delaware. Filed Dec. 16, 1914. Serial No. 877,535. 7 Claims. (Cl. 176-51.)



7. The combination with a suitable arc light electrode of a series of electrodes arranged in parallel about the electrode first mentioned, beyond the end of said electrode, forwardly diverging from the extended axis thereof and in position to form therewith arcs having their ends in the same plane and all diverging from a common central luminous spot on the end of the electrode first mentioned.

1,312,375. FILTRATION OF PETROLEUM-OIL. JOHN C. WHITMAN, Sugar Creek township, Venango county, Pa., assignor of one-half to Herbert G. Whitman, Franklin, Pa. Filed Feb. 12, 1919. Serial No. 276,649. 1 Claim. (Cl. 190-20.)

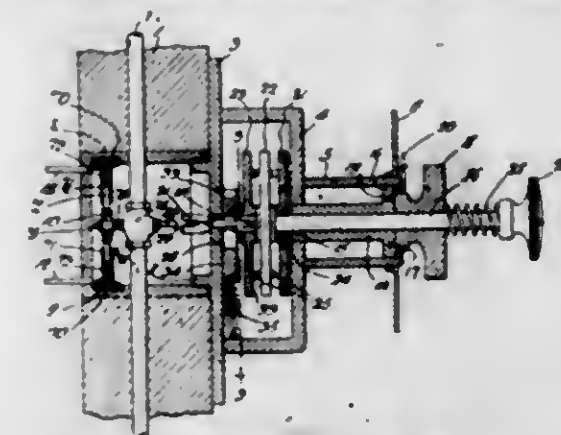
In the treatment of petroleum oil, the step which consists in passing the oil through a filter bed of bog-iron ore.

1,312,376. PERMUTATION-LOCK. JOHN KENNEDY WILLIAMS, Jacksonville, Fla. Filed June 2, 1917. Serial No. 172,492. 2 Claims. (Cl. 70-53.)

1. In a device of the class described, a carrier; a sleeve rotatable in the carrier; an operating plunger mounted in the sleeve for longitudinal sliding movement and for rotation; tumblers journaled on the plunger at the lower end of the sleeve and provided with interacting elements whereby rotation may be imparted from tumbler to tumbler, one of the tumblers being operatively

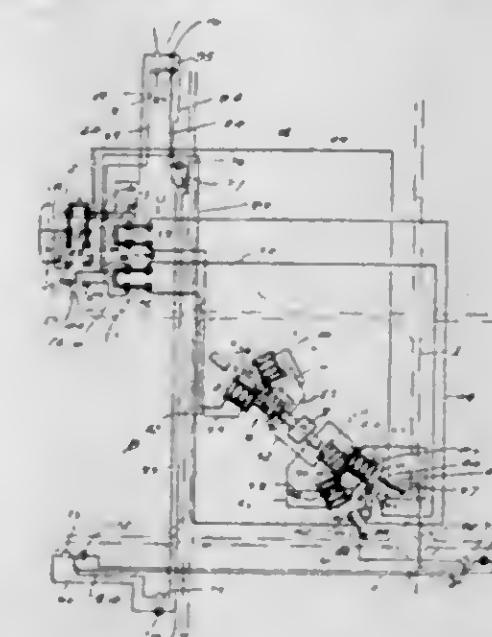
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connected with the lower end of the sleeve; a detent co-acting with the plunger and independent of the sleeve to limit the inward sliding movement of the plunger; means for mounting the detent for right-line sliding



movement on the carrier; mechanism for actuating the detent to permit the inward sliding movement of the plunger; and means releasably engaged with the tumblers for actuating said mechanism.

1,312,377. ELECTRICALLY-OPERATED RAILWAY CROSSING AND SIGNAL. HARVEY J. YAGER, Seattle, Wash. Filed Feb. 21, 1918. Serial No. 218,554. 4 Claims. (Cl. 240-378.)



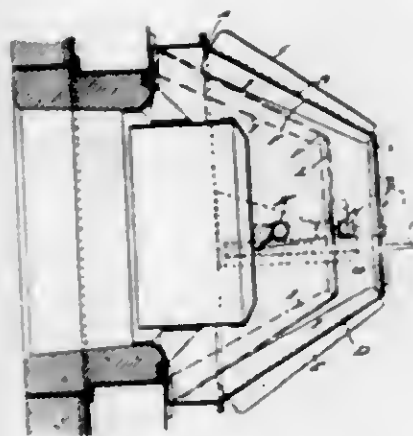
1. In combination with a railway crossing including oscillatory frogs, and an actuating arm therefor, signal lights of different characters located about the crossing, an electro-magnet carried by the arm, stationary electro-magnets located adjacent said magnet adapted to alternately repel and attract the first named magnet, and means energizing said magnet and illuminating certain signal lights.

1,312,378. AIR-VALVE FOR FURNACES USING LIQUID FUEL. HAROLD E. YANROW, Glasgow, Scotland. Filed Oct. 30, 1917. Serial No. 199,313. 5 Claims. (Cl. 158-1.5.)

1. Means for controlling the supply of air to a furnace burning liquid fuel comprising in combination a fixed seating in the form of a frustum of a hollow cone, a valve also in the form of a frustum or a hollow cone coaxial with the said seating and having a plane end subject to the pressure of the gases within the furnace to automatically move the valve in the direction of the common axis of the cones to close the valve upon a rise of pressure in the furnace.

2. Means for controlling the supply of air to a furnace burning liquid fuel comprising in combination a fixed seat-

ing in the form of a frustum of a hollow cone, a valve also in the form of a frustum of a hollow cone coaxial with the said seating and having a plane end subject to the pressure of the gases within the furnace to automatically move the valve in the direction of the common axis of the cones to close the valve upon a rise of pressure in the furnace, and an antifriction support for the valve.

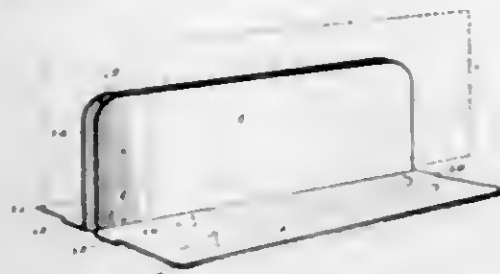


3. Means for controlling the supply of air to a furnace burning liquid fuel comprising in combination a fixed seating in the form of a frustum of a hollow cone having ports and bars in its inclined sides, a valve also in the form of a frustum of a hollow cone, a valve also in the form of a frustum of a cone coaxial with the said seating and having ports and bars in its inclined sides adapted to register with the bars in the seating in the closed position of the valve, said valve having a plane end subject to the pressure of gases within the furnace and caused by a rise of pressure in the furnace to cause the valve to automatically move into closed position.

4. Means for controlling the supply of air to a furnace burning liquid fuel comprising in combination a fixed seating in the form of a frustum of a hollow cone, directing vanes on the said seating, a valve also in the form of a frustum of a hollow cone coaxial with the said seating and means carried by the valve and subject to the pressure of gases within the furnace to cause the valve to move automatically in the direction of the common axis of the cones and close the valve if a rise of pressure occurs in the said furnace.

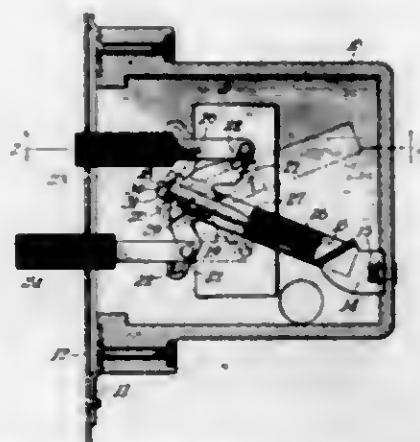
5. Means for controlling the supply of air to a furnace burning liquid fuel comprising in combination a fixed seating in the form of a frustum of a hollow cone, a valve also in the form of a frustum of a hollow cone coaxial with the said seating, directing vanes on the said valve, and means carried by the valve and subject to the pressure of gases within the furnace to cause the valve to move automatically in the direction of the common axis of the cones and close the valve if a rise of pressure occurs in the said furnace.

1,312,379. **BLOTTER AND PEN TRAY.** SAMUEL J. ADAMS, Montclair, N. J. Filed May 4, 1918. Serial No. 232,624. 3 Claims. (Cl. 120-1.)



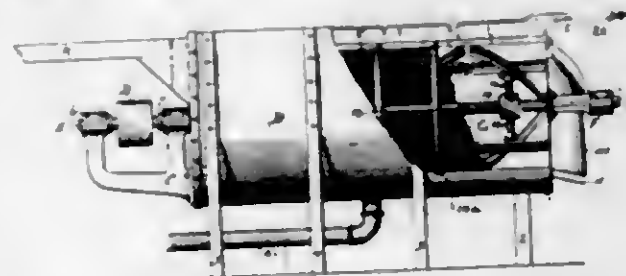
1. A device of the character described comprising a blank of flexible material having its opposite ends bent back upon the body portion and then at right angles thereto to provide a pair of spaced vertically extending walls, and means carried by the body portion for securing the parts in bent relation.

1,312,380. **ELECTRIC SWITCH.** ERNST G. K. ANDERSON, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1914. Serial No. 823,237. 7 Claims. (Cl. 175-293.)



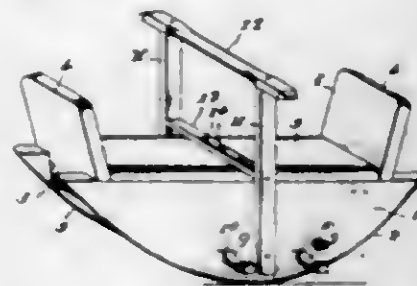
1. In an electric switch, the combination with a stationary contact, of a pivoted switch blade cooperating with said contact, a spring carried bodily by said blade and having a definite line of action with respect thereto, a movable operating member, and means for transmitting pressure from said operating member to said spring comprising a member pivoted to said operating member at a point movable from one side to the other of a plane through the axis of the blade and the point of application of pressure to the spring.

1,312,381. **DEVICE FOR CLEANSING AND REMOVING THE SKINS FROM DRIED FRUITS, SUCH AS PEACHES, APRICOTS, &c.** HERMAN A. BREKHUIS, Fresno, Calif., assignor to California Peach Growers (Inc.), Fresno, Calif. Filed Dec. 12, 1918. Serial No. 266,473. 4 Claims. (Cl. 140-14.)



1. In a device for cleansing peaches the skins of which have been partially loosened, the combination of an outer shell, a perforated cylinder within the shell, a shaft within the cylinder having a common center line with the cylinder and adapted to rotate, a plurality of brushes attached to arms extending radially from the shaft, said brushes being arranged so each alternate brush extends parallel with the shaft and the other brushes are obliquely thereto, substantially as described.

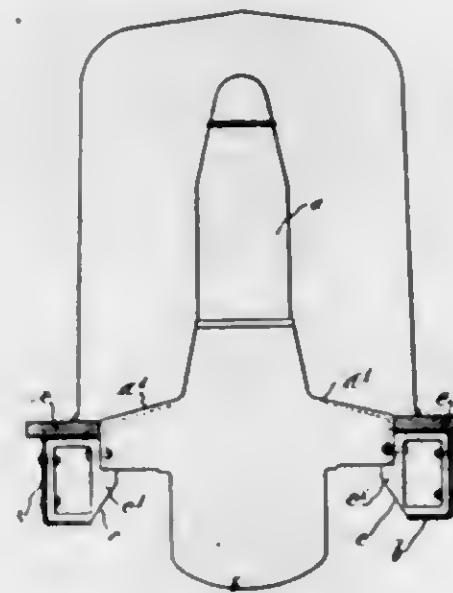
1,312,382. **ROCKING TOY.** MAURICE E. BENAS, Charleston, W. Va. Filed Dec. 27, 1918. Serial No. 268,522. 3 Claims. (Cl. 46-22.)



1. A toy comprising two side boards having arcuate bottoms, said boards being set at an angle to each other

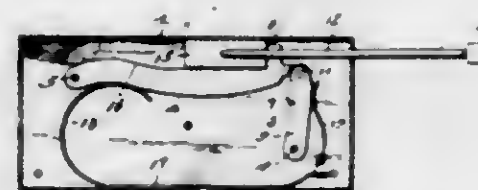
so as to form a broad base, a seat piece secured to the top edge of each of said side boards, end pieces secured to the ends of said seat piece and projecting upwardly therefrom, and each provided with a dove-tailed end projecting between said side boards, transverse braces spanning said side pieces and provided with projecting ends to form stirrups, and an upwardly projecting transverse frame located between said stirrups and provided with a transverse handle bar, substantially as described.

1,312,383. **MOTOR-VEHICLE.** MARC BIRKIOT, Bois-Colombes, France. Filed Mar. 28, 1919. Serial No. 285,888. 8 Claims. (Cl. 180-64.)



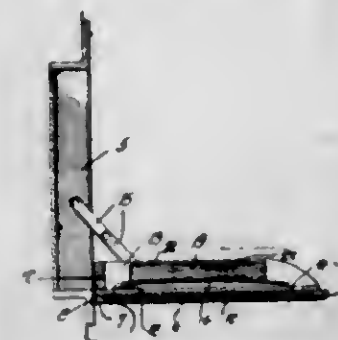
1. A motor vehicle, characterized by the crank case of its engine being provided with two lateral arms extending throughout the length of the engine and of such dimensions that the said arms rest on blocks or supports arranged in the interior of the longitudinal members of the chassis, the upper face of the said arms having flat faces, such that, once the engine has been put in place on the vehicle, the said flat faces are in line with the upper part of plates secured to the longitudinal members.

1,312,384. **CLUTCH CONTROL.** COLUMBUS BRYAN, Prineville, Ore. Filed Mar. 30, 1918. Serial No. 225,756. 1 Claim. (Cl. 74-51.)



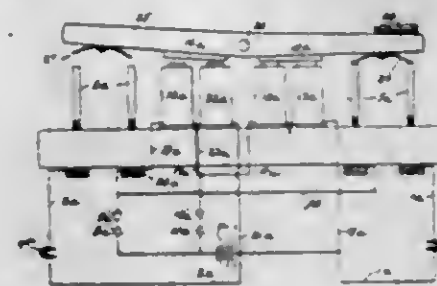
The combination with the clutch lever of a motor vehicle, of a shiftable stop connected thereto and actuated thereby, a latch lever cooperating with said shiftable stop and adapted to prevent the movement of said stop toward high speed position, a latch adapted to hold said latch lever in a certain predetermined position, while the transmission gearing is in low speed, said latch lever having a stop shoulder with which said shiftable stop engages when in neutral, and a spring having two arms cooperating respectively with said latch lever and latch to bring about an engagement between the latch and latch lever and also to insure an engagement between said shiftable stop and the stop shoulder of the latch.

1,312,385. **DISAPPEARING TOWEL-CABINET.** ROBERT B. CAHILL, Chicago, Ill. Filed May 4, 1916. Serial No. 95,416. 1 Claim. (Cl. 45-32.)



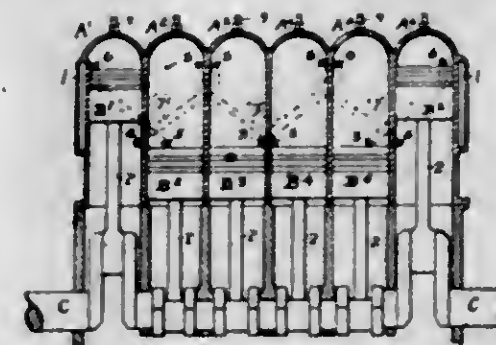
A device of the class described having a casing, a closure therefor consisting of a frame having a panel resting therein, a retainer means extending across the panel and securing it to the frame, pivot means connecting the frame to the casing below the top of the base wall at its receiving space, and said retainer being spaced from the pivot end of the frame so that the retainer may enter the casing and rest on the said base wall.

1,312,386. **CONTROLLING CIRCUITS OF PALLET-ACTUATING MAGNETS FOR AUTOMATIC ORGANS.** JOHN HAYWOOD COMPTON, Nottingham, England. Filed Dec. 26, 1916. Serial No. 138,930. 6 Claims. (Cl. 84-243.)



1. An electric organ having a plurality of departments, electromagnets for operating the pallets of pipes in different departments, and a device for controlling said electromagnets, said device comprising, in combination, electric circuits of which each includes the winding of a pallet operating magnet and a contact device, switch-gear controlling said circuits, said switch-gear normally occupying a position in which one of said circuits is closed and the other circuit is opened, electromagnets for operating said switch-gear, secondary circuits including the windings of said last-named electromagnets for operating said switch-gear, and a contact device in one of the secondary circuits.

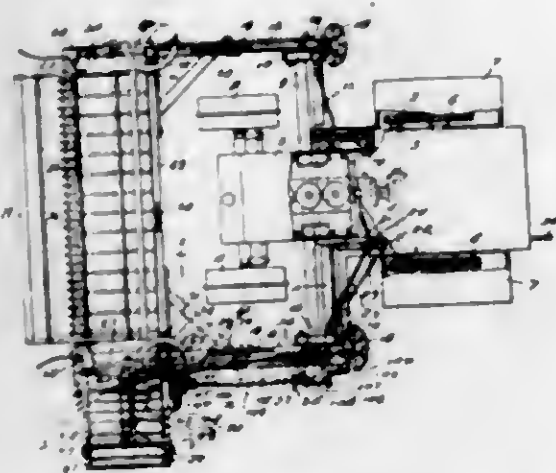
1,312,387. **INTERNAL-COMBUSTION ENGINE.** JOHN J. CONNOLLY, Pittsburgh, Pa., assignor of one-third to Thomas H. Flynn, Knoxville, Pa., and one-third to Frank A. Gallagher, Pittsburgh, Pa. Filed July 23, 1915. Serial No. 41,445. 4 Claims. (Cl. 123-143.)



1. In an internal combustion engine comprising a plurality of horizontally arranged cylinders, pistons working

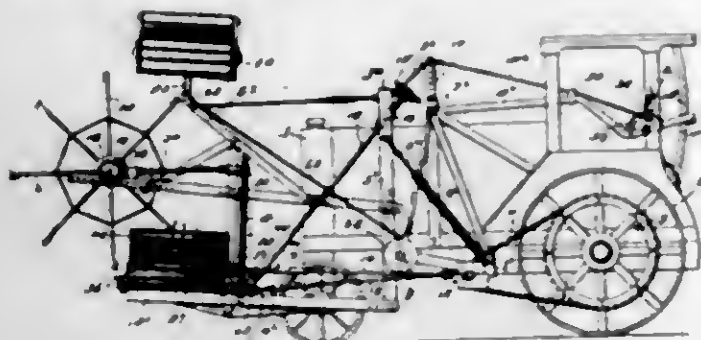
in said cylinders and an inlet and a scavenging port for each of said cylinders, means for firing said cylinders progressively consisting of a passage leading from the lower end of each cylinder at a point within the outermost position of the piston thereof to a point in the compression chamber of the cylinder next in turn to be fired, all of said passages being of a uniform length, the entrance to said passage from said first named cylinder being open and being exposed by the outward stroke of the piston previously to the opening of the scavenging port of said cylinder, substantially as and for the purpose set forth.

1,312,388. DETACHABLE GRAIN-HEADER. DAN M. CONVERSE, Albert, Kans. Filed Dec. 1, 1917. Serial No. 204,936. 9 Claims. (Cl. 56-100.)



1. A tractor frame, steering wheels, connected with said frame, a transverse pivot bar mounted on the frame in rear of the steering wheels and extending laterally beyond the sides thereof, upright arms pivoted on the end portions of said bar and extending above and below the same, a header frame positioned transversely in front of the tractor frame, and having rearwardly extending arms pivotally connected to the upright arms below the pivot bar, endwise adjustable braces interposed between the upper portions of the upright arms and the forward portions of the rearwardly extending arms, and means for rocking and adjustably fixing said arms.

1,312,389. GRAIN-HEADER ATTACHMENT FOR TRACTORS. DAN M. CONVERSE, Albert, Kans. Filed Feb. 15, 1919. Serial No. 277,282. 2 Claims. (Cl. 56-23.)



2. The combination of a wheeled frame, upright arms pivotally mounted at intermediate points in their length on said frame, a header in front of the frame and having rearwardly extending arms pivotally connected to the lower portions of the upright arms, means connecting the upper portions of the upright arms and the forward portions of the rearwardly extending arms, an arm mounted on the frame and connected with the upper portions of the upright arms, a hand lever mounted on the frame, means for adjustably fixing said hand lever with respect to the frame, a hand lever on the first-named hand lever.

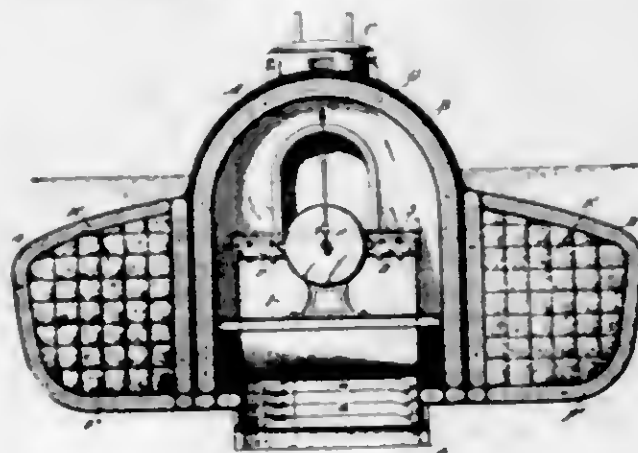
a connection between the second-named hand lever and the upwardly extending arm, and means for adjustably fixing the second-named hand lever.

1,312,390. SAFETY RAZOR. JULIUS RUSSO DE MASSQUITA, Brooklyn, N. Y. Filed Mar. 31, 1915. Serial No. 18,295. 4 Claims. (Cl. 30-12.)



4. In a safety razor, the combination with a frame, of a cap plate for the razor blade sustained by the frame, the cap plate having pivotal connections with the frame at its rear portion and disposed for having the end portions of its front edge engage a blade sustained by the frame for preventing dislocation thereof, intermediate portions of the front edge of said cap plate being spaced from the blade to prevent flexing of the cutting edge of the blade by the cap plate.

1,312,391. TORPEDO-BOAT. GIOVANNI EMANUELE ELIA, New York, N. Y. Filed Jan. 25, 1917. Serial No. 144,480. 4 Claims. (Cl. 114-18.)



1. The combination, with a torpedo boat; of a torpedo discharging mechanism comprising a wide, shallow tube having its mouth disposed transversely of the boat, means for forcing a torpedo broadside through said tube while holding it against rotation, and means for automatically setting the propelling mechanism in operation as the torpedo passes through said mouth.

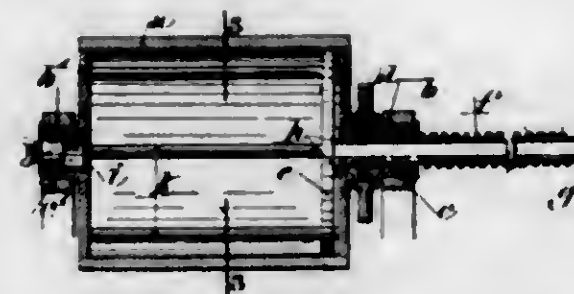
1,312,392. SPRING-HINGE. TOM YEE FOOK, Mesa, Ariz. Filed June 26, 1918. Serial No. 241,971. 1 Claim. (Cl. 16-25.)



A hinge of the class described comprising hinged leaves apertured to receive fastening screws, plate receiving ears extending in the same direction substantially at right angles from their end edges, the ears of one leaf adapted to lap those of the other when in operative position, the overlapping ears flaring slightly toward their free ends, one of said leaves having an attaching plate extending at right angles from one side edge thereof near one end, and in a direction opposed to said ears and apertured to

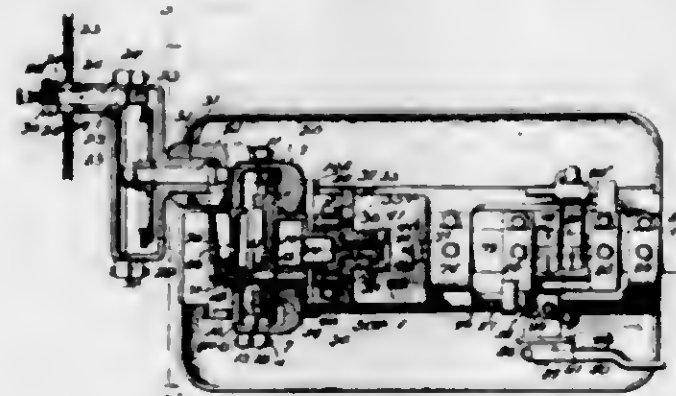
receive attaching screws, a spring barrel on the opposite face of said leaf spaced from the end thereof, the other leaf having an attaching plate at one edge midway its ends, the attaching plates of the two leaves being located in vertical planes one above the other when the members are assembled, and spring barrels arranged adjacent each end of the second mentioned leaf member, the barrels of the two leaves aligning when the parts are assembled.

1,312,393. WASHING, RINSING, AND WRINGING MACHINE. JOSEPH MARIE ETIENNE FRANC, St. Vallier, France. Filed Feb. 15, 1918. Serial No. 217,416. 1 Claim. (Cl. 68-18.)



A combined washing, rinsing and wringing machine comprising in combination a rotary impermeate cylinder having hollow trunnions, one of which is internally screw-threaded, bearings for said trunnions, a hollow screw shaft traversing said screw threaded trunnion, an impermeate piston carried by said screw shaft movable longitudinally in said cylinder and means for rotating said cylinder.

1,312,394. METAL-WORKING MACHINE. GEORGE GORTON and GEORGE E. GUSTAFSON, Racine, Wis.; said Gustafson assignor to said Gorton. Filed June 9, 1916. Serial No. 102,713. 43 Claims. (Cl. 90-14.)

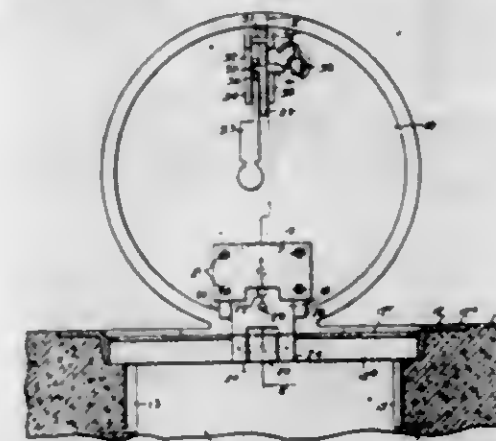


1. In combination, a headstock, a rotary work holder carried thereby and provided with actuating means, said holder provided with starting point and finishing point stops, said headstock provided with means cooperating with said stops to predetermine the point at which the holder starts each operative rotation and the point at which the holder stops such operative rotation, a rotary tool holder provided with actuating means and having its axis of rotation parallel with the axis of rotation of the work holder, means for bringing the work carried by the work holder and the tool into operative relation, and means for changing and normally fixing the relative positions of the work holder and tool holder axes forwardly and rearwardly with respect to the position where said axes are in alignment.

1,312,395. COAL-HOLE-COVER. MAX GRAP, New York, N. Y. Filed Jan. 23, 1919. Serial No. 272,069. 4 Claims. (Cl. 94-36.)

1. The combination of a base having a seat, a hinge slide, means pivotally connecting the slide to the base

within the seat, a cover having a pivot bar cooperating with the upper portion of the base and with its axis



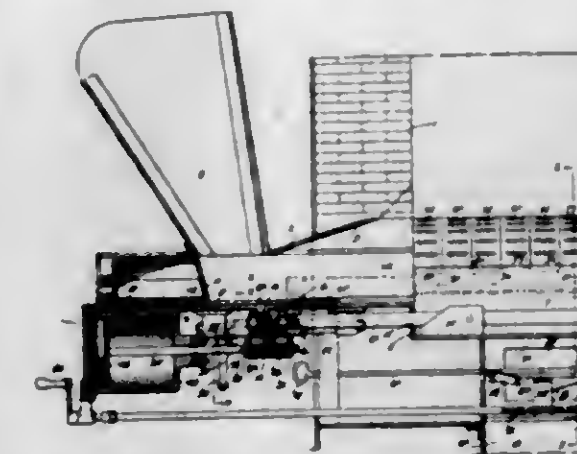
parallel to the axis of the slide, and a keeper serving to confine the slide in close parallel relation to the cover in all positions of the cover.

1,312,396. SPOON-HOLDING CLIP. CHARLES W. HARPER, Spring Valley, N. Y. Filed Feb. 18, 1919. Serial No. 277,763. 1 Claim. (Cl. 65-65.)



A spoon attachment comprising a body of resilient material, guide flanges formed on the side edges of said body at one end thereof and engageable with the side edges of a spoon handle, a pair of tongues formed on opposite edges of said body intermediate the ends thereof and extending in substantially parallel relation to each other at right angles to the upper surface of said body, said tongues terminating at their free ends in inwardly directed retaining flanges engageable with the handle of the spoon, said body being slightly angular longitudinally whereby to cause said last named flanges to resiliently engage the spoon handle, and a hook formed on the other end of said body and engageable over the flange of a vessel.

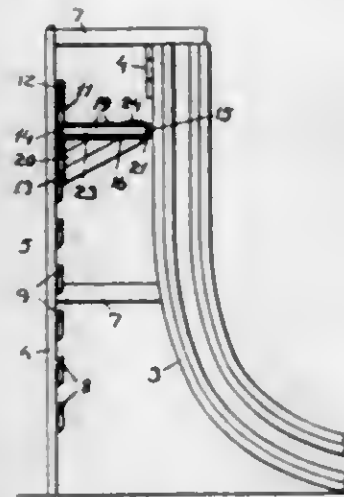
1,312,397. AUTOMATIC STOKER. EDWIN J. HART, Philadelphia, Pa. Filed May 26, 1917. Serial No. 171,087. 2 Claims. (Cl. 110-47.)



1. The combination in a stoker of a plurality of sets of grate bars; rock shafts adapted to respectively rock grate bars of each set, a cross head, adjustable cams on said cross head and adapted to oscillate the respective rock shafts due to the reciprocation of the cross head,

said cams having rows of teeth thereon, a common adjusting rod, and worms on said adjusting rod for respective engagement with the teeth of said cams for simultaneously adjusting said cams when the adjusting rod is actuated, substantially as described.

1,312,398. SCAFFOLD. ROBERT W. HAWES, Brunswick, Ga. Filed Nov. 12, 1918. Serial No. 262,191. 3 Claims. (Cl. 20-81.)



1. In a scaffold, upright standards, outwardly and upwardly projecting hooks carried by said standards and including open-end seats between the same and the standards, and platform sections having each back frame provided with posts and with longitudinal stringers connecting said posts and engaging said seats, said hooks being arranged in horizontal series, said series being spaced apart by distances equal to each other and equal to the distances separating said stringers, and said standards being spaced apart by distances equal to the distances separating the posts of the platform sections, whereby the hooks of the standards are enabled to be located close to said posts.

1,312,399. DEVICE FOR CLIMBING STEEL COLUMNS. HENRY H. HAYWOOD, deceased, late of Atlanta, Ga., by Fannie Brown Heywood, administratrix, Atlanta, Ga. Filed Jan. 31, 1919. Serial No. 274,369. 3 Claims. (Cl. 227-8.)

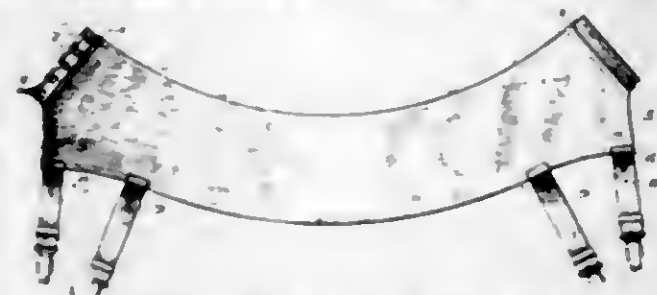


1. A device of the character described, comprising a body formed as a flat plate, a laterally disposed U-shaped yoke formed on one end of said plate, depending ears formed on the lower side of said body at the juncture of said yoke with said plate, a member extending from the free end of said yoke toward said plate, a pair of members extending from said ears toward said first named member and in spaced parallel relation thereto and to each other and means for securing said body upon a shoe.

1,312,400. ATHLETIC BELT. LUZENA HOSER, Indianapolis, Ind. Filed Sept. 26, 1917. Serial No. 193,318. 1 Claim. (Cl. 2-189.)

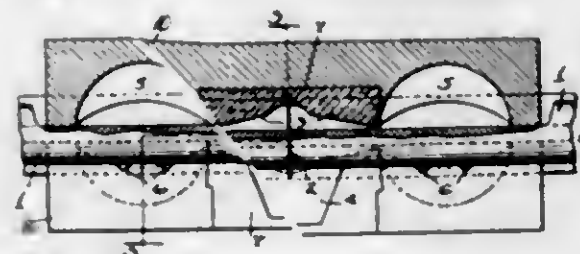
An athletic belt made of flexible material of suitable width, the upper and lower edges of which are substantially parallel throughout the main and central portion of the belt, the extreme ends each having an obtuse formation, the upper sides of the obtuse angles provided with fastening means and the lower sides of the angles diverging and leaving an open space, and hose-supporters fas-

tened in pairs to the lower edge of the belt, so that the two supporters of each pair converge toward their lower



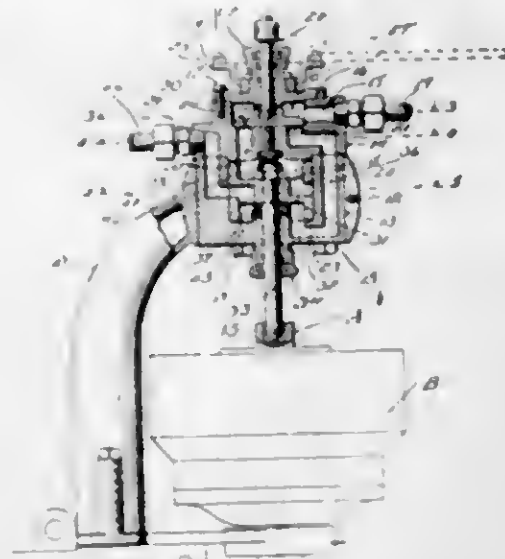
end, one supporter of each pair being approximately in line with the lower side of the obtuse formation at the end of the belt.

1,312,401. APPARATUS FOR BONDING RAILS AND THE LIKE. WILLIAM E. HERR, East Cleveland, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 7, 1916. Serial No. 135,632. 6 Claims. (Cl. 22-116.)



1. Means for forming a rigid conductor across contiguous faces of two abutting rail ends comprising a mold having a lateral recess therein, an entrance sprue in the top of said mold leading to such recess, said mold having other lateral recesses disposed at either side of such first named recess, egress sprues connecting such first named recess with such other recesses thereby constituting the latter overflow reservoirs, said mold having air vents leading from such other recesses.

1,312,402. REVERSIBLE STARTER FOR INTERNAL-COMBUSTION ENGINES. WILLIAM R. KAHLENBERG, Two Rivers, Wis., assignor to Kahlenberg Brothers Company, Two Rivers, Wis. Filed Mar. 21, 1919. Serial No. 284,038. 6 Claims. (Cl. 60-16.)



1. A starting device for internal combustion engines comprising a casing, a series of circumferentially spaced ports in the casing adapted for connection with respective engine cylinders, a cylindrical driven rotatable valve member in the casing, a pair of ports in the driven valve member extending from spaced portions of its periphery disposed in a common plane at right angles to the axis of the valve, said pair of ports communicating each with one end of the valve member, supply ports in the

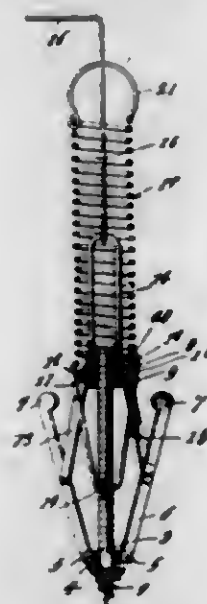
casing open at the end portions of the driven valve member and means for selectively controlling passage of air through either of said last-named ports.

1,312,403. SHIPPING CASE. GEORGE TILDEN KENYON, Lock No. 4, Pa. Filed Nov. 15, 1918. Serial No. 262,746. 3 Claims. (Cl. 220-6.)



1. A shipping and storage case composed of sheet metal sections, each section having bearings at its edges and spaced apart from each other, the bearings at each edge being staggered with respect to those at the opposite edge and being adapted to align with the bearings of adjacent sections, and a rod passing through each set of aligning bearings for connecting the sections, each case consisting of four similar side sections and two similar end sections.

1,312,404. WASTE-PIPE CLEANER. LOUIS KLAARMANN, North Bergen, N. J. Filed Mar. 27, 1919. Serial No. 285,618. 3 Claims. (Cl. 130-70.)

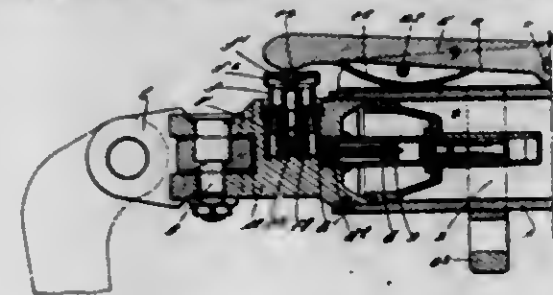


1. A tool of the class described comprising a threaded rod, a cone-shaped corkscrew-like member fixed to one end thereof, a collar mounted on said rod, at the rear of said member, links pivotally connected with said collar, a nut having threaded engagement with said rod and provided in its periphery with an annular seat, a collar mounted in said seat and loosely engaging said nut, links pivotally connected at one end with said collar and at their other end with said first-mentioned links intermediate of their ends, and means connected to rotate said nut for opening and closing said links.

1,312,405. MEANS FOR PARTING THE MOORINGS OF SUBMARINE MINES OR MINE-SWEEPING ROPES OR CABLES. FRANK EATON LANDER, Blackheath, London, England, assignor to Vickers Limited, Westminster, England. Filed June 26, 1918. Serial No. 242,104. 7 Claims. (Cl. 102-3.)

1. In cable severing means by which a cable to be protected effects the severing of an opposing cable, a link for the cable to be protected, an explosive charge provided in the said link, firing mechanism adapted to be operated mechanically and an operating lever mounted on

the link, by which the said firing mechanism is operated by pressure of the opposing cable as it passes over the



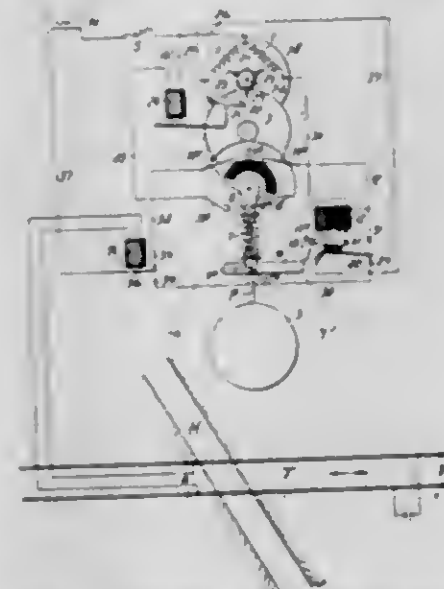
said lever, whereupon the link is destroyed and the opposing cable severed.

1,312,406. WRENCH. LEE D. LEWIS, Tulsa, Okla. Filed Sept. 7, 1918. Serial No. 253,043. 5 Claims. (Cl. 81-111.)



1. A wrench comprising a pair of pivoted jaws, a sleeve slidably mounted thereon and pivoted laterally movable means located in the sleeve and engageable with each of said jaws to hold them against pivotal movement.

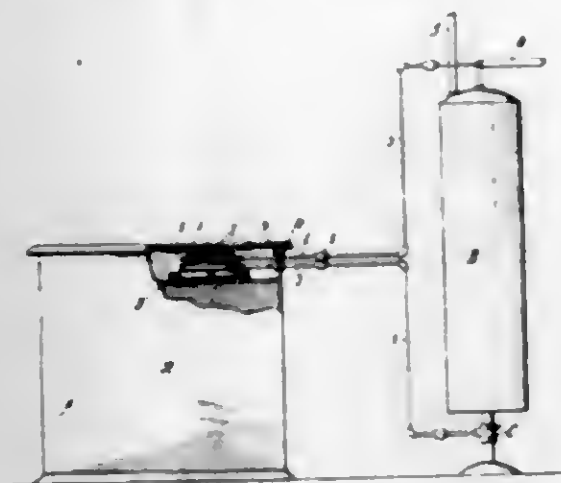
1,312,407. RAILWAY-CROSSING SIGNAL AND CONTROL THEREOF. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1916. Serial No. 115,926. 16 Claims. (Cl. 177-339.)



4. A railway crossing signal comprising a member

mounted to oscillate, single phase means for oscillating the member to indicate danger and polyphase means for actuating the member to a safety position.

1,312,408. HOT-WATER HEATER. HAROLD J. LUMLEY, Buffalo, N. Y. Filed Oct. 15, 1918. Serial No. 258,136. 2 Claims. (Cl. 126—53.)



1. The combination with a heater of the class described comprising a pipe including a plurality of superposed coils; of a flame spreader arranged over said coils, and spring clips carried by said spreader and detachably engaged with one of the coils.

1,312,409. ONE-WAY SCREW OR BOLT. ARTHUR E. MILLER and CLARENCE E. ANABLE, Sacramento, Calif. Filed July 3, 1918. Serial No. 243,193. 4 Claims. (Cl. 85—9.)



3. A screw, bolt or like fastening having tool engaging surfaces permitting the screw or bolt to be forcibly turned in one direction only, said screw or bolt having supplemental means in its head portion normally concealed when the screw or bolt is seated in place and exposable by removing a portion of the head and adapted for the engagement of a tool for unseating the screw or bolt, said head having, also, projections adapted to be deflected and forced into engagement with a part engaged by the screw or bolt, to thereby lock the screw or bolt against accidental reverse rotation.

1,312,410. SAFETY CRANK FOR AUTOMOBILES. ARTHUR E. MILLER and CLARENCE E. ANABLE, Sacramento, Calif. Filed Sept. 17, 1918. Serial No. 254,455. 7 Claims. (Cl. 74—33.)

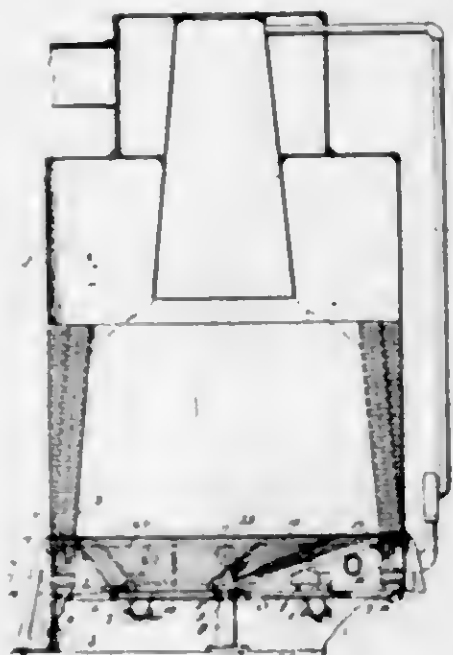
1. A safety crank or handle having companion members one of which is adapted to connect with an engine shaft and the other is designed to be grasped by the hand, shiftable means for connecting said members whereby they may be turned in unison to rotate said shaft, and a spring-actuated detent controlled by the

operator's finger for holding the connecting means in a shifted position, said detent being automatically released



by sudden vibration of the engine communicated through the crank to the operator's hand.

1,312,411. GAS-PRODUCER. HARRY L. MILLNER, Morganton, N. C. Filed Sept. 9, 1918. Serial No. 253,194. 7 Claims. (Cl. 48—66.)

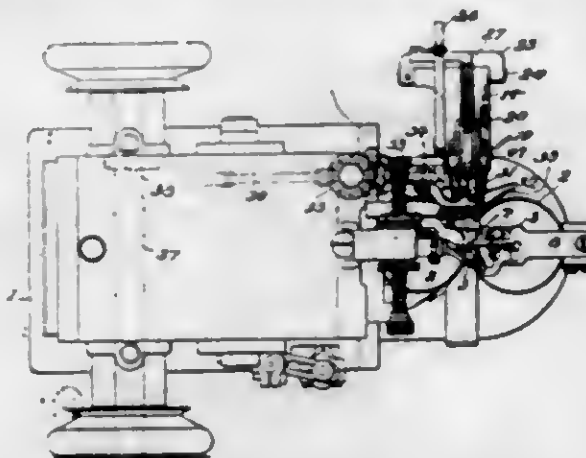


1. A gas producer comprising a furnace, a stationary grate and a rotary basket like grate having an opening directly above the stationary grate, said rotary basket like grate having sides of unequal slope and length, whereby the movement of said basket like grate causes an upward heaving motion of the fuel above and the ash is dragged across the grate bars of the stationary grate.

1,312,412. SEWING-MACHINE AND TRIMMING MECHANISM THEREFOR. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1914. Serial No. 829,913. 26 Claims. (Cl. 112—6.)

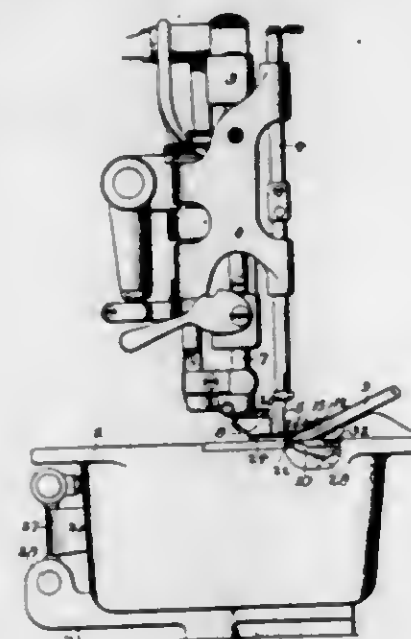
1. In combination with the stitch forming mechanism of a sewing machine, a folding device and a trimming device, a common support for the two, and means for

simultaneously and uniformly adjusting them with respect to the stitch forming mechanism, and means for



adjusting the trimming device independently of the folding device.

1,312,413. TRIMMING MECHANISM FOR SEWING-MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 26, 1915. Serial No. 23,890. 9 Claims. (Cl. 112—6.)

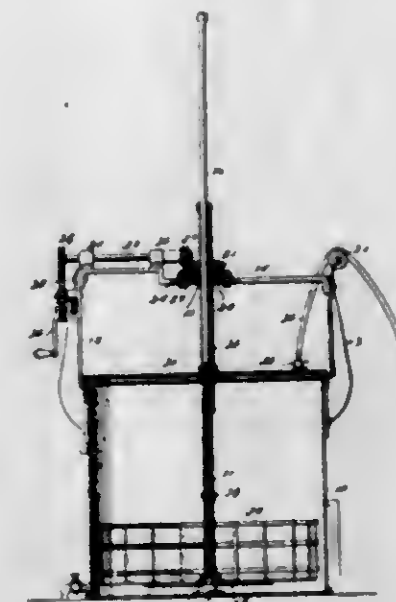


1. A trimming mechanism for sewing machines including in combination, a work support, a presser foot having a needle slot, a trimming blade carried by the presser foot and having its cutting edge substantially flush with the lower face of said presser foot and in advance of said needle slot, a movable trimming blade mounted beneath the work support and adapted to be moved upwardly against the cutting blade carried by the presser foot for cutting the fabric, a swinging arm carrying the movable blade, a bracket on which said swinging arm is mounted, and means for positively oscillating said swinging arm, said presser foot being cut away in rear of the trimming blade carried thereby in order to permit a fabric to be guided to the stitch forming mechanism in rear of the trimming blade.

1,312,414. DISH-WASHING MACHINE. FRED MOXTZ, Newark, N. J. Filed Sept. 17, 1918. Serial No. 254,442. 2 Claims. (Cl. 141—9.)

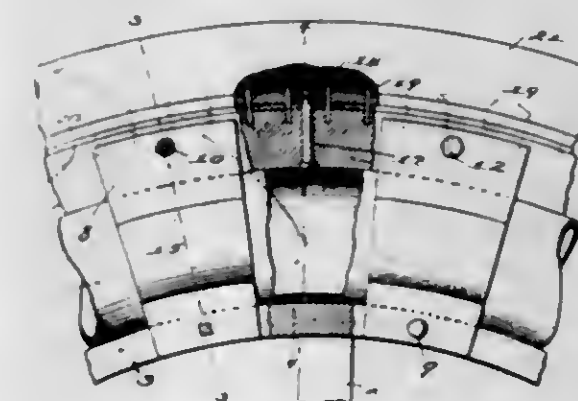
1. A dish washing machine including a tank, a threaded upright, a container having threaded connection with

the upright, and means for rotating the container whereby to cause the latter to ascend or descend, the threads of the upright terminating at a point above the lower end



thereof so that the container may rotate without an accompanying vertical movement when the container is in a lowermost position.

1,312,415. VEHICLE-WHEEL. DANIEL MORIARTY, Oakland, Calif. Filed Oct. 31, 1917. Serial No. 199,517. 2 Claims. (Cl. 152—6.)

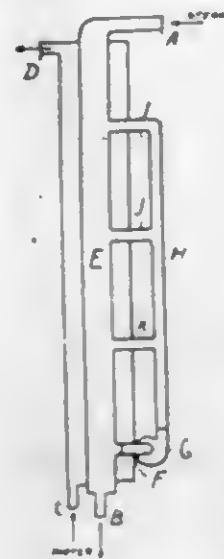


1. In a vehicle wheel, the combination of a felly, a metal rim, dowel pins embedded and secured in the felly and extending through and projecting outwardly beyond said rim, a circumferential strip of hard rubber vulcanized to the outer periphery of the metal rim and to said dowel pins, and a tire vulcanized to the outer side of said hard rubber strip.

1,312,416. CONDENSER. EINAR MORTVED, Torderød, near Moss, Norway. Filed Oct. 15, 1918. Serial No. 258,270. 7 Claims. (Cl. 257—51.)

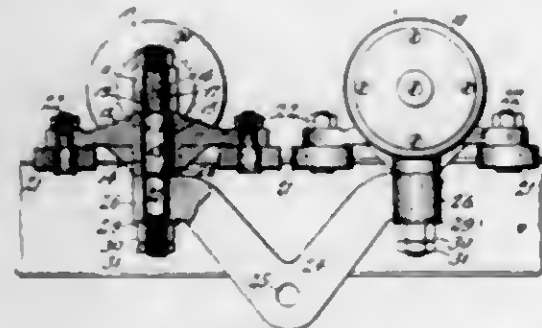
1. The method of condensing steam which consists in conducting part of the steam from the outlet end of the condenser back to one or more points between the inlet

and outlet of the condenser with the object of maintaining as far as possible an even velocity of steam through



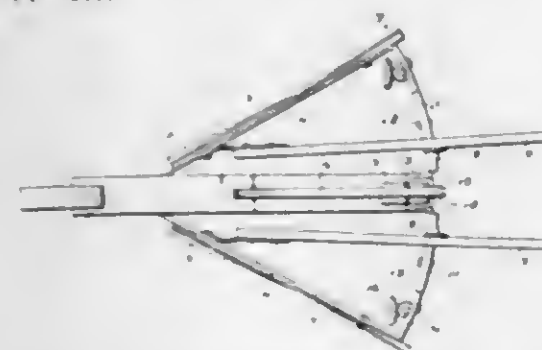
the condenser, so as to increase the efficiency of the heat transmission.

1,312,417. TROLLEY FOR HOISTING APPARATUS, &c. WILLER H. MOSHER, Buffalo, N. Y., assignor to Con-dall, Powell & Mosher, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 8, 1919. Serial No. 281,397. 10 Claims. (Cl. 105-155.)



1. A trolley comprising a pair of wheels adapted to run on a pair of rails, a transverse axle upon opposite ends of which said wheels are mounted, and a tracker bar rigidly connected with said axle and provided at a distance from said wheels in a direction lengthwise of the rails with a guide member adapted to be arranged between said rails.

1,312,418. CULTIVATOR. OTTO MUELLER, Elkton, Fla. Filed Jan. 26, 1918. Serial No. 213,994. 1 Claim. (Cl. 97-10.)

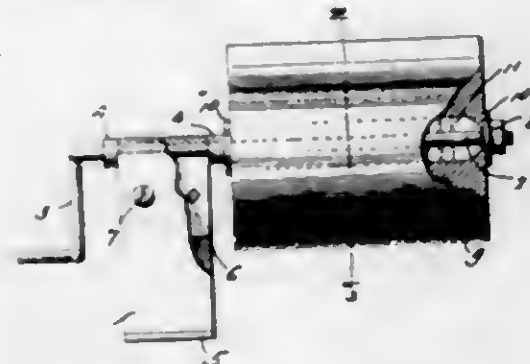


A cultivator comprising a keel having an upwardly disposed arcuate portion, angle members pivoted to the keel, blades carried by the angle members, a guide having flanges to slidably embrace said arcuate portion, and having end portions projecting laterally from said arcu-

ate portion and formed with upper and lower flanges, the rear portions of the angle members being adjustably secured against such end portions and between the flanges, and resilient means for supporting the guide and blades.

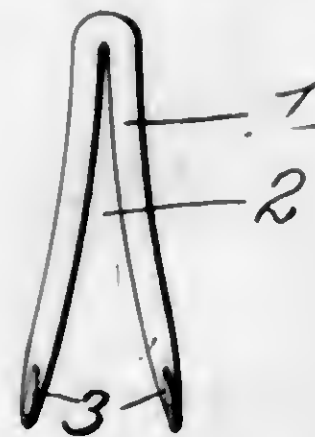
1,312,419. [WITHDRAWN.]

1,312,420. SOAP-HOLDER. SIMON D. NABBE, Marshall-town, Iowa. Filed Feb. 26, 1919. Serial No. 279,306. 3 Claims. (Cl. 45-28.)



1. A soap holder, comprising a shaft having a longitudinal split therein, a block of soap on the shaft and a flat strip in the split of the shaft and projecting laterally therefrom to enter the soap and cause it and the shaft to rotate together.

1,312,421. COMBINATION-FASTENER. JACOB W. NEW-MAN, New Orleans, La. Filed Nov. 7, 1917. Serial No. 200,808. 1 Claim. (Cl. 24-85.)

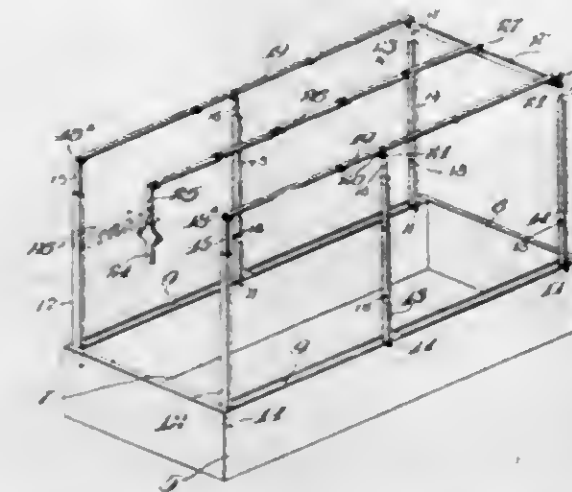


As a new article of manufacture, a combination fastener of the character described, comprising a single piece of flattened suitable material, extending from its central portion forming a V-shaped body having flat diverging legs disposed edge-wise in the same plane and presenting a wedge slot by and between the inner edges of the diverging legs, with its apex at the center of the body portion and its mouth at the outer separated ends of said legs, and each leg being provided at its outer end with an integral hook-like pin extending in a plane at right angles to the plane of the legs with the end of said pin extending toward the aforesaid apex, substantially as set forth.

1,312,422. VEHICLE-BODY. WILLIAM F. NORTON, Chicago, Ill. Filed June 8, 1918. Serial No. 238,878. 3 Claims. (Cl. 21-62.)

1. The combination with a wagon body; of uprights pivotally carried by the side walls thereof, a cross strip pivotally carried by one of the rear uprights and foldable alongside the same, and extensible across to the other rear upright, a support at the front end of the wagon

body located midway between the front uprights, and top longitudinal bars consisting of pivotally connected and foldable sections carried by the front uprights and the



said support, the side bars when unfolded extending to the rear uprights, and the medial bar when unfolded extending to the cross strip above mentioned.

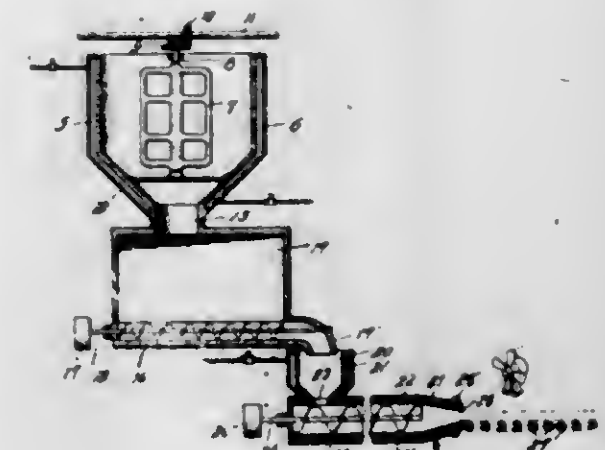
1,312,423. WELL-TUBE-DRAINING DEVICE. CLARK E. RANNEY, Tulsa, Okla. Filed Nov. 26, 1918. Serial No. 264,142. 6 Claims. (Cl. 103-60.)



3. The combination of the working barrel of an oil well pump, a standing valve within the barrel comprising a casing provided with a suitable seat and a ball movable within said casing toward and from said seat, a plurality of finger-like members pivotally connected with said valve casing and extending into the interior thereof through slots above the valve seat, and means for automatically moving said valve from its seat to a position where it will be supported by said members when the working barrel is lowered a predetermined distance from its working position.

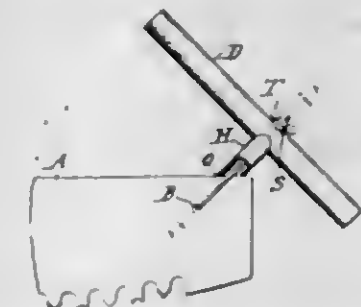
4. The combination with the working barrel of an oil well pump provided with standing and working valves, and means for raising the standing valve from its seat when the working barrel is lowered a predetermined distance from its working position, of means for automatically engaging the standing valve and maintaining it in such elevated position, and means connected with a member of the working valve for disengaging the standing valve from said engaging means on a downward movement of the working valve.

1,312,424. METHOD FOR SOLIDIFYING NORMALLY SOLID SUBSTANCES. WILLIAM D. RICHARDSON, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1916. Serial No. 70,980. 1 Claim. (Cl. 18-40.)



The herein described method of forming normally solid material into bars or the like, which consists in introducing the material while heated and in a more or less plastic or liquid state into one end of an elongated space, subjecting the mass throughout the greater portion of its length and throughout substantially the entire cross sectional area of said greater portion of the length to agitation and longitudinal propelling action toward the opposite end of the elongated space, the agitation being stopped at a point spaced a substantial distance from the leading end of the mass, simultaneously subjecting the mass throughout its entire length to the action of a cooling fluid whereby the mass becomes more or less solid at the leading end portion, and propelling the leading end portion of the mass without agitation and by means of the agitated portion of the mass through an uninterrupted contracted passage of substantial length to compress the more or less solid end portion and form the same into a bar of suitable shape.

1,312,425. HANDLE FOR ONE-MAN CROSSCUT-SAWS. WELLS M. RUGGLES, Wakefield, Mich. Filed Nov. 26, 1918. Serial No. 264,208. 1 Claim. (Cl. 145-111.)



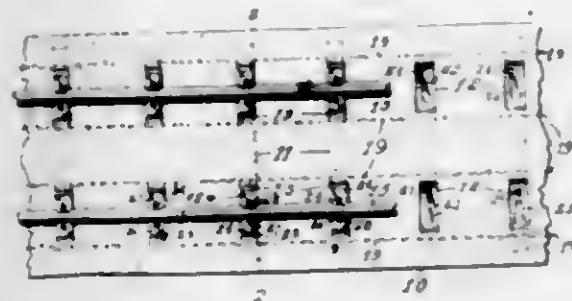
An attachment for cross cut saws, comprising an open ended, cylindrical, tubular shell, having diametrically-opposite slots of different depths formed in one end, the bottoms of the slots being in alignment and inclined, one end of the shell being concaved, a cylindrical handle engaged by the concaved end of the shell, said handle being transversely apertured, a rod having a threaded portion passed through the aperture in the handle and through said shell provided with a hook for engagement with an aperture in the saw, the shank portion of said rod being laterally bent, and a nut fitted to the threaded end of the rod and adapted to hold the shank portion of said saw in the slots and the edge of the saw against the inclined bottoms of the slots.

1,312,426. FLAG-HOLDER. MARTIN W. SCHMIDT, St. Louis, Mo. Filed Oct. 14, 1918. Serial No. 258,129. 3 Claims. (Cl. 116-12.)



3. The combination of a flag holder comprising telescopic inner and outer tubes, the upper end of the inner tube being provided with a cap forming a closure for the top of the outer tube, said inner tube being made of yielding metal and having longitudinal edges forming a longitudinal flag-receiving split, and a flag having an enlarged marginal portion located within said inner tube, said flag being extended through said longitudinal split and gripped by the yielding longitudinal edges of the inner tube, a portion of the longitudinal split being enlarged to permit the enlarged marginal portion of the flag to be inserted into and removed from the inner tube, the lower end portion of the yielding inner tube being enlarged to frictionally engage the outer tube, and the flag receiving intermediate portion of said inner tube being relatively small so that the flag can be coiled around said inner tube and inserted into the outer tube.

1,312,427. BED CONSTRUCTION FOR RAILROADS. LYDELL L. WILSON, Randolph, N. Y. Filed May 5, 1919. Serial No. 294,724. 3 Claims. (Cl. 238-7.)



1. A railroad bed comprising a concrete bed having spaced openings therein, a two-piece rail block shaped to be received in each of said openings, overhanging walls in each of said openings to hold the outer ends of said two-piece rail block thereunder, the central lower edges of said blocks chamfered in opposite directions to permit the wedging insertion thereof in said openings.

1,312,428. PAIL COVER AND STRAINER. JOHN F. ANSELING, Shawano, Wis. Filed Jan. 19, 1918. Serial No. 212,718. 2 Claims. (Cl. 31-14.)

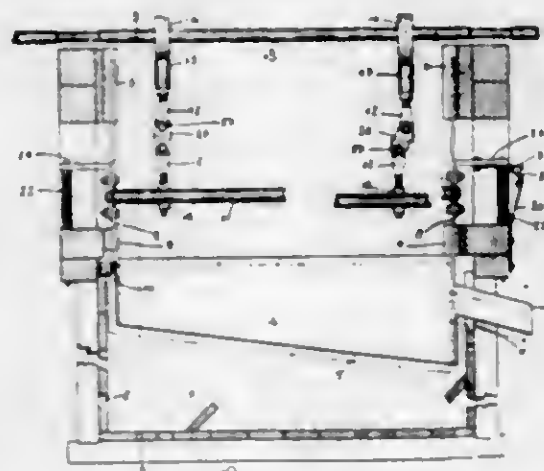
1. A cover for milk pails, comprising a member having a flat annular base, a side rising from the periphery of the flat annular part of the base, said side having its outer portion rounded inwardly and turned outwardly near the mouth thereof, said base being centrally raised

from the under face thereof to provide an inwardly projecting cone, the apex of which is disposed below the



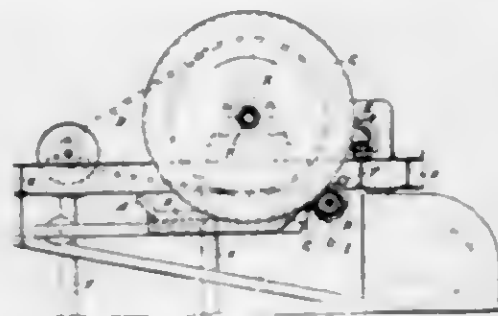
mouth of the cover, the base between the cone-shaped center thereof and the side of the cover having screened openings.

1,312,429. JIG. JAMES H. BARREZ, Central City, and OTTO J. CROSS, Nederland, Colo. Filed Mar. 13, 1918. Serial No. 222,266. 11 Claims. (Cl. 83-80.)



1. In an ore jig, a tank, a screen box having guided vertical travel in the tank, a rock-shaft extending longitudinally of and mounted on the box, an eccentric shaft above the rock-shaft, eccentrics having flexible links connecting them to the rock-shaft, the links adapted to lock individually upon movement in one direction, and a bumper for thrusting the box in endwise motion.

1,312,430. CHIPPED NITER CAKE AND PROCESS OF MAKING SAME. CHARLES S. BENJAMIN, East Orange, N. J., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 22, 1919. Serial No. 291,941. 7 Claims. (Cl. 85-91.)

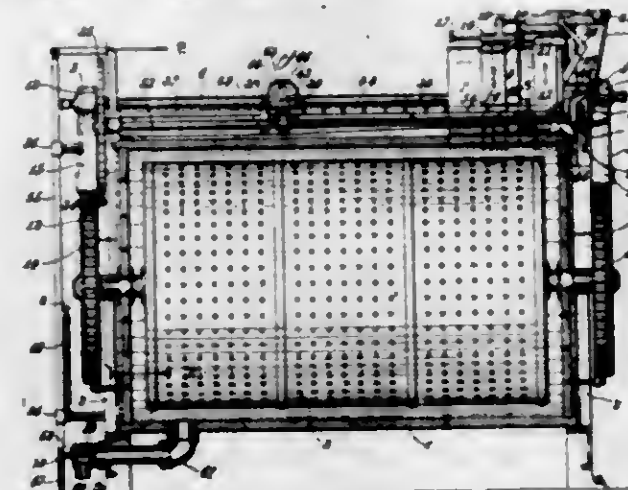


1. The process of treating a molten salt which consists in transferring a relatively thin layer thereof upon a moistened, relatively cool surface, retaining said layer upon said surface until the salt is solidified and upon hardening of the said layer upon said surface removing the solidified salt therefrom in the form of chips or flakes.

6. Niter cake in chipped or flaked form, the two larger surfaces of each flake consisting of relatively

smooth, unbroken surfaces, one of which exhibits the characteristics of a surface solidified upon a moistened, cooled surface, while the other exhibits those of an air cooled surface.

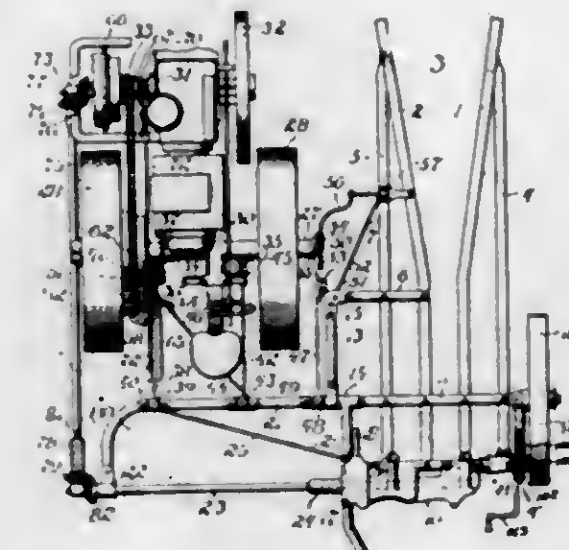
1,312,431. CONTROLLING MECHANISM FOR LAUNDRY-DRY-MACHINES. THEODORE BIRKENMAIER, St. Louis, Mo. Filed Mar. 6, 1917. Serial No. 152,846. 12 Claims. (Cl. 68-18.)



1. In a machine of the class described, laundrying mechanism, driving mechanism adapted to impart to said laundrying mechanism an alternating movement, and automatic mechanism connected with said driving mechanism and operating after a predetermined laundrying operation, adapted to automatically shift said driving mechanism to neutral position to definitely stop the operation of said laundrying mechanism.

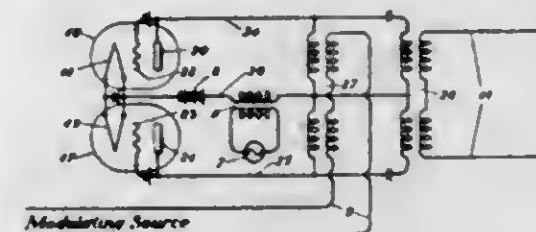
12. In a machine of the class described, laundrying mechanism, controlling mechanism therefor, means adapted to designate the number of laundrying operations performed on a given lot of material, means for setting said controlling mechanism, and means operated upon setting of said controlling mechanism adapted to set said designating means.

1,312,432. CORN-HARVESTER. EDWARD W. BURGESS, Chicago, Ill., assignor, by mesne assignments, to International Harvester Company, a Corporation of New Jersey. Filed Oct. 16, 1915. Serial No. 56,298. 6 Claims. (Cl. 56-33.)



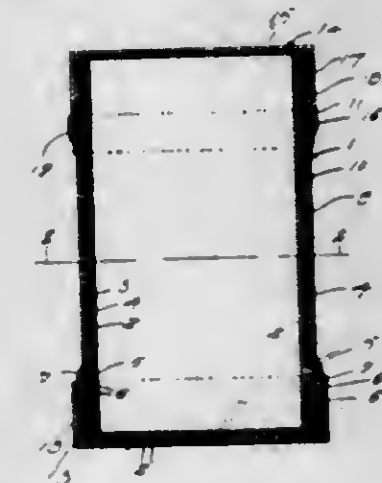
1. In combination, a tractor including a wheel supported frame, a corn harvester including a harvester frame, a plurality of draft members connected to said tractor frame and to the stubbleward side of said harvester frame whereby the stubbleward side of said harvester frame is entirely supported on said tractor frame, and means carried by said draft members for tilting said harvester frame on its axis.

1,312,433. TRANSLATING-CIRCUITS. JOHN R. CARSON, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 10, 1918. Serial No. 257,655. 12 Claims. (Cl. 179-171.)



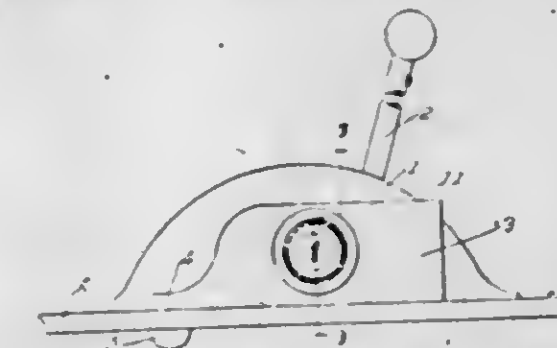
1. In a signaling system, a modulating device comprising an evacuated tube including a heated filament, an anode and a controlling electrode, said anode and controlling electrode being directly connected, a single operating circuit for said tube extending from said filament to said directly connected anode and controlling electrode, and a source of unmodulated oscillations and a source of variable oscillations connected with said operating circuit.

1,312,434. PAPER JAR OR RECEIPTACLE. CHARLES R. CHENEAY, Buffalo, N. Y. Filed Apr. 23, 1918. Serial No. 230,319. 2 Claims. (Cl. 220-43.)



1. A receptacle including a cylindrical body constructed of a plurality of layers, the outer layer of which terminates below the top of the body, a removable cover having a flanged side constructed of inner and outer layers, the inner layer of the flanged side terminating above the outer layer of the flanged side and engaging the top of the outer layer of the cylindrical body, the outer layer of the flanged side overlapping the upper portion of the outer layer of the body, and an annular sealing strip secured to the body and overlapping the lower edge of the outer layer of the flanged side.

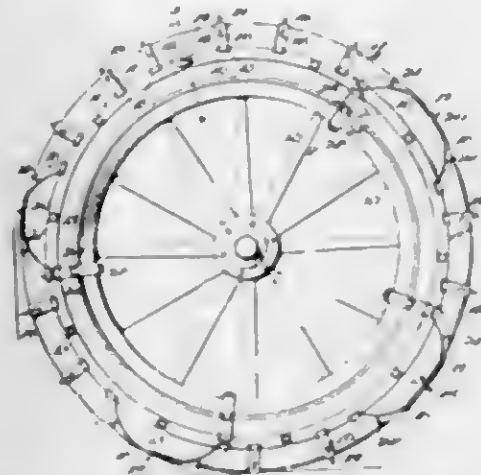
1,312,435. AUTOMOBILE-LOCK. NICKOLAUS S. DREIA, St. Cloud, Minn. Filed Jan. 4, 1917. Serial No. 146,586. 1 Claim. (Cl. 70-131.)



The combination with the floor of an automobile body, a shifting lever, and a guide for the lever having openings

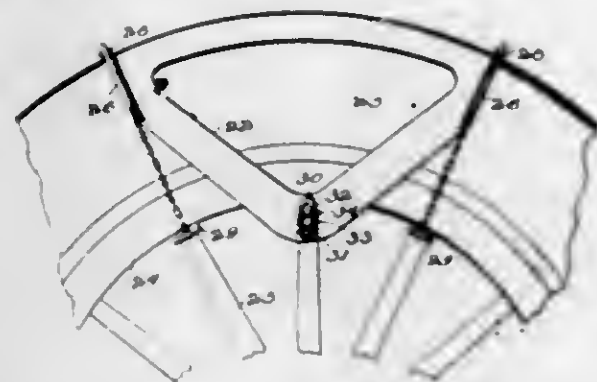
In one side, of a lock casing resting on the floor and having a tongue at one end, a pivotal connection between the tongue and the floor, parallel fingers extending from one side of the casing and movable through one side of the guide and into position across the guide to hold the lever against movement within the guide, and a lock for automatically engaging the floor to hold the casing against movement when pressed against one side of the guide.

1,312,436. ANTISKIDDING ATTACHMENT FOR WHEELS. MARTHA M. Durr, Arnold, Pa. Filed Oct. 1, 1918. Serial No. 256,421. 4 Claims. (Cl. 152-14.)



1. An antiskidding device comprising spaced side members each formed of a plurality of segmental sections hingedly united and adapted to bear against the opposite sides of a tire casing, and a plurality of members coupled at their ends to certain of the segmental sections and extending in reversely oblique directions over the casing and crossing at the junction of adjacent sections.

1,312,437. ATTACHMENT FOR WHEELS. JAMES M. FAULK, St. John, Kans. Filed Oct. 10, 1918. Serial No. 257,913. 1 Claim. (Cl. 152-14.)

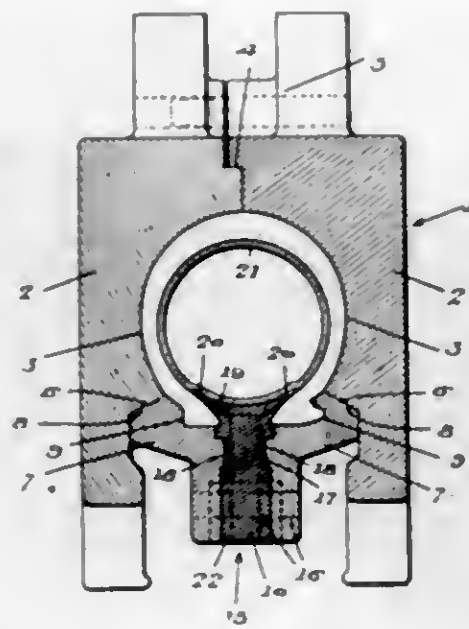


An attachment for wheels comprising a substantially triangular plate having lateral wings at its outer corners, flexible attaching devices extending from said corners of the plate to pass across the tire and engage the spokes, and an adjustable connection between the apex of the plate and the spoke intermediate the spokes engaged by the flexible attaching devices.

1,312,438. TIRE-MOLD. HOWARD H. FORBENT, Kent, Ohio. Filed Mar. 29, 1919. Serial No. 285,962. 3 Claims. (Cl. 18-45.)

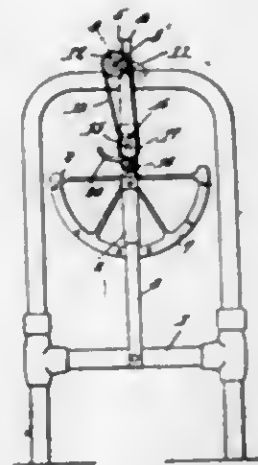
3. A tire casing mold embodying side sections to conform to the sides of a tire casing, a pair of lower mold sections fitting the side sections having portions to conform to the exterior surfaces of the casing beads, a sectional ring between said lower mold sections and having an air

bag seat projecting therefrom into the mold, said seat having lips at opposite sides diverging from one another and conforming to the inner sides of the beads, said seat



being concaved transversely between said lips, and an air bag of circular cross section seated against said seat between said lips.

1,312,439. PATIENT-HANDLING APPARATUS FOR BEDS. THEODORE L. FOSTER, Terre Haute, Ind. Filed Apr. 12, 1917. Serial No. 161,560. 2 Claims. (Cl. 5-44.)

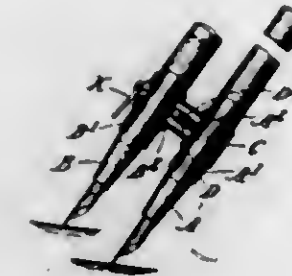


1. Apparatus of the class described including a bed structure, guide housings connected to the ends of the bed, members slidably mounted within the housings, studs thereon and limited in their downward movement by the housings, segments pivotally connected to the studs, and means for simultaneously raising and lowering said members, said means including a shaft journaled on the ends of the bed structure, gears upon the shaft engaging the respective slidable members, an operating shaft below the said gears and within convenient reach of the operator, and means for transmitting motion from said operating shaft to the gear shaft.

1,312,440. DUPLEX PEN. FRANCIS ARTHUR FRINGR, London, England. Filed Mar. 24, 1919. Serial No. 284,822. 2 Claims. (Cl. 120-42.)

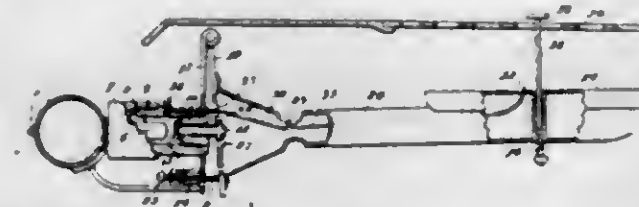
1. The combination with a clip, of a pair of parallel sheaths secured to said clip, a pair of writing members mounted in said sheaths, respectively, and having their writing points projecting therefrom, and a lever pivoted

In said clip between said writing members and having its opposite arms engaging said writing members whereby



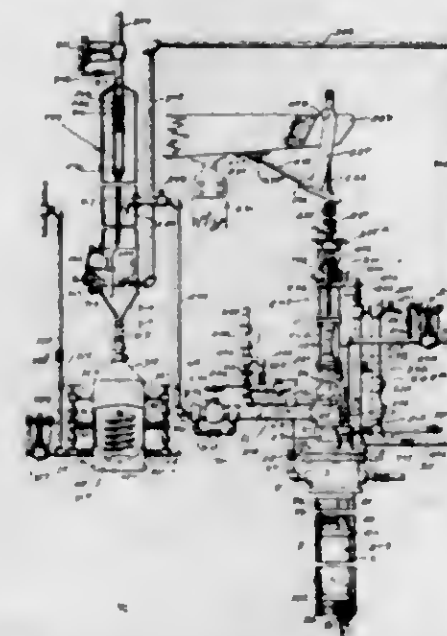
the upward pressure on one writing point is caused to exert a downward pressure on the adjacent writing point or vice versa, substantially as described.

1,312,441. AUTOMATIC GAS-BURNER. FRANK L. GILMAN and JOSEPH H. WILSON, Pasadena, Calif. Filed May 3, 1918. Serial No. 232,415. 5 Claims. (Cl. 120-52.)



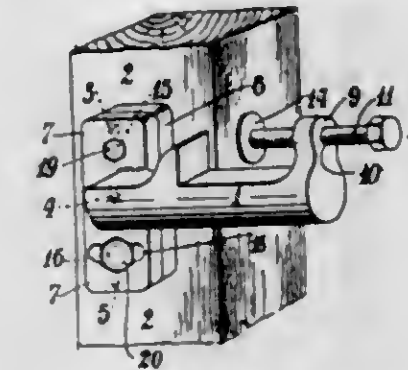
4. The combination of a gas-burner, a duct leading thereto, a perforated hinged leaf to which said duct is attached, a valve casing, a tube connected to said leaf slidably extending into said casing, a valve for controlling admission of gas to said tube adapted to open on rearward movement of the leaf to admit gas to the duct and burner, and a spring for yieldably holding the leaf in an outward position and retaining the valve closed.

1,312,442. WELL EQUIPMENT. WARREN H. GREENLEE, Pasadena, Calif. Filed Jan. 29, 1910. Serial No. 75,113. 37 Claims. (Cl. 103-79.)



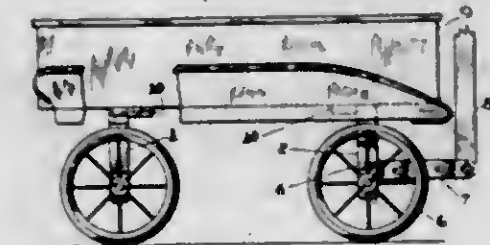
11. In combination, pump tubing, a pump, an entry member for said tubing, a conductor tube to conduct the liquid discharged by the pump to the entry member, a piston in the pump tubing, a sucker line to operate said piston, and means operatively connecting the pump to the sucker line.

1,312,443. BEDSTEAD, SETTEE, AND THE LIKE. THOMAS HILTON, Hammersmith, London, England. Filed Apr. 15, 1919. Serial No. 290,336. 2 Claims. (Cl. 5-4.)



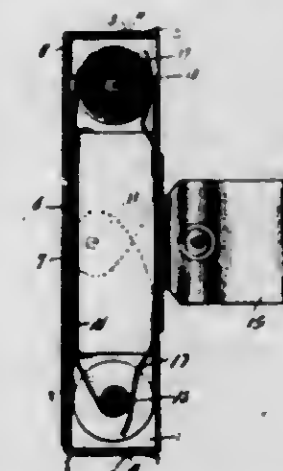
1. A pivot plate to be rigidly secured to a bed post, a palm pivotally connected with the pivot post to be swung in a substantially vertical plane, means to clamp the palm to the pivot plate, a bracket carried by the palm and having a fixed abutment, and an adjustable abutment carried by the bracket and arranged opposite the fixed abutment to cooperate therewith in holding the frame of the mattress or the like.

1,312,444. CHILD'S VEHICLE. JAMES JACKSON, London, Ontario, Canada. Filed Jan. 29, 1919. Serial No. 273,803. 2 Claims. (Cl. 280-8.)



1. In a vehicle, the combination of a pair of bolsters; a rear axle carrying wheels and fixedly connected to the rear bolster; a front axle carrying wheels and connected by a king bolt with the front bolster; a wagon box provided on the underside of its bottom with two cross bars adapted to fit against the two bolsters or against the rear bolster and the front axle; and runners secured to the bolsters and facing in the direction away from the wheel axles.

1,312,445. MAP-BOX AND MAP. ANDREW G. JOHNSON, Stillman Valley, Ill. Filed June 18, 1918. Serial No. 240,569. 3 Claims. (Cl. 40-86.)



1. A road finder comprising a casing, map rollers arranged within the casing, a map wound upon the said rollers, means hingedly mounted in the casing and carry-

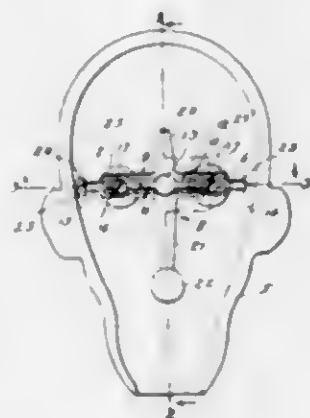
ing the rollers and adapted to swing to permit the latter to be swung into and out of the casing, and means to turn the said rollers.

1,312,446. FEED GRINDER. FORREST W. JOHNSON, Hartman, Colo., assignor of one-half to Floyd M. Wilson, Hartman, Colo. Filed Mar. 29, 1917. Serial No. 158,197. 1 Claim. (Cl. 83-11.)



In combination in apparatus of the class described, a shaft, a series of disks, each having a series of radial arms, said disks resting against each other, face to face, whereby they are positioned on the shaft, a key extending longitudinally of the shaft, each of the disks having a key-way to receive said key, excepting the end disk which has a key-way extending only part way through the same, leaving a shoulder to prevent the movement of said disk in the direction to press against the adjacent disk and through it to press the other disks together and a nut screw threaded on the shaft and pressing against the end disk, substantially as described.

1,312,447. ADJUSTABLE EYE-TILTING DEVICE FOR DOLLS. WARREN G. KELLOW, Los Angeles, Calif. Filed Aug. 12, 1918. Serial No. 249,511. 8 Claims. (Cl. 46-40.)



1. In combination with a doll's head having eye openings therein, of an eye tilting device mounted in said doll's head, comprising a slotted bar, the ends of said bar adapted to pivotally engage the interior surface of the doll's head adjacent the eye openings, whereby to impart a tilting motion to said bar on a movement of the doll's head, and a pair of eyes adjustably mounted on said slotted bar.

1,312,448. FENCE POST. WILLIAM T. LOWBRANCE, Monte Vista, Colo. Filed Nov. 13, 1918. Serial No. 262,375. 1 Claim. (Cl. 180-28.)

In a post of the character described, a base of substantial Z shape in cross section, a post body having its lower end portion bifurcated and fitting snugly about the upper end portion of the web of the base, a cap plate provided with a slot receiving said body and fitting tightly about the bifurcated portion thereof so as to

brace the same, and means for detachably securing the cap plate to the arms of the base so as to brace the



same against lateral movement or distortion and hold the post body in proper centered position.

1,312,449. APPARATUS FOR DELIVERING TOILET-PAPER PIECE BY PIECE. AROLF LUNDBERG, Stockholm, Sweden. Filed June 29, 1918. Serial No. 242,645. 2 Claims. (Cl. 231-33.)

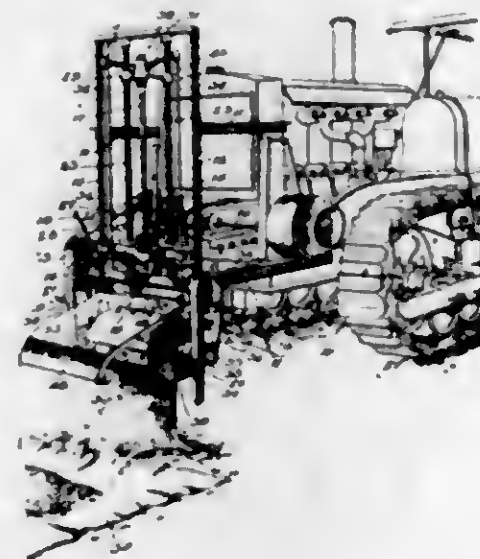


1. An apparatus of the character described, comprising a receptacle formed with a slot in its front and adapted to contain a bundle of separate toilet paper sheets, a plurality of rollers mounted within the receptacle adapted to contact with each other, a removable guiding piece mounted between the rollers at the rear thereof, a removable roller, and a spring cover mounted on said removable roller adapted to maintain frictional engagement of said bundle with the lowermost roller.

1,312,450. DISINTEGRATING AND CONSERVING MECHANISM. EDWIN A. MCKAY and GEORGE D. MOORE, New Orleans, La. Filed Nov. 17, 1917. Serial No. 202,539. 5 Claims. (Cl. 144-2.)

1. A machine for removing stumps and conserving the substance thereof, comprising a portable frame having means for supporting rotating and downwardly feeding toward the stump a horizontal shaft, a cutter whose dia-

metrical and longitudinal dimensions are substantially equal to, or greater than, the transverse section of the



stump, and a hood movable with said cutter and arranged to deflect and gather the cuttings.

1,312,451. ARTIFICIAL BAIT. HARRY L. MEDLEY, Los Angeles, Calif., assignor of one-third to Harry G. Hamilton, Youngstown, Ohio. Filed Feb. 18, 1919. Serial No. 277,896. 2 Claims. (Cl. 43-30.)



1. In an artificial bait the combination with a fish like body having a rearwardly opening V-shaped notch at the rear end thereof, of a guiding plate having its medial portion secured to the lower leg of said V-shaped notch to extend parallel therewith with the edges of the guiding plate flared downwardly and outwardly beyond the sides of the body; and line attaching means extending from said medial portion.

1,312,452. METHOD OF RECOVERING RUBBER SOLVENT. JOHN D. MOUNOX, Lakewood, Ohio, assignor to The Mechanical Rubber Company, a Corporation of New Jersey. Filed Apr. 14, 1916. Serial No. 91,120. 4 Claims. (Cl. 18-58.)

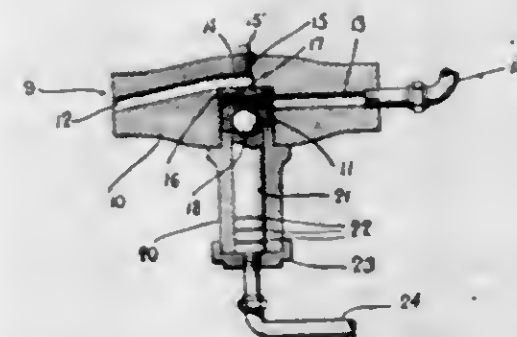
1. In the recovery of rubber solvent in the manufacture of vulcanized rubber articles by the dipping method, first passing the dipping form coated with the rubber solution through a bath which is mutually soluble with the rubber solvent but not with the rubber; and secondly recovering said solvent from the bath by agitating the latter with oil, permitting the mixture to settle and separate, the solvent being taken up by the oil.

1,312,453. PRESSURE-RETAINING VALVE. ALFRED B. MYERS, Gates, Oreg. Filed Nov. 10, 1917. Serial No. 201,332. Renewed Oct. 29, 1918. Serial No. 260,173. 3 Claims. (Cl. 188-12.)

1. A device of the class described comprising a body having a central chamber and ports passing longitudinally through the body and having their inner ends connected to the handle and a portion inclined from the

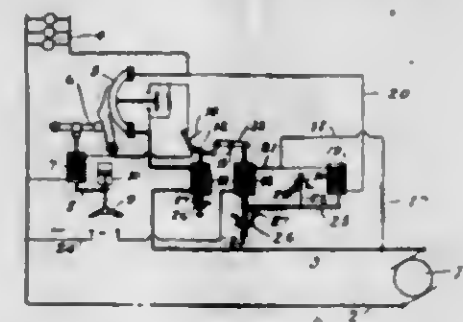
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meeting with said chamber, a removable valve seat having an opening therein located in said chamber and situated between said inner ends of the ports, a valve in said chamber, a cylinder connected with said chamber, a pla-



ton in said cylinder engaging with the valve to force the same onto its seat, an air pipe connected with said cylinder, and a valve in the engine-cab for controlling said pipe.

1,312,454. CIRCUIT-CONTROLLING MECHANISM. EVELLE C. HANEY, Columbus, Ohio, assignor to The Automatic Reclosing Circuit Breaker Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 29, 1915. Serial No. 24,802. 9 Claims. (Cl. 175-294.)



1. In a system of electrical distribution, a source of supply, a load circuit, a circuit breaker, reclosing mechanism, controlling means so related to said load circuit that it will initiate operation of said reclosing mechanism at a given load resistance, and means for adjusting the relation between said controlling means and said load circuit to render said controlling means operable at any chosen load resistance.

1,312,455. CABLE-COUPLING. AMATO N. SAMMARONE, Cleveland, Ohio. Filed Nov. 9, 1918. Serial No. 261,773. 1 Claim. (Cl. 24-124.)



A coupling comprising a shaped sheet metal member having opposite parallel sides and inclined ends, forming a V-shaped pocket, with a hole at the apex, the sides having perforated ears.

1,312,456. WRENCH. JOHN F. SAYLOR, Dodge City, Kans. Filed Mar. 14, 1919. Serial No. 282,624. 1 Claim. (Cl. 81-73.)

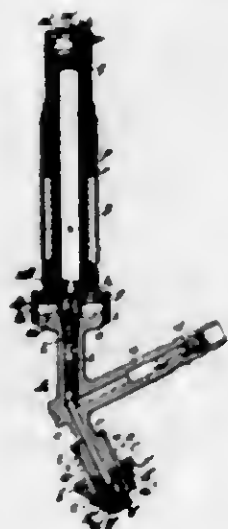
As a new article of manufacture, a wrench for connecting rods of motor vehicle motors comprising a rigid jaw, a handle, and a shank connecting the handle and the jaw, said shank being bent to form a double elbow portion connected to the handle and a portion inclined from the

double elbow portion and terminally supporting the jaw, the jaw and handle being in axial alignment, the jaw being



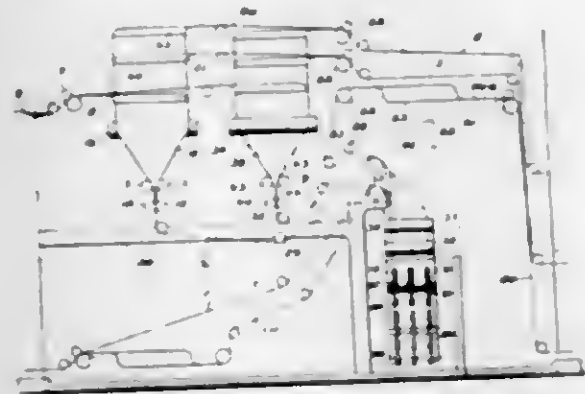
being rigid with the handle whereby the shank may be turned through the medium of the handle.

1,312,457. PRESSURE GAGE. MAXIMILIAN CHARLES SCHWEINERT, West Hoboken, and HENRY P. KRAFT, Ridgewood, N. J. Original application filed June 10, 1911, Serial No. 633,598. Divided and this application filed Mar. 21, 1916. Serial No. 85,624. 5 Claims. (Cl. 73—111.)



4. In a gage of the character described, a member responsive to variations of static pneumatic pressure, an indicating member actuated thereby, said pressure-responsive member and indicating member being adapted to maintain a fixed relative position during indicating movements of the gage, and a quickly actuated means for connecting said indicating and pressure-responsive members and disconnecting the same, said connecting means acting invariably to connect said members only in said fixed relative position, whereby, when connected, the indicating member is always in proper indicating relation to the pressure-responsive member.

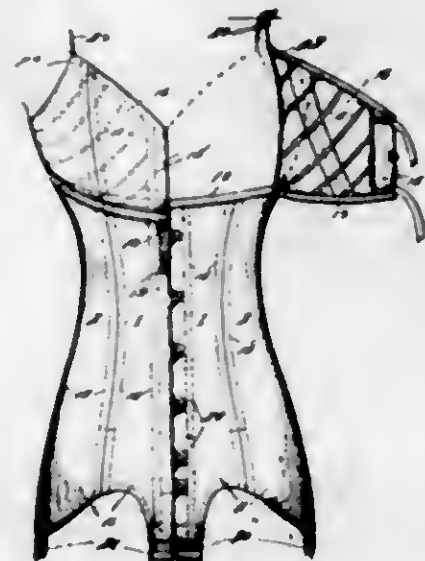
1,312,458. FOLDING MACHINE. RALPH C. SEYMOUR, Larchmont, N. Y., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed July 5, 1917. Serial No. 178,690. 18 Claims. (Cl. 270—41.)



1. A folding machine including in combination two superposed and spaced apart longitudinal formers, means

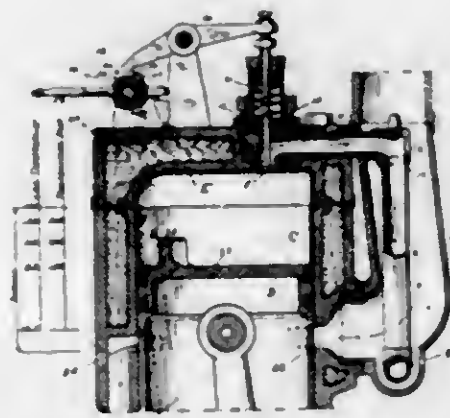
for directing a web to the inner former, means for directing a folded web to said inner former and laying it upon half of the first-mentioned web, means for directing another folded web to said inner former and laying it upon the other half of the first-mentioned web, and means for directing a web to the outer former, said webs being associated by running over the formers.

1,312,459. BRASSIÈRE-CORSET. MARTIN R. LEMERCIER STROCKER, Washington, D. C. Filed July 27, 1917. Serial No. 183,161. 12 Claims. (Cl. 2—73.)



3. The process of making a brassière-corset comprising cutting some of the corset gores to integrally include bust supporting portions, cutting those gores which include bust supporting portions along the bust line from the front gores backward toward the back of the corset, whereby to form a brassière for the corset.

1,312,460. EXPLOSION OIL-ENGINE. JAMES MADISON THOMP, Alameda, Calif. Filed July 16, 1917. Serial No. 180,828. 5 Claims. (Cl. 123—34.)

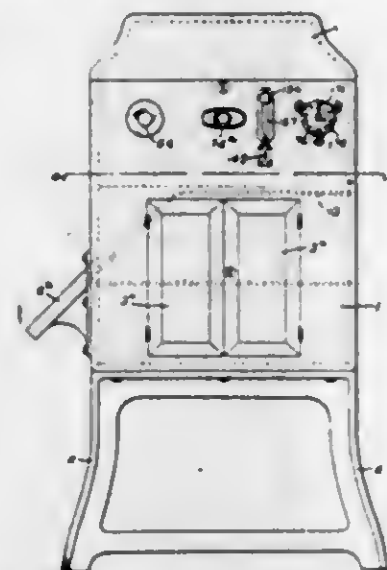


1. In an explosion engine, the method of gasifying fuel, consisting of injecting fuel into a retort, then allowing a part of the air or mixture being compressed in an engine cylinder to enter one end of said retort, then closing said end of the retort, then opening the other end of said retort during the next succeeding compression stroke of the engine allowing some of the gasified contents of the retort to enter said cylinder whereby said gasified fuel is commingled with the air being compressed to form an explosive charge.

1,312,461. SOUND RECORDING AND REPRODUCING MACHINE. HENRY L. WADSWORTH, Lexington, Mass. Filed Mar. 7, 1917. Serial No. 153,141. 20 Claims. (Cl. 274—10.)

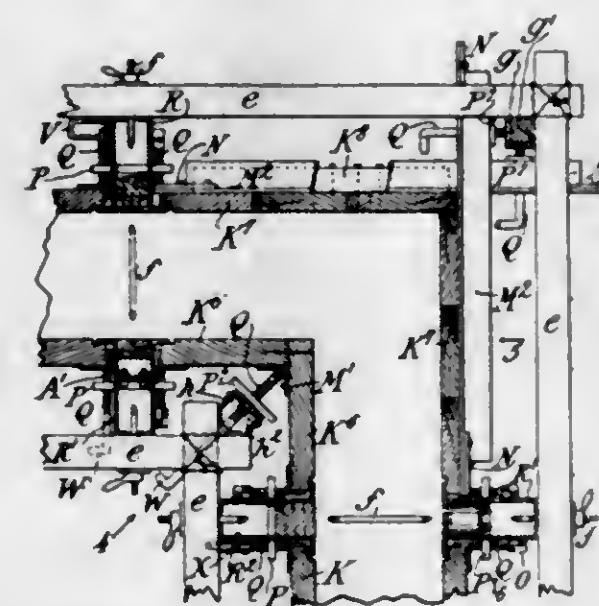
1. A combined sound recording and verified record tablet delivering machine comprising a tablet carrier, means

for recording sounds on the tablet, sound reproducing means therefor, means for delivering the tablet bearing



the sound record without the machine, and means for causing the performance of said functions in regularly progressive sequence.

1,312,462. MOLD FOR CONCRETE CONSTRUCTION. ROWLAND T. WALES, Sewaren, N. J. Filed July 24, 1915. Serial No. 41,683. 13 Claims. (Cl. 25—131.)



12. A mold for concrete comprising plates, angle irons and a series of studs, locks engaging the studs and holding the angle irons in position, said angle irons holding the plates in position and being movable relatively to said plates, one wing of each angle iron being adjacent the outer face of a plurality of said plates and the other wing extending from the aforesaid wing toward the mold face and between one of said studs and the ends of said plates, the first said wing bearing against said locks.

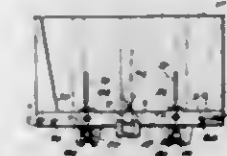
1,312,463. METHOD OF MAKING PROPELLANT POWDER. RICHARD GEORGE WOODBRIDGE, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 17, 1918. Serial No. 250,330. 15 Claims. (Cl. 52—3.)

1. The process which comprises impregnating the surface of an explosive grain insoluble in water with a mixture of detergent materials substantially insoluble in water by subjecting the grain, while intimately mixed with said detergent materials, to treatment with hot water.

1,312,464. BURSTING CHARGE FOR CONTAINERS INTENDED TO BE EXPLODED AND PROCESS OF FORMING SAID CHARGES. CLIFFORD A. WOODBURY, Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 4, 1917. Serial No. 184,491. 9 Claims. (Cl. 52—3.)

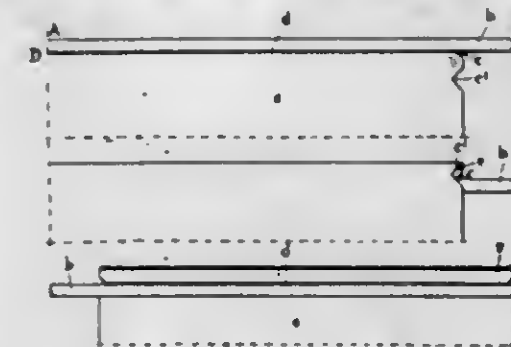
1. A bursting charge comprising trinitrotoluenol, picric acid, and trinitroxylenol.

1,312,465. ROLLING STOCK. GEORGE F. ZAUN, San Bernardino, Calif. Filed July 22, 1918. Serial No. 246,107. 10 Claims. (Cl. 105—281.)



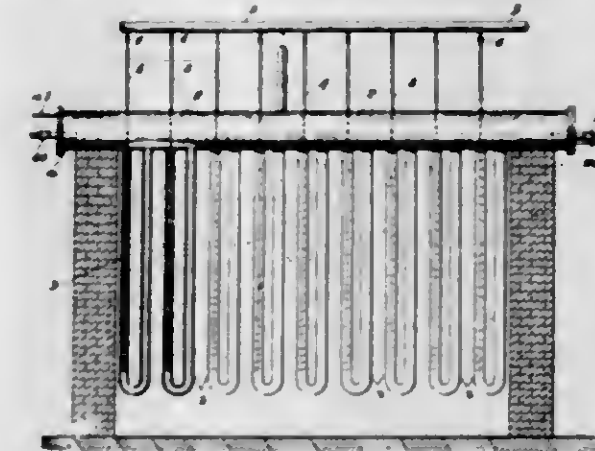
1. A car provided with a bottom section adapted to be inclined in a plurality of directions, means for releasably supporting said bottom section at a plurality of points, and an adjustable member adapted to support said bottom member and adapted to be inclined to accommodate said bottom member in a plurality of different inclinations.

1,312,466. RECEPTACLE. LOUIS ETIENNE AMIEUX, Nantes-Chantenay, France, assignor to Société Amieux Frères & Cie, Nantes-Chantenay, France. Filed Oct. 18, 1917. Serial No. 197,217. 4 Claims. (Cl. 220—53.)



1. A receptacle including a tubular shell having one of its extremities bent inwardly and parallel to the wall of the shell to form a reinforced extremity for the shell, the bent portion of the shell having a weakened line to form a tearing strip, a tongue integral with said strip, and an end closure secured to said shell.

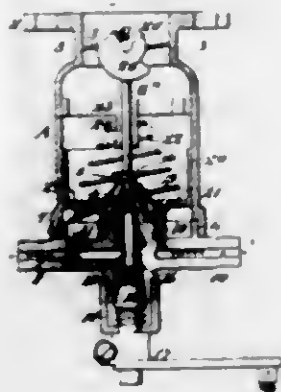
1,312,467. APPARATUS FOR TREATING HYDROCARBONS. BENJAMIN ANDREWS, Houston, Tex., and WILLIAM C. AVERILL, Jr., Meroux, La. Filed Feb. 10, 1917. Serial No. 147,780. 11 Claims. (Cl. 196—1.)



1. Apparatus for treating hydrocarbon oils comprising a tubular circulatory heating system, means for main-

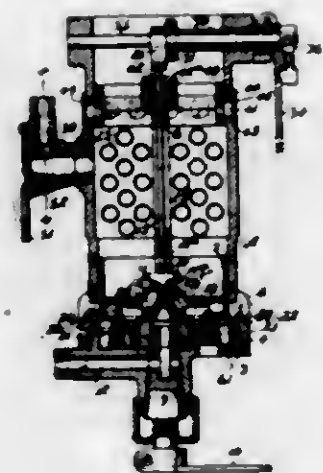
maintaining a molten metal in said tubular circulatory heating system, and means for injecting oils into said molten metal and for conducting away the resulting vapors.

1,312,468. CARBURETER. IRVIN E. HARRICKLOW, San Francisco, Calif. Filed Oct. 18, 1917. Serial No. 197,233. 7 Claims. (Cl. 261-51.)



1. In a carbureter, a needle valve having a stem the upper end of which is free, a throttle valve, a cam connected to the throttle valve and having wiping engagement with the free upper end of the needle valve stem, and a positive connection between the cam and throttle valve having turnable threaded means for adjusting the position of the cam with relation to the throttle valve by mere turning of the threaded means.

1,312,469. CARBURETER. IRVIN E. HARRICKLOW, San Francisco, Calif. Filed Dec. 4, 1917. Serial No. 205,293. 16 Claims. (Cl. 261-50.)

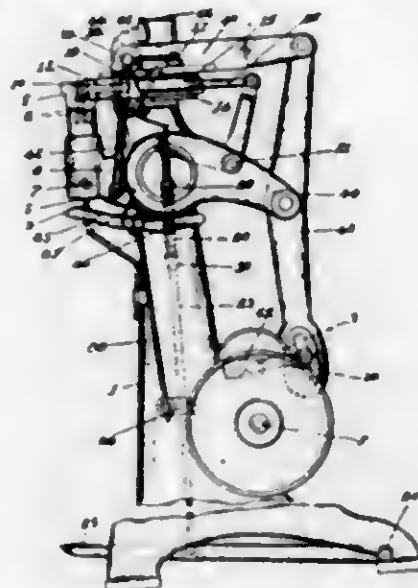


15. In a carbureter, a casing having an air inlet, a fuel nozzle in the casing, a valve controlling the air inlet, a valve controlling the fuel nozzle, a member rigidly secured to the air controlling valve, means to slidably support the fuel controlling valve from said member to allow the former to move independent of the latter, and actuating means common to said member and supporting means of the fuel controlling valve for engaging and operating each.

1,312,470. SHOE UPPER-SHAPING MACHINE. ALTHUR RATES, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 30, 1915. Serial No. 18,026. 37 Claims. (Cl. 12-97.)

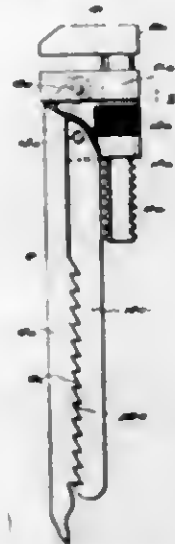
1. A machine for shaping an end portion of a shoe upper having, in combination, a mold, a wiper sustained for movement with the wiper continuously in substantially uniform angular relation to and above the plane of the tread face of the mold to wipe the margin of the upper over the tread face of the mold, and operating means for

the wiper that cause it to move from a normal elevated relation to the mold downwardly, toward the said tread



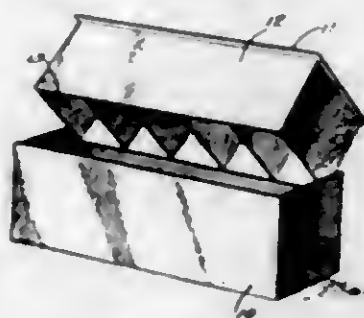
face as it is moved over the same so that the wiper has a combined wiping and compressing action.

1,312,471. QUICK-ADJUSTABLE WRENCH. WILLIAM LOUIS BASSOLO, San Diego, Calif. Filed Dec. 1, 1917. Serial No. 204,839. 2 Claims. (Cl. 81-131.)



1. A wrench comprising a pair of shanks arranged to parallel one another and provided with relatively engaging ratchet teeth, a jaw rigidly disposed at one end of said shanks, a jaw pivotally connected to one end of the other shank and slidably engaging a portion of the shank of the first jaw, said shank of said rigid jaw being in two parts having pivotal connections and means for adjusting one of said shank parts with respect to the other.

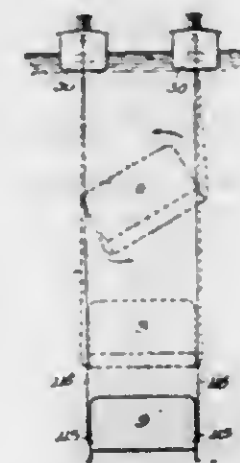
1,312,472. COMPARTMENT-CONTAINER. DAVID BROWN, New York, N. Y. Filed Jan. 29, 1918. Serial No. 214,314. 2 Claims. (Cl. 229-7.)



1. A compartment container comprising a casing having side walls, end walls and a bottom, a covering member

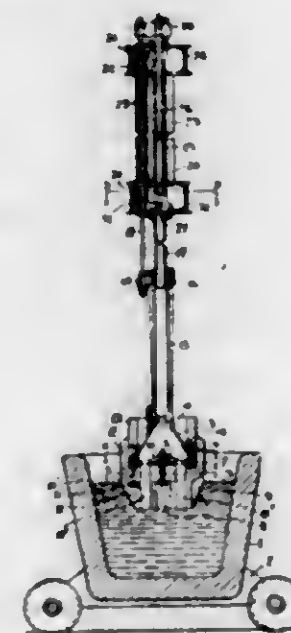
therefor, a pair of side and a pair of end walls connected with the covering member and depending therefrom, a plurality of partitions connected with said covering member arranged between said last mentioned side walls, said last mentioned side walls and said partitions telescopically fitting into the container formed by the first mentioned side and end walls and bottom, said covering member having an aperture for each of the compartments, and a covering plate for each of said apertures.

1,312,473. SHIP-SALVAGING METHOD AND APPARATUS. HENRY D. DEAM, Benton Harbor, Mich. Filed June 17, 1918. Serial No. 240,313. 5 Claims. (Cl. 114-51.)



3. A method of raising a sunken and inverted boat, consisting in grappling the hull of the boat, in raising the boat a considerable distance, in rolling the boat until it is right side up, and in then increasing the buoyancy of the boat until the buoyancy becomes greater than the weight of the boat.

1,312,474. METHOD OF TREATING METAL. GUSTAF L. FISK, Harrisburg, Pa. Filed May 9, 1916. Serial No. 96,271. 2 Claims. (Cl. 75-44.)

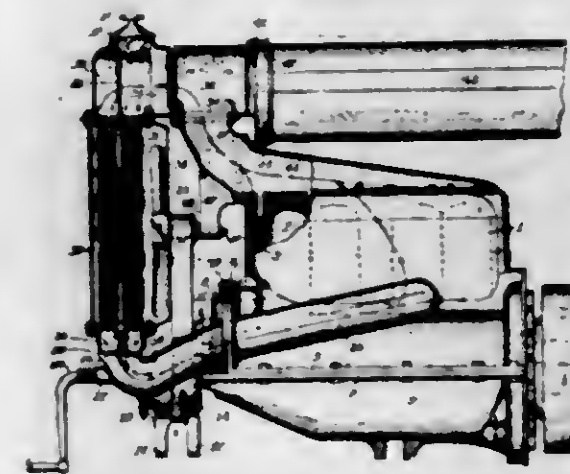


2. The process of making steel which consists in the heating and preliminary refining of the metal in the container in which the unrefined metal is taken to the steel furnace for finishing into steel by subjecting the metal in transfer to an air blast delivered from above and independent of said container.

1,312,475. ANESTHESIA ETHER AND PROCESS OF MAKING THE SAME. EDMUND M. FLAHERTY, Parlin, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 18, 1918. Serial No. 217,753. 4 Claims. (Cl. 23-24.)

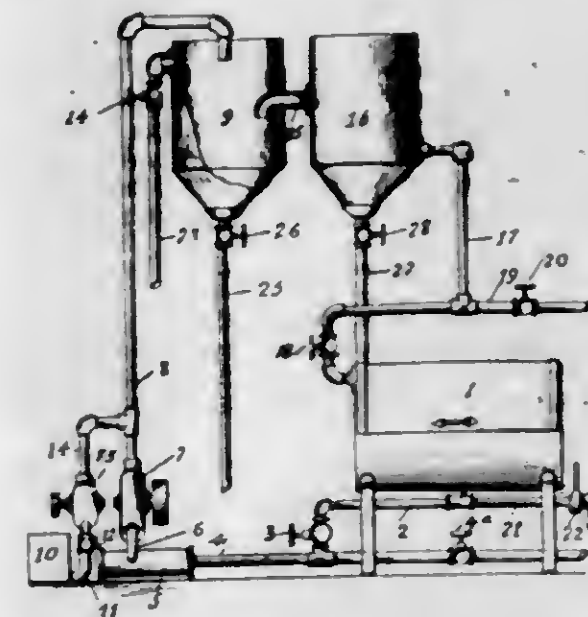
1. The process which comprises purifying ether by applying thereto a cold aqueous solution of an alkali and then passing the vapor of the ether over solid caustic soda.

1,312,476. ENGINE AND RADIATOR ASSEMBLY. HENRY FOWN, Dearborn, Mich. Filed July 17, 1918. Serial No. 245,429. 14 Claims. (Cl. 123-195.)



1. In an engine and radiator assembly, a cylinder block, a front cover connected thereto, and a radiator supported wholly on said cover and communicating with said cylinder block.

1,312,477. PROCESS FOR REUSING PREVIOUSLY-USED SOAPSUDS. HARRY MILTON GRAY, Los Angeles, Calif. Filed Aug. 15, 1917. Serial No. 186,345. 1 Claim. (Cl. 210-5.)



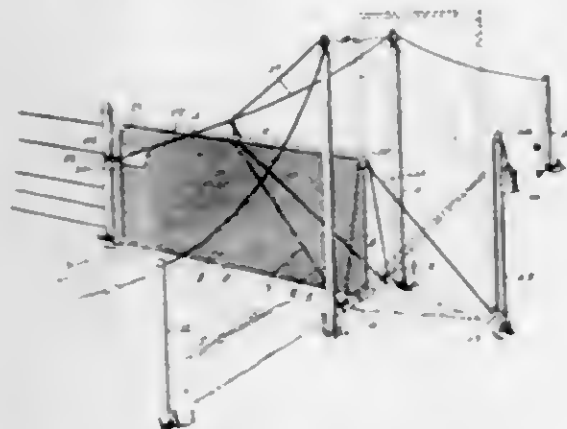
The process of reusing soap-suds which consists of drawing off used soap-suds, adding alkali to such suds running the same into a tank and permitting the suds to stratify, whereby the lighter impurities rise and form a top stratum and the heavier impurities fall and form a bottom stratum and the suds fit for reuse form an intermediate stratum and then reusing such intermediate stratum.

1,312,478. LAMP-BURNER. AUGUST W. GREGOR, Meriden, Conn., and THEODORE H. FARNICH, Chicago, Ill., assignors, by mesne assignments, to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1918. Serial No. 232,776. 8 Claims. (Cl. 67—38.)



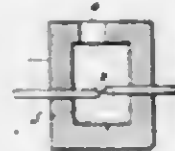
1. In a lamp of the type described, having an inner wick tube, a spreader closing the upper end of the tube and rising above the upper end of the wick, the closed end of the spreader provided with an annular row of air outlet openings adjacent to its periphery, a cone deflector of substantially the same diameter as the spreader above said openings adapted to direct air rising therethrough substantially horizontally above the upper end of the wick.

1,312,479. FARM-GATE LATCH. ARTHUR C. HARMAN, Delta, Iowa. Filed June 27, 1917. Serial No. 177,362. Renewed June 27, 1919. Serial No. 307,255. 1 Claim. (Cl. 70—28.)



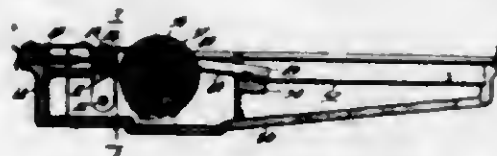
The combination with a swinging member and an abutment for said member, of a U-shaped spring actuated latch carried by said member and engageable upon each side of the abutment, cam projections also positioned upon each side of said abutment in the path of the latch to automatically retract the latter and means for releasing the latch.

1,312,480. METHOD OF REFINING ZINC. SVEN HULTDT, Stockholm, Sweden, assignor to Norsk Elektrisk Metallindustri Aktieselskab, Sundløkken, Sarpsborg, Norway. Filed Apr. 3, 1917. Serial No. 159,508. 2 Claims. (Cl. 204—64.)



1. The method of continuously refining impure zinc by exposing the molten body of zinc to the action of radiant heat produced by electrical means, which comprises maintaining a body of zinc having such a depth in proportion to the vaporizing surface, that lead from the layer of lead deposited underneath the zinc layer, will remain entirely unvolatilized, whereby pure zinc, free from lead, will volatilize.

1,312,481. STENCILING APPARATUS. JOHN HUNER, Melrose Park, Ill., assignor to Cox Multi-Miller Co., Chicago, Ill., a Corporation of Maine. Filed Oct. 15, 1915. Serial No. 55,927. 7 Claims. (Cl. 101—347.)



1. In a device of the character described, an ink supply reservoir, a roller mounted to extend partially into said reservoir, means for rotating said roller to carry ink out of said reservoir, a scraper arranged at an angle to the surface of said roller and having its edge presented to said surface, and positioned to cooperate with a portion of said roller emerging from said reservoir for removing excess of ink from said roller, and a second scraper similarly arranged and positioned to cooperate with a portion of said roller returning to said reservoir to remove the remaining ink from said roller.

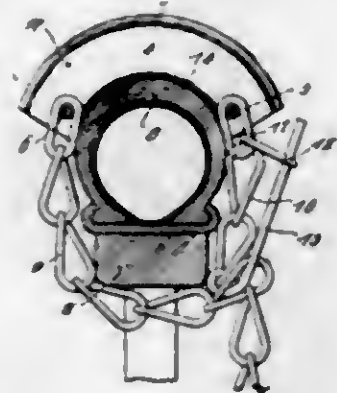
1,312,482. PNEUMATIC TIRE. HARRY G. IMHOFF, Waterloo, Iowa. Filed Feb. 5, 1916. Serial No. 76,450. Renewed May 10, 1919. Serial No. 296,126. 2 Claims. (Cl. 152—22.)



1. As a new article of manufacture, an elastic body having numerous chambers, whose chambers are filled with an elastic fluid, wound spirally upon itself to form a roll adapted for insertion in a hollow resilient tire-casing, and a bond securing the overlapping part of the roll to the roll, formed as a longitudinal extension adapted to close the space between the bead parts of the tire-casing, when the roll is used as a filler for the casing.

2. As a new article of manufacture, a cylindrical filler for an elastic tire-casing comprising an elastic cellular structure rolled upon itself and having an elastic rib adapted to be seated fittingly in the inter-space of the casing-beads and the rim on which the casing is mounted.

1,312,483. MUD-LUG FOR AUTOMOBILE-TIRES. HALMEA C. KITTELSON, Minneapolis, Minn., assignor to Pressed Steel Automobile Lug Company, Inc., Minneapolis, Minn. Filed Apr. 19, 1917. Serial No. 163,279. 2 Claims. (Cl. 152—14.)



1. A mud lug formed of a sheet of metal having its central portion folded upon itself transversely, said fold extending outwardly at approximately right angles to

form a transverse rib, said rib being of a sufficient height to provide a relatively large side surface for gripping sand or mud, the outer periphery of said rib extending across the tread surface of the tire, the remaining portions of said sheet being curved to conform to the shape of the tire, the walls of said rib being spaced apart, rivets passed through said walls near their outer ends, and means carried by said rivets and arranged within the walls of said rib for securing the lug in position.

1,312,484. APPARATUS FOR OZONE GENERATION. WILLIAM JOHN KNOX, New York, N. Y., and JOHN P. MALLETT, Elizabeth, N. J., assignors, by direct and mesne assignments, to General Research Laboratories, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1914. Serial No. 815,585. Renewed Oct. 29, 1918. Serial No. 260,211. 16 Claims. (Cl. 204—32.)



1. A system for generating ozone comprising a pressure storage tank, a compressor arranged to deliver oxygen containing atmosphere to the tank under pressure, an ozone tube, a conduit connecting the storage tank to the inlet pipe of the ozone tube, a refrigerating device, and a conduit connecting the refrigerating device with the outlet pipe of the ozone tube.

1,312,485. MUSIC-STAND. ALBERT KRAUTH, Hamilton, Ohio; Fritz G. Diesbach administrator of said Albert Krauth, deceased. Filed Aug. 23, 1917. Serial No. 187,855. 5 Claims. (Cl. 45—121.)



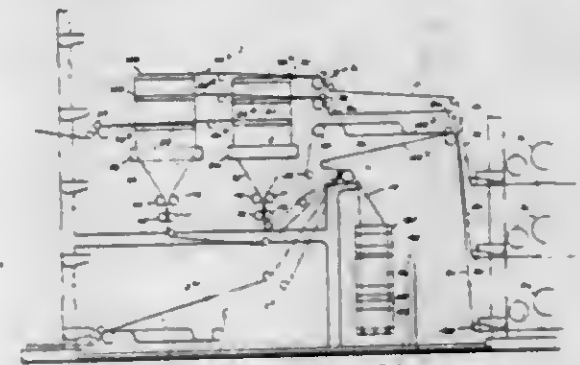
3. A device of the class described comprising telescoping tubes, the inner tube being formed with diametrical slots and a transverse pivot, a tension member on the pivot having compressible limbs normally projecting through said slots.

1,312,486. MOISTENING DEVICE FOR GUMMED TAPE, LABELS, AND THE LIKE. THEODORE H. KREUER, Bridgeport, Conn. Filed Oct. 3, 1917. Serial No. 194,470. 9 Claims. (Cl. 91—14.5.)



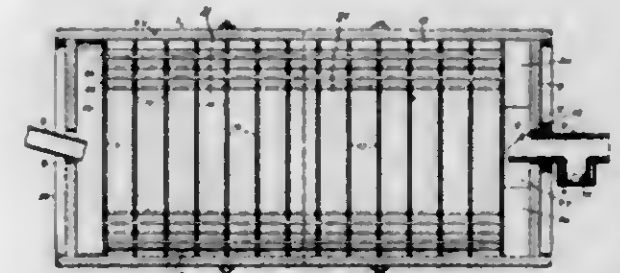
1. A moistener for gummed tape including moistening means of a length not less than the width of the tape and across which the tape is drawn, a portion of the moistening means being yieldable independently of other parts thereof so that said yieldable portion can be moved out of operative position leaving the other parts in operative position.

1,312,487. PRINTING-PRESS. HUBERT LANG, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed June 18, 1917. Serial No. 175,416. 45 Claims. (Cl. 270—5.)



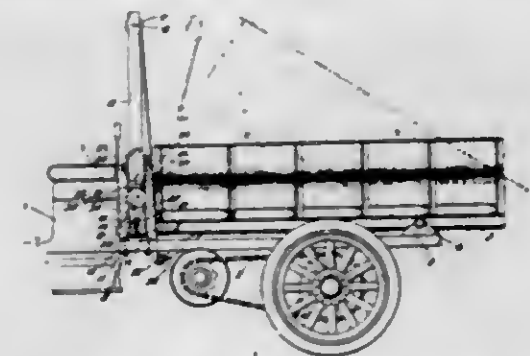
1. A printing press including in combination means for printing a plurality of webs, means for folding a plurality of webs, means for associating a plurality of the folded webs with an unfolded web and back to back with each other, and means for folding said unfolded web to inclose the plurality of previously folded webs.

1,312,488. APPARATUS FOR EXTRACTING METALS FROM THEIR ORES. EDMUND S. LEAVER, Tucson, Ariz., assignor of one-half to Charles E. Van Barneveld, Tucson, Ariz. Filed July 2, 1918. Serial No. 243,015. 3 Claims. (Cl. 23—31.)



1. An apparatus for extracting metals from their ores and oxidizing the resulting solution, consisting of a rotary drum provided with means for supply of ore pulp and outflow of gas at one end, and with means for outflow of ore pulp at the other end, means for supplying hot sulfurous oxidizing gases to the drum at the pulp discharge end thereof, so as to cause such gases to pass through the drum in counter current with the ore pulp, said drum being provided with lifts for raising the ore pulp and dropping it through the gases passing in the drum and with baffle means extending within the drum in position to intercept and distribute the ore pulp dropping from said lifts.

1,312,489. TRUCK-HOIST. WINFIELD S. LIVENGOOD, Kansas City, Mo., assignor to Andrew A. Kramer, Kansas City, Mo. Filed May 28, 1918. Serial No. 237,024. 8 Claims. (Cl. 298—19.)



1. The combination with a vehicle frame, and a vehicle bed having one end pivotally mounted on the frame,

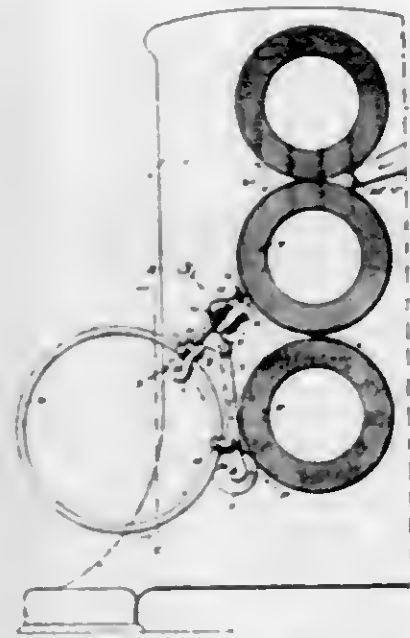
of a vertically swinging hoisting device, the base of which is resiliently connected to the frame, adjacent to the free end of the bed, and means operating over the upper end of the hoisting device for raising and lowering the bed on its pivoted mounting, the hoisting device having swinging movement toward the bed when the free end thereof is raised and swinging movement away from the bed when the free end of the bed is lowered.

1,312,490. CIGAR WITH SELF-CONTAINED HOLDER. JOHN W. MCATLIVRA, Pelham, N. Y. Filed Apr. 26, 1919. Serial No. 292,781. 8 Claims. (Cl. 131-52.)



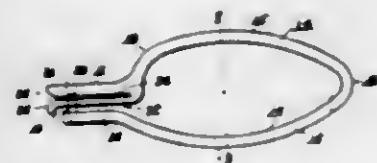
1. An attachment for a cigar comprising a cup having a downwardly projecting stem, the cup and stem being divided longitudinally into a plurality of parts, and means engaging with said stem for holding said parts together.

1,312,491. MACHINE FOR AND PROCESS OF FORMING RUBBER TIRES. ROBERT McCLENATHEN, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y., a Corporation. Filed Jan. 9, 1919. Serial No. 270,491. 6 Claims. (Cl. 154-9.)



1. In a machine for forming rubber tires of strips of rubber applied to a rim, strip cutting blades mounted for cutting a strip of rubber contemporaneously as such rubber is applied to the rim, and means to determine the width of the unapplied strips of rubber, such means controlled by the cumulative thickness of the preceding applied strips.

1,312,492. TICKET PUNCH. GEORGE W. PROCTY, Milton, Mass. Filed Sept. 14, 1918. Serial No. 254,376. 4 Claims. (Cl. 164-119.)



1. A ticket punch consisting of a U-shaped curved body portion having formed integral therewith on its ends,

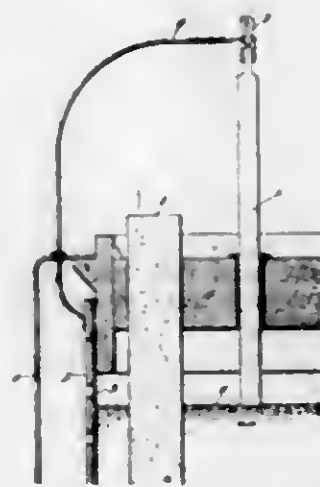
three parallel plates, the central plate of which is thinner than the outer plates and said plates having aligned openings therethrough, and a cutting member rigidly secured in one outer plate with its cutting end normally positioned within the opening in the central plate and adapted to enter the opening in the other outer plate when said outer plates are forced toward each other.

1,312,493. EAR-PROTECTOR. GEORGE J. THIES, Aurora, Ill. Filed Nov. 13, 1918. Serial No. 262,333. 4 Claims. (Cl. 128-152.)



1. An ear protector comprising a substantially cup shaped member adapted to receive the ear of the wearer, means for insulating the walls of said member and a compressible annulus surrounding the open end of the cup shaped member and extending inward to provide a flange engageable around the ear of the wearer.

1,312,494. INDICATING DEVICE FOR ELECTROLYTIC CELLS. FRANK G. WHEELER, Appleton, Wis., assignor to Bleach Process Company, Appleton, Wis., a Corporation of Wisconsin. Filed May 22, 1916. Serial No. 99,093. 7 Claims. (Cl. 177-311.)

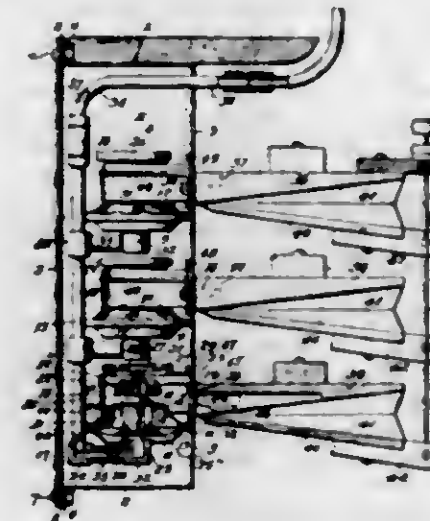


1. In an electrolytic cell, the combination with the anode, cathode and electrolyte, of an additional electrode extending to the normal level of the electrolyte, a shunt circuit including one electrode, the electrolyte and the additional electrode, and a device in said shunt circuit for indicating an interruption thereof.

1,312,495. PNEUMATIC ACTION FOR MUSICAL INSTRUMENTS. MONETA S. WRIGHT, Worcester, Mass. Filed Nov. 3, 1914. Serial No. 870,033. 46 Claims. (Cl. 84-178.)

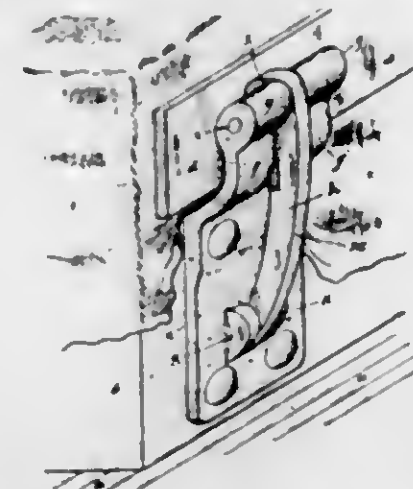
1. In a pneumatic action for musical instruments, the combination of a vacuum chamber casing, a series of primary pneumatic elements and valve casings arranged wholly within the vacuum chamber casing, valves within

the valve casings and inclosed thereby and power pneumatics one for each valve casing arranged without the



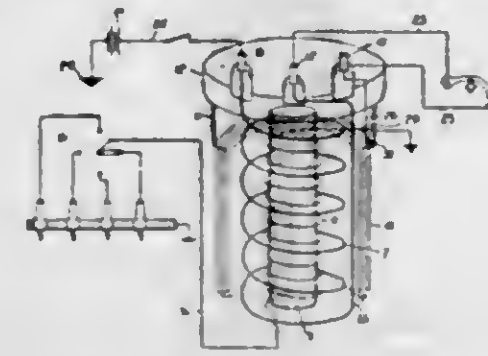
vacuum chamber casing and operatively associated with the valve casings.

1,312,496. CANVAS-SECURING FASTENING-CLAMP FOR HATCHES OF VESSELS. EDWARD G. ANDERSON and ARCHIE H. GRAHAM, Portland, Ore. Filed Mar. 14, 1918. Serial No. 222,487. 4 Claims. (Cl. 114-203.)



3. In a clamping device of the character described, the combination of a cam lever resiliently biased at one end, and means for housing the tip of the cam lever when in its holding position, thereby preventing the inadvertent displacement of the cam lever.

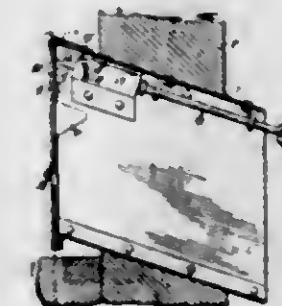
1,312,497. TRANSFORMER-COIL FOR IGNITION, &c. JOHN F. CAVANAGH, Meriden, Conn., assignor to Connecticut Telephone & Electric Co., Inc., Meriden, Conn., a Corporation of Connecticut. Filed May 28, 1918. Serial No. 237,160. 3 Claims. (Cl. 175-357.)



1. In a spark coil, the combination of a step-up secondary winding, a primary winding surrounding said second-

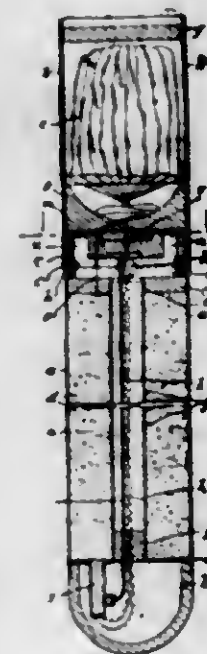
ary winding, and a condenser surrounding said primary winding, and thereby relatively far removed from the influence of the secondary.

1,312,498. COAL-CHUTE. FRED E. GROSVOLD, Eau Claire, Wis. Filed June 20, 1918. Serial No. 240,860. 4 Claims. (Cl. 70-64.)



1. In a coal chute, a slidably mounted door, a spring-actuated latch locking the door in a closed position, means for maintaining the latch in inoperative position whereby the door may be raised, and means carried by the door adapted to place the latch into operative position after the door has been partly raised whereby when the door is closed said latch will automatically lock the door in the closed position.

1,312,499. AERIAL ILLUMINATING DEVICE. HAROLD EDWARD SHERWIN HOLT, Farnborough, England. Filed Sept. 4, 1917. Serial No. 189,666. 8 Claims. (Cl. 244-1.)

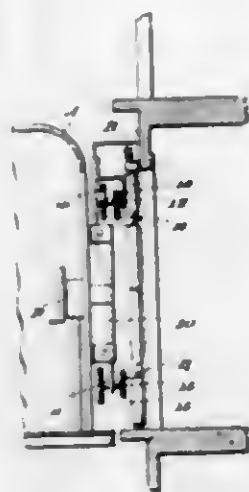


1. In combination with a launching tube, an aerial illuminating device comprising a flare or light giving body, a casing forming part of said flare or body, a parachute fastened to said flare and retained in folded condition in said casing, and means rendered operative by said tube for subsequently expelling the parachute and igniting the flare.

1,312,500. AUTOMATIC ELEVATOR-DOOR CLOSER. MATTIE E. LATHAM, Montevallo, Ala. Filed Feb. 24, 1919. Serial No. 278,698. 3 Claims. (Cl. 187-56.)

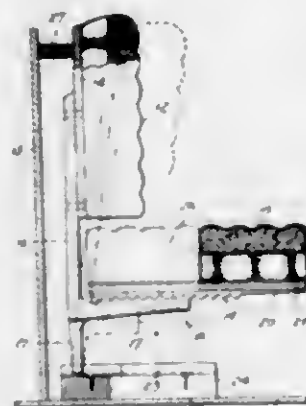
1. In combination with an elevator, an elevator shaft and the doors thereof, racks carried by and mounted upon the inner face of each door, a pair of shafts journaled ad-

larent the edge of each door opening in the shaft, said shafts being vertically spaced, gears on said shafts ar-



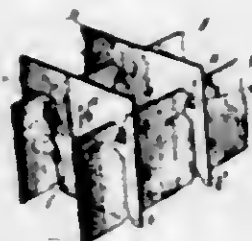
ranged in non-alignment, pinions on said shafts meshing with the associated racks, and a rack carried by the elevator and engaging said gears selectively.

1,312,501. AUTOMOBILE SEAT. HENRY GOULD LATIMER, JR., Auburn, N. Y. Filed Jan. 9, 1919. Serial No. 270,336. 7 Claims. (Cl. 155-25.)



3. An automobile seat, a back therefor, independent of said seat; together with supporting means rigid with said back and extending below said seat, and a guide in which said supporting means has support to be moved forward or backward to vary the position of said back relatively to the seat.

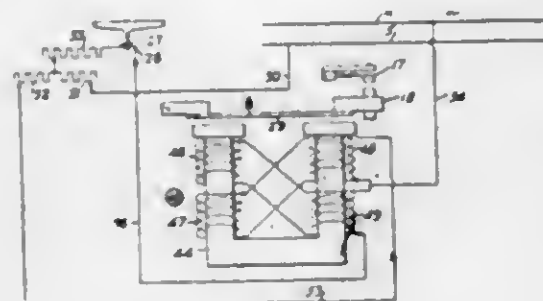
1,312,502. EGG-FILLER. HENRY F. SCHUMANN, Chicago, Ill. Filed Jan. 19, 1915. Serial No. 3,011. 1 Claim. (Cl. 217-30.)



A receptacle for eggs, comprising a rectangular box having a bottom and cover and end walls, and front and rear walls of greater length than said end walls, said cover being flexibly connected with said rear wall, said walls all being substantially of the same height as the eggs, longi-

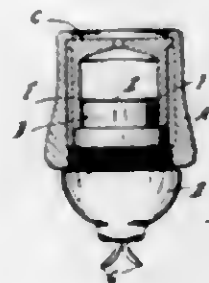
tudinal strips extending parallel with said cover from one end wall to the other, said strips being spaced apart a distance substantially equal to the width of the eggs, so that the eggs rest on said bottom, said strips being much less than egg-height so that their upper edges are practically out of sight when the open box of eggs is viewed from the front, and transverse partitions of substantially the same height as the eggs and having openings therein immediately below the upper edges of said strips, with slots extending upward from the lower edges of said partitions and stopping short of said openings, said strips having their upper edge portions formed with downwardly extending zig-zag notches having means to interlock with said openings and slots; said partitions and strips forming a removable filler having egg-cells which are open at top and bottom, each cell being much less than egg-height at front and rear thereof, and the box-bottom forming a support for the lower ends of the eggs, the difference in height as between said strips and partitions being approximately a fourth of the height of the partitions, and said lower edges being raised from said bottom so that said strips are supported by said concealed strips.

1,312,503. VIBRATING CONTACT-RELAY FOR ELECTRICAL REGULATORS. ALLEN A. TIRRELL, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1916. Serial No. 119,869. 6 Claims. (Cl. 171-229.)



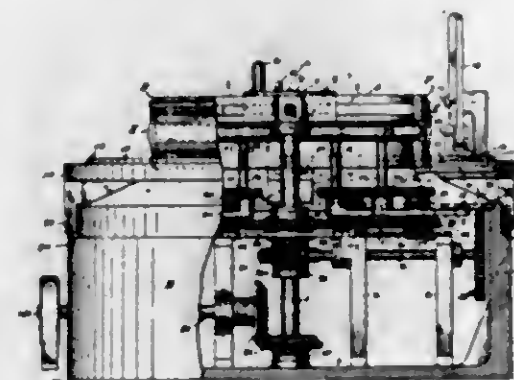
1. In a voltage regulator, a relay having two differential windings and a pair of contact members, a resistor connected in series with one of said windings, a second resistor adapted to be connected in series with the second winding and in shunt to the first winding and the resistor associated therewith by the relay contact members, and a resistor in circuit with the two windings.

1,312,504. THERMIC TELEPHONE. ROBERT ARANCO BARON VAN LYNDEN, Utrecht, Netherlands, assignor, by mesne assignments, to American Thermophone Company, Boston, Mass., a Corporation of Massachusetts. Filed May 2, 1916. Serial No. 94,869. 8 Claims. (Cl. 179-101.)



2. A thermic telephone comprising a heat conductor and a support in contact with said conductor along substantially the entire length of the conductor, the said support being a partial conductor of heat but practically a non-conductor of electricity.

1,312,505. METHOD OF TIRE-MAKING AND APPARATUS THEREFOR. ERNEST HOPKINSON, New York, N. Y. Filed Oct. 27, 1917. Serial No. 198,789. 24 Claims. (Cl. 154-9.)



1. The method forming a tire from a pulley band structure which comprises subjecting the central portion of the band to the influence of a distending force applied to a relatively small portion of the band and progressing circumferentially therearound.

1,312,506. VEHICLE RIM AND TIRE. HENRY M. FISK, Chicago, Ill.; Nellie A. Fisk administratrix of said Henry M. Fisk, deceased. Filed Aug. 18, 1917. Serial No. 186,837. 3 Claims. (Cl. 152-10.)



1. In combination, a U-shaped rim having clencher flanges at the edges thereof, a tire on the rim comprising an inner tube lying wholly in the trough of the rim and a tread member substantially square in cross section extending outwardly between said clencher flanges and having lateral extensions interlocking with the flanges and radially extending wings at the edges of said lateral extensions, the flanges being thickened in the radial direction to form comparatively deep parallel guide faces lying wholly beyond the pneumatic tube, the tread member having reinforcing fabric extending through the same in layers lying adjacent to and approximately parallel with the sides of the body portion and the sides of the wings, and additional reinforcing fabric extending substantially straight across the tread member from one of said lateral extensions to the other.

REISSUES.

14,702. GASOLINE-DISPENSING PUMP. WILLIAM T. HATMAKER, Dayton, Ohio. Filed Mar. 3, 1919. Serial No. 280,493. Original No. 1,287,983, dated Dec. 17, 1918. Serial No. 222,867, filed Mar. 16, 1918. 21 Claims. (Cl. 221-102.)

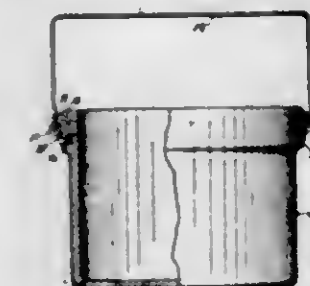
1. In an apparatus of the character described, a liquid measuring device comprising means to discharge the

liquid therefrom, a discharge line leading upwardly from said measuring device, and means arranged near the dis-



charge end of said line to indicate the presence of liquid in said line at that point.

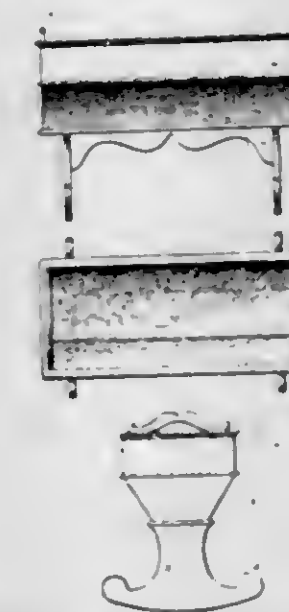
14,703. BALL-BEAR FOR VESSELS. RICHARD P. WHITE, Chicago, Ill. Filed Feb. 24, 1919. Serial No. 278,997. Original No. 1,285,860, dated Nov. 26, 1918. Serial No. 222,994, filed Mar. 18, 1918. 6 Claims. (Cl. 220-92.)



1. A ball bearing comprising a coiled spring having portions extending in substantially opposite directions from its coil, the extremities of said portions bent at a convergent angle with each other.

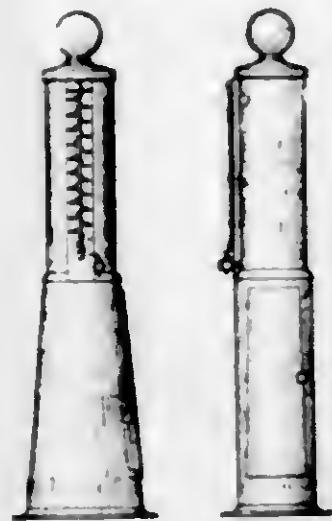
DESIGNS.

53,670. DOLL'S CRADLE. FRANCESCO BARANELLO, Brooklyn, N. Y. Filed Apr. 5, 1919. Serial No. 287,841. Term of patent 3 1/2 years.



The ornamental design for a doll's cradle as shown.

53,671. GASOLINE-DISPENSER. JAMES HENRY BARRY, Louisville, Ky., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky., a Corporation of South Dakota. Filed Nov. 7, 1916. Serial No. 130,084. Term of patent 3½ years.



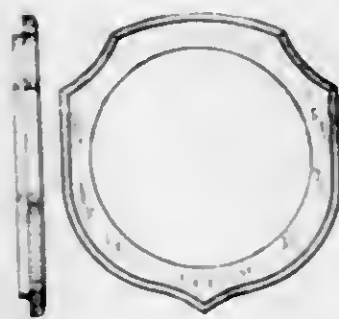
The design for a gasoline dispenser, as shown.

53,672. TIRE-CASING. ARTHUR BREITENSTEIN, Akron, Ohio, assignor to Richard J. Birch, Cleveland, Ohio. Filed May 1, 1919. Serial No. 294,092. Term of patent 3½ years.



The ornamental design for a tire-casing, as shown.

53,673. LAMP-FRONT FRAME. ROY E. COLE, Detroit, Mich., assignor to Liberty Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 17, 1919. Serial No. 297,965. Term of patent 14 years.



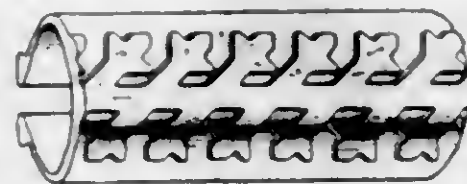
The ornamental design for a lamp front frame substantially as shown.

53,674. SIFTER-TOP CAN OR SIMILAR RECEPTACLE. MARTHA HALOWELL CONNOR, Baltimore, Md., assignor to Tia Decorating Company of Baltimore, a Corporation of New Jersey. Filed Apr. 18, 1919. Serial No. 291,139. Term of patent 7 years.



The ornamental design for a sifter top can or similar receptacle, as shown.

53,675. VEHICLE-TIRE. ISAAC R. DAVIES, Lakewood, Ohio. Filed Apr. 28, 1919. Serial No. 293,354. Term of patent 7 years.



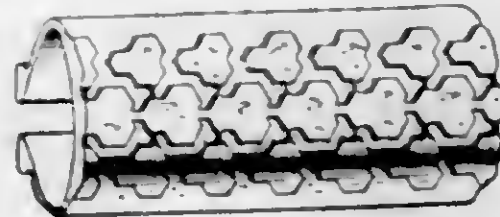
The ornamental design for a vehicle tire, as shown.

53,676. VEHICLE-TIRE. ISAAC R. DAVIES, Lakewood, Ohio. Filed Apr. 28, 1919. Serial No. 293,355. Term of patent 7 years.



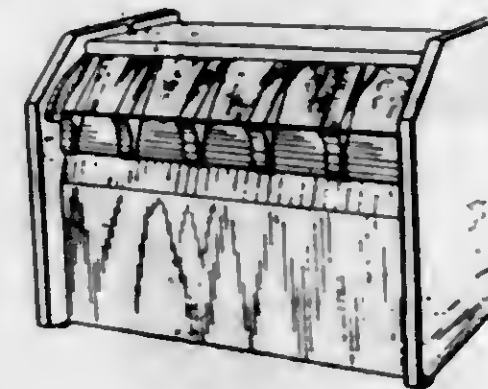
The ornamental design for a vehicle tire, as shown.

53,677. VEHICLE-TIRE. ISAAC R. DAVIES, Lakewood, Ohio. Filed May 12, 1919. Serial No. 296,708. Term of patent 7 years.



The ornamental design for a vehicle tire, as shown.

53,678. CASING FOR A TICKET-DISPENSING MACHINE. JOSEPH F. DWYER, Seattle, Wash. Filed Mar. 24, 1919. Serial No. 284,883. Term of patent 14 years.



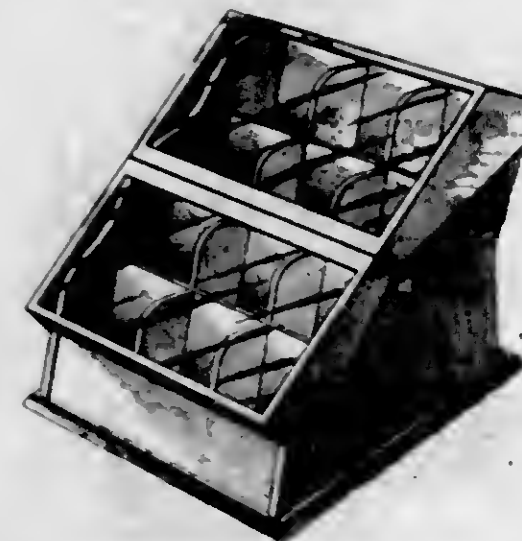
The ornamental design for a casing for a ticket dispensing machine as shown.

53,679. BRACKET. HAROLD G. FITZ GERALD, Los Angeles, Calif. Filed June 21, 1918. Serial No. 241,300. Term of patent 14 years.



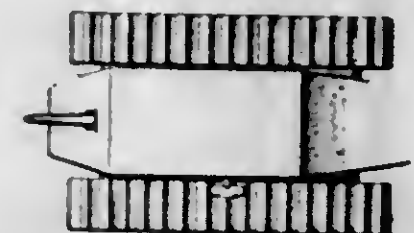
The ornamental design for a bracket, as shown.

53,680. DISPLAY-CABINET. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1919. Serial No. 287,622. Term of patent 14 years.



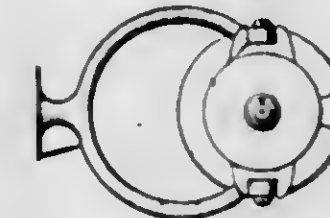
The ornamental design for a display cabinet, as shown.

53,681. TOY TANK. MATTHIAS P. HAURY, Spokane, Wash. Filed Mar. 10, 1919. Serial No. 281,857. Term of patent 7 years.



The ornamental design for a toy tank, as shown.

53,682. LIQUID SOAP FIXTURE. MICHAEL H. JACOBS, Brooklyn, N. Y. Filed Mar. 22, 1919. Serial No. 284,503. Term of patent 14 years.



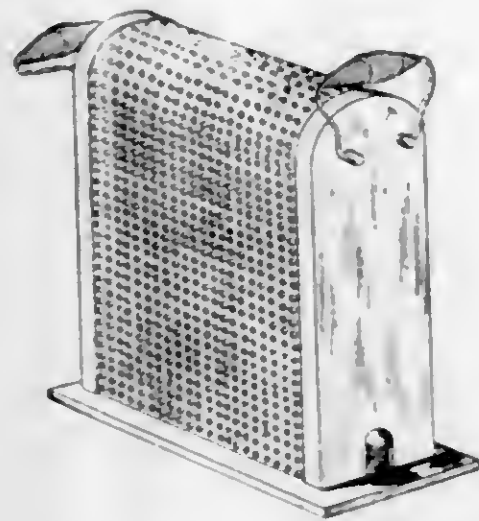
The ornamental design for a liquid soap fixture, as shown.

53,683. TOWEL-RACK. ROY E. JORDAN, Newark, N. J. Filed Apr. 19, 1919. Serial No. 291,392. Term of patent 7 years.



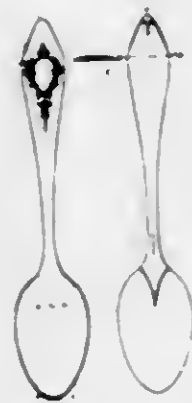
The ornamental design for a towel rack, as shown.

53,684. ELECTRICAL HEATER. FRANK KEHN and JAY A. HANO, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed June 15, 1918. Serial No. 240,242. Term of patent 14 years.



The ornamental design for an electrical heater, substantially as shown.

53,685. SPOON, FORK, OR SIMILAR ARTICLE. GEORGE C. LUNT, Greenfield, Mass. Filed Apr. 26, 1919. Serial No. 293,022. Term of patent 7 years.



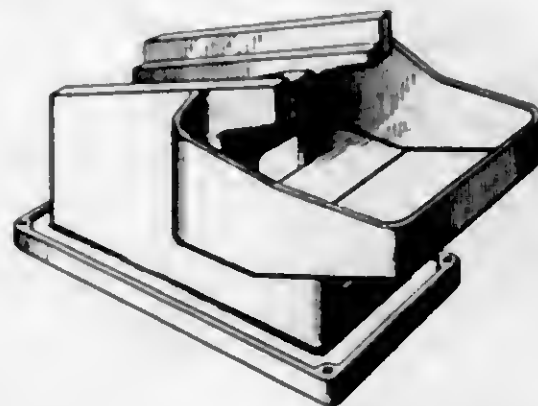
The ornamental design for a spoon, fork, or similar article as shown.

53,686. COMPRESSION, COMBUSTION, AND SPARK-PLUG TESTER. LEONARD R. MARTELL, Detroit, Mich. Filed Jan. 27, 1919. Serial No. 273,495. Term of patent 14 years.



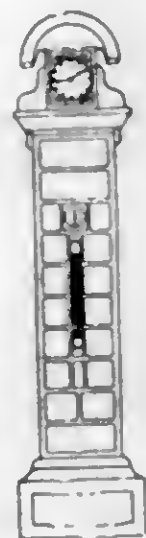
The ornamental design for a compression, combustion and spark plug tester, as shown.

53,687. MAILING-MACHINE FRAME. CHARLES D. OESTERLEIN and LOUIS H. BLOOD, Cincinnati, Ohio, assignors to The Oesterlein Machine Company, Cincinnati, Ohio. Filed Apr. 17, 1919. Serial No. 290,871. Term of patent 14 years.



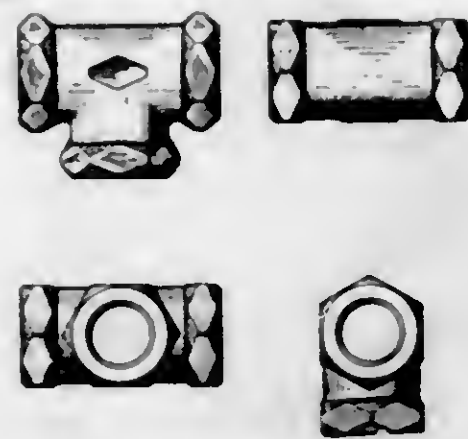
The ornamental design for a mailing machine frame, as shown.

53,688. ADVERTISING DISPLAY-CASE. CLARENCE D. OVERSMITH, Lima, Ohio. Filed Mar. 15, 1919. Serial No. 282,985. Term of patent 14 years.



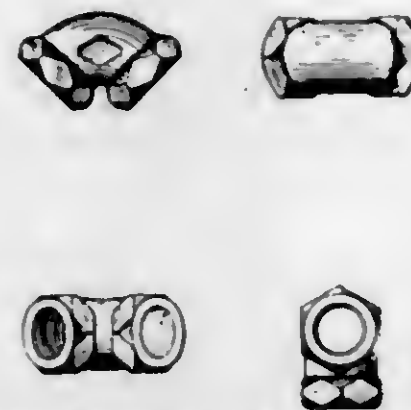
The ornamental design for an advertising display case, as shown and described.

53,689. FITTING. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Apr. 15, 1919. Serial No. 290,345. Term of patent 14 years.



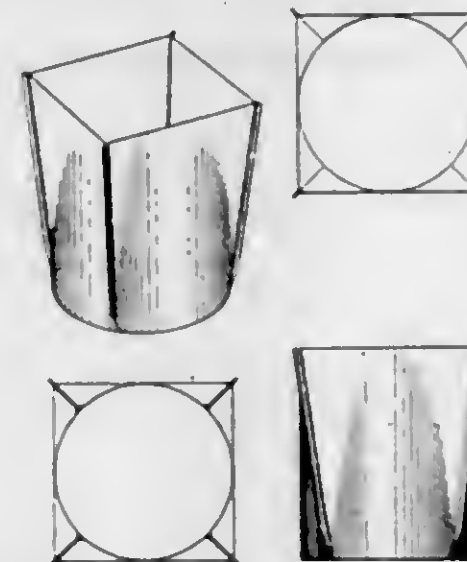
The ornamental design for a fitting, substantially as shown.

53,690. FITTING. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Apr. 15, 1919. Serial No. 290,346. Term of patent 14 years.



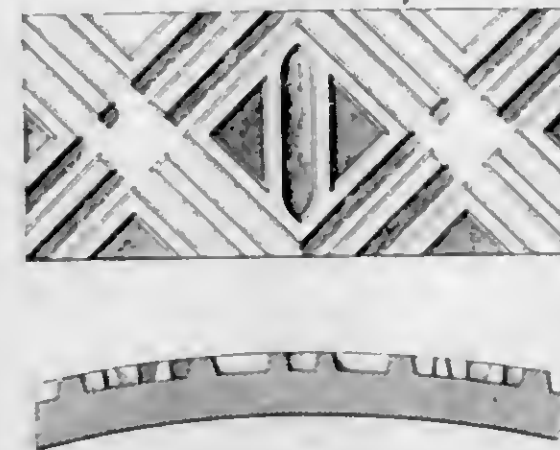
The ornamental design for a fitting, substantially as shown.

53,691. ASH-CAN, GARBAGE-CAN, OR LIKE RECEPTACLE. HENRY J. SCHAFER, Brooklyn, N. Y., assignor to Jacob Schaffer, Brooklyn, N. Y. Filed Mar. 29, 1919. Serial No. 286,178. Term of patent 14 years.



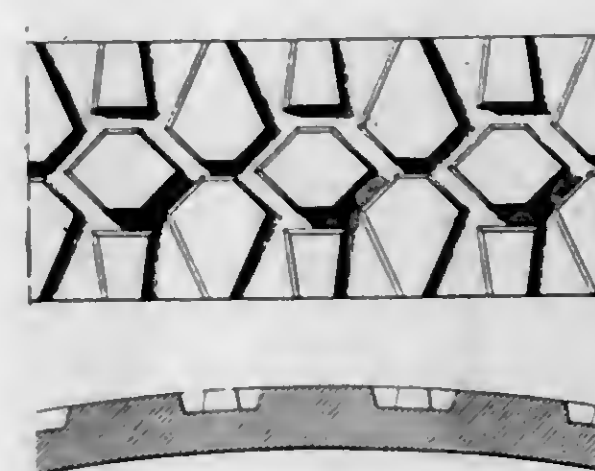
The ornamental design for an ash-can, garbage-can or like receptacle, as shown.

53,692. VEHICLE-TIRE. ROBERT J. STOKES, Trenton, N. J., assignor to Thermold Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Apr. 11, 1919. Serial No. 280,479. Term of patent 14 years.



The ornamental design for a vehicle tire, substantially as shown.

53,693. VEHICLE-TIRE. ROBERT J. STOKES, Trenton, N. J., assignor to Thermold Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Apr. 11, 1919. Serial No. 280,480. Term of patent 14 years.



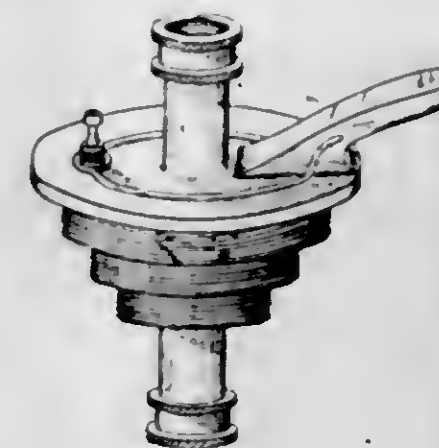
The ornamental design for a vehicle tire, substantially as shown.

53,694. BOTTLE OR JAR. LEROY J. TAYLOR, Chicago, Ill., assignor to Libby, McNeill & Libby, Chicago, Ill., a Corporation of Maine. Filed Apr. 18, 1919. Serial No. 291,145. Term of patent 14 years.



The ornamental design for a bottle or jar, as shown.

53,695. FLUID-PUMP CASING. ALBERT WILTZ, Addy, Wash. Filed Mar. 11, 1918. Serial No. 221,856. Term of patent 7 years.



The ornamental design for a fluid pump casing substantially as shown.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 5, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 94,802. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK W. PETERSON, Minneapolis, Minn. Filed Apr. 29, 1916.

Digestonique

Particular description of goods.—A Medicinal Nutritive Tonic for Internal Use.
Claims use since about Sept. 1, 1914.

Ser. No. 94,805. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK W. PETERSON, Minneapolis, Minn. Filed Apr. 29, 1916.

Locodyne

Particular description of goods.—Linctment to be Applied Externally by Rubbing to Relieve Pain in the Muscles and Tissues Such as That Caused by Neuralgia, Rheumatism, and Kindred Disorders.
Claims use since about Sept. 1, 1914.

Ser. No. 96,692. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) I. C. HERMAN, New York, N. Y. Filed July 20, 1916.

Favorita

Particular description of goods.—Handkerchiefs.
Claims use since Jan. 2, 1916.
265 U. G.—9

Ser. No. 103,177. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) LENOX JEWELRY CO., Boston, Mass. Filed Apr. 21, 1917.



No claim is made to the word "Lockland."
Particular description of goods.—Bracelets, Chatelaine Pins, Scarf Pins, Brooch Pins, Fobs, Watch Chains, Charms, Locketts, Studs, Ear Rings, Ear Studs, Finger-Rings, and Organization Emblems Made Wholly or in Part of Precious Metal, Necktie Clasps for Personal Adornment.
Claims use since Mar. 1, 1917.

Ser. No. 103,361. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RESO PRODUCTS CO., LTD., Zurich, Switzerland. Filed Apr. 27, 1917.

ALCORESON

Particular description of goods.—Antiseptic Solutions and Salves, Both for the Treatment of Wounds, Sores, Burns, Eczema, Angina, Vaginitis, Erosions, Fluor Albus, Decubitus, Inflammation of the Mucous Membrane of the Nose, Hay-Fever, Fistulae of All Kinds, Hemorrhoids, Blisters, Infectious Diseases, Abscesses, Boils, and Rash from Röntgen Rays.
Claims use since Jan. 30, 1917.

Ser. No. 106,948. (CLASS 12. CONSTRUCTION MATERIALS.) JOINTLESS FIRE BRICK COMPANY, Chicago, Ill. Filed Oct. 25, 1917.



No claim being made to the word "Jointless" apart from the mark shown in the drawing.
Particular description of goods.—Fire-Resisting Cement for Forming Furnace-Linings.
Claims use since Oct. 12, 1917.

Ser. No. 107,150. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ETIENNE BEJEAN, Paris, France. Filed Nov. 5, 1917.



The facsimile signature of A. Bejean appears on the drawing.

Particular description of goods.—A Preparation for the Treatment of Gout and Rheumatism.
Claims use since July 12, 1909.

Ser. No. 109,308. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WISCONSIN BUTTERINE CO., MILWAUKEE, WIS. Filed Mar. 1, 1918.

BESTO-NUT

No claim is made to the word "Nut" apart from the mark shown in the drawing.

Particular description of goods.—Oleomargarin.
Claims use since on or about the 12th day of March, 1918.

Ser. No. 109,427. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE COMMERCIAL MOTOR CAR COMPANY, Detroit, Mich. Filed Mar. 7, 1918.

Commerce

Particular description of goods.—Motor-Trucks.
Claims use since about May, 1911.

Ser. No. 109,620. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) BREWER TITCHENER CORPORATION, Portland, N. Y. Filed Mar. 18, 1918.



Particular description of goods.—Vehicle Parts.—Namely, Bow-Sockets, Curtain Lights, Wind-Shield Clamps, Bow-Clips, Top-Joints, Stump-Joints, Fender-Irons, Fender-Iron Sockets, Shank Ends, Gooseneck Ends, Bow-Rests, Strap-Irons, Gooseneck-Irons, Prop-Irons, Shaft-Levers, Wind-Shield Side-Arms, Top-Irons, Step-Hangers, Steel Pads, Toe Board Plates, Metal Loops, Bilets, Straps, Shifting Rails, Stay-Rails, Seat-Irons, Arm-Rails, Seat-Handles, Canopy Sockets, Bow-Hangers, Body-Plates, Reach-Irons, Hanger-Frames, Body Loops, Stay-Braces, and Slat-Irons.

Claims use since Feb. 1, 1918.

Ser. No. 109,888. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KAOLA COMPANY, Portland, Oreg. Filed Mar. 30, 1918.

KAOLA

Particular description of goods.—Coconut-Butter.
Claims use since April, 1910.

Ser. No. 111,246. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) HERBERT F. L. FENKE CO., INC., New York, N. Y. Filed May 29, 1918.

ROMAX

Particular description of goods.—Spokes, Nipples, Hubs, Pedals, and Saddles, All for Bicycles and Motor-Cycles.
Claims use since Aug. 17, 1917.

Ser. No. 111,408. (CLASS 1. RAW OR PARTLY PREPARED MATERIALS.) MALCOLM L. CARL, New York, N. Y. Filed June 7, 1918.



Particular description of goods.—Coal.
Claims use since on or about May 1, 1917.

Ser. No. 111,533. (CLASS 38. PRINTS AND PUBLICATIONS.) THE WASHINGTON TIMES COMPANY, Washington, D. C. Filed June 12, 1918.

NATIONAL EDITION

Particular description of goods.—Newspapers, (Published Daily and Sunday.)
Claims use since February, 1918.

Ser. No. 112,490. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LOOSE-WILES BISCUIT COMPANY, Long Island City, N. Y. Filed Aug. 3, 1918.



Particular description of goods.—Cakes, Crackers, and Biscuits.
Claims use since Jan. 1, 1906.

[Vol. 265. No. 1.]

Ser. No. 113,452. (CLASS 39. CLOTHING.) LINHAM-CONOVER COMPANY, Worcester, Mass. Filed Sept. 27, 1918.



No claim is made to the exclusive use of the word "Everbest" apart from the mark as shown.
Particular description of goods.—Corsets, Corset-Waists, and Brassières.
Claims use since 1914.

Ser. No. 113,532. (CLASS 39. CLOTHING.) COOPER UNDERWEAR COMPANY, Kenosha, Wis. Filed Oct. 3, 1918.



Particular description of goods.—Underwear Consisting of Woven and Knitted Union-Suits, Shirts, and Drawers for Men, Women, and Children and Socks for Men and Children.
Claims use since about Aug. 10, 1910.

Ser. No. 114,035. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARENCE E. ENSLEY, Moulton, Iowa. Filed Nov. 4, 1918.



Green Dragon

Particular description of goods.—A Live-Stock Medicinal Preparation Called Worm-Salts, a Dry Medicinal Preparation for Poultry to be Mixed with Dry Mash Feed, a Hog-Tonic Which Acts as a General Conditioner, and a Stock-Dip.
Claims use since June 4, 1910.

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Ser. No. 114,133. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LOOSE-WILES BISCUIT COMPANY, New York, N. Y. Filed Nov. 11, 1918.

Clover Leaves

Particular description of goods.—Cakes, Wafers, and Crackers or Biscuits.
Claims use since Jan. 1, 1906.

Ser. No. 114,813. (CLASS 39. CLOTHING.) PECK & CO., New York, N. Y. Filed Dec. 24, 1918.



The mark represented in the drawing comprises a large red rooster standing on a red log shaded in yellow or gold, and back of the rooster appears a partially-circular panel of red, white, and blue sections surrounded by an approximately-semicircular border of yellow or orange.

Particular description of goods.—Ladies' Outer Garments—viz., Coats, Suits, Dresses, Skirts, Cloaks, Waists, and Blouses.

Claims use since January, 1917.

Ser. No. 114,893. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ANDREW JURGENSEN COMPANY, Cincinnati, Ohio. Filed Dec. 31, 1918.

BEN HUR

Particular description of goods.—Perfumes and Toilet Waters.
Claims use since the year 1904.

Ser. No. 115,163. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SANTA CRUZ CANNING CORPORATION, San Francisco and Santa Cruz, Calif. Filed Jan. 13, 1919.

Prefet

Particular description of goods.—Canned Sardines, Canned Peaches, and Canned Tomatoes with Purée from Trimmings.

Claims use since Oct. 1, 1918.

Ser. No. 115,278. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BASKET STORES CO., Omaha, Nebr. Filed Jan. 18, 1919.

Thrift

Particular description of goods.—Canned Evaporated Milk, Canned Salmon, Peanut Butter, Pickles, Macaroni, Flavoring Extracts for Food, Spices, Corn Syrup, Catsup, Gelatin Jelly Powders, Jellies, Coffee, Tea, Cocoa, and Chocolate.

Claims use since Dec. 23, 1918.

Ser. No. 115,300. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) TOOTAL PRODUCE & ICE COMPANY LIMITED, Manchester, England. Filed Jan. 18, 1919.

LOVA

Particular description of goods.—Handkerchiefs, Sheets, Pillow Cases, Pillow Slips, Bedspreads, Table Cloths and Covers, Curtains, Furniture Covers, Antimacassars, Cushion Covers, Shawls, Counterpanes, Quilts, Blankets, Toilet Covers, Dollies, Tea Cozy Covers, Towels, Serviettes, Bassinet Covers, Laces, Polishing Cloths, of Cotton for Polishing or Cleaning Metal, China, and other Goods, All Being Cotton Goods Not in the Piece.

Claims use since June 3, 1918.

Ser. No. 115,340. (CLASS 39. CLOTHING.) ELDER MANUFACTURING CO., St. Louis, Mo. Filed Jan. 21, 1919.

TOM SAWYER

Particular description of goods.—Boys' and Children's Clothing. Namely, Sweaters, Sweater Coats, Stockings, Socks and Hosiery, Hats and Caps, Leather and Combination Shoes and Overshoes, Pajamas, Night-Shirts, Night Robes and Sleeping Garments of That Type Commonly and Commonly Known as Sleepers, and Knitted and Textile Underwear Comprising Shirts, Drawers, and Union Suits.

Claims use since Jan. 1, 1919.

Ser. No. 115,352. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DAVID FRANK MAGER, York, Pa. Filed Jan. 21, 1919.

THRIFT BAR

Applicant makes no claim to the exclusive use of the word "Bar," and the same is hereby disclaimed.

Particular description of goods.—Candy.

Claims use since Nov. 1, 1918.

Ser. No. 115,786. (CLASS 39. CLOTHING.) REVERENDOLA COLLAR COMPANY, Boston, Mass. Filed Feb. 11, 1919.

Lintex

The word "Lintex."

Particular description of goods.—Collars, Cuffs, and Shirt Bosoms.

Claims use since Oct. 31, 1918.

Ser. No. 115,894. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AMERICAN ELECTRIC CO., Chicago, Ill. Filed Feb. 17, 1919.

HI Burns LO

No claim being made for the use of the name "Burns" separate and apart from the trade-mark as shown in the accompanying drawing.

Particular description of goods.—Telephone Brackets.

Claims use since Sept. 14, 1915.

Ser. No. 115,977. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) RICHARD FRANK, New York, N. Y. Filed Feb. 19, 1919.



We disclaim the representation of an orange.

Particular description of goods.—A Non-Alcoholic Non-Cereal Maltless Beverage Sold as a Soft Drink.

Claims use since May 1, 1912.

Ser. No. 116,143. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Feb. 26, 1919.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelopes for Correspondence, Writing-Tablets, Pencil-Tablets, Drawing Tablets, Spelling Tablets, and Blank Books.

Claims use since Jan. 29, 1919.

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Ser. No. 116,215. (CLASS 39. CLOTHING.) SCHUYLKILL SILK MILLS, (now by change of name Vanity Fair Silk Mills,) Reading, Pa. Filed Feb. 28, 1919.

Vanties

Particular description of goods.—A Combination-Garment Consisting of Attached Chemise and Drawers.

Claims use since Jan. 20, 1919.

Ser. No. 116,328. (CLASS 39. CLOTHING.) DOUGLASS BARNES CORPORATION, New York, N. Y. Filed Mar. 6, 1919.

Tom Wye

The lining therein merely indicating shading.

Particular description of goods.—Wearing-Apparel—viz., Men's Worned V-Neck Six-Button Jacket, Men's Wool V-Neck Six-Button Jacket, Men's Wool Brushed Slip-On, Men's and Boys' Wool and Cotton Mixed Ribbed Slip-On, Men's Wool Brushed Vest, and Men's Wool Jersey Bathing-Suits.

Claims use since Jan. 31, 1919.

Ser. No. 116,329. (CLASS 39. CLOTHING.) DOUGLASS BARNES CORPORATION, New York, N. Y. Filed Mar. 6, 1919.

Winnie Wye

The lining therein merely indicating shading.

Particular description of goods.—Wearing-Apparel—viz., Ladies' Wool Fullest-Cloth Sport-Coats, Ladies' Brushed Wool Sport-Coats, Ladies' Coats, Sweaters, and Slip-Ons Made from Mohair, Alpaca, Cashmere, and Camel's Hair.

Claims use since Feb. 19, 1919.

Ser. No. 116,394. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOUTHERN CHEMICAL COMPANY, Baltimore, Md. Filed Mar. 7, 1919.

Pine Der

No claim is made for the words "Pine Odor" apart from the mark used in the drawing.

Particular description of goods.—An Antiseptic, Disinfectant, and Deodorant.

Claims use since about Nov. 15, 1918.

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Ser. No. 116,486. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN & HUFFMANN CO., Passaic, N. J. Filed Mar. 12, 1919.

Tricosuede

Consisting of the word "Tricosuede."

Particular description of goods.—Woolen Piece Goods.

Claims use since Feb. 1, 1919.

Ser. No. 116,522. (CLASS 39. CLOTHING.) CANNON MILLS, New York, N. Y. Filed Mar. 13, 1919.



Particular description of goods.—Hosiery for Men, Women, and Children.

Claims use since Nov. 15, 1918.

Ser. No. 116,565. (CLASS 39. CLOTHING.) JESSICA C. EVERHART, Chicago, Ill. Filed Mar. 14, 1919.

The Dorothy

Particular description of goods.—Children's Dresses.

Claims use since January, 1905.

Ser. No. 116,604. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JOHN MAYHEW, Chicago, Ill. Filed Mar. 15, 1919.

LUK-SE

Particular description of goods.—A Cleaning and Polishing Preparation in the Nature of a Furniture-Polish for Finished Woodwork, Hardwood Floors, Furniture, Planes, and All other Varnished Surfaces, also Enamelled Surfaces, Such as Automobiles.

Claims use since Feb. 27, 1919.

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Ser. No. 116,610. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ROYAL EMBROIDERED WORKS, NADAY & FLEISCHER, New York, N. Y. Filed Mar. 15, 1919.

DUVET DE SOIE

Consisting of the words "Duvet De Soie," no claim being made to the exclusive use of the word "Soie" apart from the mark as shown in the drawing.
Particular description of goods.—Silk Fabrics.
Claims use since Mar. 3, 1919.

Serial No. 116,659. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MILLS & GERR CORPORATION, New York, N. Y. Filed Mar. 18, 1919.

ERINMAID

Consisting of the word "Erinmaid"
Particular description of goods.—Linen Piece Goods.
Claims use since Feb. 15, 1919.

Ser. No. 116,852. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EDWARD P. STAHEL & CO., New York, N. Y. Filed Mar. 24, 1919.

NEWTON KNIT

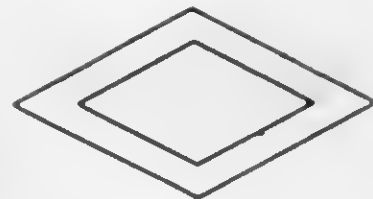
The word "Newton" or the word "Knit" apart from the mark shown on the drawing is herewith disclaimed.
Particular description of goods.—Woolen Piece Goods.
Claims use since Mar. 1, 1919.

Ser. No. 116,901. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE O.H. COMPANY, New York, N. Y. Filed Mar. 26, 1919.

PEACEMAKERS

Particular description of goods.—Candy.
Claims use since Mar. 1, 1919.

Ser. No. 117,017. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MICHIGAN LUBRICATOR COMPANY, Detroit, Mich. Filed Mar. 29, 1919.



Particular description of goods.—Cylinder Lubricators, Bearing-Oilers, Oil Pumps, Sight-Feed Valves, Oil-Cups, Grease-Cups, Oil-Sight-Feeds, Dash-Sight-Feeds.
Claims use since Oct. 8, 1918.

Ser. No. 117,018. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MICHIGAN LUBRICATOR COMPANY, Detroit, Mich. Filed Mar. 29, 1919.



Particular description of goods.—Cylinder-Lubricators, Bearing-Oilers, Oil-Pumps, Sight-Feed Valves, Oil-Cups, Grease-Cups, Flue-Cleaners, Oil-Sight-Feeds, Dash-Sight-Feeds.
Claims use since Dec. 22, 1914.

Ser. No. 117,079. (CLASS 39. CLOTHING.) RUDOLPH LOUIS BOSHELMAN, New York, N. Y. Filed Apr. 1, 1919.



The words "Kant-Burn" being disclaimed apart from the mark shown in the drawing.
Particular description of goods.—Fireproof Garments.—Namely, Smocks, Coats, Outer Shirts, and Trousers.
Claims use since about Mar. 15, 1919.

Ser. No. 117,104. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) RARY'S HOUTBOIN, INC., Portland, Oreg. Filed Apr. 2, 1919.



No claim is made to the words "Baby's Boudoir" apart from the mark shown in the drawing.

Particular description of goods.—Pillow-Tops or Fancy Covers for Pillows, Either Embroidered or Stamped to be Embroidered; Pillow-Cases, Plain or Fancy, Baby's Size, Adaptable for Very Small Pillows; Babies' Sheets Adaptable for Bassinets, Baskets, or Babies' Beds; Babies' Pads Quilted in Sizes Practical for Mattress Protection and Comprising Sheets of Cotton with Muslin Cover Quilted and Bound; Bassinet-Pads Consisting of a Covering Filled with Floss or Down and Made Especially for Young Babies; Baby Blankets, Single or Double, of Fancy and Stamped Numbers; Baby-Lap-Towels; Wash-cloths; Ribbon-Bows in the Piece; Bands and Binders in the Piece; Baby-Towels Consisting of Soft Finished Towels Made Especially for Babies' Use.

Claims use since the 1st day of October, 1916.

Ser. No. 117,146. (CLASS 39. CLOTHING.) CHARLES W. WOLFE, East Orange, N. J. Filed Apr. 3, 1919.

RENU

Particular description of goods.—Suits, Coats, Blouses, and Shirts of Outer-Wearing-Apparel for Men, Women, and Children.

Claims use since 1915.

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Ser. No. 117,238. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) MONROE CALCULATING MACHINE COMPANY, Orange, N. J. Filed Apr. 7, 1919.

MONROE

The trade-mark is lined to express the colors red and yellow.

Particular description of goods.—Calculating and Adding Machines.
Claims use since Mar. 1, 1913.

Ser. No. 117,265. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SAMUEL E. ABERNATHY, Indianapolis, Ind. Filed Apr. 5, 1919.

DE-MOC-CEN

Particular description of goods.—The Following Hair Preparations and Tonics, to wit: Hair-Growers, Temple-Grower, Hair-Oil Tonic, Liquid Tonic, Eczema-Ointment, Shampoo-Paste, Pressing-Oil.

Claims use since Jan. 10, 1918.

Ser. No. 117,290. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARIE ACETO & CO., New Haven, Conn. Filed Apr. 9, 1919.

VANTE

Particular description of goods.—Hair-Tonic.
Claims use since Mar. 10, 1919.

Ser. No. 117,294. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) CONTINENTAL AUTO PARTS COMPANY, Knightstown, Ind.; San Francisco, Calif., and New York, N. Y. Filed Apr. 9, 1919.



Particular description of goods.—Shock-Absorbers, Foot-Rests, Running-Board-Supports, Creepers, and Industrial Platform-Trucks.
Claims use since 1908.

Ser. No. 117,302. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDWIN B. MOHLER, Reading, Pa. Filed Apr. 9, 1919.

MOKI

Particular description of goods.—An Expectarant.
Claims use since Dec. 21, 1917.

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Ser. No. 117,369. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CHARLOTTE E. ROCK, Mineral Wells, Tex. Filed Apr. 11, 1919.

WISHUWELL

Particular description of goods.—Toy Well-Houses.
Claims use since Jan. 1, 1919.

Ser. No. 117,384. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MILLS & GERR CORPORATION, New York, N. Y. Filed Apr. 11, 1919.



Particular description of goods.—Cotton and Silk Piece Goods and Mixtures of the Same.
Claims use since November, 1917.

Ser. No. 117,411. (CLASS 39. CLOTHING.) NATIONAL BLACK GOODS COMPANY, INC., New York, N. Y. Filed Apr. 12, 1919.

Raven Hue

Particular description of goods.—Women's Dresses and Women's Outer Wrists.
Claims use since December, 1918.

Ser. No. 117,524. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) GALLAGHER AIRCRAFT CORPORATION, East Greenwich, R. I. Filed Apr. 16, 1919.

CHUMMY FLYABOUT

Particular description of goods.—Airplanes.
Claims use since Mar. 1, 1919.

Ser. No. 117,583. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RAY H. WELDEN, Tulsa, Okla. Filed Apr. 17, 1919.

Welden's
BUG KILLER

The trade-mark including my autographic signature, the background for the words "Bug Killer" being red and no claim being made to the words "Bug Killer" aside and apart from the mark as shown.

Particular description of goods.—Bug and Insect Powder.
Claims use since Mar. 1, 1919.

Ser. No. 117,601. (CLASS 39. CLOTHING.) JULIUS KAYSER & Co., New York, N. Y. Filed Apr. 18, 1919.

MARVEL-STRIPE

Particular description of goods.—Hosiery.
Claims use since Nov. 11, 1915.

Ser. No. 117,678. (CLASS 39. CLOTHING.) McDONALD Bros. Co., Minneapolis, Minn. Filed Apr. 21, 1919.

RELYON

Particular description of goods.—Pajamas and Nightgowns, Dress and Work Shirts for Men and Boys, Boys' Blouses, Overalls, and Coverall Suits, Men's and Boys' Pants, Rain Coats Made of Cravenette Cloth, Sheep Lined Clothing, to wit, Duck Coats, Mole Skin Ulsters, Leather Vests and Sport Coats, Leather Vests, and Mackinaw Coats; Gloves and Mittens—Namely, Leather, Cotton, and Knit, Sweater Coats and Sweaters, Bathing Suits, Underwear Made of Knit Cotton, Wool, and Silk for Men, Women, and Children, and Hosiery.
Claims use since Feb. 7, 1919.

Ser. No. 117,703. (CLASS 16. FOODS AND INGREDIENTS OF FOODS.) SUN HARBOR PACKING CORPORATION, San Diego, Calif. Filed Apr. 21, 1919.

WARRANTY



No claim being made to the pictorial representation of a fish apart from the mark shown in the drawing.
Particular description of goods.—Canned Sardines and Canned Tuna.
Claims use since June 14, 1918.

Ser. No. 117,710. (CLASS 15. OILS AND GREASES.) THE TEXAS COMPANY, Houston, Tex., and New York, N. Y. Filed Apr. 21, 1919.

TRACTOLUBE

Particular description of goods.—Lubricating Oil.
Claims use since Mar. 27, 1919.

Ser. No. 117,790. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ARKWRIGHT MANUFACTURING COMPANY, New York, N. Y. Filed Apr. 24, 1919.

Bestex

Particular description of goods.—Cotton Piece Goods and Silk Piece Goods.
Claims use since Apr. 10, 1919.

Ser. No. 117,877. (CLASS 39. CLOTHING.) HATHREWAY & REYNOLDS, Oriskany Falls, N. Y. Filed Apr. 26, 1919.



The word "Kult" apart from the mark shown in the drawing is disclaimed.

Particular description of goods.—Knitted Sweaters and Sweater Coats and Knit Underwear.
Claims use since 1915.

Ser. No. 117,905. (CLASS 37. PAPER AND STATIONERY.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Apr. 26, 1919.



Particular description of goods.—Lead Pencils and Wrapping Paper.
Claims use since Jan. 2, 1913.

Ser. No. 117,908. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Apr. 26, 1919.

Banner Mills

No claim being made to the exclusive use of the word "Mills" apart from the mark shown in the drawing.
Particular description of goods.—Fish Hooks.
Claims use since Apr. 3, 1897.

Ser. No. 117,915. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) IVAN OSTBERG, Chicago, Ill. Filed Apr. 28, 1919.

Parkway

Particular description of goods.—Grass Seed.
Claims use since the 1st day of March, 1919.

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Ser. No. 118,000. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WELSH GRAPE JUICE COMPANY, Westfield, N. Y. Filed Apr. 29, 1919.

FRUITLADE

Particular description of goods.—Jam, Jelly, Fruit Preserves, Fruit Butter, and Conserve.
Claims use since Apr. 26, 1919.

Ser. No. 118,029. (CLASS 39. CLOTHING.) CHARLES M. WOLCOTT, Baltimore, Md. Filed Apr. 30, 1919.



Particular description of goods.—Rubber Heels and Rubber Soles for Shoes.
Claims use since Mar. 1, 1919.

Ser. No. 118,034. (CLASS 39. CLOTHING.) CHAMPE S. ANDREWS, Chattanooga, Tenn. Filed May 1, 1919.

COMRADES

Particular description of goods.—Hosiery for Men, Women, and Children.
Claims use since Mar. 1, 1919.

Ser. No. 118,035. (CLASS 39. CLOTHING.) CHAMPE S. ANDREWS, Chattanooga, Tenn. Filed May 1, 1919.

WHITE WAY

Particular description of goods.—Hosiery for Men, Women, and Children.
Claims use since Mar. 1, 1919.

Ser. No. 118,053. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WILLIAM L. HARE, New York, N. Y. Filed May 1, 1919.

TROWEED

Consisting of the word "Troweed."
Particular description of goods.—Weeding-Trowels.
Claims use since Apr. 12, 1919.

Ser. No. 118,065. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) POIRIER AND LINDEMAN Co., New York, N. Y. Filed May 1, 1919.

MY-TEE-FYNE

Consisting of the words "My-Tee-Fyne."
Particular description of goods.—Hair-Nets.
Claims use since May 10, 1918.

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Ser. No. 118,080. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) ROGERS-PEET COMPANY, New York, N. Y. Filed May 1, 1919.



Consisting of the word "Explorer."
Particular description of goods.—Bicycle.
Claims use since April, 1912.

Ser. No. 118,141. (CLASS 39. CLOTHING.) ELIZABETH CITY HOSIERY Co., Elizabeth City, N. C. Filed May 5, 1919.



Particular description of goods.—Hosiery for Men, Women, and Children.
Claims use since January, 1919.

Ser. No. 118,140. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES L. FARNUM, Columbus, Ohio. Filed May 5, 1919.



No claim being made to the use of the words "Real Movie Stars" apart from the other features of the mark.
Particular description of goods.—A Laxative and Cathartic Pill for the Treatment of Liver and Intestinal Tract.
Claims use since Mar. 15, 1919.

Ser. No. 118,185. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) RACINE AUTO TIRE COMPANY, Racine, Wis. Filed May 5, 1919.



No trade-mark claim being herein made to the word "Tires" per se.
Particular description of goods.—Vehicle-Tires Made Wholly or Partly of Rubber and Inner Tubes for Pneumatic Tires.
Claims use since about the first part of March, 1919.

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Ser. No. 118,193. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE SPECIALTY DEVICE COMPANY, Cincinnati, Ohio. Filed May 3, 1919.

LUXRY

Particular description of goods.—Shock-Absorbers for Vehicles.
Claims use since June, 1914.

Ser. No. 118,202. (CLASS 39. CLOTHING.) ELIZABETH CITY Hosiery Co., Elizabeth City, N. C. Filed May 6, 1919.

Betsey's Best

Particular description of goods.—Men's, Women's, or children's Hosiery.
Claims use since January, 1919.

Ser. No. 118,281. (CLASS 39. CLOTHING.) SIMON A. MENDELSON, New York, N. Y. Filed May 8, 1919.

"Canary"

Particular description of goods.—Bloomers.
Claims use since Jan. 1, 1919.

Ser. No. 118,282. (CLASS 39. CLOTHING.) SIMON A. MENDELSON, New York, N. Y. Filed May 8, 1919.

"Bloom-Pett"

Particular description of goods.—Bloomer and Petticoat Combined.
Claims use since Jan. 1, 1919.

Ser. No. 118,312. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CARL H. F. LEMKE, Youngstown, Ohio. Filed May 9, 1919.

Lem. Balsam

No claim being made to the word "Balsam" apart from the mark.

Particular description of goods.—Medicine Used in the Treatment of Coughs, Colds, Croup, Hoarseness, Sore Throat, Bronchitis, Asthma, and All Affections of the Lungs.

Claims use since Mar. 10, 1918.

Ser. No. 118,314. (CLASS 39. CLOTHING.) THE LIONDALE SHIRT CO. INC., New York, N. Y. Filed May 9, 1919.

Liondale

Particular description of goods.—Men's Dress and Negligé Shirts.
Claims use since about January, 1913.

Ser. No. 118,343. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WARREN W. BARNETT, Phoenix, Ariz. Filed May 10, 1919.



Particular description of goods.—Ointments for Sores, Burns, Toilet Use, and for Skin Trouble Generally.
Claims use since June 7, 1909.

Ser. No. 118,364. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BROWN, CLARK & COMPANY, Brooklyn, N. Y. Filed May 12, 1919.

CARBOLENE

Particular description of goods.—Chemical Carbon-Remover.
Claims use since Apr. 1, 1919.

Ser. No. 118,381. (CLASS 35. BELTING, ROPE, MACHINERY PACKING, AND NON-METALLIC TIRES.) AUSTIN HOLCOMB, Los Angeles, Calif. Filed May 6, 1919.



Particular description of goods.—Rubber Tires.
Claims use since Apr. 10, 1919.

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Ser. No. 118,400. (CLASS 39. CLOTHING.) ROSENTHAL & GOLDBERG, New York, N. Y. Filed May 12, 1919.

RoGo
CLOTHES

Without waiving any common-law right applicant hereby disclaims any right to the use of the word "Clothes" apart from the mark shown.

Particular description of goods.—Men's and Boys' Suits and Outer Clothing—Namely, Coats, Vests, Pants, Overcoats, Overalls, Jumpers, Rain-Coats.
Claims use since Apr. 10, 1919.

Ser. No. 118,402. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) RICE-STIX DRY GOODS COMPANY, St. Louis, Mo. Filed May 12, 1919.

MONARCH

Particular description of goods.—Blankets, Lap-Robes, Bedspreads, Quilts, and Comforts.
Claims use since Oct. 28, 1911.

Ser. No. 118,439. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHENEY BROTHERS, South Manchester, Conn. Filed May 13, 1919.

Silvadell

Particular description of goods.—Fabrics of Silk and Silk Mixtures to the Piece.
Claims use since about Apr. 25, 1919.

Ser. No. 118,467. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GENASPRIN, LIMITED, London, England. Filed May 14, 1919.

GENASPRIN

Particular description of goods.—Medicines Used as Remedies for Colds, Influenza, Headaches, Toothaches, Neuralgia, Nerve-Pains, and Uric-Acid Disorders.
Claims use since Oct. 10, 1917.

Ser. No. 118,478. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THEODORE C. LEEDOM, Toledo, Ohio, and Oil City, Pa. Filed May 14, 1919.

RED TOP

Particular description of goods.—Evaporated Milk.
Claims use since Apr. 10, 1919.

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Ser. No. 118,506. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BEINHAUER BROS. CANDY CO., New York, N. Y. Filed May 15, 1919.

CANDY CIRCUS

Consisting of the words "Candy Circus," no claim being made to the exclusive use of the word "Candy" apart from the mark as shown in the drawing, the outlining of the letters being in yellow.

Particular description of goods.—Candy.
Claims use since Feb. 1, 1919.

Ser. No. 118,566. (CLASS 10. FERTILIZERS.) LISTER'S AGRICULTURAL CHEMICAL WORKS, Newark, N. J., and New York, N. Y. Filed May 16, 1919. Under ten-year proviso.



Particular description of goods.—Fertilizers.
Claims use since Aug. 1, 1888.

Ser. No. 118,573. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) THE ROBERT SMITH ALE BREWING CO., Philadelphia, Pa. Filed May 16, 1919.

Hale and Artie

Particular description of goods.—A Non-Intoxicating Cereal Malt Beverage Containing Not Over One-Half of One Per Cent. (.005) of Alcohol by Volume.
Claims use since about Mar. 1, 1919.

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Ser. No. 118,710. (CLASS 39. CLOTHING.) THE STANWEAR SHOE CO., Chicago, Ill. Filed May 19, 1919.



Particular description of goods.—Leather Shoes for Misses, Children, and Infants.
Claims use since October, 1917.

Ser. No. 118,816. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WIGHT COMPANY, Lamon, Iowa. Filed May 22, 1919.

IOWITE

Particular description of goods.—A Medicinal Product—Namely, a Treatment for White Diarrhea and Cholera of Fowls and Chickens and Healing Powder for Galls and Sores of Fowls, for a Tonic for Increasing the Egg Production of Fowls, for Worm Powder and Medicinal Product for Swine, and a Remedy for and Preventive of Roup in Poultry and Blackhead in Turkeys.

Claims use since Mar. 1, 1915.

Ser. No. 118,835. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OXYGEN GAS COMPANY, Kansas City, Mo. Filed May 23, 1919.



Particular description of goods.—Nitrous Oxid Prepared Especially for Anesthetic Purposes and Oxygen Gas Prepared Especially for Medical Purposes.
Claims use since Sept. 15, 1914.

Ser. No. 118,933. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PHILADELPHIA QUARTZ COMPANY, Philadelphia, Pa. Filed May 26, 1919.

P-Q

Particular description of goods.—Sodium Silicate.
Claims use since on or about Jan. 1, 1903.

Ser. No. 118,958. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa. Filed May 27, 1919.



No claim being made to the representation of the socket member of a snap-fastener or to the words "Either Side the Right Side Both Sides Alike!" apart from the mark shown in the drawing.

Particular description of goods.—Snap-Fasteners.
Claims use since March, 1913.

Ser. No. 119,049. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STROHM'S, Chicago, Ill. Filed May 29, 1919.



Particular description of goods.—Candy.
Claims use since May, 1918.

Ser. No. 119,125. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) A. HOENIGSWERGER, Chicago, Ill. Filed June 2, 1919.

"LOOMFUR"

Particular description of goods.—Fur Fabrics Made of Silk, Cotton, Mohair, Cattle-Hair, Artificial Silk, and Combinations Thereof.

Claims use since about the 1st of March, 1919.

Ser. No. 119,430. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) MORELAND MOTOR TRUCK CO., Los Angeles, Calif. Filed June 10, 1919.



Particular description of goods.—Motor-Trucks and Automobile-Trailers.
Claims use since July 31, 1911.

TRADE-MARK REGISTRATIONS GRANTED

AUGUST 5, 1919.

126,228. CERTAIN NAMED PRINTS AND PUBLICATIONS. THE ENGINEERING MAGAZINE COMPANY, New York, N. Y.
Filed January 13, 1919. Serial No. 115,141. PUBLISHED APRIL 1, 1919.

126,229. MEDICINAL PREPARATION USED AS A GENERAL CONDITIONER AND TONIC FOR HOGS. ARCHIE H. KERR, Raleigh, N. C.
Filed February 18, 1919. Serial No. 115,958. PUBLISHED MAY 20, 1919.

126,230. CERTAIN NAMED CLOTHING FOR MEN AND WOMEN. M. N. MAYEROFF & CO., INCORPORATED, Norwalk, Conn.
Filed February 15, 1919. Serial No. 115,881. PUBLISHED APRIL 15, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

16,990. MEAT AND MEAT FOOD PRODUCTS. ARMOUR & CO., Chicago, Ill.; Armour and Company, assignee.
Registered September 10, 1889. Renewed September 10, 1919.

LABELS

REGISTERED AUGUST 5, 1919.

- 21,372.—Title: "THURBER BRAND ASPARAGUS." (For Asparagus.) ALFRED PUTNAM & COMPANY, New York, N. Y. Filed June 13, 1919.
- 21,373.—Title: "WINDOM CORN." (For Corn.) ALFRED PUTNAM & COMPANY, New York, N. Y. Filed June 13, 1919.
- 21,374.—Title: "'THURBER' CALIFORNIA STYLE HARTLETT PEARS." (For Pears.) ALFRED PUTNAM & COMPANY, New York, N. Y. Filed June 13, 1919.
- 21,375.—Title: "EXTRA CHOICE CALIFORNIA PEACHES HEAVY SYRUP." (For Peaches.) ALFRED PUTNAM & COMPANY, New York, N. Y. Filed June 13, 1919.
- 21,376.—Title: "SAGE AND WILDROOTS." (For a Hair-Tonic Preparation.) AMES BROTHERS, Louisville, Ky. Filed May 31, 1919.
- 21,377.—Title: "MERITORIA." (For Valencias.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed June 4, 1919.
- 21,378.—Title: "ANAHEIM GLORIANA." (For Extra Fancy Valencias.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed June 4, 1919.
- 21,379.—Title: "DELICIA." (For Oranges.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed June 4, 1919.
- 21,380.—Title: "FAVORITA." (For Oranges.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed June 4, 1919.
- 21,381.—Title: "SONIA." (For Valencias.) ANAHEIM ORANGE & LEMON ASSOCIATION, Anaheim, Calif. Filed June 4, 1919.
- 21,382.—Title: "PLATITE." (For Compositions for Fitting False Teeth.) ANTI-PYORRHEA CHEMICAL COMPANY, St. Louis, Mo. Filed March 26, 1919.
- 21,383.—Title: "ARLINGTON." (For Canned Tomatoes.) ARLINGTON CANNERY, Arlington, Calif. Filed June 4, 1919.
- 21,384.—Title: "LATA BLANCA." (For a Preparation Consisting of Pork Sausage and Cereal Preserved in Lard.) ARMOUR AND COMPANY, Chicago, Ill. Filed May 31, 1919.
- 21,385.—Title: "MILLION \$ HAIR TONIC." (For Hair-Tonic.) LOUIS ACERBACH, Cleveland, Ohio. Filed March 31, 1919.
- 21,386.—Title: "DELICIA. 'THE NAME TELLS.'" (For Corned Beef.) BAKER PACKING COMPANY, Chicago, Ill. Filed November 21, 1918.
- 21,387.—Title: "JUICY FRUIT." (For Non-Alcoholic Beverages.) THE BEE BEE CONFECTION CO., Dayton, Ohio. Filed July 7, 1919.
- 21,388.—Title: "SPOT SLIDE." (For Garment-Spotter.) J. F. BENEDICT, Portsmouth, Ohio. Filed June 12, 1919.
- 21,389.—Title: "BRONCHITINE." (For a Medical Compound—Namely, Bronchitine.) V. L. BLAHNIK AND SONS, Chicago, Ill. Filed May 5, 1919.
- 21,390.—Title: "MIRRO-CREPE." (For Blouses.) THE BLOUSEMAKER, INC., New York, N. Y. Filed May 8, 1919.
- 21,391.—Title: "SHADO-CREPE." (For Blouses.) THE BLOUSEMAKER, INC., New York, N. Y. Filed May 8, 1919.
- 21,392.—Title: "BOEDEKER'S SUPERIOR GRAPE-WIN." (For a Beverage.) BOEDEKER & Co., Cincinnati, Ohio. Filed July 1, 1919.
- 21,393.—Title: "INTERNATIONAL BRAND." (For Macaroni.) BUCKLEY MACARONI COMPANY, INC., Kensington, Conn. Filed February 17, 1919.
- 21,394.—Title: "SUNSET CHOCOLATES." (For Chocolates.) BEHR, PRATT & Co., Cincinnati, Ohio. Filed May 6, 1919.
- 21,395.—Title: "VIRGINIA CHOCOLATES." (For Chocolates.) BEHR, PRATT & Co., Cincinnati, Ohio. Filed May 6, 1919.
- 21,396.—Title: "KANT-RUST SPRING LUBRICANT." (For Lubricants.) CEE & VEE PRODUCTS CO., Buffalo, N. Y. Filed May 7, 1919.
- 21,397.—Title: "MARY JAMES DEAROS." (For Candy.) CHARLES N. MILLER COMPANY, Boston, Mass. Filed April 18, 1919.
- 21,398.—Title: "LIBERTY." (For Cantaloupes.) COHEN, MANN & KAHN, Los Angeles, Calif. Filed May 19, 1919.
- 21,399.—Title: "FLORIDA MELLOW FRUIT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Atlanta, Ga. Filed June 14, 1919.
- 21,400.—Title: "FLORIDA SPEARMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Atlanta, Ga. Filed June 14, 1919.
- 21,401.—Title: "WHITE LILY CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,402.—Title: "SPEARMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,403.—Title: "PEPPER-MINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,404.—Title: "KENTUCKY PEPPERMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,405.—Title: "KENTUCKY SPEARMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,406.—Title: "KENTUCKY FRUIT FRAPPE CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,407.—Title: "FLORIDA PEPPERMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Atlanta, Ga. Filed June 14, 1919.
- 21,408.—Title: "SPEARMINT CHEWING GUM." (For Chewing-Gum.) ABRAHAM COLKER, Newport, Ky. Filed June 14, 1919.
- 21,409.—Title: "YUCCA BRAND PINK MEAT CANTALOUPE." (For Cantaloupes.) CRITCHFIELD & WOLFF, Pittsburgh, Pa. Filed June 20, 1919.
- 21,410.—Title: "TRENCH TUBES." (For Trench Tubes.) DAVIS & GEEK, INC., Brooklyn, N. Y. Filed June 24, 1919.
- 21,411.—Title: "DEAD SHOT NON-POISONOUS INSECTICIDE." (For a Powder for Killing and Destroying All Kinds of Insects.) DEAD SHOT CHEMICAL COMPANY, Oklahoma, Okla. Filed May 26, 1919.

- 21,412. Title: "DEAD SHOT RAT KILLER." (For a Powder for Killing and Destroying Rats.) DEAD SHOT CHEMICAL COMPANY, Oklahoma, Okla. Filed June 20, 1919.
- 21,413. Title: "DEXTER'S MOTHER'S BREAD." (For Bread.) DEXTER A. DEXTER, Springfield, Mass. Filed May 22, 1919.
- 21,414. Title: "BOB ROY." (For Tea.) THE DONALD COMPANY, Grand Island, Neb. Filed May 19, 1919.
- 21,415. Title: "DE LUXE." (For Oleomargarine.) EDSON BROTHERS, Philadelphia, Pa. Filed June 30, 1919.
- 21,416. Title: "PROPHY LAC TIC PENETRATOR HAIR BRUSH." (For Hair Brushes.) FLORENCE MANUFACTURING COMPANY, Northampton, Mass. Filed April 22, 1919.
- 21,417. Title: "BRUNSWICK CHOCOLATES." (For Chocolates.) GENERAL CANDY CO., Milwaukee, Wis. Filed June 11, 1919.
- 21,418. Title: "BLABON ART LINOLITHS." (For Linocuttings.) THE GEORGE W. BLABON COMPANY, Philadelphia, Pa. Filed July 2, 1919.
- 21,419. Title: "MOVIE." (For Building Blocks and Constructive Toys.) GEORGE BORGMEYER & CO., New York, N. Y. Filed June 9, 1919.
- 21,420. Title: "VANITY FAIR." (For a Non-Alcoholic Beverage.) DAVID N. GOLDBERG, Chicago, Ill. Filed July 5, 1919.

- 21,421. Title: "WHITE LABEL." (For Non-Intoxicating Beverages.) GREENSBURG BREWING COMPANY, Greensburg, Pa. Filed June 21, 1919.
- 21,422. Title: "GRIVAS SPECIAL SAUCE." (For Sauce.) JOHN B. GRIVAS, Chicago, Ill. Filed May 10, 1919.
- 21,423. Title: "DON JILLIAN." (For Cigars.) GRADY-ANNIS & CO., New York, N. Y. Filed April 17, 1919.
- 21,424. Title: "GEN CO BRAND." (For Crushed Fruits, Namely, Raspberry.) GENERAL FRUIT & SYRUP CO., Baltimore, Md. Filed May 19, 1919.
- 21,425. Title: "FORD OVERCOAT." (For Men's Overcoats.) MORRIS GOLAND, New York, N. Y. Filed May 21, 1919.
- 21,426. Title: "PERFECT SURE FIT FASTNER." (For Snap-Buttons or Garment Fasteners.) EDWARD GURNEY, New York, N. Y. Filed April 28, 1919.
- 21,427. Title: "EAGLE." (For Gasoline.) HAMMER & CO., San Francisco, Calif. Filed June 24, 1919.
- 21,428. Title: "EAGLE." (For Kerosene.) HAMMER & CO., San Francisco, Calif. Filed June 24, 1919.
- 21,429. Title: "EAGLE." (For Olive-Oil.) HAMMER & CO., San Francisco, Calif. Filed June 24, 1919.
- 21,430. Title: "EAGLE." (For Salad Oil.) HAMMER & CO., San Francisco, Calif. Filed June 24, 1919.

PRINTS

REGISTERED AUGUST 5, 1919.

- 5,145. Title: "SAVE YOUR SPOKES A SURE CURE FOR LOOSE SPOKES IN AUTO BUGGY AND WAGON WHEELS TIGHTEN YOUR SPOKES WITHOUT REMOVING YOUR RIMS OR TIRES ANY ONE CAN USE NO TOOLS NECESSARY." (For Spoke Compound.) A. C. MANUFACTURING CO., Chicago, Ill. Filed June 25, 1919.
- 5,146. Title: "LET US PLACE YOU HERE." (For Tour Maps.) AMERICAN MILL COMPANY, Owensboro, Ky. Filed July 9, 1919.
- 5,147. Title: "YES SIR! THAT LABEL GUARANTEES YOU B. V. D. QUALITY." (For Athletic Underwear.) THE B. V. D. COMPANY, New York, N. Y. Filed April 3, 1919.
- 5,148. Title: "IT'S GREAT BOYS TO CLIMB INTO B. V. D." (For Athletic Underwear.) THE B. V. D. COMPANY, New York, N. Y. Filed April 7, 1919.
- 5,149. Title: "TAKE IT FROM ME, INSIST ON B. V. D." (For Athletic Underwear.) THE B. V. D. COMPANY, New York, N. Y. Filed April 7, 1919.
- 5,150. Title: "YES DEAR I ASKED FOR B. V. D. AND HERE'S THE LABEL." (For Athletic Underwear.) THE B. V. D. COMPANY, New York, N. Y. Filed April 7, 1919.
- 5,151. Title: "QUALITY WITHOUT EXTRA GANCE—STYLE WITHOUT EXPERIMENT." (For Footwear.) GEORGE W. BAKER SHOE COMPANY, Brooklyn, N. Y. Filed June 12, 1919.

- 5,142. Title: "JUGGL-BALLS." (For a Game.) EUGENE CARRAINE, Philadelphia, Pa. Filed June 14, 1919.
- 5,143. Title: "WELCOME HOME BOYS." (For Cream of Wheat Breakfast Food.) CREAM OF WHEAT CO., Minneapolis, Minn. Filed May 15, 1919.
- 5,144. Title: "MENU." (For Cream of Wheat Breakfast Food.) CREAM OF WHEAT CO., Minneapolis, Minn. Filed June 19, 1919.
- 5,145. Title: "GOOCH'S BEST FLOUR." (For Bread.) GOOCH MILLING & ELEVATOR CO., Lincoln, Neb. Filed June 9, 1919.
- 5,146. Title: "GOOCH'S BEST SELF RISING PANCAKE FLOUR." (For Pancake-Flour.) GOOCH MILLING & ELEVATOR CO., Lincoln, Neb. Filed June 9, 1919.
- 5,147. Title: "DAYNITE." (For Watches.) KNICKERBOCKER WATCH CO., New York, N. Y. Filed May 20, 1919.
- 5,148. Title: "DAY-NIGHT." (For Watches.) KNICKERBOCKER WATCH CO., New York, N. Y. Filed May 20, 1919.
- 5,149. Title: "MENTHOLAPTINE." (For Medicinal Preparations.) LIONEL W. HALL, Irwin and Mifflinville, Pa. Filed June 9, 1919.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE HEINZE.

Decided July 18, 1919.

ADDITIONAL OATH—UNREASONABLE DELAY IN FILING APPLICATION—DELAY OF FIVE WEEKS.

Five weeks in addition to the time which may naturally be expected to be required in transmitting the papers by mail to the Patent Office will not be considered such an unreasonable time for filing an application after the execution of the oath as to require an additional oath under Rule 46. (*Ex parte Branna*, 97 O. G., 2533, modified.)

ON PETITION.

TURBINE CONSTRUCTION.

Messrs. Bradford, Merrill & Bierman for the applicant.

NEWTON, Commissioner.

This is a petition from the action of the Primary Examiner requiring an additional oath in this case under the provisions of Rule 46, on the ground that the application was not filed within a reasonable time after the execution of the original oath.

The record shows that the application was filed in the Patent Office thirty-five days after the oath was executed. This was not regarded as being within a reasonable time under the practice announced in *ex parte Branna*, (97 O. G., 2533.)

To make absolutely certain the facts regarding public use and sale, publication of the invention, and prior patenting which are required to be set forth in the oath, it would be necessary to execute the oath the same day the application is filed; but this would be impractical in many instances, as, for example, where the inventor resides at a distance from the Patent Office.

It is desirable that an application be filed promptly after the execution of the oath, and in a great majority of cases the attorneys are able to do so without being inconvenienced. It frequently occurs that the allowance of applications otherwise in condition for allowance is delayed by correspondence relating to the filing of an additional oath, with possibly a petition that the requirement be waived, all of which imposes additional labor both upon the Office and upon the attorney.

The numerous instances in which the requirement for an additional oath is made, on the ground that the application was not filed within a reasonable

time after the execution of the oath, and the numerous petitions that are brought asking that the requirement be waived indicate that the time—three weeks plus the time ordinarily required for transmitting the papers—is not long enough and should be extended.

The decision in the case of *ex parte Branna*, *supra*, is therefore modified to the extent that five weeks in addition to the time which may naturally be expected to be required in transmitting the papers by mail to the Patent Office will not be considered such an unreasonable time for filing an application after the execution of the oath as to require an additional oath under Rule 46, and to the extent indicated the petition is granted.

ERICKSON AND ERICKSON V. DYSON.

Decided January 21, 1918.

1. INTERFERENCE—PRIORITY—DILIGENCE.

Conceding that E. and E. conceived the invention before D. reduced the invention to practice by filing an application on May 13, 1905, they were lacking in diligence where nothing was being done at the time D. entered the field except the tentative making of Patent Office drawings and where the case was put in the hands of first one party and then another and an application was finally prepared without any claims and turned over to the attorneys of record, who prepared and filed the complete application.

2. SAME—SAME—REDUCTION TO PRACTICE.

The construction of a device which, while not lacking entirely in utility, fails to overcome the very difficulties for which it was designed does not constitute a reduction to practice.

APPEAL from Examiners in Chief.

TELEPHONE SYSTEM.

Messrs. Bulkey & Sweeney and Mr. E. D. Fales for Erickson and Erickson.

Mr. Curtis H. Camp for Dyson.

WHITEHEAD, First Assistant Commissioner.

This is an appeal by Erickson and Erickson from a decision of the Examiners in Chief affirming the decision of the Examiner of Interferences awarding priority to Dyson.

The Examiner of Interferences has set out at some length the general characteristics of the automatic telephone systems to which this invention relates. After stating that at first each line had been provided with a first-selector switch at the central

station and that afterward it was found practicable, in order to reduce the number of switches, to divide the substation into groups and to assign to each group a number of first-selector switches and to provide each line with a line-switch, by means of which the calling subscriber may get control of any available first selector, he points out that the invention here in issue relates to such a system in which the wipers, by which the connection is extended to an idle first-selector switch, remained at the position assumed in the making of the call until another call is made over the same line instead of always starting from and returning to a common normal position.

The invention is set out in eleven counts, of which count 8 is illustrative:

8. An automatic telephone system including telephone lines, a calling telephone line, selectors at the exchange for use in interconnecting lines, less in number than the number of lines, a progressive switch at the exchange, multiple contacts of selectors at said switch, contacts individual to said calling line at said progressive switch, mechanism responsive to a preliminary impulse transmitted over said calling line to electrically connect said individual contacts to multiple contacts of an idle selector, whereby said calling line is operatively associated with said selector, means for electromagnetically adjusting said selector in establishing connection from said line to a called line, a connector for subsequent operation responsive to said means, to connect directly with the called line, a contact for said selector serving to protect the talking circuit when established against intrusion, a trunk release circuit at the exchange, means for altering the electrical condition of said contact to render said circuit effective when disconnection is desired, and release means for said calling line to operatively dissociate said line from said selector while maintaining said switch in its antecedent progressive position.

Dyson does not claim to have reduced the invention to practice prior to his filing date. The Examiner of Interferences found that he had established a disclosure of the invention on January 5 and January 14, 1905. He further found that Erickson and Erickson had not established a conception of the invention prior to Dyson's date of conception or even prior to Dyson's filing date. In reaching this conclusion he found that a certain switch tested by Erickson and Erickson and referred to in the record as the "Erickson second specimen" was of no practicable utility, and therefore the making of this switch in 1904 did not establish a conception of the invention, much less a reduction to practice. He further found that the testimony as to the making of certain sketches by Erickson and Erickson was so uncertain and so contradictory, especially the testimony as to when certain changes were made in the Patent Office drawings, as not to establish even a conception by Erickson and Erickson before Dyson's filing date. The Examiners-in-Chief held that whatever Erickson and Erickson did prior to Dyson's filing date amounted to nothing more than an abandoned experiment and that they were lacking in diligence at the time Dyson entered the field and thereafter.

No error is found in the holding of the Examiner of Interferences that Dyson has established a conception and disclosure of the invention in January, 1905.

The principal question in the case is as to the Erickson second specimen. This device is alleged to have been built and tested in the summer of 1904.

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The Examiner of Interferences, after fully discussing the testimony with reference to this device, held that it was of no practical utility for the following reasons:

First. A call over any telephone-line of a group will lock out and render inoperative, either as calling or called lines, all other lines of the same group in which the line-switch wipers happen to be associated with multiple contacts of the first selector appropriated by the calling line. The locked-out lines will, however, be put in connection with the talking-circuit, so that any subscriber whose line is locked out may listen in.

Second. The replacement of the receiver of any one of the above-mentioned "locked out" subscribers will release the switches and interrupt the conversation between the subscribers whose connection had been properly established.

Third. An attempt to call any line of a group will result in the operation of the cut-off relays of all other lines of that group the line-switches of which stand in association with the multiple contact of the particular first selector whose trunk-terminals are at the time in contact with the line-switch wipers of the called line, and the ringing-current intended for the desired line is equally effective in ringing all the others of the above-mentioned lines, whose subscribers may answer, but will be unable to secure a connection during the continuance of the connection thus established.

On behalf of Erickson and Erickson it is not denied that there would be this trouble with the use of the second specimen; but it is contended that this does not show a lack of conception of the invention or a reduction to practice thereof by Erickson and Erickson, since the device is not entirely lacking in utility.

In support of this contention it is pointed out that with party-lines when one party is called all the other parties on the line may listen in and that when the bell of one party is rung the bells of all the other parties on the line are rung, and that therefore this system would have been of use at least with such party-lines.

The obvious answer to this is that it was not intended for such use. It was designed to make the proper connections between a calling line and a called line and to avoid some of the very difficulties which it is admitted this would create. Furthermore, one of the difficulties—namely, that if any of the subscribers who had listened in replaced his receiver the switches would be released and the conversation interrupted—is not true of an ordinary party-line. Any of the parties on the line may listen in; but when he replaces his receiver he does not cut off the connection between the calling and the called subscriber.

The testimony as to the sketches which were made and the preparation of the Patent Office drawings and the time when certain changes were made therein is too uncertain to establish that they were made before Dyson's filing date. Admittedly certain drawings had been made as early as Janu-

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ary 25, 1905; but it is not established whether certain changes which were made therein were made before or after Dyson's filing date.

It must be held, therefore, that Erickson and Erickson have not established either a reduction to practice or a conception of the invention prior to Dyson's filing date.

But even if it be held that they have established a conception prior to Dyson's filing date or even prior to Dyson's date of conception they have not established diligence in reducing the invention to practice. At the time that Dyson entered the field nothing was being done by Erickson and Erickson other than a tentative making of Patent Office drawings. The case was put in the hands of first one party and then another, and an application was finally prepared without any claims and turned over to the attorneys of record, who then prepared the complete application.

The case is clearly distinguishable from that of *O'Connell v. Schmidt*, (122 O. G., 2065; 27 App. D. C., 77,) which is cited by the appellants. There the court found that the party had almost reduced the invention to practice and that if one of his models had been tested it would have amounted to a reduction to practice, but that such a test would not, according to the witnesses who were experts in the art, have given them any more knowledge of the invention; that he had placed the invention before those who were, under certain conditions, entitled to patent it and urged that the application be filed. In the present case the second specimen was not operative for the purpose for which it was intended. The device could not have been taken up by others and successfully operated without further invention. In fact, it would apparently appear that if Erickson and Erickson had made complete tests the difficulties which are now found to be inherent in the second specimen would have been discovered.

The decision of the Examiners-in-Chief is affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

ERICKSON AND ERICKSON v. DYSON.

Decided June 2, 1919.

INTERFERENCE—PRIORITY—DILIGENCE—REVIEW OF PATENT OFFICE DECISION.

Where there was a period of inactivity by E. and E. of several months just before and after D. entered the field and the circumstances were such that the court is unable to say that there was error in the ruling of the Patent Office that they were lacking in diligence, the decision will be affirmed. (For Commissioner's decision see 265 O. G., 145.)

Mr. C. C. Bulkley for the appellants.

Mr. C. H. Camp and Mr. C. C. Brodbery for the appellee.

MEMORANDUM OPINION BY DIRECTION OF THE COURT, BY MR. JUSTICE ROBB.

Appeal from concurrent decisions of the Patent Office tribunals in an interference proceeding

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awarding priority of invention to Alfred H. Dyson, the senior party.

The invention relates to improvements in automatic telephone systems, and the issue is expressed in eleven counts. Each of the three tribunals of the Patent Office found that appellants had failed to establish conception of the invention prior to Dyson's filing date. The Examiner of Interferences made no finding on the question of diligence, but the Examiners-in-Chief and the Assistant Commissioner found that, even assuming prior conception on the part of appellants, the result would be the same because appellants had failed to show diligence in reducing the invention to practice.

Appellants' contentions have been very thoroughly and ably presented, both by brief and argument, but, having in mind that appellants are the junior parties and that there are three concurrent decisions against them, we are not so clearly convinced that the ruling of the Patent Office on the question of diligence was erroneous as to feel warranted in reversing the case on that point. There was a period of several months of inactivity at a critical period, or just before and after Dyson entered the field, and the circumstances were such that we are unable to say that the Patent Office clearly was in error in ruling that this delay constituted lack of diligence. It is unnecessary, therefore, for us to make any finding on the question of priority of conception, and we express no view thereon.

The decision must be affirmed.

Affirmed.

Court of Appeals of the District of Columbia.

HART AND BARBER v. WIG, BRADEN, AND PRATHER.

Decided June 2, 1919.

INTERFERENCE—ORIGINALITY—EMPLOYER AND EMPLOYEE.

Upon the issue of originality evidence considered and held that only one of the three joint inventors, W., B., and P., gave any instructions to H. and B., the other applicants, who were in the employ of the company of which W. was president, that such instructions were insufficient in detail to enable H. and B. to construct the machine of the issue, and priority awarded to H. and B.

Mr. Lynn A. Williams and Mr. A. G. McCaleb for the appellants.

Mr. Percy J. Moore for the appellees.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDOL.

This appeal is by the senior parties, Hart and Barber, from the decision of the Commissioner of Patents awarding priority of invention to appellees, the junior parties. Appellants filed their application August 14, 1914, on which a patent was issued May 9, 1916. Appellees filed their application August 24, 1915. The invention relates to a grain-shocker to be attached to and operated in conjunction with a grain-binder. The Examiner of Interferences awarded priority to appellees. This decision was reversed by the Board of Examiners-in-Chief. The Commissioner reversed the Board, and, in effect, sustained the Examiner.

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It is unnecessary to examine the claims of the issue, since the interference turns solely upon the question of originality. The appellees are officers or stockholders in the Peerless Shocker Manufacturing Company, of Sioux City, Iowa. Appellants were mechanics in the employ of the Peerless Company at the time they constructed the machine to issue. The first machine constructed in the winter or spring of 1914, was found to be inoperative. A second machine was begun about May 1, 1914, and completed and tested out in the July following. Appellants conducted their work in a private room constructed for the purpose in the factory of the Peerless Company.

Appellee Wig, the president of the company, is the only one who, it is claimed, gave appellants instructions as to the construction of the machine. While Wig is corroborated in some particulars by a number of the witnesses, all but one of whom are stockholders in the Peerless Company, it does not appear that either Braden or Prather gave appellants any instructions as to how they should proceed to construct the machine. Nor is any witness able to testify to any specific instructions alleged to have been given by Wig. Although appellees allege the making of drawings in their preliminary statement, it does not appear that any sketch or any drawing of any kind was furnished by Wig as a guide to appellants. On the contrary, Wig depends upon certain verbal instructions which, in our opinion, standing alone, do not amount to such a specific disclosure of the invention as would enable a mechanic to construct it.

The Board, in its opinion, analyzing the testimony of Wig as to the instructions given, said:

Probably the most specific statement, and in fact the only statement made by Wig as to details of construction is that contained in his answer to Q. 20, W. R. and P. records. Asked by his attorney what description he gave to Hart when he first talked to Hart about working on this invention, Wig says: "I laid out the plans to him to give him the idea as to how the shocker was to reverse the handle from the blinder, conveyed back into a shockformer, properly compressed, with a needle and knocker to be around the shock; also the proper means for delivering this shock was gone over with him. My ideas were to roll the shock off by some means, either canvas or some other way of constructing a roller platform. This was all thoroughly gone over with him at the time." There is no corroboration of this testimony of Wig and it is denied by Hart that he ever received any instructions from Wig which enabled him working with Barber to construct the machine made and tested in the summer of 1914. It may be noted here that the instructions alleged to have been given to Hart would naturally have been embodied in the unsuccessful machine completed in the winter or spring of 1914. The successful machine that was begun on or about May 1st, 1914, and finished in July of that year, involved features of construction not referred to in the answer of Wig to Q. 20 quoted above. It is clear to us that there is nothing in the testimony of the junior parties or their witnesses to show that there was in the minds of the junior parties any clear conception of the invention in issue including not only the result to be attained but a concrete embodiment of means by which the desired result was to be secured.

While the case is a close one, and whichever way decided may leave the impression of possible, or even probable, mistake, we are of opinion, after a careful review of the testimony, that, in view of the burden resting upon the junior parties and their delay of over one year in filing their application after notice that appellants' application had been

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denied, the conclusion reached by the Board of Examiners-in-Chief is correct.

Therefore, the decision of the Commissioner of Patents is reversed.

Reversed.

U. S. Circuit Court of Appeals—Seventh Circuit.

L. P. LARSON, JR., Co. et al. v. LAMONT, CORLISS & Co. SAME v. MINT PRODUCTS Co.

Decided July 30, 1918; rehearing denied January 15, 1919.

[257 Fed. Rep., 270.]

1. TRADE MARKS—REGISTRATION—EFFECT—SUBSEQUENT REGISTRATION.

Where a trade-mark for a gum-wrapper, consisting of an exhibited design containing the words "Peptomint" and "Gum," was registered with an explicit disclaimer of the words "Peptomint" and "Gum," the statutory right respecting "Peptomint" as one of the elements of the trade-mark was exhausted, the trade-mark statute containing no provision for reissue or amendment after issue, and the registrant could not thereafter by subsequent registration acquire any right respecting the word "Peptomint."

2. NAME—UNFAIR COMPETITION—COMMON-LAW RIGHTS.

Where a gum manufacturer's label was marked with the word "Peptomint," wreathed with sprigs of peppermint, and the quoted word was popularly taken as corrupt spelling of peppermint and so pronounced, the manufacturer, in attempting to assert a common-law right to the quoted word as an independent trade-mark, could not, after disclaimer of such word in the registration of his trade-mark, claim that such word was arbitrarily coined from "peptone."

3. NAME—NAME—EVIDENCE.

In an action based on unfair competition by a manufacturer in using the word "Peptomint" to simulate both in color and design the word "Pep-O-Mint" on plaintiff's candy-labels evidence held to require a decree for plaintiff.

4. NAME—NAME—REGISTERED TRADE MARKS—PRESUMPTIONS.

In an action for unfair competition in the use of the word "Peptomint" to simulate plaintiff's word "Pep-O-Mint" that plaintiff's label bore the words "Trade-Mark Registered," while the word "Pep-O-Mint" had not been registered, did not require a dismissal of plaintiff's bill where such words were attributable to a legend on plaintiff's products that actually had been registered and in view of the presumption that a suitor's hands are clean.

Consolidated appeals from the District Court of the United States for the Eastern Division of the Northern District of Illinois.

Action by the L. P. Larson, Jr., Company against Lamont, Corliss & Co. and others, and action by the Mint Products Company against the L. P. Larson, Jr., Company, with cross-bill by defendant against plaintiff in the last-mentioned action. From a dismissal of plaintiff L. P. Larson, Jr., Company's bill and cross-bill, it appeals; the appeals being consolidated. Modified and affirmed.

Mr. Frank P. Reed and Mr. Charles H. Aldrich for the appellant.

Mr. James R. Offield and Mr. Charles K. Offield for the appellees.

Before BAKER, ALSCHULER, and EVANS, Circuit Judges.

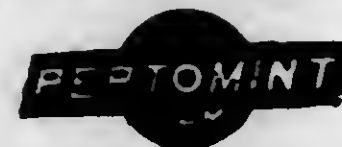
BAKER, Cir. J.:

For alleged infringement of trade-mark and for alleged unfair competition appellant sued Lamont, No. 1.]

Corliss & Co., selling agents of Mint Products Company. That company reciprocated with a like suit against appellant. In addition to taking issue by answer, appellant in a cross-bill again asserted that it was the aggrieved party. On final hearing appellant's bill against Lamont, Corliss & Co. and its cross-bill against Mint Products Company were dismissed for want of equity. With respect to Mint Products Company's bill a decree was entered that Mint Products Company was the exclusive owner of the trade mark or name "Pep-O-Mint" and also of the word collocation and descriptive appearance of the wrapper inclosing its mint lozenges; that appellant had infringed said trade mark or name and also had simulated said wrapper; and that appellant be enjoined—

from engaging in unfair competition with Mint Products Company, and from putting up or selling mint lozenges under the trade name or mark "Pep-O-Mint," or any simulation thereof as to style of lettering or letter arrangement and design, or so wrapped in labels or contained in cartons that may be mistaken for the goods of Mint Products Company.

In 1912, appellant, after a year's business in chewing-gum, registered the following trade-mark:



Appellant's verified statement alleged that the trade-mark consisted of the exhibited design and explicitly disclaimed the words "Peptomint" and "Gum."

In 1915 appellant filed a second application and thereupon procured the registration of the following trade-mark:



Appellant's verified statement alleged that the trade-mark consisted of the exhibited design, and explicitly disclaimed the word "Gum." Inferentially appellant sought to assert a trade-mark right in the word "Peptomint" by saying:

No claim is made to the word "Mint" except in association with the word "Pepto."

Appellees in 1913 began to make and sell candy lozenges, of various flavors, under the trade-mark "Life-Savers." Their lozenges were somewhat of the form of a life-buoy and were done up in cylindrical packages. Flavors were prominently marked by a peculiar style of printing, displayed along one side of the cylinders, "Pep-O-Mint," "Choc-O-Late," "Mint-O-Green," "Malt-O-Milk," "Clo-Ve," "Ice-O-Rice." Letters, white on a purple background, were graduated in size, the largest at the ends, the others diminishing toward the round O at the center.

In 1914 appellant notified appellees that they were infringing the trade-mark "Peptomint" by the use of "Pep-O-Mint" on their peppermint-flavored "Life-Savers." This was the first that

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appellees knew of appellant's claim of "Peptomint" as a trade-mark. Appellant began its suit in 1916 and counted upon the 1915 registration.

(1) In the trade-mark statute, as in the one respecting copyright, there is no provision for reissue or amendments after issue. Consequently the 1912 registration exhausted the statutory right respecting "Peptomint" as one of the elements of the described mark. (*Caliga v. Inter Ocean Newspaper Co.*, 215 U. S., 182; 30 Sup. Ct., 38; 54 L. Ed., 150.) And so appellant must be held to its disclaimer.

(2) With respect to an asserted common-law right in the word "Peptomint" as an independent trade-mark, the record shows that appellant's gum was marketed in packages bearing the 1915 design in red, green and white. In so far as the word "Peptomint" was used alone, the use was oral; and appellant's own witnesses show that the printed word was popularly taken as a corrupt spelling of peppermint and was so pronounced. As the name of the flavor of appellant's gum, the word can have no standing as a common-law trade-mark. And in view of the 1912 disclaimer, the common pronunciation of the word, and appellant's wreathing it with sprigs of peppermint, equally will not bear appellant now say that the word was arbitrarily coined from "peptone," a digestive aid. At all events appellant can reach the question of infringement only through the common pronunciation of the two words as peppermint. Appellees make no allusion to "peptone." All agree that "Pep-O-Mint" is peppermint.

Concerning unfair competition, appellees in marketing their candy lozenges did not in any way imitate appellant's gum labels and packages and did not attempt to palm off their goods as appellant's. They did not in any way molest appellant in its fair-trade rights, for appellant cannot be allowed trade rights in any form that would prevent appellees from marking the various flavors on their packages of "Life-Savers" as they did.

(3) In Mint Products Company case, we find that appellant has been guilty of unfair competition. In March, 1915, appellant went into the candy-lozenge business. It put out peppermint lozenges in packages with red, green and white labels, which were practically identical with its "Peptomint" gum-label except that the word "Gum" was omitted. Of this label there was no complaint. But in December, 1915, appellant made a change. On its new label the word "Peptomint" is shown in white letters on a purple background, with the letters graduated in size to simulate "Pep-O-Mint" of Mint Products Company's label, and with the letter O elongated horizontally to give a spaced appearance. As this was after appellant had begun its warfare, the inferences are obvious. But, appellant says, no damage was done, no cause of action arose, because the record fails to show that a secondary meaning had attached to "Pep-O-Mint," indicating origin in Mint Products Company. When these candy lozenges are displayed in cartons the part having the name of the flavor is on top, so that the custo-

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nier and the seller may readily pick out the flavor desired. From the evidence respecting the large amount of long-continued advertising, the character of the advertising, and the volume and extent of the business, we have no difficulty in finding that the peculiar and distinctive style of marking the flavors, "Pep-O-Mint," "Wint-O-Green," and so forth, had come to indicate to purchasers that they were getting the goods put forth by Mint Products Company. If further proof were needed, it is found in appellant's deliberate appropriation.

(4) Appellant contends that the case against it must be dismissed because Mint Products Company's label bore the words "Trade-Mark Registered," while the record shows that "Pep-O-Mint," on which trademark infringement was based, had never been registered. There are two answers: First, Though a certified copy of registration was not produced, testimony was given to the effect that "Life-Savers" was a patented (registered) trademark. If so, the criticized legend should be attributed, as it may well be from its position on the label, to the trademark "Life-Savers." Second, The presumption that a suitor's hands are clean, continues until some one—the suitor himself, his adversary, or the court—shows that they are unclean.

But the decree against appellant is too broad. Mint Products Company can be allowed no exclusive ownership of the word "Pep-O-Mint" as a trademark. It was used to indicate the flavor of one of several kinds of "Life-Savers." What was owned was the distinctive style of wrappers and cartons, including the particular way in which the word "Pep-O-Mint" was displayed. Further, the injunction and accounting must be limited to the proven violation, namely, the use of the label (with its accompanying cartons) put forth by appellant in December, 1915, identified as Exhibit C of the bill. Also, the general prohibition "from engaging in unfair competition with Mint Products Com-

pany" is to be deleted. To refrain from unfair competition is appellant's legal duty; but appellant should not be subjected to the possibility of contempt proceedings for undefined breaches of that duty. (*Sicily v. United States*, 193 U. S., 375, 396, 402; 25 Sup. Ct. 276; 49 L. Ed., 518.)

Decree modified and affirmed.

ADJUDICATED PATENTS.

(U. S. C. C. A. Ill.) The Alvey-Ferguson patent, No. 790,776, for a conveyer, claims 7 and 8 Held invalid. *Alvey-Ferguson Co. v. Peter Schoenhofen Breiung Co.*, 257 Fed. Rep., 314.

(U. S. C. C. A. Ill.) The Alvey patent, No. 790,811, for an elevator for packages, claims 1, 2, 3, 10, 11 Held valid and infringed. *Alvey-Ferguson Co. v. Peter Schoenhofen Breiung Co.*, 257 Fed. Rep., 314.

(U. S. C. C. A. Okla.) The Jackson patent, No. 1,038,146, for meter-box, Held invalid. *Jackson v. Enid Foundry & Machine Shops*, 257 Fed. Rep., 323.

(U. S. C. C. A. Minn.) The McQueen patent, No. 896,233, for a working elevator, Held valid and infringed. *Minneapolis, St. P. & S. S. M. Ry. Co. v. Barnett & Record Co.*, 257 Fed. Rep., 302.

(U. S. C. C. A. Ill.) The Munson patent, No. 1,025,420, for an improved revolving clod-fender for use with a corn-cultivator, claims 1 and 4 Held valid. *Munson Mfg. Co. v. Deere & Co.*, 257 Fed. Rep., 318.

(U. S. C. C. A. Va.) The Patterson reissue patent, No. 12,159, (original No. 722,243.) for powerloom, Held invalid. *Rosemary Mfg. Co. v. Halifax Cotton Mills*, 257 Fed. Rep., 321.

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THE OFFICIAL GAZETTE OF THE United States Patent Office.

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Trade-Marks.....	2—No. 126,231 to No. 126,232, inclusive.
Labels.....	57—No. 21,431 to No. 21,437, inclusive.
Prints.....	14—No. 5,150 to No. 5,163, inclusive.
Reissues.....	3—No. 14,704 to No. 14,706, inclusive.
Total.....	809

Save first; then invest—
For this, War Savings Stamps are best.

Disclaimer.

1,253,761.—Richard Wolfsberg and Sidney C. Smith, Los Angeles, Calif. CIRCUIT-BREAKER. Patent dated January 15, 1918. Disclaimer filed August 2, 1919, by the assignee, Krontz Manufacturing Company, Inc.

Hereby enters this disclaimer—

"To the subject-matter contained in the hereinbelow-quoted claims 2, 6, and 10 so far as the Wolfsberg and Smith patent is concerned:

"2. A circuit breaker comprising a case having a door, stationary contacts in the case, contacts on the door electrically connected to one another and adapted to engage the stationary contacts when the door is closed, and a shield in the case separate from the door operative by opening of the door to position between the stationary contacts.

"6. A circuit breaker comprising a case having a movable section and a stationary portion, means including a stationary contact in the case and a contact on the movable section to close an electric circuit when the movable section is in closed position, and means operative by opening movement of the movable section to position between the stationary and movable contacts to obstruct access to the stationary contact.

"10. A circuit breaker comprising a case having its front in sections, one of said sections being stationary and the other section being hinged thereto, contacts mounted on the door and connected together, other stationary contacts in the case, one of said stationary con-

tacts being below the level of the hinge, and a shield pivoted in the case above the level of the door hinge and operative by opening of the door to close off the space below the level of the door hinge from the space above the level of the pivot of the shield."

ADJUDICATED PATENTS.

(U. S. D. C. Conn.) The Weber patent, No. 743,206, for incandescent electric lamp sockets, claim 4 Held infringed. *Weber Electric Co. v. Connecticut Electrical Mfg. Co.*, 257 Fed. Rep., 429.

(U. S. C. C. A. Ohio.) The Dean patent, No. 779,533, for improvements in harmonic calling means for use in party-line telephone systems, Held not infringed. *Kellogg Switchboard & Supply Co. v. Dean Electric Co.*, 257 Fed. Rep., 425.

(U. S. C. C. A. Iowa.) The Smith patent, No. 803,721, for improvements in concrete-mixers, Held not infringed. *T. L. Smith Co. v. Cement Tile Machinery Co.*, 257 Fed. Rep., 423.

(U. S. D. C. Conn.) The Weber patent, No. 916,812, for incandescent electric lamp sockets, claim 1 Held infringed. *Weber Electric Co. v. Connecticut Electrical Mfg. Co.*, 257 Fed. Rep., 429.

Adverse Decisions in Interference.

PATENT No. 1,272,092.

On July 11, 1919, a decision was rendered that Charles Herman Rackle was not the first inventor of the subject-matter covered by claims 1, 2, 3, and 4 of his Patent No. 1,272,092, subject "Composition for preventing smut of printing-ink," and no appeal having been taken within the time allowed such decision has become final.

Correction of Drawings.

Rule 72.

The drawing may be withdrawn only for such corrections as cannot be made by the Office; but a drawing cannot be withdrawn unless a photographic copy has been filed and accepted by the Examiner as a part of the application. Permissible changes in the construction shown in any drawing may be made only by the Office and after an approved photographic copy has been filed. Substitute drawings will not be admitted in any case unless required by the Office.

APPLICATIONS UNDER EXAMINATION.

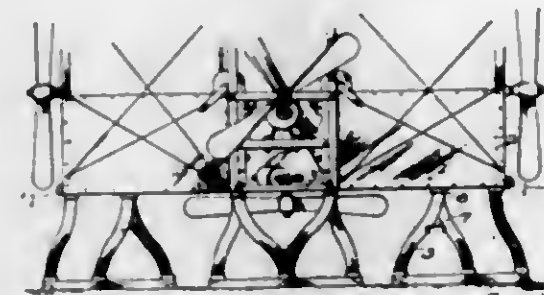
Condition at Close of Business August 8, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Seattering Unloaders; Trees, Plants, and Flowers.	May 13	May 27	39
123	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tests, Canopies, Umbrellas, and Cases; Tobacco.	Mar. 17	Apr. 30	758
173	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 20	Feb. 15	153
254	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 18	July 3	467
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter; Tying Cords or Strands.	Mar. 31	Mar. 7	192
213	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	May 1	May 3	415
212	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	May 22	July 7	221
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 22	June 5	242
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Mar. 26	Apr. 11	316
235	10. Carriages and Wagons; Motor Vehicles.	Mar. 28	May 31	260
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Buttons, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 10	June 27	320
222	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements.	Jan. 1	Mar. 1	1196
326	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Hoded, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Waking; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 26	Apr. 9	655
223	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 24	May 3	319
303	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 26	May 28	656
113	16. Radiant Energy; Telegraphy; Telephony.	Feb. 27	Mar. 13
207	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 1	May 28	257
220	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 4	May 2	531
234	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Jan. 21	Apr. 19	357
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	June 27	June 24	379
313	21. Brakes and Guns; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 22	Mar. 27	338
249	22. Aeronautics; Firearms; Ordnance.	May 17	July 10	283
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 22	May 21	510
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines.	Jan. 31	May 19	463
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 28	June 19	182
104	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Dec. 24	Mar. 7	633
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	May 3	June 18	430
225	28. Internal-Combustion Engines.	Feb. 17	June 7	582
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 29	701
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 6	July 11	417
173	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lims; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 12	Apr. 17	470
274	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Feb. 5	May 16	646
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Paving; Roofs.	Mar. 5	Apr. 21	350
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 22	May 14	284
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	June 11	July 16	379
204	36. Pliers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	June 3	Apr. 25	777
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Apr. 8	Apr. 19	710
373	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stationery; Stone-Working; Wells.	July 2	June 25	225
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Feb. 3	Mar. 5	748
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	May 6	Mar. 24	464
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 3	Apr. 7	473
111	42. Electricity, Conductors; Electricity-Transmission to Vehicle.	Apr. 3	Apr. 2	565
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 8	June 21	153
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	June 6	June 16	99
379	45. Clutches; Lubrication; Motors; Railway Brakes.	Mar. 16	June 16	317
Oldest new case, Dec. 27; oldest amended, Feb. 15.				20,880
Total number of applications awaiting action.				
163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks.	June 3	July 9	2044
	Designs.	May 13	June 17	693
	Labels and Prints.	July 1	July 14	263

PATENTS

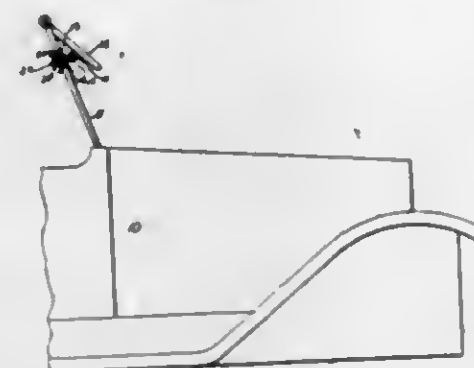
GRANTED AUGUST 12, 1919.

1,312,507. LANDING DEVICE FOR AEROPLANES. LOUIS R. ACCORNERO and ADOLPHE GAYDOU, New York, N. Y. Original application filed Mar. 5, 1918, Serial No. 220,636. Divided and this application filed July 2, 1918. Serial No. 243,028. 3 Claims. (Cl. 244-2.)



1. In an aeroplane, a body, and a cushioning means for the said body comprising an impact foot, and compression springs secured at their lower ends to the said foot and at their upper ends to the bottom of the body, the said springs being distorted out of vertical alignment.

1,312,508. SUPPORT FOR WIND-SHIELDS. JOHN HENRY ALBRECHT, Baltimore, Md. Filed Dec. 5, 1918. Serial No. 265,409. 2 Claims. (Cl. 290-84.)

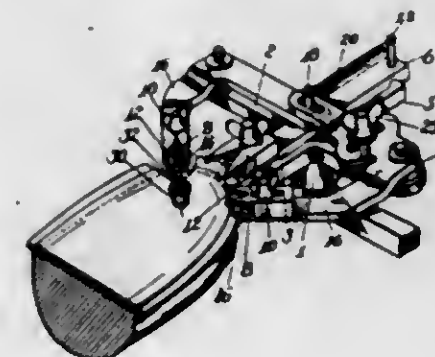


1. In a support for wind shields, the combination with a pair of hinged clamping jaws, of a screw and wing nut for forcing said jaws together, a support rod secured to one of said jaws and a buffer supported by said rod.

1,312,509. APPARATUS FOR USE IN ASSEMBLING SOLES ON LASTS. ORNELL ARNOLD, deceased, Swampscott, Mass., by Hannah Ashton, executrix, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 15, 1916. Serial No. 78,521. 18 Claims. (Cl. 12-83.)

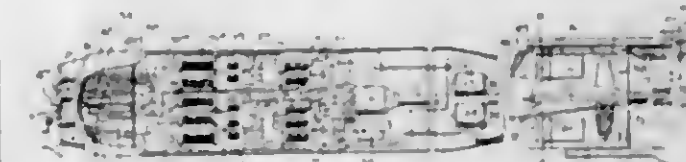
1. An apparatus for use in assembling soles on lasts having, in combination, a last engaging member, a superposed sole edge engaging member, a sole margin engaging member, and means for securing the last engaging member and the sole edge engaging member in relation to locate a sole so that it will project a predetermined distance outside of the edge of the last.

11. An apparatus for use in assembling soles on lasts comprising devices arranged for engagement by the toe of a sole and the toe of a last, said devices acting at a plurality of points including points located at opposite sides of the toe to center a sole toe on the toe portion of the last as the work supported in the hands of the operator is thrust into contact with the devices, the sole engaging devices located at the opposite sides of the toe being constructed and arranged for independent adjustment to permit a predetermined projection of the sole beyond the edge of the last bottom at each corner of the toe.



14. An apparatus for use in assembling soles on lasts comprising a carrier, angle levers fulcrumed at opposite lateral sides of the carrier and having inwardly extending arms and forwardly extending arms, feelers mounted on the latter arms to engage a toe and center a sole on a last, a slide movable longitudinally between the levers and having a feeler to engage the toe end of the work, and means to hold the feelers in proximity and allow separation for widths of toes.

1,312,510. SOUND-CONTROLLED DIRIGIBLE TORPEDO. GEORGE BAKER, Goldfield, Colo. Filed Aug. 25, 1917. Serial No. 188,179. 24 Claims. (Cl. 114-20.)



1. The combination with a floating body, propelling means therefor, steering means therefor, and normally inoperative charge detonating means, of sound affected controlling means therefor causing the initial operation of the propelling means, continuously controlling the steering means and rendering the detonating means operative when the sound affected means is acted upon by sound waves of a predetermined intensity.

1,312,511. SPARK-PLUG. LOUIS BASKIN, New York, N. Y. Filed Feb. 28, 1918. Serial No. 219,561. 4 Claims. (Cl. 123-169.)

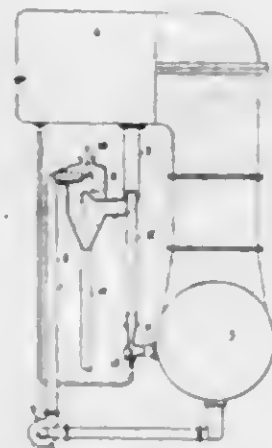
1. A spark plug comprising a base, a metal tube therein insulated from the base, an electrode within the tube, said tube and electrode having cooperating inwardly

tapering surfaces near the upper end of the tube to make a gas tight fit therebetween, and means to retain said electrode detachably in said tube to permit the electrode



to be removed outwardly without removing the plug from an engine cylinder permitting priming of the engine through the tube.

1,312,512. CONDENSING STEAM TURBINE PLANT. KARL BAUMANN, Urmston, England, assignor to The British Westinghouse Electric and Manufacturing Company Limited, a Company of Great Britain. Filed June 15, 1916. Serial No. 103,728. 2 Claims. (Cl. 257-24.)



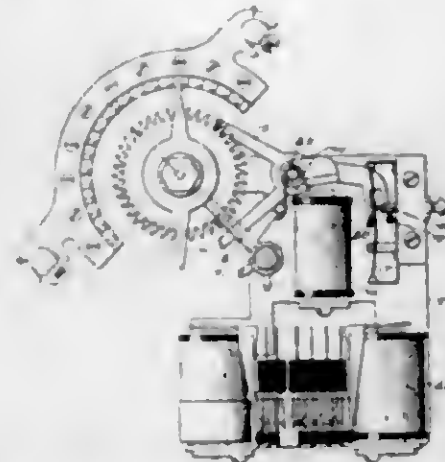
1. In combination with a condensing steam turbine, a feed water heater provided with an air off-take pipe adapted to be connected to an air extracting device, means for supplying said feed water heater with steam below atmospheric pressure derived from a low pressure part of said turbine, a condenser connected to said turbine, a connection between said condenser and said feed water heater for supplying said heater with water from said condenser, an air connection between said condenser and said feed water heater, and an air extracting device in said connection.

1,312,513. INCANDESCENT LAMP WRAPPER. RALPH L. BEACH, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 9, 1916. Serial No. 96,335. 6 Claims. (Cl. 229-89.)



1. A packing for incandescent lamps comprising an elongated blank having at each end a portion adapted to be bent at right angles to the body of the blank and perforated by an aperture of a size to fit snugly over the base of the lamp and having near the middle a line of weakness which causes said blank to form a pointed end spaced away from the tip of the lamp and supported by the rounded end of the bulb, said blank forming an enclosure conforming to the contour of the lamp when bent to cause said ends to overlap with said apertures in register.

1,312,514. TRUNK-SELECTING SWITCH. JOHN G. BLASSING, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1912; Serial No. 671,696. Renewed May 28, 1917. Serial No. 171,583. 27 Claims. (Cl. 179-27.5.)



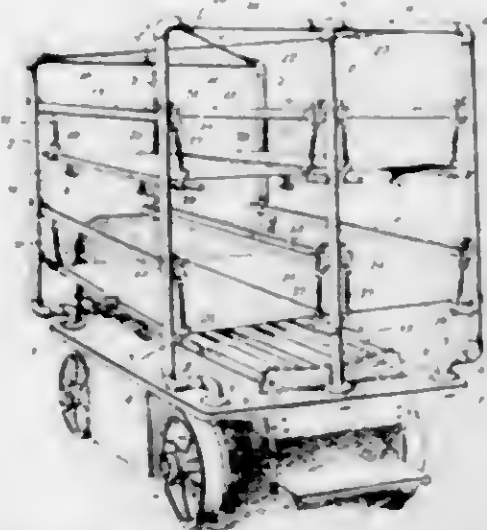
1. In a telephone system, a line, a trunk-selecting switch individual to the line comprising a series of contacts, a contact arm adapted to engage with said contacts, and means for normally maintaining said arm in a position between any two adjacent contacts.

1,312,515. AUTOMATIC SPRINKLER. ALFRED E. BOARDMAN, Seattle, Wash. Filed May 28, 1917. Serial No. 171,379. 7 Claims. (Cl. 169-5.)



1. In an automatic sprinkler, the combination of a nozzle, a thrust screw, a valve having a concave seating face for said nozzle, and struts extending in angular relations between said screw and detachably engaging the valve at a distance apart greater than the external diameter of the valve seat, one of said struts being formed of two members separably connected by a fusible element.

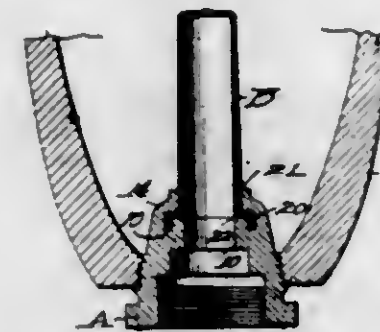
1,312,516. STRETCHER-SUPPORT. JULIUS M. BREITENBACH, New York, N. Y. Filed Aug. 23, 1918. Serial No. 251,188. 9 Claims. (Cl. 21-80.)



1. A stretcher support comprising a frame including guideways, individual stretcher suspension devices fixed

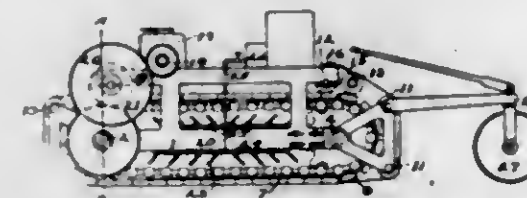
with respect to the guideways, and other individual stretcher suspension devices mounted to travel upon the guideways, the suspension devices of one guideway being independent of the suspension devices of each other guideway.

1,312,517. METHOD OF MAKING BOOSTER-CASINGS AND ADAPTERS FOR GAS-SHELLS OR THE LIKE. HJALMAR G. CARLSON, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Original application filed Nov. 17, 1917, Serial No. 202,071. Divided and this application filed Apr. 22, 1918. Serial No. 229,971. 3 Claims. (Cl. 29-148.)



1. The method of making a combined adapter and booster casing which consists in providing the adapter on its inner end with a seat surrounding the central passage thereof, and an external flange extending beyond the seat, placing against the end of the adapter a booster casing so that its end fits in said seat, and pressing the flange inwardly against the surface of the booster casing.

1,312,518. FLAT-SURFACE-PRESSURE DEVICE. CHARTOPHEA T. CLARK, East Shore Park, Minn. Filed Aug. 21, 1916. Serial No. 110,215. 7 Claims. (Cl. 94-6.)



2. In a flat surface pressure device, the combination of a series of traveling pressure bars interconnected together to form a pressure means, and an endless smooth faced belt associated therewith and travelling therewith below said pressure bars.

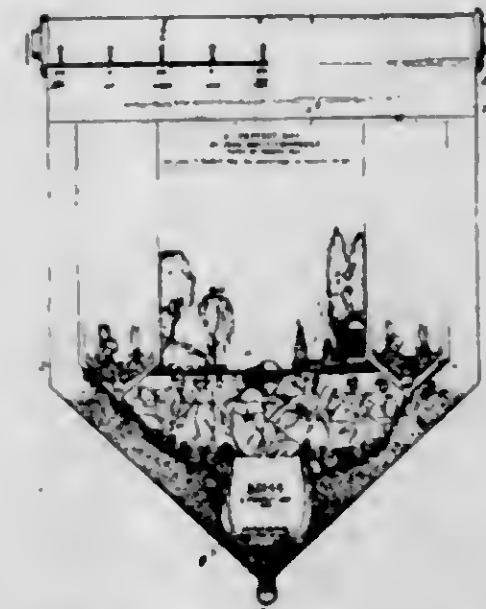
1,312,519. MACHINE FOR INSERTING FASTENINGS. JOHN W. COSGROVE, Medford, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 13, 1917. Serial No. 106,368. 13 Claims. (Cl. 1-20.)



1. In a machine for forming and inserting staples, a former having a surface to engage the strip from which the staples are formed, a cutter mounted on the former

for adjustment transversely of the strip in contact with said strip engaging surface of the former, means on the former co-acting with said cutter to take the end thrust of the cutter in cutting the strip and to position the edge of the cutter properly in substantial alignment with the strip engaging surface of the former, and means for securing the cutter to the former in any one of a plurality of positions of adjustment in operative relation with the means on the former which receives the end thrust of the cutter and positions the edge of the cutter.

1,312,520. PERFORATED ROLL FOR MUSICAL INSTRUMENTS. GEORGE HOWLETT DAVIS, West Orange, N. J. Filed Dec. 6, 1916. Serial No. 135,376. 7 Claims. (Cl. 84-102.)

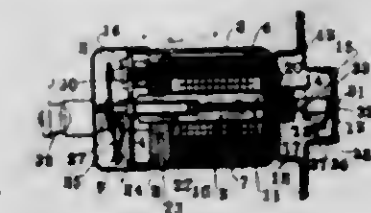


1. As a new article of manufacture, a perforated music sheet adapted to be rolled, said sheet having its outer surface at the free end thereof color treated to produce an effect somewhat simulating surface rolling or discoloration such as usually results from contact of the hand with the roll during hand rolling and tightening operations, said color treatment rendering such rolling substantially unnoticeable.

1,312,521. PROCESS OF TREATING PEAT. NELSON DE LONG, Chicago, Ill. Filed Sept. 23, 1918. Serial No. 255,298. 3 Claims. (Cl. 44-1.)

1. The process of removing water from peat at ordinary temperatures and pressures which consists in mixing with the peat a small quantity of alkali of a kind which will attack the water-holding cells of the peat without combining with the water thereof, and in exposing the mixture to the outside air.

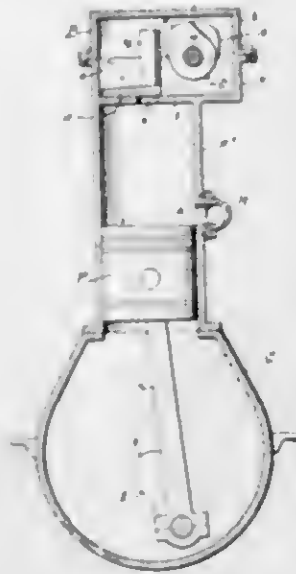
1,312,522. RELAY. BURNS DICK, St. Louis, Mo., assignor to Wagner Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed July 5, 1916. Serial No. 107,546. 9 Claims. (Cl. 175-281.)



1. A relay comprising a cup, a core of magnetic material positioned in said cup, an exciting coil within said cup and surrounding said core, a block of insulating ma-

terminal held in position in one end of said cup, connecting terminals and a stationary contact terminal all supported on said block, and a movable contact member supported from a connecting terminal and cooperating with the stationary contact terminal.

1,312,523. MOTOR. CURTIS H. DILLON, Milan, Mich., assignor to Dillon Steam Motors Corporation, a Corporation of Delaware. Filed Oct. 28, 1918. Serial No. 290,034. 5 Claims. (Cl. 136-6.)



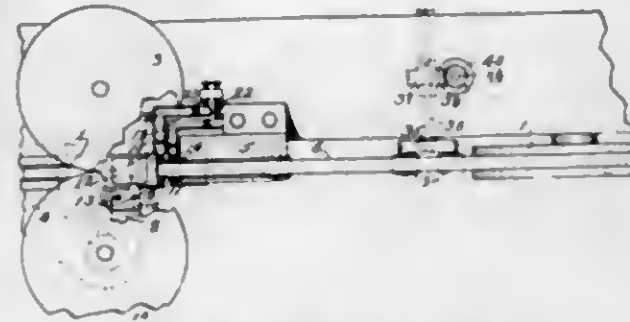
1. In a motor, the combination of a plurality of cylinders, associated pistons and crank shaft, a steam chest common to all of the cylinders, each of said cylinders being provided in its outer head with a port in communication with the steam chest, a flat valve plate coacting with each of the cylinders and normally closing the admission port thereof, a marginal portion of the plate being in contact with a side wall of the chest, and timed means for swinging the valve plates in regular succession away from the heads of the cylinders to open the admission ports thereof.

1,312,524. LUGGAGE-CARRIER FOR AUTOMOBILES. CHARLES DOUGHTY, Denver, Colo., assignor of one-half to F. J. Homan, Denver, Colo. Filed Oct. 9, 1917. Serial No. 195,505. 2 Claims. (Cl. 224-29.)



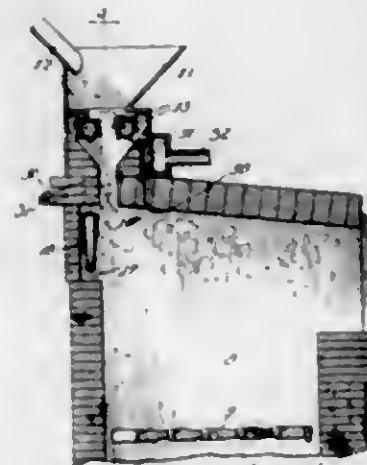
2. The combination with the running board of an automobile of a luggage carrier comprising two members hingedly connected, one member being attached to the running board and slidably mounted thereon for lateral movement to vary the capacity of the carrier, and locking means on the hinge to maintain the other member at any angle of adjustment to vary the capacity of the carrier.

1,312,525. CONTINUOUS CIGARETTE-MACHINE. NAPOLEON DU BRUL, Cincinnati, Ohio, assignor to The Miller, Du Brul and Peters Manufacturing Co., Cincinnati, Ohio, a Corporation of Ohio. Filed July 26, 1916. Serial No. 111,456. 17 Claims. (Cl. 131-43.)



1. In a cigarette machine having a feed belt, a scraper for said belt having a bracket-like mounting supported and accessible for movement at one side of the feed belt and unattached at the other side.

1,312,526. FUEL FEEDER AND SPREADER FOR FURNACES. WALTER C. ELY, Terre Haute, Ind. Filed Apr. 8, 1915. Serial No. 19,925. 7 Claims. (Cl. 122-4.)



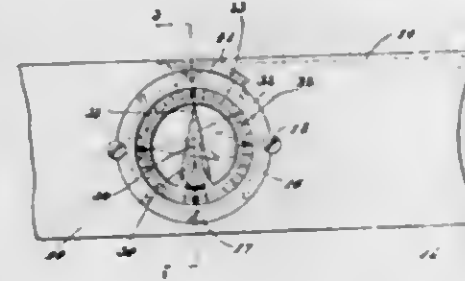
1. In combination, a heat-producing structure having a fuel opening through its upper wall, hollow feed rolls at the top end of said opening adapted to control the supply of fuel to said opening, a hollow distributing plate mounted in the structure at one side of and below said opening adapted to move across said opening and deflect fuel to different parts of the structure, a source of cooling fluid connected with the rolls and distributing plate, and means controlling the passage of fluid through said plate and rolls.

5. The combination with a firebox having a recess in its upper rear portion, a distributing plate located in said recess, means for oscillating said plate into position where its upper surface will receive fuel from a vertical opening in the upper rear portion of said firebox and distribute said fuel continuously, a hopper above said opening, a feed roll in said hopper, and means for operating said feed roll to drop the fuel through said opening onto said distributing plate.

1,312,527. UNIVERSAL LEVEL. WALTER FAAS, Fort Douglas, Utah. Filed Mar. 23, 1918. Serial No. 224,146. 1 Claim. (Cl. 33-215.)

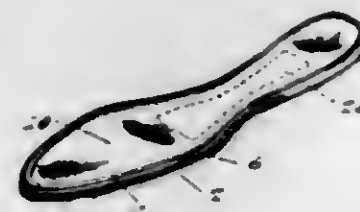
In a level, the combination with an elongated rectangular body having parallel sides and edges and having an opening formed centrally through the sides, plates fitted to said openings, means for clamping said plates in either of two positions adjacent to said openings, transparent

plates clamped by the first named plates, celluloid annular indexes below said transparent plates, a pair of annular support plates adjacent to said transparent plates, said support plates having perforated lugs extending into the openings in the plates, a ring in said opening against



which said support plates are seated, a spindle journaled in the mentioned lugs and an index finger rigid with said spindle, said finger having a sharp angular edge at one end and containing a weight whereby said finger is caused to rotate according to the inclination of said body.

1,312,528. RUBBER SOLE FOR TURN-SHOES. GEORGE FRAGAON, Wollaston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 26, 1917. Serial No. 182,942. 17 Claims. (Cl. 36-22.)



1. As an article of manufacture, a sole for turn shoes comprising a vulcanized rubber body having a reinforced stitch receiving element molded along its upper marginal surface and consisting chiefly of fibrous material.

1,312,529. HEEL-SCOURING MACHINE. ALFRED FOWLER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 2, 1918. Serial No. 209,919. 14 Claims. (Cl. 51-17.)



4. A machine of the class described, having in combination, an operating tool, a hood partly inclosing the

tool, said hood comprising a plurality of sections, and a single member arranged to act upon plural sections to move them away from the tool.

1,312,530. CIGAR-HOLDER AND ASH-RECEPTACLE. FRANK A. FULLER, Newark, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 28, 1916. Serial No. 117,157. 2 Claims. (Cl. 131-51.)



1. As an article of manufacture, a combined cigar holder and ash receptacle, comprising an upper apertured shell forming the cigar holder, and a lower shell forming the ash receptacle, said upper shell being provided with a circumferential centering flange, portions of said flange being turned over on the inside of the holder to form guides, the lower shell being provided with a plurality of ears extending outwardly from the circumferential edge of said lower shell, designed to be received by said guides and to have frictional holding engagement therewith, when the two sections are rotated in opposite directions.

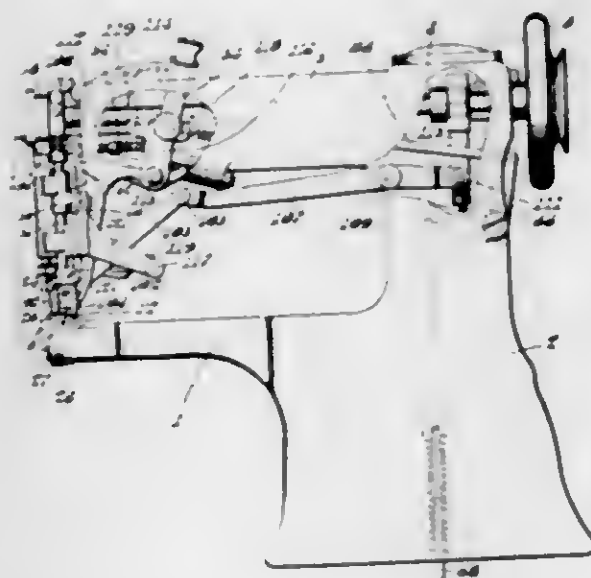
2. As an article of manufacture, a combined cigar holder and ash receptacle, comprising an upper shell forming the cigar holder, and a lower shell forming the ash receptacle, said upper shell being provided with a raised annular and apertured portion, the raised portion being provided with depressed portions for the reception of cigars, said upper shell being further provided with a circumferential centering flange, said flange being provided with a plurality of integral projections extending inwardly from the circumferential edge of the holder, each projection being provided with holding means thereon, the lower shell being provided with a corresponding plurality of ears extending outwardly from the circumferential edge of the said lower shell, each ear being provided with receiving means, the holding means in said projections adapted to snap into engagement with the receiving means in said ears when the two sections are rotated in opposite directions.

1,312,531. FUNNEL. THEODORE W. GARNISCH, Carter, Mont. Filed Nov. 22, 1915. Serial No. 62,809. 1 Claim. (Cl. 226-33.)



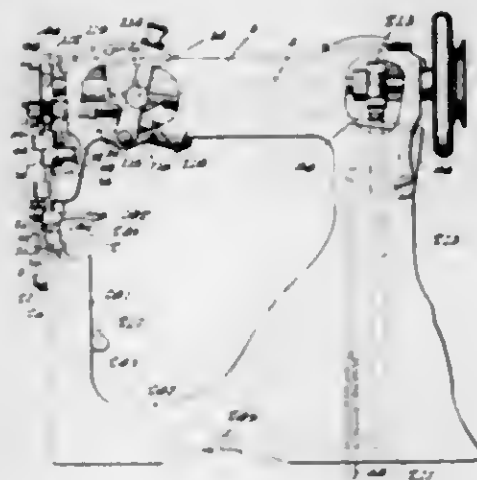
A funnel of the class described comprising a body portion of the usual configuration having an outlet spout extending therefrom, a bracket extending from the spout intermediate its length, a valve seat formed at the junction of the body portion and spout, a valve adapted to be normally seated on said seat, a float slidably mounted in the lower end of the spout, a plurality of links connecting the float and valve, the central link being pivotally connected to the said bracket, so that when the float is moved upward, the valve will be seated, and said spout having a plurality of elongated slots arranged around the lower end thereof, of sufficient length to leave openings between the float and upper ends of the slots after the valve is closed to allow the liquid in the spout at this time to pass therethrough.

1,312,532. FOLDING-MACHINE. PERLEY R. GLASS, Brookline, Mass., assignor to P. R. Glass Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1918. Serial No. 260,732. 13 Claims. (Cl. 12-54.)



10. A folding machine, having in combination, a frame comprising a work-supporting portion and an overhanging arm, and a feed member, a stationary folder and a fold-presser all mounted on said arm.

1,312,533. FOLDING-MACHINE. PERLEY R. GLASS, Brookline, Mass., assignor to P. R. Glass Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1918. Serial No. 260,733. 6 Claims. (Cl. 12-55.)

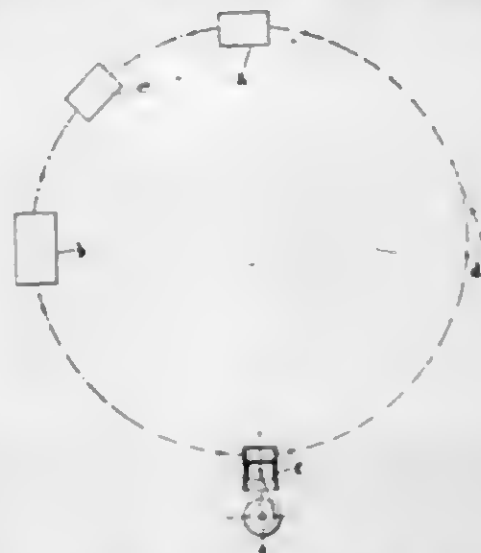


1. A folding machine, having in combination, a post of small cross-section provided with a work-supporting surface on the top thereof, there being a free and unobstructed space around said post, means for feeding a piece of work over said surface, means for forming a fold in the margin of the work, and means for pressing the fold.

1,312,534. SYNTHETIC PRODUCTION OF AMMONIA. HAROLD CECIL GREENWOOD, Putney, London, England. Filed Feb. 13, 1918. Serial No. 217,443. 3 Claims. (Cl. 23-21.)

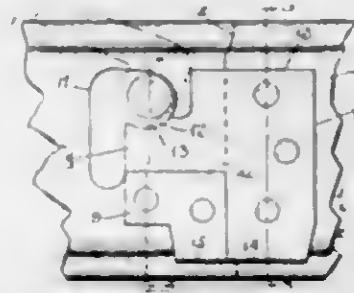
1. A process for the synthetic production of ammonia according to which a mixture of hydrogen and nitrogen

is passed over a heated catalyst at a velocity equivalent to the passage of a volume of the order of a million liters



(measured at ordinary temperature and pressure) per hour per liter of catalyst space.

1,312,535. TRANSVERSELY-SPLIT DEMOUNTABLE RIM. CHARLES W. GAZALE, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 17, 1916. Serial No. 104,143. 10 Claims. (Cl. 152-21.)



1. The combination with a demountable rim of the transversely split type; of means for securing the ends thereof together, said means including a rigid projection on one such rim-end, the other rim-end being provided with an abutment adapted to engage one side of such projection, so as to prevent lateral displacement thereof in one direction, and a movable member adapted to have an interlocking engagement with the other side of such projection so as to prevent longitudinal displacement as well as lateral displacement thereof in the opposite direction.

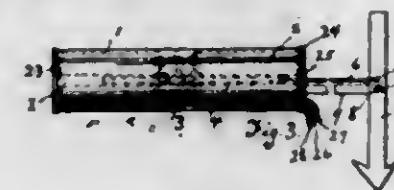
1,312,536. WICK-HOLDER. GUSTAVE ALPHONSE HALIVÉ, Tarbes, France. Filed Apr. 23, 1917. Serial No. 164,581. 1 Claim. (Cl. 67-7.)



A wick container for pocket lighters, comprising two recessed lids and a chimney tube attached thereto forming a wick casing provided with a central hole, a stiffer cap at the end of the chimney, a spindle in said central hole

upon which the wick is wound, two hooks on said spindle for securing the end of the wick thereto, a thumb screw screwed into one end of said spindle and a movable ring at the opposite end of the same for operating the spindle to advance the wick from the casing and back, substantially as described.

1,312,537. DIRECTION-INDICATOR FOR VEHICLES. CHARLES A. HARPMAN, Youngstown, Ohio. Filed Apr. 15, 1918. Serial No. 228,556. 2 Claims. (Cl. 177-329.)



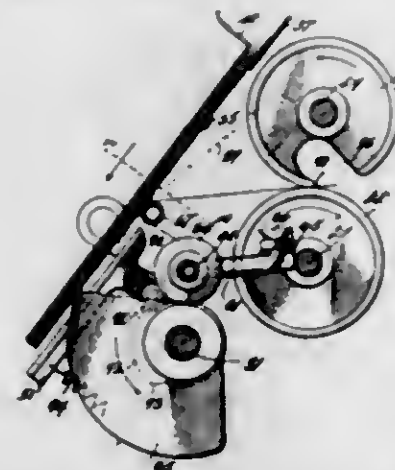
1. A signalling device for vehicles comprising a support arm secured upon the vehicle; a tubular solenoid container secured to said support arm, solenoid within each end of said container, a common core reciprocating in said solenoids, provided with a hole at one end, an operating rod attached at said hole, a signalling arrow pivotally mounted upon the support arm above mentioned, said signalling arrow provided with two small openings spaced at right angles from the pivot point, the above mentioned operating arm adapted to be connected at either of said openings, means for energizing said solenoids, substantially as described for the purpose set forth.

1,312,538. SHARPENING DEVICE. VICTOR BIRCH HARRISON, Toronto, Ontario, Canada. Filed Nov. 29, 1918. Serial No. 264,727. 6 Claims. (Cl. 51-16.)



1. In a sharpening device, a base plate, handles projecting from the ends of said base plate, a pivoted plate adapted to be locked over said base plate and forming therewith a blade clamp, and rollers longitudinally arranged in said plates and projecting from the outer faces thereof.

1,312,539. SHEET-FEEDER. CHARLES W. HARROLD, Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio, a Corporation of Ohio. Filed Feb. 21, 1916. Serial No. 79,631. 42 Claims. (Cl. 271-29.)



2. In a sheet-feeder, the combination with an inclined support for a pile of sheets on edge, of means for de-

taching one end of the outer sheet from the pile, means for engaging the detached end and drawing the sheet from the pile, and means for relieving the inherent weight of the pile upon the detached sheet during its withdrawal from the pile.

1,312,540. SHEET-FEEDER. CHARLES W. HARROLD, Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio, a Corporation of Ohio. Original application filed Feb. 21, 1916, Serial No. 79,631. Divided and this application filed Feb. 14, 1917. Serial No. 148,400. 12 Claims. (Cl. 271-29.)



1. In a sheet-feeder, the combination with a support for a pile of sheets on edge including a transverse guard plate to support the upper margin of the pile, of a series of reciprocating separator blades engaging the upper portion of the outermost sheet of the pile below said guard plate, means for detaching the front edge of the outermost sheet from the pile and from said guard plate, means for lifting said blades away from the pile when said detaching means engages the outermost sheet, and means for lowering said blades beyond said plate to loosen said outermost sheet from the pile and to directly support the balance of the pile after the detaching means has withdrawn the upper edge of the outermost sheet from said guard plate.

1,312,541. WASHLINE-SUPPORT. ERNEST WEITMAN, West Hoboken, N. J. Filed Sept. 14, 1917. Serial No. 191,332. 1 Claim. (Cl. 180-33.)

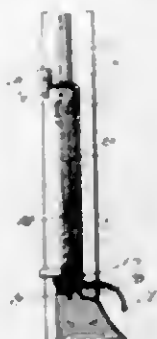


In a wash line support, the combination of a supporting pole with a transverse rail, a pair of bands secured upon said rail in spaced relation near the center thereof, an integral arm on each band diverging outwardly from said pole, each of said arms provided with a plurality of perforations for the passage of means securing said arms to said pole, and hooks on said rail adapted for the attachment of rope ends.

1,312,542. SCREEN FOR INCLOSED-AUTOMOBILE BODIES. WILLIAM B. HERBERT, Columbus, Ind. Filed Aug. 28, 1918. Serial No. 251,549. 6 Claims. (Cl. 21-148.)

1. The combination with an automobile wind shield frame, and upper and lower swinging wind shield sections mounted in said frame; of a screen in front of the lower section, and a flange on the upper edge of said

screen extending rearwardly between the two sections and turned upwardly at its rear edge behind the lower edge



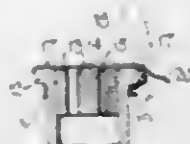
of said upper section to prevent water from entering between said sections.

1,312,543. LAST. JOHN J. HEYS, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 18, 1918. Serial No. 223,114. 2 Claims. (Cl. 12-135.)



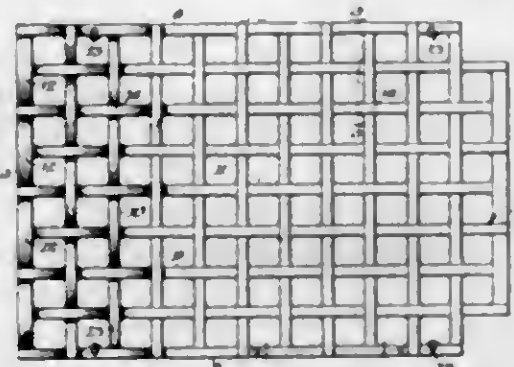
1. A separable last divided on a circular arc swung about a center lying below the heel bottom and having a shoulder to hold the heel part against backward movement from extended position, the forepart having a recess with a pin therein, a hook in the heel part extending beneath said shoulder and into the recess in the forepart for engaging said pin, and a locking pin in one last part engaging the other part to lock said parts against collapsing movement.

1,312,544. BOTTLE-CLOSURE. ELLA JOHNSON, Nocatee, Fla. Filed Jan. 2, 1917. Serial No. 140,268. 2 Claims. (Cl. 215-2.)



1. The combination with a bottle having a cylindrical relatively elongated, annular neck, with a flange at the outlet end of the neck, of an annular band loosely surrounding the neck below said flange and slidable longitudinally thereon on the neck, a metallic cap hinged directly upon the band and resiliently urged to a closed position, the diameter of the cap and the width of the band being less than the length of the smooth portion of the neck, and a thumb piece operatively connected to the cap and projecting beyond the hinged connection thereof whereby the cap may be shifted to an open position against the action of the resilient means.

1,312,545. SCREEN. FRANK E. JOHNSON, Salt Lake City, Utah, assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed May 27, 1918. Serial No. 236,722. 7 Claims. (Cl. 83-86.)



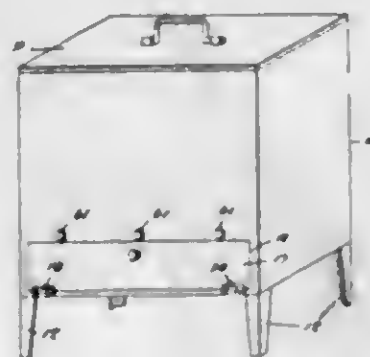
1. An integrally formed screen, including boundary members and intermediate members, the boundary members having undulating upper surfaces.

1,312,546. FIXTURE FOR MAGNETIC CHUCKS. SAMUEL KARARICK, New York, N. Y., assignor to The Kar Engineering Company, New York, N. Y., a Corporation of Connecticut. Filed June 30, 1917. Serial No. 177,878. 6 Claims. (Cl. 175-367.)



1. A fixture for use with magnetic chucks comprising a lower fixture block movable in all directions on the face of the chuck, and an upper work-holding block coacting with, and movable relatively to, said first block, said blocks being each composed of alternate and complementary magnetic and nonmagnetic plates whereby the complementary and contacting magnetic plates of each block are energized in all relative positions of the blocks by the energizing of the magnetic chuck.

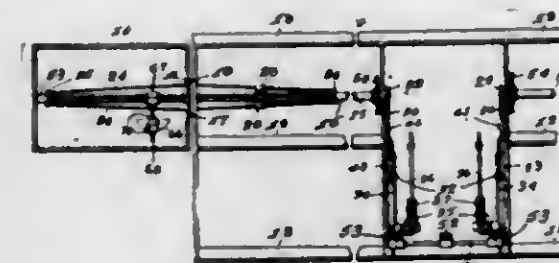
1,312,547. BUTTER-DISPENSING APPARATUS. NICKLAUS KAYGAS and WILLIAM K. ZWERNER, Brooklyn, N. Y. Filed Nov. 16, 1917. Serial No. 202,346. 5 Claims. (Cl. 81-85.)



1. In a butter dispensing apparatus, a casing with an upper and lower chamber, a stationary magazine in the upper chamber having an inlet and having an outlet lead-

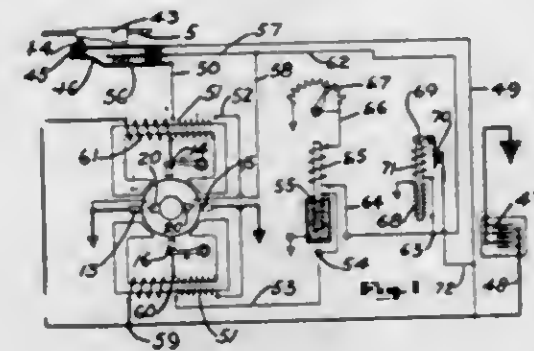
ing into the lower chamber, a plate movable in the magazine for forcing portions of the contents of the magazine through its outlet, a blade in the lower chamber of the casing, operable at the outlet of the magazine for slicing the portions of its contents delivered from the magazine, said blade having a handle extending exteriorly of the casing, and said plate being operable with each operation of the blade so that portions of the contents of the magazine of given sizes will be discharged from its outlet into the lower compartment of the casing, and a shelf carried by the blade for receiving the contents delivered from the outlet of the magazine.

1,312,548. AEROPLANE. DANIEL X. KELLY, St. Louis, Mo. Filed June 17, 1918. Serial No. 240,322. 10 Claims. (Cl. 244-29.)



4. An aeroplane comprising supporting planes and a tail attached thereto, stabilizers attached at each end of the supporting planes, and near the rear end of the tail, means for connecting the stabilizers on each side of the machine together in pairs, manual means for operating the pair of stabilizers on either side of the machine in the same direction simultaneously, means for connecting and disconnecting the manual means to the stabilizer.

1,312,549. ENGINE STARTING SYSTEM. CHARLES F. KETTERING and WILLIAM A. CHRYSLER, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed May 25, 1915. Serial No. 30,399. 16 Claims. (Cl. 290-31.)

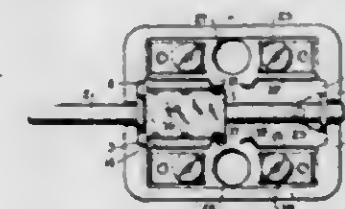


4. In a dynamo electric machine, the combination with an armature having a motor winding and a generator winding each connected with a commutator having a set of brushes coöperating therewith; of a field comprising a plurality of pole pieces and a field circuit; a means for shifting the sets of brushes into and out of contact with their respective commutators and for changing the field connections to change the status of the machine either to a multi-polar motor or to a bi-polar generator.

1,312,550. ELECTRIC SWITCH. CHARLES J. KLEIN, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 11, 1914. Serial No. 824,003. 5 Claims. (Cl. 175-284.)

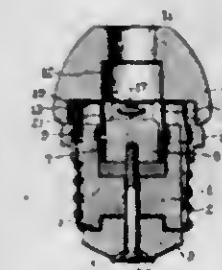
3. In an electric switch, in combination, a reciprocable operating member, a relatively movable contact member

having spaced peripheral notches, a resilient member biased against said contact member and normally disposed in one of the notches thereof for holding the same against



movement, and resilient means responsive to said operating member for imparting a snap movement to said contact member in either direction.

1,312,551. ATTACHMENT-PLUG. CHARLES J. KLEIN, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 5, 1915. Serial No. 43,749. 17 Claims. (Cl. 173-343.)

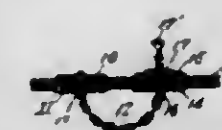


4. A separable attachment plug including a plug part provided with concentric annular contacts and a cap therefor having a plurality of sets of normally spread contact lugs to be plugged within each of said annular contacts.

1,312,552. WATER-PURIFYING MATERIAL AND PROCESS OF MAKING SAME. HEINRICH KATHOSHEIM, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 14, 1916. Serial No. 125,569. 9 Claims. (Cl. 23-13.)

8. An assemblage of zeolite particles bound into a hard and rigid but porous body by a water-resisting binding material.

1,312,553. GARMENT HANGER AND LOCK. GUSTAV A. LIMBACH, New York, N. Y. Filed Apr. 7, 1919. Serial No. 288,060. 4 Claims. (Cl. 2-53.)



1. A garment hanger comprising a flexible member adapted to be attached to a garment collar, to pass through and to be adjustably secured to the collar at a point spaced from the point of attachment, whereby the effective length of the member may be varied.

1,312,554. MANIFOLD-HEATER. THOMAS P. LOGAN, Columbus, Ohio. Filed Feb. 17, 1919. Serial No. 277,473. 3 Claims. (Cl. 219-38.)

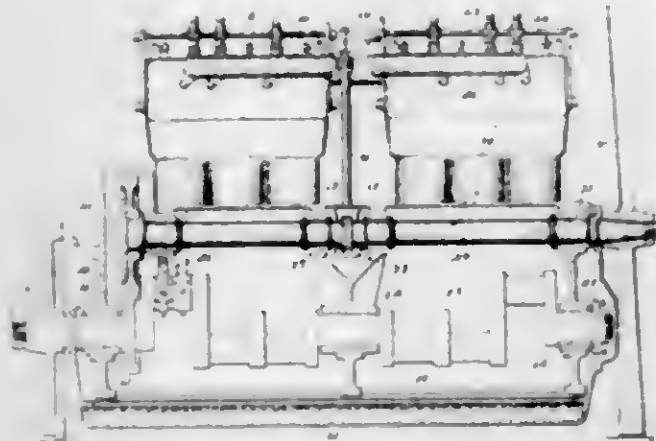
1. The combination with an intake manifold of an internal combustion engine, of a heating attachment therefor, comprising a resilient metallic body shaped to embrace substantially T-shaped configuration of the manifold, clamping means for securing the attachment in an

operative position upon said manifold, an electric conductor situated within said attachment and in intimate relation with said manifold to impart heat to the latter.



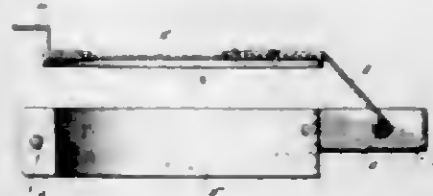
and a flange formed upon the lower end of said attachment for spacing said conductor from the wall of said manifold and to define a heating chamber therebetween.

1,312,555. HYDROCARBON-MOTOR. GEORGE L. McCANN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 12, 1915. Serial No. 61,006. 7 Claims. (Cl. 121-26.)



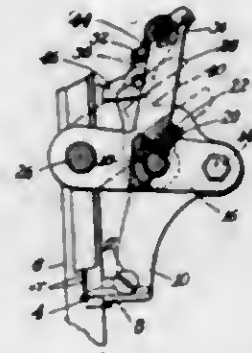
4 The combination with a V-type motor having a crank shaft, a flywheel at one end of said crank shaft, a gear sprocket at the other end of said crank shaft, a driving shaft parallel to said crank shaft and extending the length of the motor, gearing between said crank shaft and said driving shaft and a propeller at one end of said driving shaft.

1,312,556. WELL COVER. WILLIAM H. McDONALD. London, Ark. Filed Nov. 19, 1918. Serial No. 263,201. 1 Claim. (Cl. 72-100.)



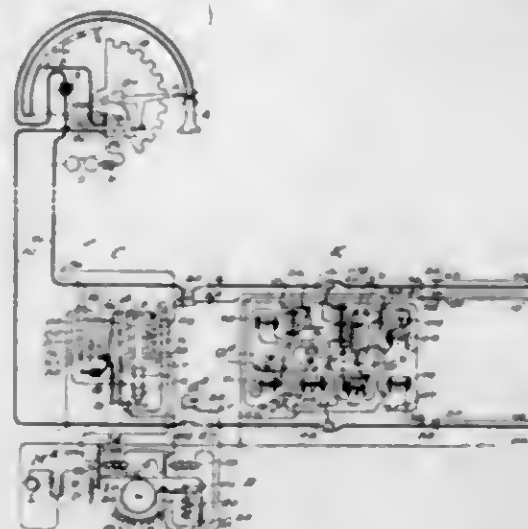
In combination with well curb, a band encircling the curb near the top thereof, means for clamping the band about the curb, a loop-shaped bracket projecting outwardly from the band, a cover closing the top of the curb, a member projecting outwardly from the cover and terminating between the longitudinal elements of the said bracket, and means pivotally connecting the outer end of said member with the longitudinal elements of the bracket, the outer closed end of the bracket constituting a stop to engage the said member and limit the opening of the cover.

1,312,557. MACHINE FOR INSERTING FASTENINGS. FRED L. MACKEZIE, Beverly, Mass., assignor, by means of assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 10, 1916. Serial No. 114,279. 9 Claims. (Cl. 1-6.)



1. In a machine for inserting tacks, the combination with a raceway for the tacks to be inserted, a driver passage at the end of said raceway, and a tack separator for separating the endmost tack from the line of tacks in the raceway and moving the tack so separated toward said passage, of an operating mechanism for said separator constructed and arranged to advance the separator across said line of tacks in making its tack separating movement, and to move the separator directly away from said line of tacks after it has completed said separating movement, said mechanism including a holder for said separator, means for moving said holder and separator, and a stop between said means and said holder operative to cause the separator to retreat from the raceway along a path that crosses the path of movement of said tacks farther down the raceway than the point at which it advanced to said line of tacks.

1,312,558. AUTOMATIC PRIVATE-BRANCH-EXCHANGE TELEPHONE SYSTEM. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1911. Serial No. 655,955. Renewed May 17, 1919. Serial No. 297,957. 38 Claims. (Cl. 170-181.)



1. In an automatic telephone system, a main exchange, a plurality of private branch exchanges, a group of trunk lines extending from said main exchange to each of said branch exchanges, automatic progressively movable switches at said branch exchanges in which said trunk lines terminate, an automatic switch at the main exchange having a plurality of contacts arranged in different levels, and a plurality of groups of said trunk lines terminating in a single level of said switch, and means for operating said progressively movable switches over said trunk lines through said automatic switch.

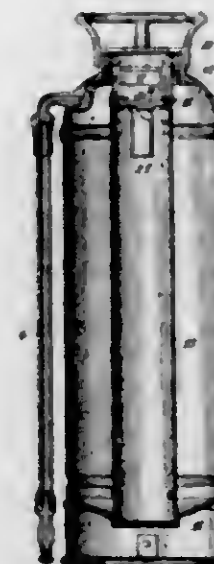
2. In an automatic telephone system, a main exchange, a plurality of private branch exchanges, a group of trunk lines extending from said main exchange to each of said branch exchanges, automatic progressively movable switches at said branch exchanges in which said trunk lines terminate, an automatic switch at the main exchange having a plurality of contacts arranged in different levels, a plurality of groups of said trunk lines terminating in a single level of said switch, means for operating said progressively movable switches over said trunk lines through said automatic switch, and means for controlling said switch over two sides of a line circuit in series.

3. In a telephone system, a main exchange, a plurality of private branch exchanges, a group of trunk lines extending from said main exchange to each of said branch exchanges, a connector switch at said branch exchanges in which said trunk lines terminate for connecting with the called subscriber's line, a selector switch at said main exchange, said selector switch having contacts arranged in a plurality of main groups, a plurality of groups of said trunk lines terminating in a single main group of said contacts of said switch, and means controlled by said switch for repeating impulses to control the operation of said connector switches.

4. In a telephone system, a main exchange, a plurality of groups of private branch exchanges, a group of trunk lines extending from said main exchange to said branch exchanges, a connector switch at said branch exchanges in which said trunk lines terminate for connecting with the called subscriber's line, a selector switch at said main exchange, said selector switch having contacts arranged in a plurality of main groups, a plurality of groups of said trunk lines terminating in a single main group of contacts of said switch, means controlled by said switch for repeating impulses to control the operation of said connector switches, and means for controlling said switches over two sides of a line circuit in series.

5. In a telephone system, an automatic switch, trunk lines divided into groups and sub-groups, said switch having one motion to select groups and a second motion to select a sub-group and then select an idle trunk line in said selected sub-group, and means in said switch for repeating impulses over said selected trunk.

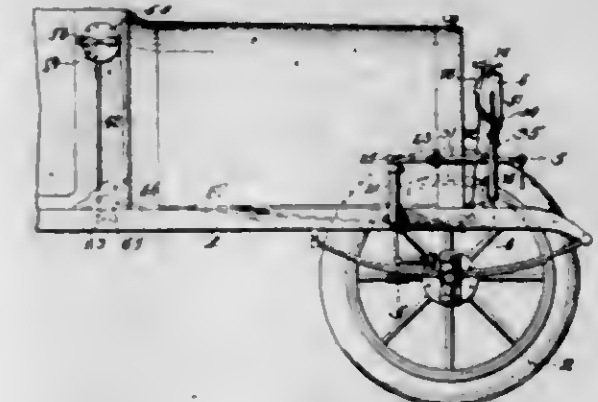
1,312,559. FIRE-EXTINGUISHING APPARATUS. CHARLES H. MITOS, Philadelphia, Pa., assignor to MacAndrews & Forbes Company, Camden, N. J., a Corporation of New Jersey. Filed Feb. 28, 1918. Serial No. 219,600. 8 Claims. (Cl. 169-7.)



1. In fire-extinguishing apparatus adapted to be rendered active by inversion of the apparatus, an outer con-

tainer having a neck, an inner receptacle having an open top and also having means extending into said neck to space said open top relative to the neck, a gravity stopple normally seated to close said open top and movable relative to said means, and a blow-imparting element freely movable within and in the direction of length of said receptacle to provide a hammer-like blow effect to said stopple exerted in the direction of stopple-opening movement when the apparatus is inverted, whereby said element may aid in the stopple unseating movement.

1,312,560. DIRIGIBLE HEADLIGHT FOR AUTOMOBILES. GEORGE F. MESSER, Aberdeen, Wash. Filed July 23, 1918. Serial No. 246,342. 5 Claims. (Cl. 240-82.)

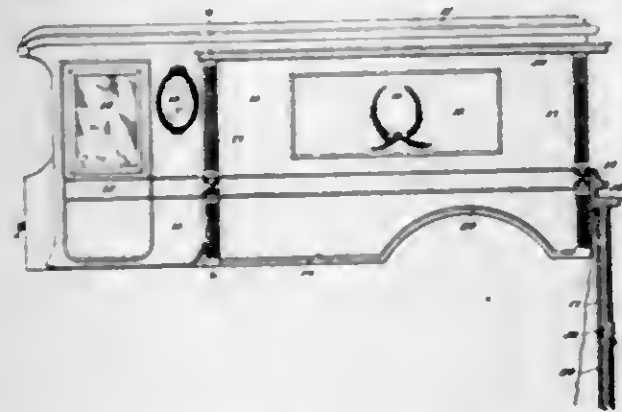


5. In a mechanism of the class described, the combination with an automobile provided with front wheels, of brackets carried by said automobile, lamp-carrying sleeves mounted upon said brackets, means connecting the sleeves, one sleeve provided with a rearward extension, a connecting rod for said wheels, a detachable bracket carried by said connecting rod, a primary link threaded at its inner end into said bracket, said link provided at its outer end with a ball, a sleeve provided with an elongated slot detachably mounted upon the ball, a primary angle link slidably mounted in said sleeve, said link provided with a pin working in the slot of said sleeve, an outer stationary sleeve secured at its lower end to said automobile, an inner sleeve mounted in said stationary sleeve, said inner sleeve provided with an elongated slot, said angle link provided with a pin working in said slot, an auxiliary angle link extending down into said inner sleeve at its upper end, means connecting said auxiliary angle link to said inner sleeve, a detachable cap device secured over the upper ends of said stationary and inner sleeves and partly covering said angle primary link, an auxiliary horizontal sleeve provided with an elongated slot mounted upon the rearward extension of said lamp-carrying sleeve, a pin on the rearward extension and extending into the elongated slot of the auxiliary horizontal sleeve, and detachable fastening means connecting the auxiliary horizontal sleeve to the auxiliary angle link, substantially as shown and described.

1,312,561. COMBINED WAGON AND HEARSE BODY FOR MOTORS WITH MOVABLE ATTACHMENTS. OSCAR J. MITCHELL, Ingersoll, Ontario, Canada. Filed Apr. 4, 1918. Serial No. 226,787. 1 Claim. (Cl. 296-16.)

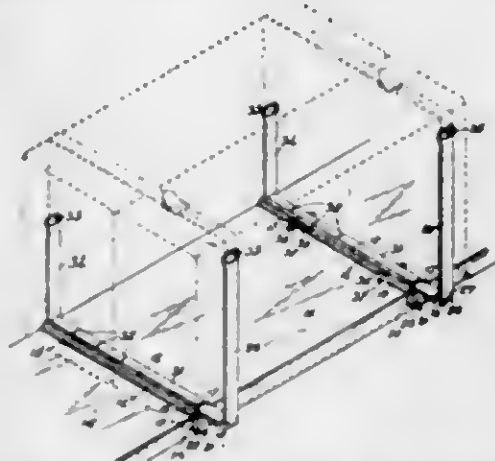
In combination with a covered body having an outwardly projecting bottom ledge and an outwardly projecting molding adjacent the top of the body, an ornamental panel closely fitting between the said ledge and molding when arranged for use and detachable connec-

tions between the wagon body and panel adapted for automatic engagement with the panel when placed in



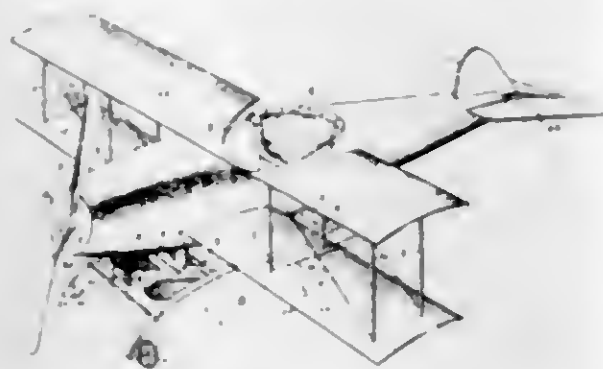
position flatly engaging the wagon body, and releasing means for said connections arranged interiorly of the wagon body.

1,312,562. LUGGAGE-CARRIER. THOMAS MOSS, Bexley, near Sydney, New South Wales, Australia. Filed July 11, 1918. Serial No. 244,432. 5 Claims. (Cl. 224—29.)



1. An improved package retainer comprising a channel member having a top or cover plate thereon formed with a series of slots and adapted to be secured to a support, a raked member slidable within said channel member, a spring pawl adapted to engage and hold said raked member in set position, an outer vertical member, hingedly connected to said raked member, and an inner vertical member having a grip hook on its lower end adapted to position in one of the slots in said top or cover plate substantially as herein described and explained.

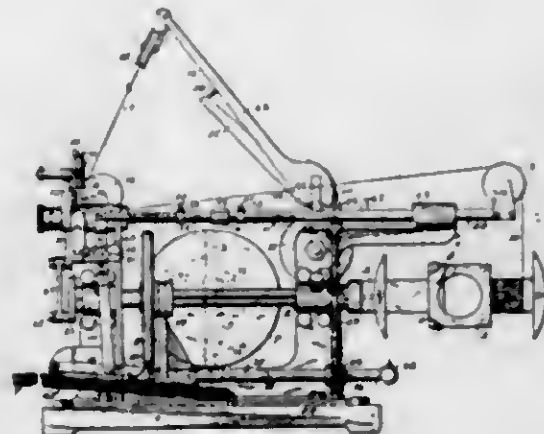
1,312,563. TOY. RUDOLPH MOSKOWITZ, Detroit, Mich. Filed Feb. 27, 1919. Serial No. 279,580. 5 Claims. (Cl. 46—22.)



1. In a toy, the combination of a base, a frame pivotally mounted on the base, a hollow fish-shaped body

ported by the frame and adapted to swing with the frame in a vertical plane passing longitudinally through the body, said body having a seat in its interior, and laterally extending wings and a flat substantially horizontal tail on said body to force slow even movement of the body and frame by reason of the resistance of the air.

1,312,564. ARMATURE-WINDING MECHANISM. HERMAN CHARLES MCCELLER, Milwaukee, Wis. Filed June 1, 1915. Serial No. 31,354. 8 Claims. (Cl. 242—8.)



1. Winding mechanism, including armature rotating means, in combination with a wire guiding device, means connecting with the armature rotating means for progressively feeding said device in either direction, a trip latch controlling the armature rotating means, and devices connected with the guide feeding device for actuating the trip latch after a predetermined movement of the guide feeding device in either direction.

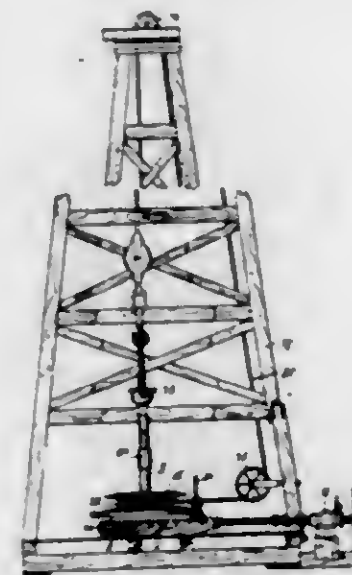
2. Winding mechanism including a wire guide, a slide supporting the guide, and manually reversible step by step mechanism for feeding the slide, together with a stop secured to said slide, and trip mechanism adapted to be actuated by said stop in either direction to automatically stop the operation of said step by step slide feeding mechanism.

3. Intermittent winding mechanism including automatic stopping mechanism and manual restarting mechanism, in combination with a spool support, a wire supporting spool thereon, a spring actuated brake resisting the rotation of said spool, a spring actuated wire tension device, and a resilient connection between the brake and the wire tension device adapted for maintaining a definite relation between the pull exerted by the wire tension device and the resistance supplied by said brake.

4. Intermittent winding mechanism including automatic stopping mechanism and manual restarting mechanism, in combination with a spool support, a wire supporting spool thereon, a spring actuated brake resisting the rotation of said spool, a spring actuated wire tension device, a resilient connection between the brake and the wire tension device adapted for maintaining a definite relation between the pull exerted by the wire tension device and the resistance supplied by said brake, automatic means for stopping the movement of the traveling wire guide, and manually actuated devices for subsequently starting said guide in a reverse direction.

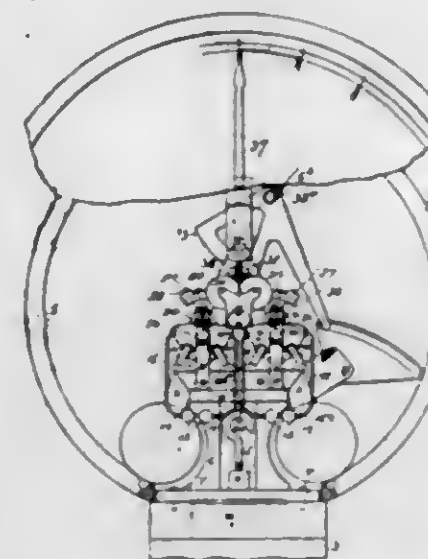
5. Winding mechanism including the combination of a rotative support for the article to be wound, a friction driving wheel, a driven friction wheel mounted to slide upon said support along the face of said driving wheel, means for automatically shifting said driven friction wheel to the center of the driving wheel to stop the rotation of said support, a traveling wire guide, and a trip mechanism operated by the wire guide and controlling the operation of the means for shifting said friction wheel.

1,312,565. COMBINED ROTARY EARTH-BORING AND DRAW MACHINE. HARRY R. NORTZ and FREDRICK J. SCHWIMMER, Toledo, Ohio. Filed Jan. 13, 1919. Serial No. 270,908. 31 Claims. (Cl. 255—19.)



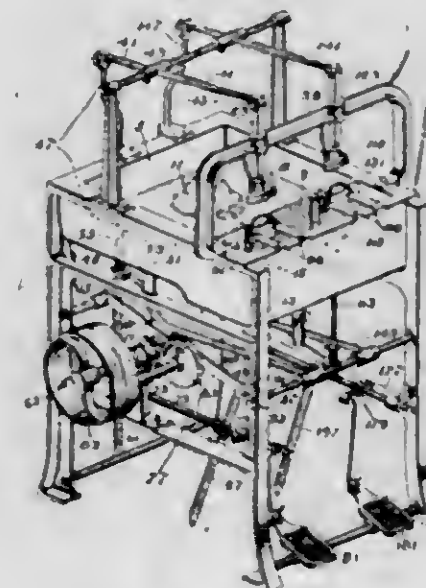
1. In a rotary boring machine, a rotary driver sleeve, a rotary-pipe drive chuck carried thereby, a draw-drum mounted around said sleeve for rotation relative thereto, and bearing means for said sleeve.

1,312,566. MEASURING INSTRUMENT. ERNEST J. OHNNELL, Brooklyn, N. Y. Filed Feb. 8, 1917. Serial No. 147,308. Renewed Dec. 27, 1918. Serial No. 268,494. 9 Claims. (Cl. 74—104.)



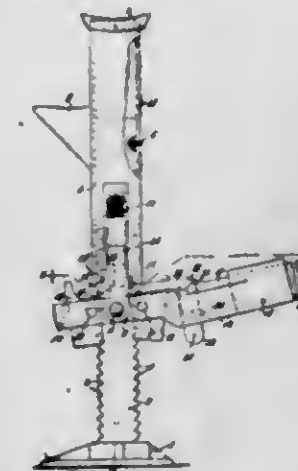
1. A measuring instrument comprising a lever having pivots, movable members below and adapted to support said pivots, means movably supporting said members below the pivots, and means to balance said members in correct positions.

1,312,567. MACHINE FOR USE IN MANUFACTURING STIFFENERS FOR BOOTS AND SHOES. JOSEPH H. OGDWAY, Brookline, Mass., assignor to Boston Blacking Company, Cambridge, Mass., a Corporation of Maine. Filed Aug. 17, 1916. Serial No. 115,534. 29 Claims. (Cl. 91—47.)



2. A machine of the class described, having in combination, a pair of carriers, means for supplying said carriers with stiffening material, and means for causing said carriers to apply material to both sides of a blank.

1,312,568. LIFTING-JACK. ORVILLE R. OGDON, Covington, Ky. Filed Apr. 10, 1919. Serial No. 289,046. 10 Claims. (Cl. 254—110.)



1. A lifting-jack comprising a standard, having opposed series of ratchet teeth, a lifting head slidably mounted

on the standard, an operating member pivotally connected to and movable with said lifting head, opposed ratchet pawls pivoted on the operating member at opposite sides of the standard, means controlling the operation of the pawls, a second means operable to disable said first means, and a handle capable of longitudinal movement to operate said second means.

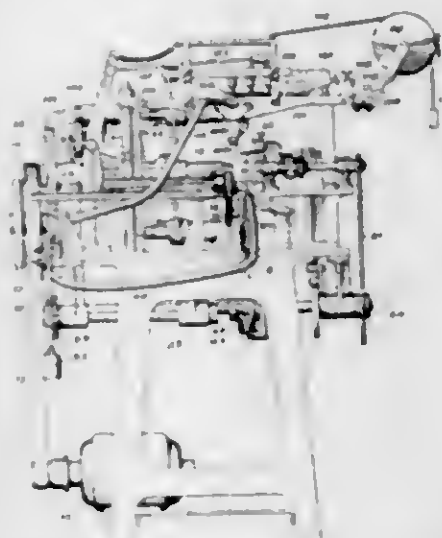
9. A lifting jack comprising a standard having opposed series of ratchet teeth, a lifting head telescopically slidable on said standard, an operating member pivotally connected to and movable with said lifting head, opposed gravity ratchet pawls pivoted on the operating member at opposite sides of the standard, each having inwardly extending fingers, a spring pressed plunger carried by the lifting head adapted to be positioned to engage said pawl fingers, a handle slidable on the operating member and a cam slide slidable with said handle to control the spring plunger.

1,312,569. SHAKING MIXER. JAMES H. PAIGE, Manchester, N. H. Filed July 5, 1918. Serial No. 243,362. 3 Claims. (Cl. 259—72.)



1. A shaking mixer comprising a receptacle, and a unitary structure embodying a receptacle-cover, a suspending device depending from said cover, and a plurality of laterally arranged multi-armed mixers carried by said suspending device and arranged in groups at different heights one above the other within the receptacle, the arms of both mixers projecting freely from the suspending device and those of one mixer being disposed vertically above the spaces between another mixer.

1,312,570. BOX-MAKING MACHINE. LYNDON C. PALMER, Buffalo, N. Y., assignor to F. N. Bart Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed May 14, 1918. Serial No. 231,416. 62 Claims. (Cl. 93—39.)



1. In an apparatus of the character described, in combination, a form, means adapted to apply a head and a

bag side to said form in position to form a bag and means adapted to insert said bag in a box and press a wall of the bag against the interior of the box.

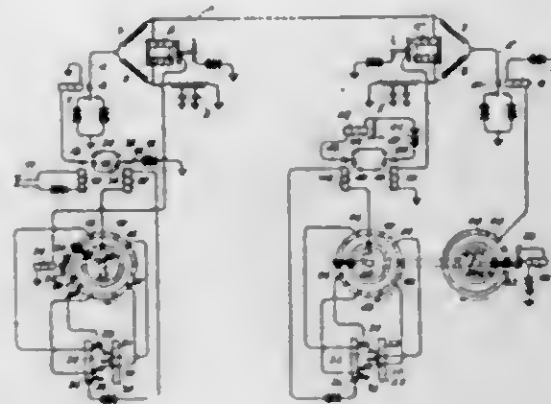
1,312,571. AEROPLANE AND THE LIKE. HUMPHREY FRANCIS PARKER, Dunedin, New Zealand. Filed Apr. 2, 1918. Serial No. 226,258. 16 Claims. (Cl. 244—12.)



1. In an aeroplane, the combination with a rigid main plane, of an auxiliary plane having a flexible frame of pure stream-line shape adapted upon increase of the angle of incidence of the planes relative to the direction of air flow, to flex, under the pressure of said air flow, from said stream-line shape to a lift shape.

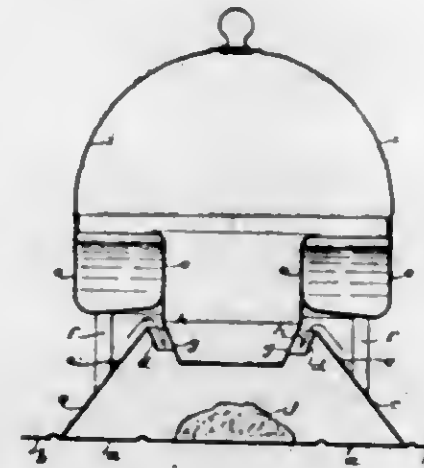
9. In an aeroplane, a main lifting plane, and a flexible auxiliary plane adapted at large angles of incidence to carry a substantial part of the weight of the machine, said auxiliary plane being rearwardly spaced with respect to said main plane, whereby the shifting of the load to said auxiliary plane with increase in incidence angle maintains the center of lift of said planes taken as a whole in a substantially constant position.

1,312,572. SECRET-SIGNALING SYSTEM. RALPH MOND D. PARKER, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 13, 1918. Serial No. 253,966. 6 Claims. (Cl. 178—22.)



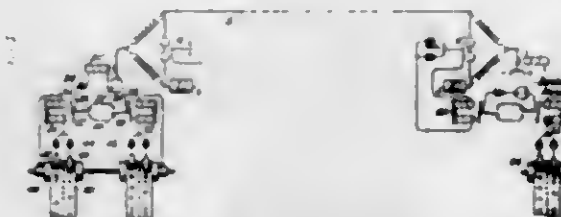
6. In a signal transmitting system, a main line, a duplex set at each end of the line, means for transmitting signal impulses in one direction over said line, a ciphering device at the sending end, a deciphering device at the receiving end of said line and means for transmitting impulses over the line in the opposite direction for coordinating the action of the ciphering and deciphering devices.

1,312,573. TRAP FOR FLIES AND THE LIKE. LEONTINE PICHOT, *sdc* DEBENNA, Angers, France. Filed Apr. 30, 1919. Serial No. 293,751. 1 Claim. (Cl. 42—22.)



A trap for flies or like insects, comprising a tray on which the bait is placed, a truncated conical casing resting by its base on the tray perforated at the upper portion and having an inverted truncated conical flange, a basin for containing soapy water or any other liquid, supported by feet on the casing, and having a central aperture extending by a truncated conical border into the casing and providing with the flange a narrow annular space for the entry of insects into the tray, and a dome fitting on the basin, freely lighted to attract flies after leaving the bait and forego same by deprivation of any outlet to fall into the liquid contained in the basin.

1,312,574. SECRET-SIGNALING SYSTEM. RALPH E. PARKER, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 13, 1918. Serial No. 266,632. 3 Claims. (Cl. 178—22.)



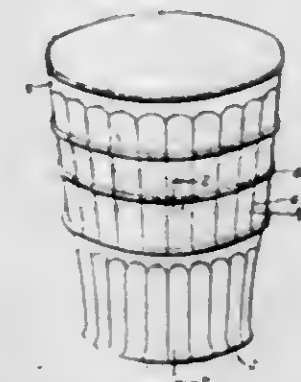
1. In a signal transmitting system, mechanism for representing message characters in dot and dash symbols in which the dot, dash and space lengths are all integral multiples of the same time interval, mechanism for producing at the same rate and in phase with the message symbols an arbitrary series of symbols similarly related in their time intervals, and means for combining the effects of symbols simultaneously produced by the two mechanisms to give a series of electrical impulses representing the enciphered message.

1,312,575. EXTENSION WASTE-BASKET. ALBERT R. PATCHARD, New York, N. Y. Filed Nov. 13, 1917. Serial No. 201,727. 6 Claims. (Cl. 220—84.)

1. A waste basket comprising a base portion and an upper portion associated therewith, one of said portions having a plurality of vertically spaced recesses and the other portion having a complementary surface for engaging

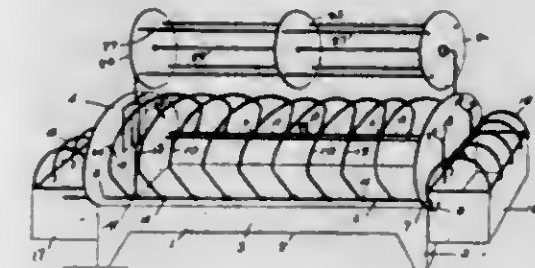
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any one of said first mentioned recesses and thereby holding said portions in adjusted position, and one of said



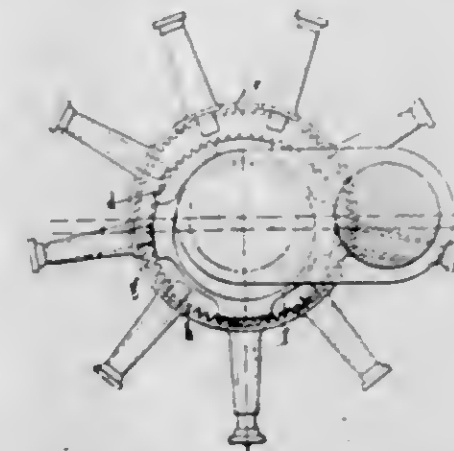
portions being expansible and contractible in the horizontal direction.

1,312,576. POULTRY-FEEDER. STANLEY OSBORNE REA, Toronto, Ontario, Canada. Filed Dec. 14, 1914. Serial No. 877,236. Renewed Jan. 6, 1919. Serial No. 269,929. 1 Claim. (Cl. 110—61.)



In a poultry feeder, a trough, end walls extending upwardly from said trough, a rod extending along one of the sides of said trough and being slidably mounted in each of said end walls and having its ends extending outwardly therebeyond, a rod extending along the other side of said trough between said end walls and adapted to be locked to said trough and movable upwardly therefrom, a plurality of bent wires rigidly secured to said sliding rod and loosely secured to the other rod and a plurality of bent wires loosely secured to said sliding rod and rigidly secured to said other rod, said wires being alternately rigidly and loosely secured to said rods.

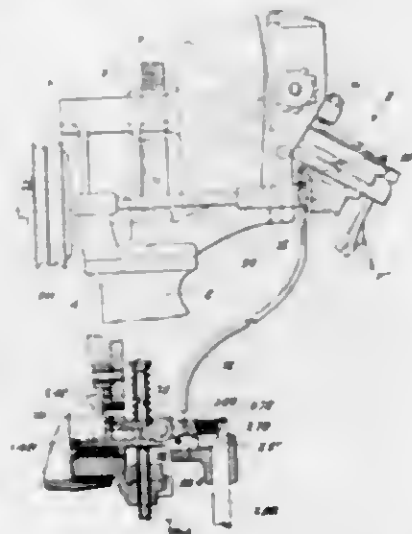
1,312,577. VALVE-GEAR OF INTERNAL-COMBUSTION ENGINES. CHARLES BENJAMIN REDRUP, Leeds, England. Filed June 2, 1919. Serial No. 301,320. 1 Claim. (Cl. 123—44.)



Valve gear of the character described including in combination a crank casing, a plurality of radially arranged

valve operating tappets slidably arranged through the periphery of the casing, a crank shaft journaled therein, an eccentric carried with the shaft, a sleeve loosely mounted upon the eccentric, a spur wheel fitted on the sleeve near the inner edge thereof, an internally toothed wheel carried concentrically of the inner surface of the casing and positioned in proximity to one side of the tappets and meshed by the spur wheel, the outer portion of the sleeve being cut-away to provide uniformly spaced and alternately arranged recesses and projections for co-acting with the inner ends of the tappets, substantially as described.

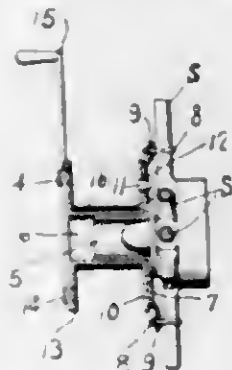
1,312,578. MACHINE FOR UTILIZING FASTENINGS. WILLIAM THOMAS BUCKINGHAM ROBERTS, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 21, 1916. Serial No. 85,695. 60 Claims. (Cl. 1-18.)



46. In a machine of the class described, the combination with fastening delivery means, and mechanism for imparting operative movement to said delivery means to cause said means to deliver a fastening, of means constructed and arranged for operation in consequence of failure of said delivery means to complete an operative movement to give a signal to the operator.

55. In a machine of the class described constructed to perform a normal cycle of operations and then stop, the combination with starting means and fastening delivery means, of mechanism constructed and arranged to render said starting means ineffective to start the machine in consequence of failure of said delivery means to perform its normal function.

1,312,579. AUTOMOBILE EXTRACTOR. DANIEL A. ROSE, Hills, Iowa. Filed Feb. 15, 1919. Serial No. 277,199. 4 Claims. (Cl. 242-95.)



4. In combination, a base plate having an outstanding tubular trunnion and a slot, a drum revolvably and removably held on said trunnion having an ear to engage said slot and means to rotate said drum.

1,312,580. DRIVING-BELT. JOSEPH H. SANTS, Beloit, Wis. Filed June 7, 1918. Serial No. 238,668. 2 Claims. (Cl. 74-64.)



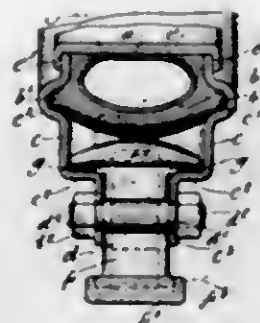
1. A driving belt comprising a chain having central inwardly extending longitudinal flanges on its links, and facings of friction creating material secured against the opposite sides of said flanges.

1,312,581. MEANS FOR RETAINING GASKETS IN JAR CAPS. EDWARD D. SCHMITT, Baltimore, Md., assignor, by mesne assignments, to The American Pure Food Process Company, Baltimore, Md., a Corporation of Delaware. Filed May 18, 1914. Serial No. 839,365. 3 Claims. (Cl. 215-0.)



1. A jar cap comprising in part a closing member having a gasket holding channel and adapted for application to a jar having an annular bead or lip, said member being provided with a horizontal upper portion and an outer wall provided at intervals with spurs, a compressible gasket fitting said channel and held against the horizontal portion thereof by the spurs which are primarily bent into the gasket to a comparatively limited extent, but adapted to be forced farther into said gasket by contact between said spurs and the upper portion of the lip of the jar, upon the application of force tending to seat the closing member, and means for locking the closing member on the jar.

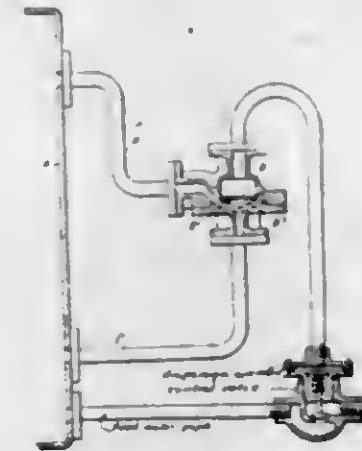
1,312,582. TIRE. FRANK SCHNEIBL, New York, N. Y. Filed Sept. 27, 1918. Serial No. 255,892. 9 Claims. (Cl. 152-10.)



1. An armor for a pneumatic tire comprising annular side plates, radially movable tread blocks between the side plates, means to secure the side plates together and a supporting rim independent of the wheel, capable of being applied thereto and removed therefrom readily and in engagement with the side plates.

3. An armor for a pneumatic tire comprising annular side plates, radially movable tread blocks between the side plates, means to secure the side plates together near their outer edges and a flanged supporting rim to engage the inner edges of the side plates.

1,312,583. FEED-WATER REGULATOR FOR STEAM-BOILERS. HENRY WILMOT SPENCER, London, England. Filed Mar. 15, 1918. Serial No. 222,092. 2 Claims. (Cl. 122-451.2.)



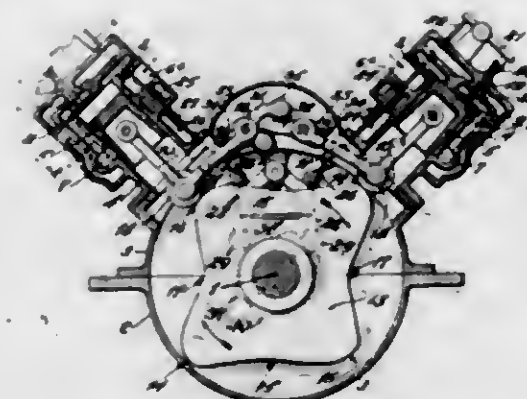
1. A feed water regulator comprising a fitting, steam and water connections between said fitting and a steam boiler, and a chamber for vaporizable liquids within said fitting, said chamber having its heat conducting surface provided with downwardly directed projecting parts arranged parallel to the plane containing the steam connection with the boiler.

1,312,584. COUPLING DEVICE. WALTER SCOTT, Sheridan, Wyo. Filed Dec. 14, 1918. Serial No. 266,727. 12 Claims. (Cl. 285-180.)



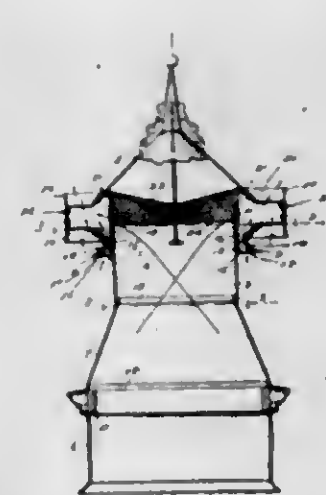
7. A detachable coupling embodying a pair of mating members, one of which is provided with a plurality of laterally swinging fingers and the other of which is provided with retaining means for the ends of the fingers, said retaining means including a member overlying the ends of said fingers when they are in locking relation.

1,312,585. INTERNAL-COMBUSTION ENGINE. ARTHUR W. SHEPHERD, St. Louis, Mo., assignor of one-half to Albert H. Hamel, St. Louis, Mo. Filed Aug. 12, 1918. Serial No. 249,400. 10 Claims. (Cl. 123-197.)



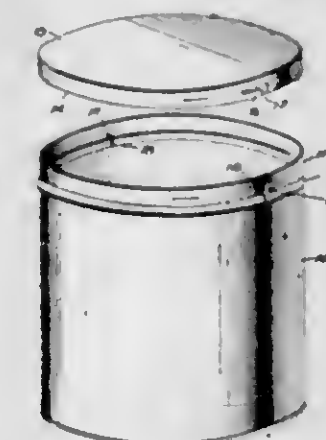
1. An internal combustion engine comprising a main shaft, a cam thereon, a plurality of cylinders disposed radially about said shaft, pistons in said cylinders and piston rods pivotally connected to said pistons at one end and having operative contact engagement with said cam at their other end, the curvature of said cam comprising a major peak, a minor depression, a minor peak and a major depression.

1,312,586. CUPOLA-VENTILATOR FOR BARNS AND THE LIKE. HERMAN SILVER, Minneapolis, Minn. Filed Nov. 15, 1918. Serial No. 262,650. 1 Claim. (Cl. 98-4.)



A ventilating cupola having a flue, a cap and inner and outer bands, said inner band being V-shaped in cross section with its vertex spaced apart from the flue to afford an air passageway therebetween and with its flanges diverging from said flue, radial brackets secured to the flue and having in their outer ends V-shaped notches to receive the inner band which is secured thereto, and brackets supporting the outer band from the cap and inner band.

1,312,587. CAN-CLOSURE. CHARLES J. SINN and HENRY G. WELLS, Crisfield, Md. Filed Mar. 11, 1918. Serial No. 221,852. 1 Claim. (Cl. 220-40.)

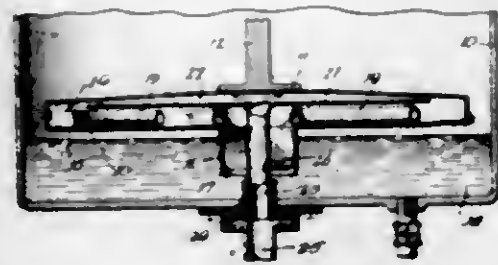


The combination with a can body having a cover-receiving flange, of a loop produced by spaced elts, said loop being forced outwardly beyond the circumferential limits of the flange, a cover having a flange proportioned to slip over the flange of the can body, and to be manually rotated relatively thereto, and a tongue formed in said cover flange by an L-shaped slot, said tongue being positioned and proportioned to slip through the loop when the cover is rotated.

1,312,588. SUCTION AND PRESSURE CREATING APPARATUS. BENJAMIN SKIDMORE, Jr., Chicago, Ill. Filed Apr. 6, 1918. Serial No. 227,104. 9 Claims. (Cl. 261-87.)

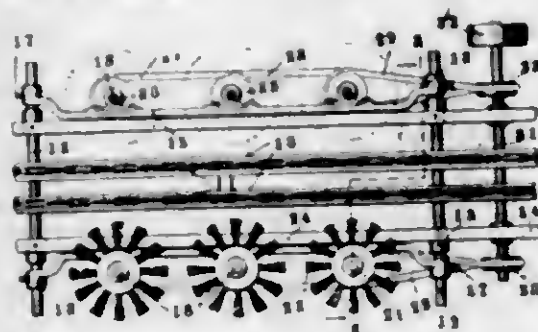
1. An apparatus of the character described embodying a rotatable support having a fluid passage therethrough, a nozzle at the outlet of said passage, there being a liquid passage through the support the inlet of which latter passage is adjacent the axis of rotation of the support, said liquid passage embodying a laterally extended tubular portion terminating adjacent and discharging into the

nozzle to create a suction in the fluid passage when the support is rotated, and means for rotating the support



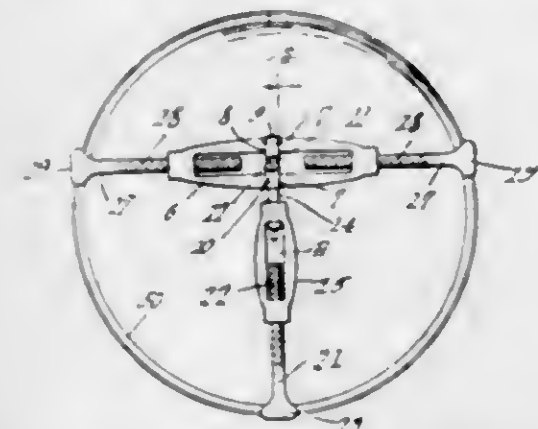
whereby centrifugal force will cause the liquid to be discharged through the said tubular portion of the liquid passage.

1,312,589. CAN-BRUSHING MACHINE. CHENEY T. SMALL, St. Louis, Mo. Filed May 8, 1918. Serial No. 233,237. 6 Claims. (Cl. 51-15.)



2. In a can brushing machine, the combination with a travelling conveyor for the cans, of a pair of vertical spindles, one situated at each side of the conveyor, each of said spindles having mounted thereon brushes comprising a plurality of removable brush members, whereby the machine may be adapted to cans of varying heights, and means for rotating said brushes in the same direction, whereby the cans are rotated on the conveyor as they pass between said brushes.

1,312,590. RIM-TOOL. ALFRED B. SMITH, Topeka, Kans. Filed Feb. 13, 1919. Serial No. 276,755. 1 Claim. (Cl. 157-1.)

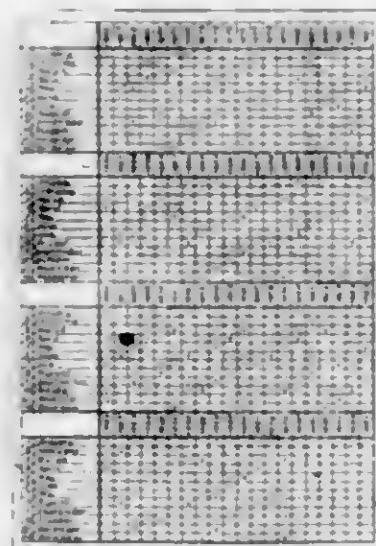


A rim tool comprising angularly disposed first and second loops; means for mounting the inner end of the second loop on the intermediate portion of the first loop for swinging movement about the first loop and for rotation on an axis; screws oppositely threaded into the outer ends of the first loop, and a screw threaded into the outer end of the second loop, the screws being provided with rim-engaging means.

1,312,591. CALENDAR. ARTHUR SOKOL, New York, N. Y. Filed Dec. 14, 1915. Serial No. 66,853. 1 Claim. (Cl. 283-2.)

A device as described, consisting of a chart having a series of longitudinal lines inscribed thereon and provid-

ing a narrow vertical column at the extreme left of the chart, a broad vertical column to the right of the narrow column, and twenty vertical narrow columns to the right of the broad column, a series of transverse lines intersecting said twenty vertical columns so as to set apart at spaced intervals longitudinally of the chart, sets of twelve rows of squares, dividing the broad vertical column into sets of twelve rectangles in which the consecutive months of the year are inscribed, and also dividing the first-named



narrow vertical column into squares in which are inscribed in consecutive order numbers one to twelve, the twelve rows of squares having inscribed herein in varying order representations of digits, a consecutive series of years 1866-1930 being inscribed immediately above and in line with the twenty narrow vertical columns of each set of vertical columns, each alternate set of rows of squares having the representations of digits within its small squares arranged in exactly the same order and being exactly of the same value.

1,312,592. MANUFACTURE OF POTASH AND CEMENT. ARTHUR C. SPENCER, Washington, D. C., assignor of one-third to Archibald Cox, New York, N. Y. Filed Aug. 24, 1917. Serial No. 188,030. 9 Claims. (Cl. 23-22.)

1. Process of obtaining potassium compounds which comprises heating a calcareous potassiumiferous silicate mixture under conditions favorable for the production of potassic fume and clinker nodules, disintegrating the clinker and reheating to induce further evolution of potassic fume.

1,312,593. CAR-COUPLING. EDGAR J. STOVER, York, Pa. Filed Oct. 7, 1916. Serial No. 124,311. 2 Claims. (Cl. 213-9.)



1. In a car coupler, the combination with a head having a knuckle pivoted thereto and provided with fingers, and a vertically movable locking pin for engaging the fingers when the knuckle is in closed position provided with a head; of a lever pivoted on the coupler head and having one end bifurcated and engaging beneath the head

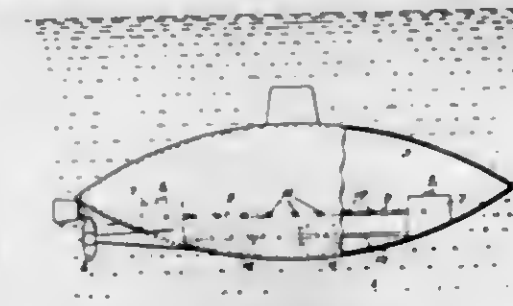
on the locking pin, and means for effecting raising of the bifurcated end of the lever when the locking pin is moved to unlocking position so as to hold the locking pin in such position.

1,312,594. RECLAIMING AND CONVEYING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed Oct. 16, 1918. Serial No. 258,355. 7 Claims. (Cl. 193-3.)



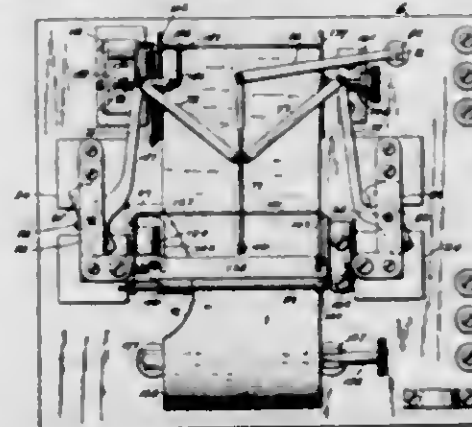
1. Reclaiming apparatus, comprising a reclaiming conveyor supported at one end to swing about a vertical axis and provided at its outer end with a gathering section which is pivotally connected with the main portion of said reclaiming conveyor, and a tractor for supporting and moving said gathering section about its pivotal connection with the reclaiming conveyor.

1,312,595. ART OF AND APPARATUS FOR OBSCURING SUBMERGED SUBMARINE BOATS AND THE LIKE. HENRY H. SUPLEE, New York, N. Y. Filed Oct. 3, 1912. Serial No. 723,669. Renewed Dec. 30, 1916. Serial No. 139,851. 5 Claims. (Cl. 114-15.)



1. The art of rendering submerged vessels or the like invisible from a position above the surface of the water, which consists in introducing into the water adjacent to such vessel or the like, an obscuring agent in such quantity only as will suffice effectually to reduce the transparency of the water without causing the obscuring agent itself to be readily distinguishable from such position.

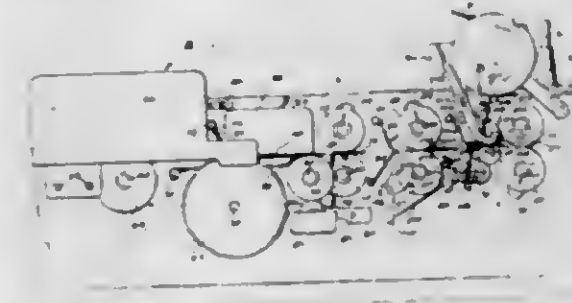
1,312,596. TELAUTOGRAPHIC APPARATUS. GEORGE S. TIFFANY, Summit, N. J., assignor to Gray National Teltograph Company, New York, N. Y., a Corporation of Virginia. Filed Mar. 29, 1912. Serial No. 687,033. Renewed Dec. 11, 1918. Serial No. 260,365. 13 Claims. (Cl. 178-20.)



1. In a teltographic system of the variable current strength type, the combination of right and left tracer

lines connecting the transmitter and receiver, a source of current supply therefor, a transmitting tracer and connections controlling the strength of the currents traversing the tracer lines in accordance with the movements of the tracer over its writing field, and direct current electro-magnetic devices connected with the tracer lines at the receiver and provided with armatures of iron or similar magnetizable material arranged to oscillate varying distances as the strength of the currents traversing the tracer lines varies, connections between said armatures and the receiving pen for moving the latter over its writing field, means controlled by the transmitting tracer for impressing a pulsating current on one of the tracer lines, a branch circuit at the receiver connected to said tracer line, and means in said branch circuit and arranged to be actuated by the pulsating current for controlling the movements of the receiving pen to and from its writing surface.

1,312,597. ENVELOPE SEALING AND STAMPING MACHINE. JOSEPH T. TILLMAN, Minneapolis, Minn. Filed Oct. 2, 1916. Serial No. 123,326. 11 Claims. (Cl. 216-3.)



8. In a machine of the class described, envelop carrying means, a guide for stamps arranged in a continuous strip, means to feed a stamp to each advancing envelop, said carrying means being also adapted to affix and sever said stamps, and a tearing blade over which said strip is drawn when a stamp is severed.

1,312,598. MACHINE FOR INSERTING FASTENINGS. FRANK H. WARREN, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 15, 1916. Serial No. 115,019. 16 Claims. (Cl. 1-6.)



1. In a machine for inserting tacks, the combination with a driver passage, a raceway constructed to lead a line of tacks to said passage, and a tack separator for separating individual tacks from said line and advancing each tack so separated toward said driver passage, of operating mechanism for said separator constructed and arranged to swing the separator toward said raceway about one axis and away from said raceway about another axis.

1,312,599. ARTIFICIAL LIMB. HOWARD R. WERN, Cincinnati, Ohio. Filed Aug. 10, 1918. Serial No. 250,098. 2 Claims. (Cl. 3-2.)

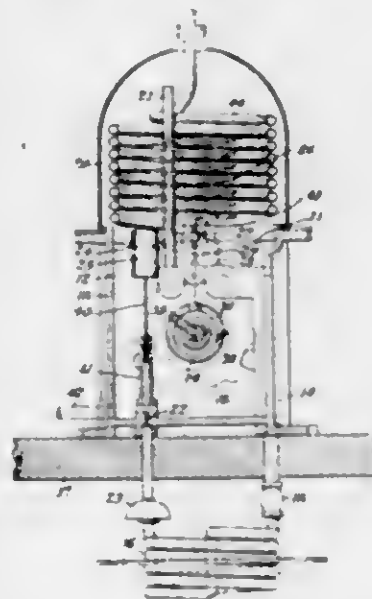
1. In an artificial leg the combination of hollow upper and lower members, a tubular support member within the

lower member and extending from the ankle portion thereof through the member and into the lower end of the upper member, a pivot connecting the upper member and the tubular support, a cylinder secured to the tubular



support within the lower member, a piston within the cylinder, a rod within the members and secured to the piston and the upper member and means for retarding the movement of the piston in the cylinder.

1,312,600. REFRIGERATING MACHINE. EDWARD T. WILLIAMS, New York, N. Y. Filed Sept. 15, 1915. Serial No. 50,796. Renewed Jan. 17, 1919. Serial No. 271,756. 13 Claims. (Cl. 62-116.)

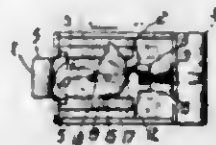


1. In a refrigerating machine, the combination with a chamber adapted to contain a liquefied refrigerant, and a compressor discharging refrigerant into said chamber, of means adapted to float in liquefied refrigerant for taking lubricant floating on the said liquefied refrigerant and delivering the same to the compressor.

1,312,601. LOCK. JOHN WOLF, Topeka, Kans. Filed May 12, 1919. Serial No. 296,374. 2 Claims. (Cl. 70-27.)

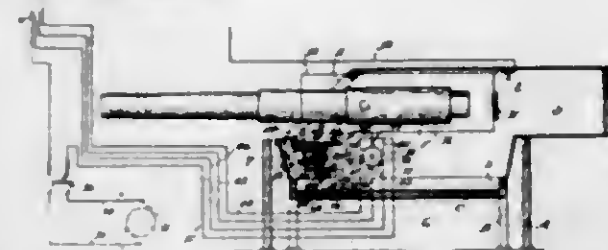
1. In a lock of the character described, a hinged raling, a latchbolt traversing a wall of the casing, a keeper for the bolt, a yoke secured to the bolt and operating in the casing, a post in the casing within the

yoke, a dog mounted rotatably on said post and adapted to be rotated in a given direction by the bit of a key inserted through a key-hole in the casing wall and passed over the arbor aforesaid, a guard on the yoke permitting rotation of the key in proper direction to rotate the dog, a guard on the dog preventing rotation of the key in the opposite direction, the parts being disposed relatively to the key-hole to allow insertion of the key-bit between



the guards aforesaid, a tooth on the dog adapted to be engaged by the key-bit, a lug on the yoke, a finger on the dog for engaging the lug with a rotation of the dog by the key, and a spring bearing against the yoke at a point opposite from the bolt, for forcing the yoke and bolt outwardly upon release of the dog, whereby the bolt may enter the keeper with a closing movement of the casing.

1,312,602. GUNFIRE-CONTROL APPARATUS. FRANK W. WOOD, Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 26, 1915. Serial No. 63,445. 16 Claims. (Cl. 177-351.)

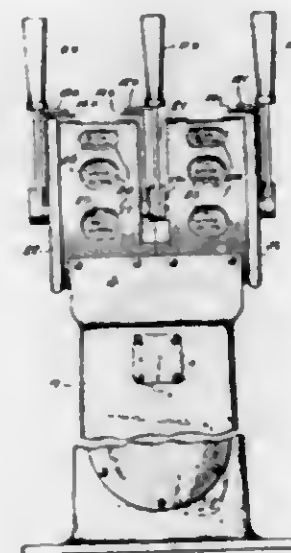


10. The combination with a horizontally rotating gun support and a gun carried thereby, of indicating mechanism mounted on the revolving turret, said mechanism including a pair of concentrically-arranged indicators having complementary degree indications for indicating the degree of horizontal rotation to be imparted to the turret and gun, and electrically operated means under control of an operator at a remote station for causing the operation of the indicating mechanism at the turret to indicate a selected degree of horizontal rotation to be imparted to the turret.

1,312,603. SIGNALING APPARATUS. FRANK W. WOOD, Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 25, 1918. Serial No. 264,044. 7 Claims. (Cl. 116-31.)

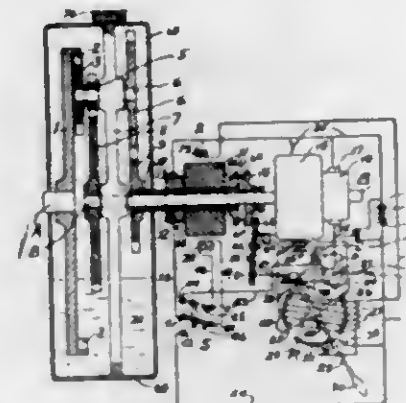
5. In telegraph systems of the three-unit type, and wherein each unit includes transmitting and answering instrumentalities individually operative, a casing having a cavity externally open intermediate the casing ends and adapted to receive the external elements of the instrumentalities of one of said units, the external elements of the instrumentalities of the remaining units being located at the external ends of the casing, a signal-indication formation carried by the casing on each side of and spaced from such cavity, said formations being substantial duplicates, and indicating elements carried by each

unit and forming parts of the several unit instrumentalities, the indicating elements of each unit being operative



relative to the same indication-formation, one of said formations providing the indication index for the indicating elements of two of said units.

1,312,604. MEANS FOR TRANSMISSION OF POWER. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Apr. 16, 1917. Serial No. 162,492. 2 Claims. (Cl. 200-10.)

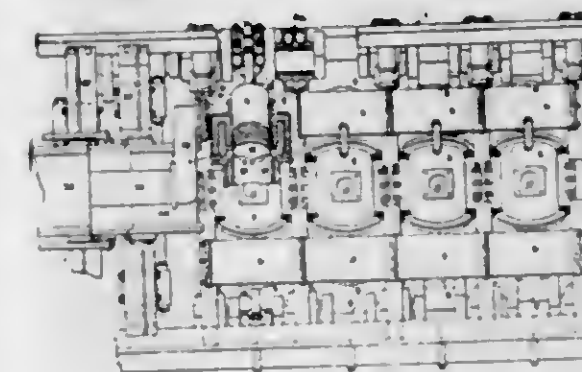
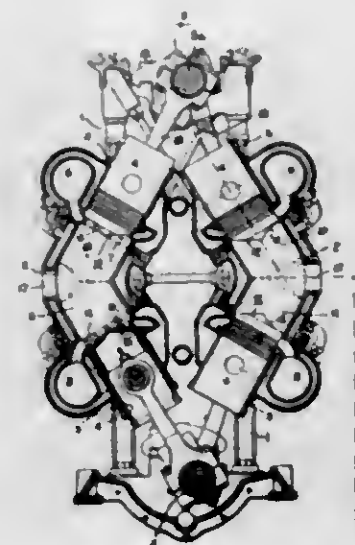


1. In combination, a driving shaft and its internal gear wheel, a driven shaft and its external gear wheel, an auxiliary shaft coaxial with the driven shaft and its external gear wheel, three planetary gear wheels rigidly interconnected and meshing respectively with the three shaft gear wheels, two dynamo-electric machines electrically interconnected, whereof one is mechanically connected to the driven shaft and the other to the auxiliary shaft, and field controlling means for controlling the transfer of electrical energy between the two machines.

1,312,605. INTERNAL-COMBUSTION ENGINE. LEON WOODMAN, Baltimore, Md., assignor to Baltimore Oil Engine Company, Baltimore, Md., a Corporation of Delaware. Original application filed Aug. 22, 1917. Serial No. 167,662. Divided and this application filed Nov. 23, 1918. Serial No. 263,854. 8 Claims. (Cl. 123-53.)

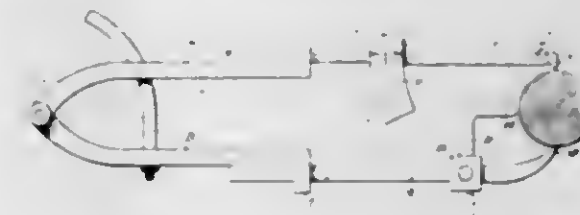
1. An internal combustion engine comprising in combination two crank shafts mounted for rotation, cylinders and pistons therefor, arranged to drive said crank shafts, and means for communicating motion from one crank

shaft to the other, comprising laterally slidable bearing blocks mounted on cranks of said crank shafts, and a re-



ciprocating member connecting said bearing blocks, and provided with slides therefor.

1,312,606. CALIPERING DEVICE. JOHN E. ZION, Enid, Okla. Filed Apr. 29, 1919. Serial No. 293,460. 5 Claims. (Cl. 33-148.)

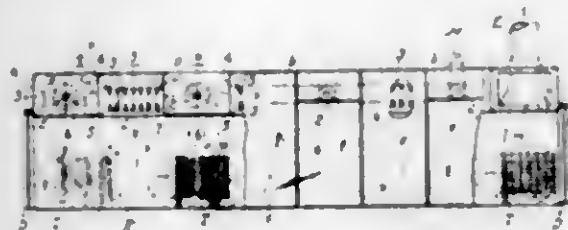


1. The combination with the movable legs of a pair of calipers, comprising an arm adjustably connected to one of the legs, and having a complementary arm pivotally connected to the end thereof, the said complementary arm being provided with a finger adapted to cooperate with the finger on the other leg of the caliper, and scales carried by the said arms and relatively movable when the said arms are moved on their pivots.

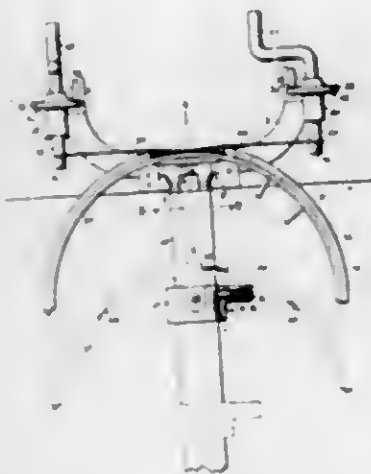
1,312,607. DRYING APPARATUS. HENRY BAETZ, St. Louis, Mo. Filed Oct. 30, 1918. Serial No. 260,359. 10 Claims. (Cl. 34-46.)

3. A drier comprising a suitable casing or chamber, a succession of air moving and air heating devices disposed beneath and adjacent the roof of the casing and alternating with one another, the walls of the casing being provided with openings for the introduction and removal of

the articles to be dried, said air moving and air heating devices operating to cause a circulation of the air vertically across the articles to be dried and longitudinally through the chamber.



1,312,608. APPARATUS FOR APPLYING TIRES TO VEHICLE WHEELS. GUSTAV ROSACH, Danbury, Conn. Filed Apr. 21, 1917. Serial No. 103,572. 7 Claims. (Cl. 157-6.)



4. In a tire applying apparatus, a wheel support, tire holding means associated with the support, wire tightening means cooperatively related to said tire holding means, tire gripping means carried by the support and located in depending relation to the holding and tightening means so as to be overlapped by the wheel during the wire tightening operation, and means to allow of adjustment of the wheel support so as to enable the wheel to be successively moved from the holding and tightening means to gripping means.

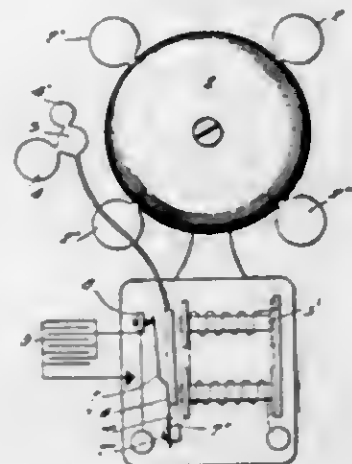
1,312,609. TRANSMISSION MECHANISM. ANGE HOWMAN, Long Beach, Calif. Filed May 23, 1918. Serial No. 236,077. 3 Claims. (Cl. 192-9.)



1. In a transmission mechanism an axle having splines therein; wheels rotatably mounted on said axle but not movable longitudinally thereon; female clutch members secured to the hubs of said wheels; on both fa-

thereof; male clutch members slidably mounted on said axle opposed to the female clutch members; splines connecting said male members, said splines sliding in said spline ways; and means to position said male clutch members.

1,312,610. VARIABLY PITCHED AND ACTUATED BELL. PENROSE E. CHAPMAN and ROLAND HARRY ROBINSON, St. Louis, Mo.; said Robinson assignor to said Chapman. Filed July 29, 1915. Serial No. 42,002. 9 Claims. (Cl. 116-33.)



4. In a vibratory sound producing device, the combination of a resonator adjustably loaded with weights attached to the said resonator by means of a severable neck, and a vibratory striking mechanism having a striking hammer adjustably loaded with weights attached to said hammer by means of a severable neck.

1,312,611. PACKAGE. PHILIP S. CHESB, Pittsburgh, Pa. Filed May 7, 1919. Serial No. 295,395. 3 Claims. (Cl. 40-4.)

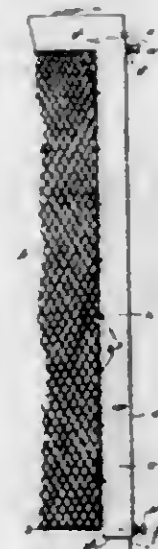


2. A package containing an article of distinctive form, and comprising a transparent container, a label borne by said container and bearing pictorial representation of the recognized surroundings of the article contained within, and consisting further of an article within the container, visible through the transparent wall thereof, and supplying to the pictorial representation upon the label a presentment of the article itself, completing the picture.

1,312,612. SPRING BED-BOTTOM. JOSEPH CIPOLLA, Philadelphia, Pa. Filed May 15, 1918. Serial No. 234,634. 1 Claim. (Cl. 5-69.)

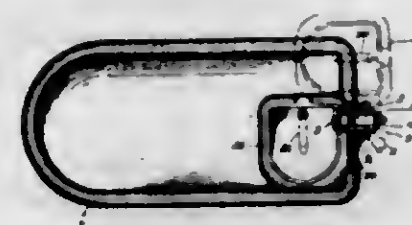
In a fabric bed-bottom, a rectangular framing to one side of which an end of the fabric is secured, while the opposite end of the fabric is secured to an angle-iron clamping member arranged to be drawn down against the outer side of said framing, with the horizontal leg of the angle iron against the top of the framing and the vertical leg of the angle iron parallel to the edge of the

framing; and said member provided with means for forcing said vertical flange away from said edge for varying



the tension of said fabric bottom, substantially as described.

1,312,613. BATH-ROOM FIXTURE. ARTHUR P. CODY, Cleveland, Ohio. Filed Nov. 1, 1918. Serial No. 260,744. 7 Claims. (Cl. 4-27.)



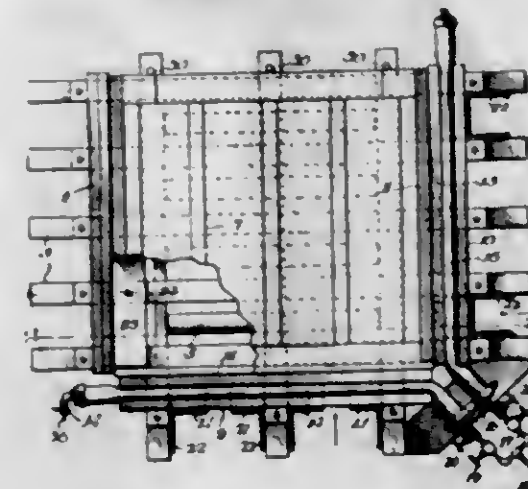
1. A bath room fixture comprising a stationary tub, water pipes adjacent said tub, spigots upon said pipes arranged above said tub, a grooved ring carried by said pipes and a basin rotatably mounted upon said grooved ring, the said basin being designed to be rotated upon said ring and brought into position beneath said spigots when said basin is to be used and swung backwardly from beneath said spigots when said tub is to be used, means for locking the basin in either position and a waste pipe from said basin arranged to discharge within the said tub.

1,312,614. MUSICAL INSTRUMENT. RALPH COLLING, San Francisco, Calif. Filed Aug. 27, 1918. Serial No. 251,007. 5 Claims. (Cl. 84-33.)



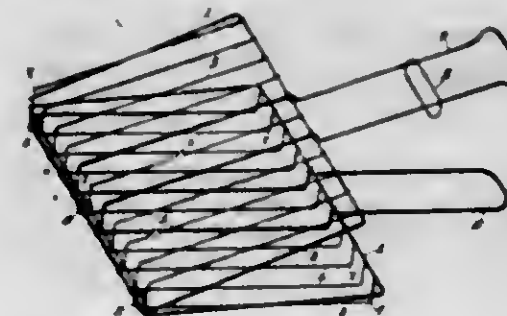
1. In a musical instrument, a stretched membrane of elastic material, having a portion of its length embraced by an adjustable mouthpiece consisting of two labial parts lying along opposite sides of said portion of membrane, one end of each labial part in contact with said membrane and extending therefrom at such an angle to the direction of the length thereof that said mouthpiece has the form of a letter V, the contact ends of said labial parts extended in width and provided with screw-passages and adjusting-screws for the purpose set forth.

1,312,615. METHOD OF AND APPARATUS FOR APPLYING FLUID-PRESSURE. SIMON COOPER, New York, N. Y., assignor to The Hobart M. Cable Company, Laporte, Ind., a Corporation of Indiana. Filed Oct. 19, 1917. Serial No. 197,519. 14 Claims. (Cl. 144-291.)



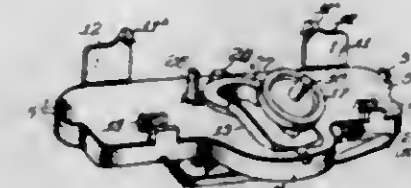
1. In a press, the combination of a bed adapted to receive the work, an abutment projecting above the bed, an expansion chamber comprising a flat base located between the work and abutment and extending lengthwise of the abutment, and means for admitting fluid pressure to said base.

1,312,616. CULINARY DEVICE. ARTHUR E. COWAN, Gloucester, Mass., assignor of one-fourth to Gorham Crosby, Glen Ridge, N. J. Filed Mar. 27, 1916. Serial No. 86,905. 9 Claims. (Cl. 53-5.)



1. A device of the class described, having two connected members, one member having parts adapted to pass between parts of the other member sufficiently to dislodge material thereon upon reversal of the parts.

1,312,617. UNIVERSAL CLAMPING-FIXTURE FOR INTERNAL-COMBUSTION ENGINES. FRANK DANIELSON, Chicago, Ill. Filed May 31, 1918. Serial No. 237,458. 12 Claims. (Cl. 29-89.)



1. A universal clamping fixture for internal combustion engines comprising a horizontal rotatably mounted bed, projections right with the bed and distributed thereon to support an engine cylinder block in a plurality of positions, and a single means cooperative with the block for clamping the same to the fixture in each of said positions.

1,312,618. ATTACHMENT FOR LAWN-MOWERS. JOHN M. DAVIDSON, Xenia, Ohio. Filed Sept. 22, 1917. Serial No. 162,638. 2 Claims. (Cl. 74-7.)



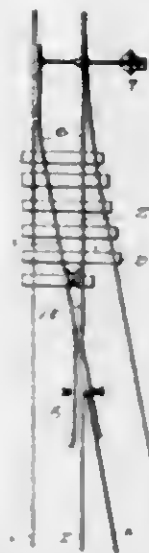
1. In a lawn mower, a ground wheel having an internal gear, a pinion enmeshed therewith, a shaft on which the pinion is adapted to rotate freely, and a ratchet mechanism whereby the pinion drives the shaft in one direction; said pinion having a hub, which hub and the shaft have transverse holes drilled in alignment with each other, adapted to receive a cotter pin, nail or the like, whereby to lock the pinion and shaft together so the shaft will be rotated whichever way the ground wheel is rotated.

1,312,619. APPARATUS FOR TREATING PARTS OF THE HUMAN BODY. ISRAEL D'ORRAY, New York, N. Y. Filed Aug. 25, 1916. Serial No. 116,798. 10 Claims. (Cl. 128-40.)



1. Apparatus for the treatment of the body comprising a pair of vacuum applicators adapted to be adjusted by the hands of the user, an exhaust pump, a mouth piece connected to the exhaust end of the pump, and auxiliary means for holding the vacuum.

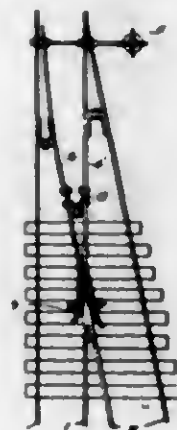
1,312,620. RAIL CONNECTION. EDWARD W. DORSEY, Newark, Ohio. Filed Apr. 9, 1919. Serial No. 288,671. 3 Claims. (Cl. 246-391.)



1. The combination with rails as described, of a joint device comprising a pair of members rigidly secured

to the respective rails and having integral lapping portions, and a pivot bolt extending through, and flexibly connecting, said lapping portions.

1,312,621. RAIL-LOCK. EDWARD W. DORSEY, Newark, Ohio. Filed May 5, 1919. Serial No. 294,832. 3 Claims. (Cl. 246-434.)



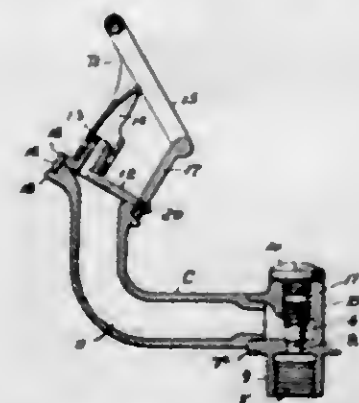
1. The combination with the pair of rails and an attaching plate bolted to each, of a socket member on one plate and a head member on the complementary plate fitted together and adapted for relative vertical movement.

1,312,622. ELECTRIC GASLIGHTER. ROY F. DOWDY, Roanoke, Va., assignor to Safety Gas Lighter Corporation, Roanoke, Va., a Corporation of Virginia. Filed Dec. 22, 1917. Serial No. 208,367. 5 Claims. (Cl. 175-91.)



1. In an electric gaslighter, a tubular handle having an opening in one of its ends, a removable head for normally closing the said opening and means for securing it to the handle, a resistance unit within the cavity of the handle, the same having a portion of substantially the same cross section as the cavity of the handle there being another portion at the outer end of the unit formed of greater dimension than the said cavity and adapted to overlie the end of the tube, and to restrain the unit against inward movement, the said head being formed to restrain the unit against outward movement.

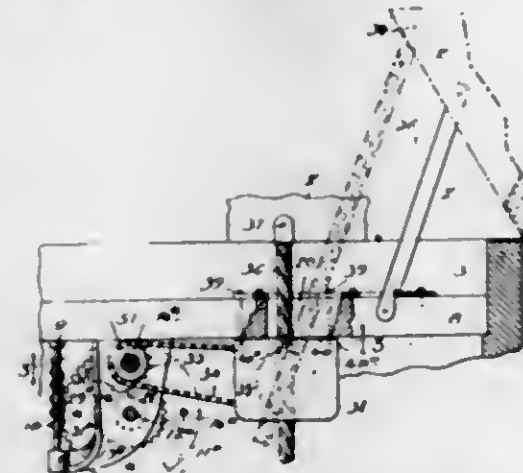
1,312,623. DRINKING-FOUNTAIN FIXTURE. JOHN A. FARLEY, Chicago, Ill., assignor to Crane Company, a Corporation of Illinois. Filed May 31, 1918. Serial No. 237,404. 1 Claim. (Cl. 137-109.)



In a drinking fountain attachment, the combination of a water conduit having a threaded upper end, a guard

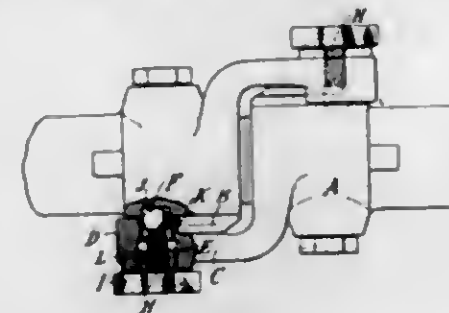
cage having a threaded base portion and a guard annulus inclined at an angle with reference to the axis of said upper end, an inclined closure plate for said upper end formed with a short jet nozzle near the upper side edge thereof, said threaded base portion detachably connecting said plate to said threaded upper end, and a cover member for the nozzle extending into the center of said annulus.

1,312,624. WINDING MECHANISM FOR TALKING-MACHINES. LOUIS A. FREEDMAN, New York, N. Y. Filed June 17, 1914. Serial No. 845,531. 5 Claims. (Cl. 185-39.)



3. In a device of the class described, a casing, a cover connected thereto, a screw shaft pivotally secured to said cover, means engaging said screw shaft for rotating the motor shaft in one direction by a raising or lowering of the cover, a friction clutch on the motor shaft, and means on the exterior of the casing for regulating tension on said clutch whereby slippage may be caused at a desired point.

1,312,625. HOSE-COUPLING. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1917. Serial No. 140,720. 3 Claims. (Cl. 285-68.)

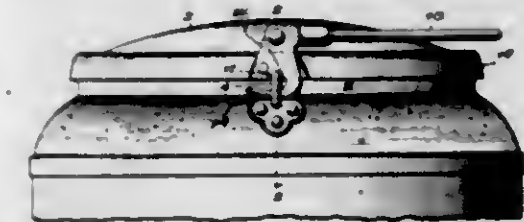


2. In a direct port coupler, comprising mating coupler heads each having a body with a projection on a side thereof and an arm with a lug thereon, the respective lugs adapted to engage behind the respective projections when the heads are coupled, means for positively locking said heads in coupled position, comprising a ball mounted in a channel in said arm, and a screw bolt for adjusting said ball to locking position and for holding it in such position, the arm having a threaded bushing engaged by said screw bolt.

1,312,626. CAN BODY AND TOP. WILLIAM GRANNIS, Kewannee, Wis. Filed June 10, 1916. Serial No. 104,445. Renewed Nov. 8, 1918. Serial No. 261,717. 1 Claim. (Cl. 220-55.)

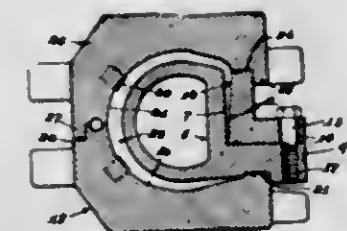
The combination with a can and top, of a depending notched flange carried by the top, vertically arranged

outstanding, perforated lugs carried by the can and adapted to enter from below the flange notches, a ball



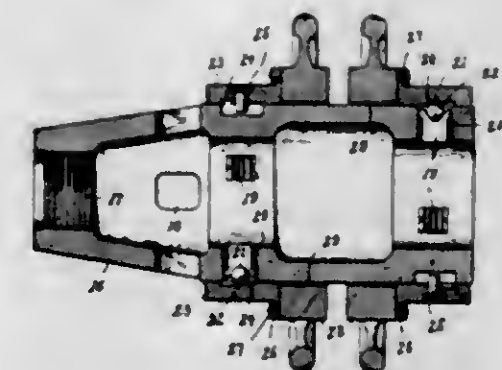
carried by the top, and cam hooks carried by the ball and adapted to enter the perforations of the lugs, after said lugs are seated in said notches.

1,312,627. TIRE-LINER MOLD. JOHN H. GAUSE, Los Angeles, Calif., assignor to Alrsafe Inner Tire Company, Los Angeles, Calif., a Corporation of Nevada. Filed Dec. 28, 1917. Serial No. 209,282. Renewed June 4, 1919. Serial No. 301,811. 5 Claims. (Cl. 18-42.)



1. A mold for forming tire liners comprising an annular drag having a concave upper face, a complementary cope having a concave under face, an annular core having an arcuate cross section and formed with a flat inner wall, and an annulus having a beveled outer face adapted to be set within the core to form a tapered annular channel communicating with a space between the cope and core.

1,312,628. LATHE-CHUCK. ALFRED M. GYDERSEN, Bridgeport, Conn. Filed Mar. 14, 1918. Serial No. 222,315. 2 Claims. (Cl. 270-69.)



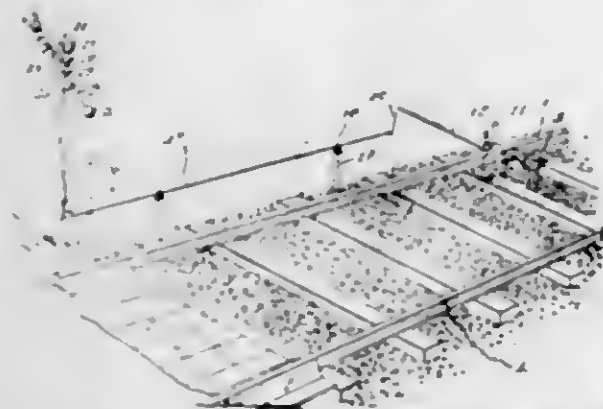
1. A lathe chuck comprising a body adapted to be secured to a lathe spindle and having a series of pockets formed therein a series of radially disposed clamping jaws slidably mounted in said pockets and provided with ball sockets in one of their end portions, a longitudinally movable member mounted on the body and having recessed longitudinally inclined ways to align with the pockets, balls contained in the sockets and inclined ways and between the jaws and slidable members and a rotatable handled operating member connected with the slidable member whereby the latter is moved longitudinally to slide the jaws in their pockets through the engagement of the ball bearings.

1,312,629. CONTAINER. FREDERICK HACHMANN, St. Louis, Mo., assignor of fifty-one one-hundredths to Herman C. Stifel, St. Louis, Mo. Filed Oct. 9, 1918. Serial No. 257,500. (Cl. 221-64.)



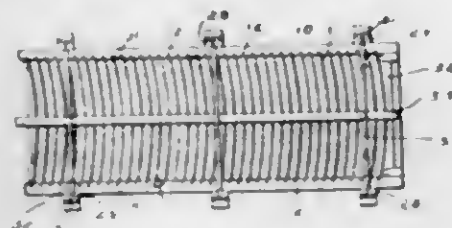
1. A container of the character described, comprising a top having an opening therethrough, an annular flange around the opening extending into the container and having holes therethrough, a tubular part fitting within the annular flange and having holes which in one position of said part register with the holes in the flange and in another position of said part are closed by said flange, an end wall closing the inner end of said tubular part, and a head connecting said end wall with said tubular part and engaging under the end of said flange to retain said part in connection with each other.

1,312,630. RAILROAD-CROSSING SIGNAL. GUN HEILIGSTEIN, Altamont, Ill. Filed Jan. 5, 1916. Serial No. 70,487. 1 Claim. (Cl. 246-294.)



A track instrument for railway signals comprising a plate of a length to overlie two contiguous ties adjacent one rail, its ends being secured upon them and its center dropped, a housing mounted upon the dropped center of said plate and having a guide opening in its top, a web across said housing having a second guide opening, a plunger slidably mounted in said openings and rising above the housing and carrying a hand standing along the flange side of said rail, a flange fixed to the plunger beneath the top of the housing, a spring between said flange and web holding the plunger normally raised, a rock shaft passing beneath the rail and mounted in the wall of said housing, its inner end having a cranked arm provided with a slot, means for connecting its outer end with a signal, and a pin in the plunger engaging said slot.

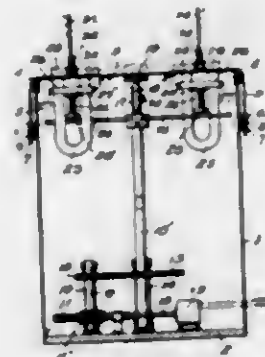
1,312,631. BUILDING-BLOCK MOLD. FRANK O. HEILSTROM, Bismarck, N. D. Filed May 2, 1918. Serial No. 232,031. 9 Claims. (Cl. 25-121.)



6. A mold for building blocks having side walls, spaced division plates spanning the interval between said walls, and pallets closing, respectively, the spaces between the division plates, and provided with shouldered ledges for respectively engaging the lower edges of the same.

and pallets closing, respectively, the spaces between the division plates, and provided with shouldered ledges for respectively engaging the lower edges of the same.

1,312,632. ADVERTISING DEVICE. HILARIO HURATA, St. Louis, Mo. Filed May 31, 1919. Serial No. 300,814. 4 Claims. (Cl. 40-53.)



3. An advertising device comprising a housing, a thin flexible top for said housing, means for holding said top in a stretched position upon the upper end of the housing, a floor for said housing, a motor driven mechanism including a central shaft, a cross-bar fixed to the central shaft so as to revolve therewith, a magnet passing through the cross-bar near each end thereof having their poles engaging the flexible top of the housing, clamp-bars carried by the arms of the magnets, a coiled spring interposed between the clamp-bars of each magnet and the cross-bar for yieldingly supporting each magnet, a tubular roller-carrier having a tapered inner end mounted upon the flexible top of the housing above the poles of each magnet for movement in accordance with the magnets rotatably supported below the flexible top of the housing, and a forked article holder carried by each roller-carrier to support the article to be advertised or displayed.

1,312,633. PARKING APPARATUS. WILLIAM JAMES HUSSEY, Sturgeon Falls, Ontario, Canada, assignor to Herbert Goettler, Chicago, Ill. Filed Dec. 27, 1916. Serial No. 139,211. 8 Claims. (Cl. 144-208.)



1. In a park removing machine, the combination of a rotatable drum, supporting rollers on which said drum may turn, said rollers engaging the drum above its median line and suspending it from above while leaving the space beneath the drum unobstructed, and means for rotating said drum on said rollers.

1,312,634. METHOD OF RENDERING WOOD INSECT-REPELLENT. JOHN KEUSE, New Orleans, La. Filed Aug. 11, 1917. Serial No. 185,763. 3 Claims. (Cl. 99-12.)

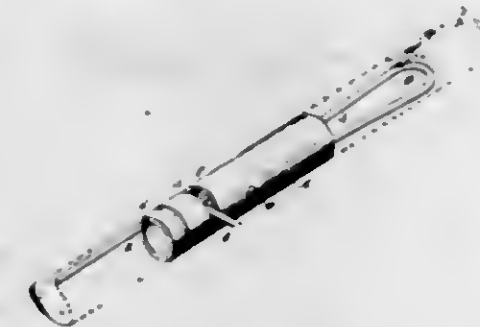
1. The method of preparing wood for use as a protection against the incursion of ants and other insects, which consists in impregnating the wood with a solution in water

of bichlorid of mercury and hydrochloric acid with the acid in sufficient quantity to open the pores of the wood to



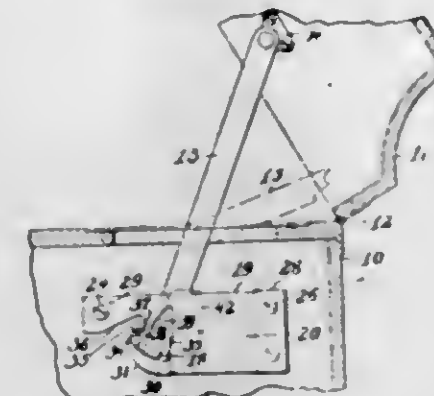
an extent to facilitate the entrance of the bichlorid of mercury into the wood, and subsequently drying the wood.

1,312,635. WIRE-GRIP. SILVESTER P. LEVERICH, Marion, Iowa. Filed Apr. 8, 1918. Serial No. 227,365. 3 Claims. (Cl. 24-129.)



2. A wire-grip, comprising a tube transversely notched to receive a wire bent at right angles to the tube, a transverse pin fixed in said tube, and a hook to engage either the wire or said pin, which pin is spaced farther from the tube wall than the cross wire when in the notch, whereby the hook may engage the cross-wire if small and loose in the notch, or the pin, if the cross-wire be large enough to be self-held in the notch.

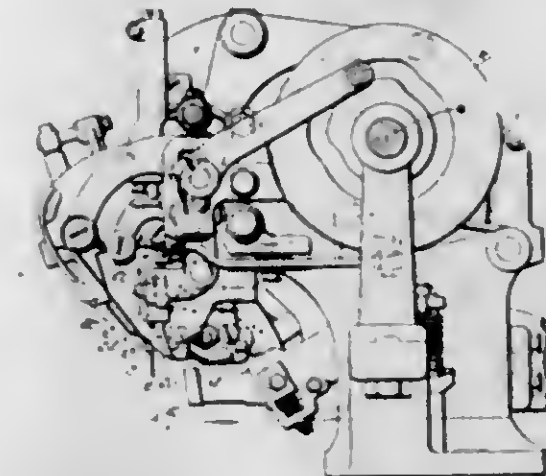
1,312,636. STAY-ARM. FRANK D. LEWIS, West Orange, N. J., assignor, by mesne assignments, to Pathe Freres Phonograph Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1917. Serial No. 145,058. 3 Claims. (Cl. 217-60.)



1. A cabinet, a lid therefor, a stay arm, a pivot on the lid on which the stay arm may turn, a spring washer on the pivot for frictionally retarding the turning movement of the arm, a member in the cabinet with which the stay

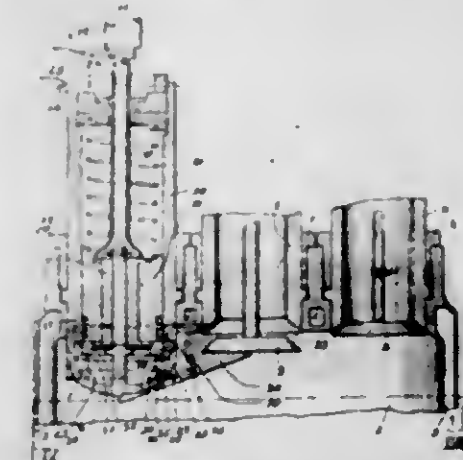
arm is automatically engaged on raising the lid and automatically disengaged for lowering on again raising the lid, said member being adapted to positively control the movement of the arm in opposition to the retarding action of the said spring washer, so that the movement thereof is substantially independent of the force of gravity.

1,312,637. SEWING-MACHINE. AUGUSTINE F. LITTLEFIELD, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 25, 1916. Serial No. 122,071. 4 Claims. (Cl. 112-20.)



1. An in-seam-sewing machine having, in combination, sewing-instrumentalities including a needle, a channel-guide, and means supporting the channel-guide normally in operative relation with the needle, but yieldable during the work piercing stroke of the needle to permit displacement of the channel-guide when subjected to an unusual pressure in the direction of the advancing movement of the needle.

1,312,638. SPARKING DEVICE FOR EXPLOSIVE-ENGINES. HARRY F. MURRAY, Reno, Nev. Filed June 10, 1918. Serial No. 239,230. 21 Claims. (Cl. 123-143.)

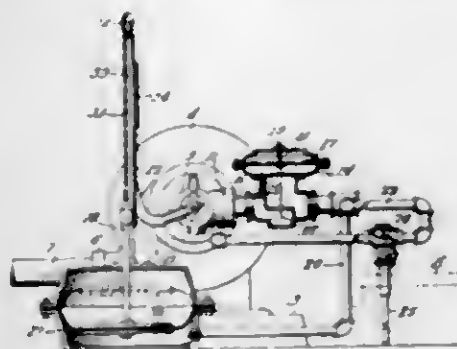


1. In an internal explosion engine, the combination with a cylinder, of a movable sparking device adapted to be shut off from the cylinder during part of the explosion stroke and most of the exhaust stroke of the engine.

1,312,639. AUTOMATIC TEMPERATURE CONTROL FOR GAS-FURNACES AND THE LIKE. GARNET W. MCKEE, Rockford, Ill. Filed Dec. 18, 1917. Serial No. 207,706. 5 Claims. (Cl. 236-80.)

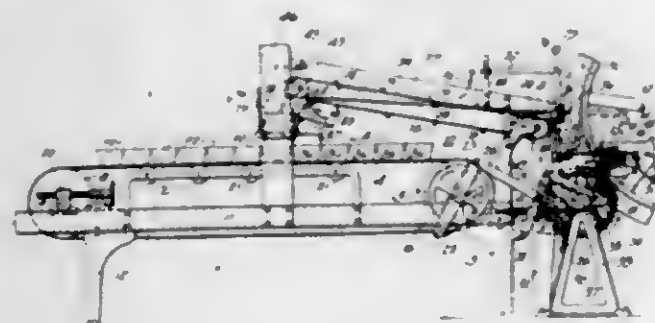
1. In an apparatus of the character described, the combination of an air and gas mixing device, a gas pressure reducer, a by-pass pipe leading from the high pressure to

the low pressure side of said reducer, an automatically controlled valve in said pipe, and means controlled by the



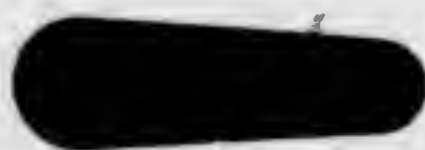
opening and closing movements of said valve for increasing or diminishing the flow of mixture to said mixing device.

1,312,640. PAN FILLING MACHINE. JOHN F. MALLINCKRODT, Salt Lake City, Utah. Filed Sept. 7, 1915. Serial No. 49,281. 12 Claims. (Cl. 107-7.)



1. In a pan filling machine, the combination with a suitable framework, of a receiving conveyor; a second conveyor adapted to have pans placed thereon and so arranged that any objects carried by the said receiving conveyor may be discharged therefrom into the said pans while they are in position on the said second conveyor; and means, actuated by the passage of the said objects, for causing the said second conveyor to move through a certain predetermined space.

1,312,641. PADSUPPORT FOR PRESSING-MACHINES. JOSEPH J. MARX, St. Louis, Mo. Filed Apr. 3, 1919. Serial No. 287,306. 4 Claims. (Cl. 68-9.)

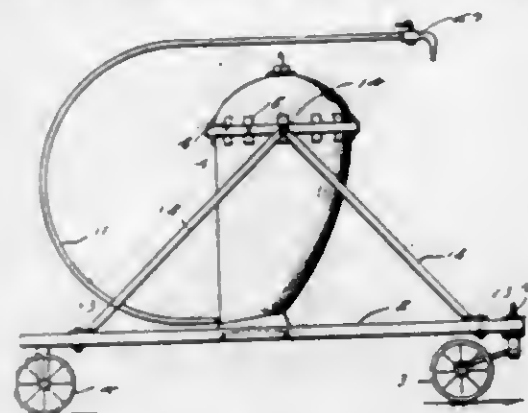


1. A device of the character described, composed of a pad of steel shavings.

1,312,642. COMPRESSED-AIR GREASE-GUN. HARRY N. NIKMANN, Armstrong, Iowa. Filed June 5, 1917. Serial No. 172,921. 1 Claim. (Cl. 221-74.)

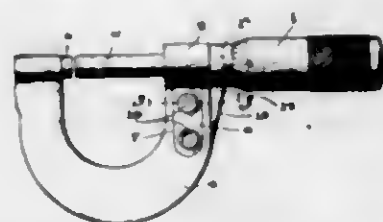
A compressed air grease gun comprising a tank substantially circular in horizontal section and having one of its walls vertical, a discharge opening in the lower end of the wall and having its opposite wall curved downwardly and inwardly toward the vertical wall, to facilitate the flow of grease from the opening, a support, a seat carried by the support, said seat having its upper surface curved transversely and longitudinally, the longitudinal curvature being extended at an inclination to receive the lower end of

the tank, and braces extending from the support to the upper end of the tank, to hold the same on its seat, a discharge pipe connected with the discharge opening and having a valve or cutoff, and means for filling the tank and for admitting fluid pressure to the same.



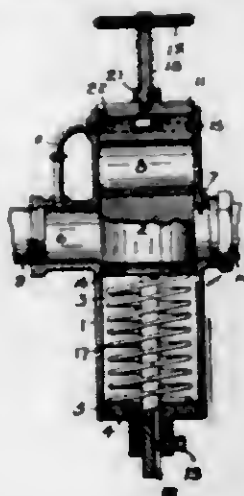
charge pipe connected with the discharge opening and having a valve or cutoff, and means for filling the tank and for admitting fluid pressure to the same.

1,312,643. MICROMETER-CALIPERS. GEORGE W. POLLOCK, Tarrytown, N. Y. Filed Feb. 11, 1919. Serial No. 276,376. 2 Claims. (Cl. 33-167.)



1. In a micrometer caliper structure, the combination with an ordinary micrometer barrel, of a U-shaped frame carrying an anvil at one end, said frame provided at the other end with a recess in one side face thereof, a lug formed upon the stationary portion of said micrometer barrel and adapted for seating in said recess, said lug and frame provided with aligning openings, the openings in said frame being threaded, thumb screws extending through said lug openings and threaded into the openings in said frame for detachably connecting the frame to the barrel, a web formed adjacent the barrel-receiving end of the frame, the upper surface of said web projecting a short distance above the upper surface of the adjacent end of the frame and being adapted for engagement against the portion of the stationary part of said barrel.

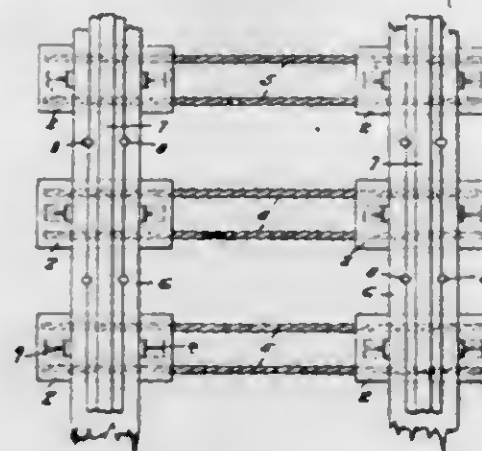
1,312,644. VALVE. HENRY C. RAAB, Garrettsville, and JOHN H. DUDSON, Youngstown, Ohio. Filed Feb. 26, 1919. Serial No. 279,408. 7 Claims. (Cl. 67-115.)



1. In a safety valve, a casing, a plunger-valve reciprocable therein, a stationary by-pass arranged to admit

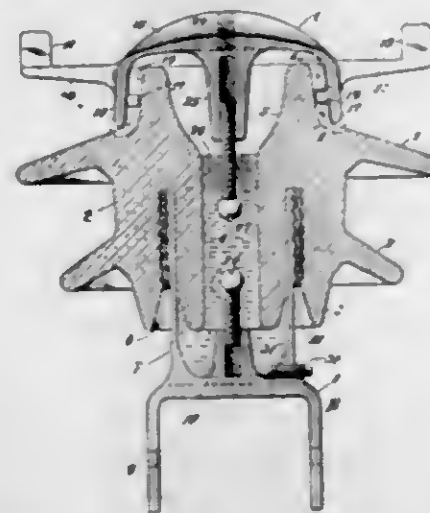
fluid pressure to the valve from the inlet side thereof through the casing above the valve to hold it open, hand-operated means for opening the valve mechanically connected thereto, and means for closing the valve when the fluid pressure is reduced below a predetermined value, the valve being positioned when closed so as to prevent the gas from opening it.

1,312,645. RAILWAY-TRACK. JOHN A. SANBORN, Oakland, Calif. Filed July 9, 1917. Serial No. 179,380. 2 Claims. (Cl. 238-117.)



1. A railway track composed of a plurality of parallel reinforced concrete ties, a pair of metallic bars embedded in each tie and extending above the surface of the tie, a wooden stringer arranged on said ties between said bars, holding means engaging said stringers and bars and rails arranged on and secured to said stringers, said bars having the opposed faces thereof which extend above the tie, parallel and engaged with the stringer to provide a tight fit therefor.

1,312,646. LIGHTNING-ARRESTER FOR HIGH-TENSION LINES. S. L. S. SONNENMAN, Brooklyn, N. Y. Filed Feb. 10, 1917. Serial No. 147,737. 9 Claims. (Cl. 175-30.)

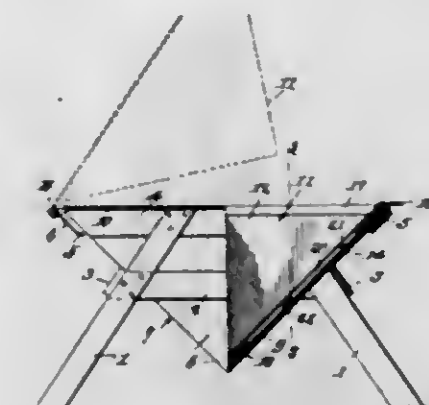


2. A lightning arrester for high-potential lines comprising an insulating solid of revolution having an open ended axial bore; a closure for the lower end of said bore providing a central spark-gap electrode; and a metallic cap for the top of said insulating solid having rotary locking engagement therewith, providing a downwardly extending spark-gap electrode and attaching means for a conductor.

1,312,647. MACHINE FOR TREATING SMUT. ALFRED STRAUB, Fargo, N. D., assignor of one-half to Alfred Holland, Fargo, N. D. Filed May 6, 1918. Serial No. 232,901. 1 Claim. (Cl. 83-28.)

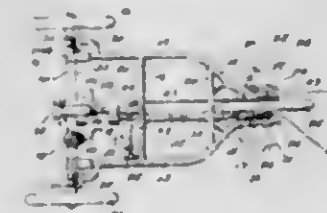
In a machine for dipping vegetable products, a tank in the form of a triangle having its apex downwardly dis-

posed; a receptacle fitting closely in the tank and in the form of a triangle having its apex downwardly disposed, the receptacle including downwardly converging end walls having openings; frames within the receptacle and resting on the end walls of the receptacle, the frames having



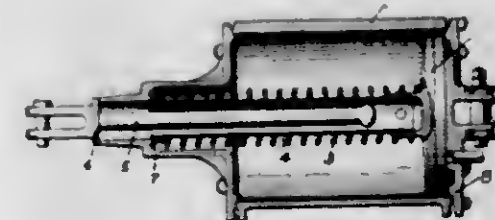
openings coinciding with the openings in the end walls of the receptacle; screens carried by the frames and bridging the openings in the frames; and means for mounting the receptacle for vertical swing movement into and out of the tank.

1,312,648. VEHICLE-FRAME. LEO TAUSSIG, New York, N. Y. Filed Dec. 29, 1917. Serial No. 208,557. 8 Claims. (Cl. 180-25.)



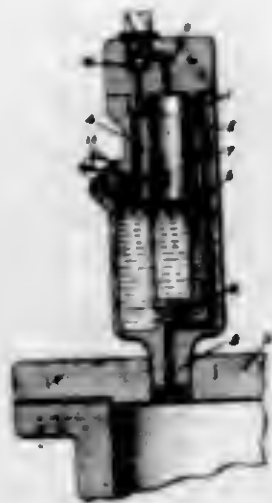
1. In a vehicle, a main frame carrying the driving mechanism of the vehicle, a front frame provided with dirigible wheels having steering elements, a driving wheel carried by said main frame, means for actuating said steering elements and removable connections between said main and front frames and said driving wheel whereby said parts may be disconnected.

1,312,649. FLUID-PRESSURE BRAKE. WALTER V. TRUNZ, Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1916. Serial No. 129,439. 3 Claims. (Cl. 188-1.)



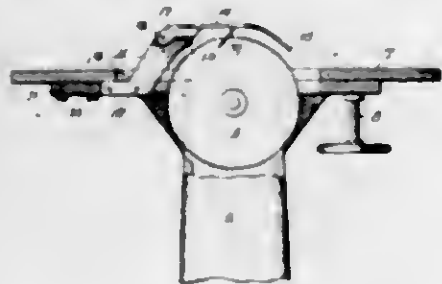
1. In a fluid pressure brake, the combination with an extended brake cylinder and a brake cylinder piston rod of the usual length, of a brake cylinder piston having a preliminary movement relative to the piston rod in applying the brakes.

1,312,650. PUMP-LUBRICATOR. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1918. Serial No. 208,630. 5 Claims. (Cl. 184—38.)



4. A lubricator for fluid compressors comprising a casing having a chamber containing a quantity of lubricant and having a passage leading from the space above the surface of the lubricant to the fluid compressing cylinder of the compressor, a fluid chamber having a passage communicating with the lubricant chamber below the surface of the lubricant and having a passage communicating with the fluid compressing cylinder, and a check valve for preventing back flow from the fluid chamber to the fluid compressing cylinder.

1,312,651. SAW-GUARD. HENRY F. WALTERS, Chicago, Ill. Filed July 5, 1918. Serial No. 243,290. 3 Claims. (Cl. 143—159.)



1. In a saw guard, the combination of a support, and a guard carried by said support and having its front end tapered to deflect the fingers of the operator and render the work visible while it is being cut.

1,312,652. RAILROAD DESPATCH-DELIVERER. ROBERT L. WANAMAKER, Toledo, Ohio. Filed Apr. 2, 1919. Serial No. 286,823. 1 Claim. (Cl. 238—2.)



In a despatch delivering device, a bracket, a second bracket swiveled for horizontal relative movements to the first named bracket, an arm, means for pivotally supporting the arm on the second named bracket, a tr

curved lip forming a recess having a curved surface on its under side for engaging the inner rad of the arm to maintain the arm in a substantially horizontal position, the inner end of the arm having a roller fitting the recess to yieldingly prevent lateral movements of the arm, a spring mounted in the swiveled bracket and operating to press the inner end of the arm upward and to press the roller against the lip.

1,312,653. MANICURE IMPLEMENT. WILLIAM R. WATSON, Chester, Conn., assignor to C. J. Bates & Son, a firm composed of Carlton J. Bates and Hamilton C. Bates, Chester, Conn. Filed Feb. 1, 1918. Serial No. 214,820. 3 Claims. (Cl. 31—19.)



1. An implement comprising a handle having resilient side parts, a pivot, and a plurality of blades secured to said pivot irrespective of said handle and for separate pivotal movement thereon, said handle and pivot being constructed to removably secure the pivot through the agency of the resiliency of the side parts of the handle.

1,312,654. KNIFE-SHARPENER. CHARLES B. WEAVER, Los Angeles, Calif. Filed Aug. 21, 1917. Serial No. 187,329. 5 Claims. (Cl. 76—84.)



1. In combination with a sharpening steel or the like, a blade sharpening cutter clamped against the side of the steel at an angle so as to leave an angular opening between the cutter and the steel through which opening a blade may be drawn with the opposite sides of its cutting edge in contact with the cutter and steel, respectively.

1,312,655. VALVE AND IGNITION MECHANISM FOR GAS-STOVES. JAMES WHALEN, Omaha, Nebr. Filed Jan. 28, 1918. Serial No. 214,223. 4 Claims. (Cl. 126—52.)

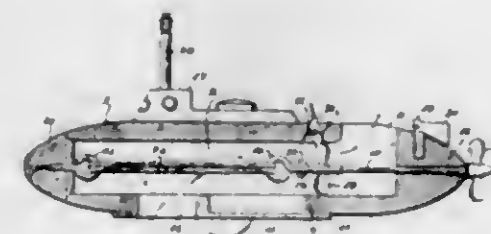
3. In combination with a gas stove burner, a valve controlling the supply of gas to the burner, valve-actuating means adapted for operation by the placing and removal of an article over the burner, a pilot-light disposed adjacent to the burner, a guard having an opening and inclosing the pilot-light, a shield normally covering the

opening in said guard, and means connecting said shield and the valve-actuating means whereby the shield is



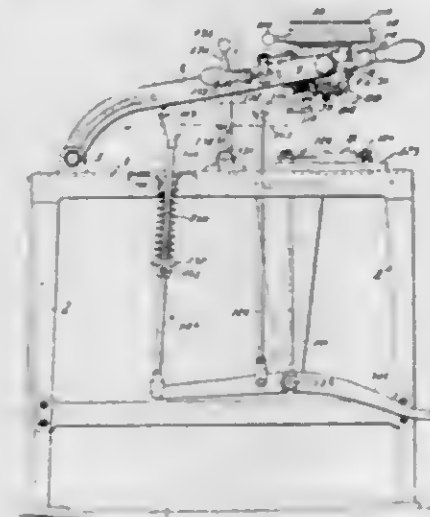
moved to uncover the opening in the guard as the valve is opened to supply gas to the burner.

1,312,656. SUBMERSIBLE TOY SUBMARINE. SIGMUND WIEBE, Brooklyn, N. Y., assignor to American Toyland Creators, Inc., New York, N. Y., a Corporation of New York. Filed June 27, 1918. Serial No. 242,215. 11 Claims. (Cl. 46—37.)



1. In a device of the character described, the combination of a hull; means for impelling water from the lower part of the hull to the upper part; and means for propelling the hull.

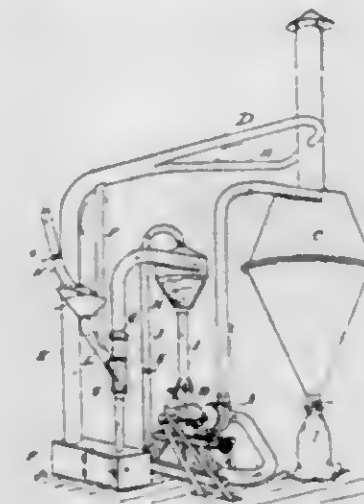
1,312,657. ENPLACING PROCESS AND APPARATUS. EDWIN L. WIZGARD, Youngstown, Ohio. Filed Feb. 11, 1918. Serial No. 216,566. 35 Claims. (Cl. 18—1.)



1. In an apparatus of the character described, the combination of a carrier for an element, a support for a receiving element, the support and carrier being relatively movable to present the former element to the latter element, and means actuated by reason of the relative movement between the carrier and support for removing the first element from its carrier when presented in proper relation to the receiving element.

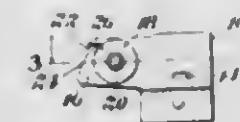
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1,312,658. COMBINED DISINTEGRATING AND SEPARATING DEVICE. MILTON F. WILLIAMS, St. Louis, Mo. Filed Feb. 23, 1918. Serial No. 218,748. 2 Claims. (Cl. 83—11.)



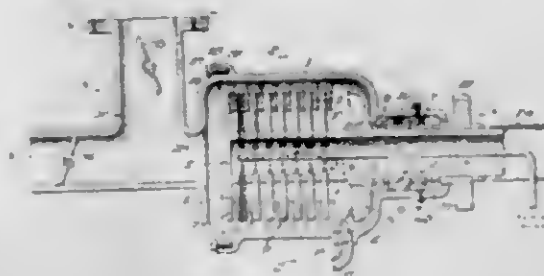
1. A device of the character described comprising a disintegrator, a vertical pipe having a feed inlet at its side, an expansion chamber located above said disintegrator and feed inlet and in communication with said disintegrator and said vertical pipe and between the same, and a suction device common to said disintegrator, expansion chamber and vertical pipe, substantially as described.

1,312,659. SEWING-MACHINE. WILLIAM WILSON, Boston, Mass., assignor to Campbell Bowditch Machinery Company, Portland, Me., a Corporation of Maine. Filed May 17, 1915. Serial No. 28,630. 6 Claims. (Cl. 112—33.)



1. A sewing machine having, in combination, stitch forming device, a plate having a thread slot, a knife arranged with its cutting edge extending across the slot, a guide for the thread leading to the slot and a projection at one side of the slot extending beyond the line of the guide to intercept the thread as it is drawn along the guide and conduct it into the slot.

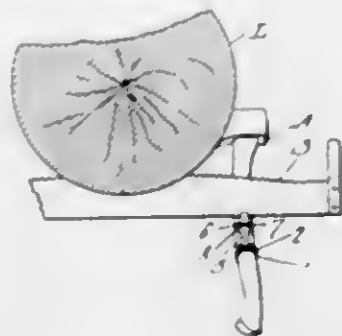
1,312,660. CARBURATION. WILLIAM H. WINSTON, River Forest, Ill., assignor of one-half to Charles A. Brown, Hinsdale, Ill. Filed Feb. 12, 1917. Serial No. 147,990. 22 Claims. (Cl. 123—135.)



1. The process of preparing a charge of air and liquid fuel for rapid combustion which consists in whipping the

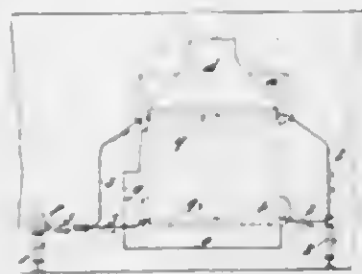
liquid fuel by mechanical impulses and simultaneously subjecting the whipped product to numerous individual jets of air within the whipped product.

1,312,664. SAW ATTACHMENT. DUDLEY WORDEN, Ferndale, Wash. Filed Oct. 1, 1917. Serial No. 194,242. 1 Claim. (Cl. 143-163.)



In a detachable saw guide, a spring-clip member, a plate secured to the clip intermediate its length, and having an opening therein, standards terminating in a head, said head being positioned in the opening of the plate to allow a pivotal movement of the head, a pin positioned between the standards, a collar mounted on the pin, and a roller mounted on the collar to rotate between the standards.

1,312,662. COOLING DEVICE FOR STEAM-GENERATING APPARATUS OF SUBMARINE VESSELS. HAROLD KIDGAR YAMOW, Scotstoun, Glasgow, Scotland. Filed May 7, 1917. Serial No. 107,042. 2 Claims. (Cl. 114-16.)



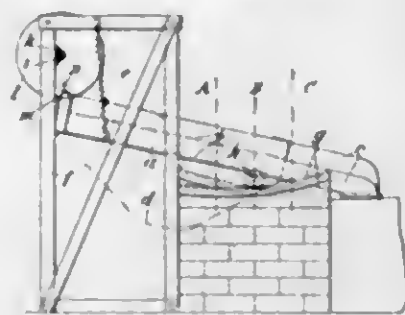
1. In a submarine vessel, a boiler for generating steam; cooling pipes within the said boiler; and means for circulating a cooling medium through said cooling pipes when the fires have been drawn, thereby to convey away the heat stored in said boiler.

1,312,663. OVEN-WALL. GEORGE A. YOUNG, Detroit, Mich., assignor to Young Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed June 5, 1916. Serial No. 101,852. 2 Claims. (Cl. 220-77.)



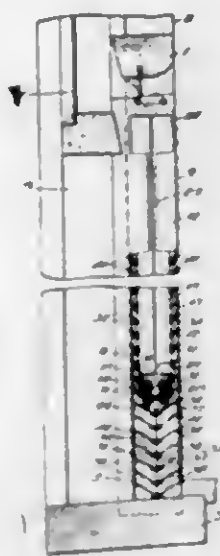
1. In a heat insulating wall, a section comprising inner and outer spaced metallic plates and metallic edge strips, a flange on one engaging a return flange on the adjacent member, and a sheet of flexible non-metallic insulation clamped between said flange and return flange for forming a sealed joint and interrupting the metallic continuity.

1,312,664. SCREENING APPARATUS. JOSEPH EUGENE YERNAUX, Puteaux, France. Filed July 20, 1918. Serial No. 245,914. 2 Claims. (Cl. 83-56.)



2. A screening apparatus comprising a movable trough, screens of different mesh within the said trough, springs suspending the said trough, rollers carried by the said trough, two paths on which the said rollers run, the said paths being adapted by their varying levels to impart transverse oscillation to the trough as it is moved to and fro along the paths.

1,312,665. COUNTERBALANCE. CARL G. ALMQUIST, Chicago, Ill. Filed May 15, 1919. Serial No. 297,187. 12 Claims. (Cl. 16-116.)



12. The improvements herein described comprising a vertically movable member, channels at the sides of said member, projections rigid with said member entering said channels, thin webs connecting said projections with said member, slots in the faces of said channels through which said webs extend, two series of flexible resilient elements in said channel between which said projection moves up and down, anti-friction rollers carried by said projection adapted to engage said elements and flex them as the member moves down, each of said elements having a hooked end and an opening, the hooked end of one of the elements adapted to be depressed into the opening of the element next below and to be hooked therein when the elements next below is flexed, said elements adapted to be unflexed by the rising of said projection through said channel.

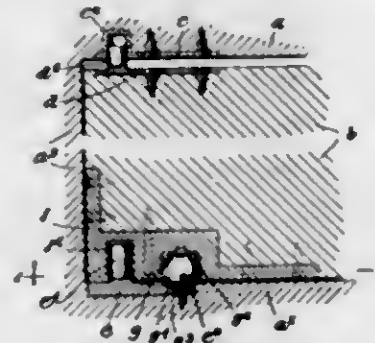
1,312,666. SHUTTLE. BENJAMIN S. ATWOOD, Milford, Mass. Filed Feb. 27, 1918. Serial No. 219,388. 6 Claims. (Cl. 139-46.)



2. In a shuttle, a thread guide comprising a tube having an inlet opening for the entrance of thread adjacent

the end of the cop of thread in the shuttle and an exit opening for the thread remote from the end of the cop of thread and having another opening therein, intermediate said inlet and exit ends whereby, when the exit end of the tube is sucked, for the purpose of drawing the thread into the inlet end of the tube, air will flow through said openings into the tube in preference to flowing through the inlet end of the tube and the thread will thereby not be drawn into the tube.

1,312,667. HINGE FOR DOORS. GEORGE J. AYRES, New York, N. Y. Filed Mar. 29, 1918. Serial No. 225,466. 2 Claims. (Cl. 16-163.)

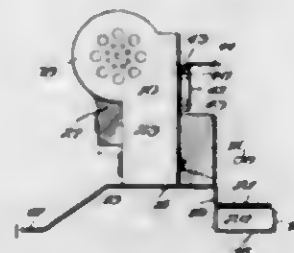


1. A door hinge comprising members having coacting pintle elements, one of said members being formed with an arcuate groove concentric to its pintle element and inclined downwardly from each end toward its intermediate point, the member being further formed with a depression at each end of the groove and with a depression at the intermediate point of the groove, the groove opening into the depressions and the depressions being of greater depth than the groove, and a bearing ball carried by the other member to travel in the groove and to seat in the said depressions in different positions of swinging movement of the door.

1,312,668. SULFIDATION AND FLOTATION OF ORES. RAYMOND F. BACON, Pittsburgh, Pa., assignor to Metals Recovery Company, New York, N. Y., a Corporation of Maine. Filed Mar. 6, 1917. Serial No. 152,758. 5 Claims. (Cl. 83-85.)

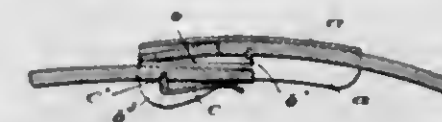
1. In the art of mineral separation, the method of rendering oxidized ores amenable to flotation, which comprises heating a mixture of sulfid minerals containing metalliferous values to be recovered and alkaline material to a temperature sufficient to form a water soluble sulfid, and subjecting the oxidized ores to a flotation operation in the presence of the resulting sulfid containing material.

1,312,669. STAMP-FEEDING MACHINE. WESLEY J. BALKWILL and WILLIAM F. SCHWEIGER, Rochester, N. Y., assignors to Miltipost Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 1, 1916. Serial No. 128,865. 6 Claims. (Cl. 211-33.)



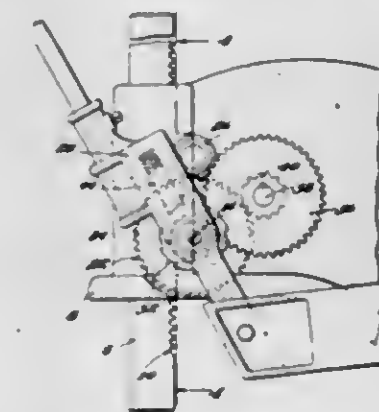
3. In a stamp feeding machine, the combination of a frame, a plurality of supports each adapted to contain a plurality of stamps, separate means for feeding stamps from each support, and a removable guard for preventing the actuation of the several feeding means.

1,312,670. BELT-BUCKLE. WALTER B. BALLOU, North Attleboro, Mass. Filed Jan. 10, 1918. Serial No. 211,279. 1 Claim. (Cl. 24-74.)



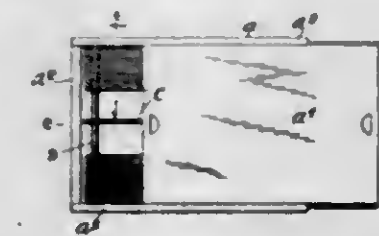
A belt buckle embracing in its construction a front plate having rearwardly turned flanges, a clamping lever pivotally mounted in said flanges with its short arm arranged to pinch the free end of the belt against the back face of the front plate and an anchoring lever pivotally mounted in said clamping lever and having its short arm projecting forwardly toward the clamping lever to pinch the fixed end of the belt against said clamping lever, substantially as described.

1,312,671. ARBOR-PRESS. EDWIN E. HARTLETT, Nashua, N. H. Filed Mar. 7, 1919. Serial No. 281,160. 4 Claims. (Cl. 29-85.)



1. A press of the class described having, in combination, a ram having a rack on one side thereof, a pair of shafts located on the same side of the ram, a pinion carried by each of the shafts and engaging said rack, a gear secured to each of the shafts on opposite ends thereof and equally spaced from the longitudinal center line of said rack, and means engaging said gears to drive said pinions in unison.

1,312,672. FILING-CABINET. WILLIAM H. BARRINGER, Passaic, N. J. Filed Feb. 20, 1918. Serial No. 218,328. 6 Claims. (Cl. 129-15.)

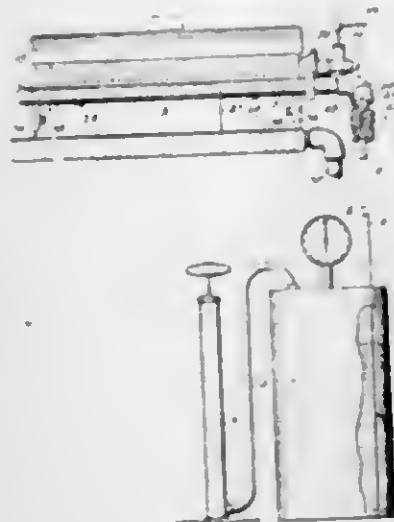


5. A file box provided with opposite movable sides, the other opposite sides being stationary, and means mounted in said box and movable longitudinally thereof for forming pockets which open in opposite directions and in the direction of the movable sides.

1,312,673. OIL-BURNER. JOHN L. BECK, Springfield, Mass. Filed Mar. 13, 1918. Serial No. 222,220. 6 Claims. (Cl. 158-69.)

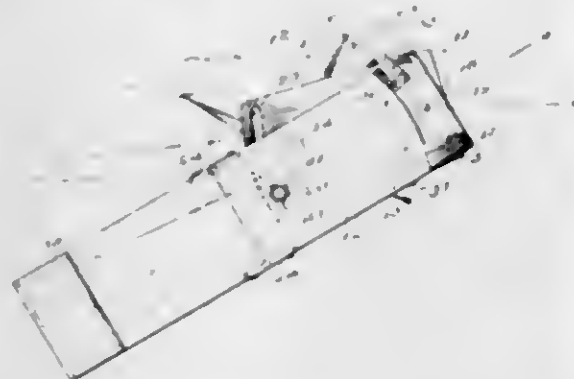
1. In an oil burner, a substantially rectangular burner member, a generator, an injector extending from the generator, into the burner member, a tunnel element carried by the burner member within the same and inclosing

the injector, said tunnel element having a flared air inlet at its outer end and also having an outlet situated at a point beyond the outlet of the injector, the latter com-



prising two tubes one longer than and surrounding the other, the two tubes being separated, and the outer tube having an air inlet.

1,312,674. CAMERA ATTACHMENT. MAX WM. BETER, Edgewater, N. J. Filed June 15, 1917. Serial No. 174,900. Renewed Jan. 8, 1919. Serial No. 270,210. 10 Claims. (Cl. 95-86.)



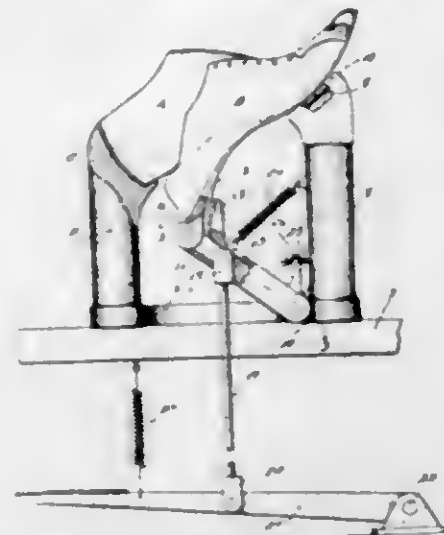
1. A device of the character described including a base plate, an intermediate plate swingingly connected thereto, and a plate swingingly connected to the intermediate plate at a point upon the arc thereof, the said last mentioned plate being adapted to receive a camera with the lens thereof arranged over the axis of the said plate.

1,312,675. STEREOSCOPIC ATTACHMENT FOR CAMERAS. MAX WM. BETER, Edgewater, N. J. Filed Oct. 23, 1917. Serial No. 198,150. Renewed Jan. 8, 1919. Serial No. 270,211. 7 Claims. (Cl. 95-86.)



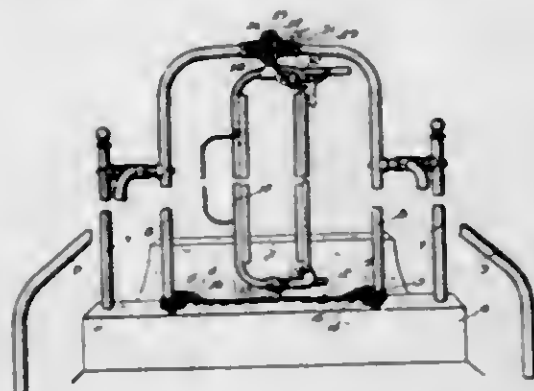
1. A device of the character described including a base plate, and means shiftably mounted upon the said plate for supporting a camera selectively focused on spaced points upon the arc of a circle having the subject as its center.

1,312,676. SHOE-RELASTING MACHINE. ROBERT W. HLATSDILL, Milwaukee, Wis., assignor of one-half to Fred J. Mayer, Milwaukee, Wis. Filed Feb. 3, 1919. Serial No. 274,727. 10 Claims. (Cl. 12-15.)



1. A relasting machine including means for affording stationary support for a last and means movable with respect to said support means and engageable with the sole of a shoe mounted on a last on said support means for drawing the shoe on the forward portion of the last.

1,312,677. STANCHION-ALIGNMENT DEVICE. FRANK H. BORDA, Horicon, Wis. Filed June 1, 1918. Serial No. 237,660. 4 Claims. (Cl. 119-150.)

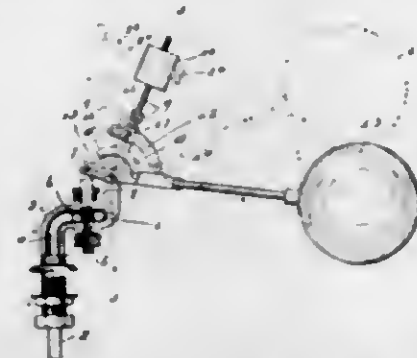


1. The combination, with a stanchion and stall uprights, of plates secured to the lower ends of said uprights and provided with spaced apart slots, members having hooked T-shaped ends insertible in any one of said slots and thereby held in interlocking engagement with said plates, and means for connecting said members to the lower portion of the stanchion.

1,312,678. FLOAT-VALVE. JAMES T. BRIEN, Hoosick Falls, N. Y., assignor of one-half to John C. Maxwell, Dayton, Ohio; Jennie A. Brien, executrix of said James T. Brien, deceased. Filed Feb. 2, 1917. Serial No. 146,246. 1 Claim. (Cl. 137-104.)

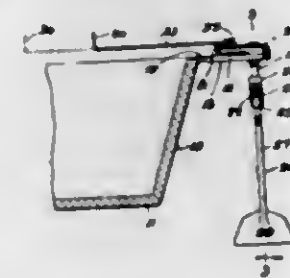
In a float valve and in combination, a valve-case provided with a passageway; a tubular valve mounted to slide longitudinally within the valve-case and provided with an opening adapted in certain positions of the valve to communicate with said passageway; a valve-operating member mounted on a horizontal axis and connected with said valve, a weight-carrying member mounted on said axis and cooperating with and having a lost motion connection with said valve-operating member; means for automatically moving said weight-carrying member in either direction past a dead-center and having a lost-

motion connection with the weight-carrying member; and a float connected with said means, said parts being so



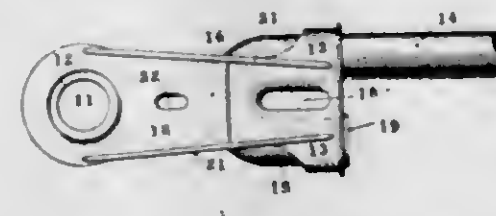
connected with one another that movement of said weight-carrying member induced by a downward movement of said float causes said valve to be opened.

1,312,679. PROPELLING MECHANISM. PAUL G. BRUNZEL, New York, N. Y. Filed Sept. 10, 1918. Serial No. 233,392. 8 Claims. (Cl. 115-21.)



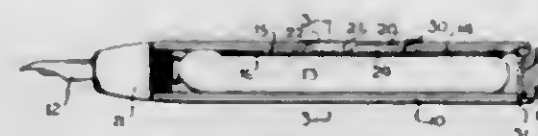
1. A propelling mechanism of the class described, comprising a propeller member, means for rotating said member, and means for giving said member a rotary oscillatory movement when rotated.

1,312,680. BRAKE-ROD JAW. STERLING H. CAMPBELL, St. Louis, Mo. Filed Jan. 20, 1919. Serial No. 272,024. 4 Claims. (Cl. 188-24.)



1. A one piece cast brake rod jaw comprising a pair of arms terminating at their inner ends in rod loops, the inner walls of the rod loops forming a rod seat, the walls of which are separated by a transverse opening.

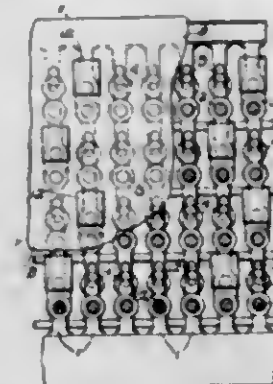
1,312,681. FOUNTAIN-PEN. WILLIAM L. CHAPMAN, Brooklyn, N. Y. Filed Dec. 22, 1917. Serial No. 208,370. 3 Claims. (Cl. 120-46.)



1. In a fountain pen of the character described, the combination of a collapsible ink sack; a barrel enclosing the sack; a lever projecting into the said barrel through a slotted opening therein, said slotted opening having

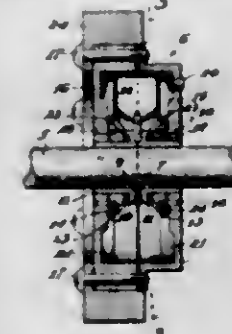
beveled end walls flaring inwardly; and a lever mounting member adapted to cooperate with said beveled end walls to resist outward pressure thereon.

1,312,682. PROCESS OF WATERPROOFING SHEET MATERIAL. ALBERT L. CLAPP, Marblehead, Mass., assignor to The Metallite Company, Amesbury, Mass., a Corporation of Delaware. Filed Dec. 20, 1915. Serial No. 67,712. 11 Claims. (Cl. 91-68.)



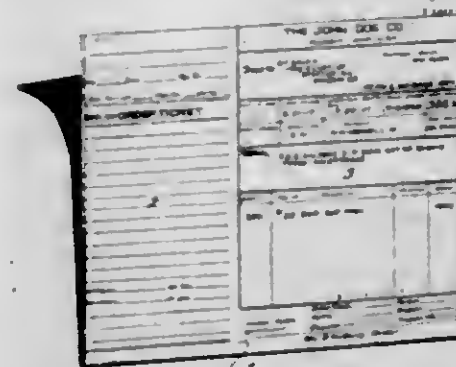
1. The process of waterproofing leather- or fiber-board which is characterized by passing the wet or moist sheet-leather- or fiber-board between successive sets of pressure members; applying the waterproofing material to said sheet intermediate the successive sets of pressure members; and simultaneously drying said sheet.

1,312,683. SELF-OILING HUB. FRANK CRAWFORD, Los Angeles, Calif. Filed Sept. 13, 1918. Serial No. 254,026. 6 Claims. (Cl. 64-26.)



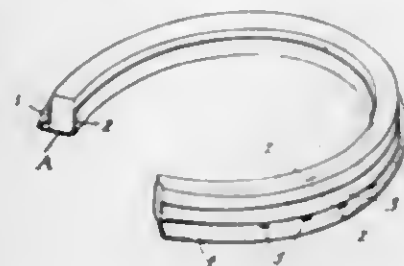
1. In a self oiling hub, a shaft, a hollow hub thereon, a pair of opposed female bearing members fixed on said shaft within the hub, and a pair of opposed truncated cone bearings on said hub extending into said female bearing members.

1,312,684. COST-RECORDING APPLIANCE. CLYDE E. DEVERA, Alliance, Ohio, assignor to The McCaskey Register Company, (Incorporated in 1914.) Alliance, Ohio, a Corporation of Ohio. Filed Sept. 4, 1917. Serial No. 189,619. 6 Claims. (Cl. 282-25.)



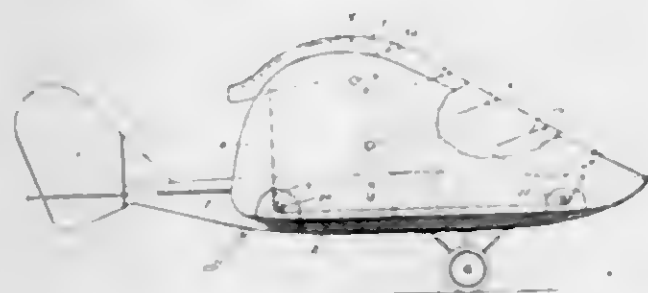
1. A cost recording envelop having a flap overlying its back, there being corresponding coupons on the flap and the back for entering successive items of cost.

1,312,655. HORSESHOE. CHARLES J. DION, Minneapolis, Minn. Filed Apr. 5, 1917. Serial No. 139,881. 2 Claims. (Cl. 168-13.)



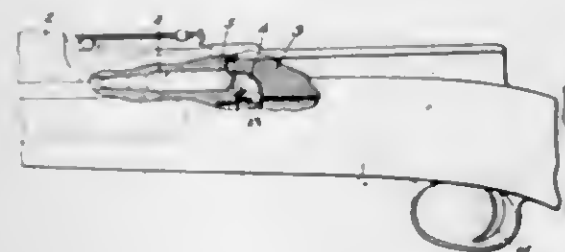
1. A horseshoe comprising a single piece of metal bent upon itself to form a top wall and downwardly projecting parallel side walls spaced apart to form an intermediate channel, the metal of the outer side wall being bent outwardly adjacent to the top wall to form a nailing flange surrounding the horseshoe, the lower wall of the nailing flange being spaced from the top wall of the shoe to form a groove surrounding the horseshoe, said groove forming a lateral extension of the main channel, and a resilient cushion fitted within the main channel, in the manner and purpose set forth.

1,312,686. AIRPLANE. LUCIUS BRADLEY DORA, Buffalo, N. Y. Filed Aug. 6, 1918. Serial No. 248,631. 12 Claims. (Cl. 244-14.)



2. In an airplane, a plurality of aerofolds arranged in upwardly receding formation, a bottom and vertical slides connecting said bottom and said aerofolds and propelling means therefor.

1,312,687. FIREARM. THEODORE H. EICKHOFF, Cleveland, Ohio, assignor, by mesne assignments, to Auto-Ordnance Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1918. Serial No. 223,657. 4 Claims. (Cl. 42-3.)



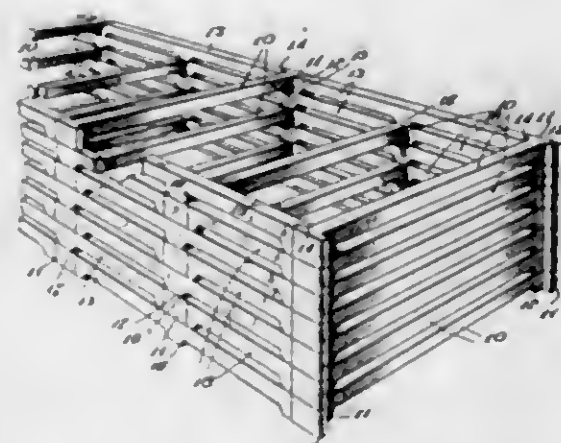
1. In a gun having a breech block mounted behind a firing chamber to move to and from the firing chamber, a combination of a firing member, and means for mounting the firing member on the breech block so that it may oscillate into and out of firing position, said means engaging the firing member in line with its center of gravity or on the side of its center of gravity opposite to the firing point of the member so that the firing member is thrown into firing position by its momentum when the breech block reaches its forward position.

1,312,688. MEASURED-SERVICE TELEPHONE SYSTEM. JOHN HATCHBOX, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1917. Serial No. 181,727. 11 Claims. (Cl. 179-11.)



1. In a telephone substation, the combination with talking instrumentalities and suitable circuits therefor, of a meter or call register, a line circuit, means for closing said line circuit when a call is made, a relay and means for including it in the line circuit, means for preventing the subscriber from calling unless said relay is so included upon the initiation of a call, means for completing the connection to a called line, means for altering the current flow in the calling line upon the response of the called subscriber to operate said relay, a circuit for said meter prepared by said relay when operated, and means for closing said circuit to operate the meter when the calling subscriber replaces his receiver.

1,312,689. REINFORCED-CONCRETE CRIBBING. ROBERT H. FORD, CHARLES P. RICHARDSON, and ALEXANDER L. GREENBAUM, Chicago, Ill., and HENRY M. PRIEST, Dayton, Ohio. Filed Feb. 24, 1919. Serial No. 278,810. 4 Claims. (Cl. 61-47.)



1. In a concrete cribbing having longitudinally disposed stretchers and transversely arranged headers, the headers having extensions at both ends thereof disposed laterally beyond two parallel sides of the headers, said extensions also depending beyond the lower surfaces of the headers, while the stretchers are provided with kerfed ends, with the kerfs arranged on the same longitudinal sides of the stretchers and of dimensions substantially similar to the dimensions of the laterally disposed extensions on the ends of the headers, whereby said kerfed ends of the stretchers are adapted to receive the lateral extensions of the headers and provide interlocking relation between the ends of the headers and stretchers.

1,312,690. SPRING-TRAP. HOLDSIDGE G. GREENE, Oneida, N. Y., assignor to Triumph Trap Co., Oneida, N. Y., a Corporation of New York. Filed Nov. 23, 1916. Serial No. 132,965. 3 Claims. (Cl. 43-23.)

1. In an animal trap of the class described, a pair of separately formed spring members, jaws swiveled in one of said spring members, a connecting member provided with an elongated slot having an offset portion, one of said spring members having an upstanding portion adapted to be received in the offset portion of said slot

and the other of said spring members having an upstanding portion adapted to be received in said slot, the first



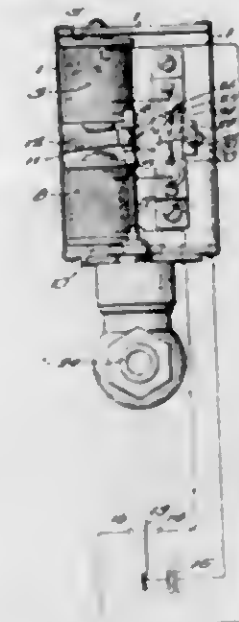
named of said spring members being provided with lateral slots and shoulders provided in said connecting member adapted to be received in said lateral slots.

1,312,691. SWITCH-STAND. STANLEY W. HAYES, Richmond, Ind. Filed Jan. 19, 1918. Serial No. 212,756. 3 Claims. (Cl. 246-404.)



1. A switch stand having a base comprising opposite spike flanges united by an upstanding roof portion and a depressed floor portion, said portions being provided with shaft bearings in vertical alignment, a target staff in said bearings, a crank sleeve secured thereon between the bearings, a lower arm on said crank sleeve adapted for connection to the operating track member, an upper arm thereon, and an operating handle pivoted on said upper arm and adapted to swing vertically with reference to said crank sleeve.

1,312,692. MOTION-TRANSMITTING APPARATUS. JOHN C. HOANUNG, Chicago, Ill. Filed Oct. 21, 1918. Serial No. 238,983. 8 Claims. (Cl. 175-281.)



1. Motion transmitting apparatus including two oppositely arranged electro-magnets; an armature between and operable by said magnets alternately; a floating oscillating block pivotally engaged upon one side with a reciprocating portion on said armature; a floating oscillating link having one end pivotally engaged with said

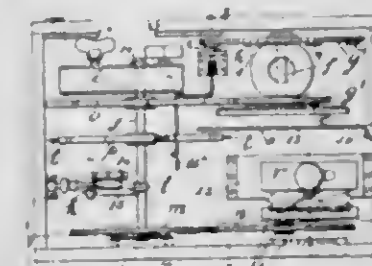
block upon a side of the block opposite the place of engagement of the block and said reciprocating portion; a spring pressing upon the other end of said link toward said block and at a place aligned with an intermediate position of said armature; and a switching device for alternately energizing said electro-magnets and including current conducting contacting portions on the link upon each side thereof and current conducting contacts between which said link oscillates and complementary to the current conducting contacting portions upon the link.

1,312,693. COUNTER ATTACHMENT. WALTER E. HOACH, St. Louis, Mo.; Annie Mae Hoach, administratrix of said Walter E. Hoach, deceased, assignor to The Measuregraph Company, St. Louis, Mo., a Corporation. Filed Aug. 16, 1917. Serial No. 186,483. Renewed Feb. 3, 1919. Serial No. 274,802. 3 Claims. (Cl. 211-12.)



3. A counter attachment for supporting a salesman's accessory, comprising the combination of a bracket, a vertically adjustable post carried by said bracket, shoes pivotally mounted on said bracket, a roller carried on the pivotal axis of each of said shoes, another roller carried by each of said shoes at a point removed from the axis of rotation of each shoe, all of said rollers constructed to engage a pair of rails attached to the counter, and means tending to rotate said shoes about their pivots and operating to hold the rollers forcibly in engagement with the rails.

1,312,694. CAMERA FOR COMPOSITE HELIOCHROMY. FRED JUDGE, Hastings, England. Filed Oct. 17, 1916. Serial No. 126,126. 5 Claims. (Cl. 95-2.)

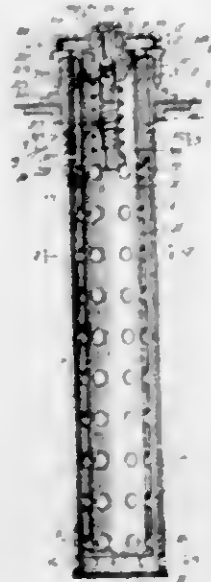


1. A camera for multiple or composite heliochromy, comprising a mandrel spindle, a face plate integral therewith, a carrier mounted thereon for a single color-sensitive surface plotted into exposure areas, lens or objective apparatus in front of said color-sensitive surface, a screen holder, means for imparting step-wise rotation to the screen holder and to the mandrel spindle, and means for controlling said rotation.

1,312,695. FILLER-TUBE AND CLOSURE THEREFOR FOR RECEPTACLES. LOUIS KASATKA, Chicago, Ill., assignor to Non-Explosive Can and Tube Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1916. Serial No. 105,390. 8 Claims. (Cl. 220-86.)

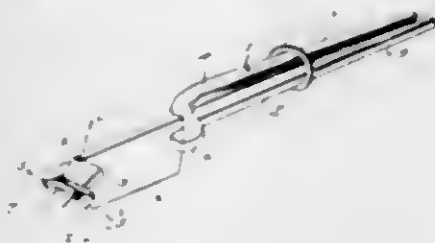
1. In a tank closure device of the kind described, the combination of a part arranged to be detachably carried by the tank at the filler opening thereof, said part forming at its top a valve seat, and with openings there-through, a valve arranged on said seat, means for maintaining said valve in place, comprising a stem extended through said part, and arranged to engage said valve, yieldable means for normally maintaining said valve in closed position, said stem provided with an opening there-through with a valve seat on the interior thereof, a

valve arranged in said stem, and arranged to permit the entrance of air through said stem from the exterior side of said cap, and prevent the escape of gas therethrough



from the inner side of the cap, and an auxiliary cap arranged over the outer end of said stem provided with openings through the side walls thereof.

1,312,696. PLOW SHARE OR LAY HOLDER. GEORGE N. KINSMAN, Alpena, S. D. Filed May 14, 1919. Serial No. 297,106. 3 Claims. (Cl. 81-3.)

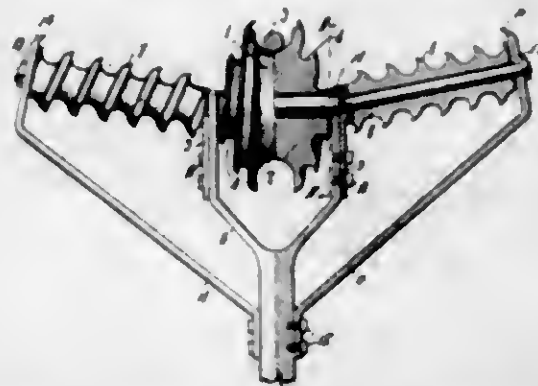


3. In a plow share holder, the combination with a jaw member provided with a right angle portion having a slot, of a second jaw member of greater length than the first jaw member and slidable through the slot, the end of the right angle portion having a lug, between which and the sliding jaw member, the rear end of the plow share may be clamped, means carried by one end of the sliding jaw member, to overlie the forward end and a portion of the land side of the share, to clamp the other end of the share in engagement with the jaw member, the clamping portion of the sliding jaw member being of a curved formation throughout its length, to the shape of which the share may conform during the process of harrowing, and means for engaging the handles of the jaw members to draw the jaw members together.

1,312,697. TROLLEY-WIRE FINDING AND REPLACING DEVICE. ARTHUR R. LANGLEY, Oakland, Cal. Filed Dec. 2, 1916. Serial No. 134,657. 1 Claim. (Cl. 191-75.)

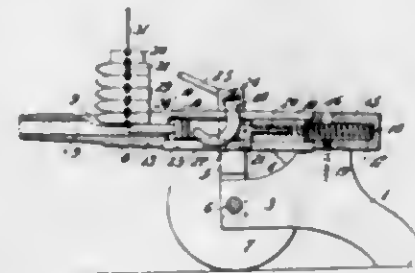
In a trolley wire fender, the combination with a base having a trolley wheel rotatably mounted therein, of a plate detachably connected to each side of the harp, the upper end of the plate being offset so as to leave a space between the upper end of the plate and side of the harp, a bracket detachably connected to each side of the harp, the upper end of each bracket being above the upper end of the plate, an inclined shaft carried by the plate and bracket on each side of the harp, and spirally grooved

rollers rotatably mounted on the shafts, one end of each roller being provided with a recess to receive the offset on



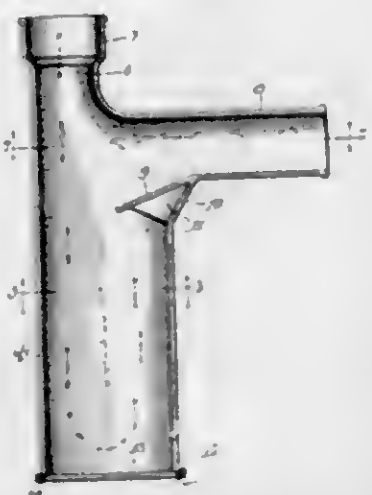
the plate and that end of the roller extending over the top of the plate and in close proximity to the upper end of the harp.

1,312,698. TOY CANNON. GEORGE C. LASAREK, Springfield, Mass. Filed Aug. 19, 1918. Serial No. 250,512. 11 Claims. (Cl. 124-13.)



2. A plunger for a toy cannon comprising a member formed with an opening therein, an angular shaped member pivotally secured to the plunger, one arm of the member serving to receive one end of a propelling spring, the other arm serving as a guide for the plunger, said plunger having a propelling end, the propelling end being chamfered for the purpose described.

1,312,699. CATCH-BASIN FOR DOWN-POUTS. GEORGE E. MCGATH, Chicago, Ill. Filed Feb. 1, 1919. Serial No. 274,485. 1 Claim. (Cl. 182-10.)



The combination with a downspout or conduit leading from the roof of a building downwardly and having an outlet portion, of a vertically elongated container inter-sectingly communicating with said spout or conduit between its inlet and outlet ends, said inlet being located in the upper end of the container near its wall and the outlet of said container being located below said inlet but also in its upper portion in the wall opposite that ad-

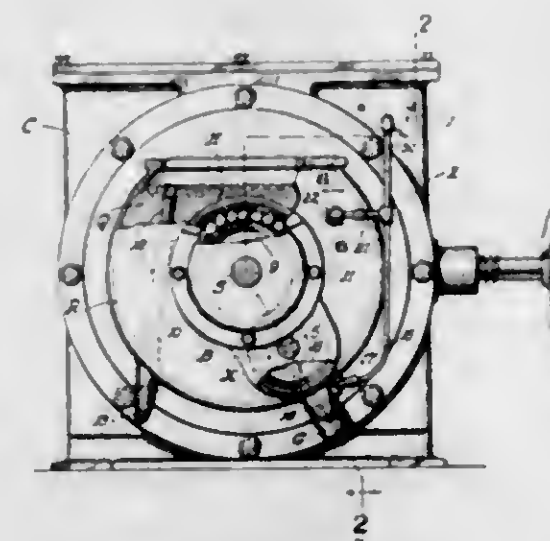
acent to the inlet, the container having an outwardly belled portion directly below said outlet forming an inwardly open chamber, a horizontally disposed baffle member extended inwardly and downwardly from the inner portion of said outlet above said chamber produced by the belled portion and having its side edges in juxtaposition with the walls of the container on each side of said outlet, the free or inner end or the edge of said baffle plate terminating short of the path of the downwardly flowing water from the inlet and said end or edge being horizontally disposed.

1,312,700. PORTABLE HOUSE. JOSEPH P. MCNEENEY, St. Louis, Mo. Filed Nov. 27, 1918. Serial No. 264,424. 9 Claims. (Cl. 108-17.)



1. A house roof composed of a number of substantially A-shaped sections detachably connected together, a relatively shallow frame member at one edge of each section extending transversely of the roof, a relatively deep frame member at the opposite edge of each section arranged parallel to the shallow frame member of said section and provided at its upper edge with a rabbet for receiving the shallow frame member of an adjacent section, and means for holding the cooperating shallow and deep frame members of adjacent sections in vertical alignment with each other.

1,312,701. LEAKAGE-RETURN FOR HYDRAULIC TRANSMISSION. WILLIAM E. MAGIE, Buffalo, N. Y., and WALTER FERRIS, Milwaukee, Wis. Filed Aug. 3, 1918. Serial No. 248,178. 21 Claims. (Cl. 60-53.)



1. In a hydraulic transmission comprising a pump, a motor, and an oil circuit connecting and including them having both high and low pressure branches, means for intercepting leakage from the high pressure system and automatically returning it to the low pressure system together with separate means for positively supplying make-up oil to the low pressure system under pressure.

1,312,702. MEASURED-SERVICE TELEPHONE SYSTEM. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 8, 1912. Serial No. 713,057. Renewed Aug. 31, 1918. Serial No. 252,258. 88 Claims. (Cl. 179-9.)



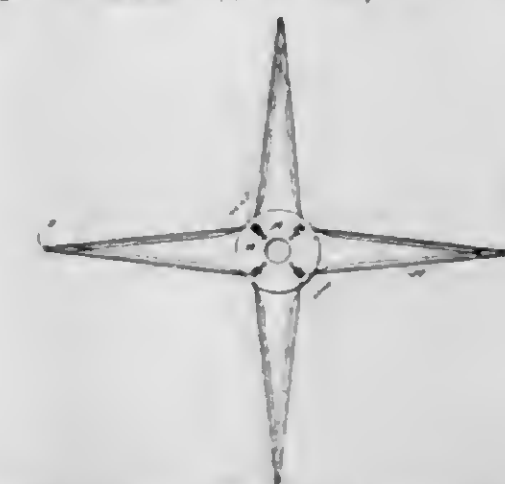
1. In a telephone system, a calling and a called subscriber's line, a manual operator's cord circuit for establishing connection with the called line, primary and secondary trunk-selecting switches for establishing connection from a calling line to said cord circuit, said secondary switches operating in response to the operation of said primary switches, a meter on said calling line, and means for automatically operating said meter upon the response of the called subscriber.

1,312,703. COMBINATION HAY AND MANURE HOOK. HENRY MATTSON and EDWARD MATTSON, Hutchinson, Minn. Filed Apr. 7, 1919. Serial No. 288,099. 2 Claims. (Cl. 55-25.)



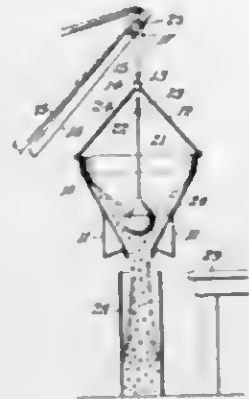
1. In combination, a bifurcated handle, a fork member formed with an outwardly extending lug extending loosely through and beyond said bifurcation, a pivot pin piercing said lug and handle, a notch in the edge of said lug above the handle and facing the latter and a sleeve screw threaded on the handle adapted to be screwed into and against the bottom of said notch and against said lug for the purpose set forth.

1,312,704. DRIVING-WHEEL. MICHAEL J. MILMOZ, Chicago, Ill., assignor to F. H. Redington Company, Chicago, Ill., a Corporation of Indiana. Original application filed June 14, 1915, Serial No. 33,898. Divided and this application filed Nov. 12, 1917. Serial No. 201,425. 15 Claims. (Cl. 74-41.)



1. A take-down star wheel for a counter, comprising thin sheet metal arms having struck-up reinforced ribs longitudinal thereof.

1,312,705. DUMPING-BUCKET. JOHN C. MITCHELL, East Orange, N. J. Filed Nov. 9, 1915, Serial No. 60,471. Renewed Jan. 9, 1919. Serial No. 270,437. 3 Claims. (Cl. 57-13.)



1. A bucket for concrete adapted to discharge its contents through the bottom, comprising a receptacle the lower portion of which has a steep downward taper and a circular opening at its apex; the interior of the said tapered portion being free of obstructions and the inner surface thereof being smooth, to permit free and unobstructed flow of the concrete downwardly to the said opening; with a closure for the opening, comprising a body having a spherical lower portion of larger diameter than the opening and having its upper part formed to shed the concrete downwardly and laterally and prevent accumulation of concrete thereon, and a member attached to the said closure at the top and extending upwardly by which the closure can be raised and lowered independently of the receptacle.

1,312,706. SELECTIVE RINGING TELEPHONE SYSTEM. MICHAEL SCHWARTZ, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1912, Serial No. 673,437. Renewed Jan. 4, 1919. Serial No. 269,656. 15 Claims. (Cl. 179-17.)

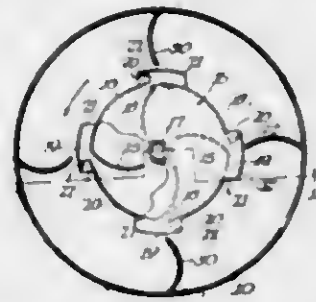


1. In a party line telephone system, a subscriber's line connector for seizing said line, means for extending connection to said connector, a plurality of ringing generators, a relay for controlling each of said generators, means for energizing one of said relays upon the completion of the connection to the connector, a ring relay, and means for energizing said relay upon seizure of the called line to apply the current from the selected generator to the called line.

1,312,707. HYDROTURBINE VACUUM PUMP. BENJAMIN SKIPMOORE, JR., Chicago, Ill. Filed Mar. 9, 1915. Serial No. 221,361. 4 Claims. (Cl. 230-14.)

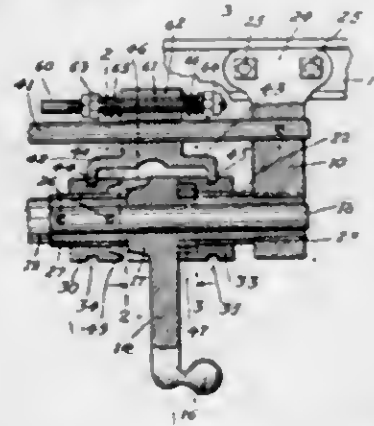
1. An apparatus of the character described embodying a submerged rotary element circular in cross section having a fluid chamber therein, said chamber being provided

with an inlet and having an outlet through the periphery of the element, a hood connected with the periphery of element and extending across said outlet, said hood embodying a conical nozzle adjacent one end of the hood, the larger portion of the nozzle being disposed adjacent the leading end of the hood and the smaller portion terminating



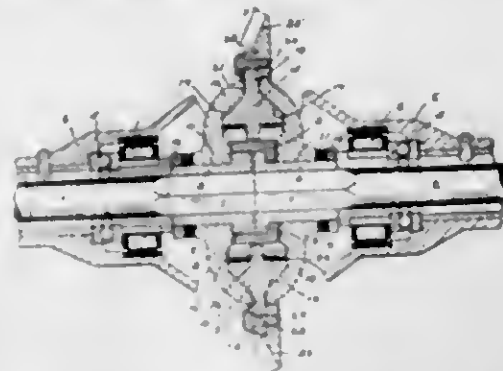
within the hood and at a considerable distance from the trailing end of the hood, whereby when the element is rotated the submerging liquid forced through the nozzle will be discharged into the hood in the form of a spray and substantially fill said hood to create a suction through the said outlet of the said element, and means for rotating the said element.

1,312,708. CLUTCH FOR STEERING-CONTROL SYSTEMS. FRANK H. STEBBINS and WILLIAM A. HOPKINS, Minneapolis, Minn., assignors to Anton Huhn, Minneapolis, Minn. Filed Aug. 13, 1917. Serial No. 185,842. 5 Claims. (Cl. 74-79.)



1. A clutch device comprising an operating member, an actuating member normally free from said operating member, a fixed member, a clutch device on the fixed member, a clutch device on the actuating member, and means to cause either of said devices to lock the operating member respectively to the fixed member or to the actuating member.

1,312,709. DIFFERENTIAL COUPLING. SYLVESTER GEORGE STEVENS, Duluth, Minn. Filed Aug. 17, 1916. Serial No. 115,486. 9 Claims. (Cl. 74-7.)



1. In combination, a two part shaft having the ends thereof abutting each other, cooperating means carried

by the abutting ends of the shaft, holding same together and permitting of independent relative action of each part, two spaced driven members one upon each part of the shaft for rotating same and a driving member intermediate of the driven members and in frictional engagement therewith.

1,312,710. CARTON AND BLANK THEREFOR. ROBERT A. TAYLOR, Cincinnati, Ohio. Filed Apr. 26, 1919. Serial No. 293,009. 7 Claims. (Cl. 206-44.)



1. A one piece carton blank comprising a section to be folded into a lid and a section to be folded into a container, said blank being scored at the union of said sections to guide said sections to a telescopic closed position and to a partially telescopic display position in which one end of the container rests upon the edge of one end of the lid.

1,312,711. SEWER-TRAP. JEAN F. VEAT, Malta, Mont., assignor to one-half to Gustav Frederick Thompson, Malta, Mont. Filed Apr. 1, 1919. Serial No. 286,689. 4 Claims. (Cl. 251-123.)



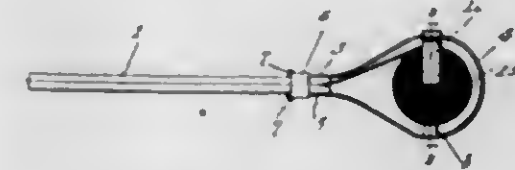
1. A sewer trap including a valve carrying plate, an arched bar at one side of said plate and attached therein for reception in one end of a sewer pipe, and means for forcing the ends of said arched bar apart for engagement with the pipe.

1,312,712. PEN-POINT. WILLIE F. WALL, San Francisco, Calif. Filed Feb. 11, 1919. Serial No. 276,421. 1 Claim. (Cl. 120-109.)



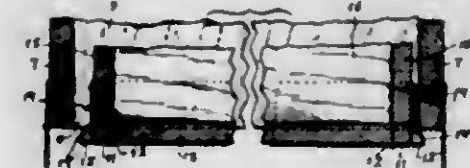
A pen having an elongated tapered point with the tip thereof turned upwardly and rounded, the terminal of said tip contacting with the upper face of the point and being narrower than the lower writing face.

1,312,713. STAMP-RECEIVER. EDWARD MASON WALSH, Madette, Wash. Filed Sept. 24, 1918. Serial No. 255,476. 5 Claims. (Cl. 211-37.)



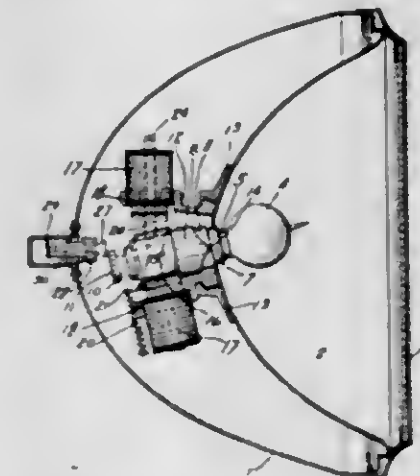
4. In a device of the class described, a loop-shaped body; a retainer extended across one end of the body and provided with an opening; and a shaft having one of its ends mounted in the opening, the other end of the shaft being provided with an angularly disposed arm carrying a clamp engaging the opposite end of the body releasably.

1,312,714. TRUNK-DRAWER CONSTRUCTION. GEORGE HENRY WHEAT, Racine, Wis. Filed Feb. 28, 1916. Serial No. 80,858. 2 Claims. (Cl. 45-7.)



1. The combination with a drawer compartment, of a drawer therefor, comprising a drawer member loosely fitting into the drawer compartment, and a separate U-shaped angular offset continuous strip of reinforcing material mounted on the front edge portions of the drawer member and extending laterally beyond the sides and the bottom of said drawer member, the offset portions engaging the opposite sides and the bottom of the drawer member and being joined to the front edge portion by curved approximately obliquely extending guide portions, the obliquely extending portions guiding the drawer to a central position within the drawer compartment and the laterally extending portions closely engaging some of the walls of the drawer compartment to maintain said drawer member in closed position.

1,312,715. HEADLIGHT. OVERTON WINSTON, Minneapolis, Minn. Filed Jan. 26, 1916. Serial No. 74,341. Renewed Jan. 3, 1918. Serial No. 210,227. 9 Claims. (Cl. 240-44.)



1. In a headlight, the combination with a casing, of a reflector supported thereby and spaced therefrom, of a lamp socket pivotally supported from said reflector and projecting into the space between said reflector and casing.

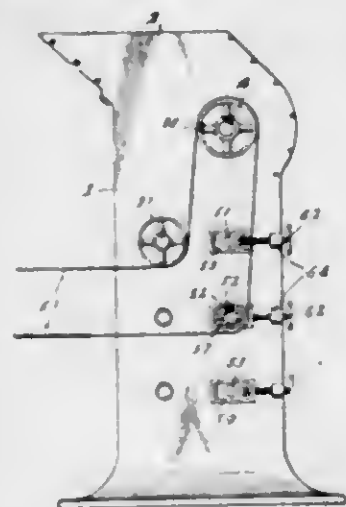
and an electro-magnet for oscillating said socket supported entirely from the back of said reflector, said magnet and the pivotal connection between said socket and reflector being unaffected by movement of said casing in respect to said reflector.

1,312,716. PROCESS FOR COATING METALS. MAXWELL M. WISE, Detroit, Mich. Filed Dec. 11, 1918. Serial No. 266,265. 4 Claims. (Cl. 91—70.1.)



1. The process of coating the surfaces of sheets of metal with zinc which consists in rolling up the sheets into cylinders or spirals with separators between the convolutions, then placing these rolled up sheets into a treating chamber with finely divided zinc packed around and between them, and then heating the sheets and zinc sufficiently to deposit the zinc in metallic state.

1,312,717. FEED-MILL. MILTON G. ZOELLER, Kansas City, Mo. Filed Dec. 23, 1918. Serial No. 267,920. 5 Claims. (Cl. 83—12.)



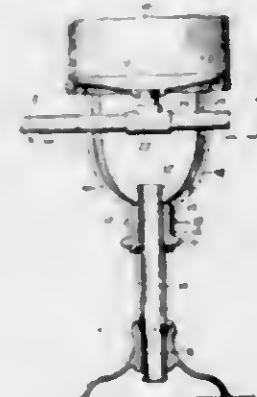
1. In a machine of the character described, a housing a hopper communicating with the upper portion of said housing to receive the material to be reduced, a rotary cutter for cutting the material received from said hopper, a pair of coarse-toothed reduction rolls arranged in the housing beneath said rotary cutter to act on the material received therefrom, a pair of smooth rolls arranged beneath said coarse-toothed rolls to crush the material received therefrom, and a pair of fine-toothed reduction rolls arranged beneath said smooth rolls to act on the material received therefrom, substantially as described.

1,312,718. GARMENT SUPPORTER. EDWARD L. ALL, Pittsburgh, Pa. Filed Oct. 3, 1917. Serial No. 194,355. 2 Claims. (Cl. 24—84.)



of the opposite end of the said wire bent back upon itself to form a pair of parallel jaws spaced slightly apart and in substantial alignment with the loop vertex, and the free end of the backwardly bent portion extended laterally at an angle to the jaws.

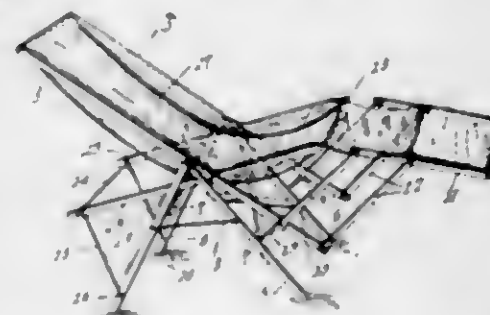
1,312,719. DOMESTIC-BOILER STAND. JAMES F. ANTHONY, Dickson City, Pa. Filed Sept. 16, 1916. Serial No. 120,541. Renewed Jan. 10, 1919. Serial No. 270,582. 2 Claims. (Cl. 248—41.)



1. An apparatus as characterized comprising a base having a central orifice; a basket-like member having an annular ring for forming a receptacle for a boiler and having a central orifice; and means connecting said base and said receptacle, said means embodying a standard having right and left screw threads to engage corresponding threads in said orifices for elevating said receptacle relatively to said base.

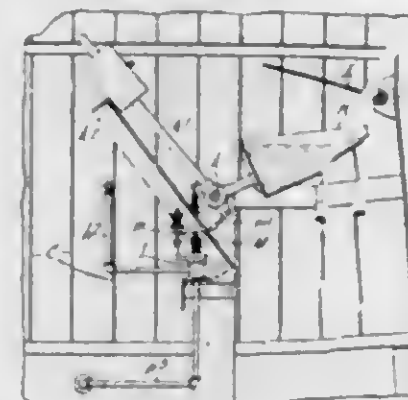
2. An apparatus as characterized comprising a base having a central screw-threaded orifice; a basket-like member having an annular ring for forming a receptacle for a boiler and having a central screw-threaded orifice; and means connecting said base and said receptacle, said means being adapted for elevating said receptacle relatively to said base, said means embodying a hollow open-ended standard having screw threads for engaging corresponding threads in said orifices.

1,312,720. CHAIR. ARTHUR B. BOSTWICK, St. Albans, Vt. Filed Nov. 12, 1918. Serial No. 262,126. 2 Claims. (Cl. 155—16.)



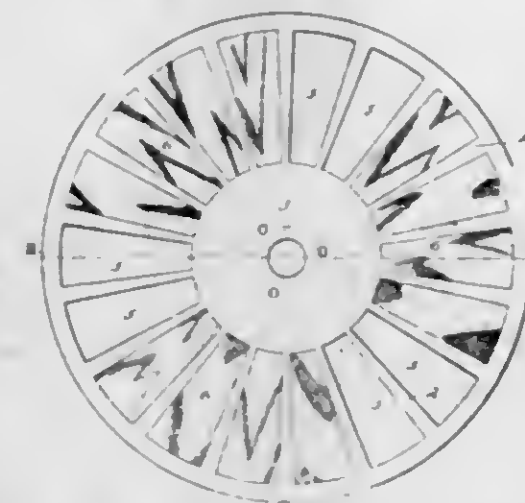
1. A chair comprising a pair of supports, a pair of legs pivoted to said supports, a pair of beams pivoted to said supports, means for limiting the movement of said beams with respect to said legs, a pair of arms pivoted to each of said supports, and a frame pivoted to said arms.

ranged to receive liquid discharged by said nozzle and to be moved by the weight of the liquid collected therein, means actuated by said pan when moved for enlarging the dis-



charge opening of said nozzle, and a pivotally adjustable shield over said pan for regulating the delivery of liquid to said pan for varying the operating periods of said pan, substantially as set forth.

1,312,722. SHUTTER FOR MOTION-PICTURE-PROJECTING MACHINES. EDWIN W. CLARK, Kansas City, Mo., assignor to Photo Motion Company, a Corporation of Missouri. Filed Oct. 6, 1915. Serial No. 54,335. 5 Claims. (Cl. 88—19.3.)

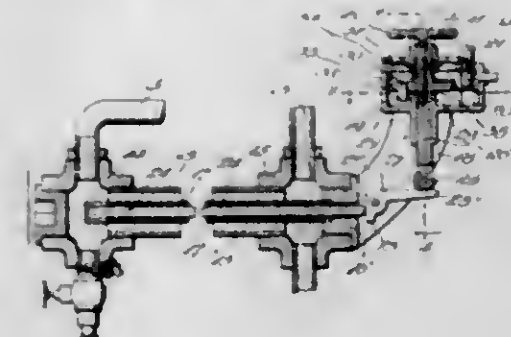


1. In a rotary shutter, open segments to allow the passage of picture-carrying rays during the period of exposure, translucent segments to intercept said picture-carrying rays during each period of movement of the pictures, and also one or more times in each period of exposure, and opaque segments extending through said open segments to intercept a portion of the light during the periods of exposure of the pictures.

1,312,723. METHOD OF TREATING PEARL BUTTONS OR BLANKS. CHARLES H. DAVIS, New York, N. Y. Filed Oct. 29, 1917. Serial No. 169,023. 1 Claim. (Cl. 41—41.)

The method of treating pearl buttons or blanks to change the coloring thereof, which consists in treating the blanks or buttons with a solution comprising water and crystallized nitrate of bismuth, to which has been added nitric acid until a clear solution results, then after the calcium carbonate of the blank has been removed by the nitric acid and replaced by the bismuth, washing the buttons free from acid and drying.

partition, a tubular guide on one end of the casing in line with the aperture of said partition and a stuffing box on the other end of said casing in line with said guide, said guide extending into said casing and having an apertured lateral lug on its inner end, a valve for the aperture of said partition having a tubular hub received slidably in the inner end of said tubular guide, the opposite end of said hub being slidably received in



said stuffing box, a thermally operated plunger slidable in the outer end of said guide, a screw threaded through said tubular hub and bearing against said plunger to adjust the movement of the valve, and a finger extending from said valve parallel with said tubular hub and received slidably in the aperture of said apertured lug, whereby to prevent rotation of said valve and hub when said screw is adjusted.

1,312,725. STEP-LADDER. JOSEPH HORMUNDAR GAGNIE, Fall River, Mass. Filed May 2, 1918. Serial No. 232,183. 1 Claim. (Cl. 228—17.)



In a step ladder of the character described comprising a main section, a pair of plates secured to the upper end of said main section, a swinging frame detachably connected to said plates, a socket formed within said swinging frame, a prop, said prop comprising two bars converging toward their upper ends and the converging end of said prop adapted to rest within said socket.

1,312,726. BODY-BOLSTER FOR RAILWAY-CARS. GEORGE H. GILMAN, St. Paul, Minn., assignor of one-half to Henry M. Robertson, St. Paul, Minn. Filed July 3, 1916. Serial No. 107,588. 3 Claims. (Cl. 105—230.)

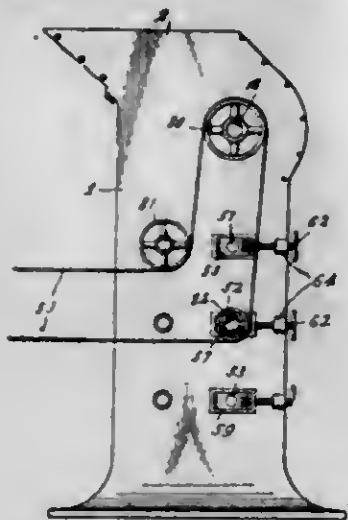
and an electro-magnet for oscillating said socket supported entirely from the back of said reflector, said magnet and the pivotal connection between said socket and reflector being unaffected by movement of said casing in respect to said reflector.

1,312,710. PROCESS FOR COATING METALS. MAXWELL M. WISE, Detroit, Mich. Filed Dec. 11, 1918. Serial No. 286,265. 4 Claims. (Cl. 91—70.1.)



1. The process of coating the surfaces of sheets of metal, with zinc which consists in rolling up the sheets into cylinders or spirals with separators between the convolutions, then placing these rolled up sheets into a treating chamber with finely divided zinc packed around and between them, and then heating the sheets and zinc sufficiently to deposit the zinc in metallic state.

1,312,717. FEED-MILL. MILTON G. ZOELLER, Kansas City, Mo. Filed Dec. 23, 1918. Serial No. 267,920. 8 Claims. (Cl. 83—12.)



1. In a machine of the character described, a housing, a hopper communicating with the upper portion of said housing to receive the material to be reduced, a rotary cutter for cutting the material received from said hopper, a pair of coarse toothed reduction rolls arranged in the housing beneath said rotary cutter to act on the material received therefrom, a pair of smooth rolls arranged beneath said coarse toothed rolls to crush the material received therefrom, and a pair of fine toothed reduction rolls arranged beneath said smooth rolls to act on the material received therefrom, substantially as described.

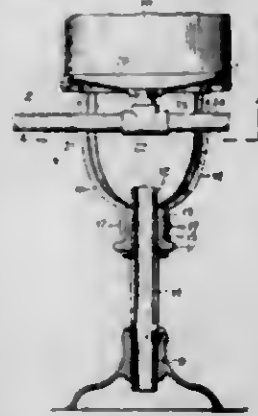
1,312,718. GARMENT-SUPPORTER. EDWARD L. ALLEN, Pittsburgh, Pa. Filed Oct. 3, 1917. Serial No. 194,518. 2 Claims. (Cl. 24—84.)



1. A clasp for garment supporters comprising a length of spring wire bent at one end to form a triangular loop, the body portion of said wire extending straight from the vertex of the loop and perpendicular to the base there-

of, the opposite end of the said wire bent back upon itself to form a pair of parallel jaws spaced slightly apart and in substantial alignment with the loop vertex, and the free end of the backwardly bent portion extended laterally at an angle to the jaws.

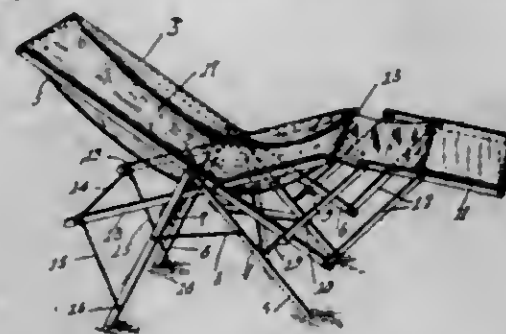
1,312,719. DOMESTIC-BOILER STAND. JAMES F. ARTHUR, Dickson City, Pa. Filed Sept. 16, 1916. Serial No. 120,541. Renewed Jan. 10, 1919. Serial No. 270,582. 2 Claims. (Cl. 248—41.)



1. An apparatus as characterized comprising a base having a central orifice; a basket-like member having an annular ring for forming a receptacle for a boiler and having a central orifice; and means connecting said base and said receptacle, said means embodying a standard having right and left screw threads to engage corresponding threads in said orifices for elevating said receptacle relatively to said base.

2. An apparatus as characterized comprising a base having a central screw-threaded orifice; a basket-like member having an annular ring for forming a receptacle for a boiler and having a central screw-threaded orifice; and means connecting said base and said receptacle, said means being adapted for elevating said receptacle relatively to said base, said means embodying a hollow open-ended standard having screw threads for engaging corresponding threads in said orifices.

1,312,720. CHAIR. ARTHUR B. BOSTWICK, St. Albans, Vt. Filed Nov. 12, 1918. Serial No. 262,126. 2 Claims. (Cl. 155—16.)

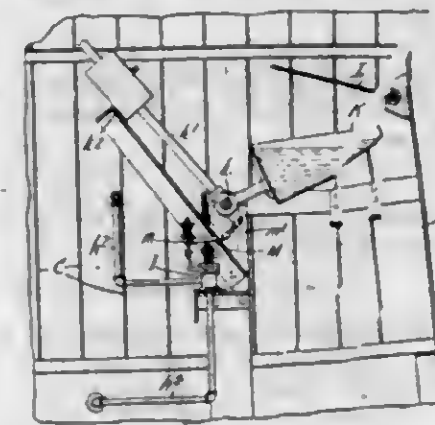


1. A chair comprising a pair of supports, a pair of legs pivotally connected to said supports, a pair of beams pivotally connected to said supports, means for limiting the movement of said beams with respect to said legs, a pair of arms pivotally connected to each of said supports, and a frame pivotally connected to said arms.

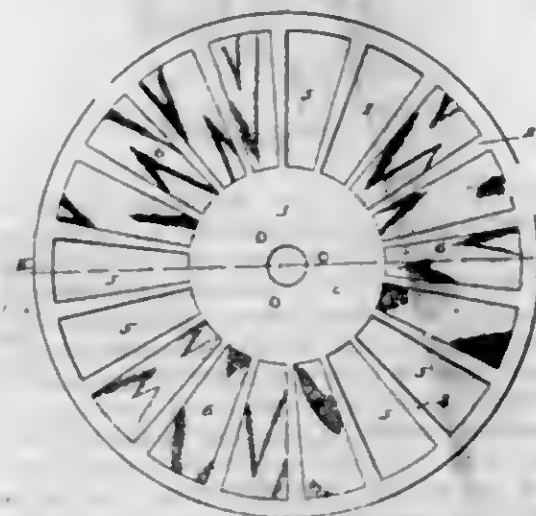
1,312,721. NOZZLE-FLUSHING MECHANISM FOR AIR AND GAS WASHERS AND THE LIKE. WILLIS H. CANNATA, Buffalo, N. Y., assignor to Buffalo Forge Company, Buffalo, N. Y. Filed Oct. 11, 1913. Serial No. 794,748. 2 Claims. (Cl. 137—58.)

2. In an air washing apparatus, the combination of a discharge nozzle for the washing liquid having a normally restricted discharge opening, a pivotally mounted pan ar-

anged to receive liquid discharged by said nozzle and to be moved by the weight of the liquid collected therein; means actuated by said pan when moved for enlarging the discharge opening of said nozzle, and a pivotally adjustable shield over said pan for regulating the delivery of liquid to said pan for varying the operating periods of said pan, substantially as set forth.



1,312,722. SHUTTER FOR MOTION-PICTURE-PROJECTING MACHINES. EDWIN W. CLARK, Kansas City, Mo., assignor to Photo Motion Company, a Corporation of Missouri. Filed Oct. 6, 1915. Serial No. 54,335. 5 Claims. (Cl. 88—19.3.)



1. In a rotary shutter, open segments to allow the passage of picture-carrying rays during the period of exposure, translucent segments to intercept said picture-carrying rays during each period of movement of the pictures, and also one or more times in each period of exposure, and opaque segments extending through said open segments to intercept a portion of the light during the periods of exposure of the pictures.

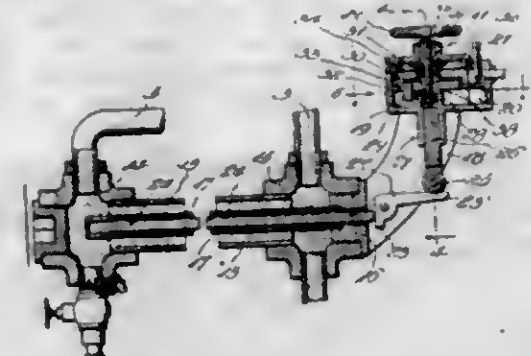
1,312,723. METHOD OF TREATING PEARL BUTTONS OR BLANKS. CHARLES R. DAVIS, New York, N. Y. Filed Oct. 29, 1917. Serial No. 199,023. 1 Claim. (Cl. 41—41.)

The method of treating pearl buttons or blanks to change the coloring thereof, which consists in treating the blanks or buttons with a solution comprising water and crystallized nitrate of bismuth, to which has been added nitric acid until a clear solution results, then after the calcium carbonate of the bark has been removed by the nitric acid and replaced by the bismuth, washing the buttons free from acid and drying.

1,312,724. AUTOMATIC WATER-HEATER. HERBERT PAYNE FISHER, Los Angeles, Calif. Filed Jan. 8, 1917. Serial No. 141,244. Renewed Feb. 11, 1919. Serial No. 276,422. 1 Claim. (Cl. 236—33.)

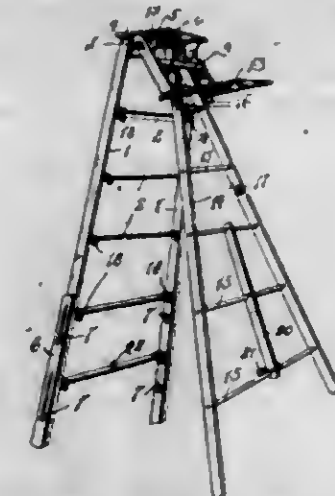
In a thermal valve, a casing having an apertured partition, supply and outlet means at opposite sides of said

partition, a tubular guide on one end of the casing in line with the aperture of said partition and a stuffing box on the other end of said casing in line with said guide, said guide extending into said casing and having an apertured lateral lug on its inner end, a valve for the aperture of said partition having a tubular hub received slidably in the inner end of said tubular guide, the opposite end of said hub being slidably received in



said stuffing box, a thermally operated plunger slidable in the outer end of said guide, a screw threaded through said tubular hub and bearing against said plunger to adjust the movement of the valve, and a finger extending from said valve parallel with said tubular hub and received slidably in the aperture of said apertured lug, whereby to prevent rotation of said valve and hub when said screw is adjusted.

1,312,725. STEP-LADDER. JOSEPH HOMMISDAR GAGNIE, Fall River, Mass. Filed May 2, 1918. Serial No. 232,183. 1 Claim. (Cl. 228—17.)



In a step ladder of the character described comprising a main section, a pair of plates secured to the upper end of said main section, a swinging frame detachably connected to said plates, a socket formed within said swinging frame, a prop, said prop comprising two bars converging toward their upper ends and the converging end of said prop adapted to rest within said socket.

1,312,726. BODY-BOLSTER FOR RAILWAY-CARS. GEORGE H. GILMAN, St. Paul, Minn., assignor of one-half to Henry M. Robertson, St. Paul, Minn. Filed July 5, 1916. Serial No. 107,588. 3 Claims. (Cl. 105—230.)

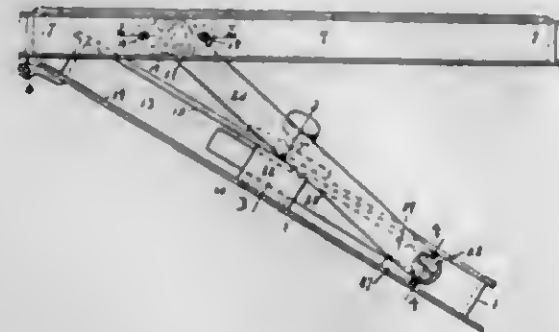


1. The combination with a car bolster having transverse roller seats, of side bearing rollers mounted in said seats for rotary and traveling movements.

2. A car body bolster provided on its under side outward of its center with transverse roller receiving pockets, and rollers in said pockets mounted to rotate and travel therein.

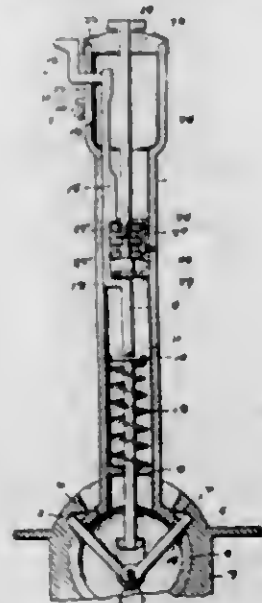
3. A car body bolster provided with side bearing rollers arranged to rotate and travel therein transversely thereof.

1,312,727. CASEMENT-WINDOW STAY. LEWIS HANSON, Walkerville, Ontario, Canada, assignor to Truscon Concrete Steel Company of Canada, Ltd., Walkerville, Ontario, Canada, a Corporation of Ontario. Filed Mar. 28, 1918. Serial No. 225,184. 5 Claims. (Cl. 189-69.)



1. In a casement window, the combination of a fixed frame and a movable frame hinged thereto, the fixed frame having inwardly extending flanges of unequal width and the movable frame having outwardly extending flanges of unequal width, all the flanges being parallel to the general plane of the window, the narrow flanges of each contacting with the wider flanges of the other.

1,312,728. TRANSMISSION-GEAR LOCK. CHARLES E. HANDING, Sioux Falls, S. D., assignor of one-third to Helen B. Lane, Sioux Falls, S. D. Filed Dec. 30, 1918. Serial No. 268,838. 3 Claims. (Cl. 70-128.)

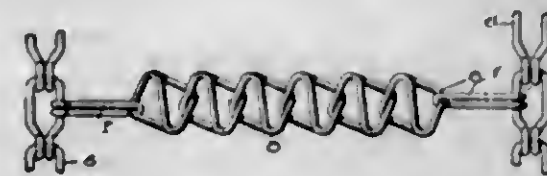


1. The combination of a tubular gear shifting lever, a bearing socket member for said lever having a locking notch, a longitudinally shiftable locking rod extending lengthwise of and within said lever, a locking pin pivotally attached to said rod and movable through a guide-way in said lever into and out of said notch, a spring acting on said rod to thrust the latter in a direction which will force the locking pin into said notch, and manually operable means for locking said rod in such position.

1,312,729. ANTISKID DEVICE. HENRY HELLER, Winona, Minn. Filed Apr. 17, 1919. Serial No. 290,804. 5 Claims. (Cl. 152-14.)

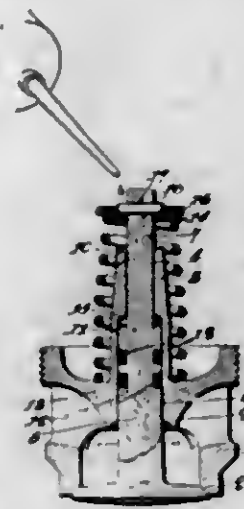
1. In an anti-skid device, in combination, a flexible member adapted to extend transversely across the tread

of the tire, said member comprising a series of links of general S-shape construction having elongated free ends



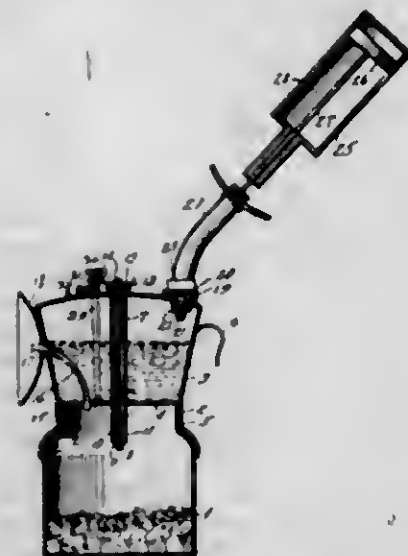
angularly disposed to the body portion of the link and diagonally to each other.

1,312,730. ENGINE-VALVE. LLOYD R. HORN, Little Rock, Ark. Filed Mar. 3, 1919. Serial No. 280,199. 1 Claim. (Cl. 123-188.)



In gas engine valves, the combination with the cage having a valve seat and a stem guide, said stem guide having a bore of a plurality of diameters, a valve cooperative with said seat and having a stem of a plurality of diameters cooperating with said guide to provide an oil pocket, the entrance to said guide having a beveled or flared mouth to constitute an oil receiver, metallic expansion packing rings carried by said valve stem, said valve stem projecting through said guide, a spring for closing said valve, and a cup washer on said valve stem against which said spring bears, said cup washer being adapted to receive lubricant and deliver the same around the valve stem, whereby it may be fed into the valve guide, substantially as shown and described.

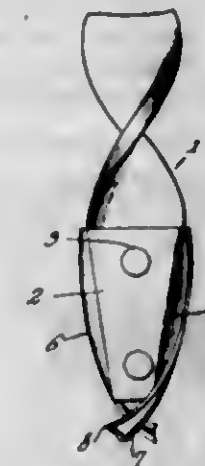
1,312,731. LAMP. SHERMAN HORSLEY, Richmond, Md. Filed Oct. 19, 1918. Serial No. 126,607. 2 Claims. (Cl. 48-4.)



2. A miner's lamp including in combination, a gas and chemical chamber, a water chamber superposed thereon, a

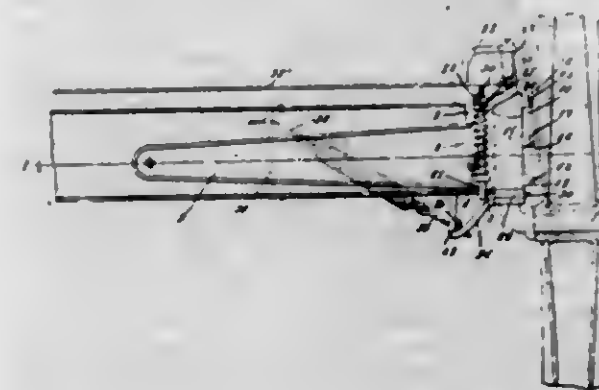
valve controlling communication therebetween to permit flow of water to the gas chamber by gravity, a tube in communication at one end with the gas chamber, and at its opposite end with the atmosphere, the latter end being laterally threaded, said tube, however, extending through the water chamber, a branch located exteriorly of the water chamber leading from said terminal of the tube back into the water chamber, a screw entering said tube to lap the end of the branch to form a valve for cutting off communication between said tube and the atmosphere, and the tube and its branch, a tube leading from the gas chamber to the exterior of the lamp, a burner at the outer end of the last-mentioned tube, and means on the lamp for securing the same to a miner's cap.

1,312,732. MINING-BIT. ISAAC HUBBELL, Peoria, Ill. Filed Nov. 20, 1917. Serial No. 204,011. 4 Claims. (Cl. 255-69.)



1. An auger having opposed bits at one end of the auger, each including an outwardly extending flange merging at one end into a cutting blade, said blade being curved transversely and extending across one side of, but spaced from the axis of rotation of the auger, the blade having a cutting edge curved from end to end and terminating at its outer end in a point movable in advance of its inner end.

1,312,733. MOTOR-VEHICLE. JOSEPH D. INGRAM, Amarillo, Tex. Filed Nov. 28, 1917. Serial No. 204,413. 3 Claims. (Cl. 21-141.)



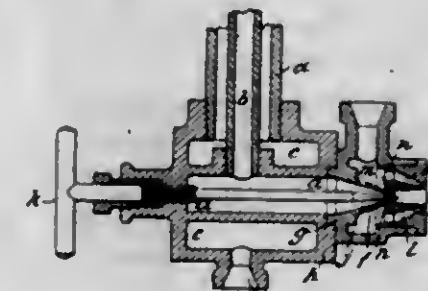
1. The combination with an axle having a projecting wing, of a split sleeve, spaced tongues extending therefrom and along opposite faces of the axle, a pivotal connection between the tongues and axle, oppositely disposed yokes slidably connected, one of said yokes straddling and extending downwardly from the tongue and the other yoke straddling the bottom of and extending upwardly from the wing, springs engaging the yokes for retarding the upward swinging of the tongues relative to the axle, a stem journaled in the sleeve, and a spindle extending from the stem.

1,312,734. FISHHOOK. JACON JONES, Ringling, Mont. assignor of one-half to Tillie Theis, Butte, Mont. Filed Mar. 15, 1919. Serial No. 282,784. 2 Claims. (Cl. 43-31.)



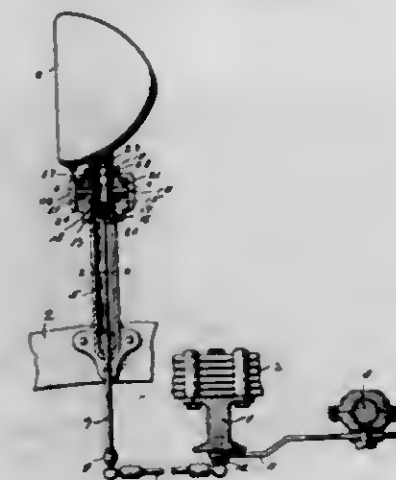
1. A device of the class described comprising a body having a socket produced in the face thereof and having an opening in an opposed face in communication with the base of the socket, an eye member including a portion disposed through the opening and provided with an enlargement arranged within the base portion of the socket, and hook members including resilient shanks extending within the socket and secured therein, said hook members being reversely directed and in crossed relation.

1,312,735. BURNER FOR LIQUID FUEL. ARTHUR KIRBY, East Greenwich, London, England. Filed Feb. 4, 1919. Serial No. 274,549. 1 Claim. (Cl. 158-75.)



A burner adapted for use in burning pitch, consisting of a pitch chamber, a steam jacket for said chamber, a nozzle leading from said chamber and located at the end of the burner, a needle valve in the nozzle, a steam chamber surrounding the nozzle, a pipe into the inner end of which the nozzle extends, and two passages leading from the said steam chamber, one extending between the nozzle and the pipe, and the other extending to the outer end of the pipe and surrounding the same.

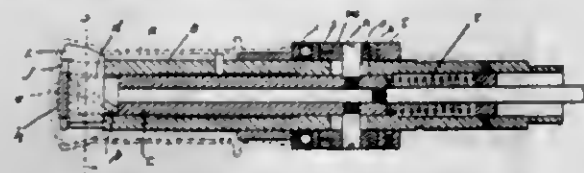
1,312,736. DIRIGIBLE HEADLIGHT. ROGER KRASNOGA and JACOME N. KRASNOGA, Lykens, Pa. Filed Apr. 12, 1919. Serial No. 289,559. 5 Claims. (Cl. 240-62.)



1. In a dirigible headlight, an upright, a fitting at the upper end of the upright, a shaft extending through the upright, a lower connecting member mounted on the fitting and connected to the shaft to turn therewith, an up-

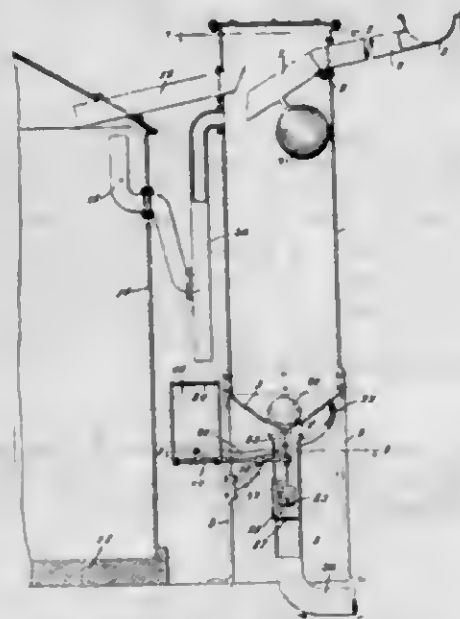
per connecting member keyed to the lower connecting member, a headlight coupled to the upper connecting member and a union coupling the upper and lower connecting members to one another and to the said fitting.

1,312,737. UNDERBORING-TOOL. HENRY R. KAUECKE, Detroit, Mich., assignor to Cadillac Tool Co., Detroit, Mich., a Corporation of Michigan. Filed July 3, 1918. Serial No. 243,097. 11 Claims. (Cl. 77—58.)



1. An under-boring tool, comprising a sleeve having a guide-way opening in the side thereof near one end, a boring bar slidable within the sleeve and supporting a key in the form of a relatively long bar having an oblique disposition with respect to the axis of the boring bar, and a blade slidable in the said guide-way and provided with an oblique key-way in the form of a groove in one side of the blade that extends clear to one edge of the blade and has an opening throat to allow the key to slide out of the end of said groove, whereby when relative movement takes place between the boring bar and the sleeve the action of the key and the oblique key-way in conjunction with the action of the guide upon the blade constrains the blade to slide in and out of the guide-way.

1,312,738. CISTERN. GEORGE MOORE LEAR, New Orleans, La. Filed Dec. 3, 1918. Serial No. 265,151. 6 Claims. (Cl. 137—9.)

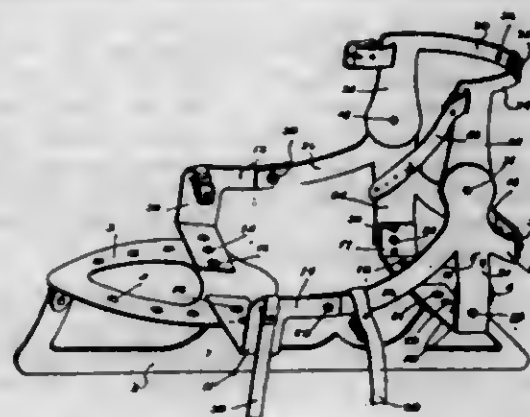


6. In a device of the class described, a tank; a cistern; a conduit leading from the tank to the cistern; a supply conduit leading to the tank; a movable member adapted to bridge the space between the conduits; a float controlling said member and responsive to changes of level in the tank; a valve controlling the outflow from the tank; mechanism for operating the valve, including a receptacle; an overflow pipe discharging into the receptacle, the overflow pipe having branches leading to the tank and to the cistern; a waste pipe whereby the tank discharges when the valve is open, the receptacle and the tank having minute bleed ports discharging into the waste pipe.

1,312,739. SKATE-FASTENER. FELIX LERLANC, St. Adolphe, Manitoba, Canada. Filed Nov. 5, 1918. Serial No. 261,293. 1 Claim. (Cl. 46—53.)

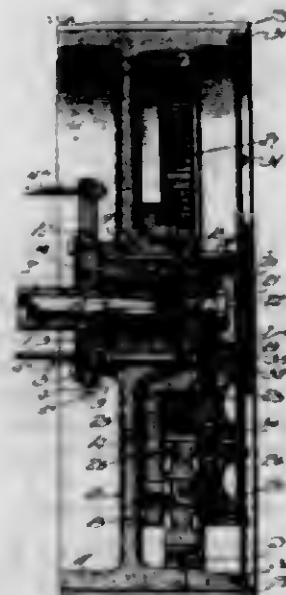
The combination with a skate, of front and rear pairs of angle plates adjustably secured to the toe and heel plates

of the skate, upstanding side plates adjustably secured to the rear angle plates and provided with forward side extensions connected to the front angle plates and with rear heel extensions adjustably secured together, upstanding



leg plates pivotally secured to the upper ends of the side plates and provided with rear extensions adjustably fastened together and adjusting straps attached to the front angle plates, the side extensions and the leg plates.

1,312,740. TRACTION-WHEEL. CLAUDE ELMORE MIDDLTON, Eagle Grove, Iowa. Filed Feb. 7, 1918. Serial No. 215,795. 4 Claims. (Cl. 74—7.)

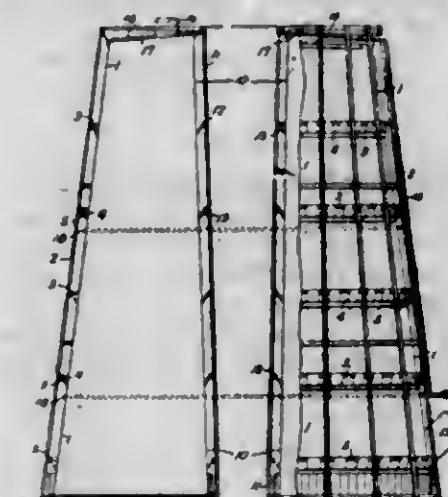


1. In combination, a vehicle axle, a casing surrounding the same, the end of the axle extending beyond the end of the casing, a sleeve secured to and projecting from the end of the casing around the end of said axle and spaced from the latter, a wheel having its hub surrounding and rotatable on said sleeve, a stationary gear train supporting arm fixed to said sleeve, a pinion having an elongated cylindrical hub formed thereon, said pinion having a central opening communicating with the bore of its hub, said hub surrounding the end of the axle and being disposed within said sleeve, a nut extending into the opening in said pinion to secure the latter to the axle, a gear ring on the wheel, and a train of gears connecting the pinion and the gear ring and mounted on said gear train supporting arm.

1,312,741. CHAMBER USED IN THE MANUFACTURE OF SULFURIC ACID. WILLIE GEORGE MILLER and CHARLES TURNER PACKARD, Ipswich, England, assignors to Edward Packard and Company, Limited, Ipswich, England. Filed July 31, 1918. Serial No. 247,572. 6 Claims. (Cl. 23—1.)

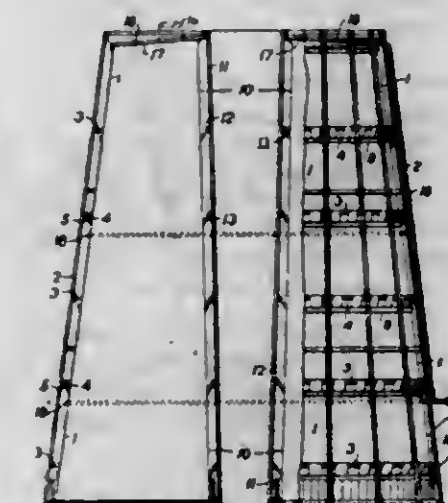
1. In apparatus for the manufacture of sulfuric acid, the combination of a chamber to which the gas to be treated is admitted, a cooling shaft within the chamber, a frame within said cooling shaft, means for supplying

water to the inside of the shaft, means supported by the frame for receiving at various elevations water supplied



to the shaft, and means for supplying a cooling agent to the outside of the chamber.

1,312,742. CHAMBER USED IN THE MANUFACTURE OF SULFURIC ACID. WILLIE GEORGE MILLER and CHARLES TURNER PACKARD, Ipswich, England, assignors to Edward Packard and Company, Limited, Ipswich, England. Original application filed July 31, 1918. Serial No. 247,572. Divided and this application filed Mar. 4, 1919. Serial No. 280,669. 2 Claims. (Cl. 23—1.)



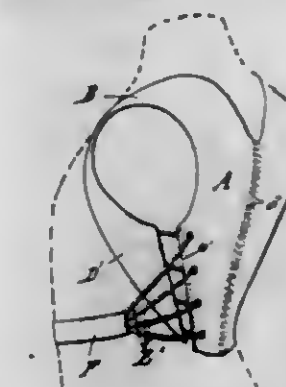
1. In apparatus for the manufacture of sulfuric acid, the combination of a chamber to which gas to be treated is admitted and which is elliptical in cross section and tapers from bottom to top, a cooling shaft within the chamber, means for causing water to flow down the outer surface of the chamber wall, and means for causing water to flow down the inner surface of the shaft.

1,312,743. METHOD FOR PREPARING SUBLIMATE. EMILE GUSTAAR MOYE, Nymegen, Netherlands. Filed Nov. 4, 1918. Serial No. 261,124. 1 Claim. (Cl. 23—13.) A method for preparing sublimate, characterized by the fact that mercury is mixed with hydrochloric acid with addition of a silicate and the mixture sublimated.

1,312,744. BODY-CONFORMER. CHARLES MUNTRE, New York, N. Y. Filed Sept. 18, 1917. Serial No. 191,940. 4 Claims. (Cl. 2—93.)

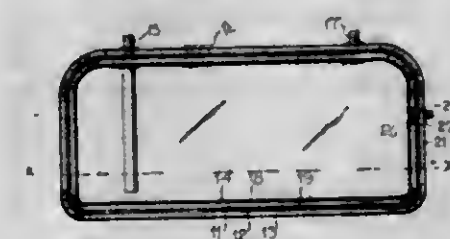
1. A body conformer or stabilizer embodying a substantially full back and extending downwardly to substantially the waist line of the wearer, shoulder pieces

extending forwardly therefrom over the shoulder and terminating in side pieces, lacings connecting the side



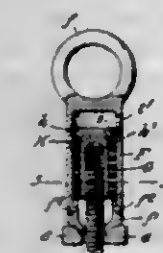
pieces with the back, and a belt adapted to be secured around the waist for tightening the lacings and causing the garment to conform to the wearer.

1,312,745. SELF-SEALING FUEL-TANK. GEORGE J. MURDOCK, Newark, N. J. Filed June 28, 1917. Serial No. 176,591. 7 Claims. (Cl. 220—88.)



1. A self puncture-sealing tank including a wall formed of a layer of material which, when perforated by a projectile, will provide a plug, and a layer of elastically expandable and contractible material which will be expanded by the passage of a projectile through it and will then contract to leave a relatively small passage into which said plug is carried by the passage of the projectile.

1,312,746. SPRING-CLAMP. ROY T. PARKER, Buffalo, N. Y. Filed Mar. 17, 1910. Serial No. 283,162. 5 Claims. (Cl. 70—82.)

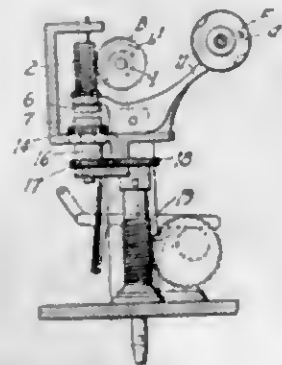


2. The combination with two parts, one of which is movable relatively to the other, and a bolt pivotally secured to one of said parts, of a clamping device including a body portion, and a spring-pressed member slidable with regard to said body portion and having a portion adapted to engage said bolt for securing said clamping device to said bolt, said clamping device being adapted to engage the other part for clamping said parts together, said spring-pressed member being adjustable relatively to said bolt to vary the action of said spring.

1,312,747. MILEAGE AND TIME INDICATOR FOR VEHICLES. RENÉ PICARD, Paris, France. Filed June 25, 1913. Serial No. 775,811. 3 Claims. (Cl. 235—44.)

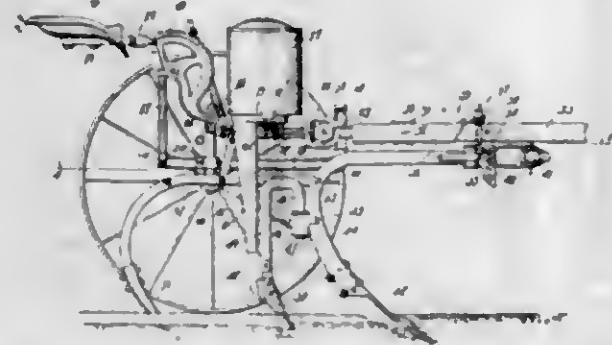
1. The combination with a device for automatically computing and recording the tariff of a hired vehicle, according to the distance traveled, rate charged, time consumed and load carried, of driving means, actuated by the movement of the vehicle, for operating the said de-

vice, means for varying the tariff rate by changing the ratio of the speed of the driving means to the driven device, comprising a series of endless screws, driven by said driving means, a series of toothed wheels each of different pitch and each adapted to be driven by one of said end-



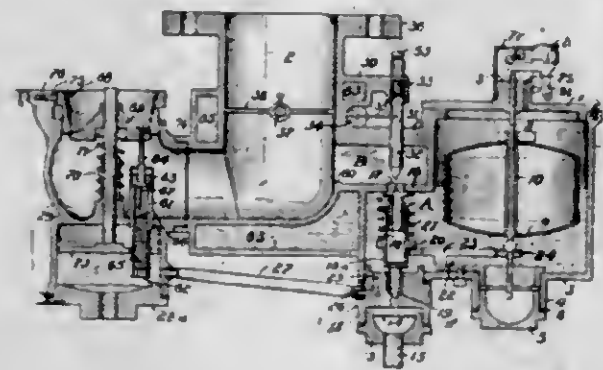
less screws and each of said toothed wheels being adapted to operate said device, and means for controlling said toothed wheels so that only one of the series may be operated whereby the ratio between the driving means and the driven device may be varied according to the rate of tariff to be charged.

1,312,748. FARM IMPLEMENT. OTTO RAUCH, New Braunfels, Tex. Filed Feb. 28, 1918. Serial No. 219,682. 5 Claims. (Cl. 97-85.)



1. In a planter, a wheel supported frame, a hopper supporting frame including parallel frame bars, an inverted arched member connecting the forward ends of said bars, means connecting the depending portions of said arched member to the wheel supported frame to permit vertical adjustment of the hopper supporting frame, planting mechanism mounted upon said hopper supporting frame, and means mounted on the wheel supported frame engaging the hopper supporting frame to adjust the same.

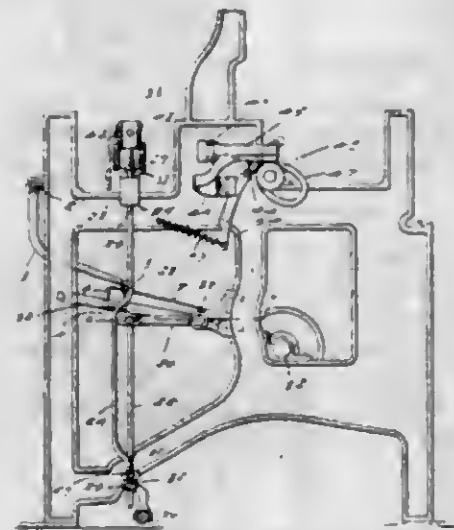
1,312,749. CARBURETER. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Findelsen & Kropf Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 10, 1914, Serial No. 832,158. Divided and this application filed Apr. 16, 1914. Serial No. 832,159. 6 Claims. (Cl. 261-41.)



6. In a device of the class described a carbureter having a mixing chamber open at its upper end and closed

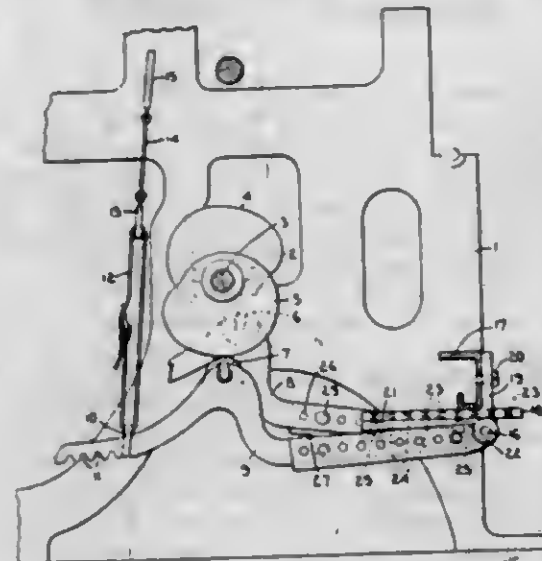
at its lower end, an air inlet passage communicating laterally in the lower end thereof, a fuel supply valve mounted in said passage, and an automatic air inlet valve offset therefrom and disposed thereabove to control the flow of air through said air inlet passage and to open said fuel valve different proportionate amounts in accordance with the adjustment of said air valve into open position.

1,312,750. BOBBIN OR QUILL CLEANING ATTACHMENT FOR LOOMS. GEORGE H. REDMOND, DAVID R. HARRIMAN, Jr., and OLIVER L. RICHARDSON, Griffin, Ga.; said Harriman assignor of his right to The Terrell Machine Company, Charlotte, N. C., a Corporation of North Carolina. Filed Feb. 14, 1917, Serial No. 148,500. Renewed July 29, 1918. Serial No. 247,315. 20 Claims. (Cl. 130-85.)



1. A bobbin or quill cleaning attachment for looms including a stripping device, means for moving the same in position to receive the quill or bobbin as the same is forced out of the shuttle by a full bobbin, and means for imparting relative movement to the stripper and the quill or bobbin for cleaning the unused yarn or material from the bobbin.

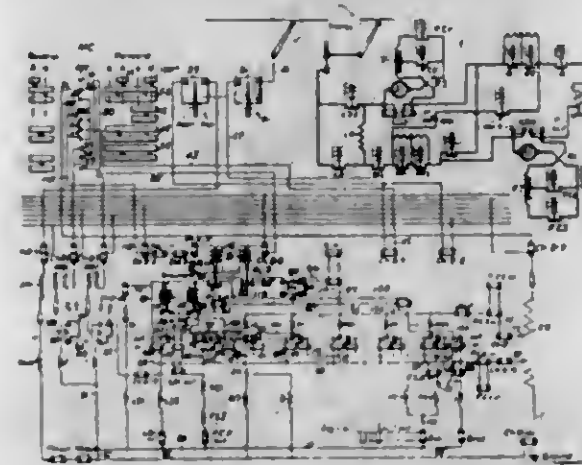
1,312,751. HARNESS-MOTION FOR LOOMS. ALONZO E. ITHOANDA, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 3, 1919. Serial No. 274,615. 6 Claims. (Cl. 139-78.)



1. A harness motion for looms comprising a lever connected to the harness frame and fulcrumed on the loom frame; a cam for rocking the lever on its fulcrum to shift the harness frame; and means for adjusting the fulcrum toward and from the cam, while maintaining

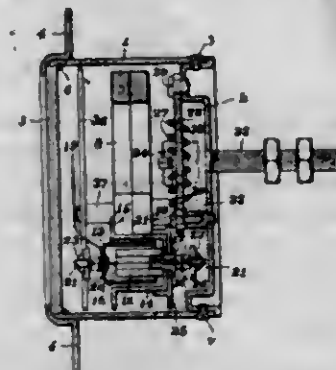
the distance between the cam and the point of connection of the lever to the harness frame, whereby the throw of the lever at its point of connection to the harness frame and consequently the shed opening is adjusted.

1,312,752. SYSTEM OF CONTROL. LYNN G. RILEY, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 6, 1915. Serial No. 26,306. 16 Claims. (Cl. 172-179.)



1. In a system of control, the combination with an electric motor, a plurality of controlling switches therefor, a main supply circuit, and an auxiliary governing system for said switches, of a plurality of sources of energy for said auxiliary system, said sources of energy comprising a storage battery and an electromotive force derived from said supply circuit, and means adapted to occupy a plurality of positions for respectively adapting the auxiliary system for energization from the said sources.

1,312,753. ELECTRICAL MEASURING INSTRUMENT. FRANK W. ROLLEN, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Dec. 15, 1914. Serial No. 877,282. 1 Claim. (Cl. 171-95.)

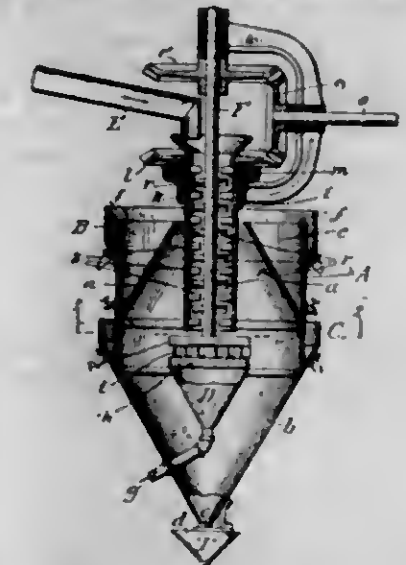


An electrical instrument comprising a permanent magnet, an iron core between the poles of said magnet, a cylindrical dampening element between said core and the poles of said magnet, a shaft supporting said element and passing through said core, a stationary winding, an armature carried by said shaft and affected by the field of said magnet and of said winding, and means clamping the poles of said magnet for supporting said core and said shaft.

1,312,754. APPARATUS FOR SEPARATING ORE BY FLOTATION. LEWIS G. ROWAND, Brooklyn, N. Y., assignor to New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 9, 1914. Serial No. 830,683. 13 Claims. (Cl. 83-85.)

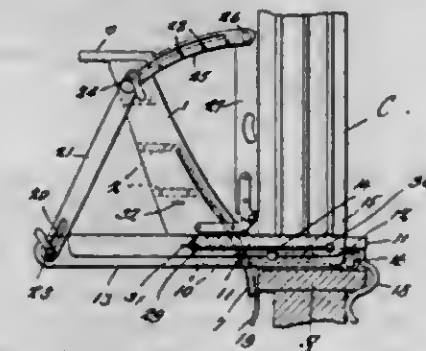
1. Flotation apparatus comprising a receptacle for water, a feed tube provided with pressure mechanism for forcing below the surface of the water and into the main

body thereof finely divided ore mixed with flotation emulsion, a porous member below the discharge opening of the tube, means for forcing a multitude of air or



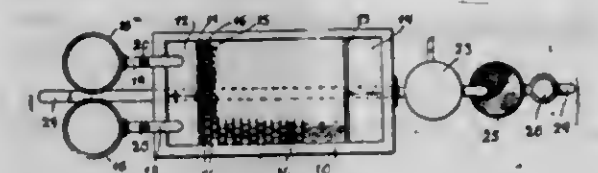
gas bubbles through the porous member, and a barrier consisting of a hallow frustum of a cone interposed in the upward rise of the particles raised by the bubbles; substantially as described.

1,312,755. WINDOW-SCAFFOLD. AUGUST H. SASS, Milwaukee, Wis. Filed Mar. 5, 1919. Serial No. 280,793. 4 Claims. (Cl. 20-87.)



1. The combination with a section including steps, and a platform section, of means slidably engaging the step section for securing said step section to the platform section and for engaging one face of a platform supporting structure.

1,312,756. ELECTROLYZER. JORDAN H. STOVER, Nutley, N. J. Filed Jan. 12, 1917. Serial No. 141,929. 4 Claims. (Cl. 204-5.)

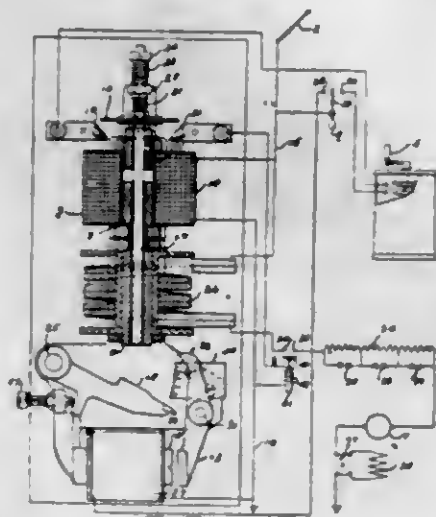


1. An apparatus of the kind described comprising a bank of electrodes arranged in rows, the rows being separated from each other by insulation for a part of the length of the electrodes, the electrodes of each row being also in close relation but independent of each other, and electric connections for the end rows of the bank.

2. An apparatus of the kind described comprising a bank of electrodes arranged in parallel relation and in rows, with the rows separated from each other by insulation for a part of the length of the electrodes, the electrodes of each row being independent but in close relation, and the electrodes of adjacent rows being in staggered relation, and electrical connections for the end rows of the bank.

3. In an apparatus of the kind described, the electrolyzer comprising a tank, a bank of electrodes arranged within the tank in close parallel relation and in rows, the rows being also in close relation but separated from each other for a part of the length of the electrodes by insulation, the electrodes of adjacent rows being in staggered relation, and the electrodes of each row being independent but in close relation, electric connections for the end rows of electrodes, and means for causing a flow of electrolyte through the tank and through the said bank of electrodes.

1,312,757. RELAY. WALTER H. SMITH, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1917. Serial No. 174,434. 7 Claims. (Cl. 175-294.)



1. A relay for an electric circuit comprising two relatively movable magnetizable members, a potential winding for actuating one of the members under predetermined normal conditions in the circuit, a current winding for actuating the other movable member when an overload traverses the circuit, and means actuated by the second movable member for opposing the operation of the other movable member.

1,312,758. SHEET MATERIAL FOR INNERSOLES. GEORGE A. SPEAR, Medford, Mass., assignor, by mesne assignments, to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1917. Serial No. 153,805. 1 Claim. (Cl. 154-46.)

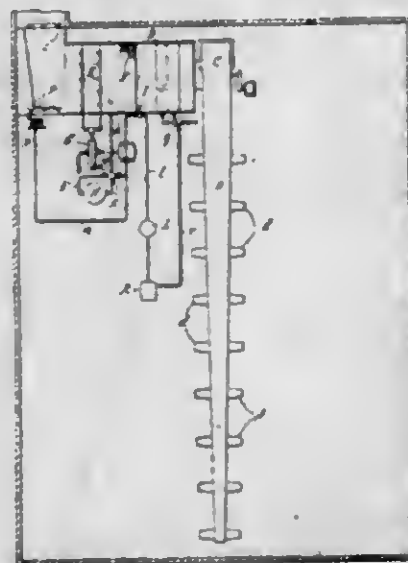


Sheet material for innersoles for shoes composed of a compressed sheet of tar or asphalt saturated felt, a sheet of heavily napped fabric cemented to one surface of said sheet of felt with the nap face out, and a sheet of woven fabric cemented to the other surface of said sheet of felt.

1,312,759. METHOD OF DRYING MATERIAL. ALFRED E. STACEY, Jr., Chicago, Ill., assignor to Carrier Engineering Corporation, New York, N. Y. Filed Sept. 8, 1917. Serial No. 190,060. 7 Claims. (Cl. 34-24.)

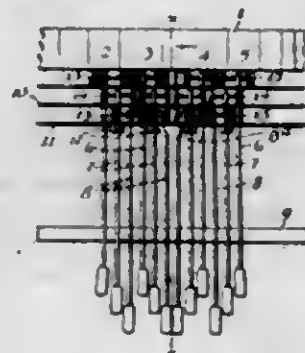
1. The heretodescribed method of drying material, which consists in supplying to the room containing the material air having a definite dew point lower than the dew point in said room, continuing the supply of such air until the dew point of the air in the room is reduced approximately to said definite dew point of the air sup-

plied to the room, then causing a change in the relation between the temperature of the room and the dew point of the air supplied to the room and continuing this rela-



tion until the dew point of the air in the room is again reduced approximately to the dew point of the air supplied to the room.

1,312,760. TYPE-WRITING MACHINE. FRANK W. STAHL, Denver, Colo. Continuation of application Serial No. 879,842, filed Dec. 31, 1914. This application filed Jan. 24, 1917. Serial No. 144,154. 11 Claims. (Cl. 197-41.)



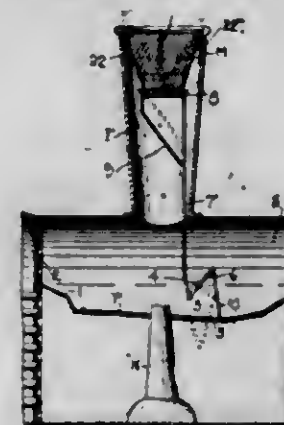
1. In a typewriting machine, in combination, a segmental support; a set of three or more hangers arranged in alignment at an angle to said support; means for securing the hangers to the said support; a type-bar pivotally mounted in each of the hangers; and said hangers having their type-bar supporting ends arranged in staggered relation, so as to support the type-bars in substantially parallel planes.

1,312,761. SPARK-ARRESTER. JOSEPH E. STARNES, Live Oak, Fla. Filed Aug. 15, 1917. Serial No. 186,400. Renewed Jan. 25, 1919. Serial No. 273,173. 8 Claims. (Cl. 183-62.)

1. In combination with a smoke box having a flue in communication therewith, a perforate partition intersecting the smoke box and provided with a swinging section, a tubular member in the form of an inverted truncated cone extending within the outer end portion of the stack and having its opposite ends open, the walls of said member being perforate, and means co-acting with the member and the swinging section of the partition for moving the member outwardly of the stack when the swinging member is adjusted into open position.

2. In combination with a smoke box having a flue in communication therewith, a perforate tubular member extending within said flue and in the form of an inverted truncated cone, and pressure operated means for reciprocating the member longitudinally of the flue.

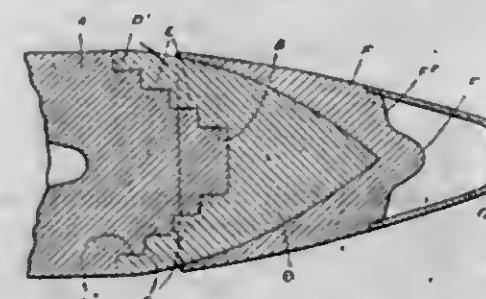
4. In combination with a smoke box having a flue in communication therewith, a tubular member extending within said flue and in the form of an inverted truncated cone, means for imparting movement to said member longitudinally of the flue, and arms depending from the outer marginal portion of the member and having sliding contact with the inner wall of the flue to afford guiding means for the member in its movement, said arms being independent of the means for moving the member.



6. In combination with a smoke stack having a flue in communication therewith, a perforate tubular member extending within the flue through the outer end thereof, said flue being in the form of an inverted truncated cone and open at opposite ends, a rod engaged with the inner end of the tubular member and extending through the stack into the smoke box, a shaft intersecting the smoke box, and extending exteriorly thereof, a rock arm carried by the shaft and operatively connected with the lower end of the rod, and expansion means co-acting with the extended portion of the shaft for intermittently rocking the same for moving the tubular member toward and from the outer end of the flue.

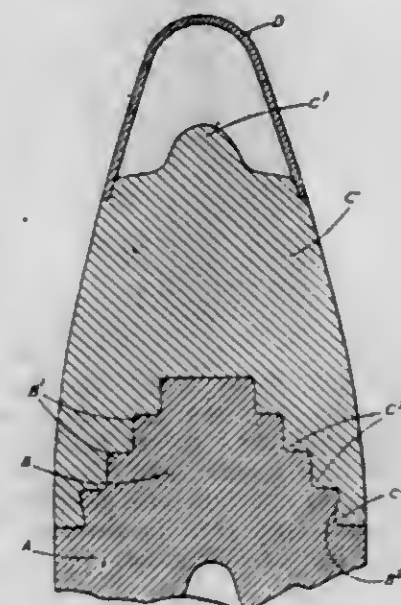
8. In combination with a smoke box and a steam chest of an engine, a tubular member extending within said flue and in the form of an inverted truncated cone, a rock shaft, an operative connection between the rock shaft and the member for moving said member longitudinally of the flue, a piston within the cylinder and operatively connected with the rock shaft, a communication between the steam chest and the cylinder for imparting movement to the piston in one direction, and automatic means for imparting movement to the piston in the opposite direction.

1,312,762. PROJECTILE. HARRY BLAND STRANG, London, England, assignor to Thos. Firth and Sons Limited, Sheffield, England. Filed Apr. 16, 1919. Serial No. 290,462. 3 Claims. (Cl. 102-28.)



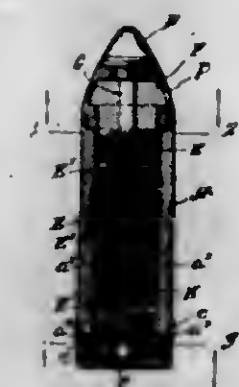
1. In an armor piercing projectile the combination of a body formed throughout of steel having homogeneous physical characteristics and provided with a solid projecting fore part which is formed with a series of forwardly directed resistant surfaces of pronounced dimensions, a hardened and tempered steel head having its rear part hollowed and shaped so that it will fit on to and engage the projecting fore part of the body, a cap which is hardened and mounted on the fore end of the head, and a hollow nose covering the face of the cap as set forth.

1,312,763. PROJECTILE. HARRY BLAND STRANG, London, England, assignor to Thos. Firth and Sons Limited, Sheffield, England. Filed Apr. 21, 1919. Serial No. 291,456. 2 Claims. (Cl. 102-28.)



1. In an armor piercing projectile the combination of a body formed throughout of steel having homogeneous physical characteristics and provided with a solid projecting fore part, a series of separate but angularly disposed alternating projections and recesses all of relatively substantial dimensions formed and positioned along the length of the projecting fore part of the body so as to present resistant surfaces toward the front of the projectile, a hardened and tempered steel cap head having a fore end which is shaped and constructed in the manner customary with a separate cap while the rear part of this cap head is hollowed and shaped internally so that it will fit on to the projecting fore part of the body and engage the projections and recesses thereon the structure of this cap head being such that it combines in itself the characteristics and properties of a head for the projectile and also a cap, and a hollow nose covering the face of the cap head as set forth.

1,312,764. ANTI-AIRCRAFT PROJECTILE. OSCAR I. STRAUB, U. S. Army. Filed Oct. 5, 1917. Serial No. 194,952. 5 Claims. (Cl. 102-29.)



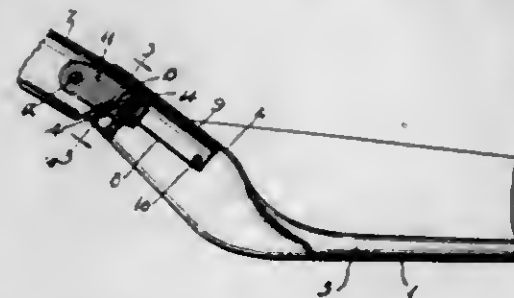
1. A projectile of the character described, comprising a cylindrical shell provided with a series of weakening grooves symmetrically disposed, and a base and nose cap closing the ends of said shell, a series of wire coils each coil having its ends connected to opposite sides of said shell, and said wires being wound from their centers in reverse directions, and a bursting charge for said shell, substantially as described.

1,312,765. PROJECTILE. OSCAR I. STRAUB, U. S. ARMY. Filed Dec. 26, 1917. Serial No. 208,873. 30 Claims. (Cl. 102-29.)



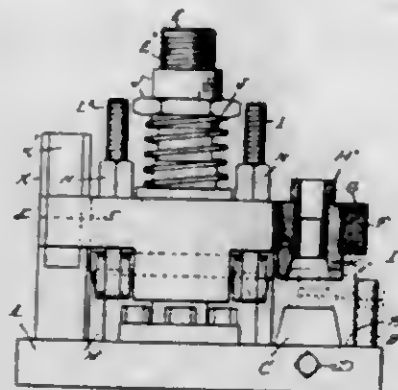
1. A projectile comprising a base member and a cap, with a spindle connecting the two, thus constituting a spool, means for imparting a rotary motion to said spool about the axis of said spindle, and a coil of wire wound from the end of said spool in one direction toward the center of said spool, and then in reversed direction toward the opposite end of said spool.

1,312,766. SHOVEL, SCOOP, &c. JOHN S. SURRAUGH, Vincennes, Ind. Filed Mar. 7, 1918. Serial No. 220,934. 23 Claims. (Cl. 287-26.)



1. A tool embodying a blade having a roll with a seat thereunder connected rigidly with both sides of the roll, a handle member to enter freely between said roll and seat, and means operable after the handle member is moved between said roll and seat for clamping said handle member therebetween and operable for releasing the handle member for withdrawal.

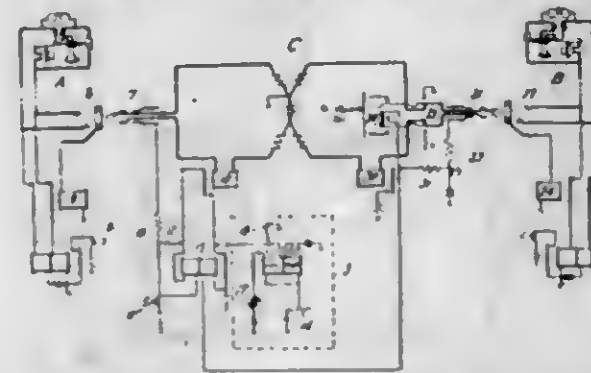
1,312,767. ADJUSTABLE DRILL-JIG. GUY E. SWARTZ, Detroit, Mich. Filed Aug. 6, 1917. Serial No. 184,720. 3 Claims. (Cl. 77-62.)



1. A combined adjustable and universal jig having a stationary member, a clamping movable clamping member, a post projecting from the stationary member and forming a guide for the clamping member, a spring coiled upon said post bearing at one end upon the clamping member to press the same toward the stationary member, an ad-

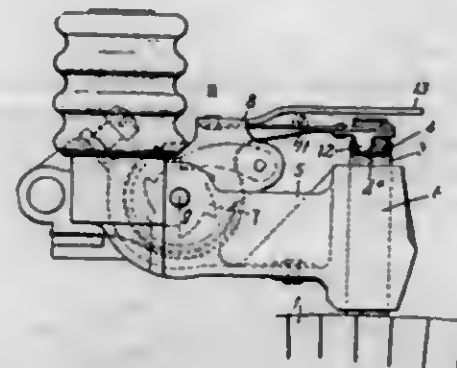
justing nut engaging a threaded portion of the post forming an abutment for the other end of said spring, and lever mechanism for adjusting the movable clamping member away from the work against the tension of the spring.

1,312,768. TELEPHONE-EXCHANGE SYSTEM. DAVIDSON M. TAGGART, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1917. Serial No. 202,515. 7 Claims. (Cl. 170-73.)



1. A telephone exchange system comprising telephone lines, a plurality of link circuits for interconnecting the lines, one of which is connected with one of the lines, a supervisory relay and a signaling device in the engaged link circuit, a signal device common to the link circuits, means controlled by the supervisory relay and rendered effective upon the opening and subsequent closure of the engaged line to cause the operation of the common signaling device, a normally ineffective energizing circuit for the signaling device individual to the engaged link circuit, and a switch actuated subsequent to the operation of the common signaling device for rendering the energizing circuit effective for energizing the individual signaling device.

1,312,769. BRUSH-HOLDING DEVICE. LAWRENCE W. TURNBULL, Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 15, 1914. Serial No. 861,804. 7 Claims. (Cl. 200-24.)

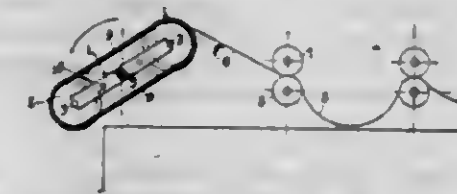


5. The combination with a brush-holding device, and a brush slidably disposed therein, of a spring actuated arm having one end pivotally mounted on said device for biasing said brush to a predetermined position, and a box-like member comprising a substantially flat surface loosely bearing upon said brush and upwardly extending portions partially bounding said surface and partially enclosing the free end of said arm.

1,312,770. METHOD OF PRODUCING ENDLESS ELASTIC BANDS. ARCHIBALD TURNER and HUGH JAMES TURNER, Leicester, England. Filed Oct. 12, 1916. Serial No. 125,812. 1 Claim. (Cl. 28-2.)

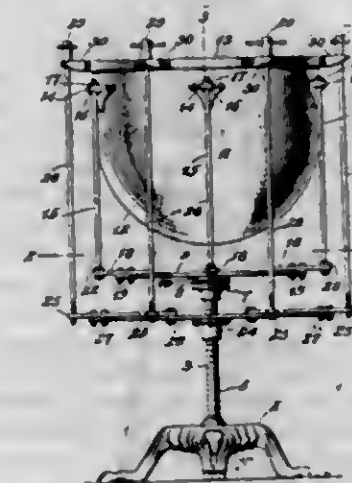
The method of producing an endless elastic band of the kind herein described, which consists in first forming

an endless uniformly tensioned elastic core by winding under tension a cord of elastic thread into a multiplicity of coils, joining the ends of the elastic cord, transferring



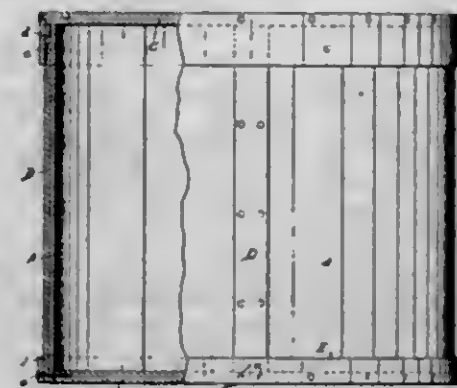
said core while maintained under tension to a covering device, maintaining the core under tension in said device and covering the same with a binding medium of textile threads.

1,312,771. DRUMHEAD-TIGHTENER. JOHN VOGELER, New York, N. Y. Filed May 13, 1919. Serial No. 290,745. 10 Claims. (Cl. 84-36.)



7. In a tympanum, a supporting screw, a plate rotatably mounted upon the upper end of said screw, a kettle having a flesh hoop, rods connected at one of their ends to the kettle, adjustable means on said plate to which the other ends of said rods are connected to support the kettle above and in spaced relation to the plate, a part threaded on the screw for movement longitudinally thereof, a plurality of straining elements connected to the flesh hoop, and adjustable means carried by said part and to which said elements are connected whereby said part and the kettle are rotatable in unison and the flesh hoop moved longitudinally with said part to thereby tension the drum head.

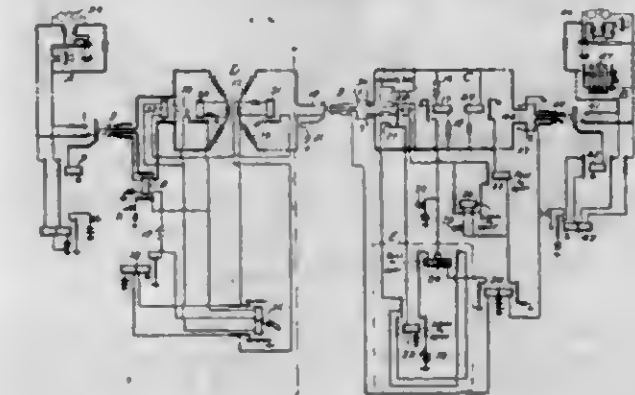
1,312,772. CHEESE-BOX. JOHN HAMMON WHEELER, Plymouth, Wis. Filed Mar. 31, 1919. Serial No. 280,413. 1 Claim. (Cl. 217-1.)



A container for transporting cheese, which container comprises a bottom and a hoop, the latter formed from a thin sheet of wood with ends overlapping, the grain of the wood extending circumferentially of the hoop, a series of spaced vertical reinforcing strips attached to

the hoop, and to the bottom of the container, such reinforcing strips being tapered at their upper ends, and a cover for the container held in place by frictional engagement with the tapered ends of the vertical reinforcing strip.

1,312,773. TELEPHONE-EXCHANGE SYSTEM. RAY S. WILATA, Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1917. Serial No. 193,097. 8 Claims. (Cl. 170-41.)



1. A telephone exchange system comprising telephone lines, a link circuit for interconnecting the lines, a supervisory relay in the link circuit responsive to the opening and closure of a telephone line, a local relay energized over a circuit independent of the supervisory relay upon connection of the link circuit with one of the lines and deenergized upon response of the supervisory relay when the line is opened, a relay energized upon the deenergization of the local relay, a signaling device, and interrupter mechanism brought into circuit with the signaling device by the subsequent energization of the local relay upon the closure of the line.

1,312,774. COLLAPSIBLE BACK-REST. HARRY R. BARRETT, Philadelphia, Pa., assignor of one-half to Walter Bramwell, Philadelphia, Pa. Filed May 14, 1919. Serial No. 297,023. 2 Claims. (Cl. 155-27.)

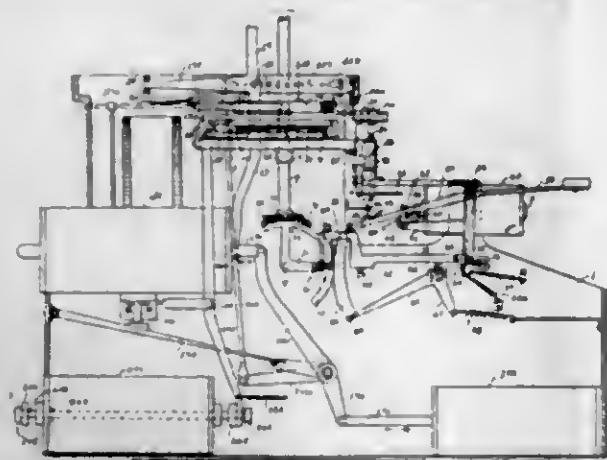


1. A collapsible back rest, comprising standards each having an upper and a lower slot in its inner face, links pivotally connected and pivoted in said lower slots, an upper brace having one end pivoted in the upper slot of one standard, means to lock the free end of said upper brace in the upper slot of the other standard, said brace and said links being concealed within their respective slots when the back rest is in its collapsed condition, and a strip of material connected with said upper brace and forming a seat for the user.

1,312,775. TELEGRAPHIC TYPE-WRITER. ORIN BENNETT, Placerville, Calif., assignor to Pacific Coast Typewriter Company, Placerville, Calif., a Corporation. Filed May 4, 1916. Serial No. 95,329. 13 Claims. (Cl. 178-28.)

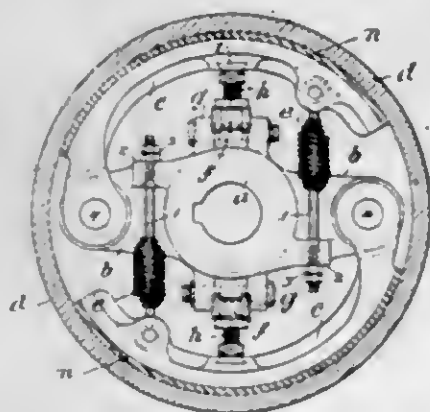
1. A telegraphic typewriter comprising a type rack, a local battery for operating the type rack, a line battery for controlling the action of the local battery, means for

making and breaking the circuit through the local battery with the action of the type rack, and means for likewise



making and breaking the circuit through the line battery each time the circuit through the local battery is broken.

1,312,776. FRICTION-CLUTCH. ROBERT BRIDCK and EDGAR BRADSHAW, Castleton, England, assignors to David Bridge and Company, Limited, Castleton, England. Filed Mar. 31, 1917. Serial No. 158,818. 1 Claim. (Cl. 102-5.)



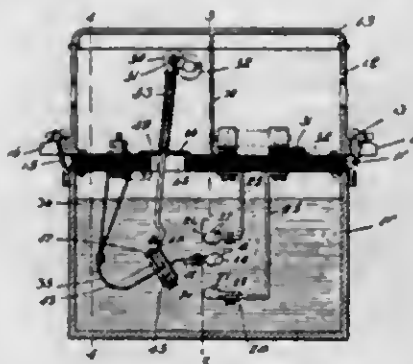
In combination, a shaft, a pulley loosely mounted on the shaft, a pair of diametrically opposed arms fixed to said shaft and provided intermediate of their ends with lugs, shoes pivotally mounted on said arms for engagement with the inner periphery of the pulley, springs located at opposite sides of the shaft and connected at their outer ends with the shoes, rods extending across the arms between the said shaft and the pivotal points of the shoes and passing through the said lugs and connected with the springs and provided at the outer sides of the said lugs with adjusting means for tensioning the springs, said springs and the adjusting means being located at opposite sides of the arms, and means for actuating the shoes for forcing the same outward into engagement with the pulley.

1,312,777. ELECTRIC SWITCH. GEORGE A. BURNHAM, Saugus, Mass., assignor to S. B. Condit, Jr., Brookline, Mass. Filed Mar. 24, 1915. Serial No. 16,773. 10 Claims. (Cl. 200-2.)

1. In an electric switch, a stationary and a movable switch-member, contact-members detachably carried thereby, said switch-members having contact-member receiving portions arranged to interchangeably receive said contact members, said contact-members being identical in construction and interchangeably attachable to each of said switch-members, and each contact-member carried by either switch-member arranged to properly cooperate with the other contact-member for the control of an electric circuit.

4. In double throw-switches, an insulating carrying-plate, a pair of stationary switch-arms secured to and de-

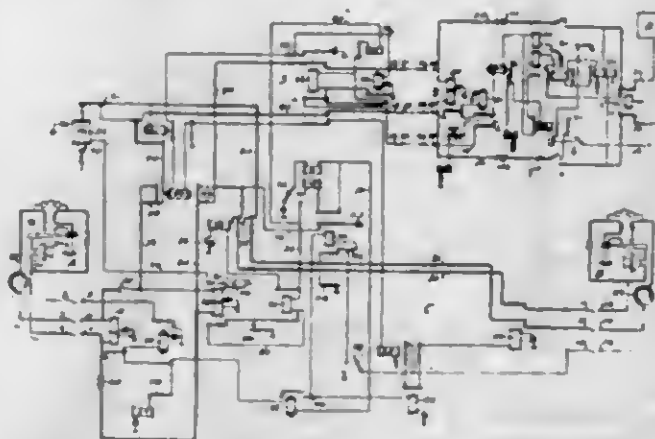
pending from said carrying-plate and having contact portions one of which is disposed beneath the other, a switch-member comprising a block having two engaging-portions normally arranged between the contact portions of said stationary switch-members, a crank-shaft, a rod connecting said crank-shaft with said movable switch-member, a spring arranged on said rod adapted to be compressed upon a downward movement thereof, and means for rocking said crank-shaft.



5. In an electric-switch, an insulating carrying-plate having a hole through it and bearing the switch-elements; a plate supported on said carrying plate and arranged to cover said hole, having a hole through it, switch operating-means including a rod which is extended through the hole in the carrying-plate and through a hole in the cover-plate, and a crank-shaft to which said rod is connected, said cover-plate being slidable on the carrying-plate and on said rod, upon a movement of said rod caused by a turning movement of the crank-shaft, yet arranged to cover the hole in the carrying-plate in all positions it occupies.

7. In an electric switch, a movable switch member having a handle movable both ways from a neutral position, and a lug on said handle, stops for limiting movement of the handle in said two positions, and a pivoted latch having a shallow recess to receive the lug on the handle and prevent movement of the handle into the final position, but permit movement thereof into the initial position, and means whereby said latch is adapted to be progressively moved in an upward direction by the handle while the handle is being moved into said initial position, said handle adapted to be moved from the initial to final position independently of the latch with such an angular velocity that the downward velocity component of the lug on the handle is greater than that of the latch which is adapted to fall by gravity independently of the handle, to enable the lug to pass by the recess of the latch before the latch has engaged the lug and permit the handle to be removed to said final position.

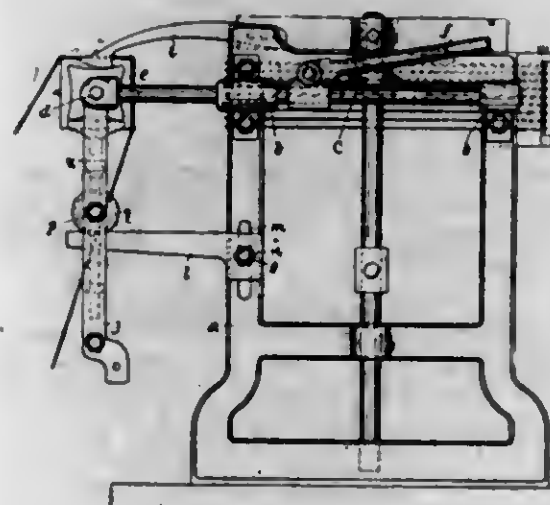
1,312,778. TELEPHONE-EXCHANGE SYSTEM. HENRY P. CLAUSEN, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1918. Serial No. 228,390. 8 Claims. (Cl. 179-18.)



1. In a telephone system, a calling line, a called line, means for establishing a connection between said lines, a

third line, an automatically operated hunting switch, means controlled by the called subscriber for initiating the hunting movement of said hunting switch to extend the established connection in the direction of the third line, and means controlled by the called subscriber for completing the extension of the established connection to said third line.

1,312,779. JACQUARD-MACHINE. FRANK DUCHACEK, Paterson, N. J. Filed June 19, 1919. Serial No. 305,286. 2 Claims. (Cl. 139-16.)



1. In a Jacquard machine or the like, the combination of the frame, a horizontally reciprocating cylinder-carrying structure including horizontal rods guided in the frame, said structure including depending portions rigid with reference to said rods, a pair of horizontal arms rigidly projecting from said frame, and rollers journaled on the depending portions of said structure on horizontal axes and arranged to roll on said arms.

1,312,780. REINFORCED RECEPTACLE, TUBE, OR THE LIKE AND PROCESS OF MAKING THE SAME. WILLIAM B. FENN, New York, N. Y. Filed Dec. 6, 1917. Serial No. 205,741. 22 Claims. (Cl. 93-80.)



2. The method which consists in winding upon a mandrel a strip of non-metallic material at a predetermined pitch, then winding around said strip a reinforcing element under tension sufficient to partially embed the same in said strip and at a pitch different from the pitch of said strip.

1,312,781. BOOT. HOWARD J. FLANNERY, Pittsburgh, Pa. Filed Feb. 16, 1916, Serial No. 217,481. Renewed Dec. 14, 1918. Serial No. 266,810. 4 Claims. (Cl. 36-4.)

1. A boot of the class described comprising a comparatively stiff waterproof sole portion, a flexible upper portion of light, thin and waterproof material, said upper portion being extended outwardly or enlarged at the back above the heel line, said enlarged portion being adapted to be folded over upon the ankle portion of the upper, and means for holding said folded enlarged portion in position.

3. A boot of the class described comprising a comparatively stiff waterproof sole portion, a flexible upper portion of light, thin and waterproof material, said upper

portion being extended outwardly or enlarged at the back above the heel line, said enlarged portion being



adapted to be folded over upon the ankle portion of the upper, and a strap secured to said enlarged portion for holding said portion in its folded-position.

1,312,782. PROCESS AND PRODUCT FOR UTILIZING NITER CAKE AND SIMILAR SUBSTANCES. HUGH A. GALT, Barberton, Ohio. Filed Dec. 15, 1917. Serial No. 207,286. 10 Claims. (Cl. 23-11.)

1. A new material, comprising a mechanical mixture in finely divided form of a substance containing sodium bisulfate and a neutralizing base therefor.

1,312,783. PROCESS AND PRODUCT FOR UTILIZING NITER CAKE AND SIMILAR SUBSTANCES. HUGH A. GALT, Barberton, Ohio. Original application filed Dec. 15, 1917, Serial No. 207,286. Divided and this application filed Dec. 15, 1917. Serial No. 207,287. 4 Claims. (Cl. 23-11.)

1. A new material, comprising a mechanical mixture in finely divided form of a substance containing sodium bisulfate and a carbonate of sodium.

1,312,784. MANUFACTURE OF GLASS. HUGH A. GALT, Barberton, Ohio. Filed Dec. 15, 1917. Serial No. 207,289. 4 Claims. (Cl. 106-36.1.)

1. The process of making glass which consists in mechanically mixing together finely divided niter cake and a neutralizing base, adding such mixture to a lime silica batch, and fusing.

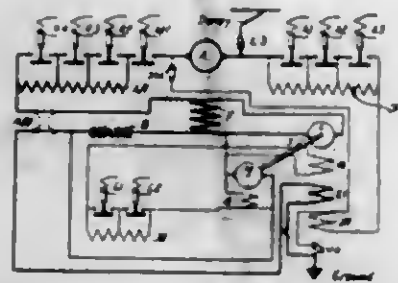
1,312,785. CONTROL SYSTEM. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Sept. 25, 1914, Serial No. 863,504. Divided and this application filed Nov. 7, 1917. Serial No. 200,657. 4 Claims. (Cl. 172-179.)



4. In a system of control, the combination with a supply circuit, and a main dynamo-electric machine having and armature and a field winding, of an auxiliary motor-generator for exciting said field winding, and means for operating said motor-generator irrespective of interruption of supply-circuit energy, at least one armature of

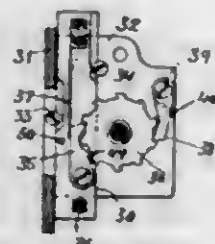
said motor-generator being excited in accordance with main-armature current in such manner as to materially modify the operation of the motor-generator after the resumption of supply-circuit energy.

1,312,786. CONTROL SYSTEM. RUDOLF E. HELLMOND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Sept. 25, 1914, Serial No. 863,504. Divided and application filed Nov. 7, 1917, Serial No. 200,656. Divided and this application filed Jan. 5, 1918. Serial No. 210,527. 12 Claims. (Cl. 172-179.)



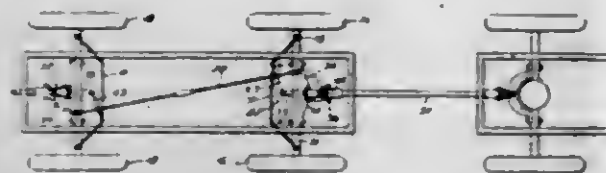
3. In a system of control, the combination with a supply circuit and a main dynamo-electric machine operated therefrom and having an armature and a field winding, of an auxiliary machine for exciting said field winding, and means for inherently energizing said auxiliary machine to increase the separate excitation thereof during interruption of supply-circuit energization and to provide excitation in accordance with main-machine current as soon as stable conditions obtain upon the reestablishment of said energization.

1,312,787. INTERMITTENT-GRIP DEVICE. FRANK H. HOPKINS, Somerville, Mass., assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 26, 1916. Serial No. 127,827. 3 Claims. (Cl. 74-54.)



1. A pawl and ratchet mechanism including a driving pawl, a driven ratchet and means for preventing overthrow of the ratchet comprising a stop in the path of movement of the pawl away from the ratchet, and a shoulder on the pawl in the path of one of the ratchet teeth, said shoulder having an extent sufficient to obstruct such tooth when the pawl is arrested by said stop.

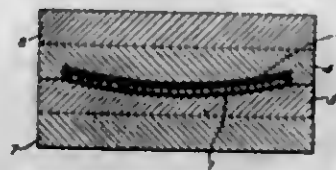
1,312,788. VEHICLE STEERING MECHANISM. EMIL E. KELLER, East Rochester, N. Y. Filed Feb. 1, 1916. Serial No. 75,554. 4 Claims. (Cl. 21-137.)



1. In a steering mechanism for trailers, a steering head, a steering arm for one set of wheels of the trailer,

a steering arm for the other set of wheels, and means for locking both arms to the steering head and for releasing both arms from the steering head and locking one arm in a fixed position.

1,312,789. METHOD OF FORMING COMPOSITE PLATES. WILLARD H. KEMPTON, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 8, 1919. Serial No. 270,139. 10 Claims. (Cl. 18-55.)



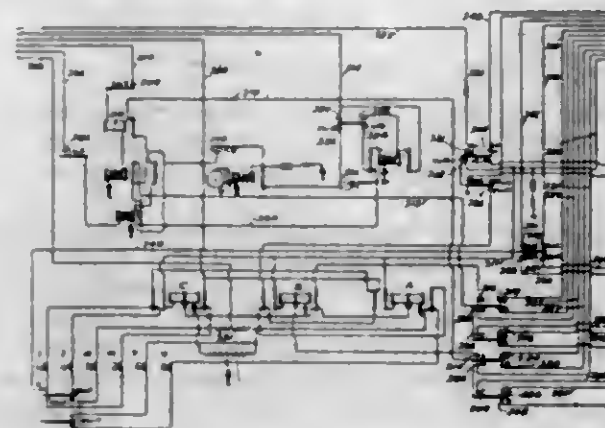
1. The method of overcoming irregularities in mold platens which comprises interposing a pressure-equalizing body between one of the platens and the article being molded to equalize the applied pressure.

1,312,790. PERMUTATION-PAVLOCK. PASQUALE LO CASCIO, Brooklyn, N. Y. Filed Feb. 28, 1919. Serial No. 279,740. 8 Claims. (Cl. 70-19.)



8. In a permutation padlock, the combination with a core, of a plurality of ring tumblers surrounding said core, a shackle to slide between the core and tumblers, means controlled by said tumblers for normally locking the shackle in closed position, an abutment on the shackle to limit the outward movement of the same, and a top plate on the core to be engaged by said abutment for the purpose specified.

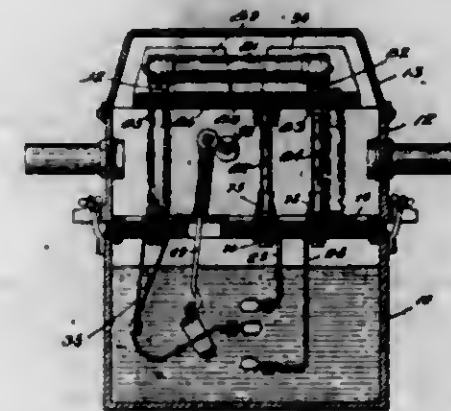
1,312,791. SIGNALING SYSTEM. ALSEN E. LUNDRELL and EDGAR H. CLARK, New York, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1917. Serial No. 158,580. 18 Claims. (Cl. 179-17.)



1. In a telephone system, an incoming line, outgoing lines, a plurality of substations connected to said outgoing

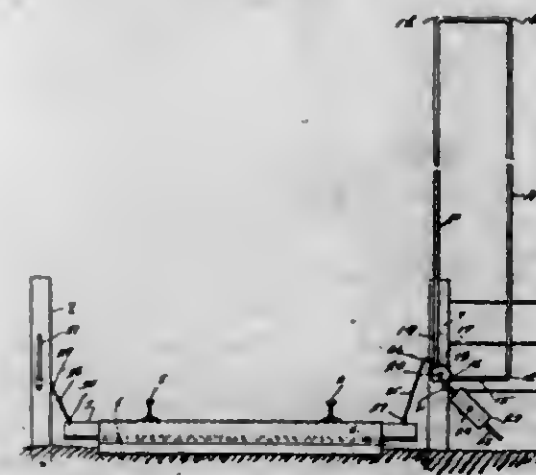
lines, a signal associated with each of said substations, an automatic switch for interconnecting said incoming line and said outgoing lines, means for directly operating said switch, an impulse transmitting mechanism arranged to transmit impulses of various characteristics, sources of signaling current of various characteristics for operating said signals, and mechanism responsive to said impulse transmitting device for selecting the desired source of signaling current.

1,312,792. FUSE FOR ELECTRIC SWITCHES. GEORGE A. BURNHAM, Saugus, Mass., assignor to Sears B. Condit, Jr., Brookline, Mass. Filed July 1, 1915. Serial No. 37,606. 2 Claims. (Cl. 175-273.)



1. A series of fuse holders, all of the fuse holders of the series adapted to receive fuses of definite lengths and the length of the fuse adapted to be received by any fuse holder differing from the lengths of the fuses adapted to be received by all other fuse holders of the series, each fuse holder comprising a base of insulating material, terminals thereon spaced a fixed distance apart, which distance is the same for all fuse holders of the series, and fuse clips electrically connected with said terminals, the fuse clips of each fuse holder of the series spaced a fixed distance apart, which distance is different for all fuse holders of the series.

1,312,793. CATTLE-GUARD. LERT MCCONNELL, Grand River, Iowa. Filed July 31, 1918. Serial No. 247,519. 1 Claim. (Cl. 30-21.)



A cattle guard comprising a foot treadle having one of its edges hingedly connected to a side of a tie of a railroad and adapted to pivot between adjacent ties, a spring tensioning means connected to one end of the foot treadle at its free end and having its other end connected to a post beside the roadbed whereby the free edge of the foot treadle is kept normally in contact with the bases of the track rails, a post located beside the roadbed and opposite the spring holding post and having a guard gate pivoted thereto, said guard gate being pivoted at one of its cor-

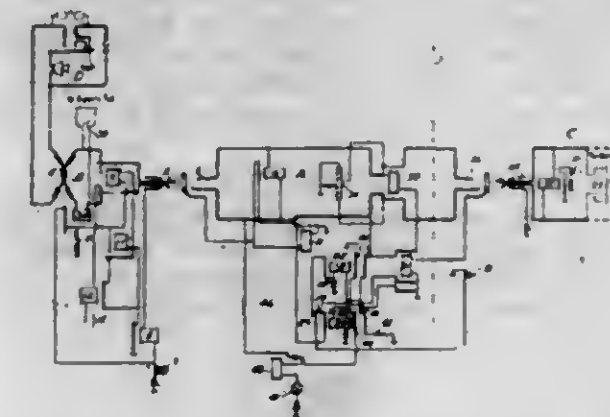
ners to the post and having a weighted arm extending from said corner adapted to engage a stop when the guard gate is in raised position, said stop being located below the pivotal point of the guard gate and a connection between the gate at a point above the pivotal point thereof and the free edge of the foot treadle whereby the guard gate will be pulled to a closed position upon depression of the free edge of the foot treadle.

1,312,794. AUTOMOBILE MAGNETO CONTACT. WALTER E. MCCREARY, Altoona, Pa. Filed Dec. 23, 1916. Serial No. 138,639. 2 Claims. (Cl. 200-25.)



1. A magneto contact device of the class described consisting of a holding member having an interior shoulder, and an electrical conductor rod having an abutment portion for engaging with said shoulder and a left-coiled helical spring contact terminal.

1,312,795. TELEPHONE-EXCHANGE SYSTEM. HARRY W. MACDONALD, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1917. Serial No. 208,737. 6 Claims. (Cl. 179-41.)

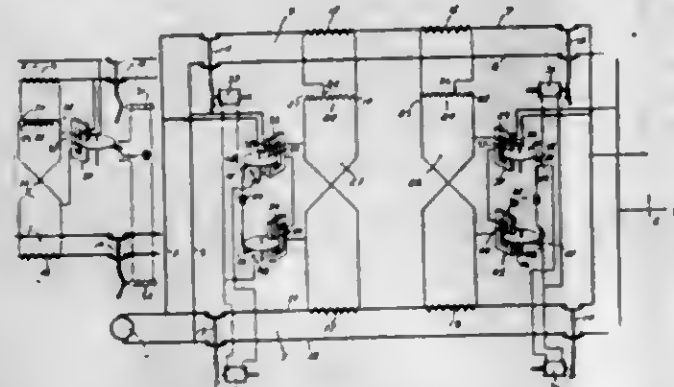


1. In a telephone exchange system, the combination of a trunk circuit extending from a first to a second switchboard, a link circuit at each switchboard connected with the trunk circuit, a signaling device at the first switchboard associated with the link circuit thereat, a relay at the first switchboard for controlling the signaling device, means responsive to the disconnection of the link circuit at the second switchboard from the trunk circuit, an operating circuit for the relay completed upon the response of said means, and means responsive to such disconnection for intermittently closing a shunt circuit for the relay, thereby causing the intermittent operation of the signaling device.

1,312,796. ELECTRICAL PROTECTIVE DEVICE. PAUL MACGAHAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 6, 1917. Serial No. 178,920. 9 Claims. (Cl. 175-294.)

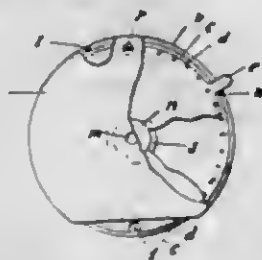
1. In an alternating-current system of distribution, the combination with parallel-connected feeder conductors carrying different values of current, and a current trans-

former for each conductor, of a resistor connected across one transformer and a portion thereof connected across



another transformer, said resistor being so connected that equal-potential points are provided on the connecting means.

1,312,797. CALCULATOR. VIRGINIA A. MAYRA, Wollaston, Mass. Filed Oct. 20, 1916. Serial No. 126,673. 7 Claims. (Cl. 235-78.)



1. A calculator comprising a casing having a window, a disk bearing a series of numbers arranged to appear at said window, and itself having a slight opening and a second disk having a series of numbers covered by said first disk and arranged to appear singly at said opening, the disks being coaxial and rotatable relatively to the casing and to one another and the casing formed to expose the peripheral parts of the disk elsewhere than at said window.

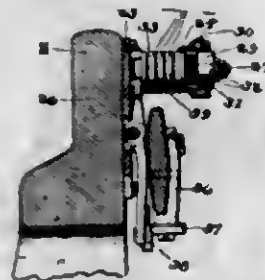
1,312,798. LINT SEPARATOR AND CLEANER. FRANK WYNN MEYERS, CHARLES LEMUEL CAMPBELL, and FRANK H. MCSWEENEY, Houston, Tex. Filed July 5, 1918. Serial No. 243,429. 6 Claims. (Cl. 19-9.)



1. A cotton lint separating and cleaning apparatus comprising a pair of chambers, one of which is disposed below the other and connected at its upper end to the lower end of the upper chamber, the upper chamber having a cotton lint intake pipe at its upper end and having an outer imperforate wall, an air outlet, and an inner perforate wall spaced from the outer wall and extending around one side thereof opposite the inlet, said lower chamber having an air outlet and an outer imperforate wall and being provided with an inner perforate wall extending around one

side thereof in a plane, the curvature of which is reversed with respect to that of the upper chamber, a dirt and dust discharge pipe having communication with the spaces between the perforate and imperforate walls of the two chambers, and a lint discharge pipe having connection with the lower portion of the lower chamber, all for the purpose described.

1,312,799. THREAD-NIPPER. JAMES R. MOFFATT and RALPH S. KELSO, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 26, 1917. Serial No. 193,362. 6 Claims. (Cl. 112-39.)



1. In a multiple thread nipping device, the combination with a tubular holder, of a plurality of clamping disks loosely mounted therein and supported thereby, a tension spring disposed within said holder and located at one end thereof, said holder being provided with means for leading the threads between the several disks, and means for moving said disks against the spring for clamping said threads.

1,312,800. METHOD FOR MAKING CARBON BISULFID. HUGH K. MOORE and GEORGE A. RICHTEA, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 24, 1917. Serial No. 203,224. 3 Claims. (Cl. 204-04.)

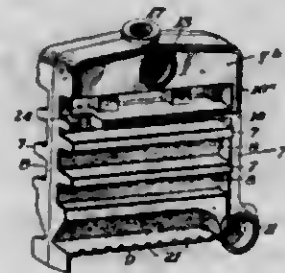


3. In the manufacture of carbon bisulfide, melting the sulfur, continuously feeding the molten sulfur, vaporizing such sulfur and bringing the vaporized sulfur into contact with heated charcoal to cause a reaction therewith, condensing the product of the reaction by the direct contact with water, collecting the water and the product of condensation, and continuously separating the water from the condensed carbon bisulfide.

1,312,801. HEATER OR BOILER. ALEXANDER H. MORROW, Pittsburgh, Pa. Filed Oct. 9, 1914. Serial No. 865,910. 5 Claims. (Cl. 122-223.)

1. A section or unit for sectional heaters or boilers, comprising a hollow vertical web portion formed at each of its vertical sides with hollow projections extending horizontally of the section from front to rear, some of

the projections on the two sides being staggered with respect to each other, and the staggered projections having their upper, inner and outer surfaces sloped downwardly and outwardly and the lower inner and outer surfaces thereof being sloped upwardly and outwardly, said



sections also having other horizontal projections, one on each side, above the staggered projections and which are horizontally opposite each other, each of said other projections having a vertical opening therethrough near the front edge of the section; substantially as described.

1,312,802. CONVERTIBLE SELF-GRINDING HOE. ALEXANDER NORRIS, Dexter City, Ohio. Filed Aug. 6, 1918. Serial No. 248,565. 1 Claim. (Cl. 287-25.)



In a self grinding garden hoe, the combination with a handle having a shank provided with a laterally turned threaded end, of a hoe blade provided with a self renewing cutting edge and capable of reversibility whereby the cutting edge may be utilized, said hoe blade having a threaded socket into which said end is threaded, said socket having its upper end spaced a short distance below the upper edge of the blade, said threaded end having a slot, a pair of diametrically opposed members arching the upper edge portion of the blade adjacent said socket and having tongues engaging said slot, said members having reduced parts, and a device threaded on said end and adapted to fit over said reduced parts to lock the members in place.

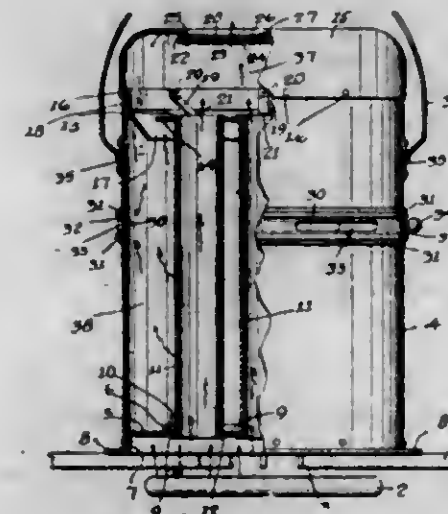
1,312,803. TIME-FUSE FOR ARTILLERY-PROJECTILES. OLOF OHLSON, West Newton, Mass., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed June 19, 1916. Serial No. 104,410. 4 Claims. (Cl. 102-30.)



1. In a time fuse for shells, a motive mechanism, an arm connected with said mechanism to be moved by running thereof, detonating means controlled by said motive mechanism, a lock for preventing running of the motive mechanism prior to firing of the shell from a gun, said lock being normally in the path of said arm and being displaceable from said path by force acting when the shell is so fired, the lock having a protuberant part with

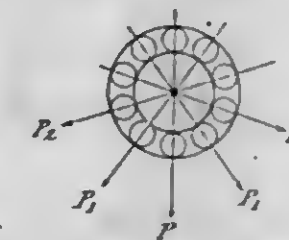
oppositely inclined surfaces facing respectively toward and away from the direction of such displacement, and resilient separable holding jaws bearing against one of said faces in position to be spread apart thereby when the lock is so displaced, and to close against the other surface thereafter, whereby to retain the lock in the displaced position.

1,312,804. FLUID HEATING AND COOKING STOVE. MAXIMILIAN J. OTTO, New York, N. Y. Filed Feb. 21, 1918. Serial No. 218,416. 6 Claims. (Cl. 126-85.)



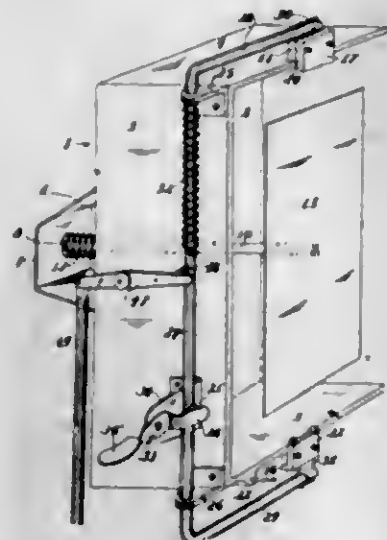
1. A combination cooker and heater comprising a body portion having located therein a plurality of parallel and co-extensive heat conducting and radiating tubes, and having an unobstructed heating chamber encircling the tubes, the outer wall of which is exposed for radiating heat, and another heating chamber above said tubes, and a member between the two said chambers extending from one into the other and operating both as a baffle and a deflector.

1,312,805. METHOD OF DETERMINING THE PRESSURE BETWEEN TWO BODIES. NILS AARVID PALMGREN, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Nov. 27, 1918. Serial No. 204,480. 2 Claims. (Cl. 265-1.)



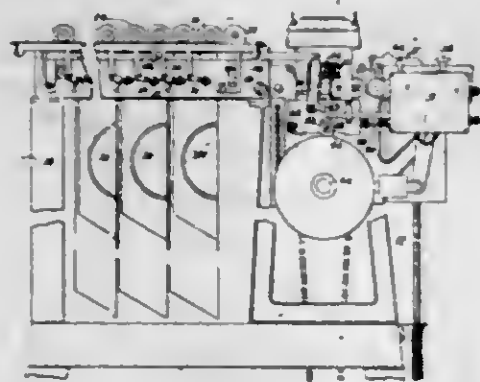
1. The method of determining the pressure between two bodies having relatively curved surfaces, normally in tangential contact, which consists in applying pressure to the bodies to transform their tangent contact to surface contact, subjecting the portions of the bodies surrounding the surface of contact to the influence of an etching agent capable of attacking the material of the body, removing said etching agent after a suitable period of time, removing the pressure applied to the bodies, and measuring the dimensions of the surface of contact of the bodies not touched by the etching agent, whereby to determine therefrom the pressure producing the deformation.

1,312,806. RECORD-CARD FEED. JAMES POWERS, New York, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 13, 1915. Serial No. 14,284. 17 Claims. (Cl. 40-78.)



2. In a device of the character described, the combination of a casing adapted to hold cards therein and having an open front; abutment members at said open front provided with abutment faces, and with guideways just to the rear of said faces; means for yieldably pressing cards against said abutment faces; a picker slidably disposed in each of said guideways; and means for reciprocating said pickers in synchronism.

1,312,807. COUNTERS FOR ACCOUNTING-MACHINES. JAMES POWERS, New York, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed June 28, 1915. Serial No. 36,644. 25 Claims. (Cl. 235-01.)

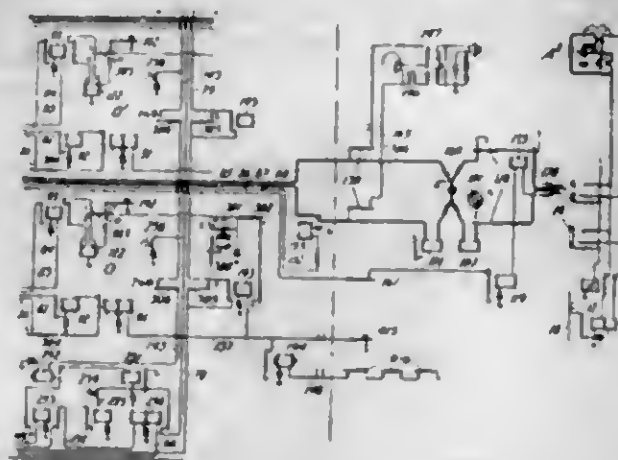


1. In an apparatus of the character described, the combination of a series of compartments; guide means therefor; means for actuating the guide means; a counter for each guide means; an actuating member operable independently of the guide means for the counters; and means for operatively connecting the counters to the actuating members when the associated guide means is operated.

1,312,808. SIGNALING SYSTEM FOR TELEPHONE EXCHANGES. RALPH L. QUASS, Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1916. Serial No. 135,790. 16 Claims. (Cl. 179-27.)

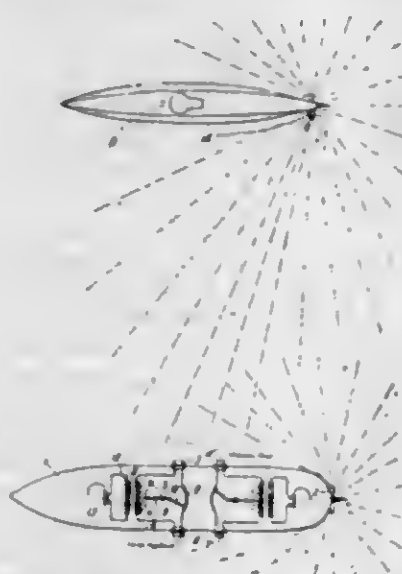
1. The combination with a group of operators' positions, of a group of circuits for extending calls thereto,

signaling means for said operators' positions, and means made operative when all the positions of said group are



unavailable to bar calls from said group of circuits and to actuate said signaling means upon the initiation of a call.

1,312,809. SIGNALING SYSTEM. CHARLES E. SCHIBNER, Jericho, Vt., and JAMES L. McQUARRIE, Montclair, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1917. Serial No. 173,540. 9 Claims. (Cl. 177-352.)



1. A signaling system comprising a plurality of unequally sensitive sound detectors, a receiver, and means for differentially relating said detectors to said receiver.

1,312,810. NUT-LOCK. JEREMIAH W. SHEAN, Yonkers, N. Y. Filed Sept. 19, 1917. Serial No. 192,124. 1 Claim. (Cl. 151-21.)

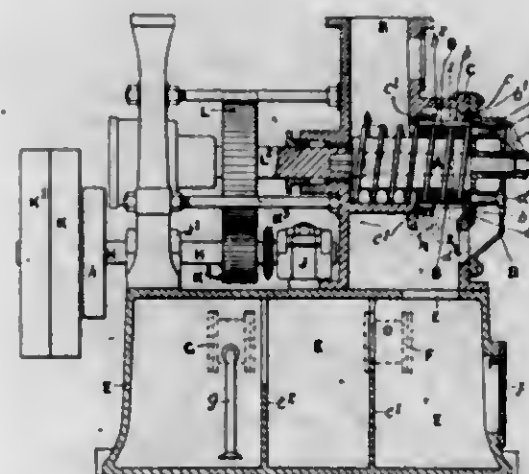


The combination with a bolt having diametrical slots in its threaded end, of a nut engaged with the bolt and having identical wings rising from all of its sides, all of the wings being correspondingly tapered each in the direction of its free end, the free end of each wing being curving reentrant excepting at its middle portion where

It is provided with a parallel sided tongue having a pointed extremity, the wings being bendable to lie flat upon the outer face of the nut, the sides of each wing being at such an angle to each other and the dimensions of the tongues being such that when the wings are upon the outer face of the nut, the side edges of adjacent wings will contact, the reentrant portions of the ends of the wings will engage the bolt and the tongues will fill the slots of the bolt transversely, whereby entrance of a disengaging tool between the wings and between the tongues and between the bolt and the wings of the tongues, will be prevented.

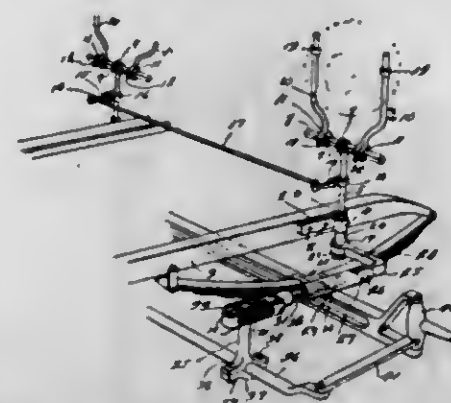
1,312,811. PRESS. ALBERT WILLIAM SIZEA, Hestle, near Kingston-upon-Hull, England. Filed Sept. 17, 1918. Serial No. 254,402. 7 Claims. (Cl. 100-48.)

1. In a press, a tubular press chamber provided with a series of longitudinally extending slits which are tapered from end to end, and means for compressing the material in the chamber so as to force its fluid portions through the said slits.



7. In a press, a hollow casing, a tubular press chamber mounted in the casing and provided with a series of longitudinally extending slits which are tapered from end to end, a hollow head secured at the delivery end of the press chamber and provided with a series of tapering perforated tubes which operate to form the solid material into separate portions, means for compressing the material in the press chamber to force its fluid portions through the slits and perforations, and means for diminishing the atmospheric pressure in the casing and head to accelerate the flow of fluid.

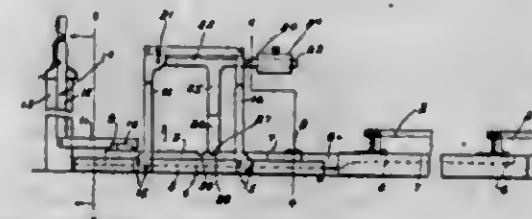
1,312,812. DIRIGIBLE HEADLIGHT. JESSE F. SPENCER, Toppenish, Wash. Filed May 18, 1918. Serial No. 235,272. 1 Claim. (Cl. 240-62.)



A dirigible headlight mechanism including a lamp supporting bracket, said lamp supporting bracket having a vertically disposed shaft, said shaft being rockably mounted in a bearing secured to the side of an automo-

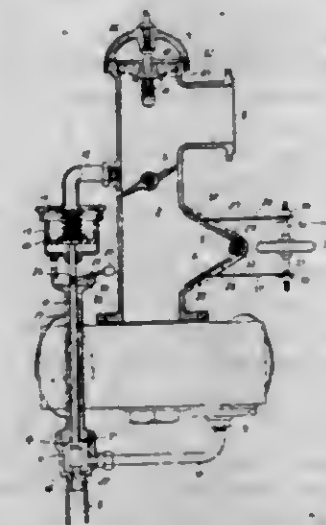
bile frame, an L-shaped member having one of its arms secured to the lower end of the vertical shaft, said arm extending laterally from the side of the vehicle, the other arm of said L-shaped member extending rearwardly, a pivoted sleeve having one of its ends pivoted to said rearwardly extending arm, the free end of said sleeve being provided with a threaded aperture, said aperture having threaded therein a yoke member, said yoke member being provided with elongated slots, one of said slots being in a vertical plane, the other slots being in a horizontal plane, a vertically disposed rod being disposed in the elongated slot between the elongated slots that are in a horizontal plane and the ends of the transversely disposed pin carried by the upper end of the vertical shaft carried by the connecting rod disposed in the elongated slots at either side of the first mentioned slot.

1,312,813. SWITCH-OPERATING MECHANISM. ORA SPENCER, Logan, Ohio. Filed Apr. 18, 1919. Serial No. 291,043. 2 Claims. (Cl. 246-448.)



1. A switch operating mechanism comprising a base having a channel therein, a slidable bar mounted in said channel and having its inner end connected to switch points, a frame arching said slidable bar and having a weighted detent pivoted thereon, one arm of said detent being adapted to engage a notch in the face of the slidable bar and a second notch in the face of the slidable bar and so positioned that when the switch points are thrown by the flanges of the train wheel the end of the arm of the detent lever will be forced out of the notch and into the second notch thereby preventing longitudinal movement of the slidable bar.

1,312,814. OIL-FEED CONTROL FOR CARBURETERS. CHARLES LAWRENCE STOKES, Millong, via Young, New South Wales, Australia. Original application filed Aug. 5, 1915, Serial No. 43,761. Divided and this application filed May 23, 1916. Serial No. 99,417. 3 Claims. (Cl. 158-36.)



1. Mechanism for controlling the fuel supply of carbureting means for internal combustion engines, comprising in combination, a chamber separate from and inde-

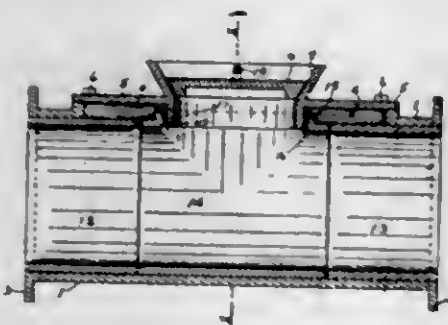
pendent of said carbureting means and adapted to be connected to the inlet pipe of an engine, means within said chamber movable in one direction under engine suction, a valve chamber having an inlet adapted to be connected to a fuel supply and an outlet adapted to be connected to said carbureting means, a valve in said valve chamber controlling the passage of fuel from the inlet to the outlet, said valve having a valve stem connected to and operable by said movable means, and a tubular member loosely surrounding said stem and having its upper end above the highest level to which the fuel can rise therein under its head pressure.

1,312,815. PROCESS OF LACQUERING SHEET METAL. THOMAS LUCIEN TALIAFERRO, Chicago, Ill., assignor to Phoenix Hermetic Company, Chicago, Ill., a Corporation of New York. Filed Dec. 30, 1918. Serial No. 268,930. 5 Claims. (Cl. 91—70.)



1. The process of lacquering sheet metal including coating the sheet of metal with lacquer, subjecting the coated sheet to a drying atmosphere for a sufficient period only to cause a protecting film to form on the lacquer coating, again coating the sheet with lacquer and subjecting the twice coated sheet to a baking atmosphere for an interval of time sufficient to cause a thorough fusing or amalgamating of the particles of the lacquer.

1,312,816. PNEUMATIC-CONVEYER HOPPER. LOUIS C. VANDERLIP, Elkhart, Ind. Filed Oct. 5, 1918. Serial No. 123,805. 8 Claims. (Cl. 137—75.)

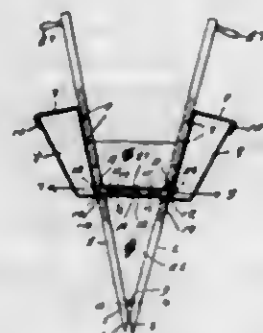


1. A device of the class described comprising a tubular body member provided with an elongated branch opening; a wear lining removably arranged within said body member and consisting of a plurality of sections arranged end to end and adapted for insertion and removal through said body member branch opening; an elongated cover plate detachably fastened over said body member branch opening, said plate being provided with an opening the area whereof is substantially less than the area of said body member branch opening; and a removable cover for said branch opening cover plate opening.

1,312,817. HAND BEAN AND CORN PLANTER. ROBERT G. WILSON, Orndorff, W. Va. Filed Oct. 4, 1918. Serial No. 256,549. 2 Claims. (Cl. 111—97.)

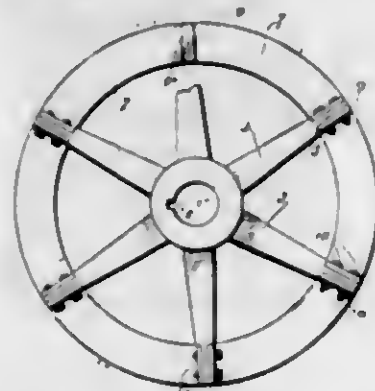
1. In a hand operated bean and corn planter, the combination with a pair of opposing jaws, of means for pivotally uniting said jaws adjacent their lower ends whereby a space is formed between the lower ends of the

jaws below the pivot uniting means, flexible covers located between and connecting the corresponding opposite side edges of the jaws, grain receptacles carried by the jaws, said receptacles and the jaws having opposing open-



ings, a slide guided in said openings and having grain receiving openings adapted to drop feed the grain from the receptacles as the jaws are opened and closed, and means for equalizing the insertion of the opposite ends of the slides into said receptacles.

1,312,818. GEAR-WHEEL. HARVEY W. WRIGHT and JOHN M. RATCLIFF, Florence, Ala. Filed Nov. 22, 1918. Serial No. 263,700. 1 Claim. (Cl. 74—28.)



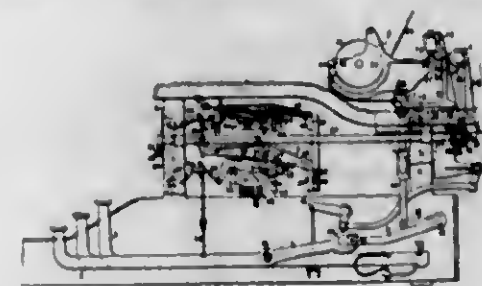
A wheel of the character specified, comprising a hub having radial spokes, and a rim detachably connected with the ends of the spokes, the rim consisting of similar sections, the connections between the sections being at the spokes, said connection between the spokes and the rim comprising pairs of spaced lugs extending laterally from the face of the rim, the spokes having tenons fitting between the members of the pairs, the tenons and lugs having registering openings, and bolts for engaging the openings.

1,312,819. TOOL-HANDLE FASTENER. FREDRICK ZIEGLER, Freeport, N. Y. Filed Mar. 10, 1919. Serial No. 281,636. 5 Claims. (Cl. 287—34.)



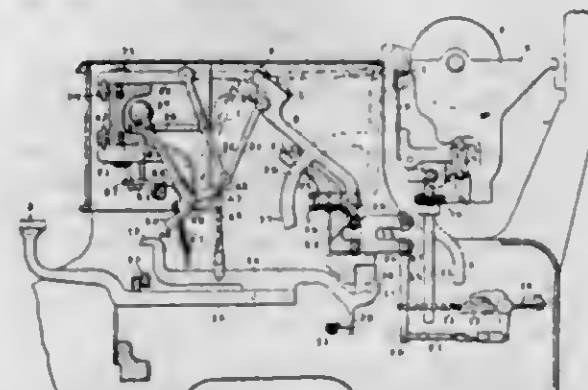
1. The combination with a handle having a transverse opening and a transverse slot extending to the opening from one end of the handle, and a tool head; of a head retaining plate at one end of the handle, an anchoring member insertible laterally into the slot and opening and having an enlarged end adaptable to be seated in the opening, the other end of said member detachably engaging the cap plate.

1,312,820. TYPE-WRITING MACHINE. NILS H. ANDERSON, Middletown, Conn., assignor to The Noiseless Typewriter Company, Middletown, Conn., a Corporation of Connecticut. Filed Oct. 8, 1909. Serial No. 521,078. 27 Claims. (Cl. 197—25.)



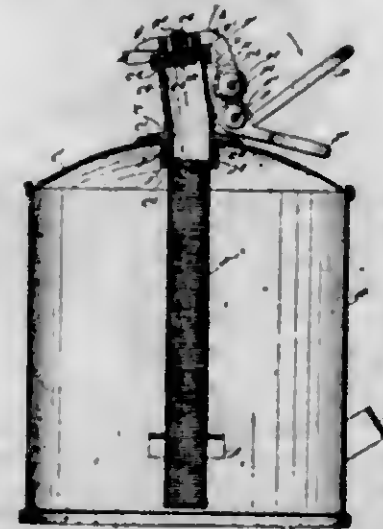
12. A pressure printing typewriter comprising the combination of a platen, a pivoted type carrier, an operating key, and connections between the key and carrier adapted to move the carrier continuously but with gradually reduced speed and augmented force just as it approaches the limiting printing position.

1,312,821. TYPE-WRITING MACHINE. NILS H. ANDERSON, Middletown, Conn., assignor to The Noiseless Typewriter Company, Middletown, Conn., a Corporation of Connecticut. Filed June 12, 1914. Serial No. 844,658. 49 Claims. (Cl. 197—25.)



1. In a typewriting machine, in combination, a curvilinearly movable type carrier, and means to effect a printing movement thereof, said means including a momentum accumulator associated with said type carrier for effecting a relatively short movement of the latter during a relatively long movement of said momentum accumulator.

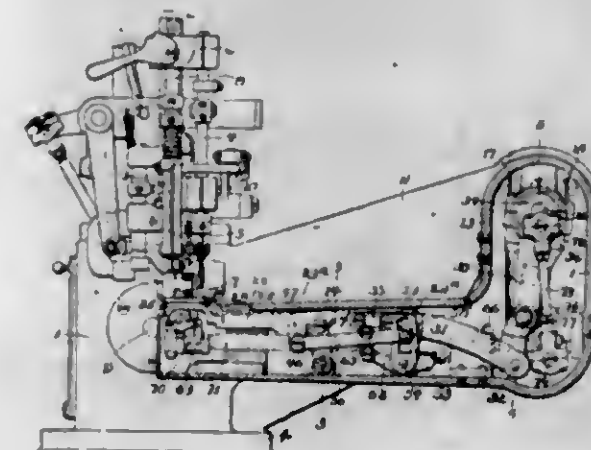
1,312,822. SAFETY-CAN. PAUL ANDERSON, Cambridge, Mass., assignor to Dover Stamping & Manufacturing Company, Portland, Me., a Corporation of Maine. Filed May 13, 1916. Serial No. 97,413. 5 Claims. (Cl. 220—88.)



1. A safety can consisting of a closed receptacle comprising a top, a spout fixed to said top and having integral

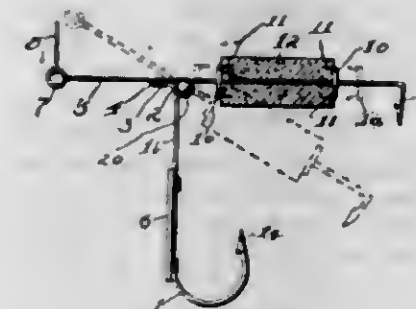
wings at one side thereof, a handle lever pivotally mounted between said wings and having a geared portion, a bent lever arm also mounted between said wings and also having a geared portion meshing with the geared portion of said lever, a closing cap for said spout carried by said lever arm and a spring coacting with said lever-arm and lever to hold said cap normally closed and to retain said lever in a lowered position from which it will be lifted when said cap is to be removed to open said spout.

1,312,823. FEEDING MECHANISM FOR SEWING-MACHINES. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,892. 20 Claims. (Cl. 112—8.)



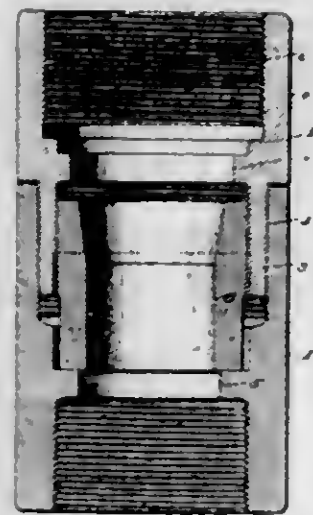
2. The combination of a work-supporting arm, a main feed bar in said arm, a feed dog carried by said main feed bar, means connected to the rear end of said feed bar for moving the same endwise and for oscillating the same, an auxiliary feed bar located in said work-supporting arm, a feed dog carried by said auxiliary feed bar, and devices connected to the main feed bar adjacent the forward end thereof for reciprocating said auxiliary feed bar.

1,312,824. FISHHOOK. HENRY ROMAN, Tulsa, Okla. Filed Dec. 30, 1918. Serial No. 268,921. 3 Claims. (Cl. 43—31.)



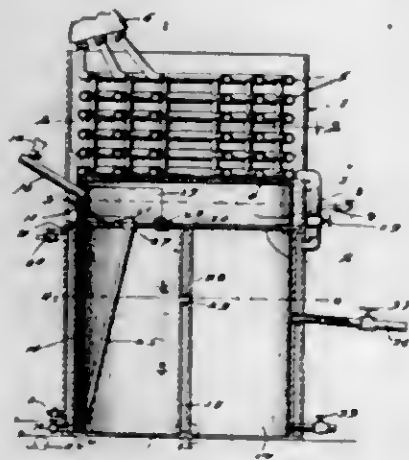
1. A device of the character described including a main hook having a shank and a pointed end, a lever pivoted between its ends on the shank of the main hook, said lever being provided at one end with cord attaching means and at its other end with a lateral prong adapted to be swung toward the pointed end of the hook when there is a pull on the cord, a float on the pronged arm of the lever, and a resistance plate applied to the shank of the hook and arranged in a plane at right angles to that of the hook.

1,312,825. OIL-WELL-PUMP SHOE. ERNEST BOWERY, Oil Center, Calif. Filed May 29, 1919. Serial No. 300,542. 2 Claims. (Cl. 103—61.)



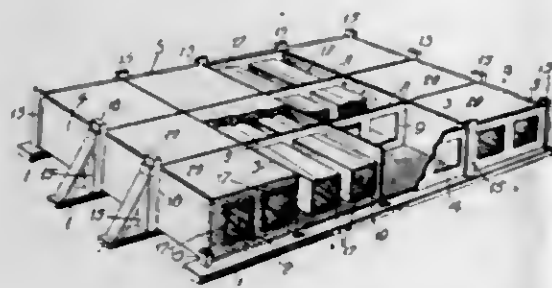
1. A pump shoe comprising upper and lower sections having threaded engagement with each other, and a valve seat detachably connected with the upper section, the lower section having an annular stop against which the lower end of the seat abuts.

1,312,826. TURPENTINE-DISTILLING APPARATUS. JOSEPH A. BOYER and HENRY E. BRYANT, Jacksonville, Fla. Filed Feb. 9, 1918. Serial No. 216,275. 5 Claims. (Cl. 203—3.)



1. In a turpentine distilling apparatus, a chamber for receiving mixed vaporous and liquid distillate, a passage extending from said chamber, a vapor trap in said passage, and means associated with the chamber for condensing the vaporous distillate.

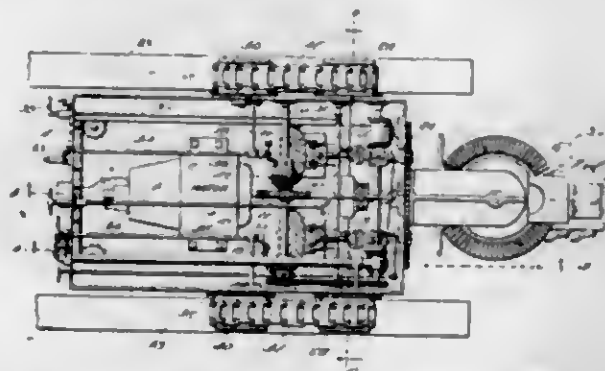
1,312,827. MOLD FOR THE MANUFACTURE OF CONCRETE TILES. HAROLD J. BAADT, Royal Oak, Mich. Filed Dec. 8, 1916. Serial No. 135,783. 2 Claims. (Cl. 25—121.)



1. A mold for making concrete tiles comprising mold walls, partitions, and core walls, said core walls having

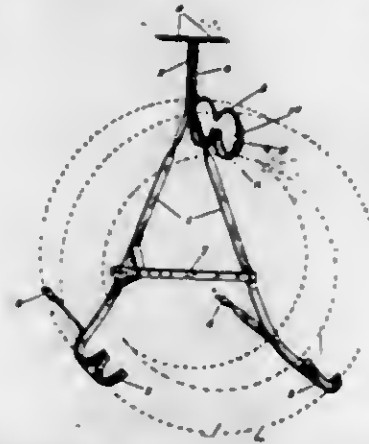
the ends thereof intermeshed with said mold partitions, all of said walls cooperating in providing rectangular compartments and two of the walls of each compartment having rectangular openings, and collapsible cores mounted in the openings of said walls with said cores extending through a plurality of compartments.

1,312,828. PROPELLING MECHANISM FOR VEHICLES. JAMES A. BRANTLEY, Sudd Springs, Okla. Original application filed Feb. 3, 1917, Serial No. 140,414. Divided and this application filed Aug. 31, 1918. Serial No. 252,195. 2 Claims. (Cl. 180—9.)



2. In a mining machine, the combination of a body, tractor wheels, a motor in the body, a transverse shaft connected with and driven by the motor, gears feathered on said shaft, shafts connected with the tractor wheels, disks feathered on said shafts and opposed to the gears and having circular series of indentures in their faces, thrust bearings mounted on said shafts at the opposite sides of the disks, with reference to the gears, connections between said bearings and disks, anti-friction means interposed between the bearings and disks, means extending to the rear of the body for moving the gears, and means extending to the rear of the body for moving said thrust bearings.

1,312,829. TIRE-CARRIER FOR MOTOR-CARS. ARTHUR RAMOND BROOKSHIRE, Feneion Falls, Ontario, Canada, assignor of one-half to Fred J. Goodman, Feneion Falls, Ontario, Canada. Filed Nov. 19, 1918. Serial No. 263,147. 3 Claims. (Cl. 224—29.)

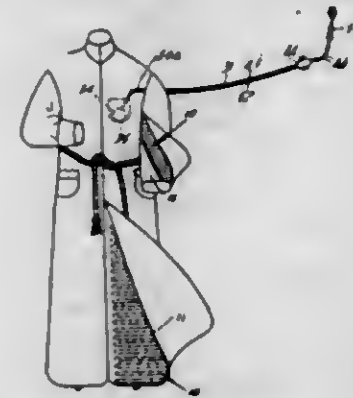


1. A tire carrier for connection to the rear of the body of a motor car comprising two metal bars connected together at the top and spreading in V-form, each bar being bent to form at the top a laterally directed attaching lug, at the bottom a tire support and extending forwardly from the same an attaching arm.

1,312,830. ELECTRICALLY-HEATED GARMENT. CHARLES E. CAMM, Salt Lake City, Utah, assignor of one-half to William H. Turver, Los Angeles, Calif. Filed Mar. 20, 1919. Serial No. 283,887. 4 Claims. (Cl. 219—46.)

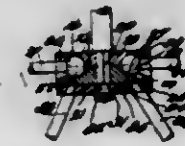
1. In an electrically heated garment or the like, a resistance winding, circuit connections one to each end of the

winding and one to an intermediate point, a three way switch adapted to throw current through the whole winding in series or through either of its halves or through



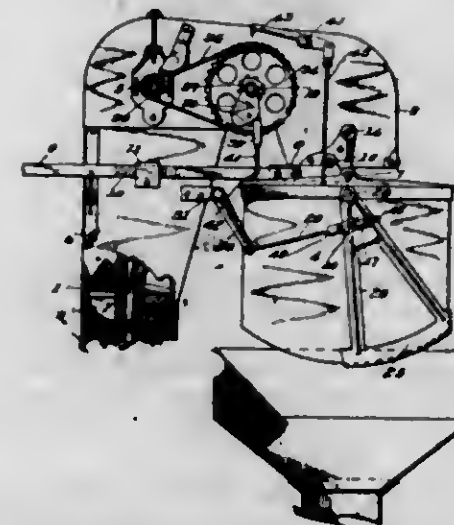
both halves in multiple; and a thermostat connected into the intermediate circuit connection and located adjacent the garment to be actuated by the heat thereof.

1,312,831. WASHING-MACHINE. CLIDA CHAPMAN, Cherryvale, Kans. Filed Jan. 10, 1918. Serial No. 211,161. 1 Claim. (Cl. 250—128.)



An agitator for a washing machine comprising a shaft, a body member at the lower end thereof, said body member comprising two sections having semi-spherical recesses therein forming spherical bearings having tapering openings extending radially therefrom and in a horizontal plane, each section having a square aperture, said apertures being adapted to be received by the squared end of the lower end of the shaft, said apertures when registered with each other will cause the registration of the semi-spherical recesses and tapering openings of the sections, agitator fingers provided with spherical enlargements, said enlargements being disposed in the spherical bearings formed by the semi-spherical recesses and extending radially from said body member and means passing through the sections for securely securing them together.

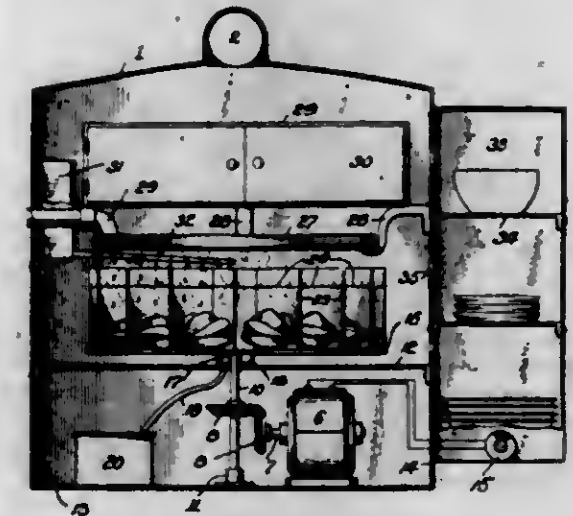
1,312,832. GRAIN-WEIGHER. CHARLES F. CLEMENTS, Peoria, Ill. Filed Oct. 18, 1918. Serial No. 258,707. 10 Claims. (Cl. 249—32.)



1. In a grain weigher, in combination, an elevator discharge spout, an oscillating member in said spout adapted to alternately direct the discharge of grain in opposite directions, a weighing hopper suspended beneath said spout,

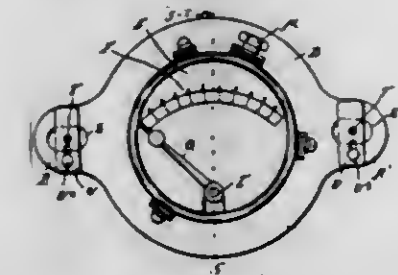
said hopper divided into two grain receiving compartments, a cut-off gate adapted to alternately close the bottom discharge openings of said compartments, means for operating said cut-off gate, and means for actuating said oscillating member in the discharge spout, simultaneously with the operation of said cut-off gate.

1,312,833. COOKING APPARATUS. ALEXANDER P. COLIAS, Detroit, Mich. Filed Mar. 10, 1919. Serial No. 281,579. 5 Claims. (Cl. 126—41.)



1. A cooking apparatus comprising a horizontally disposed partitioned grid, said grid having a central circular wall with vertical partitions extending radially therefrom to the edges of the grid, a burner above said grid adapted to project its flames toward said grid, and electrical means and gearing below said grid adapted for imparting a rotary movement to said grid.

1,312,834. ADJUSTABLE THERMOMETER. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Electric Stove Company, Flint, Mich., a Corporation of Michigan. Original application filed July 29, 1916, Serial No. 112,173. Divided and this application filed July 5, 1917. Serial No. 178,560. 6 Claims. (Cl. 73—119.)



1. In a thermometer, the combination with a casing having a dial and supported upon the outside of an oven but in open communication with its interior, of a hand movable over said dial, an expansion strip within said casing for moving said hand in accordance with changes in oven temperature, and means extending to the exterior of said casing and located permanently outside the oven for adjusting said expansion strip.

1,312,835. THERMAL CIRCUIT-CLOSER. THOMAS L. COBARR, Johnston City, Ill. Filed June 22, 1917. Serial No. 176,351. 1 Claim. (Cl. 200—31.)

A circuit closer comprising an insulating plate provided with a terminal post at one of its ends and a stationary contact terminal at its other end, a movable lever pivoted to the terminal post and carrying a contact adapted to make and break a circuit with said stationary contact to control said circuit, a frame supporting a

thermostat below the base of the circuit closer, said thermostat having one of its sides secured to the frame and a vertically disposed member attached to the other side of the thermostat, the upper end of the vertical member being adapted to protrude through an aperture in the

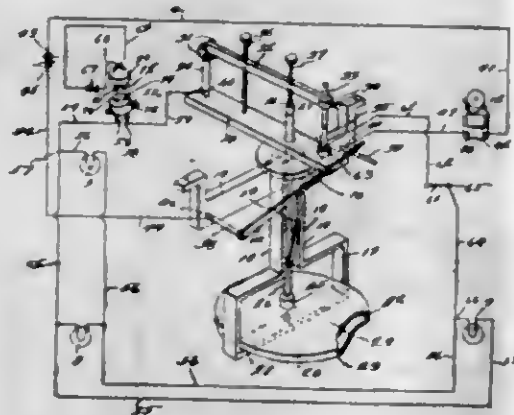


plate and contact with the end of an adjusting screw in the lever so as to make and break the circuit as the thermostat contracts and expands and an adjusting screw carried by the lever whereby the downward movement of the same is limited and allowing a fine adjustment and timing of the making and breaking of the circuit.

1,312,836. FOLDING CARRIAGE-TOP. ALMON W. CORTIS, Cortland, N. Y. Filed Aug. 28, 1916. Serial No. 117,269. 2 Claims. (Cl. 296-118.)



1. In a folding carriage top, the combination with tapered bow-sockets having wood inserts terminating flush with the open ends of the sockets, couplings secured to the inner faces of the sockets and extended beyond the ends thereof, the extensions being offset outwardly partly across the ends of the wood inserts, and provided with inwardly projecting strut-supports, a bow having its ends terminating against the upper ends of the sockets and inserts, and means for clamping said bow-ends to said extensions.

1,312,837. FOLDING CARRIAGE-TOP FOR AUTOMOBILES. ALMON W. CORTIS, Cortland, N. Y. Original application filed Aug. 28, 1916, Serial No. 117,269. Divided and this application filed Feb. 7, 1919. Serial No. 275,575. 2 Claims. (Cl. 216-118.)

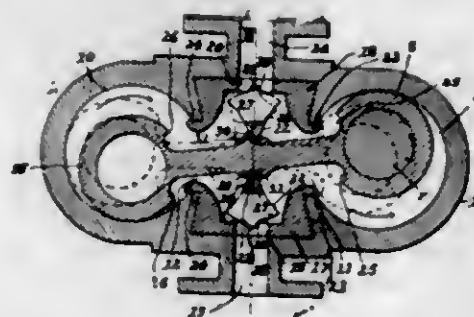
1. In a folding top for vehicles a tubular sheet-metal bow-socket having the upper end of its inner side extended some distance beyond the upper end of its outer

side, said extension being offset outwardly beyond the inner face of the main body of the tube, the opposite lon-



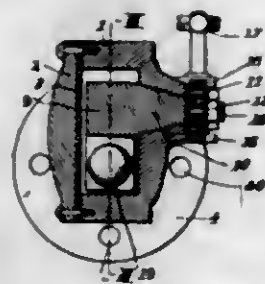
gitudinal edges of the extension being bent outwardly in spaced relation to form a lengthwise channel for receiving the adjacent end of a bow-section.

1,312,838. ENGINE. EMIL DEMBOWSKY, Metuchen, N. J. Filed Jan. 20, 1919. Serial No. 272,074. 3 Claims. (Cl. 121-54.)



1. The combination with a pair of similar cylinders arranged side by side and having openings in their adjacent sides communicating with one another, inlet and outlet ports communicating with said cylinder openings at opposite sides, rotary pistons in said cylinders, a rigid connecting bar between said pistons and constituting a partition between the inlet and outlet ports, a crank operatively engaging the piston of one of the cylinders, and means externally of the connecting bar, and the other cylinder for causing the piston in the latter to move synchronously with the piston in the first cylinder.

1,312,839. FREE-FLOW AND PACKINGLESS VALVE. EMIL DEMBOWSKY, Metuchen, N. J. Filed Feb. 3, 1919. Serial No. 274,639. 2 Claims. (Cl. 251-16.)



2. The combination with a valve casing having a bearing, of a valve having a tapered swivel shank arranged in said bearing, a worm gear on the outer end portion of the shank, an operating shaft carried by the casing, a worm on said shaft meshing with said worm gear, and a nut on the extremity of the tapered shank for acting through the worm gear to tighten said shank in its bearing.

1,312,840. CHEMICAL HEAT-PRODUCING MEANS. WILLIAM ELBOURNE, Petersborough, England. Filed Oct. 22, 1918. Serial No. 259,293. 6 Claims. (Cl. 102-29.)

1. A shell adapted to serve as a combined incendiary and poison-gas shell containing a charge comprising

aluminum, sulfur in combustible form, and igniting means, said charge being capable, upon ignition and disruption of the shell, of shedding a fluid incandescent mass from which, upon contact with water a noxious gas is evolved.

1,312,841. PROTECTIVE DEVICE FOR SHIPS. GIOVANNI EMANUELE ELIA, Washington, D. C. Filed Dec. 22, 1910. Serial No. 138,408. 1 Claim. (Cl. 114-240.)

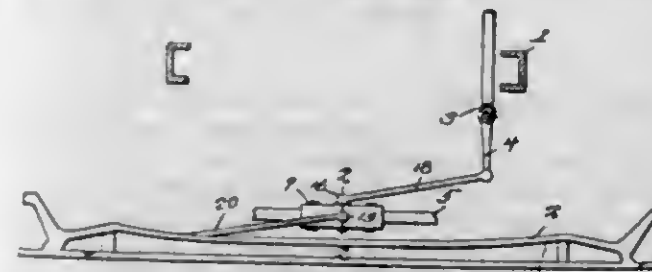


A projective device for ships, comprising an elongated body consisting of a series of buoyant elements of substantial and protective thickness extending at least as low on the water as the bottom of the ship and flexibly connected edge to edge to one another for individual movement both vertically and horizontally; whereby said body, on being engaged by the bow of a moving ship, will be caused solely by the movement of the ship through the water, to fold upon itself into and to maintain a position in contact with and conforming to the curvature of the ship's sides, but will assume a substantially straight-line position when towed through the water by a towing connection attached to one end thereof.

1,312,842. PROCESS OF MAKING CYANOGEN COMPOUNDS. LEON S. FINCH, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 7, 1918. Serial No. 257,287. 9 Claims. (Cl. 23-13.)

1. The process of forming a cyanogen compound by the reaction of nitrogen with a soluble alkali metal compound and carbon in the presence of a catalyzer, which comprises utilizing a mixture of relatively active carbon and carbon which alone is relatively inactive but which is activated by the relatively active carbon.

1,312,843. SAFETY ATTACHMENT. EDMOND J. GARDNER, Valliant, Okla. Filed Sept. 5, 1918. Serial No. 252,740. 1 Claim. (Cl. 280-89.)



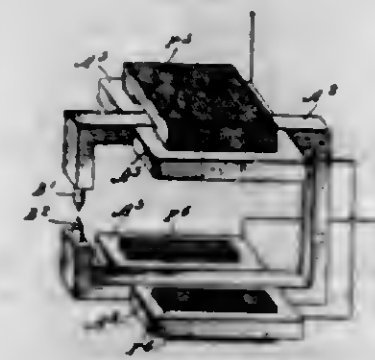
In a device of the class described, a fixed rod; a casing slidable longitudinally of the rod; a releasing member having limited movement in the casing longitudinally of the rod; clamps in the casing and bearing against one side of the rod, the inner ends of the clamps cooperating with the releasing member; spring means for forcing the clamps longitudinally toward the releasing member and transversely into engagement with the rod; converging links having their ends pivoted, respectively, to the clamps and to the casing; means for connecting the releasing member with a steering element under the control of an operator; and means for connecting the casing with a driven element of the mechanism to be shifted in steering.

1,312,844. METHOD OF ELECTRIC WELDING. JAMES H. GRAVELL, Brooklyn, N. Y., assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1918. Serial No. 212,041. 8 Claims. (Cl. 219-10.)

1. The method of electrode welding which consists in treating the contacting surfaces of the work with an

acid, passing a current through the contacting surfaces to cause the acid to remove the oxid therefrom and to produce a weld.

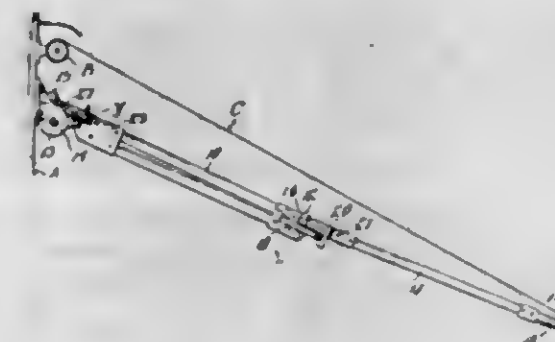
1,312,845. ELECTRIC WELDING-MACHINE. JAMES H. GRAVELL, Philadelphia, Pa., assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1919. Serial No. 269,491. 6 Claims. (Cl. 219-4.)



1. In an apparatus of the character described, a transformer consisting of a primary winding on an open magnetic circuit core and a secondary winding enclosing the air path of the core.

6. The method of neutralizing the self-induction of the secondary circuit in an electric metal working machine, consisting in utilizing the air space enclosed by the secondary for transmitting generating lines of force opposed to those set up by the current in the secondary.

1,312,846. AWNING-ARM. GUSTAV W. HAUSER, Jackson, Tenn. Filed Jan. 10, 1919. Serial No. 270,525. 3 Claims. (Cl. 150-42.)

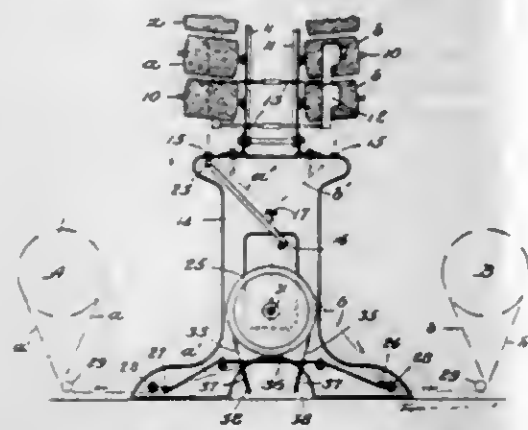


3. An awning arm structure comprising a bracket for supporting said arm in position for use and carrying a curved track, a member of said arm connected to said bracket by a vertical pivot and carrying a bearing adapted to rest and travel on said track, a second member hinged to said first member of said arm, one member being provided with a track at said hinge-point and the other with a bearing adapted to rest and travel upon said track, both of said tracks being formed with depressions in their bearing faces in which the bearing parts of the respective members of the arm are adapted to normally rest and hold said parts slightly out of line with each other, substantially as set forth.

1,312,847. WARP-DELIVERING MEANS FOR LOOMS. JAMES HINAT, Melrose, Mass., assignor to Charnock Manufacturing Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Sept. 30, 1916. Serial No. 123,154. 11 Claims. (Cl. 242-131.)

9. In a warp delivering apparatus, a stand, a reel carrying spools of warp material, a tension drum mounted on said stand in position to receive on its periphery the

warp strands from said reel, a brake to retard rotation of said drum, and a yieldingly mounted take up between



the reel and drum, having eyes to admit the several warp strands and separate them from one another on their way to the drum.

1,312,848. NEEDLE FOR SOUND-REPRODUCING MACHINES. JONATHAN A. HUNT, Salem, Mass. Filed Jan. 14, 1918. Serial No. 211,714. 1 Claim. (Cl. 274-38.)



A needle for sound reproducing machines, of circular shape in cross section, with a flattened section at its end, and a projection of wedge shape forming the engaging end, offset from the plane of the body of the needle.

1,312,849. NEEDLE FOR SOUND-REPRODUCING MACHINES. JONATHAN A. HUNT, Salem, Mass. Filed Mar. 28, 1918. Serial No. 225,225. 7 Claims. (Cl. 274-38.)

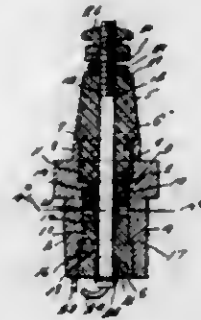


1. A needle for sound reproducing machines, the lateral surface of which has two edges situated at opposite ends of the longest dimension of the cross section, said needle having a flattened surface parallel to the plane of said edges and extending the whole length of the needle.

1,312,850. SPARK-PLUG. BENJAMIN I. JOHNSON, Gascogne, N. D. Filed Oct. 31, 1918. Serial No. 260,474. 1 Claim. (Cl. 123-169.)

In combination with a spark plug casing having interior concentric shoulders, of inner and outer porcelain and fiber holders telescoping said casing and engaging said shoulders, said holders having axially aligned bores

having their adjacent ends flared outwardly a copper sleeve countersunk in the lower end of the lower holder, an electrode of soft copper extending through the holders and having an enlargement contacting with the copper sleeve, and means on the upper part of the electrode for drawing the aforesaid parts together, a washer between a



shoulder of the lower holder and one of the shoulders of the casing, a filler surrounding the electrode and having its opposite ends telescoping into the flared out portions of the holders, the lower part of the casing and the enlargement of the electrode having cooperating sparking terminals.

1,312,851. DOUCHE. JOSEPH E. JOHNSON, Norfolk, Va. Filed Dec. 12, 1918. Serial No. 260,493. 3 Claims. (Cl. 126-350.)



3. A douche comprising a receptacle having an outlet, the back portion of said receptacle being substantially flat, a flame guard extending below the bottom of the receptacle and secured to its flat back, a plurality of arms extending from said bottom in spaced relation to each other, and a horizontal burner supporting plate carried by the lower ends of said arms and located in the same horizontal plane as the lower end of said flame guard, said burner supporting plate and said end of said flame guard together forming supporting means for said receptacle.

1,312,852. APPARATUS FOR THE REFILLING OF DITCHES OR DRAINS. ANDREAS KJØLSTAD, Bygdø, near Christiania, Norway. Filed Apr. 19, 1918. Serial No. 229,526. 3 Claims. (Cl. 37-5.)



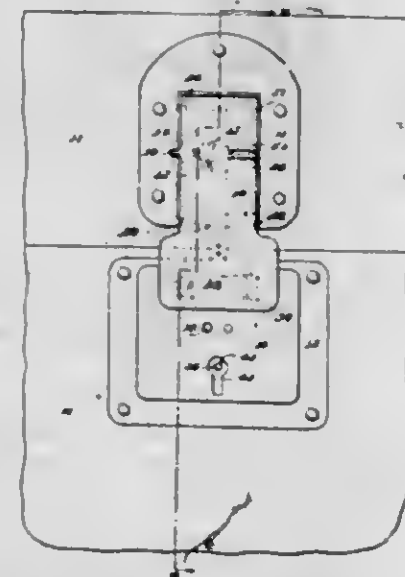
1. In an apparatus for refilling ditches or drains, the combination with scrapers or scoops for scooping the earth into the ditch, of a depending keel shaped guide member for steering said scrapers and simultaneously

compressing the earth in the ditch, and a seat member connected to said depending guide and compression member in such way that the compression is effected by the weight of the driver on said seat.

1,312,853. CLAY-BINDER AND PROCESS OF MAKING SAME. HENRY L. KOHLER, St. Louis, Mo. Filed Mar. 24, 1919. Serial No. 284,854. 13 Claims. (Cl. 106-10.)

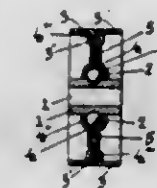
1. A body of clay having a binder comprising a basic sulfate of aluminum generated within the mass of the clay.

1,312,854. RECEPTACLE-LOCK. MACIEJ KORCUS, Providence, R. I. Filed Jan. 13, 1919. Serial No. 270,949. 10 Claims. (Cl. 70-115.)



3. In combination with a receptacle having a lid, a lock casing upon the receptacle having openings therein, a key-operated slide bolt within the casing, a safety catch for the bolt projecting from the casing adapted for normally preventing the shifting of the bolt from its locked position, the said bolt having keeper engaging portions shiftable transversely inwardly of said openings, a swinging hasp upon the lid, keepers upon the inner face of the hasp adapted for reception through said slots within the path of movement of the bolt when the hasp is depressed, means carried by the hasp adapted for automatically swinging the hasp to its open position and a releasable safety latch carried by the hasp and adapted to engage the lid for normally maintaining the hasp depressed with said keepers within the casing openings.

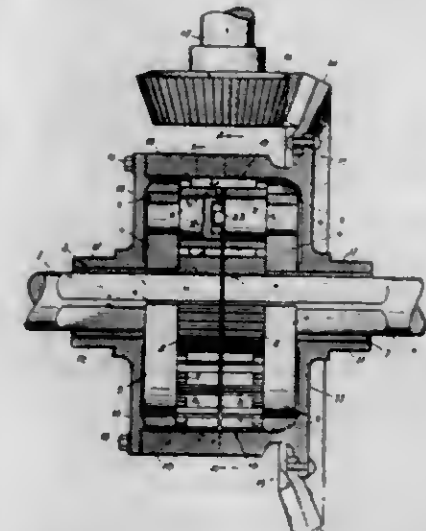
1,312,855. ROLL OR WHEEL FOR ROLLER-SKATES. JOHN M. LEAKE, Worcester, Mass., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1919. Serial No. 277,053. 1 Claim. (Cl. 46-32.)



A roll or wheel, comprising two separate tread parts, each having a flat periphery, and an inwardly extending annular lip or flange on its inner edge, said lips abutting against each other, and two disks or central parts, made separate from the tread parts and extending within the tread parts, and abutting against each other, and each central part having its outer edge offset outwardly to

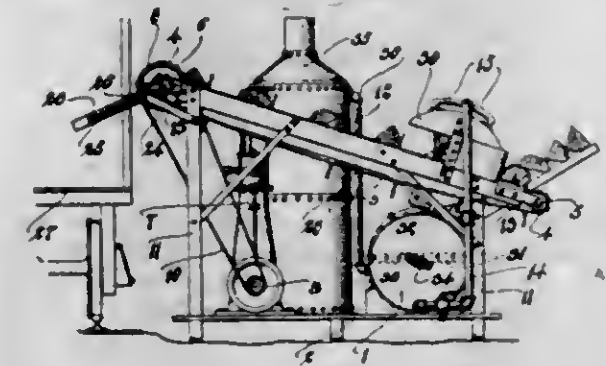
form a recess to receive and hold the lip or flange on the tread part, and each central part having its inner edge offset outwardly, to form a recessed or outwardly cupped portion, and one set of ball bearings inclosed within said cupped portions, and a central stud or shaft grooved to receive said ball bearings, and extending through central openings in said central parts, and means for securing said central parts together.

1,312,856. DIFFERENTIAL. HOWARD G. LEONARD, Jackson, Mich. Filed Mar. 27, 1917. Serial No. 157,851. 2 Claims. (Cl. 74-7.)



2. In a structure of the class described, the combination with aligned axle sections, of driven gears fixed thereto, a yoke rotatably mounted upon each of said axle sections, opposed stub shafts carried by said yokes, pinions rotatably mounted in pairs upon said stub shafts and meshing with said driven gears, a driving member rotatably mounted upon said axle sections, driving lugs secured to said driving member on opposite sides of each pair of adjacent pinions, and slightly spaced therefrom in the neutral position of said pinions, one of said stub shafts being provided with a recess at its inner end, and the opposite stub shaft being provided with a lug adapted to contact with the sides of said recess and limit the rotation of one yoke relative to the other, as specified.

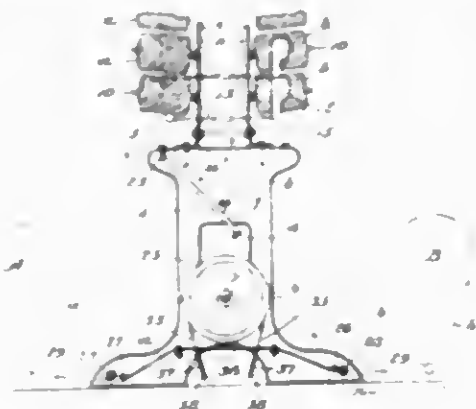
1,312,857. APPARATUS FOR COATING OR IMPREGNATING POSTS. EDWARD A. LINDSLEY, Spokane, Wash. Filed June 12, 1917. Serial No. 174,310. 2 Claims. (Cl. 99-12.)



1. In an apparatus for coating posts, the combination with a conveyer, an open trough, and a drain pan forming part of the trough, of an upper sprayer to spray downwardly, and an opposed lower sprayer to spray upwardly, a transversely extending shield over the upper sprayer, and means for supplying a preservative fluid under pressure to both sprayers.

2. In an apparatus for coating posts the combination with a pair of spaced conveyer chains and an inclined trough located beneath the upper flights of the chains,

warp strands from said reel, a brake to retard rotation of said drum, and a yieldingly mounted take up between



the reel and drum, having eyes to admit the several warp strands and separate them from one another on their way to the drum.

1,312,848. NEEDLE FOR SOUND-REPRODUCING MACHINES. JONATHAN A. HUNT, Salem, Mass. Filed Jan. 14, 1918. Serial No. 211,714. 1 Claim. (Cl. 274-38.)



A needle for sound reproducing machines, of circular shape in cross section, with a flattened section at its end, and a projection of wedge shape forming the engaging end, offset from the plane of the body of the needle.

1,312,849. NEEDLE FOR SOUND-REPRODUCING MACHINES. JONATHAN A. HUNT, Salem, Mass. Filed Mar. 28, 1918. Serial No. 223,225. 7 Claims. (Cl. 274-38.)



1. A needle for sound reproducing machines, the lateral surface of which has two edges situated at opposite ends of the longest dimension of the cross section, said needle having a flattened surface parallel to the plane of said edges and extending the whole length of the needle.

1,312,850. SPARK PLUG. BENJAMIN I. JOHNSON, 4-coyne, N. Y. Filed Oct. 31, 1918. Serial No. 260,741. 1 Claim. (Cl. 123-169.)

In combination with a spark plug casing having interior concentric shoulders, of inner and outer portions and fiber holders telescoping said casing and engaging said shoulders, said holders having axially aligned

having their adjacent ends flared outwardly a copper sleeve countersunk to the lower end of the lower holder, an electrode of soft copper extending through the holders and having an enlargement contacting with the copper sleeve, and means on the upper part of the electrode for drawing the aforesaid parts together, a washer between a



shoulder of the lower holder and one of the shoulders of the casing, a filler surrounding the electrode and having its opposite ends telescoping into the flared out portions of the holders, the lower part of the casing and the enlargement of the electrode having cooperating sparking terminals.

1,312,851. DOUCHE. JOSEPH E. JOHNSTON, Norfolk, Va. Filed Dec. 12, 1918. Serial No. 266,493. 3 Claims. (Cl. 126-350.)



3. A douche comprising a receptacle having an outlet, the back portion of said receptacle being substantially flat, a flame guard extending below the bottom of the receptacle and secured to its flat back, a plurality of arms extending from said bottom in spaced relation to each other, and a horizontal burner supporting plate carried by the lower ends of said arms and located in the same horizontal plane as the lower end of said flame guard, said burner supporting plate and said end of said flame guard together forming supporting means for said receptacle.

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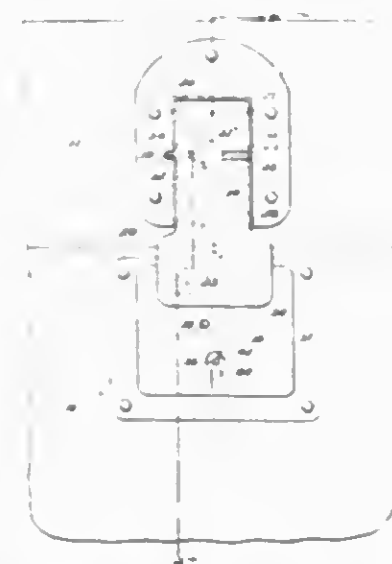
1. In an apparatus for refilling ditches or drains, the combination with scrapers or scoops for scooping the earth into the ditch, of a depending keel shaped guide member for steering said scrapers and simultaneously

compressing the earth in the ditch, and a seat member connected to said depending guide and compression member in such way that the compression is effected by the weight of the driver on said seat.

1,312,853. CLAY-BINDER AND PROCESS OF MAKING SAME. HENRY L. KOHLER, St. Louis, Mo. Filed Mar. 24, 1919. Serial No. 284,834. 13 Claims. (Cl. 106-10.)

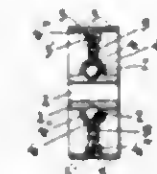
1. A body of clay having a binder comprising a basic sulfate of aluminum generated within the mass of the clay.

1,312,854. RECEPTACLE-LOCK. MACIEL KOSKUS, Providence, R. I. Filed Jan. 13, 1919. Serial No. 270,949. 10 Claims. (Cl. 70-115.)



5. In combination with a receptacle having a lid, a lock casing upon the receptacle having openings therein, a key-operated slide bolt within the casing, a safety catch for the bolt projecting from the casing adapted for normally preventing the shifting of the bolt from its locked position, the said bolt having keeper engaging portions shiftable transversely inwardly of said openings, a swinging hasp upon the lid, keepers upon the inner face of the hasp adapted for reception through said slots within the path of movement of the bolt when the hasp is depressed, means carried by the hasp adapted for automatically swinging the hasp to its open position and a releasable safety latch carried by the hasp and adapted to engage the lid for normally maintaining the hasp depressed with said keepers within the casing openings.

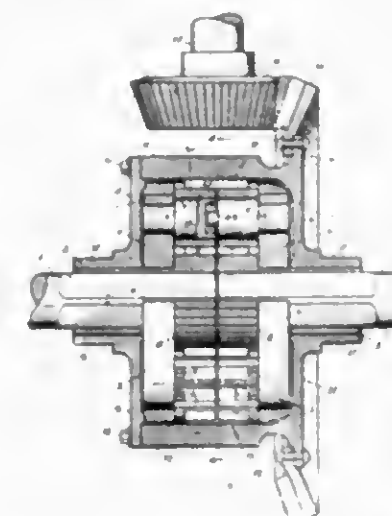
1,312,855. ROLL OR WHEEL FOR ROLLER-SKATES. JOHN M. LEAKE, Worcester, Mass., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1919. Serial No. 277,053. 1 Claim. (Cl. 46-52.)



A roll or wheel, comprising two separate tread parts, each having a flat periphery, and an inwardly extending annular lip or flange on its inner edge, said lips abutting against each other, and two disks or central parts, made separate from the tread parts and extending within the tread parts, and abutting against each other, and each central part having its outer edge offset outwardly to

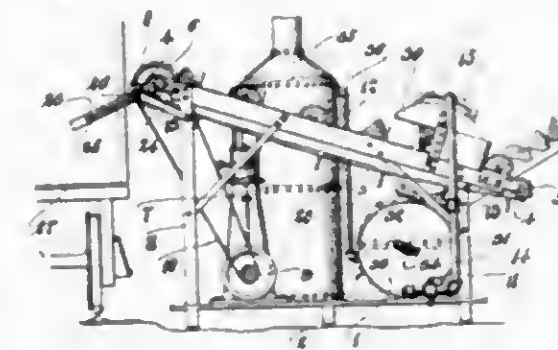
form a recess to receive and hold the lip or flange on the tread part, and each central part having its inner edge offset outwardly, to form a recessed or outwardly cupped portion, and one set of ball bearings inclosed within said cupped portions, and a central stud or shaft grooved to receive said ball bearings, and extending through central openings in said central parts, and means for securing said central parts together.

1,312,856. DIFFERENTIAL. HOWARD G. LEONARD, Jackson, Mich. Filed Mar. 27, 1917. Serial No. 137,831. 2 Claims. (Cl. 74-7.)



2. In a structure of the class described, the combination with aligned axle sections, of driven gears fixed thereto, a yoke rotatably mounted upon each of said axle sections, opposed stub shafts carried by said yokes, pinions rotatably mounted in pairs upon said stub shafts and meshing with said driven gears, a driving member rotatably mounted upon said axle sections, driving lugs secured to said driving member on opposite sides of each pair of adjacent pinions, and slightly spaced therefrom in the neutral position of said pinions, one of said stub shafts being provided with a recess at its inner end, and the opposite stub shaft being provided with a lug adapted to contact with the sides of said recess and limit the rotation of one yoke relative to the other, as specified.

1,312,857. APPARATUS FOR COATING OR IMPREGNATING POSTS. EDWARD A. LINDSLEY, Spokane, Wash. Filed June 12, 1917. Serial No. 174,310. 2 Claims. (Cl. 90-12.)

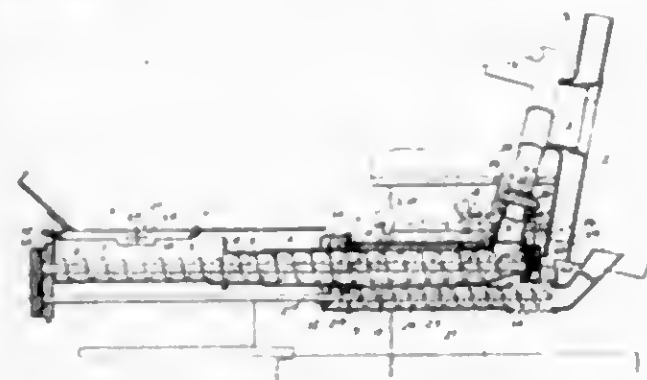


1. In an apparatus for coating posts, the combination with a conveyor, an open trough, and a drain pan forming part of the trough, of an upper sprayer to spray downwardly, and an opposed lower sprayer to spray upwardly, a transversely extending shield over the upper sprayer, and means for supplying a preservative fluid under pressure to both sprayers.

2. In an apparatus for coating posts the combination with a pair of spaced conveyor chains and an inclined trough located beneath the upper flights of the chains,

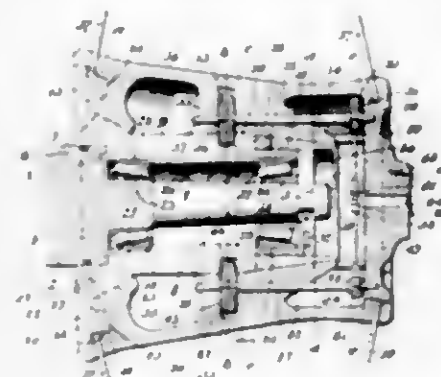
said said trough having a drain pan at the lower end of the trough, a lower sprayer projecting upwardly through the pan, an opposed upper sprayer to spray downwardly toward the pan, a transversely extending shield in connection with the upper sprayer for the lower sprayer, and means for supplying a preservative fluid under pressure to both sprayers.

1,312,858. LOCOMOTIVE STOKER MECHANISM. NATHAN M. LOWE, Pittsburgh, Pa., assignor to Locomotive Stoker Company, Schenectady, N. Y., a Corporation of Pennsylvania. Original application filed Oct. 16, 1912, Serial No. 729,108. Divided and this application filed Nov. 10, 1917. Serial No. 201,288. 6 Claims. (Cl. 193-13.)



1. In locomotive stoker mechanism, the combination with a firebox, of a conduit located underneath the deck of the locomotive for feeding fuel to the firebox, said conduit including a section arranged to be opened laterally to permit the discharge of obstructing masses therefrom, and means extending above the deck of the locomotive for moving said section to open and closed position.

1,312,859. DEMOUNTABLE WHEEL. WILLIAM H. MCQUIVET and GEORGE A. KEATING, Buffalo, N. Y. Filed May 31, 1917. Serial No. 171,888. 15 Claims. (Cl. 21-31.)

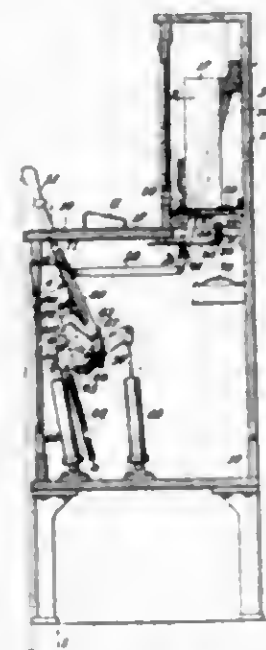


1. In a demountable wheel, a hub comprising an inner or bearing member having two spaced tapered exterior portions, one of which is arranged at a greater angle than the other, an outer member provided with corresponding tapered portions, means for detachably locking said members together, and means operable from the exterior of said hub to actuate said locking means so as to permit removal of said outer member from said inner member.

1,312,860. APPARATUS FOR DELINEATING CHARACTER ACCORDING TO THE CHARACTER OF THE HAND. HARRY N. MARVIN, Rye, N. Y. Filed Jan. 2, 1919. Serial No. 272,489. 17 Claims. (Cl. 40-1.)

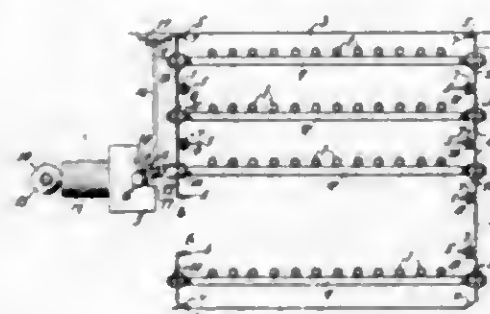
1. In a machine of the class described, a series of card magazines, means for ejecting cards from the magazines

constructed and arranged normally to eject one card from each magazine at each operation of the machine, a hand measuring device, and means connected to the hand



measuring device constructed and arranged to prevent the operation of all of the card ejecting means except the one corresponding to the size of the hand being measured.

1,312,861. SECTIONAL SUPPORT. THOMAS J. MORRIS, Springfield, Mass. Filed Feb. 6, 1919. Serial No. 275,282. 6 Claims. (Cl. 211-14.)



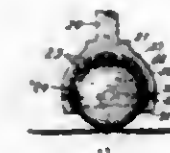
5. The combination, in a sectional support, with a rack consisting in part of front uprights made up of separable sections, and cross-pieces extending through said sections, of ceiling brackets in front of said uprights, caps adapted to fit the protruding terminals of said cross-pieces, rods supported from said brackets, and means to connect said rods with said caps, whereby said cross-pieces and sections may be temporarily supported from said brackets.

1,312,862. PYROPHORIC GAS-IGNITER. EVERETT C. MURDOCH, Berkeley, Calif., and GEORGE J. KELLY, Haverhill, Mass. Filed Apr. 21, 1915. Serial No. 22,925. Renewed Jan. 10, 1919. Serial No. 270,590. 5 Claims. (Cl. 67-6.1.)



1. In a pyrophoric igniter, an externally threaded support having a face at one end, a coupling ring threaded on said support and having an inwardly extending lip, and a pyrophoric alloy holder constructed to extend through said ring to support the alloy therebeyond, and having a lateral projection arranged to be engaged by said lip to clamp said holder against said face.

1,312,863. CASTER. KONSTANTY NABUSZEWICZ, Chicago, Ill. Filed Apr. 11, 1919. Serial No. 289,416. 1 Claim. (Cl. 16-151.)



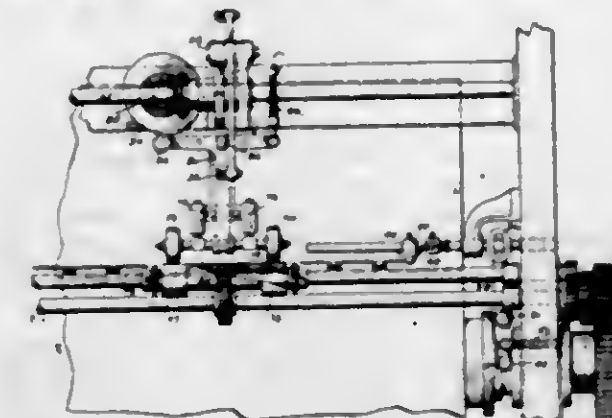
In a ball caster, the combination with a body having a partial spherical cavity and provided with internal screw threads at its lower edge, of a concavo-convex cage threaded to engage with the internal threads and containing a plurality of openings, balls loosely engaged in said openings contactable with the surface of said cavity, a sphere freely received in said cage in contact with said balls, and a cap adapted to retain said sphere within said cavity.

1,312,864. WINDOW-SASH FASTENER. HENRY W. NELSON, Ashby, Minn. Filed Mar. 27, 1919. Serial No. 285,441. 3 Claims. (Cl. 16-19.)



3. In combination with a window sash having an outer vertical edge properly mortised out to receive the device, a sash fastener comprising a housing having a flat outer face adapted to lie flush with the outer face of the said sash and having a spur port therein, side portions on said housing extending at right angles to the face and positioned in the mortise, a vertically disposed trigger medially pivoted between the sides of the housing and offset outwardly at its lower end, a spur pivoted on the lower end of said trigger and adapted to play through the port in the face of the housing, a spring positioned within the housing between the face thereof and the upper inner face of the trigger and adapted to normally bear against said trigger to force the spur outwardly, and a push lever connected with the upper end of said trigger and extending inwardly through the vertical sash edge.

1,312,865. SHEET-FEEDING MECHANISM. JAVING F. NILES, Plainfield, N. J., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed May 2, 1912. Serial No. 694,685. 2 Claims. (Cl. 271-48.)



1. In a sheet feeding mechanism, an abutment, carrying devices adapted to move the sheet forward for foot registration against the abutment, rollers in continuous contact with the sheet but permitting its free forward

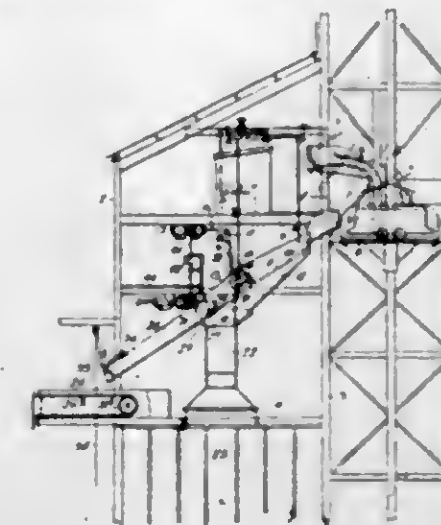
movement, the said rollers being adapted to move the sheet laterally in one direction to effect side registration, an actuator to cause the transverse movement of the rollers, a side stop adapted to cooperate with the rollers to effect side registration, and an actuator for the side stop to cause a movement of the same in a direction opposite to that of the rollers.

1,312,866. SEWING-MACHINE. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1914. Serial No. 829,506. 8 Claims. (Cl. 112-8.)



1. A sewing machine including in combination, a work support, a main feeding member, an auxiliary feeding member in advance of said main feeding member, a presser foot cooperating with said main feeding member, a yieldingly supported separating plate located wholly in front of the work-engaging surface of the presser foot and cooperating with the auxiliary feeding member, and means for raising said separating plate, whereby said auxiliary feeding member is rendered ineffective.

1,312,867. COAL-CLEANING APPARATUS. WILLIAM J. PATTERSON and ROSS M. BICKLEY, Pittsburgh, Pa., assignors to Heyl & Patterson, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1919. Serial No. 280,854. 5 Claims. (Cl. 83-50.)

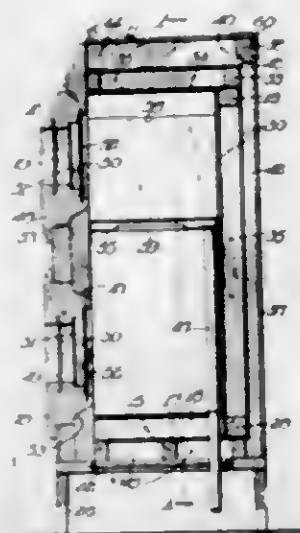


1. In apparatus for cleaning coal, the combination of a weigh-hopper, a screen dividing said hopper into an upper and lower deck, said upper and lower decks having discharge openings, gates controlling said openings, means for operating said gates, a common chute to receive the contents of said upper and lower decks, a picking-table and means for diverting the coal from the said upper deck to said picking-table.

1,312,868. REFRIGERATOR CONSTRUCTION. LOUIS F. PEABODY, Traverse City, Mich., assignor to Traverse City Refrigerator Co., Traverse City, Mich., a Corporation of Michigan. Filed Nov. 12, 1917. Serial No. 201,421. 2 Claims. (Cl. 217-12.)

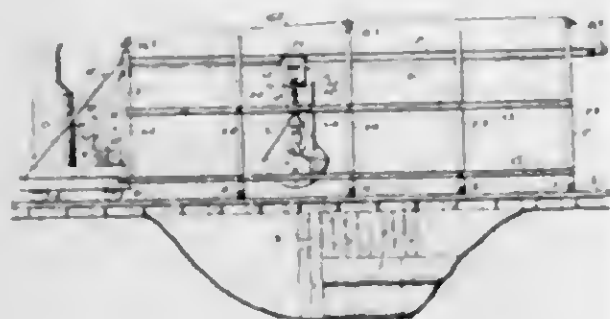
1. A refrigerator embodying a plurality of independent wall elements, each of said elements embodying a frame,

fiber board secured to the frame to form a closed dead air space, spaced laterally projecting spacing members secured to one face of the element and extending thereacross, said elements being assembled to form the sides, back, top and bottom of an inner casing with the said



spacing members projecting from the outer faces of the walls, the front of the casing being shaped to form an entrance opening, the fiber board secured to the said spacing members and defining the outer walls of the refrigerator, and a closure for the said entrance opening.

1,312,869. EXCAVATOR AND HOIST AND TRAVELER OR TROLLEY THEREFOR. JOSEPH PRANA, Philadelphia, Pa. Filed Mar. 1, 1917. Serial No. 131,800. 3 Claims. (Cl. 212-109.)

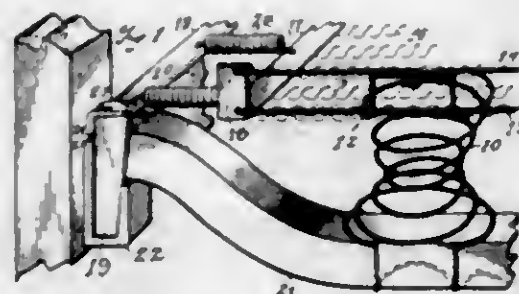


1. In a device of the character stated, a trolley consisting of two side plates, axes carried by each plate adjacent their upper ends, wheels journaled on said axes for traveling on a track, shafts passing through said plates and projecting beyond their outer faces, said shafts having slots formed in the projecting ends, locking plates secured to the side plates and registering with the slots in said shafts for holding said shafts in position, sheaves mounted on said shafts over which the cables are adapted to run, a rod secured to the side plates adjacent one of the sheaves, a roller journaled thereon for holding the cable in its sheave, and guide rods secured to the plates for guiding one of said cables.

1,312,870. SPRING BED OR SEAT. ERICK W. PRINCASSON, Jamestown, N. Y., assignor to William Lewis, Utica, N. Y. Filed July 9, 1914. Serial No. 84,921. 12 Claims. (Cl. 5-40.)

10. A bed spring comprising supporting means, spiral springs carried thereby, a side guard located along each

outer longitudinal row of spiral springs to project above the same, and means connecting the guard with said



springs for preventing the flattening, spreading and sagging of a stuffed mattress over the edge of the spring.

1,312,871. METHOD OF MANUFACTURING MAGNESITE REFRACTORIES. ROBERT D. PIKE, San Francisco, Calif. Filed Oct. 23, 1917. Serial No. 108,087. 8 Claims. (Cl. 100-9.)

1. The process of treating magnesite in admixture with ferric oxide for the production of magnesite refractories, which consists in intermixing with the said magnesite a ferro alloy, and then heating the mixture so formed to a temperature sufficiently high to cause the ferro alloy to react with the constituents of the magnesite.

1,312,872. WIRE CABLE. WILLIAM N. RETTINGER, Bourbon, Ind. Filed Jan. 13, 1910. Serial No. 71,971. 1 Claim. (Cl. 28-5.)

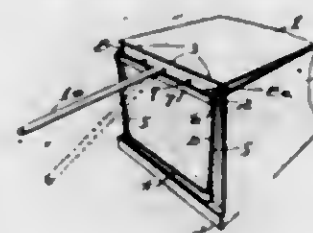


As a new article of manufacture, a cable comprising a central core, said central core comprising a plurality of closely compact longitudinally extending massed wires, a plurality of binding wires passing spirally around said core for holding the wires of said core in compact relation, a covering for said core comprising a plurality of closely arranged strands extending spirally around said core at a greater angle than the binding wires, each of these strands being composed of a plurality of wires twisted together, the convolutions of the strands extending longitudinally of the cable upon the outer face thereof.

1,312,873. CRATE-OPENER. THURMAN ALLEN RHODES, Altamont, Ill. Filed Sept. 19, 1918. Serial No. 254,707. 4 Claims. (Cl. 145-21.)

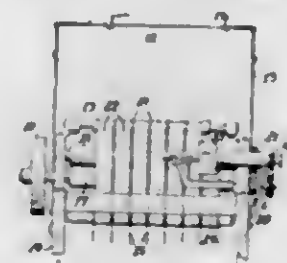
1. A crate opener including a flat open frame adapted to fit against the end of a crate and provided at its lower end with a horizontal cross piece adapted to rest loosely upon an end cleat of the crate, an elongated blade arranged substantially parallel to the cross piece and pivotally mounted upon the upper end of the frame, said

blade having an edge adapted to enter the space between the cover and the top of the crate and extending sub-



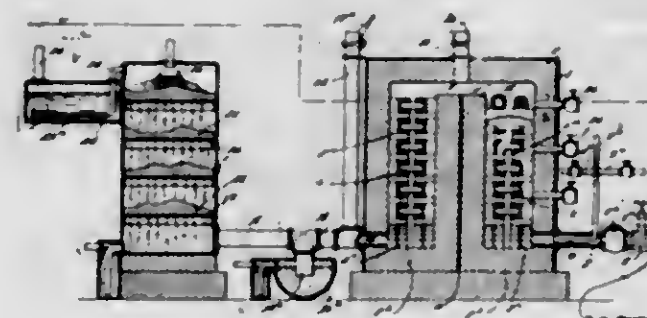
stantially the full width of the cover, and a lever rigid with the blade for tilting the same to pry the cover open, said lever being collapsible against the frame.

1,312,874. TEXTILE APPARATUS. JOHN WM. ROBERTS, Passaic, N. J. Filed June 9, 1917. Serial No. 173,736. 12 Claims. (Cl. 164-60.)



1. A textile apparatus comprising positively driven feed rollers between which a sheet of fabric is passed, said fabric being of a nature to make initial tearing difficult, and movable cutting means, said cutting means being disposed so as to cut spaced transverse short cuts in the edge of the fabric.

1,312,875. APPARATUS FOR PRODUCING COMBUSTIBLE FUEL. JAMES R. ROSE, Edgeworth, Pa. Filed Dec. 9, 1915. Serial No. 65,954. 9 Claims. (Cl. 48-74.)

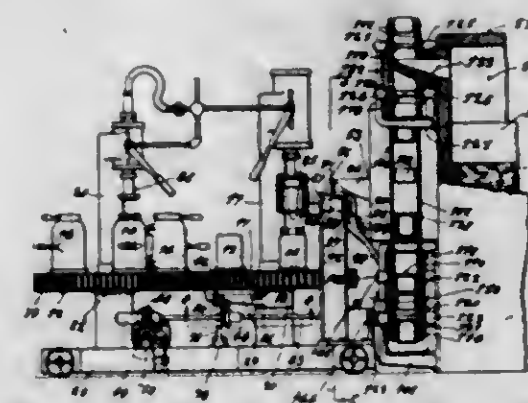


1. An apparatus of the character described comprising a pair of generators, means for supplying a preheating fluid or fluids to each of said generators, a retort in each of said generators arranged to discharge into the other generator, and connections whereby gas-producing material may be supplied to said retort.

1,312,876. APPARATUS FOR FEEDING AND DELIVERING GLASS. JOHN SCHIRAZ, Anderson, Ind. Filed Aug. 28, 1914. Serial No. 859,099. 8 Claims. (Cl. 49-5.)

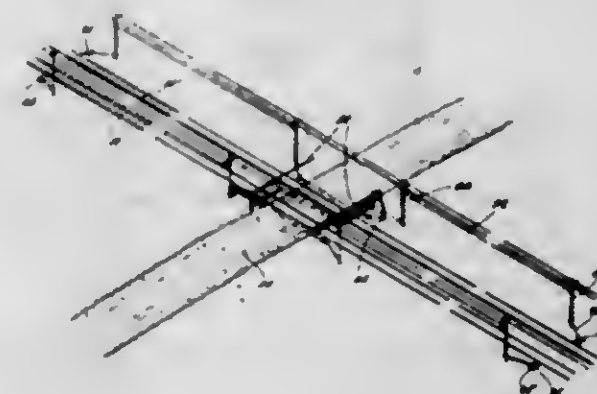
1. In a device of the character described, the combination of means for causing a constant flow of glass-metal, a series of molds adapted to be successively placed in glass-metal receiving position, means for automatically

selectively causing said flow to and away from the mold in glass-metal receiving position at timed intervals comprising cutting off and glass-metal deflecting means, and



means for operating said cutting off and glass-metal deflecting means comprising an adjustable member for adjusting the duration of said intervals.

1,312,877. AUTOMATIC GATE. EWTREY SKRIBUK, Avonlea, Saskatchewan, Canada. Filed Feb. 27, 1919. Serial No. 279,502. 3 Claims. (Cl. 240-311.)

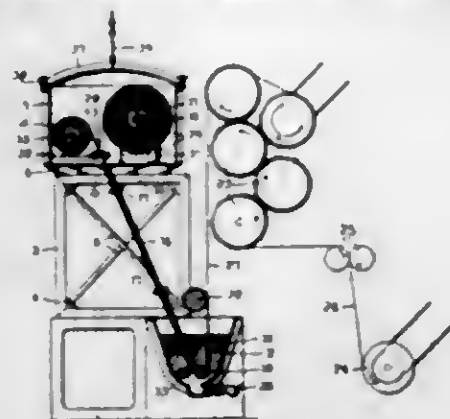


1. In a device as described, in combination, a series of railway ties, a post secured alongside the same, a gate pivoted upon said post so as to extend crosswise of rails, an elongated upper rail secured upon said gate and providing one crank arm projecting beyond said post, another crank arm formed at an angle to the other crank arm upon said rail, a square collar carried dependently by said gate adjacent said post and at its lower end, a spring finger having one portion thereof secured to a tie and being deflected outwardly so as to provide an arm bearing against said square collar to lock said gate in open and closed positions, cables secured to said crank arms, and means for operating said cables alternately to open and close said gate.

1,312,878. APPARATUS FOR IMPREGNATING FABRIC. JOHN E. THROPP and PETER D. THROPP, Trenton, N. J., assignors to The De Laski and Thropp Circular Woven Tire Company, Trenton, N. J., a Corporation of New Jersey. Filed May 23, 1917. Serial No. 170,495. 4 Claims. (Cl. 91-46.)

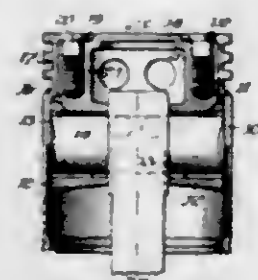
1. Apparatus of the character described comprising an air-tight chamber, an impregnating tank located below the chamber, a duct having one end in air-tight communication with the chamber and the other end opening into the tank, said duct extending from the chamber downwardly to the tank at an angle to the vertical, means for supporting the fabric to be treated in the cham-

ber, means for leading the fabric from the chamber through the duct and tank, means for leading the fabric



away from the tank in a substantially vertical direction, and means for drying the fabric after it has been impregnated.

1,312,879. PISTON FOR INTERNAL-COMBUSTION ENGINES. EDGAR AMES TURNER, Chicago, Ill., assignor to North-Western Expanded Metal Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 28, 1917. Serial No. 209,273. 60 Claims. (Cl. 74—85.)



1. A built-up composite metal piston construction comprising, in combination, a skeleton inner core and an outer wall detachably carried thereby.

1,312,880. PISTON FOR INTERNAL-COMBUSTION ENGINES. EDGAR AMES TURNER, Chicago, Ill., assignor to North-Western Expanded Metal Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 28, 1917. Serial No. 209,274. 31 Claims. (Cl. 74—85.)

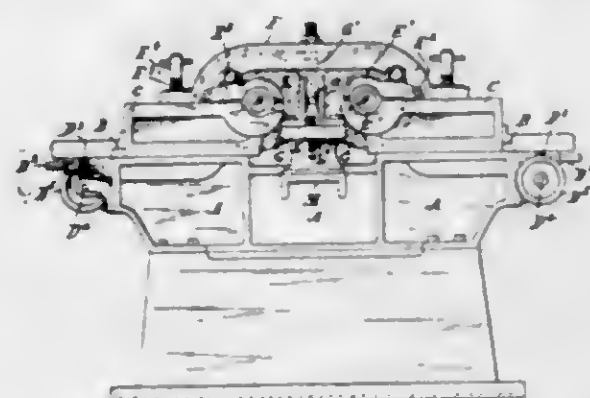


1. A built up bi-metallic piston construction comprising, in combination, an outer iron wall and head, and an inner supporting core of aluminum alloy contacting with said head, adjacent the center thereof for transmitting heat therefrom.

1,312,881. ROLL-GROUNDING MACHINE. JAY G. WEISS, Montclair, and CONRAD KNOTT, Newark, N. J., assignors to Hysatt Roller Bearing Division, United Motors Corporation, Harrison, N. J., a Corporation of New York. Filed Aug. 20, 1918. Serial No. 259,631. 13 Claims. (Cl. 51—4.)

1. A grinding machine adapted to repeatedly grind a continuous series of roll blanks, and having a plurality

of pairs of grinding wheels with the edges of the wheels in each pair opposed and arranged in line with one another, supporting guides extended between the several pairs of wheels with upper and lower guide bars forming



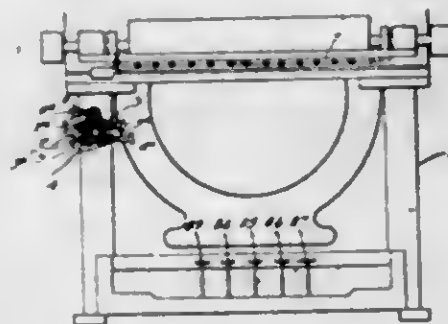
a channel in the guides to lead the roll blanks successively from one pair of wheels to another and the distance between the several pairs of wheels being greater than the length of the roll blank.

1,312,882. BANJO ATTACHMENT. HARRY W. WEYMANN, Philadelphia, Pa., assignor to H. A. Weymann and Son, a Corporation of Pennsylvania. Filed Jan. 25, 1916. Serial No. 74,122. 5 Claims. (Cl. 84—124.)



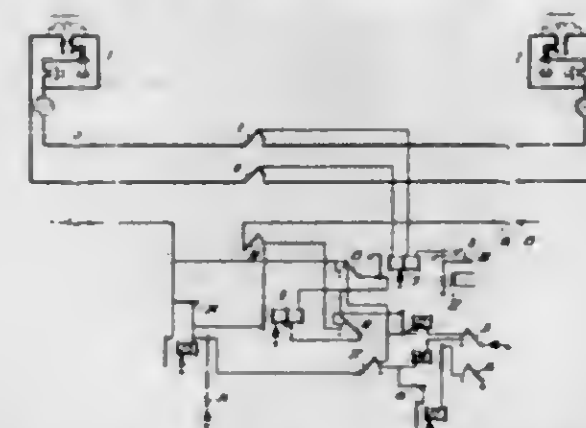
1. A banjo attachment comprising a back, a flange projecting therefrom and having an opening therein and means carried by the interior of the attachment for frictionally attaching the same to a musical instrument.

1,312,883. TYPE-WRITER. WILLIAM L. WHITE, Birmingham, Ala., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1917. Serial No. 194,299. 12 Claims. (Cl. 197—177.)



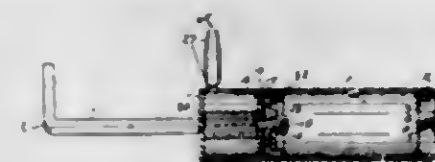
1. In a typewriting machine, the combination with a traveling carriage, of column-selecting means including stops mounted at the rear of the machine, each adjustable transversely of the machine, means for severally setting said stops in adjusted position, said setting means including devices through which actuation of said setting means is effected, positioned at the front of the machine and having thereon scales numbered to conform with the numbering on the space scale of the machine, and indicators associated with said scales, whereby the positions of said stops relative to the space scale will be indicated, and means on said carriage for engaging with said stops.

1,312,884. AUTOMATIC SWITCH-CONTROL CIRCUITS. SAMUEL B. WILLIAMS, Jr., Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1916. Serial No. 84,580. 5 Claims. (Cl. 179—18.)



1. In a telephone exchange system, a controlling switch, wipers and an escape magnet for said controlling switch, a plurality of windings for said magnet, a circuit including part of said windings for energizing said magnet, and a circuit including said windings in series for making said magnet slow to release, the first named circuit being controlled by a wiper of said controlling switch.

1,312,885. TIMER. MORRISON J. BARNETT, San Francisco, Calif. Filed Oct. 24, 1916. Serial No. 127,377. 5 Claims. (Cl. 161—26.)



1. In combination with a needle valve, a partition having an aperture adapted to be closed by said valve, a threaded casing in which said needle valve is screwed, and a wall remote from said casing, and a straight double-ended pointer attached to said needle valve and having both of its ends movably and frictionally engaging said wall.

1,312,886. PILLOW. WILLIAM E. BAWDEN, Chicago, Ill. Filed Sept. 12, 1916. Serial No. 119,627. 4 Claims. (Cl. 5—13.)

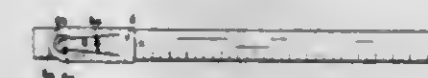


1. A pillow having a partition extending across the interior at an acute angle to the general plane of one of the faces of the pillow.

1,312,887. GUIDE AND HOLDER FOR FLEXIBLE RULES. WILLIAM JOHN BOURQUET, Springfield, Mass. Filed June 29, 1917. Serial No. 177,837. 1 Claim. (Cl. 24—3.)

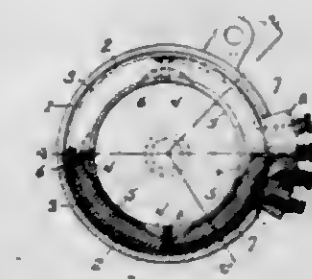
A combined rule guide and holder consisting of a one-piece device having a central wall and parallel inset flanges slightly spaced from said wall to slidably retain a thin flat rule therebetween, said flanges having longitudinal corrugated ribs for engagement with the rule and said central wall having a spring tongue formed thereon, said spring tongue having a dished terminal portion mov-

able between the opposing edges of the flanges but wider than the space between said flanges, whereby the flanges will prevent a wedging action of the tongue therebetween



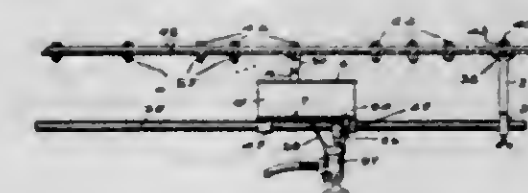
and a rule can be inserted between said tongue and said flanges without becoming wedged between the tongue and the central wall.

1,312,888. TIMING APPARATUS. CHARLES E. BRAND-PASS, Wheeling, W. Va. Filed July 15, 1918. Serial No. 244,854. 4 Claims. (Cl. 123—167.)



1. In an ignition timer, a casing, superimposed insulation rings mounted within said casing, contact blocks disposed in spaced relation on the inner face of the inner of said rings, metallic means extending through said inner ring for maintaining said blocks in place, insulation segments removably mounted between said blocks, and lead wires disposed between said rings, said wires having their inner ends connected to said block-attaching means and having their opposite ends directed outward through the casing and in a closely associated group.

1,312,889. NUT-TIGHTENER. THEOPHILUS M. BROWN, Seattle, Wash. Filed Aug. 26, 1918. Serial No. 251,376. 4 Claims. (Cl. 81—57.)

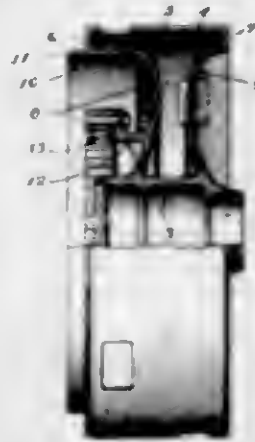


1. A device for tightening nuts in the hulls of steel ships comprising a bar, a support pivotally secured to the hull of a ship and projecting outwardly therefrom one end of said bar being secured to said support and the other end of said bar being adapted to be manually supported whereby said bar may be oscillated about its pivotal connection, and a power actuated nut tightener supported by said bar and movable lengthwise thereon, the said bar preventing the said nut tightener from turning when torque is exerted to turn a nut.

1,312,890. METAL WHEEL. ROBERT J. BURNOWS, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 15, 1917. Serial No. 168,070. 11 Claims. (Cl. 21—69.)

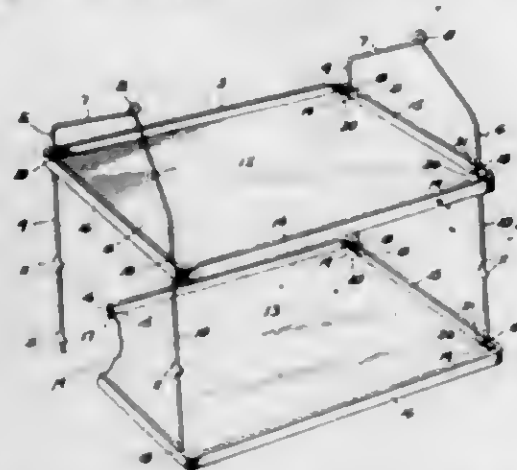
1. A metal wheel, comprising a hub, a hollow rim having a tread portion and a substantially radial marginal flange, a web integrally connected with said flange and

forming a cylindrical braking surface adjacent to the rim of the wheel, said web being also connected with the hub.



and means connecting the other margin of the rim with the hub.

1,312,891. SHELF-SUPPORT. ARVID F. CARLIN, New York, N. Y. Filed Mar. 3, 1919. Serial No. 280,203. 4 Claims. (Cl. 45—55.)



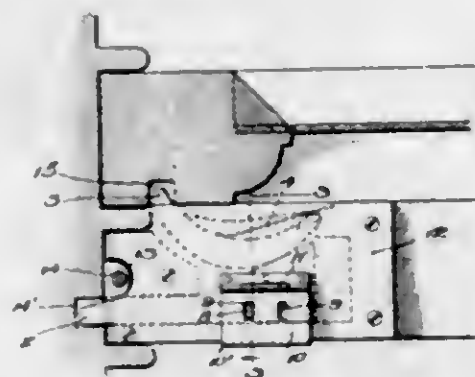
1. An article of the class described, comprising a plurality of frame members and a plurality of shelf members, the shelf members being each provided with a plurality of cut-out portions and with spring tongue members adjacent to said cut-out portions, and said frame members being provided with a plurality of lugs, said frame members and the lugs thereon being adapted to be passed through the cut-out portions of the shelf members and to depress said spring tongue members in this operation.

1,312,892. RADIATOR-CAP. ROBERT A. CASHEN, Meriden, Conn. Filed Apr. 10, 1919. Serial No. 290,521. 1 Claim. (Cl. 220—32.)



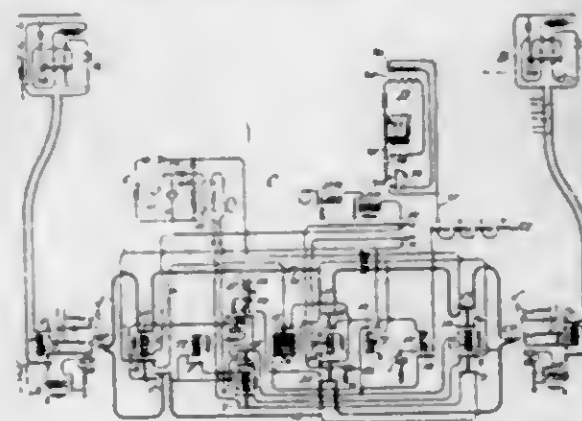
The combination with a filling neck formed with a collar, a band secured to the neck below said collar, the ends of the said band formed with upwardly projecting integral arms, a strap having one end turned at right angles to the plane of the strap and secured to the upper ends of said arms, a cap secured to said strap and adapted to enter said collar, said strap formed with a shoulder adapted to engage with said collar when the cap is in place.

1,312,893. SASH-FASTENER. JOHN H. CONN, Fairfield, Conn. Filed Apr. 10, 1919. Serial No. 289,035. 4 Claims. (Cl. 16—52.)



1. In a window fastener, a casing composed of a base plate formed with a cut-out to form a curved seat, a sliding bolt in the cut-out having an enlarged rear end formed with an inclined cam face, a lug projecting upwardly from the bolt, a curved pivoted bolt in the cut-out resting in one position against the seat, a spring for tensioning the pivoted bolt to normally hold same within the cut-out, a cover plate for the casing having a cut-out, a plate hinged to the cover plate and operating in the cut-out of the latter and formed with a plurality of spaced openings to receive the lug in different positions of the sliding bolt, and said casing being formed with a cut-out in an end thereof to receive the sash cord, and being formed for securement to the upper rail of the lower sash.

1,312,894. TELEPHONE SYSTEM. HIRSH D. CURRIER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, a Corporation of Illinois. Filed Jan. 8, 1915. Serial No. 1,097. 15 Claims. (Cl. 179—73.)

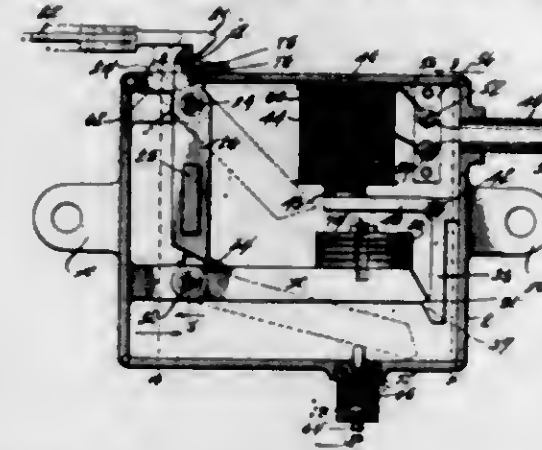


1. A telephone system comprising telephone lines, a link circuit having called line terminals for connection to said lines as called lines, a source of pulsating current, a polarized relay, circuit connections for connecting said source of current and said relay in series circuit to a connected called line, said relay being so arranged as not to actuate its armature when so connected, means for establishing a reverse flow of current in said relay to cause the same to operatively energize and attract its armature, and circuit connections controlled by said armature when thus operated to disconnect said pulsating current from said terminals.

1,312,895. RELEASE-BOX. JOHN H. DERRY, New York, N. Y. Filed Nov. 20, 1915. Serial No. 62,550. 6 Claims. (Cl. 70—50.)

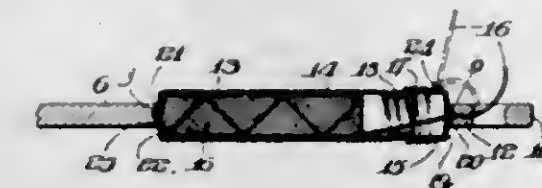
1. A release box comprising a series of connected multiplying levers adapted to move into separated relation to each other when the box is released, said levers having engaging faces so located with respect to the directions of

movement of successive levers but a component of the force exerted upon the initial lever by the part to be released is transmitted at each connection to the succeeding member of the series and tends to rock said member and break



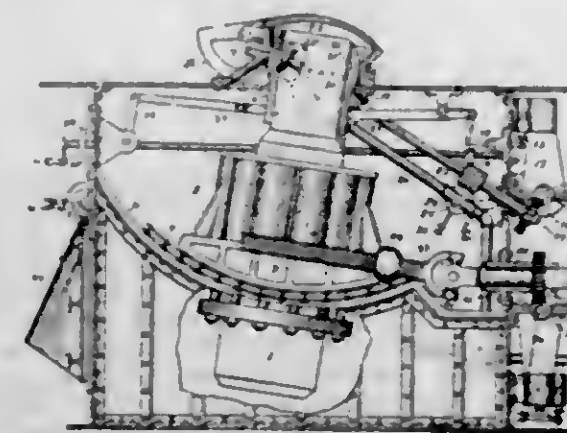
the connection, and that another component is transmitted directly to the lever fulcrum and is thus neutralized and electromagnetic means for retaining the last member of the series and thereby the connected series against the tendency of said transmitted pull to break the connections.

1,312,896. TOILET UTENSIL. LAURENCE F. DONNELLY, Lansford, Pa. Filed Aug. 20, 1918. Serial No. 250,643. 7 Claims. (Cl. 132—32.)



5. A toilet utensil having a portion provided with a slot and a dental floss container mounted within said slot, said slot having recesses in its opposite ends, said container being made in sections screw threaded together, each of said sections having an extension adapted to project respectively into said recesses when said screw threaded sections are turned in opposite directions, said portion having a duct therein, one of said extensions having a hole in alignment with said duct whereby thread can be pulled from said container through said hole in the extension and said duct, said portion having a hole with which said duct communicates and through which said thread can be pulled, substantially as described.

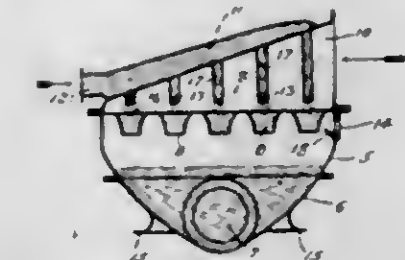
1,312,897. SUBMARINE GUN. HALVOR O. ERIK, Detroit Harbor, Wis. Filed May 24, 1916. Serial No. 99,672. 6 Claims. (Cl. 89—5.)



1. A submarine gun having its muzzle end pivotally mounted, and its breech end supported through suitable re-

coil cylinders provided with segmental runners and movable to angular positions on circular guide tracks having their center of circle in the pivotal mounting of the muzzle end of said gun.

1,312,898. CONDENSER. RAYMOND N. EHRHART, Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Co., a Corporation of Pennsylvania. Filed Sept. 19, 1917. Serial No. 192,190. 3 Claims. (Cl. 261—116.)



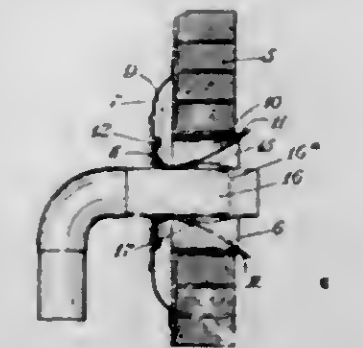
3. In a condenser, a condenser shell having a steam inlet, a water box closing the condenser, having its under side inclined downward away from the inlet so as to deflect the incoming steam downward, a series of combining cones supported within the condenser shell, and a plurality of nozzles for delivering cooling water from the water box to the said cones.

1,312,899. INTERNAL COMBUSTION TURBINE-ENGINE. ROBERT ENNAULT-PELTERIE, Ronlogne-sur-Seine, France. Filed Dec. 28, 1917. Serial No. 209,363. 5 Claims. (Cl. 60—41.)



1. An internal combustion turbine engine, comprising an air compressor driven by said engine, a combustion device supplied with air in excess from said compressor and having a fuel injecting means therein, a turbine driven by the hot gases from said combustion device, and a thermal regulator located in the path of the exhaust gases from said turbine controlling the supply of liquid fuel to said injecting means.

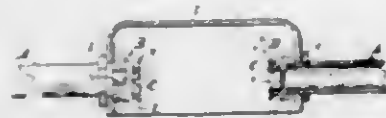
1,312,900. STOVEPIPE-COLLAR HOLDER. MICHAEL J. FAISTL, Columbus, Ohio. Filed Jan. 31, 1916. Serial No. 75,244. 1 Claim. (Cl. 126—315.)



The combination with a stove pipe collar concentrically slotted to form a plurality of seats extending radially with reference to the axis of the collar opening, of means for holding said collar in a chimney opening comprising a plurality of arms 10 each bent at its outer end to slidably

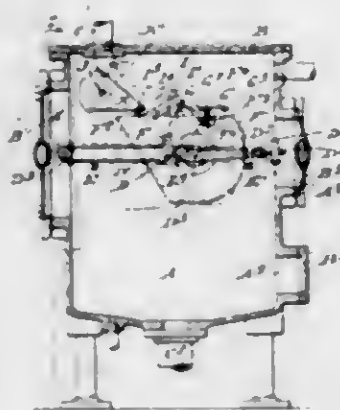
and removably engage one of said seats by movement in a radial direction and each of said arms provided at its inner end with teeth to engage a fixed member at the inner side of the chimney opening to prevent the withdrawal of the arms and collar, and spring arms 15 on said arms 10 to engage the stove pipe to resist its removal.

1,312,901. CONDUIT-BUSHING. CHARLES W. FINLEY, Battle Creek, Mich. Filed Mar. 28, 1917. Serial No. 157,953. 5 Claims. (Cl. 285-26.)



8. In a device of the class set forth, the combination of a collar threaded at one end, and a cover fitting within the other end of said collar, and having an out-turned rim provided with spacing lugs engaging the end of said collar, for the purpose specified.

1,312,902. LIQUID-WEIGHING APPARATUS. JOSEPH W. GARATE, Philadelphia, Pa., assignor to Joseph S. Lovering Wharton, William S. Hallowell, and John C. Jones, Philadelphia, Pa., doing business under the firm name of Harrison Safety Boiler Works, Philadelphia, Pa. Filed Oct. 5, 1918. Serial No. 256,961. 2 Claims. (Cl. 73-178.)

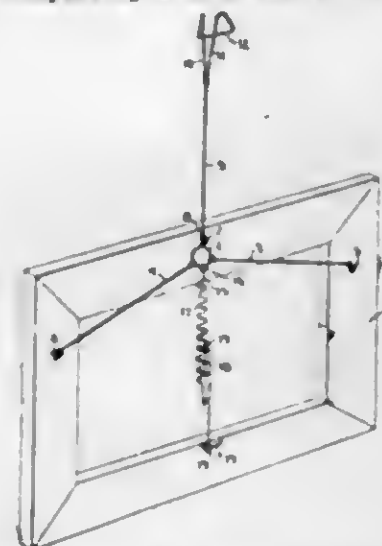


1. In a liquid weighing apparatus, the combination of a receptacle into which the liquid is delivered and in which it is weighed, means actuated by the weight of liquid in the receptacle for discharging it intermittently, a conduit through which liquid is delivered to the apparatus, an intermediate pivotally supported liquid receptacle located between said conduit and the weighing receptacle and serving normally, and while the weighing receptacle is being filled, as a more conduit, and means actuated by the means which effect the discharge of the weighing receptacle whereby the intermediate receptacle is turned to a liquid retaining position and held in such position while the weighing receptacle is being discharged.

1,312,903. PICTURE HANGER. LUDWIG G. GARDINO, Campello, Mass. Filed Dec. 15, 1915. Serial No. 66,506. 2 Claims. (Cl. 40-145.2.)

2. A hanger for pictures and like articles comprising a central supporting ring, two laterally divergent members flexibly connected at their adjacent ends to said ring and provided at their remote ends with means adapted to be attached to the sides of the picture frame, an extensible intermediate positioning device comprising a member flexibly connected at one end to said ring and at the other end adjustably connected to a cooperating member having

means adapted to be connected to the base of said picture frame and a suspending member flexibly connected at one



end to said ring and having means at its other end to engage a support upon the wall.

1,312,904. ADJUSTABLE STILT. PAUL EMERSON GLAFCKE, Denver, Colo. Filed June 21, 1915. Serial No. 35,301. 8 Claims. (Cl. 135-53.2.)



1. A stilt step comprising a hollow shank member and a foot rest member formed integral with the shank and projecting therefrom, and means mounted on the foot rest member for securing the step in place upon a staff, said means comprising a pawl pivotally connected with the foot rest member slightly below the lower surface of the tread portion thereof and in suitable proximity to the staff and adapted to swing into clamping relation with the stick or staff passing through the shank member, and into engagement with the lower surface of the foot rest member, which surface is slightly above the axis of the pawl when the device is in use.

2. A stilt step comprising a shank member and a foot rest member formed integral therewith and projecting therefrom intermediate the extremities thereof, and means mounted on the foot rest member for securing the step in place upon a staff, said means comprising a pawl pivotally connected with the foot rest member below the top of the latter and adapted to be moved toward the tread portion thereof and into clamping relation with the staff passing through the shank member, the pawl being so arranged that when in the locking position, its upper surface engages the under surface of the tread portion of the foot rest, which serve as a stop.

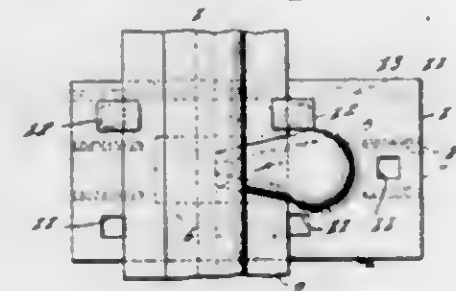
3. A stilt step comprising a hollow shank and a foot rest member projecting laterally therefrom intermediate the extremities thereof, the foot rest member having a top part forming a tread and spaced depending side parts, and a pawl pivotally mounted between the said side parts of the foot rest slightly below the lower surface of the tread portion thereof and in suitable proximity to the staff and adapted to be moved toward and into engagement with the tread portion thereof and into locking relation with a staff passing through the shank member.

4. A stilt step comprising a hollow shank and a foot rest member projecting laterally therefrom intermediate the extremities thereof, the foot rest member having a

top part forming a tread and spaced depending side parts, and a pawl pivotally mounted between the said side parts of the foot rest and adapted to be moved toward the tread thereof into locking engagement with a staff passing through the shank member, the tread portion of the foot rest having an opening which is partially closed by the pawl when in the locking position.

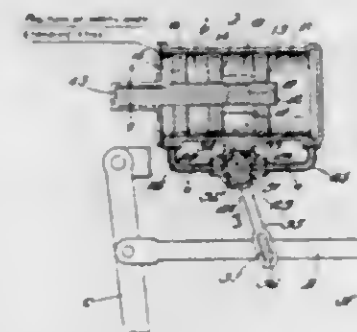
5. A stilt step comprising a hollow shank adapted to receive a staff, a foot rest extending laterally from the shank and having a top part forming a tread and depending spaced side parts, and a pawl located between said side parts hingedly connected at its outer extremity therewith and so arranged that its free extremity is adapted to swing into clamping relation with the staff and its upper surface into engagement with the lower surface of the tread of the foot rest, the said tread being open to give access to the pawl.

1,312,905. COMBINATION TIE-PLATE AND RAIL BRACE. CHARLES WALTER HACKETT, Atlanta, Ga., assignor of one-half to Frank D. Hackett, Northwilkboro, N. C. Filed Mar. 21, 1910. Serial No. 85,600. Renewed July 5, 1919. Serial No. 308,013. 1 Claim. (Cl. 238-293.)



A combination tie plate and rail brace comprising, a flat rectangular base having longitudinal and transversely extending incisions forming a centrally disposed partly severed portion adapted to be bent upwardly to function as a tie brace, said brace being curved transversely to form a semiconical bracing member, the lower portion of the bracing member and the adjacent portion of the base being struck up and rounded to form a strong durable connection between the base and brace.

1,312,906. DRIFTING-VALVE FOR LOCOMOTIVES. JOHN H. HANLON, Somerville, Mass. Filed Nov. 16, 1910. Serial No. 131,784. 3 Claims. (Cl. 121-14.)

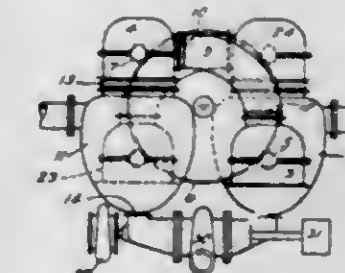


1. In a device of the character described, a drifting valve cylinder, a conduit leading from the boiler through the said cylinder to the cylinders of the locomotive, a valve controlling the passage of steam through said drifting valve cylinder, a piston in said cylinder connected to said valve and actuating it, a throttle actuated pilot valve, and a casing therefor having ports entering the drifting valve cylinder on opposing faces of the piston and ports leading to the atmosphere and to a portion of

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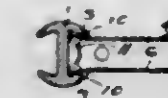
the said steam conduit which leads from the boiler to the cylinders of the locomotive, all of said ports being controlled by said pilot valve.

1,312,907. GEARED-TURBINE INSTALLATION. HERBERT T. HEAR, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 11, 1910. Serial No. 136,312. 7 Claims. (Cl. 60-70.)



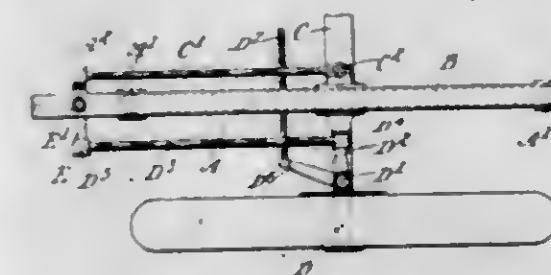
1. In a marine turbine, a driven gear, a turbine shaft located on one side of the gear, and comprising a high pressure and a low pressure section, one located below and on one side of the axis of the gear and the other above and on the other side of the axis of the gear, a passage connecting said sections, a separate pinion driven by each section and meshing with the gear, and a condenser communicating with said low pressure section.

1,312,908. REINFORCING MEANS FOR CONCRETE STRUCTURES. WILLIAM GOLDIE, Wilkesburg, Pa. Filed July 10, 1918. Serial No. 244,236. 5 Claims. (Cl. 72-110.)



1. A reinforcing structure for concrete, comprising a main reinforcing bar having dove-tailed recesses extending along the sides thereof, of a transverse reinforcing bar having a vertical web and having flanges adapted to be expanded into and engage the dove-tailed walls of said recesses, and means for expanding the flanges in the dove-tailed recesses.

1,312,909. STEERING MECHANISM FOR MOTOR-VEHICLES. CHARLES LOUIS HEYERMANN, London, England, assignor of one-half to Cecil Henry Arthur Edye, London, England. Filed July 20, 1917. Serial No. 181,751. 3 Claims. (Cl. 21-197.)



1. In steering mechanism for motor-vehicles the combination with a front axle carried by leaf-springs whose ends are free to slide relatively to the chassis they support, of parallel longitudinally extending radius rods pivotally connected to the axle and to the chassis, one for each end of the axle, and a steering-link pivotally connecting the arm of one of the stub-shafts to an operating member so carried on the chassis as to move bodily there-

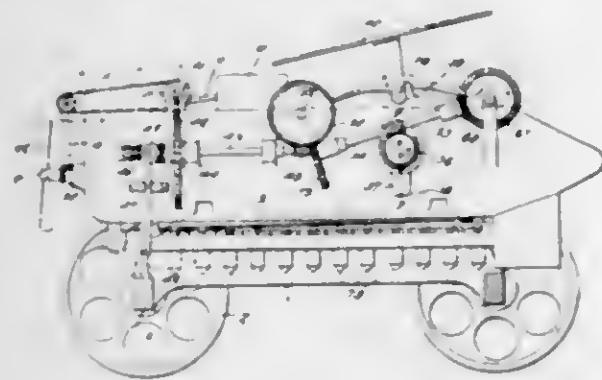
with which link has its axes of pivoting on the same transverse lines as those of the radius rods, for the purpose set forth.

1,312,910. AEROPLANE STRUCTURE. ALBERT S. JANIS, New York, N. Y., assignor, by mesne assignments, to The Janis Co., Inc., New York, N. Y., a Corporation of New York. Filed July 31, 1913. Serial No. 782,225. 53 Claims. (Cl. 244-2.)



1. A device of the character described having a buoyant hull-like body portion adapted to traverse the water, and except for the aeroplane lift adapted to be substantially the entire supporting element at all speeds so long as the body portion is in contact with the water, planes extended from opposite sides of said body portion having movable parts and operable to sustain the structure during aerial flight and to assist in balancing the same during travel over the water, driven propelling means, and buoyant bodies extended at opposite sides of the body portion operable by contact with the water to assist in balancing the structure.

1,312,911. BOMB-DROPPING MACHINE. BUD KILLMAN, Dixon, Ky. Filed Oct. 9, 1918. Serial No. 257,499. 2 Claims. (Cl. 24-1.)

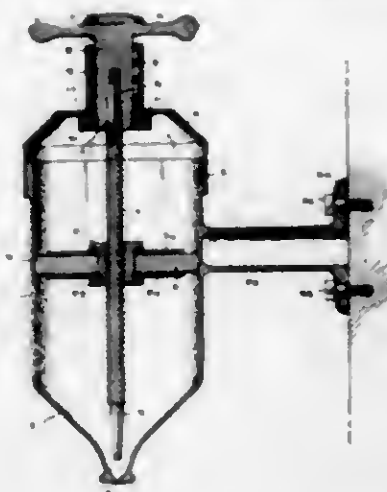


1. In a bomb dropping machine a body, a propeller, a motor tiltable sustaining planes, means for locking the planes against tilting movement, means operating in timed relation and driven by the motor for successively unlocking the planes, tilting them, and positively releasing them.

1,312,912. SOAP DISPENSER. DON L. KIMBALL, Portland, Ore., assignor to Commercial Specialty Company, Inc., Portland, Ore. Filed May 15, 1917. Serial No. 168,716. 1 Claim. (Cl. 224-79.)

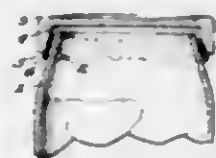
A soap dispenser comprising a container having a discharge orifice in its lower end, a cover for said container, a handle having a stem disposed centrally through said cover, said stem being provided in its inner end with a non-circular socket, a removable ratchet disk carried by the inner end of said stem, a ratchet disk carried by the inner surface of said cover and adapted to engage the ratchet teeth on said stem, a coil spring positioned around said stem between the handle and the cover and adapted

to normally maintain said catchet disks in interlocking engagement with each other, an invertible threaded plunger rod having its opposite ends of non-circular formation



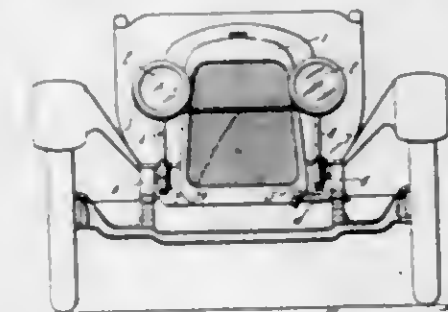
and adapted to be selectively engaged within said handle stem socket, and a piston head adjustably mounted on said plunger rod.

1,312,913. CONTAINER AND SEALING-RING THEREFOR. ROBERT J. KRAUSE, Dehesa, Calif. Filed Nov. 12, 1915. Serial No. 61,069. Renewed Mar. 11, 1918. Serial No. 221,867. 11 Claims. (Cl. 215-80.)



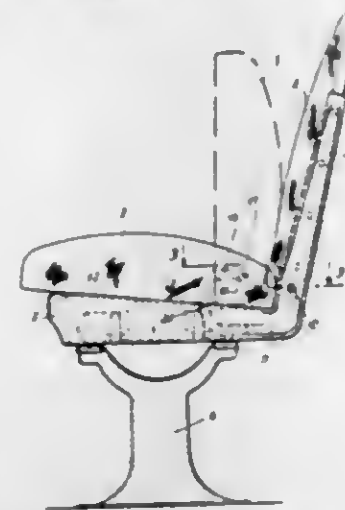
1. A container comprising a jar, a cover for the jar, and a sealing ring between the cover and the jar having a tension means embedded therein and adapted to be withdrawn to progressively destroy and remove successive annular portions of the ring while the cover is in place.

1,312,914. IRRIGIBLE HEADLIGHT. FELIX LAVIOLETTE, Green Bay, Wis., assignor of one-half to Connard & Neville, Green Bay, Wis., a firm composed of Felix Connard and John J. Neville. Filed Feb. 15, 1917. Serial No. 148,831. 2 Claims. (Cl. 240-62.)



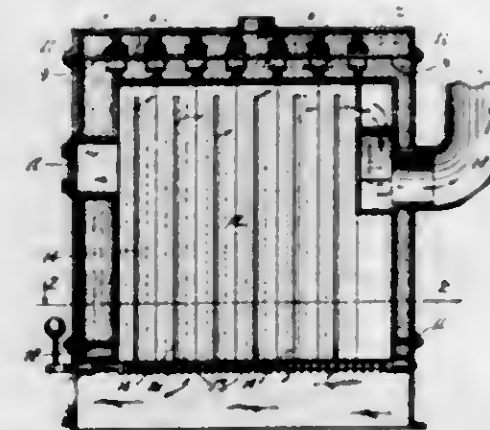
1. In combination with a steering link of a motor vehicle, brackets secured to the frame of the vehicle, supporting rods journaled in said brackets, lamps carried by said supporting rods, a crank secured to one of said supporting rods, an actuating rod secured to said crank, a socket member secured to the other end of said actuating rod, a clamp arranged on said steering link, a pin projecting from said clamp, said socket member being mounted on said pin, and means for maintaining the parts in position to prevent rattling thereof and means connecting the lamps for movement in unison.

1,312,915. HINGED SEAT-CUSHION. ALBERT LESLIE LAMBERT, Philadelphia, Pa., assignor to Hale & Kilburn Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 14, 1917. Serial No. 161,937. 6 Claims. (Cl. 155-2.)



1. In a car-seat, the combination of a pair of standards, having horizontal and upwardly extending arms, a back-cushion secured to the latter, a seat-cushion adapted to rest on the former, with its rear edge adjacent to said upwardly extending arms and beneath, and closely adjacent to, the back-cushion, and a pair of parallel links, each pivoted at one end to an arm to the rear of the seat-cushion, the link thence extending downwardly alongside the upwardly extending standard arm, thence forwardly alongside the horizontal standard arm, and thence upwardly to a pivotal connection with the seat-cushion, located toward the rear edge thereof, substantially as set forth.

1,312,916. PROCESS OF PROMOTING COMBUSTION. EDWIN C. LILLIE, Denver, Colo. Filed May 16, 1916. Serial No. 97,828. 7 Claims. (Cl. 110-1.)

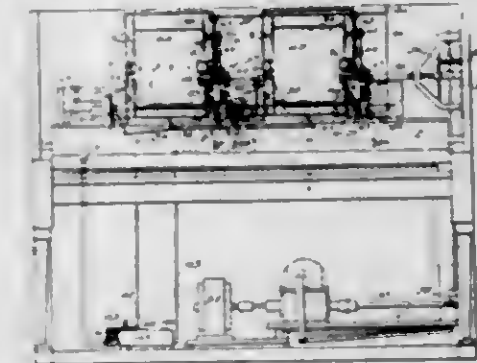


2. The herein described process of promoting combustion which comprises maintaining a relatively deep and narrow bed of solid carbonaceous fuel with only the lower portion thereof in a state of ignition, withdrawing the combustible gaseous products from the fuel laterally, gradually and directly into a rising column of flame carrying an excess of oxygen, said flame being that resultant from the combustion of the fixed carbon of the fuel.

1,312,917. DOUBLE-TRACKER MUSICAL INSTRUMENT. FRANK L. MCCORMICK, North Tonawanda, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed Jan. 4, 1917. Serial No. 140,550. 50 Claims. (Cl. 84-166.)

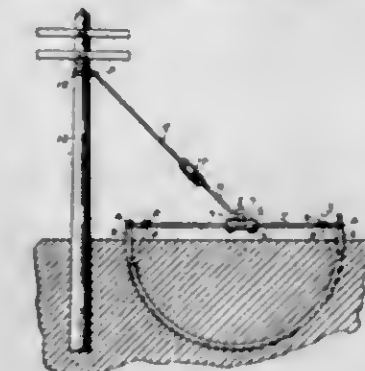
1. In an instrument of the character described, the combination of the music and take-up rolls, a rewind

shaft having a rewind gear, a take-up shaft having main and auxiliary take-up gears, a driving gear, a shipper member carrying transmission gears driven by said driving gear and arranged to alternately engage said main take-up and rewind gears, a controlling member for said shipper member, a selecting gear actuated by said con-



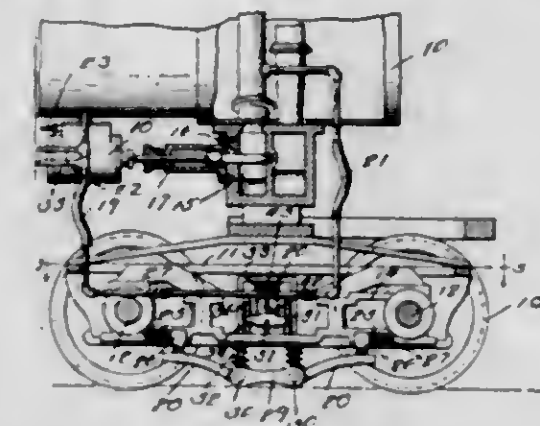
trolling member and arranged to transmit motion from said driving gear to said auxiliary take-up gear, and means connecting said controlling and shipper members for disengaging said transmission gears from said main take-up gear when said selecting gear is shifted to operative position.

1,312,918. ANCHOR FOR GUY-RODS. HUGH MCGUCKIN, Syracuse, N. Y. Filed July 22, 1918. Serial No. 246,040. 3 Claims. (Cl. 189-90.)



1. An anchor comprising an arc-shaped member adapted to be driven into the earth in a substantially circular path until the opposite ends of said member project above the surface of the earth, and a rod engaging and tying the exposed ends of said member together.

1,312,919. AUTOMATIC TRAIN CONTROL. EDWIN METZGER, Lockport, N. Y. Filed Nov. 8, 1915. Serial No. 60,389. 2 Claims. (Cl. 240-168.)



1. In a device of the kind described, an engine controlling valve, a steam cylinder controlling said valve, a valve controlling said steam cylinder, an operating stem for the last valve, an engine supported frame, a sliding member mounted in said frame, a ratchet on said

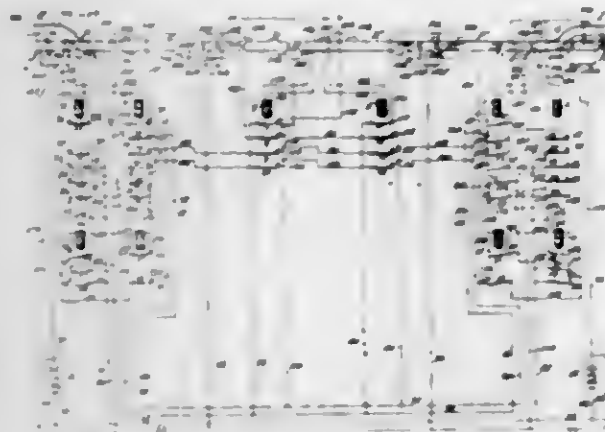
frame, a pawl on said member engaging said ratchet, a rod connecting the member and valve operating stem, means supported on said frame for raising the member comprising a pair of blocks slidably mounted on said frame, bars pivoted to said blocks, a link pivotally connected to said bars, and spring means normally holding said link depressed.

1,312,920. LENS-FORMING PROCESS. ARTHUR FELLOW, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 2, 1918. Serial No. 200,997. 3 Claims. (Cl. 49-82.1.)



1. The process of forming a fused bifocal lens, consisting in forming a major blank and segment with congruent surfaces, one of said surfaces being spherical and the other being toric, superimposing the parts to bring the surfaces in substantial contact one with the other, and subjecting the parts to a heat sufficient to cause one of the members to assume the shape of and unite with the other.

1,312,921. SIGNAL SYSTEM FOR SINGLE-TRACK RAILWAYS. LUTHER RINGER, Buffalo, N. Y., assignor to The Stromen Automatic Railway Signal Company, Buffalo, N. Y., a Corporation of Arizona. Filed Mar. 10, 1917. Serial No. 153,795. 16 Claims. (Cl. 246-33.)

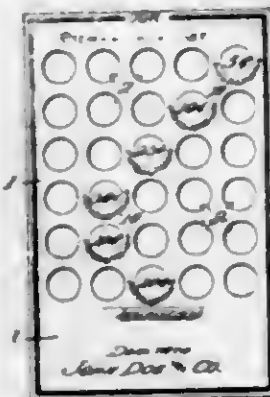


1. In a signal system for single-track railways, a main block, comprising a plurality of sub-blocks, a normally closed track circuit including a source of current and a track relay for each sub-block, a signal for each direction for each sub-block, and a neutral control relay at one end of the main block for controlling all of the signals for one direction.

1,312,922. TRADE-STIMULATING MEANS. FRANK CHARLES ROSE, Chattanooga, Tenn., assignor to Garnet Carter Co. Inc., Chattanooga, Tenn. Filed Mar. 24, 1919. Serial No. 281,717. 1 Claim. (Cl. 283-60.)

A trade stimulating means comprising a substantially rigid card of fibrous material having a series of spaced apertures extending over the greater portion of the same, a delineated space provided on said card and containing printed matter as to the use of the card, a backing sheet attached to and covering the rear side of the card and provided with an adhesive substance forming a bottom coating for said apertures, the card being provided adjacent each of the apertures with a value mark denoting the value of a value check to be inserted in the aperture, and a series of ungummed value checks of a thickness substantially the same as the thickness of the card,

provided with value designations corresponding to the value marks on the card, said checks being adapted to be inserted in the apertures and secured to the adhesive



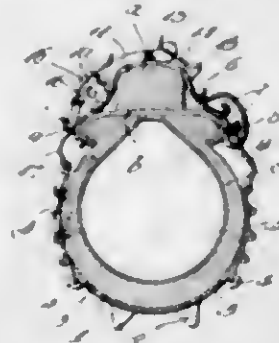
substance, and in inserted position having their upper surfaces substantially flush with the upper surface of the card.

1,312,923. LEGGING. MORRIS ROSENWASSER, Astoria, N. Y. Filed Oct. 26, 1916. Serial No. 127,762. 4 Claims. (Cl. 36-2.)



1. A legging comprising a strip of material adapted to be wound about a wearer's leg, and means for engaging the several convolutions of the strip to hold said convolutions against accidental displacement with respect to each other, said means comprising in part means for fastening the upper end of the strip and including an incased continuous resilient member with its upper terminal positioned to have a limited movement to accommodate the movements of the leg of the wearer.

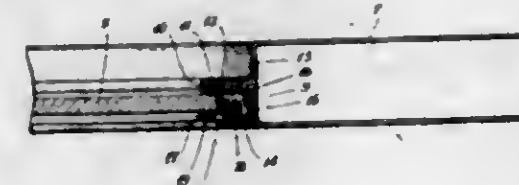
1,312,924. MUD-SHOE FOR AUTOMOBILES. JOHN ROWE, Casey, Iowa. Filed Oct. 11, 1917. Serial No. 195,973. 2 Claims. (Cl. 152-14.)



1. In an attachment for embracing a tire and rim and felly of a wheel, a member extending across the inner surface of the felly and embracing and conforming to the opposite margins of the rim and being formed with spaced

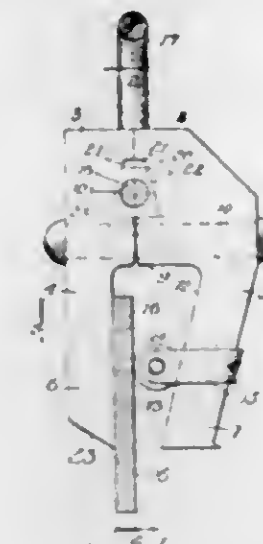
cars, anti-slipping means extending across the outer and lateral sides of the tire and having one end secured to said member, and a lever engageable with said anti-slipping means, said lever being normally substantially in pivoted engagement with said member and also being engaged with said anti-slipping means, and being swingable into and out of a position between said cars and retained by said cars in its operative position for holding the anti-slipping means on the tire substantially as described.

1,312,925. PANEL-RETAINING MEANS. LOUIS E. RUTHELMANN, Philadelphia, Pa., assignor to Hale & Kilburn Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 9, 1917. Serial No. 201,156. 2 Claims. (Cl. 189-78.)



1. The combination of a frame surrounding a rectangular opening, having forward and rear inwardly directed abutments about the opening, the inner portion of the rear abutments being adapted to be contacted by the rear edge portions of a glass panel and the forward abutments being shorter in length than the rear abutments, fillers positioned between the forward and rear abutments and the edge of a glass panel, and removable retaining strips each positioned between the forward abutment and filler on one side so as to extend inwardly beyond the abutment to overlap and press upon the front of a glass panel, the top horizontal strip having its ends rest on the two vertical strips and the bottom horizontal strip and having squared ends fitting between the lower end portions of the vertical strips, said strips having abutment means whereby the same may be engaged by an instrument and slid out of glass-retaining position.

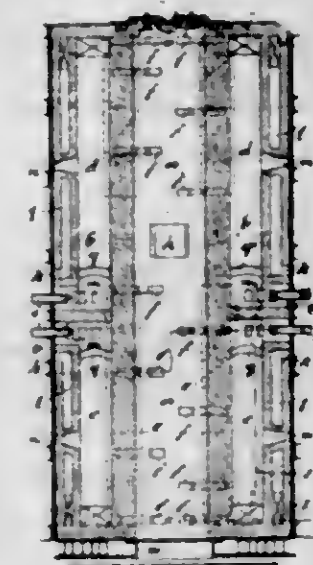
1,312,926. CLAMP FOR SHEETS. GUY SHEWMAN, Brenton, Wash. Filed Aug. 13, 1918. Serial No. 249,670. 6 Claims. (Cl. 57-9.)



1. In a plate-clamp, the combination of a pair of jaws, means connecting said jaws together and affording relative movement of said jaws, one of said jaws having a surface inclined relative to the plate-engaging surface of the other of said jaws, a member movable along said inclined surface and adapted to engage the plate, and means engaging the clamp above the said means connecting the jaws together, for lifting the clamp and operating to move said jaws relatively toward each other.

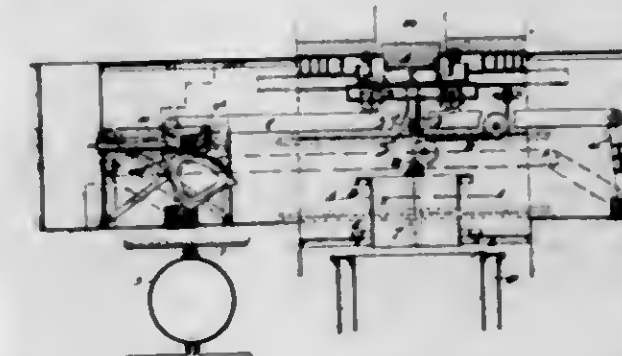
4. In a plate-clamp, the combination of a pair of jaws, means connecting said jaws together and affording relative movement of said jaws, one of said jaws having a surface inclined relative to the plate-engaging surface of the other of said jaws, a member movable along said inclined surface and adapted to engage the plate, the portion of said clamp above the means connecting the jaws together being recessed at the joint thereof, and wedging means engaging the walls of said recess and through the medium of which the clamp is lifted, said wedging means operating to move said jaws relatively toward each other in the lifting operation.

1,312,927. FURNACE FOR HEATING AND TREATING ARTICLES. ALFRED SMALLWOOD, Highgate, London, England. Filed Sept. 19, 1916. Serial No. 121,073. 10 Claims. (Cl. 263-43.)



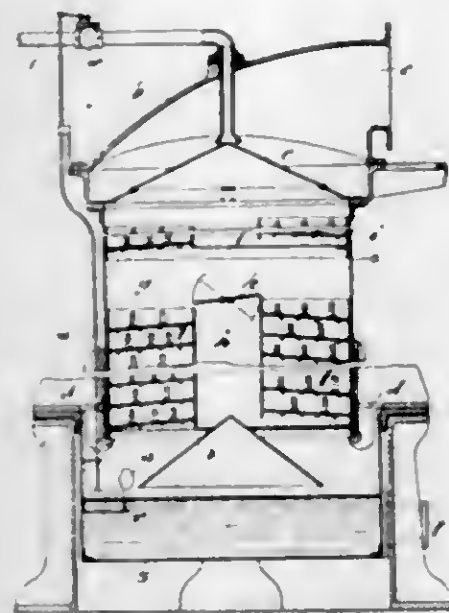
1. A furnace comprising a vertically disposed heating chamber, a source of heat located outside of said chamber and approximately intermediate its extremities, combustion chambers extending upwardly and downwardly from said source of heat, flues provided with ports extending through to the heating chamber, such flues being in communication with the outer end of the combustion chamber.

1,312,928. FURNACE FOR TREATING ARTICLES. ALFRED SMALLWOOD, Highgate, London, England. Filed Sept. 19, 1916. Serial No. 121,074. 1 Claim. (Cl. 266-4.)



A furnace having a closure member, mechanical means for lowering and raising said closure member, such closure member being adapted to be carried by a truck or carriage capable of running on carrier means, a stationary part, links connecting such carrier means with said stationary part, the said carrier means being adapted to be displaced by a parallel motion.

1,312,929. APPARATUS FOR COOLING LIQUIDS. ALFRED SMALLWOOD, Highgate, London, England. Filed July 3, 1917. Serial No. 178,379. 3 Claims. (Cl. 201-108.)



1. An apparatus for cooling liquids, comprising a chamber, a partition in said chamber forming a spiral passage through which cooling air is adapted to ascend, said partition being formed with perforations and with tubular bosses projecting upwardly from the helical surface, and means for regulating the volume of ascending air.

1,312,930. APPARATUS FOR COOLING LIQUIDS. ALFRED SMALLWOOD, Highgate, London, England. Filed Jan. 19, 1918. Serial No. 212,745. 2 Claims. (Cl. 201-108.)



1. An apparatus for cooling liquids, comprising a chamber, means for conducting air into said chamber, a series of superposed conical scrolls presenting an extended air face upon which the oil or other liquid is subjected to the cooling influence of air, and means for preventing egress of the liquid together with the air.

1,312,931. COMBINATION LATCH HASP AND STAPLE. WILLIAM N. TENNY and CLARENCE J. TENNY, Sherman, Calif. Filed May 10, 1919. Serial No. 296,178. 3 Claims. (Cl. 70-83.)

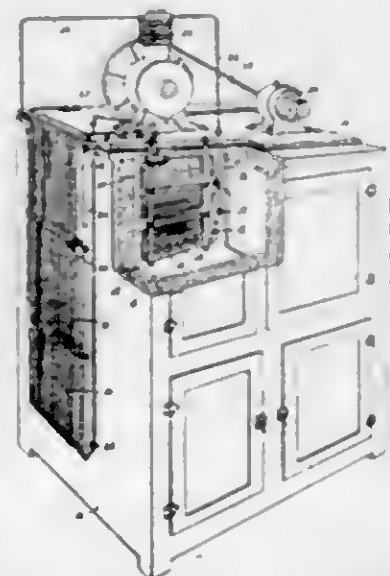
2. The combination with a keeper to be secured to the side of a housing near one end of a door opening and provided with laterally extending keeper member, said keeper member comprising opposed parallel parts having registering openings, said keeper having opposed registering

slots, of a latch pivotally carried by a door and adapted to be swung downwardly to enter the slots, said latch having a laterally extending tongue, to enter the space between



the opposite parallel parts of the keeper member, said tongue having an opening to cooperate with the openings of the keeper member for the reception of the shackle of a padlock.

1,312,932. REFRIGERATING APPARATUS. MILTON TISSAINT, Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 10, 1916. Serial No. 115,837. 1 Claim. (Cl. 62-116.)



In a refrigerating apparatus, in combination, a refrigerator box having an opening in the top, a support mounted on top of said box over said opening, a compressor and motor on said support, an expansion coil in said box and connected to said support, brackets extending from said support over the side of the refrigerator box, and a condenser suspended from said brackets.

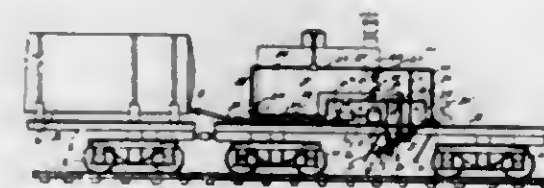
1,312,933. SASH-FASTENER. DAVID L. WENRICK, Harrisburg, Pa. Filed Apr. 4, 1919. Serial No. 287,408. 6 Claims. (Cl. 16-30.)



6. In a device of the class described, the combination with a pair of companion window sashes, of a base plate adapted to be secured to the frame of one of the sashes, a link seated on said base plate and adapted to engage the frame of the other sash, said link having a circular open-

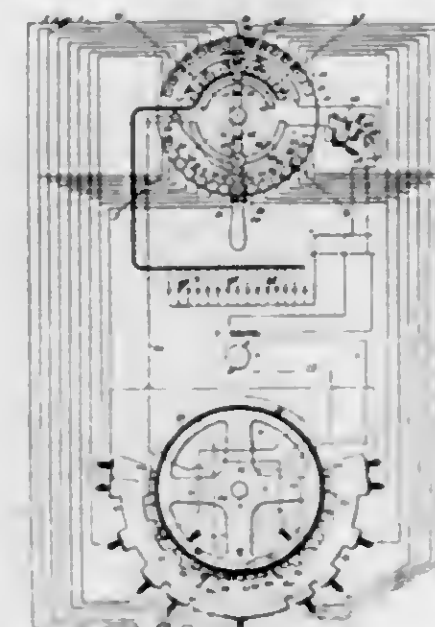
ing formed therein, and a lever having an annular projection adapted to fit said opening, said link and lever being pivotally secured to said base plate at a single point eccentrically of said projection, whereby rotation of the lever around its pivot will cause said link to engage and disengage the frame of the sash.

1,312,934. SPRAYING AND BURNING APPARATUS. HERBERT K. WHEELLOCK, Long Beach, Calif. Filed Feb. 2, 1917. Serial No. 146,181. 4 Claims. (Cl. 126-271.2.)



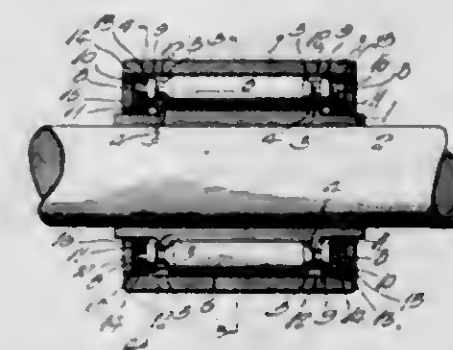
1. A weed burner for roadways including a wheeled vehicle, a fuel supply pipe extending transversely across the same, a pressure medium supply pipe arranged parallel to the fuel supply pipe, a series of burners, parallel feed pipes supporting the burners, and extending downwardly from the transverse pipes, said feed pipes being loosely connected to the respective transverse supply pipes and swiveled to the burners so that the latter are maintained in the same angular relation to the roadway as they are raised and lowered by swinging the feed pipes about the transverse supply pipes, and means for holding the burners in an adjusted position.

1,312,935. ELECTRICAL STEERING-GEAR. JOHN D. WILLIAMSON, Jr., Philadelphia, Pa. Filed Mar. 15, 1918. Serial No. 222,783. 14 Claims. (Cl. 172-8.)



13. The combination of a governing controller having at least two sets of contacts and an operating member; a remote controller having two sets of fixed contacts respectively connected to the contact sets of the governing controller and a movable element provided with at least two contacts cooperating with said fixed contacts; a motor having its armature connected solely and exclusively to the contacts of said movable element; and mechanism driven by the motor connected to actuate the movable element.

1,312,936. ROLLER-BEARING. FRED G. WILSON, Brooklyn, N. Y. Filed Oct. 18, 1917. Serial No. 197,304. Renewed Aug. 16, 1918. Serial No. 250,232. 8 Claims. (Cl. 64-62.)

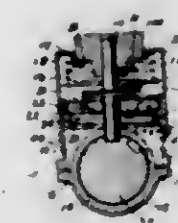


3. In an anti-friction bearing, rolling bearing members, a cage for said members including end rings, and reinforcing rings mounted on said end rings and extending over the peripheries and outer sides of the latter to form therewith rigid unitary end members for the cage.

1,312,937. SHEET-IRON PLATE. BRYNJULV ABRAHAMSEN, Trondhjem, Norway. Filed May 3, 1918. Serial No. 282,416. 2 Claims. (Cl. 29-181.)

1. A sheet iron plate having a protecting metal foil thereon, and an adhesive medium uniting said plate and said foil, said adhesive medium being capable of withstanding sterilizing heat.

1,312,938. PERMUTATION-LOCK. CLARENCE E. ANABLE, Sacramento, Calif. Filed Feb. 14, 1918. Serial No. 217,102. 3 Claims. (Cl. 70-53.)



1. The combination of a rotary and axially movable spindle; combination tumblers actuated by the spindle and comprising concentric, rotatable rings each having a radial opening; an arm carried by the spindle adapted to enter said openings when the latter are in alignment; a pin projecting from the spindle; a casing having a cap member through which the spindle passes, said cap member having a notch through which said pin may pass, forming a fixed tumbler; an operating piece carried by said spindle extending over and adapted to conceal said notch; and a part to be locked by said spindle.

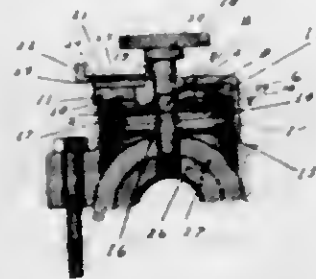
1,312,939. PERMUTATION-PADLOCK. CLARENCE E. ANABLE, Sacramento, Calif. Filed Mar. 9, 1918. Serial No. 221,479. 4 Claims. (Cl. 70-19.)



1. In a permutation lock, the combination of two concentric rotatable drums, each of said drums carrying a

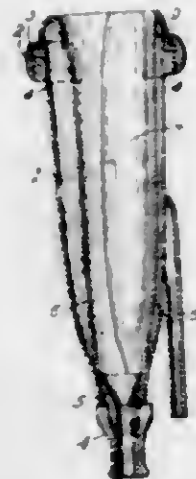
portion of a part to be locked, a radially movable bolt for locking the drums against rotation, a spindle having a rotary and axial movement, said bolt being controlled by the axial movement of said spindle, means on the spindle for controlling its axial movement, and permutation tumblers within the innermost drum concentric with each other and having openings adapted, when aligned, to permit the passage of the spindle-controlling means.

1,312,910. COMBINATION LOCK. CLARENCE E. ANGLE, Sacramento, Calif. Filed Dec. 26, 1916. Serial No. 138,695. Renewed May 22, 1919. Serial No. 209,079. 3 Claims. (Cl. 70-53.)



1. A combination lock comprising a casing a pin mounted for turnable and longitudinal movement within the casing, a notched detector surrounding the pin, a finger member on the pin movable over the detector, and combination disks operable by the finger member.

1,312,911. TEST-CUP FOR MILKING-MACHINES. CHARLES M. ANDERSON, Waterloo, Iowa. Filed July 12, 1917. Serial No. 180,119. 2 Claims. (Cl. 31-102.)



1. A test-cup of elastic material, shaped with three like broad relatively thick longitudinal portions connected by narrow relatively thin wall parts.

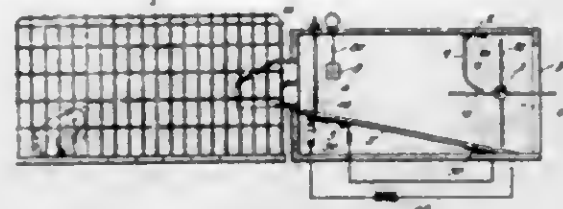
1,312,912. QUICK-LOCKING DEVICE. WILLIAM P. ANDERSON, NORMAN C. CLARKE, and JOHN FALCONER WHITEHEAD, Birmingham, England. Filed May 8, 1918. Serial No. 233,292. 4 Claims. (Cl. 74-40.)



1. In a quick locking device the combination of an outer member; an externally screwed member fitting within said outer member; a pivoted gripping flange piv-

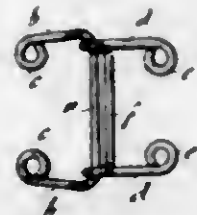
otally carried upon said outer member and having partial threads upon its one extremity adapted to engage with said externally screwed member; and a spring intermediate between said outer member and the finger serving to normally maintain said partial screw threads in engagement with said externally screwed member; for the purpose specified.

1,312,913. ANIMAL-TRAP. SOLOMON D. HALLER, Seattle, Wash. Filed Feb. 17, 1919. Serial No. 277,539. 5 Claims. (Cl. 43-24.)



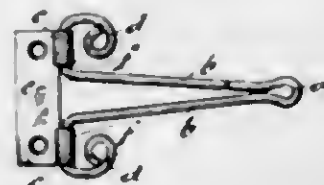
3. In an animal trap, in combination, a receiving chamber having an entrance opening and a discharge opening, a holding chamber communicating with said discharge opening, a shaft extending across said receiving opening and carrying a plurality of rows of arms, and means for producing a persistent rotation of said shaft set in action by the animal after entering the receiving chamber and ceasing when he enters the holding chamber.

1,312,914. HINGE. EDWARD ARMSTRONG BELLOW, Codsall, England, assignor of one-half to Kynoch, Limited, Witton, Birmingham, England, a Company of Great Britain. Filed Feb. 25, 1919. Serial No. 279,164. 1 Claim. (Cl. 16-106.)



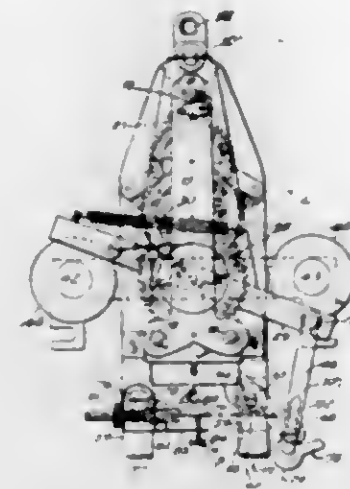
A hinge comprising a pair of substantially U-shaped sections, each made of a single piece of wire, the right portions of said sections being pivotally connected together and the arms of said sections having eyes at their outer ends, the arms of one section being parallel and the arms of the other section converging outwardly so that the space between the eyes of one section is approximately equal to the space between the eyes of the other section.

1,312,915. HINGE. EDWARD ARMSTRONG BELLOW, Codsall, England, assignor of one-half to Kynoch, Limited, Witton, Birmingham, England, a Company of Great Britain. Filed Feb. 25, 1919. Serial No. 279,165. 2 Claims. (Cl. 16-108.)



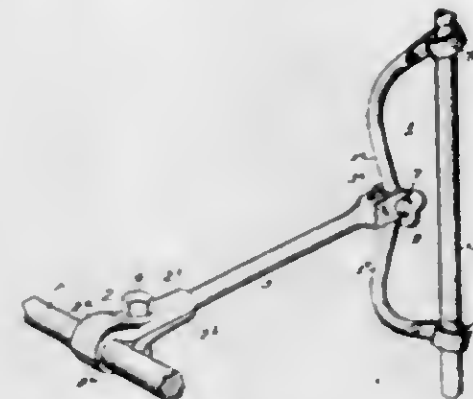
1. A hinge, comprising a T-member made from a single length of wire bent at a mid-length position to form an eye and having converging arms which at the axis of the hinge are bent into alignment to form pivot portions, the wire extending beyond the pivot portions and being formed at its extremities with eyes for the reception of fastening members.

1,312,916. ELECTRIC CLOCK. GUSTAV BLUMENAG and JOHN A. BUTKES, Baltimore, Md. Filed Dec. 23, 1915. Serial No. 68,415. Renewed Feb. 1, 1919. Serial No. 274,564. 6 Claims. (Cl. 58-41.)



1. The combination of a time train including a pinion and a ratchet wheel secured to said pinion, with an armature revolvably mounted on said pinion, a pawl mounted on said armature and engaging said ratchet wheel, a spring for moving said armature in one direction and a source of electricity and an electro-magnet for moving said armature in the opposite direction, said armature and electromagnets being so disposed that when said armature is over the poles of said magnets, the attracting force of said magnets shall act upon said armature in a direction parallel to the axis of said pinion.

1,312,917. FLAG-HOLDER. ARTHUR G. HILLINGTON, Ite, N. Y. Filed Nov. 30, 1918. Serial No. 264,766. 5 Claims. (Cl. 248-87.)

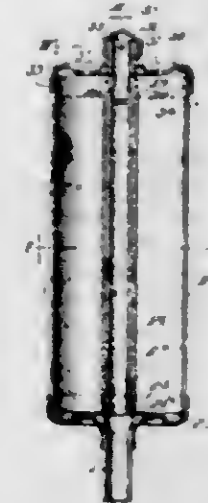


2. A flagstaff holder comprising a pair of arms pivoted together and provided with eyes to receive the flagstaff, and means for adjusting the arms in the pivot to cause the eyes to bind on and hold the staff.

1,312,918. AIR-MOISTENER. ELI J. BUHNER, New York, N. Y. Filed Mar. 20, 1915. Serial No. 15,810. 3 Claims. (Cl. 261-107.)

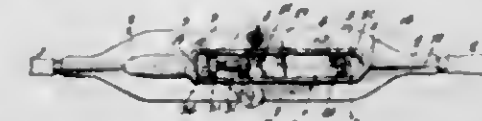
1. In an apparatus of the character described, a tank comprising a body adapted to hold water, caps located at opposite ends of said cylindrical body, a tube having a flared portion providing a seat, a pipe adapted normally to be seated in said flared portion, an elongated absorbent covering fitting about the pipe, said pipe having inlet means above said absorbent covering, the lower edge of said inlet means being flush with the upper edge of the

absorbent covering, means whereby air may be supplied to the tank to adapt a mixture of vapor and air to pass



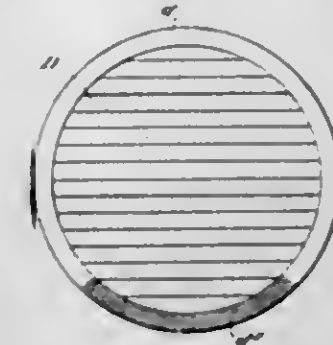
into said pipe, and means normally keeping the pipe seated in the flared portion of the tube.

1,312,919. DIE STOCK. ASHMEAD H. CHESTER, Jacksonville, Ill. Filed May 16, 1918. Serial No. 234,932. 1 Claim. (Cl. 10-123.)



In a die stock, the combination with a loop-shaped body having handles at its extremities, its opening being bounded by transverse webs having flanges along their edges except at one end where the flanges are omitted, the webs extending across one end of the opening and making an angle at the other end thereof; of dies slidably mounted in the runway formed by said webs and flanges at that end adjacent the angle, the body having a socket nut formed at the other end of said opening, a screw whose shank is threaded into said nut and whose head is round and of a size to prevent lateral displacement from between the flanges, said head being provided with means whereby it may be turned, and nuts on the screw removably mounted between said flanged webs, one nut being square and non-rotary between the webs, and the other nut being round and rotary, thus constituting a jam nut as described.

1,312,950. HEADLIGHT-COVER GLASS. WILLIAM CHURCHILL, New York, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Original application filed Nov. 22, 1915. Serial No. 62,756. Divided and this application filed July 2, 1919. Serial No. 308,072. 1 Claim. (Cl. 240-48.4.)



In a cover for an automobile head-light, the combination with a lamp and its casing, of a transparent cover

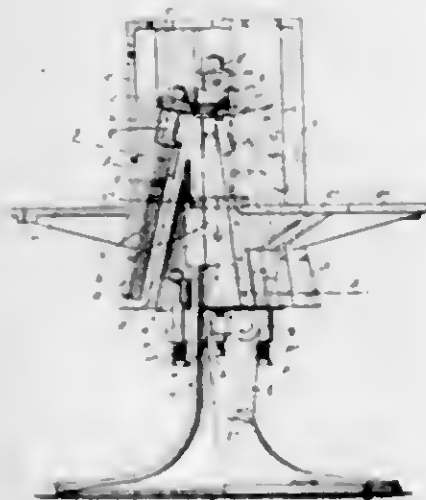
for the casing having light-directing elements on its central portion, such light-directing elements being surrounded by a chamfered edge for engagement by the rasling, the chamfered edge having a roughened surface to prevent refraction thereby of light across the optical axis of the head-light.

1,312,951. PYROMETER. EMERSON L. CLARK, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Original application filed Dec. 19, 1912, Serial No. 737,610. Divided and this application filed July 23, 1913. Serial No. 780,636. 9 Claims. (Cl. 73—32.)



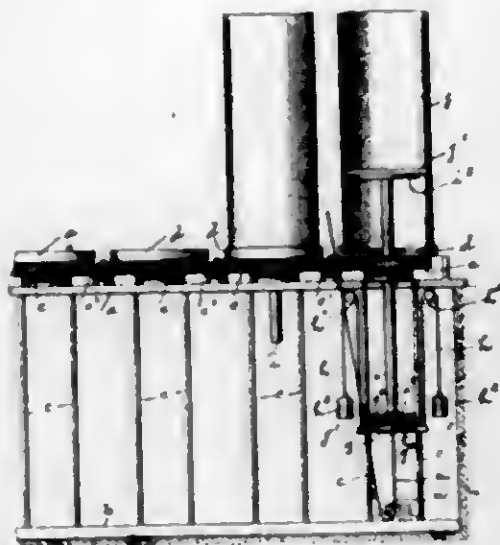
1. In a pyrometer system, a galvanometer, a thermocouple, a resistance connected between the thermocouple and galvanometer and a second resistance with a positive temperature coefficient connected in shunt to the galvanometer, said resistances being proportioned to approximately compensate for temperature variations in the cold junction of said thermocouple for a predetermined temperature at the hot junction.

1,312,952. WIRE UNCOILING MACHINE. WILLIAM E. COOK, New York, N. Y. Filed Oct. 17, 1917. Serial No. 197,018. 10 Claims. (Cl. 242—72.)



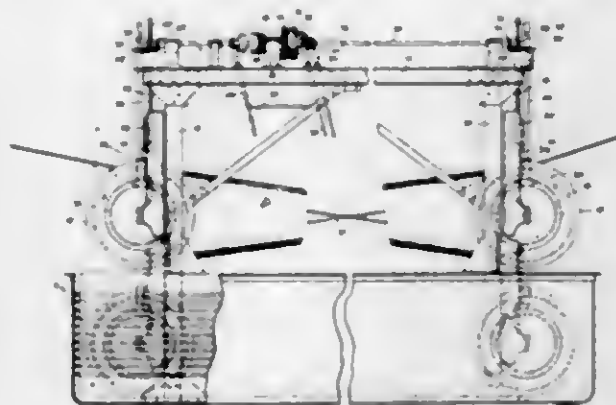
1. A wire uncoiling machine embodying therein a rotatable support having a plurality of ways therein, said ways being grouped about, and extending obliquely to the axis of rotation of said support, plates extending substantially parallel with the axis of said support, slightly mounted in said inclined ways respectively, and means acting upon each of said plates whereby it may be moved in its ways in either direction to move it toward or from the axis of said support.

1,312,953. COLLECTING MECHANISM FOR CARDING MACHINES. WILLIAM E. COOK, New York, N. Y. Filed Nov. 20, 1917. Serial No. 202,953. 10 Claims. (Cl. 19—5.)



2. A collecting mechanism for carding machines embodying therein a rotatable support for a container, an open bottom container removably mounted upon said support, a false bottom movably mounted in said container, parallel guides below said support, a traveler block slidably mounted on said guides, a reciprocatory plunger rotatably mounted upon said traveler block, projecting through, slidably mounted in, and rotatable with said support and adapted to project within, and support said movable false bottom, and a weight acting upon said traveler block whereby substantially uniform resistance is offered to the depression of said plunger.

1,312,954. INSULATED WIRE MAKING MACHINE. WILLIAM E. COOK, New York, N. Y. Filed Dec. 13, 1918. Serial No. 200,560. 9 Claims. (Cl. 91—46.)



1. An insulated wire making machine embodying therein a tank for a bath of a fluid composition, and means whereby a wire covered with absorbent material, is repeatedly passed back and forth through the composition in said tank, said means being so constructed that a wire covered with absorbent material will be fed into the bath at a higher speed than it is delivered therefrom, to prevent tenting of the wire.

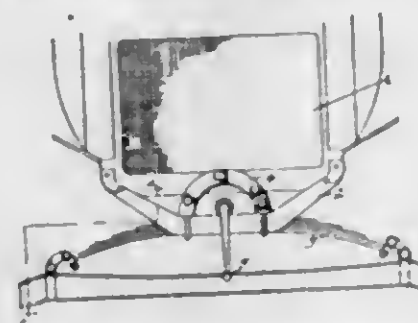
1,312,955. APPARATUS FOR CASTING CHAIN-LINKS. WILLIAM P. CUNNINGHAM, Norristown, Pa. Filed Nov. 20, 1918. Serial No. 264,611. 1 Claim. (Cl. 22—13.) The combination in apparatus for making a mold for casting continuous chains, of a bottom board; a half section of a link pattern secured to the said board; two patterns of quarter sections of the link mounted verti-

cally; one being located at one end of the flask and the other at the opposite end and extending over the ends of the pattern of the half link, each quarter section being made in two parts; and means for holding the parts together and to the flask so that when the sand is



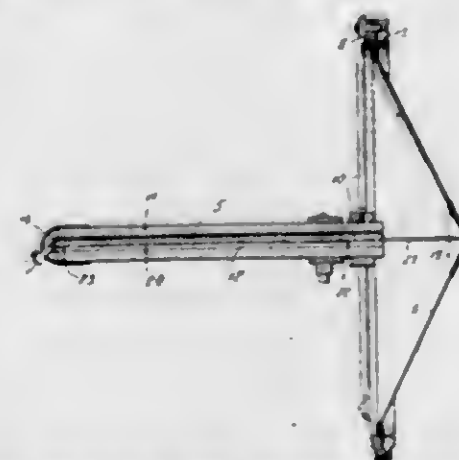
rammed around the pattern, and the pattern is withdrawn, a mold for a section of enchain links is formed and when a series of these mold sections is arranged side by side and end for end a mold for a complete series of enchain links is formed.

1,312,956. ATTACHMENT FOR MOTOR VEHICLES. ULYSSES S. DANIEL, Beaumont, Tex. Filed Mar. 14, 1919. Serial No. 282,712. 3 Claims. (Cl. 74—33.)



1. In a motor vehicle, the combination with the crank, of an attachment for preventing reverse movement thereof, said attachment comprising a substantially semi-circular plate having means at its ends for connecting the same to the vehicle on opposite sides of the crank, means on the forward face of the plate for preventing reverse movement of the crank when in engaged position and for permitting the free forward movement thereof, said means comprising a series of pawls, each consisting of two arms extending at approximately a right angle, and pivoted to the plate at the junction of the arms, springs normally holding the pawls with one arm in contact with the plate and with the other substantially perpendicular thereto, the pawls being similarly arranged, and a facing of cushioning material upon that arm of each pawl which engages the plate.

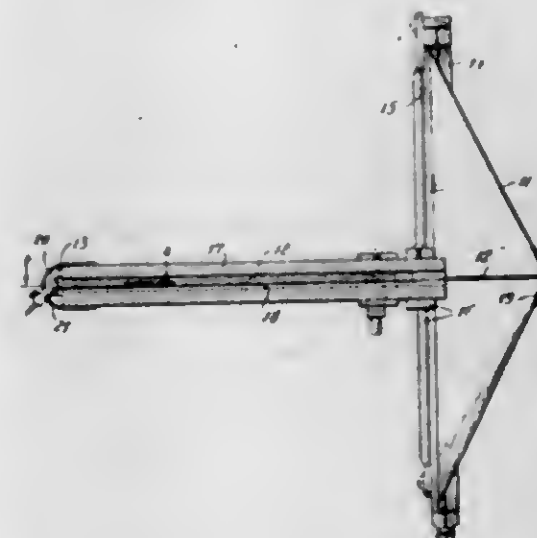
1,312,957. PHONOGRAPH TRANSMISSION-ROD. WILLIAM H. DAVIS, Bronxville, and FREDRICK E. JOSS, Brooklyn, N. Y., assignors to Lektophone Corporation, a Corporation of Delaware. Filed May 9, 1918. Serial No. 233,405. 5 Claims. (Cl. 274—25.)



1. A long, thin phonograph transmission rod adapted to be connected at opposite ends with a stylus holder and a

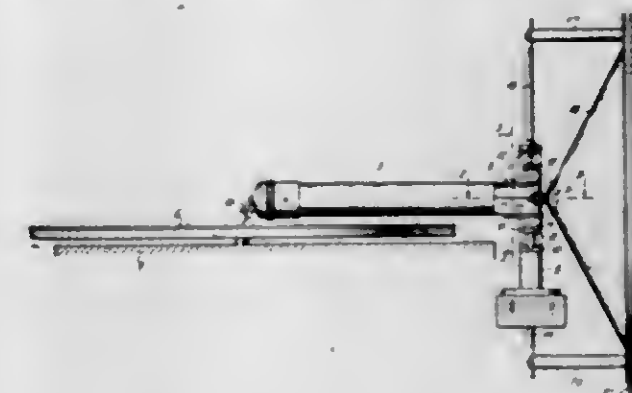
diaphragm end to be vibrated by the travel of the stylus along a sound groove, comprising a section inherently adapted to set up independent tonal vibrations during the travel of the stylus, and a section of differently-resonant material for neutralizing such independent vibrations, said sections aligning and abutting end to end.

1,312,958. PHONOGRAPH TRANSMISSION. WILLIAM H. DAVIS, Bronxville, and FREDRICK E. JOSS, Brooklyn, N. Y., assignors to Lektophone Corporation, a Corporation of Delaware. Filed May 9, 1918. Serial No. 233,406. 9 Claims. (Cl. 274—35.)



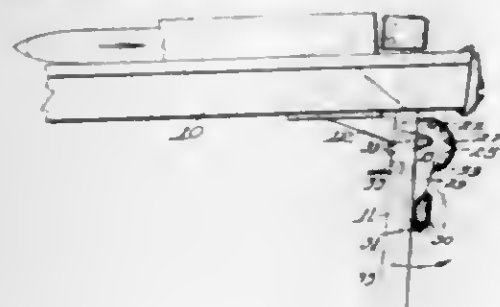
1. In a phonograph transmission, the combination, with a supporting bar having a bore extending therethrough; of a diaphragm carried by said bar at its rear end; a stylus holder at the front end of the bar; a vibration transmission element extending through said bore and connected at opposite ends with said diaphragm and said holder; and a resilient member connecting said holder and the adjacent end of said bar to vibrably support the former.

1,312,959. TALKING-MACHINE. WILLIAM H. DAVIS, Bronxville, and FREDRICK E. JOSS, Brooklyn, N. Y., assignors to Lektophone Corporation, a Corporation of Delaware. Filed July 13, 1918. Serial No. 244,601. 5 Claims. (Cl. 274—26.)



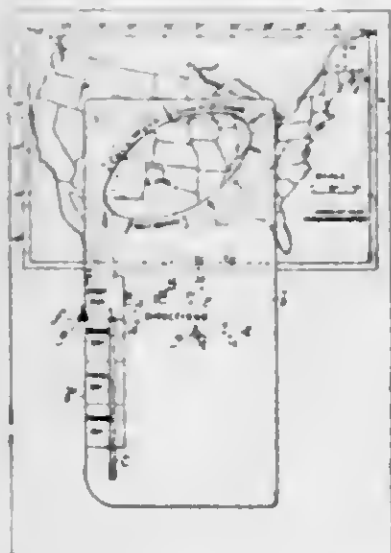
1. In a talking machine, the combination of a stationary diaphragm of large area; a supporting bar extending toward the center of the diaphragm and mounted for swinging movement relative to said diaphragm in both vertical and horizontal planes; a vibration transmission device carried by said bar and provided at one end with a stylus holder; and a universal coupling between the other end of said transmission device and the center of said diaphragm.

1,312,960. PICKER-CHECK. NAZARE DEMERS, Worcester, Mass. Filed Aug. 21, 1918. Serial No. 250,867. 11 Claims. (Cl. 139-22.)



5. In a picker check, the combination of two substantially cylindrical hubs, one stationary and the other oscillatable about an eccentric axis, a strap passing over said hubs partially in contact with each one to exert frictional resistance to the oscillation of the movable one, a spring connected with one of them for exerting a spring resistance to its motion in one direction and returning it to normal position after it has been moved out of said position, and a rod passing through the centers of the hubs eccentrically and having an arm thereon outside said hub to which one end of the spring is connected and also one end of said strap.

1,312,961. WEATHER-INDICATOR. ANDREW J. DE VER, Hackensack, N. J. Filed July 16, 1917. Serial No. 180,797. 7 Claims. (Cl. 35-6.)



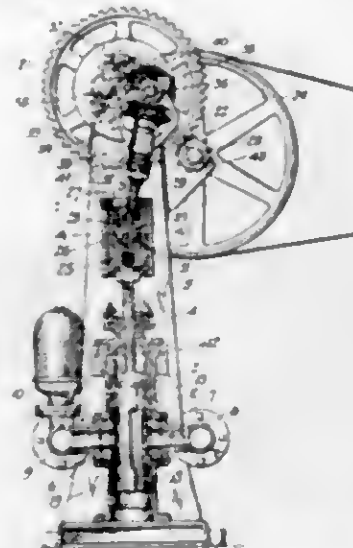
1. In a weather indicator the combination with a chart, of means representing a predetermined time and means mounted on the chart and controlled by the time representing means for showing the area of a storm.

1,312,962. VALVELESS PUMP. GEORGE J. DOWDY, Denver, Colo. Filed July 26, 1916. Serial No. 141,349. 8 Claims. (Cl. 103-78.)

1. In combination, a cylinder having oppositely disposed ingress ports and an egress port, a piston to reciprocate in said cylinder, having openings adapted to register simultaneously with said ingress ports and to register with said egress port, and passages connecting said openings with the interior of the cylinder, mechanism to reciprocate the piston, and means to simultaneously rotate the same, whereby to bring the openings of the piston in register with the ports of the cylinder during determinate periods in its reciprocal motion.

2. In combination, a cylinder having oppositely disposed ingress ports and oppositely disposed egress ports, a piston to reciprocate in said cylinder, having openings adapted to register with said ingress ports and with said egress ports, and passages connecting said openings with

the interior of the cylinder, mechanism to reciprocate the piston, and means to simultaneously rotate the same, whereby to bring the openings of the piston in register with the ports of the cylinder during determinate periods in its reciprocal motion.

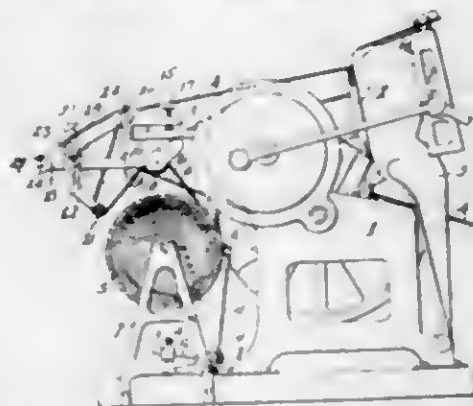


3. In combination, a cylinder having oppositely disposed ingress ports and an egress port, a piston to reciprocate in the cylinder, having two pairs of oppositely disposed openings to register simultaneously with said ports, and passages connecting said openings with the spaces of the cylinder at opposite sides of the piston, mechanism for reciprocating the piston, and means to simultaneously rotate the same whereby to bring the openings of the piston in register with the ports of the cylinder during determinate periods in its reciprocating movement.

4. In combination, a cylinder having oppositely disposed ingress ports, and oppositely disposed egress ports, a piston to reciprocate in the cylinder, having two pairs of oppositely disposed openings to register simultaneously with said ports, and passages connecting said openings with the spaces of the cylinder at opposite sides of the piston, mechanism for reciprocating the piston, and means to simultaneously rotate the same whereby to bring the openings of the piston in register with the ports of the cylinder during determinate periods in its reciprocating movement.

5. In combination, a ported cylinder, and a piston to reciprocate in said cylinder, adapted to cover and uncover the ports of the same and composed of parts one of which is recessed, springs in the recesses for continuously forcing said parts into fluid-tight engagement with the cylinder, and screws providing adjustments for said springs and capable of adjustment to vary the tension of the same.

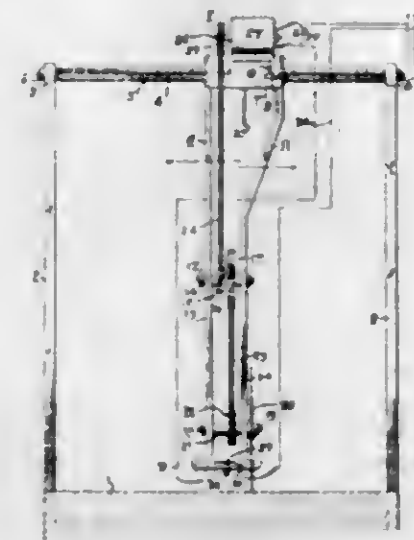
1,312,963. WEB-FEEDING MECHANISM FOR PRINTING-PRESSES. OSVILLE VINCENT DUTRO and ARTHUR S. BRADY, Spokane, Wash. Filed Oct. 28, 1918. Serial No. 250,943. 3 Claims. (Cl. 242-75.)



1. The combination in a web feeding mechanism with a supply roll and web, of an attachment having a driven

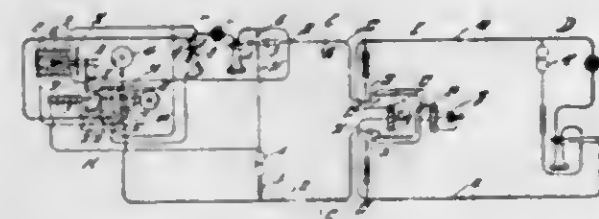
roll over which the web passes, a swing tension roll, a supporting bar to the attachment and an adjustable block on the bar and retaining means for the block, a fixed roll, and a resilient finger carried by the block and having a pad bearing on the web over the fixed roll as described.

1,312,964. SAWING-MACHINE. FRED M. EASTON, San Bernardino, Calif. Filed Mar. 28, 1919. Serial No. 285,786. 4 Claims. (Cl. 143-46.)



3. A sawing machine, including a frame, a rock shaft journaled horizontally therein, a carriage movable longitudinally of the rock shaft and having means to hold the same in adjustable relation thereon, a jointed saw frame carried by said carriage, a saw mounted in said saw frame, a motor on the carriage, and operating connections between said motor and the saw, as described.

1,312,965. MEASURED SERVICE TELEPHONE SYSTEM. JOHN ERTKSON, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1917. Serial No. 206,317. 14 Claims. (Cl. 179-9.)



1. In a substation, the combination of a line circuit for said station, talking instrumentalities included in said line circuit, a meter for said station, a controlling relay for said meter, means for completing a connection to a called line, said controlling relay normally excluded from the line circuit, means for including said relay in the line circuit during the establishment of a connection, and means for again excluding said relay from the line circuit after the connection is completed and while the subscribers are talking.

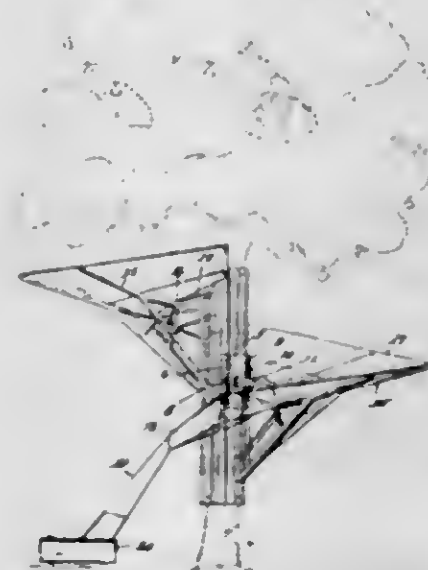
1,312,966. SAFETY-HOOK. FRANCIS J. FARBA, Rochester, Minn. Filed Jan. 20, 1919. Serial No. 272,091. 4 Claims. (Cl. 24-232.)

3. A safety hook comprising two members, one having a pair of laterally spaced parallel bills connected at the rear edges of one end, one of said connected ends having



an arm extending forwardly and spanning the space between it and the free ends of said bills, said arm being laterally offset to position its free end over the space between the free ends of said parallel bills, the other member

1,312,967. FRUIT-GATHERER. JOSEPH DUTRA FEARY, Niles, Calif. Filed Aug. 20, 1918. Serial No. 250,696. 3 Claims. (Cl. 56-99.)

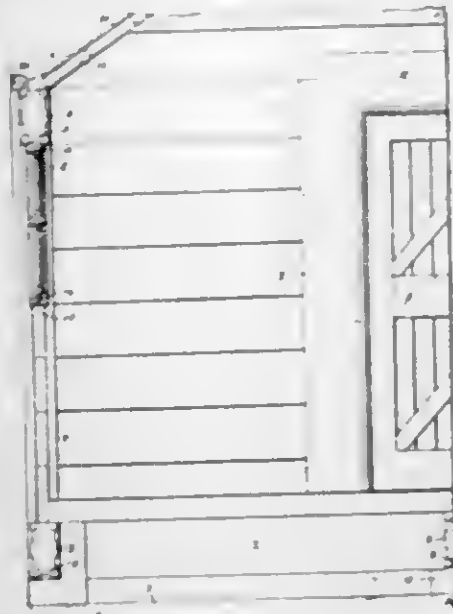


1. A fruit gatherer including a flexible sheet, means for adjustably securing the sheet about the trunk of a tree, frames detachably connected to the sheet and extending outwardly therefrom, spirally arranged arms upon the frames, a fabric strip secured to the arms and extending spirally around the engaged trunk, and an outlet spout at the lower end of the strip.

1,312,968. BUILDING MADE MAINLY OF BLOCKS OF CONCRETE OR EQUIVALENT MATERIAL. HAROLD JONES FOGG, Liverpool, England. Filed July 9, 1917. Serial No. 179,438. 3 Claims. (Cl. 72-1.)

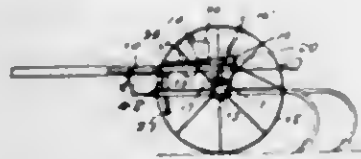
1. A building of the character described, comprising spaced vertical stanchions, horizontal beams arranged at the tops and bottoms thereof, slabs arranged between the stanchions, an A-roof arranged upon the top beams and embodying angularly arranged slabs having inclined edges, and gutter slabs arranged upon the top of the upper

beams and having tongue and groove connection therewith, said gutter slats being provided upon their upper



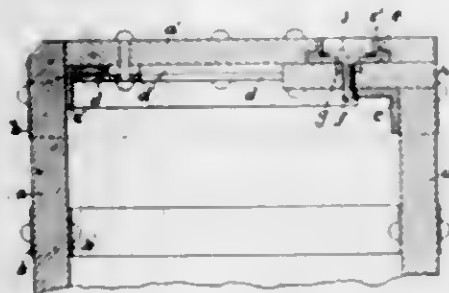
surfaces with channels and having their inner sides inclined outwardly to contact with the inclined edges of the slats of the roof.

1,312,969. INSECTICIDE-DISTRIBUTER FOR CULTIVATORS. MAC L. FOX, Columbiaville, Mich. Filed Oct. 21, 1918. Serial No. 250,028. 3 Claims. (Cl. 43-14.)



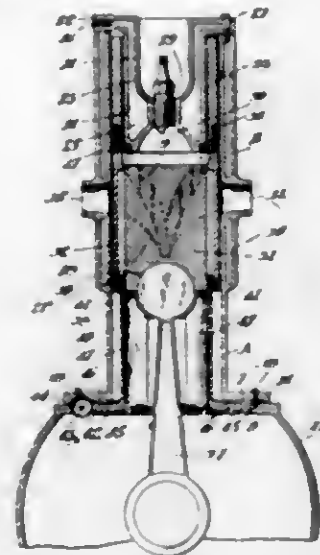
1. An insecticide applicator including a powder discharging means, a rotary brush mounted thereunder, and means to rapidly rock the brush alternately in opposite directions.

1,312,970. TREASURE-BOX AND THE LIKE WITH KEYLESS LOCK AND METAL SEAL. SPIRO DENIS GARRIA, Calcutta, India. Filed Jan. 8, 1916. Serial No. 71,002. 1 Claim. (Cl. 70-80.)



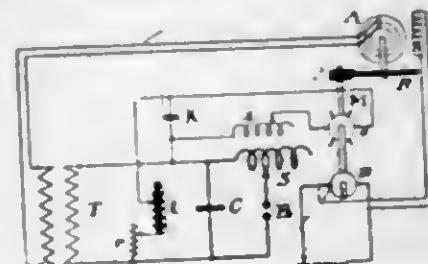
In a box fastener adapted to be used on a box having a sliding lid; a recessed and exteriorly flanged metal disk fitted in a corresponding recess in the lid and provided on the inner side of its wall with an undercut groove; said disk also having a central opening; a screw to hold said disk in place and also to lock the lid when closed, said screw extending through and projecting below the lid and having a head arranged in the central opening of the disk, and an inverted cup-shaped metal disk arranged to be placed in the recess of the disk, to cover the head of the screw and to be flattened to bring its circumferential edge into engagement with said undercut groove.

1,312,971. INTERNAL-COMBUSTION ENGINE. WILLIAM BRITTON GEARY, Medicine Hat, Alberta, Canada. Filed June 4, 1917. Serial No. 172,843. 1 Claim. (Cl. 123-45.)



In an internal combustion engine, a cylinder having conduits in the walls thereof, angularly disposed relatively to each other with openings extending through the cylinder walls, said conduits being substantially continuous and Z-shaped in aspect with the intermediate conduit longer than the others, a piston reciprocating in the cylinder having a sleeve provided with a port and means for rotating the piston to cause the port in the sleeve to register with the openings from the conduits, the said means consisting of a pair of arms engaging the piston, and means controlling the actuation of the said arms.

1,312,972. DEVICE FOR AUXILIARY STARTING FOR HIGH-POWER RADIOTELEGRAPHIC STATIONS. EMILE GIRARDEAU and JOSEPH BETHENOD, Paris, France. Filed Mar. 16, 1918. Serial No. 84,608. 8 Claims. (Cl. 250-37.)

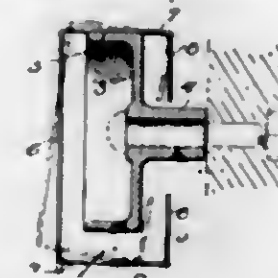


1. A system for generating waves for wireless telegraphy, comprising a principal oscillation circuit including a source of energy, a spark gap, a condenser, an inductance; and an auxiliary generating circuit also including a spark gap, a condenser and an inductance, the inductance of the auxiliary circuit being influenced by that of the principal circuit, and the condenser of the auxiliary circuit in serial connection with a resistance and inductance being shunted to the condenser of the main circuit.

1,312,973. HANGER FOR SLIDING DOORS. ALEXANDER W. GORDON, Crossfield, Alberta, Canada. Filed Dec. 11, 1918. Serial No. 266,360. 1 Claim. (Cl. 16-7.)

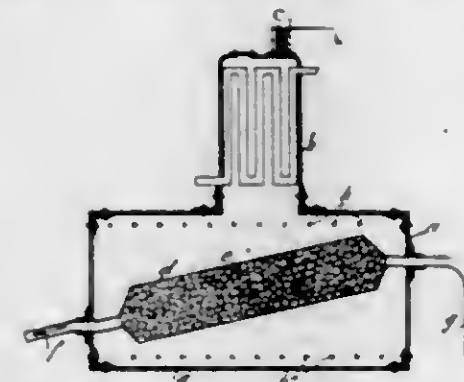
A door mounting comprising a plurality of rollers arranged on a line parallel with the top of the door opening and each consisting of a web having a hob projecting rearwardly from its center and an annular tread flange projecting forwardly from its edge, and a track secured to the upper edge of the door and consisting of a central

strip disposed vertically in front of the rollers, track flanges extending rearwardly from the upper and lower edges of said strip to pass above and below the rollers, and retaining flanges extending from the rear edges of the track flanges toward the hubs of the rollers and ter-



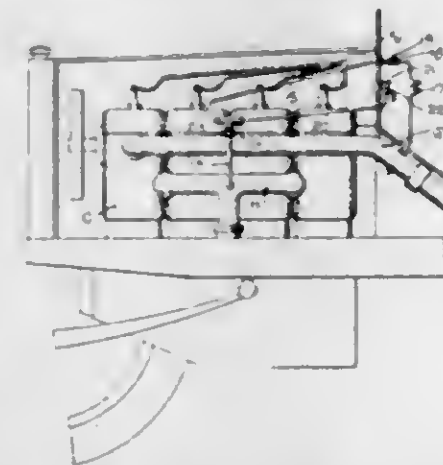
minating short of said hubs, the height of the central strip being greater than the diameter of the rollers, the width of the track flanges being greater than the width of the tread flanges of the rollers, and the lower edge of the door being free whereby limited transverse rocking of the door is permitted.

1,312,974. PROCESS AND APPARATUS FOR FRACTIONAL DISTILLATION OF LIQUIDS. CHARLES GOUDET, Geneva, Switzerland, assignor to the Firm of Societe d'Etudes Chimiques pour l'Industrie, Geneva, Switzerland. Filed Feb. 27, 1919. Serial No. 279,570. 6 Claims. (Cl. 196-25.)



1. The hereinbefore described process of separating volatile liquids by fractional distillation consisting in passing the volatiles to be separated to a dephlegmator, maintaining the dephlegmator at a given temperature for a predetermined period and then varying the temperature of the dephlegmator by varying the pressure of the medium by which the dephlegmator is heated.

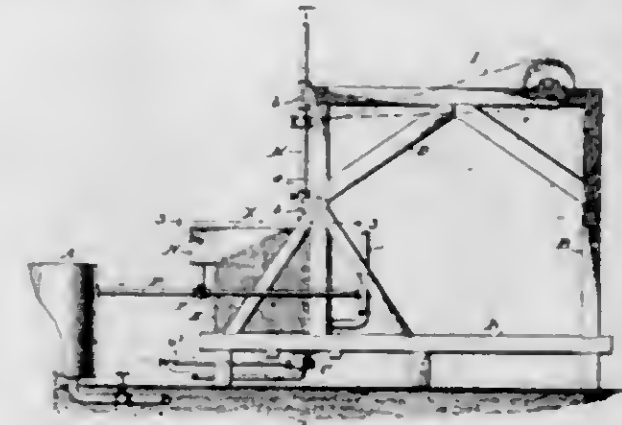
1,312,975. AUXILIARY AIR-SUPPLY FOR INTERNAL-COMBUSTION ENGINES. JOHN J. GORGH, Benton, Ky. Filed July 16, 1917. Serial No. 180,888. 1 Claim. (Cl. 123-180.)



The combination with an internal combustion engine, provided with an intake manifold and an exhaust mani-

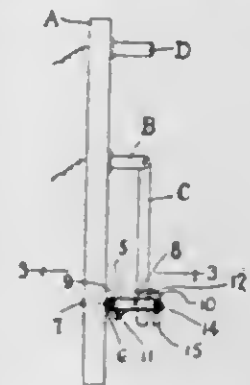
fold, of a pipe opening at one end into the intake manifold, a T connected to the other end of said pipe, an air inducing pipe connected at one end to one branch of said T and leading rearwardly therefrom and then vertically downward and having its other end open and extending through the exhaust manifold and provided intermediate of its ends with a controlling valve, said vertically extending portion of the conducting pipe having a coil to take up vibrations in said pipe, and another pipe connected at one end to another branch of the T, said last named pipe being provided at its opposite end with a valved priming cup, as and for the purpose set forth.

1,312,976. APPARATUS FOR RECOVERING PULP FIBERS, &c., FROM LIQUIDS CONTAINING THEM. FRANK GROCH, Cobalt, Ontario, Canada. Filed Apr. 26, 1919. Serial No. 292,942. 7 Claims. (Cl. 210-5.)



1. Apparatus for separating floatable material from waste liquid, comprising an agitation chamber, a rotary impeller therein which by centrifugal action draws the waste liquid to it, an air supply pipe leading to the impeller, means for rotating the impeller to cause it to draw air and liquid thereinto and to discharge it therefrom into the agitation chamber, an overflow chamber communicating with the agitation chamber and into which the agitated liquid overflows, means in the overflow chamber for separating the floatable portion of the overflow liquid from the remainder thereof, a receiver for the floatable material, means for carrying away the clear liquid, and means for conveying a portion of the liquid in the overflow chamber back to the agitation chamber.

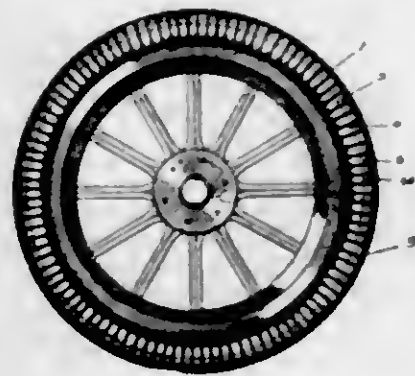
1,312,977. SWITCH-LOCK. MARTIN GRUNNET, Chicago, Ill., assignor of one-half to Hingo Sells, Chicago, Ill. Filed Feb. 4, 1919. Serial No. 274,948. 1 Claim. (Cl. 70-128.)



In combination with an electric knife switch including spaced plates connected by a cross bar provided with a handle, a locking device comprising a supporting bracket including a pair of spaced plates arranged in planes parallel with the blades of the switch, a locking plate pivoted between said spaced plates and having one end provided with an arcuate slot and having its other end formed with a projection providing a shoulder, a guide pin ex-

tending transversely across said spaced plates and engaged within said slot, said locking plate being normally in a position with said projection disposed between the spaced plates in non-obstructing position with relation to the cross bar of the said switch when the switch is in one position whereby upon movement of said switch with its cross bar passing along the edge of the supporting bracket the cross bar will engage the other end of the locking plate and cause swinging thereof to bring said shoulder behind said cross bar whereby to prevent movement of the switch in the other direction, and means for locking said locking plate against movement with respect to said spaced plates.

1,312,978. SECTIONAL CASING FOR PNEUMATIC TIRES. CHARLES H. GUNN, Emeryville, Calif. Filed May 28, 1918. Serial No. 237,993. 1 Claim. (Cl. 152—16.)



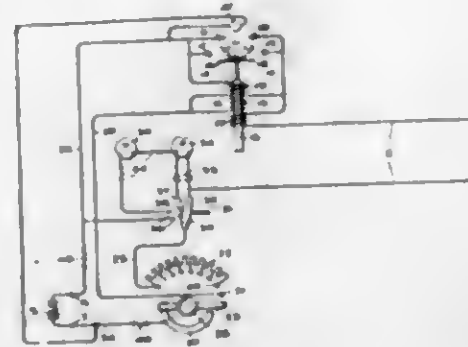
A sectional casing for pneumatic tires comprising a plurality of sections arranged side by side to form an annulus, each section embodying a tread portion tapered at its ends, a lamination of fabric passing around the inner surface of the tread portion and for a certain distance on each side around the outer surface thereof and forming loops adjacent the tapered end of said tread portion, the terminations of the fabric on the outside being secured to the fabric on the inside through the tread portion by stitching therethrough and being further held by metallic staples driven into the tread portion, endless cables passing through the loops of all the sections, and metallic securing members passing through each loop and the respective cable, whereby the sections will be held from creeping on the cables.

1,312,979. CENTRIFUGAL PUMP. OTTO HAERTIGS, Hazleton, Pa. Filed Apr. 24, 1919. Serial No. 292,363. 9 Claims. (Cl. 253—188.)



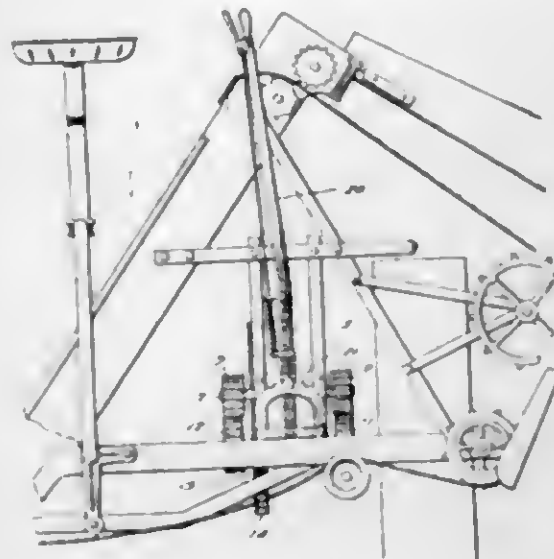
1. A multi-stage centrifugal pump having, between successive stages, a pressure chamber of large capacity to which one stage delivers at relatively high velocity, and through which the fluid passes at relatively low velocity, a connecting passage leading therefrom at a sharp angle and of such reduced cross sectional area that the fluid is caused to pass therethrough at increased velocity to the succeeding stage of the pump.

1,312,980. CHARGING SYSTEM FOR STORAGE BATTERIES. CHESTER I. HALL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed June 8, 1918. Serial No. 102,573. 11 Claims. (Cl. 171—314.)



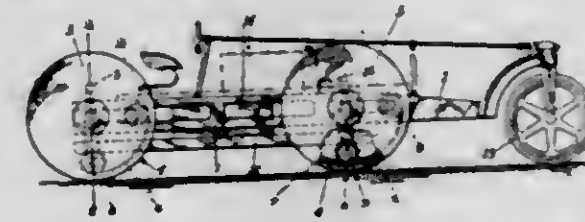
5. A storage battery charging system comprising in combination, a storage battery to be charged, a source of charging current, a switch adapted to connect said battery to said source, a relay having three coils one of which is designed to carry a current proportional to the charging current and the second and third of which are designed to carry currents proportional to the charging and battery voltages respectively, means associated with said relay for closing said switch when said second and third coils are conjunctly energized, means for connecting said second and third coils to their respective sources of current whereby said switch is closed if both coils act in conjunction but is held open if the two coils act in opposition, and means whereby one of said last two mentioned coils is disconnected from its source of current during the normal charging operation.

1,312,981. CHANGE-SPEED GEARING. FRANK M. HAMREK, Lidgerwood, N. D. Filed Sept. 9, 1916. Serial No. 119,231. 1 Claim. (Cl. 74—59.)



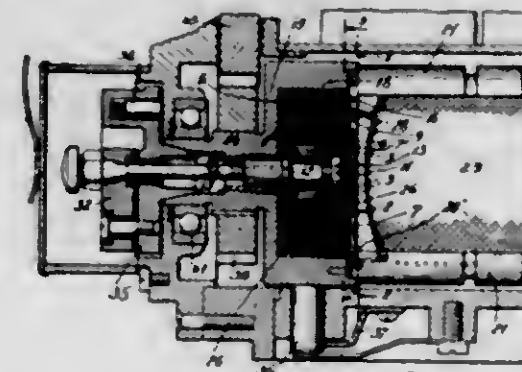
A machine change speed device comprising a machine actuating shaft, a gear loose on the shaft, a combined gear and sprocket loose on the shaft, the gear and the combined gear and sprocket having opposing clutch objects and the sprocket being located between the gear and the clutch portion of the combined gear and sprocket, a clutch sleeve splined to the shaft and having clutch portions adapted to be alternately engaged with the first mentioned clutch portions, a countershaft, and gears carried on the countershaft and meshing with said loose gears for the purpose specified.

1,312,982. TRACTOR. LOUIS B. HARVEY, Stockton, Calif. Filed Aug. 15, 1918. Serial No. 249,984. 2 Claims. (Cl. 180—10.)



1. A wheel tractor comprising a frame, axles secured to the frame, wheels turnable on the axles, annular gears in the wheels, driving pinions meshing with the gears, shafts on the gears turnably mounted on an inner frame, and radius rods pivotally connecting said axles and said shafts whereby the inner frame is free to turn about the axles as a center.

1,312,983. ELECTRICAL CONDENSER AND MOUNTING THEREFOR. OTTO HEINA and CHARLES M. WILD, Southwick, and WOLFGANG E. SCHWARZMANN, Springfield, Mass., assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1918. Serial No. 216,491. 19 Claims. (Cl. 250—41.)



1. A condenser having a shrunken metal ring tightly fitting around its outer periphery to prevent loosening of the layers thereof.

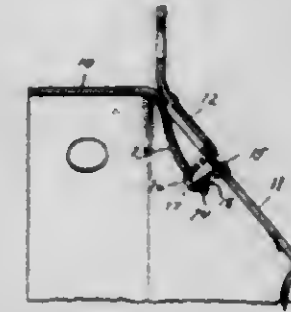
1,312,984. POTATO-PICKER MECHANISM FOR POTATO-PLANTERS. WILLIAM A. HENDRICKSON, Riverton, N. J., assignor to McWHORTER MANUFACTURING COMPANY, Riverton, N. J., a Corporation of New Jersey. Filed June 20, 1919. Serial No. 305,547. 3 Claims. (Cl. 221—127.)



1. In a potato planter, a pair of arms, one stationary and one pivotal, a pivot for said pivotal arm, an impaling pin on said pivotal arm movable through an opening in said stationary arm, said opening acting as a wiper for said impaling pin to remove the potato therefrom, a guiding abutment on said stationary arm located intermediately of said pivot and pin, a contiguous guiding abutment on said pivotal arm, and means for holding the juxtaposed faces of said guiding abutments in contact.

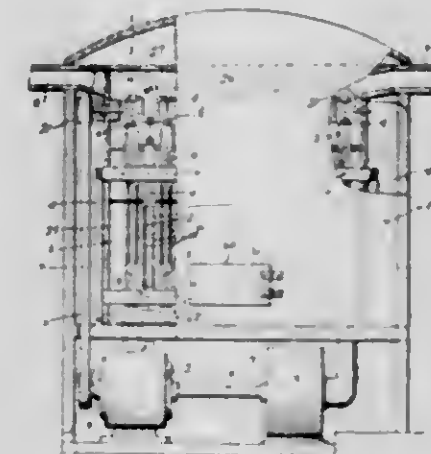
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1,312,985. TIMER-CASING. FREDERICK C. HEASER, Waltham, Mass. Filed Sept. 13, 1918. Serial No. 293,874. 11 Claims. (Cl. 123—167.)



1. In combination, a sheet metal wall having a tongue cut therefrom to leave an aperture, said tongue having one end thereof integral with said wall at one side of said aperture and a portion spaced from said wall opposite to said aperture, and a separate closure for said aperture connected to said last mentioned tongue portion and movable in respect thereto.

1,312,986. MACHINE FOR THE MANUFACTURE OF PAPER EXCELSIOR. IGNATZ HOFFMANN, Ford City, Pa. Filed March 8, 1919. Serial No. 281,411. 20 Claims. (Cl. 13—22.)

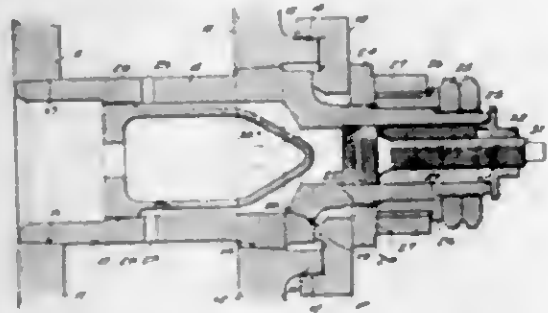


15. In a machine for the manufacture of paper excelsior, the combination with a housing having a chamber, of vertically reciprocating paper severing elements mounted in said chamber, upper and lower spaced plates between which the elements reciprocate, said plates having slot and pin connections with the elements for guiding the same, means for feeding the paper through the chamber in cooperation with the severing elements, and means below and offset from the lower part of the severing elements and in communicative connection with the feeding means for equally distributing the feeding means and the paper through the chamber and in cooperation with the severing elements.

1,312,987. CROSSHEAD WRIST-PIN FOR LOCOMOTIVES. HARRY A. HOKE, Altoona, Pa. Filed Feb. 26, 1919. Serial No. 279,240. 4 Claims. (Cl. 74—38.)

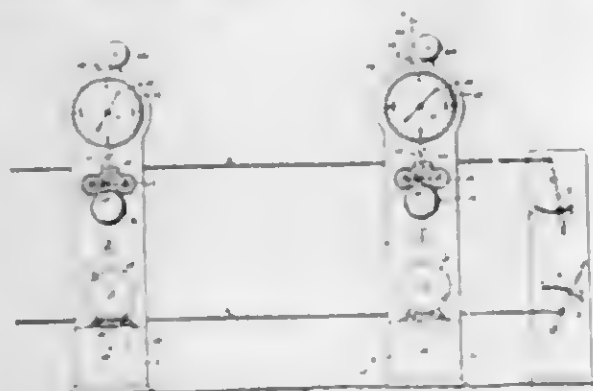
1. In a cross head for locomotives, the combination with the inner wall having an opening therein and the outer

well having on its outer side an externally threaded boss with an opening therethrough, of a wrist pin fitting said



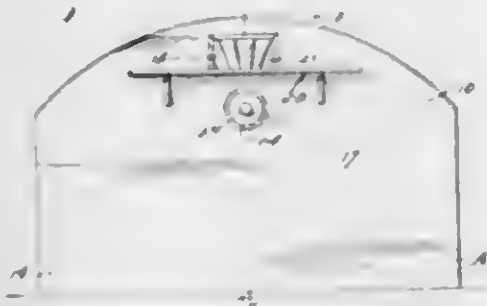
openings and an annular member having an internally threaded portion to engage the thread on said boss, and a portion to engage and lock said pin in said openings.

1,312,988. AMUSEMENT DEVICE. JACOB INSCH, New York, N. Y. Filed Jan. 23, 1919. Serial No. 272,690. 4 Claims. (Cl. 46—56.)



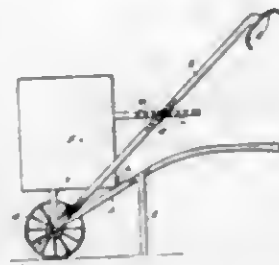
1. An amusement device comprising a plurality of stations, each of said stations having a rotatable pointer, mechanism for rotating said pointer including a hand-operated wheel, a driving gear, a driven gear, and a connecting idler for connecting said gears, a rod connecting the connecting idlers of each of said stations together, a single lever for operating said rod for throwing in and out said connecting idlers, means connected with said pointer for moving the pointer back to zero when the connecting idlers are moved to a disengaged position, a lock for each of said stations for locking the mechanism for rotating the pointers, means for connecting all of said last mentioned locks together, and a lever operating said means.

1,312,989. BRICK CLEANING MACHINE. GEORGE RILEY IVES, West Pike, Ulysses, Pa. Filed May 1, 1917. Serial No. 165,754. 2 Claims. (Cl. 125—26.)



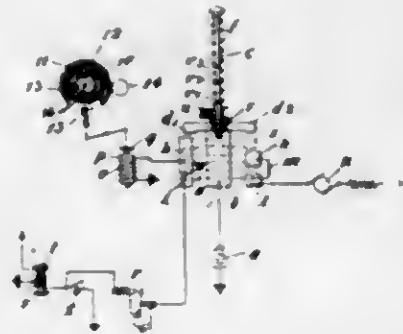
2. A machine of the character described comprising a supporting frame, a rotary disk mounted in the frame and having cutting teeth on its outer side, and a covering mounted on the frame and shielding the disk on the toothed side of the latter, the covering having an opening formed therein to expose the cutting teeth, the opening having its edges beveled in toward the disk, whereby a brick being operated upon may be easily directed away from the disk or supported in an angular position with respect to the disk for grinding upon the edges of the brick.

1,312,990. WHEELBARROW. CHARLES BROOKS JOHNSON, New York, N. Y. Filed Sept. 10, 1918. Serial No. 253,445. 3 Claims. (Cl. 21—68.)



1. The combination of a load-carrier comprising handle members, a wheel connected therewith, with a shoulder yoke comprising bar-like members connected to the axle of the wheel and adjustable with respect to the handle members, the said bar-like members terminating in seats adapted to be seated on the shoulders of the user of the load carrier.

1,312,991. STARTING SYSTEM FOR ENGINES. AUGUST KAZENMAIER and EUGEN HÄGER, Stuttgart, Germany, assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1916. Serial No. 78,953. 5 Claims. (Cl. 290—38.)



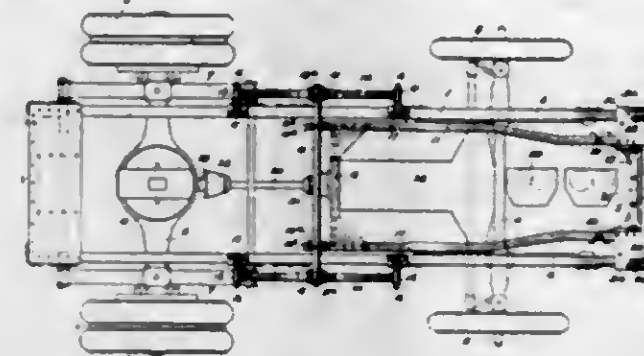
1. In engine starting apparatus, the combination with a starting motor, a source of power supply therefor, gearing including an over-running clutch between the engine and motor, and a brake engageable with the clutch to connect the rotating members thereof, of a controller which first causes the brake to engage the clutch and the starting motor to take up the play in the gearing, and then causes the flow of full power from the source of power supply to the motor to start the engine from rest.

1,312,992. ELECTRICAL SPEED-INDICATOR. AUGUST KAZENMAIER, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1917. Serial No. 154,377. 4 Claims. (Cl. 175—183.)



1. The method of measuring the speed of a revolving element by means of an alternating current generator driven thereby, which consists in utilizing capacity and inductance in the circuit of the generator in such manner as to produce over the range of speed to be measured a steep gradient of current flow preceding the maximum current value due to resonance, and measuring the speed of the revolving element in terms of the value of the current flowing in the circuit.

1,312,993. MOTOR-VEHICLE. CLYDE C. KEKALER, Canastota, N. Y., assignor to Watson Wagon Company, Canastota, N. Y., a Corporation of New York. Filed Apr. 26, 1917. Serial No. 164,660. 5 Claims. (Cl. 180—64.)



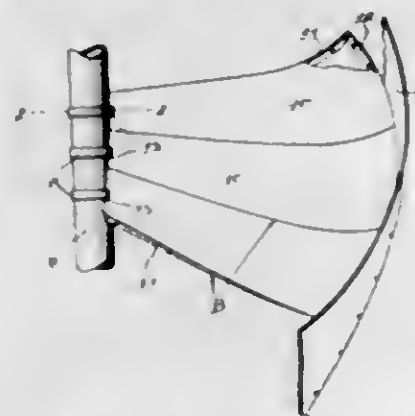
1. A motor truck comprising a main frame, front and rear springs supporting the main frame for carrying the load, a sub-frame pivoted at its front end to the front end of the main frame, springs interposed between the intermediate part of the main frame and sub-frame and mounted on the sills of the main frame between the front and rear springs, and a body and power plant carried by the sub-frame, substantially as and for the purpose described.

1,312,994. WORKMAN'S COLLAPSIBLE TRESTLE OR TABLE. ALVIN LEONARD, Carbondale, Pa. Filed July 23, 1918. Serial No. 246,378. 5 Claims. (Cl. 20—81.)



1. A device of the class described comprising a body member, upper and lower plates fastened to the ends of the body member and the edges of the plates projecting beyond the ends of the member, members removably set in the recesses formed between the projecting edges of the plates, and straps secured to the edges of the plates and extending across the recesses to form keepers for the last-mentioned members.

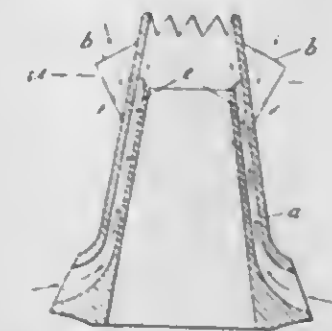
1,312,995. SPIRAL CHUTE. CHARLES HENRY LISTER, North St. Paul, Minn., assignor to Minnesota Manufacturers' Association, North St. Paul, Minn., a Corporation of Minnesota. Filed May 25, 1916. Serial No. 99,765. 4 Claims. (Cl. 193—42.)



1. In a chute of the class described, a central cylindrical post, a slideway section having a segmental flange turned back from the sliding surface thereof and de-

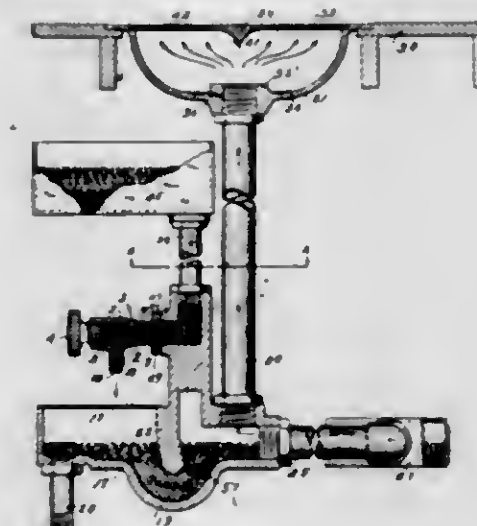
signed to partly surround said post, said section being formed with a slot adjacent the flange, a clamp comprising a band, encircling the post, passing through said slot and overlapping said flange, and means at the adjoining ends of said band located behind the slideway section and adapted to grip the flange against the post.

1,312,996. CHIMNEY POT, FLUE-TOP, AND THE LIKE. GEORGE LISTER, Tow Law, England. Filed Oct. 1, 1918. Serial No. 256,459. 1 Claim. (Cl. 98—4.)



A chimney pot tapered from the base to the top and provided with a plurality of ducts having inclined inlets disposed around the outside of the top of the pot to admit air blowing downwardly and to discharge the same in an upward direction within the pot, and a second plurality of ducts having inlets disposed around the outside of the pot and oppositely inclined with relation to the inlets of the first mentioned ducts to admit air blowing horizontally or upwardly and to discharge the air in an upward direction within the pot, the outlets of all of said ducts terminating in the same horizontal plane.

1,312,997. HUMIDIFIER. ORTON C. LITTLE, Menasha, Wis. Filed May 4, 1918. Serial No. 232,067. 7 Claims. (Cl. 126—350.)



1. A humidifier including the combination of a drip valve, together with a receptacle provided with a trap, and arranged to receive liquid from the valve, a vaporizing chamber connected with the receptacle and having a flat bottom slightly below the normal level of liquid in the receptacle, a pipe connection between the vaporizing chamber and the portion of said receptacle on the opposite side of the trap from that into which the drip valve delivers, and a vapor outlet duct.

1,312,998. AERIAL BOMB. JOSEPH JOHN MCINTYRE, Brooklyn, N. Y. Filed Mar. 5, 1918. Serial No. 220,486. 11 Claims. (Cl. 102—2.)

1. An aerial bomb, comprising a casing filled with an explosive charge and provided with a head and with a

tall, time controlled firing means mounted on the said head and adapted to fire the said explosive charge after the lapse of a predetermined period of time, and a time



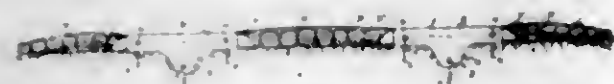
controlled releasing and impact operated firing means mounted on the said tail and adapted to fire the said explosive charge on the bomb striking an object in its flight.

1,312,999. POWER-TRANSMITTING DEVICE. JAMES W. A. McKILLICAN, Montreal, Quebec, Canada. Filed Oct. 15, 1918. Serial No. 258,212. 2 Claims. (Cl. 74-40.)



1. A device of the character described, comprising a shaft having oppositely pitched helical grooves thereon, a pair of clutches slidably and revolvably mounted on the shaft each comprising an inner sleeve, means carried thereby engaging one of the shaft grooves, an outer sleeve, means for releasably connecting the inner and outer sleeves comprising a flange on each inner sleeve, ratchet teeth on the outer sleeves facing said flanges, and balls seated between said teeth and flanges adapted to jam between the teeth and flanges upon relatively opposite revolution of the inner and outer sleeves and to lock the inner sleeve against revolution independently of the outer sleeve in one direction, and a casing rigidly connected to both outer sleeves.

1,313,000. ROADWAY AND APPARATUS FOR ITS MANUFACTURE. HUDSON MAXIM, Hopatcong borough, N. J. Filed Oct. 6, 1916. Serial No. 124,016. 11 Claims. (Cl. 238-5.)

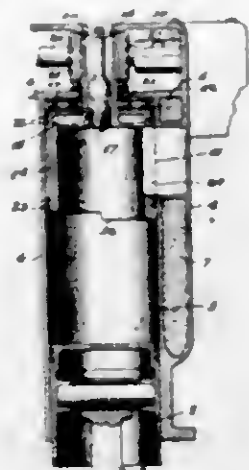


1. In a roadway having a plurality concrete runways for vehicles, a line or wall of stone such as cobbles, laid along the edges of the runways, the upper surface of the stones being lower than the upper surface of the runways, as and for the purpose described.

1,313,001. GAS ENGINE. HENRY E. MAY, Sedalia, Mo., assignor of one-third to Holmes Hall, one-fourth to William D. O'Rannon, and one-twelfth to William M. May, Sedalia, Mo. Filed Oct. 6, 1915. Serial No. 54,344. 1 Claim. (Cl. 123-50.)

In a gas engine, the combination with a cylinder having inlet and exhaust ports, of a cylindrical rotary valve

member mounted in the upper end of said cylinder and provided at one side with a vertically extending port, of



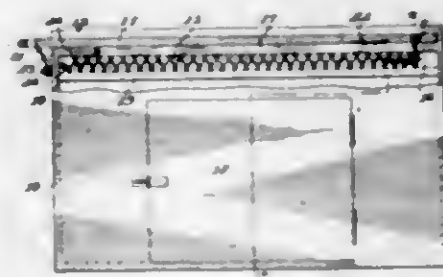
means for counter-balancing the ported side of said valve member to evenly distribute the weight throughout the circumference of the latter.

1,313,002. POWER-HAMMER GUIDE-HEAD. LOUIS MARR, Kaukauna, Wis. Filed July 8, 1918. Serial No. 243,690. 1 Claim. (Cl. 78-37.)



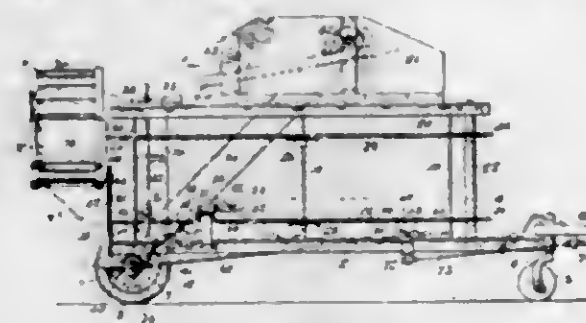
In a power hammer, the combination with a body frame portion, of spaced wall portions extending integrally therefrom and otherwise free, guide channels at the outer ends of said wall portions, a ram slidable in said guide channels, and bolts passed through said wall portions and rigidly adjustably connected therewith whereby to hold the channels in rigid relation and to provide for adjustment of the channels toward and away from each other by flexure of the wall portions.

1,313,003. GARBAGE-RECEPTACLE. WINCENTY P. MEKLEMBURG, Adena, Ohio. Filed Mar. 20, 1919. Serial No. 283,731. 3 Claims. (Cl. 220-41.)



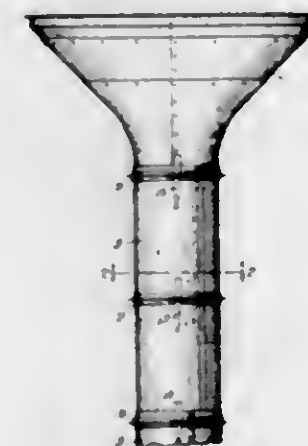
1. A receptacle comprising a box having an open top with an inwardly projecting flange around three sides of the top of the box, an inwardly projecting ledge coextensive with and positioned beneath said flange, guides carried by the sides of the box beneath the ledge, a tightly fitting lid slidably positioned between said flange and ledge and automatic closing means for the lid when open positioned between the said ledge and guides.

1,313,004. MAIZE-HEADER. PINK J. MELTON, Memphis, Tex. Filed Nov. 8, 1916. Serial No. 130,213. 11 Claims. (Cl. 50-50.)



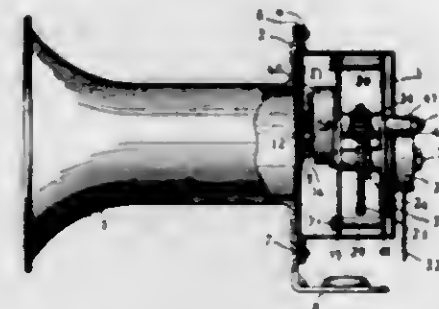
1. A header for maize and the like comprising a vehicle, means for engaging and holding the stalks, means on the vehicle for severing the stalks from the root ends thereof, means on the vehicle for then depressing the head ends of the stalks to bring them all to approximately one level, means on the vehicle for severing the butt ends of the depressed stalks and located at a higher level than the first severing means, and means on the vehicle for then severing the leveled heads from the stalks.

1,313,005. MOLD FOR CONCRETE COLUMNS. CHARLES LOUIS MEYER and ROY O. MACMONAGLE, Omaha, Nebr. Filed Mar. 29, 1919. Serial No. 286,122. 3 Claims. (Cl. 25-131.)



2. A mold for a concrete column, comprising a plurality of superposed cylindrical hollow sections, and hoops embracing said sections, each of said hoops comprising a plurality of sections of T form in cross section, the ribs of said sections at the meeting ends of the latter having transversely slotted overlapping extensions rigid therewith, and wedge keys driven through the slots of said extensions.

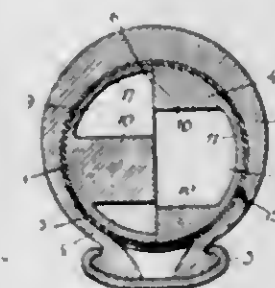
1,313,006. SIGNALING DEVICE. ERIC MOARD, East Hampton, Conn., assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn., a Corporation of Connecticut. Filed Feb. 20, 1914. Serial No. 819,568. 2 Claims. (Cl. 116-1.)



1. In a signaling device, a resonator, an inclosing casing to which the resonator is secured, a vibratory dia-

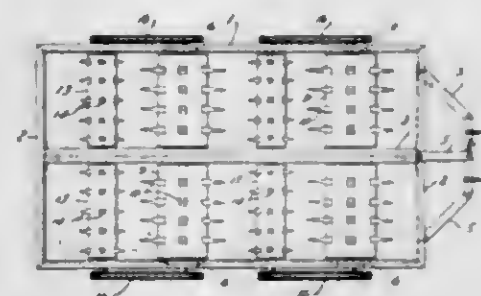
phragm between the resonator and the casing, a cam for actuating the diaphragm rotatable in a plane parallel with the diaphragm, gearing arranged within the casing for driving the cam, all of the parts of said gearing moving about axes that are perpendicular to the plane of the diaphragm, a winding drum connected with the driving mechanism for actuating it, arranged outside of the casing and disposed in a plane parallel with the diaphragm, and a flexible device wound upon the drum for rotating it.

1,313,007. ELASTIC NON-INFLATABLE TIRE. CART A. MORRISON, Delaware, Ohio. Filed June 4, 1919. Serial No. 301,017. 7 Claims. (Cl. 152-5.)



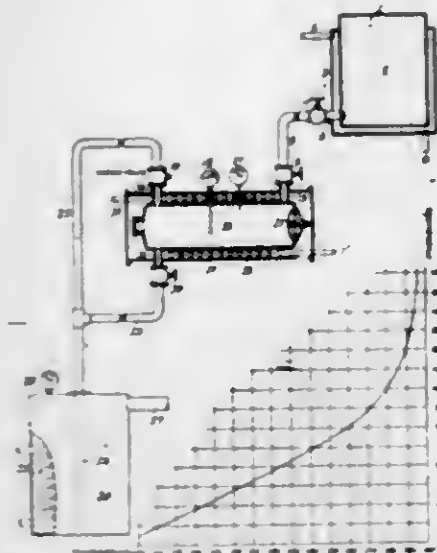
2. An elastic non-inflatable tire, provided with a core consisting of two annular sections, each of which consists of an outer annular wall of semi-circular cross-section and transverse intersecting semi-circular ribs joined at their curved edges to said outer wall and intermediate of their lengths to each other and forming transverse truss connections of said outer wall, said ribs being provided with thickened combined tie and brace connections with each other and with thickened combined tie and brace connections with said outer wall, each section having recesses between the ribs thereof and the recesses of one section being staggered with relation to the recesses of the other section.

1,313,008. HARROW. LARN ERIN OAKES, Elk Point, S. D. Filed Dec. 26, 1917. Serial No. 208,906. 1 Claim. (Cl. 55-85.)



A harrow comprising a frame composed of side bars, end bars connecting said side bars, a longitudinal bar centrally of the frame and connected between said end bars, a plurality of pairs of independent harrow and clod-breaking rolls mounted at both sides of the frame between said side and central longitudinal bars, said harrow rolls being of greater diameter than said clod-breaking rolls and having rows of spaced teeth thereon, said clod-breaking rolls also having rows of spaced teeth arranged offset with respect to the teeth on said harrow rolls, shafts carrying said rolls and journaled to said side and central bars, the shafts projecting at both sides through said side bars, sprockets fixed on the projecting ends of said shafts, and chains passing about said sprockets, the sprockets on said harrow roll shafts being larger than the sprockets on the clod-breaking roll shafts whereby to drive the latter in the same direction and at a greater speed than the former.

1,313,009. PROCESS OF TREATING PETROLEUM RESIDUES, &c. CHARLES S. PALMER, Pittsburgh, Pa. Original application filed June 12, 1916, Serial No. 103,288. Divided and this application filed Aug. 29, 1917. Serial No. 188,707. 3 Claims. (Cl. 196-25.)



1. The process of treating crude petroleum and petroleum residues of the paraffin series to increase the yield of volatile compounds above that normally obtainable therefrom, which consists in digesting the same in a confined space under a pressure in excess of four atmospheres, said pressure being principally autogenous, and at a temperature in excess of 200° C., for a time sufficiently long to induce transformation of the major portion of said materials treated into more volatile products, said temperatures being below that point at which sufficient carbonization occurs to substantially interfere with such transformation, and said digesting being conducted with the treated materials being alternately subjected to high and low pressure during the digesting period, such high pressure being principally self-produced by the evolved volatilized compounds undiluted by added aqueous vapors and such alternating low pressure being produced by the release of the evolved volatilized compounds until the desired predetermined low pressure is obtained.

1,313,010. SAFETY-CATCH FOR PINS, BROOCHES, AND THE LIKE. CHARLES L. PARKER, Newark, N. J. Filed Nov. 10, 1915. Serial No. 60,631. 11 Claims. (Cl. 24-157.)



1. In a device of the character described, the combination with a hooked keeper, of a pivoted catch having an arm lying inside said keeper and adapted to close the same and another arm projecting at the closed side of the keeper, and a spring engaging the said arm inside the keeper to normally hold it in closed position.

1,313,011. ROLLER-GRIZZLY. LEO PINOER, Fallon, Nev., assignor of one-half to Zeb Kendall, San Francisco, Calif. Filed Aug. 10, 1918. Serial No. 249,286. 1 Claim. (Cl. 83-56.)

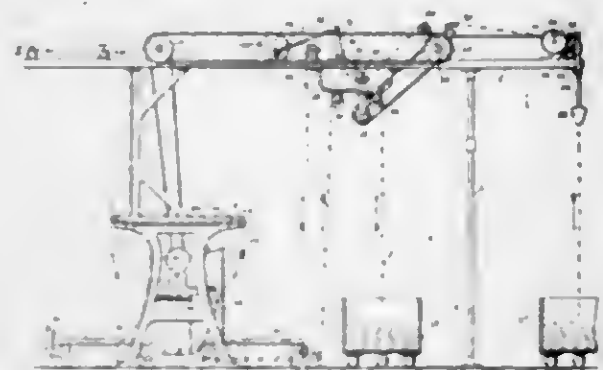
A frame for roller grizzlies consisting of a pair of spaced apart side members each comprising a pair of vertical channel beams having a vertical web and top and bottom flanges, the channels of each pair facing out-

wardly away from each other, and the webs spaced from each other constituting a continuous vertical slot from end to end, tie bolts passing through said channel beams, and connecting the side members, spacing blocks on said rods between the vertical webs, nuts threaded on said tie rods abutting the outer faces of said webs of each pair, a series of bearing blocks mounted on the upper flanges of the beams and bearing on each side of the slots so formed, stems projecting downwardly from each bearing block between the webs, and nuts on the lower ends of said



stems and engaging the lower flanges of the beams, whereby the bearing blocks may be uniformly adjusted longitudinally, to vary the distance between rollers journaled thereon, and then held in such adjusted relation.

1,313,012. BURLING OR EXAMINING MACHINE. MAX PORTZACH, Clifton, N. J. Filed Feb. 4, 1919. Serial No. 275,046. 3 Claims. (Cl. 26-2.)

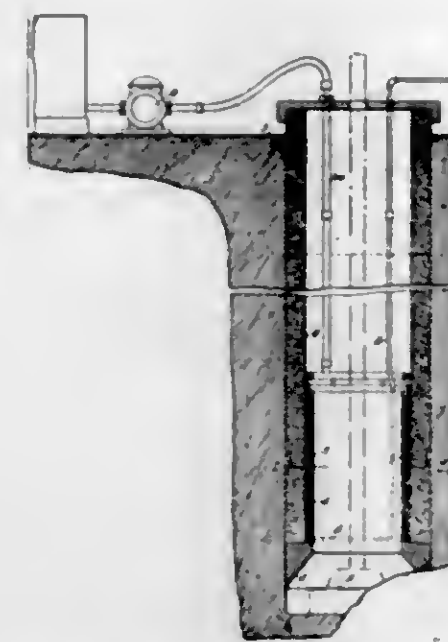


3. An examining machine of the character described, comprising a frame, a stationary table connected with the frame, means for guiding a strip of cloth over said table, means mounted on the frame for moving the cloth at a uniform speed from a starting point to a discharge point, means for intermittently causing the cloth to move rapidly and then slowly over said table without varying the uniform travel of the cloth through the machine, said means comprising a roller, a pair of pivotally mounted supporting arms connected with the roller, means including a rotating disk for rocking said roller back and forth and causing the roller to move back and forth transversely of the length of the cloth so that the cloth at one time will have a longer path of travel than at another, and means connecting said disk and said driving means so that they will operate in timed relationship with each other.

1,313,013. METHOD AND APPARATUS FOR CASINO WELLS. CONSTANTINE C. POLYAC, Tonnere, France. Filed May 25, 1918. Serial No. 236,535. Renewed Apr. 4, 1919. Serial No. 287,636. 4 Claims. (Cl. 25-124.)

3. A device for forming casing sections in a well, comprising a tubular form having a lateral head at the lower

end, said tubular form having passages opening in the upper edge of the mold and also in the outer periphery

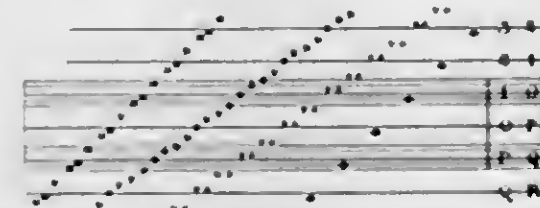


in proximity of the head whereby molding material may be supplied about the mold through said passages.

1,313,014. ORGANIC PHOSPHORUS COMPOUND FROM PLANTS. SWIGEL POSTERNAK, Chêne-Bougeries, near Geneva, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 12, 1918. Serial No. 244,645. 4 Claims. (Cl. 23-24.)

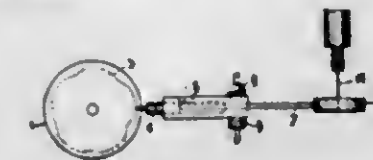
1. The herein described process of preparing a chemically pure and uniform salt of the organic phosphorus reserve compound of the green plants, consisting in dissolving the impure organic phosphorus reserve compound of the green plants with diluted mineral acid, precipitating the phosphorus compound by means of a solution of ferric salt, decomposing the washed iron precipitate by an excess of caustic soda, filtering, adding diluted alcohol to the filtrate, effecting crystallization, and then recrystallizing the crystalline mass in water in order to obtain the chemically pure sodium salt, the aqueous solution of which is capable of being transformed wholly or partially into chemically pure and uniform acid, neutral or alkaline salts by usual methods.

1,313,015. MUSICAL NOTATION. SIDNEY ARMOR REEVE, New Brighton, N. Y. Continuation of application Serial No. 752,258, filed Mar. 6, 1913. This application filed Nov. 23, 1918. Serial No. 263,875. 11 Claims. (Cl. 263-47.)



6. In a musical notation, a staff of five horizontal lines grouped in two and three, indicating the five black keyboard-keys of an octave of piano-keyboard, in combination with one form of notehead used in the spaces between the lines of a group, a contrasted form of notehead used on the lines, and a third contrasted form of notehead used in the spaces between groups, substantially as described.

1,313,016. MARKING-MACHINE. JOHANNES GERARD FREDERIK ROOGER, Vrijzenban, near Delft, Netherlands. Filed Nov. 22, 1917. Serial No. 203,352. 3 Claims. (Cl. 112-103.)



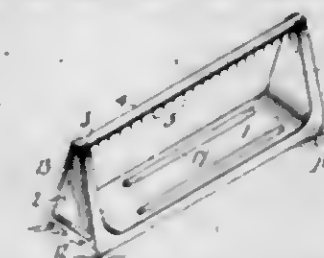
1. In a marking machine of the character described, a rotatable drum provided with longitudinal rows of grooved blocks, the grooves of the blocks being different and of different depths according to the character, figure or the like to be sewed, and a pivoted casing adjacent the drum, a sliding and spring pressed pin in the casing and engaging the grooves of said blocks, and a gripping member to which the pin is secured for gripping the piece of material to be sewed.

1,313,017. SIGNAL DEVICE. CHARLES M. ROSE, New York, N. Y., and ALLEN L. HAMLIN, East Orange, N. J. Filed Aug. 7, 1918. Serial No. 248,710. 7 Claims. (Cl. 116-31.)



6. In a signal device, in combination, a support adapted to be attached to the wrist of the operator, an extension attached to said support, and a luminous member hinged at the outer end of said extension and positioned in the palm of the hand of the operator and adapted to be swung around its hinge to conceal or expose the luminous portion.

1,313,018. MEANS FOR SUPPORTING CERAMIC WARE WHILE BEING FIRED IN OVENS. HERBERT JOHN RUABTON, Southfields, England. Filed Nov. 10, 1917. Serial No. 201,304. 12 Claims. (Cl. 25-153.)



1. For supporting ceramic ware during firing, an open-sided ware-holder comprising a rectangular base and end walls, said base being provided on its lower side at one end with a central foot or lug and at its other end with a pair of laterally arranged feet or lugs.

2. For supporting ceramic ware during firing, a plurality of superposed open-sided ware-holders each comprising a base and end walls, the base of each ware-holder being provided on its lower side at one end with a central foot or lug and at its other end with a pair of laterally arranged feet or lugs and the upper ends of the end walls of each ware-holder being provided with bearing surfaces adapted to support the feet or lugs on the superposed ware-holder and admit of their moving longitudinally thereon.

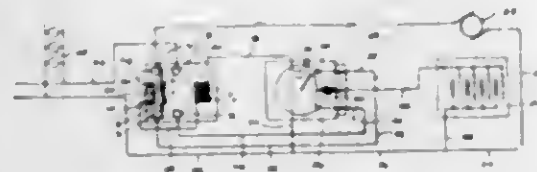
3. For supporting ceramic ware during firing, superposable ware-holders of refractory material each comprising a base provided on its lower face at one end with a central foot or lug and at its other end with a pair of laterally arranged feet or lugs and a pair of rectangular end walls carried by said base, one of these end walls being provided on its upper face or edge with a pair of bearing surfaces for the lateral feet or lugs of a super-

posed holder, and the other of the said end walls being provided at the central portion of its upper face or edge with a bearing surface for the central foot or lug of the superposed holder.

4. For supporting ceramic ware during firing, an open-sided ware holder comprising a rectangular base and end walls the upper ends of which are adapted to carry a longitudinal ware-supporting member, said base being provided on its lower side at one end with a central foot or lug and at its other end with a pair of laterally arranged feet or lugs.

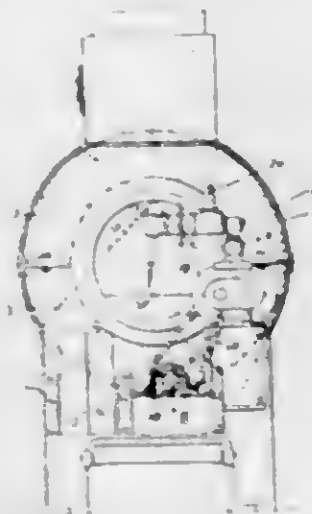
5. For supporting ceramic ware during firing, an open-sided ware holder comprising a rectangular base and end walls the upper ends of which are formed with bearings adapted to support a longitudinal ware-supporting member and retain it in place laterally, said base being provided on its lower side at one end with a central foot or lug and at its other end with a pair of laterally arranged feet or lugs.

1,313,019. ELECTRIC SWITCH. WILLIAM R. SCHMITZ, Columbus, Ohio. Filed Feb. 19, 1917. Serial No. 149,467. 2 Claims. (Cl. 171-314.)



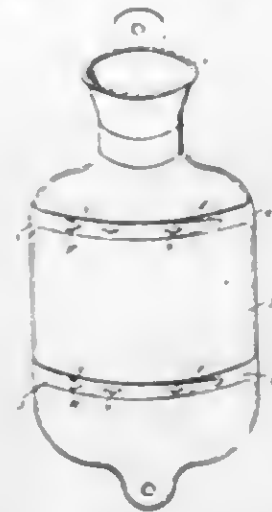
1. The combination with a generator, meter and a storage battery, of an electro-magnetic switch structure comprising a plurality of contacts and a magnetically controlled arm operable to bridge the contacts, said arm being so arranged that when the same occupies one position a circuit will be completed through the generator, meter and battery, and when said arm occupies a second position said generator will be thrown out of circuit and a load circuit completed through said battery and meter, and means operating in conjunction with said meter for automatically moving said arm to said second position after the battery has received its charge.

1,313,020. COFFEE-ROASTER. EDWARD F. SCHNECK, Greenburg, N. Y., assignor to Jabez Burns & Sons, a Corporation of New York. Filed Apr. 17, 1918. Serial No. 229,053. 11 Claims. (Cl. 34-5.)



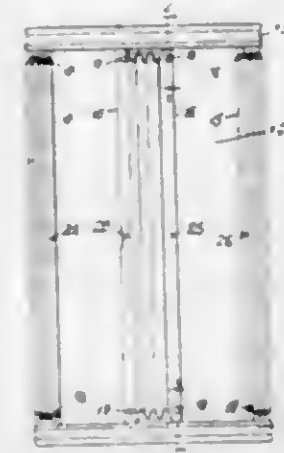
1. In a roaster, the combination with means for dropping coffee or the like in a vertical stream, of a heat generator producing a downwardly directed continuous sheet flame substantially parallel to the moving material.

1,313,021. HOT WATER BOTTLE. GERTRUDE M. SCOTT, Scotts Mills, Oreg. Filed Sept. 25, 1916. Serial No. 122,175. 3 Claims. (Cl. 24-10.)



3. The combination with a pair of pliable straps joined together, and designed and adapted to have their free ends united under tension, each strap being tapered toward its free end, and each being provided with a slot whose side walls also converge toward its free end, of a slot-engaging head on the end of each strap, each head being of a triangular contour, as specified, and having its apex toward the tapered end of its strap, whereby when the head of one strap engages the slot of a companion strap, tension upon the straps tends to draw them into closer union.

1,313,022. RIVETED RECEPTACLE. ISAAC E. SEXTON, Boston, Mass. Filed Jan. 30, 1919. Serial No. 274,033. 1 Claim. (Cl. 220-271.)



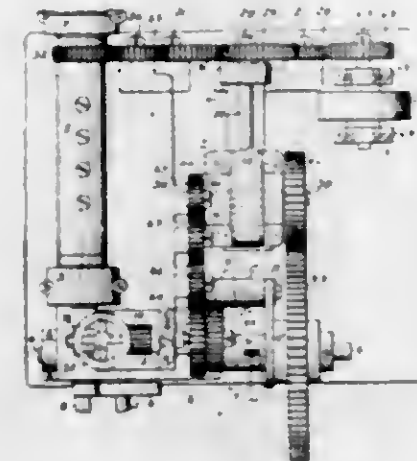
A reinforced receptacle or barrel, comprising a sheet metal body, sheet metal reinforcing strips seated on the external surface of the body, relatively thick metal hoops having rigid anvil portions seated on the internal surface of the body, the inner surfaces of the hoops being exposed within the end portions of the body, said strips, body, and hoops having coinciding orifices, and rivets having relatively large hardened wear-sustaining heads seated on and in binding contact with the outer surfaces of the sheet metal strips, and malleable shanks inserted in said orifices and upset at their inner ends on said anvil portions to form relatively small inner heads, in binding contact with and protected by the anvil portions of the hoops.

1,313,023. MANUFACTURE OF SULFATE OF AMMONIA. JOHN TOMLINSON SHERMAN, Birley Carr, near Sheffield, England. Filed May 19, 1919. Serial No. 298,207. 1 Claim. (Cl. 23-21.)

In the manufacture of sulfate of ammonia, a process for reducing the amount of free acid which will be con-

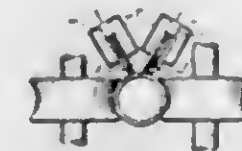
tained in the sulfate when drained, consisting in spraying with clean water the magma of crystals of sulfate enveloped in mother liquor immediately it is ejected from the saturator, and before any draining away of mother liquor from said crystals has been allowed to take place.

1,313,024. WIRE STRAIGHTENING AND CUTTING-OFF MACHINE. ELMORE F. SHUSTER, New Haven, Conn. Filed Feb. 15, 1919. Serial No. 277,131. 5 Claims. (Cl. 140-140.)



1. In a machine of the character described having a base and a head, a straightening arbor rotatably mounted thereon, feed rolls, cam shaft, and cutting off lever, of a gear mounted on the arbor, a driving shaft and its gear, a train of gears connecting the driving shaft with the arbor gear, a worm shaft and its worm, a gear of the train mounted on the worm shaft, a worm gear, a shaft therefor, means to support the worm gear shaft from the base and at right angles to the driving shaft, said worm gear meshing with the worm, spur gears mounted on the worm gear shaft, a gear mounted on one of the feed roll shafts, and a train of gears connecting one of said spur gears with the feed roll shaft gear, a gear mounted on the cam shaft meshing with the other spur gear to actuate the cam shaft and cutting off lever.

1,313,025. TUBE-FORMING APPARATUS. CHARLES S. SMITH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Dec. 26, 1916. Serial No. 139,043. 11 Claims. (Cl. 219-6.)



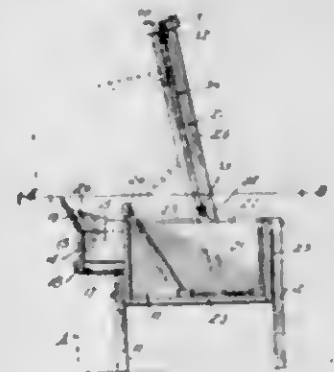
1. Tube forming apparatus, including the combination with a set of bending rolls adapted to progressively shape a longitudinally moving sheet metal blank into tubular form, means for compressing the meeting edges of the tubular portion of the blank into forcible abutting contact with each other, and means for passing electrical currents through said meeting edge portions while the blank is in motion and in the form of a substantially continuous sheet along a considerable portion of its length, said electrical means comprising a set of brushes arranged in close proximity and insulated from each other, whereby the temperature may be progressively and continuously raised as the blank advances.

1,313,026. DETACHABLE HEEL. JOHN WILLIAM SMITH, Chicago, Ill. Filed Apr. 26, 1918. Serial No. 230,667. 4 Claims. (Cl. 36-36.)



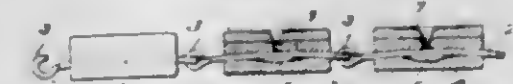
1. In combination with a shoe, a heel body having a normally concave upper surface; an annular member embedded in said heel body adjacent the periphery thereof; a resilient cross piece embedded in said heel body and having its ends connected with said annular member; and an exteriorly extending screw connected with said cross piece and removably securing said heel body to said shoe, and binding said cross piece under the compression, substantially as described.

1,313,027. GRAIN-TREATING APPARATUS. LEXIOW D. SMITH, Helix, Oreg. Filed Mar. 24, 1917. Serial No. 157,191. 1 Claim. (Cl. 83-28.)



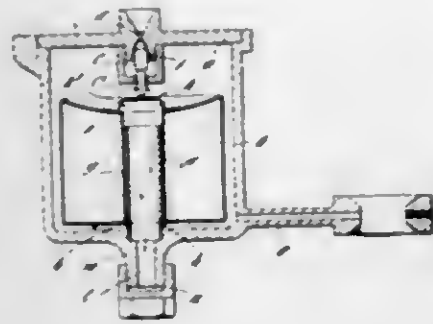
In an apparatus for treating grain and other seeds, the combination with a box-like trough open at its top, a hopper secured to the front of the trough; of parallel forwardly inclined standards rising rigidly from the ends of said trough and provided with guides, slides movable in the latter, a winch across the upper ends of said standards having ropes connected with said slides, and a receptacle shaped to fit within the ends and rear side and bottom of said trough and having its ends pivoted to the lower ends of said slides, its front inclining upward and forward and over the front wall of said trough and overlying said hopper, for the purposes set forth.

1,313,028. DRIVE BELT. WILLIAM S. SMITH and SAMUEL N. CRIDER, Hagerstown, Md. Filed Sept. 19, 1918. Serial No. 254,700. 3 Claims. (Cl. 74-64.)



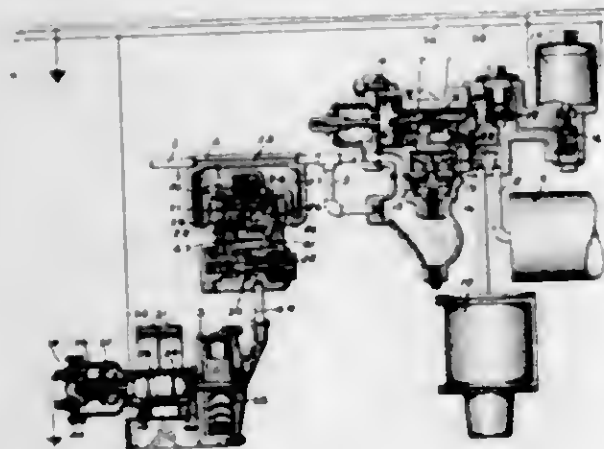
1. A belt link comprising a core of strong material having an opening near one end and provided with a hook on its other end portion, said hook being of relatively flexible material and adapted to be passed through an opening in a similar link core and closed thereafter, a suitable frictional covering and a fastening device passing through said core, having one end covered by said covering and the other end flush with the surface of said covering, whereby said device is protected and said covering is secured to said core.

1,313,029. FLOAT-CONTROLLED APPARATUS FOR MAINTAINING A CONSTANT LEVEL OF LIQUID. CHARLES EDWARD NOEL STONE, London, England. Filed Jan. 19, 1918. Serial No. 212,653. 3 Claims. (Cl. 137-104.)



4. An apparatus of the character described comprising a vessel having an inlet opening in the top wall thereof, a tubular guide upstanding in said vessel and disposed directly below said inlet opening, a float surrounding said guide and slidable vertically thereon, a valve controlling said inlet opening, and means carried by said float for actuating said valve, said guide being formed with outlet openings at a point below said float, and said float being formed with a concave top.

1,313,030. ELECTROPNEUMATIC BRAKE. WALTER V. TURNER, Wilkesbarre, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1918. Serial No. 257,320. 4 Claims. (Cl. 188-4.)

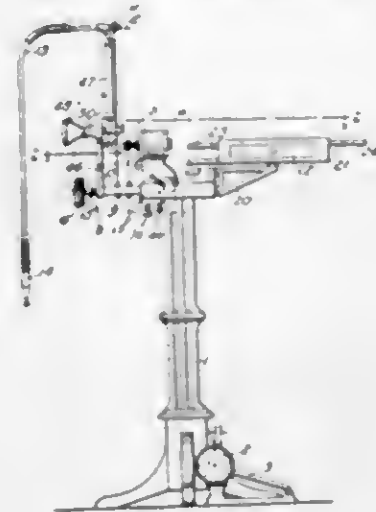


1. In an electropneumatic brake, the combination with a brake pipe means operated upon a sudden reduction in brake pipe pressure for venting fluid from the brake pipe, and an electrically controlled device for effecting a reduction in brake pipe pressure, of an electric generator for supplying current to said electrically controlled device, and a motor operated by fluid vented from the brake pipe for operating said generator.

1,313,031. DENTAL APPLIANCE. GILBERTO VILLALBA M., Progreso, Yucatan, Mexico. Filed Mar. 27, 1919. Serial No. 285,606. 4 Claims. (Cl. 32-5.)

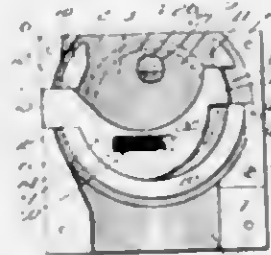
1. In a dental appliance for itinerant dentists, a standard formed with a platform, an electric motor mounted on the platform, means arranged adjacent the base of the standard for controlling the flow of electricity to the appliance, a power shaft supported on the platform, means for connecting the motor with the power shaft for ro-

tating the power shaft, a bracket connected with the platform, a dental tool supporting shaft carried by said



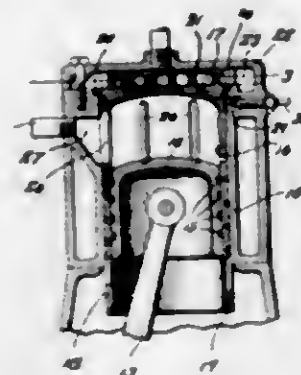
bracket, a belt for transmitting power from said power shaft to said dental tool carrying shaft, and means on the end of the power shaft for receiving a tool.

1,313,032. VENDING MACHINE. JOHN A. WHESTER, Rutherford, N. J. Filed July 8, 1916. Serial No. 108,155. 9 Claims. (Cl. 194-70.)



1. A coin controlled operating mechanism for vending machines comprising a stationary member, a coin carrier movable with relation thereto and provided with a coin receiving slot, a yieldable stop for the carrier adapted to be released by a coin of proper diameter, a yieldable stop for the carrier adapted to be released by a coin of proper thickness, and each of said stops being adapted to lock the carrier in a stationary initial position thereby to release the carrier for rotation from initial position only upon the insertion of a coin within the slot proper both in diameter and thickness.

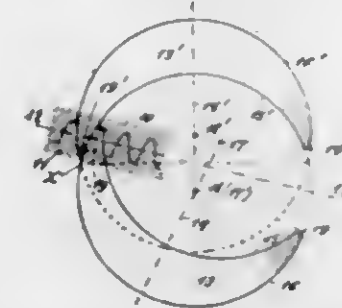
1,313,033. INTERNAL-COMBUSTION ENGINE. CHARLES T. WESTLAKE, St. Louis, Mo. Filed July 30, 1915. Serial No. 42,715. 22 Claims. (Cl. 123-80.)



1. In an internal combustion engine, an outer cylinder, an inner cylinder closed at its outer end, said last mentioned cylinder being adapted to rotate within the first mentioned cylinder, both cylinders being provided with

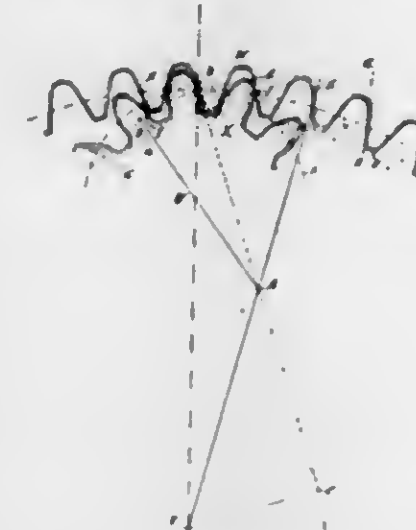
ports which are adapted to coincide as the inner cylinder is rotated, a piston mounted for operation within the rotating cylinder, and means on said rotating cylinder for effecting a circulation of cooling medium around the outer cylinder and over the closed end of the inner cylinder.

1,313,034. GEAR-CUTTING TOOL. HARVEY D. WILLIAMS, Wallingford, Conn., assignor, by mesne assignments, to James E. Gleason, trustee, Rochester, N. Y. Filed Sept. 14, 1916. Serial No. 120,087. 21 Claims. (Cl. 29-105.)



8. A rotary gear-tooth cutter having two cutting edges, one convex and the other concave, and both curved according to arcs of circles whose centers are on the cutter axis, and a bottom-cutting edge transverse to said two edges and located in a section of an element of a cone whose axis is the cutter axis.

1,313,035. INTERNAL GEAR. HARVEY D. WILLIAMS, Wallingford, Conn., assignor to Gear Improvement Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 4, 1917. Serial No. 205,327. 8 Claims. (Cl. 74-41.)

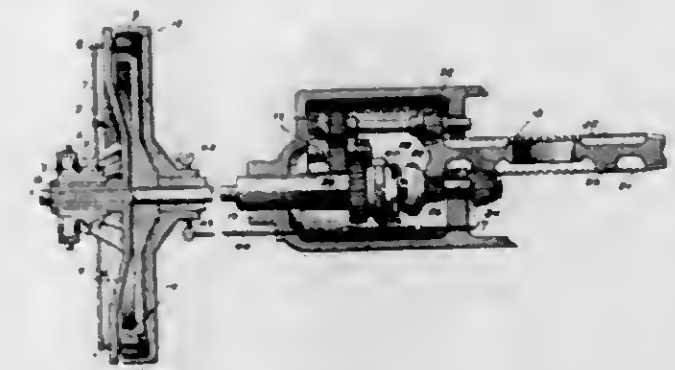


1. Internal gearing comprising a pair of mating gear wheels having teeth of conjugate form, the working tooth profiles of one of which wheels when at the instant axis of the gears are radial to an arc which is the path of the point of contact of the two gear wheels.

1,313,036. VARIABLE-SPEED TRANSMISSION. JACOB F. WOLLFSEN, Lockwood, Calif. Filed May 2, 1918. Serial No. 233,394. 6 Claims. (Cl. 74-59.)

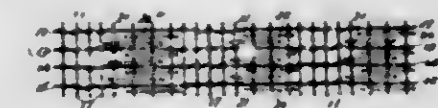
1. A variable speed transmission comprising a driving shaft; a driven element; a pair of gears of different diameters mounted upon the driven element; a counter shaft extending from the driving shaft to the driven element; a pinion on the counter shaft meshing with one of the gears on the driven element; a sleeve rotatably mounted upon the counter shaft; a second pinion mesh-

ing with the other gear on the driven element; and means for connecting either the counter shaft or the sleeve with



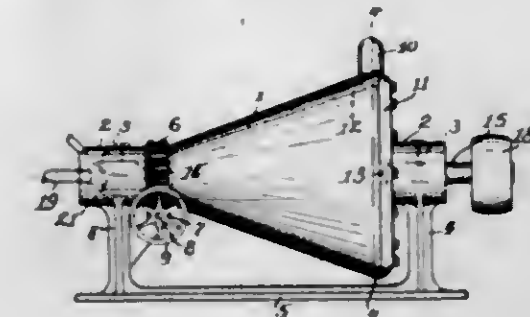
the driving shaft and for simultaneously connecting the second pinion with the sleeve when said sleeve is connected to the driving shaft.

1,313,037. ELASTIC FABRIC. CARL ADAMS, East Rutherford, N. J. Filed Dec. 31, 1917. Serial No. 209,711. 9 Claims. (Cl. 139-70.)



1. An elastic two-ply fabric, comprising two weaves each having interwoven warp threads, weft threads and connecting warp threads, the said warp threads being arranged in pairs and the warp threads of one pair being excessively twisted in one direction, and the warp threads of the adjacent pair being excessively twisted in the opposite direction, the said warp threads being crinkled and set to allow the fabric to yield lengthwise.

1,313,038. MACHINE-GUN. FRANK W. ADAMS, St. Paul, Minn. Filed Dec. 4, 1916. Serial No. 135,264. 7 Claims. (Cl. 89-10.)

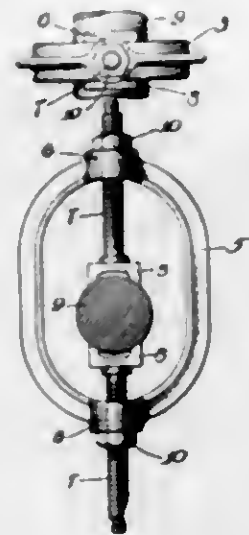


1. In a machine gun the combination of an outer casing, an inner cone journaled in said outer casing, an aperture in said outer casing for introducing projectiles, and means associated with said inner cone for driving projectiles fed thereto.

1,313,039. BALANCING APPLIANCE. NICHOLAS W. AKIMOFF, Philadelphia, Pa., assignor to Vibration Specialty Company, a Corporation of Delaware. Filed May 11, 1917. Serial No. 167,919. Renewed June 24, 1919. Serial No. 306,445. 7 Claims. (Cl. 74-6.)

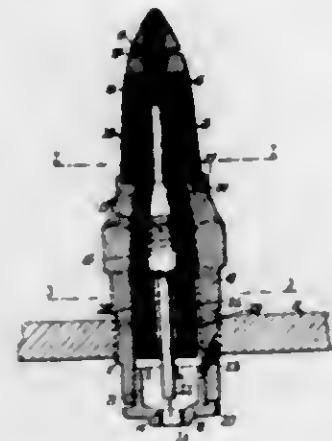
1. A balancing appliance adapted to be adjustably mounted upon a rotatable shaft adjacent a body under examination to determine the unbalance existing in said

body comprising a device having a portion of predetermined mass adapted to be arranged symmetrically about



two axes at right angles to the axis of rotation of the shaft, and means for shifting the center of gravity thereof with respect to the axis of rotation.

1,313,040. SPARK-PLUG. ALBERT NELSON ALEXANDER, Bergenfield, N. J. Filed Aug. 24, 1917. Serial No. 188,005. 2 Claims. (Cl. 123-160.)

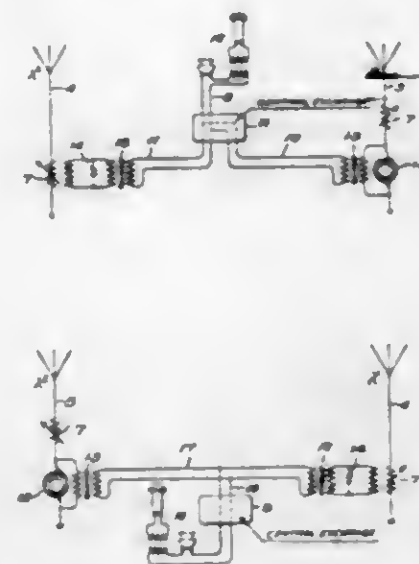


1. A spark plug, comprising a hollow metal body having a portion of its inner surface tapered and having at its outer end an annular recess, a roll of mica fitted within the tapered portion of the body and extending beyond the outer end of the body, a series of flat mica washers surrounding said extending end of the roll of mica and seated in said recess, a contact pin projecting through the mica core and having a tapered enlargement fitted within the said core, means cooperating with the outer end of the contact pin and bearing against the outer end of the series of mica washers to hold the parts all in firmly united condition, and a thimble screwing in the outer end of the body and provided with a contact sleeve.

1,313,041. WIRELESS-TELEPHONE SYSTEM. EARST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1916. Serial No. 116,634. 6 Claims. (Cl. 250-6.)

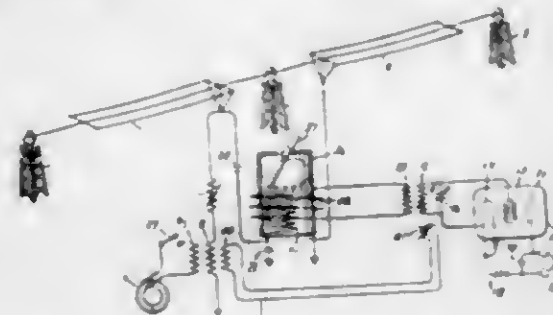
1. The combination in a wireless signaling system of an antenna for transmitting signals, a source of high frequency energy and apparatus for controlling the same connected to said antenna, a receiving antenna having suitable receiving apparatus operatively connected thereto at all times and located at such a distance from the

transmitting antenna that the effect of the transmitted signals may be eliminated in the receiving apparatus, a



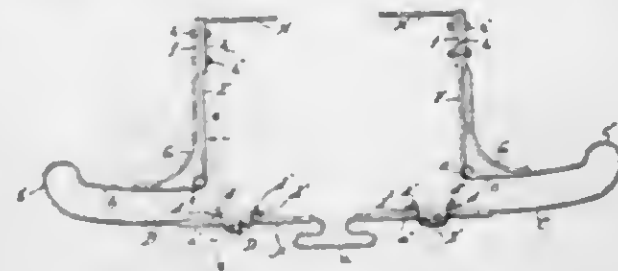
telephone line, and means for connecting the telephone line simultaneously to both the transmitting and receiving apparatus.

1,313,042. WIRELESS SIGNALING SYSTEM. EARST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1917. Serial No. 203,915. 7 Claims. (Cl. 250-9.)



1. The combination in a wireless signaling system of a receiving antenna, a separate transmitting antenna in proximity thereto, and a receiving system comprising a receiving coil having one end connected to said receiving antenna and its opposite end connected to a point between two capacities, one of which is connected to earth and the other of which is connected to the transmitting antenna, and an electromagnetic coupling between the transmitting antenna system and the receiving system.

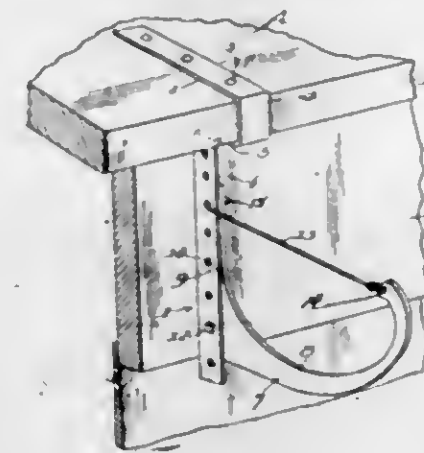
1,313,043. AUTOMOBILE BAR-BUMPER. FRANK AMATO, Long Island City, N. Y. Filed Jan. 24, 1918. Serial No. 213,490. 10 Claims. (Cl. 293-35.)



7. A bumper comprising a plurality of members two of which are doubled rearwardly with respect to the opera-

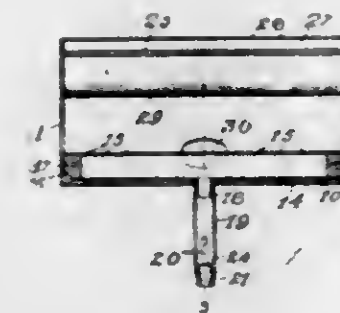
tive portion of the bumper, and hangers each provided with a spring positioned in cooperative relation to said rearwardly extending portions of the members.

1,313,044. EAVES-TROUGH HANGER. ALBIN JOHN ANDERSON, Kings Park, N. Y. Filed Sept. 6, 1917. Serial No. 190,054. 3 Claims. (Cl. 108-29.)



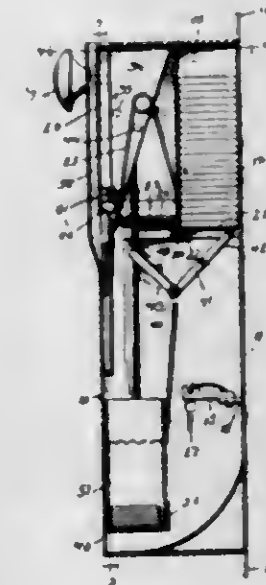
1. In an eave trough hanger comprising a bracket support formed from a right angular blank, one portion of which constitutes a roof engaging member, the said portion being bent downwardly to form a fascia engaging member, a wall engaging member continuing from the fascia engaging member, the opposite portion of the support being bent downwardly and arranged in alignment with one side edge of the wall engaging member to provide a hanger arm, means engaging the roof engaging member for anchoring the support in position, a trough support adjustably connected vertically of the arm, and a locking wire movably connected to the trough support and designed to be engaged with the arm and the support for firmly anchoring the support in position.

1,313,045. GAS-HEATER. CARL P. ANDERSON, Jamestown, N. Y. Filed Mar. 22, 1919. Serial No. 284,312. 3 Claims. (Cl. 126-248.)



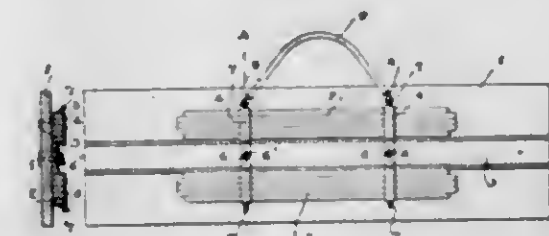
1. A gas heater comprising a horizontal metal cylinder having openings in the ends thereof, a tubular gas burner lengthwise within the lower portion of said cylinder, a mixer tube and gas nipple connection to said burner for attachment to a gas arm, and a lengthwise cupping crown plate in the upper portion of said cylinder over said tubular gas burner to form a combustion chamber therein.

1,313,046. VENDING-MACHINE. GUSTAV R. ANDERSON, Long Island, N. Y. Filed Mar. 21, 1917. Serial No. 156,465. 5 Claims. (Cl. 211-8.)



2. In a vending machine, a magazine, a hingedly mounted door closing the bottom thereof, a slidable dividing plate, a lever for operating the door, a slidable cam to move the plate, and a pin carried by the cam to engage the lever.

1,313,047. CLAMPING DEVICE FOR PAPER-HANGERS' OUTFITS. HARRY ANDERSON and JOSEPH F. KANE, Chicago, Ill. Filed May 15, 1916. Serial No. 97,695. 3 Claims. (Cl. 224-45.)

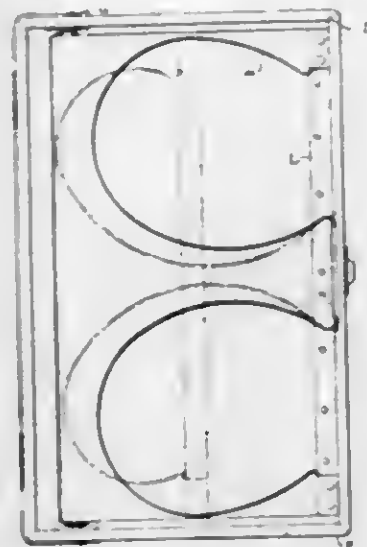


1. In a clamping device for a paper-hanger's outfit, the combination with a board and other supplemental members to be connected together, said members being arranged upon one side of said board, of a pair of spaced clamping members arranged upon said side of said board; a channel at the inner side of each of said clamping members at each end thereof for the reception of said supplemental members; means for securing said clamping members to said board; and loops on the ends of said clamping members for connection with a supporting element, substantially as described.

1,313,048. DEVICE FOR MEASURING THE FEET. JAMES W. ARROWSMITH, Morristown, N. J., assignor to Arrowsmith Manufacturing Company, a Corporation of New Jersey. Filed Oct. 4, 1918. Serial No. 256,801. 12 Claims. (Cl. 282-1.)

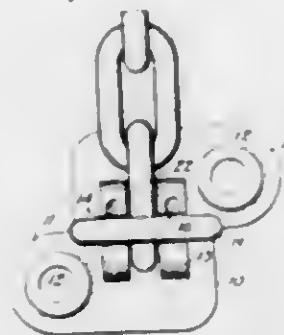
1. The combination of a frame, an inking roller mounted to rotate therein, an inking sheet independently mounted therein, and means for causing the sheet to pass over the said roller automatically in one direction, said

means constructed to permit movement of said sheet in another direction, and means for manually moving said



sheet in that direction against the pull of said automatic means.

1,313,049. FASTENING DEVICE. IRVING HARRISON BACHMAN and FRANK H. BACHMAN, Allentown, Pa. Filed Feb. 14, 1919. Serial No. 276,930. 4 Claims. (Cl. 24-241.)

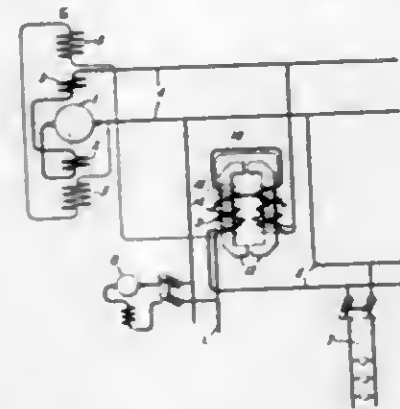


3. A device of the class described comprising a base having means for attachment to a support, said base being provided with spaced wings having aligned perforations and aligned grooves, said aligned grooves and said aligned perforations being substantially parallel, said grooves at corresponding ends being provided with bevels, and a removable element consisting of a U-shaped member, one part of which is adapted to enter said perforations to secure a link of chain between said wings, the other part of said member having its free end downwardly curved and beveled and being adapted to seat in said aligned grooves when said removable element is in operative position, said bevels of said grooves and said bevel at the free end of said member cooperating to permit said member to be forced into operative position, said wings being cut away to permit the insertion of a tool into said grooves to permit of the removal of said removable element.

1,313,050. MEANS FOR PREVENTING VOLTAGE FLUCTUATION ON DISTRIBUTION CIRCUITS. JOHN D. HALL, Milwaukee, Wis., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1917. Serial No. 157,750. 7 Claims. (Cl. 171-225.)

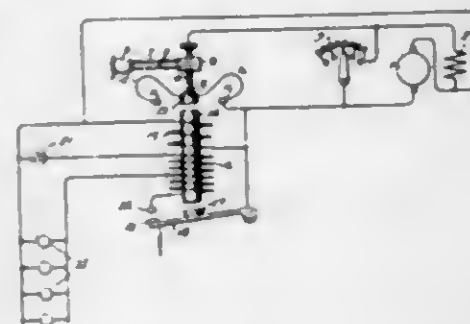
2. The combination with a generator having shunt and series field windings of a plurality of load circuits adapted to be energized thereby, and mutually inductive windings one of which is connected in series with one of said load

circuits and constitutes a self-inductive, inducing winding, another of which is connected in series with the



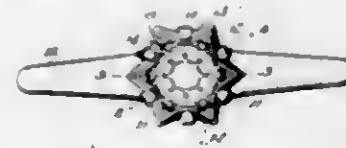
shunt field winding and constitutes an induced winding, and another of which is connected in series with another load circuit and constitutes an induced winding.

1,313,051. TEMPERATURE-COMPENSATOR FOR ELECTRICAL CONTROL DEVICES. FREDERICK C. BARTON, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Dec. 20, 1916. Serial No. 137,966. 4 Claims. (Cl. 171-229.)



1. In an electrical control device, the combination of a non-vibratory contact, a vibratory contact adapted to cooperate therewith, electro-responsive means adapted to actuate said vibratory contact, and thermostatic means for adjusting the position of said non-vibratory contact in response to temperature changes.

1,313,052. GEM-SETTING. MAX BAUMAN, New York, N. Y. Filed Feb. 15, 1919. Serial No. 277,285. 2 Claims. (Cl. 63-26.)

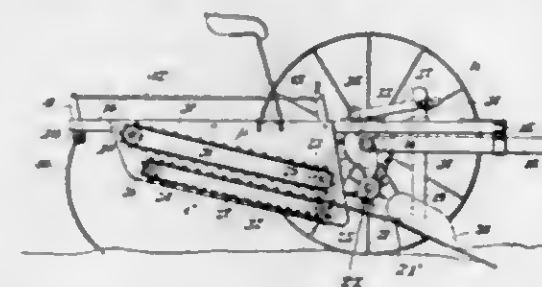


2. A gem setting including cramps, and a frame therein adapted to receive the gem, said frame presenting at the exterior alternating projecting members and depressions, said cramps engaging said frame at the depressions thereof and thus alternating with said projecting members; together with holding prongs on the frame at the interior adapted to engage the gem, said prongs being disposed between the cramps and at the inner sides of the projecting members.

1,313,053. PEANUT-HARVESTER. WILLIE LEE BEARD, Comanche, Tex. Filed Oct. 13, 1916. Serial No. 125,483. 1 Claim. (Cl. 55-138.)

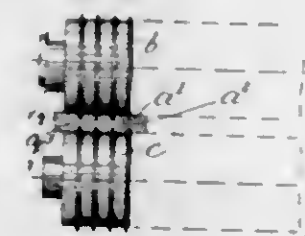
In a machine of the class described, a frame, an axle having ground wheels supporting the frame, standards supported for sliding movement with relation to the frame,

and at right angles to the latter, a digger carried by the standards, an elevator supported by the frame in rear of the digger, a rotary beater supported directly by the axle and driven therefrom, said beater being arranged midway between the digger and elevator, and a series of longitudinally extending fingers movably connected at their forward



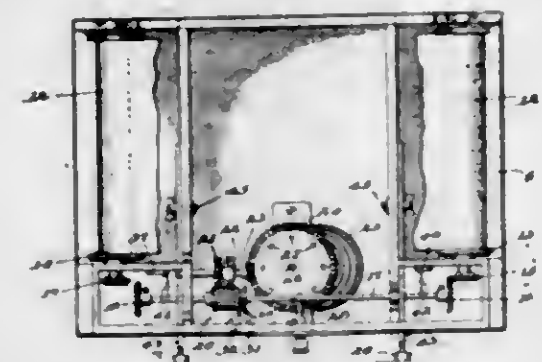
ward ends to the rear end of the digger and overlying and resting upon the elevator at their rear free ends, said fingers underlying the beater and having their forward ends adjusted in the movement of the digger without affecting the relation of their rear ends with respect to the elevator and but slightly affecting their intermediate portions with respect to the beater.

1,313,054. MAGNETIC MATERIAL SUITABLE FOR USE IN STATIC TRANSFORMERS AND OTHER ELECTRICAL APPARATUS. ARTHUR FRANCIS BERRY, London, England. Filed Jan. 7, 1918. Serial No. 210,734. 9 Claims. (Cl. 175-356.)



1. Magnetic material in sheet, strip or like form and suitable for use in static transformers or other electrical apparatus, comprising a number of parallel lengths magnetically connected together sidewise through portions of the sheet or strip material of reduced cross section or thickness, substantially as described for the purpose set forth.

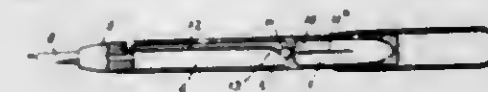
1,313,055. MUSIC-HOLDER. GEORGE C. BRASNETT, Chicago, Ill. Filed Jan. 11, 1916. Serial No. 71,455. 3 Claims. (Cl. 40-91.)



1. A device of the class described comprising a casing; two rollers mounted on said casing; a continuous strip of flexible material wound on one roller and windable onto the other roller; a bevel gear arranged to operate each of said rollers; a longitudinally shiftable shaft carrying bevel gears arranged to be shifted into mesh with either of the roller-driven bevel gears; a clock spring mechanism; a gear operable by said clock spring mechanism; pins pro-

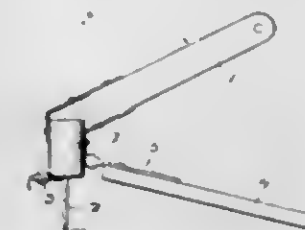
jecting from the face of said gear; a spring-held plunger arranged to engage said pins to prevent rotation of the gear carrying the same; and an operative connection between said pin-carrying gear and said longitudinally shiftable shaft, substantially as described.

1,313,056. FOUNTAIN-PEN. OSWALD H. BLACKWOOD, Holla, Mo., and FRED PEARSON, Chicago, Ill. Filed June 20, 1918. Serial No. 240,978. 4 Claims. (Cl. 120-42.)



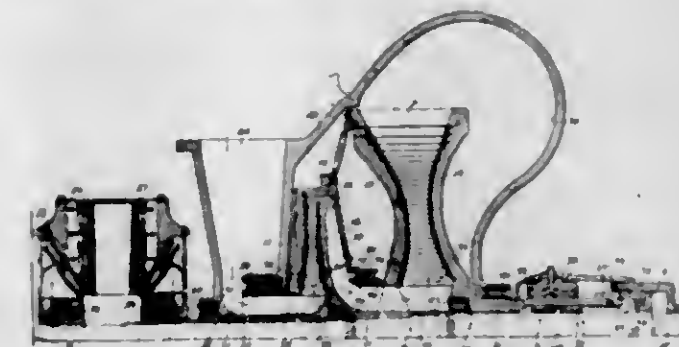
1. In a fountain pen, the combination of an ink carrying member, a wall extending transversely thereof, dividing it into a main reservoir adjacent the pen which holds the main supply of ink for the pen and an auxiliary reservoir which holds a supply of ink less than the main reservoir, said wall being provided with a passage through which the two reservoirs are in communication and through which ink may pass from one to the other, whereby both reservoirs are filled when the pen is filled, and when the ink in the main reservoir is all used indicating that the pen needs filling, the ink in the auxiliary reservoir serves as a temporary supply, and means for preventing ink from running freely from the auxiliary reservoir to the main reservoir.

1,313,057. BRUSH-RAKE. JOSEPH BLAIR, Dinuba, Calif. Filed Nov. 26, 1918. Serial No. 264,204. 2 Claims. (Cl. 56-74.)



2. A rake of the class described comprising a main bar, teeth carried thereby, a platform having one end hinged to one side of said bar, draft means connected with the other side and an operating handle connected with said bar and extending over the platform.

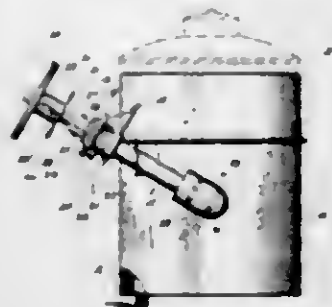
1,313,058. REVERSIBLE TURBINE. ALFRED BONOM, Paterson, N. J. Filed Dec. 26, 1918. Serial No. 268,302. 9 Claims. (Cl. 60-103.)



1. The herein described compound steam turbine comprising an inner rotor and an outer rotor, the inner rotor comprising a high pressure disk and a low pressure disk, the outer rotor comprising a high pressure disk coaxial with the first mentioned high pressure disk, a low pres-

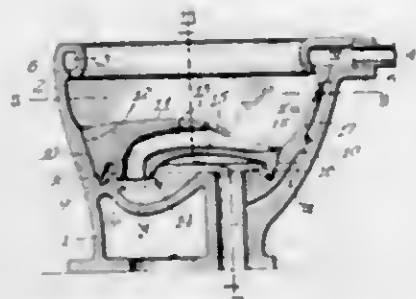
sure disk cooperating with the aforesaid low pressure disk, rigid connections between the aforesaid disks of the outer rotor, and a third disk extending between the two disks of the inner rotor, means supporting the two rotors for independent rotation in relatively opposite directions, and means to cause the flow of motive fluid outward radially between the two sets of cooperating disks.

1,313,050. OIL-BURNER. HENRY W. BARNETT, Baltimore, Md. Filed Jan. 7, 1919. Serial No. 270,050. 11 Claims. (Cl. 67-65.)



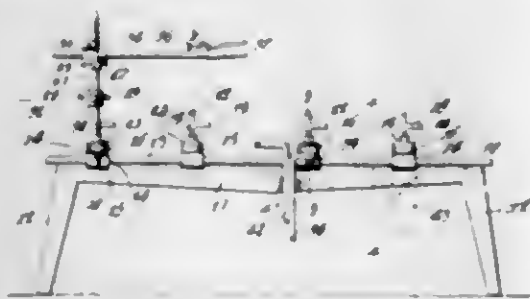
1. In an oil burner, the combination with a burner tube adapted to contain a wick, of wick-operating means having the capacity of positively stopping the elevation of the wick during a complete movement of said means in one direction so as to set the wick at a fixed and predetermined maximum height above said tube, and automatically operating means for resetting the wick operating means.

1,313,060. WATER-CLOSET BOWL. HENRY J. BRASSON, Detroit, Mich. Filed Oct. 17, 1918. Serial No. 258,560. 3 Claims. (Cl. 4-22.)



1. A water closet bowl comprising a body having the bottom thereof provided with a basin and a sewer connection into which said basin is adapted to overflow said bowl body having a groove around said basin and its sewer connection, and a trap member seated in said bowl body and extending into the groove thereof, said trap member having an opening communicating with the basin of said bowl body.

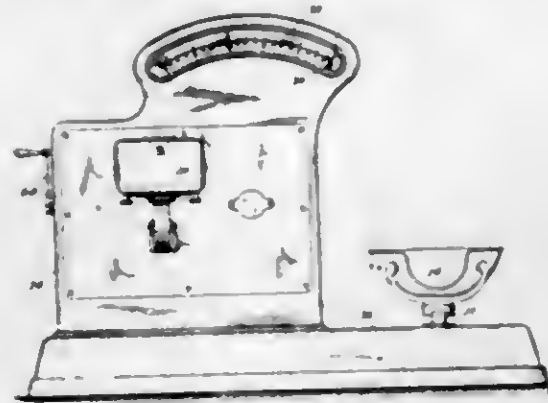
1,313,061. WELDING STAND. OSCAR WILSON BROWN, Abilene, Kans. Filed Aug. 16, 1918. Serial No. 250,192. 6 Claims. (Cl. 78-101.)



1. A welding stand comprising a horizontally supported base, and a plurality of work holding devices individu-

ally slidable in a longitudinal direction on said base and individually adjustable transversely and vertically with relation to said base.

1,313,062. WEIGHING APPARATUS. JAMES W. BRYCE, Bloomfield, N. J., assignor to Computing-Tabulating-Recording Company, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1914. Serial No. 861,925. Renewed Jan. 6, 1919. Serial No. 269,885. 13 Claims. (Cl. 265-8.)



1. The combination in a weighing machine with a scale pan of two means for indicating the total weight placed in the pan and intermediate mechanism for respectively actuating said means according to the amount of displacement of the scale pan, one of said weight indicating means and the intermediate actuating mechanism therefor being at all times free to operate, and means for locking the other weight indicating means and the intermediate actuating mechanism therefor in the position to which it was brought by the weight originally placed in the pan.

1,313,063. COMB AND BRUSH. WLODZIMIERZ BUJNOWSKI, Peru, Ill. Filed Jan. 13, 1919. Serial No. 270,955. 4 Claims. (Cl. 132-35.)



2. A device of the class described comprising a brush having the back and handle portions thereof formed in two separated sections providing a space therebetween, a comb having a handle pivoted between the handle portions of the brush with the comb adapted for seating inclosed within the space between the brush sections, a block between the brush sections against which the comb is adapted to abut when inclosed within the brush, releasable means adapted for retaining the comb within the brush, an arcuate strip between the brush sections at one side of the brush with said sections cut-away upon their inner adjacent faces and adjacent said strip, spaced leaf-springs secured at opposite sides of the strip extending into said cut-away portions adapted for resilient en-

gagement with the comb when swung into said cut-away portions and seated against said strip with the comb positioned for use at the side of the brush opposite its normal inoperative position.

1,313,064. MACHINE FOR TRIMMING TENPINS. GEORGE P. HUTLER, Lebanon, N. H. Filed Apr. 9, 1919. Serial No. 288,865. 4 Claims. (Cl. 142-1.)



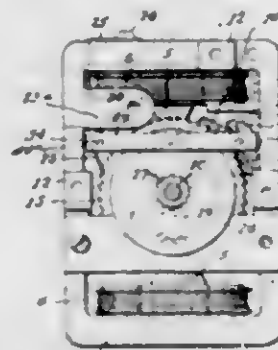
1. In a machine for trimming tenpins, the combination with a yoke formed at one end with a ring, a runway for said ring, said yoke formed with a neck, a support for the neck, a screw extending through said neck, and means for turning said screw.

1,313,065. METHOD OF MANUFACTURING SHOES. PATRICK J. BYRNE and BENJAMIN H. OSBURN, Rochester, N. Y. Filed Jan. 11, 1919. Serial No. 270,025. 1 Claim. (Cl. 12-142.)



The improved method of constructing a shoe consisting in lasting an upper having a welt attached thereto on a last, applying and attaching a thin sole to the outer face of said welt, pressing inward the center of said thin sole to form a recess, placing in said recess a bottom filler, and finally applying an outer sole to the outside of the thin sole and attaching the welt and both soles together by stitching.

1,313,066. ELECTROMECHANICAL REGISTERING AND RESETTING MECHANISM. CLARENCE N. CAMERON, Jersey City, N. J., assignor to Slocum, Avram & Slocum, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1917. Serial No. 156,089. 2 Claims. (Cl. 235-144.)

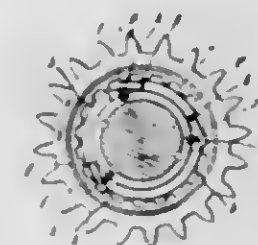


1. A device of the class described, comprising a ratchet wheel, a pawl for moving said wheel step-by-step, a stop-spring for preventing back movement of said ratchet

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wheel, gearing operated by said wheel to actuate a register, a cross bar journaled at its ends to rock on its longitudinal axis, and adapted when rocked thereon to disengage said pawl and stop-spring from said ratchet wheel, the pressure exerted upon said bar by said pawl and stop-spring when shifted to their disengaged positions being in the line of the axis of said bar, whereby the latter will remain in such position until positively shifted, and a lever for operating said bar.

1,313,067. FREE-WHEEL MECHANISM FOR CYCLES AND THE LIKE. JAMES CARNE, Reddington, England. Filed Feb. 28, 1918. Serial No. 219,088. 4 Claims. (Cl. 208-9.)



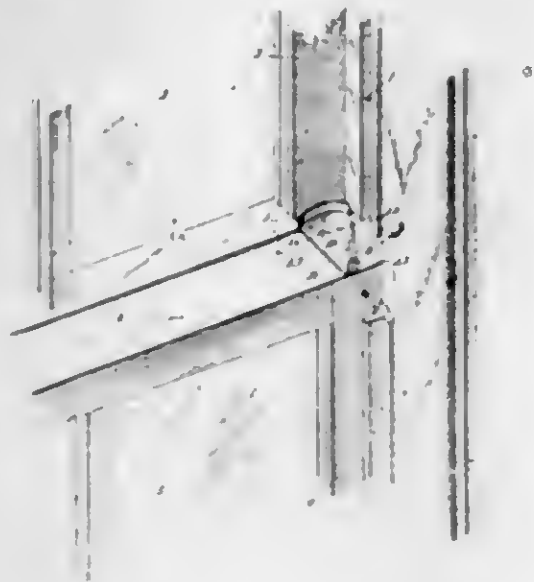
1. The improved free wheel mechanism comprising a driving member, internal teeth on the driving member having square abutment faces and inclined abutment faces, a driven member disposed within the driving member, spring pressed pawls on the driven member adapted to engage the square abutment faces on the said teeth, a locking pawl on the driven member, adapted to engage one of the inclined abutment faces on the said teeth and means for moving the said locking pawl into and out of engagement with said teeth.

1,313,068. RECEPTACLE FOR INCENDIARY AERIAL BOMBS. AUGUSTE CHANARD, Paris, France. Filed Apr. 5, 1919. Serial No. 287,881. 2 Claims. (Cl. 102-2.)



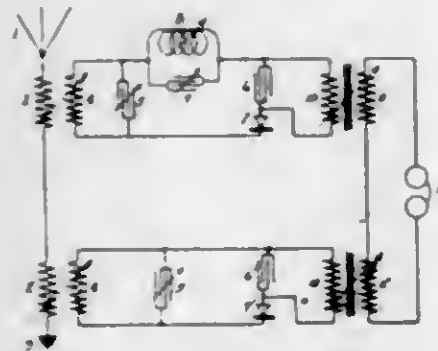
2. Receptacle for incendiary bombs comprising an elongated compartment having end and side walls adapted to be destroyed by the action of heat, a substantially hemicylindrical compartment adjoining said elongated compartment on each side thereof, a fuse carrying plug, a fusible closure inserted in a hole in one of the end walls of said elongated compartment, and a tube extending from said plug to said fusible closure.

1,313,069. ANTHRATTLEING DEVICE FOR WINDOW-SASHES. DANIEL H. CHABON, Elizabeth, N. J. Filed Apr. 8, 1919. Serial No. 288,540. 3 Claims. (Cl. 16-19.)



1. A device for use with upper and lower window sashes slidable in guideways in a casing and having mid- and side-rails, comprising a one-piece sheet-metal lever provided with a hole and having a curved cam flange disposed eccentrically of said hole and at one end of said lever, the opposite free end of said lever affording a manipulating handle for turning the cam flange directly against one of the sashes and thereby holding both sashes against the sides of their guideways whereby rattling is prevented, and a fulcrum member adapted to enter said hole and to be anchored to the mid-rail of one of the sashes adjacent a side-rail of the other sash.

1,313,070. ELECTRICAL SIGNALING. LOUIS COHEN, Washington, D. C. Filed Sept. 7, 1916. Serial No. 118,829. 4 Claims. (Cl. 250-20.)

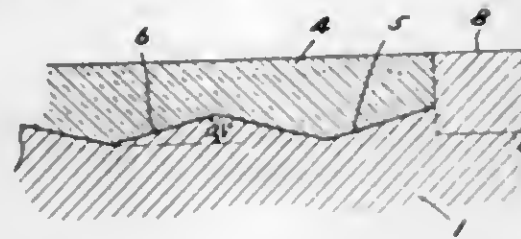


4. A system of radio signaling comprising two receiving equipments separately related to a suitable antenna through means of oscillation transformers, a loop circuit embodied in one receiving equipment adapted to be tuned to current frequency of a signal to be received, and an indicating device common to both receiving equipments.

1,313,071. APPARATUS FOR ROLLING RIBBED GLASS. WALTER COX, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 14, 1915. Serial No. 55,824. 1 Claim. (Cl. 49-34.)

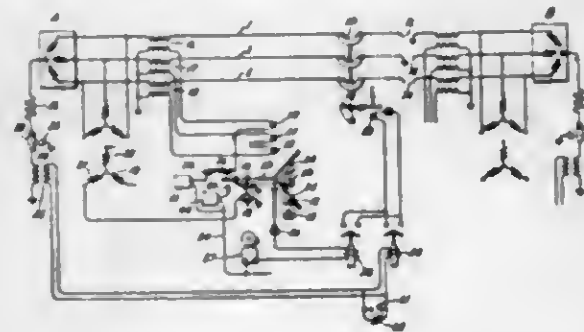
A table for rolling ribbed glass free from visible cold spot defects having shallow wide angled grooves with flat

faces ribs between them cut in the surface of the table, about twenty grooves to the inch, the angle of the flat



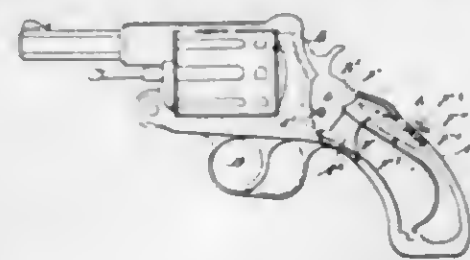
sides of the ribs between the grooves being from 5° to 40° to the plane of the table.

1,313,072. PROTECTION OF TRANSMISSION SYSTEMS. ELMER E. F. CARRINGTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 7, 1918. Serial No. 59,583. 24 Claims. (Cl. 175-294.)



1. In a system of distribution, the combination with a feeder, of means for protecting said feeder upon the occurrence thereon of conditions occasioned by a broken line wire including a relay device differentially operated in response to the product of current, potential and power factor existing on each phase of the feeder when a line wire breaks to selectively indicate the phase of the feeder at fault.

1,313,073. SAFETY-LOCK FOR REVOLVERS. PROSPERO DONATO, Brooklyn, N. Y. Filed May 31, 1919. Serial No. 301,002. 2 Claims. (Cl. 42-60.)

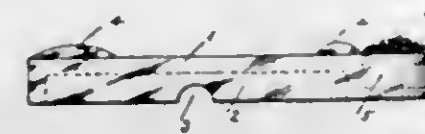


2. The safety lock described, comprising a lever fulcrumed in the frame of the revolver, having a nose adapted to engage the hammer and prevent the rising movement of the latter, a spring on said lever abutting against the mainspring of the revolver and tending to hold said nose yieldingly in such engagement, a stud on said lever extending through the rear portion of said frame, and a plate on said stud adapted to be acted upon by pressure to tilt said lever.

1,313,074. CURRENCY-COUNTING TRAY. PHILIP B. DOWNING, Everett, Mass. Filed Sept. 16, 1918. Serial No. 254,302. 1 Claim. (Cl. 91-54.4.)

As an article of manufacture, a currency counting tray, comprising a flat oblong open ended tray portion, end

and side flanges on the lower surface of the same, a stop member for bills arranged on one side of said tray portion, a forwardly extending base portion integral with one of said end flanges and having its lower surface flush with



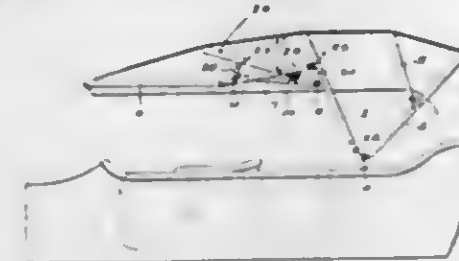
the lower surfaces of said flanges, and an upwardly extending rim integral with said base portion and said side flanges, said base portion and rim constituting a receptacle for containing a finger moistening device.

1,313,075. NUT. JOHN FREDERICK DUKK, Shortlands, Dorset, England. Filed Nov. 12, 1917. Serial No. 201,404. 1 Claim. (Cl. 151-21.)



A nut having a threaded opening, a base, side walls, a face, and provided with an annular recess in its face surrounding said threaded opening, said recess being curved initially toward said base, thence inwardly toward the threaded opening and thence outwardly toward the side wall, and forming a flange connected to the body of the nut by a relatively thin wall, the portion of said flange nearest the side walls being located beyond the portion of the recess nearest the threaded opening, thereby providing a curved pocket to receive and confine an indenting tool, the threaded opening being coextensive with said flange.

1,313,076. VEHICLE-TOP. WILLIAM J. ELSON, Cortland, N. Y., assignor to Cortland Forging Company, Cortland, N. Y., a Corporation of New York. Filed Dec. 5, 1914. Serial No. 875,074. 5 Claims. (Cl. 21-62.)



1. A vehicle top comprising a pivoted main bow, an outrigger comprising a bow, and a link pivoted to the main bow and to the outrigger bow and being connected to the outrigger bow by a stop joint and being movable into position to form an extension of the outrigger bow when the top is up, and foldable into a position along-side of the outrigger bow when the top is down, the main bow and the outrigger bow having means for interlocking near the pivot of the main bow when the outrigger bow and the link are being folded and are nearing their extreme folded position, substantially as and for the purpose set forth.

1,313,077. RADIATOR. KOLMAN EMMERMAN and WILLIAM NATHANSON, Chicago, Ill. Filed Apr. 20, 1916. Serial No. 92,407. 2 Claims. (Cl. 257-130.)

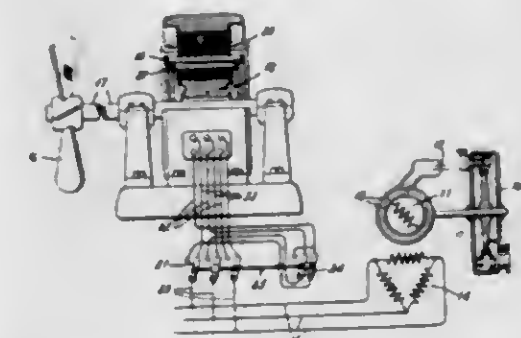
1. A radiator comprising a series of vertically disposed units each consisting of a pair of strips of heat conducting

material arranged side by side, each of said strips having alternating transversely extending straight flat portions and inwardly offset portions, the central portion of each of said offset portions being pressed outwardly, the straight flat portions of one strip registering with the offset portions of the other, and the longitudinal edges of said strips interlocking with and snugly fitting each



other forming a tortuous vertically extending water passage between said strips; and outwardly extending flaps on said strips at certain of the straight flat portions thereof having blind passages formed therein communicating with the corresponding vertical passage, the flaps of the flaps of one unit engaging against the unplated straight flat portions of adjoining strips to space adjacent units apart, substantially as described.

1,313,078. ELECTRIC SHIP PROPULSION. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1916. Serial No. 80,100. 4 Claims. (Cl. 172-8.)

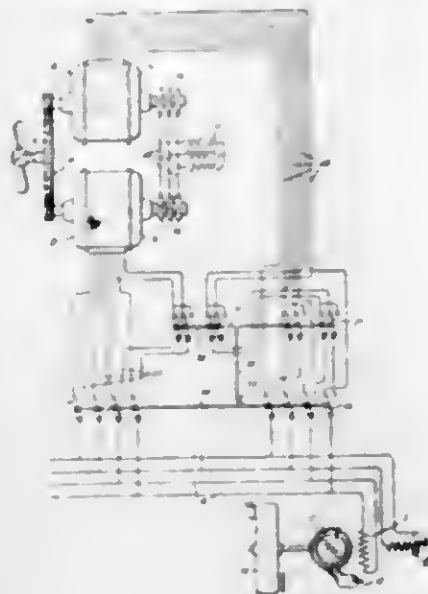


1. An electric system of ship propulsion comprising in combination a propeller, an alternating current induction motor operatively arranged for driving said propeller, said induction motor having means for producing primary magnetic fields of two different pole numbers one of which is especially adapted for reversing conditions, means for reversing the direction of rotation of said induction motor to drive said propeller in a backward direction, and means cooperating with said reversing means for necessitating the arrangement of said motor to produce said number of primary magnetic poles particularly adapted for reversing only when said reversing means is actuated to drive the propeller in a backward direction.

1,313,079. ELECTRIC SHIP PROPULSION. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1916. Serial No. 86,110. 10 Claims. (Cl. 172-8.)

4. An electric system of ship propulsion comprising a propeller shaft, two induction motors, speed reducing gearing operatively connecting said motors to said shaft, said motors having primary windings adapted to produce the same number of primary magnetic poles having normally the same angular positions in space, means electrically connecting the secondary windings of said motors so as to form a low resistance path for the secondary currents of both motors when the primary magnetic poles of

the motors have substantially the same angular positions in space and so as to form a relatively high resistance path for such secondary currents when the primary mag-



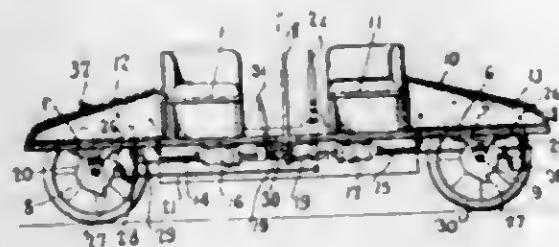
netic poles of the motors are relatively displaced in space, and means for displacing the angular space relation of the primary magnetic poles of one motor with respect to the primary magnetic poles of the other motor.

1,313,080. KNITTED CAP. LOUIS H. ENSTEN, Cleveland, Ohio. Filed Apr. 30, 1919. Serial No. 293,660. 6 Claims. (Cl. 2—109.)



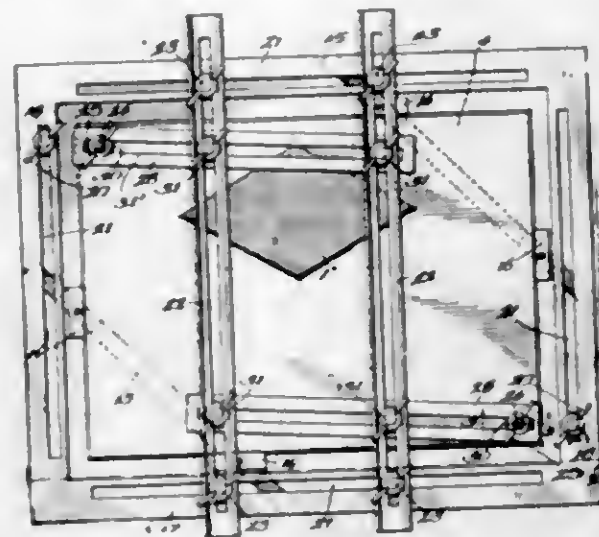
3. A knitted cap, comprising diagonally-related rows of knitting subdivided into sections of different width forming a relatively small peak centrally at the front of the cap and relatively larger triangular areas and depending portions at each side of the cap.

1,313,081. COASTER. ELLEN M. FINNEY, Kansas City, Kans. Filed July 17, 1918. Serial No. 245,396. 3 Claims. (Cl. 208—164.)



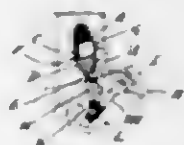
1. In a machine of the character described a body portion, compressed air tanks mounted thereon, wheels supporting the body portion, driving connections between the compressed air tanks and wheels, and means for alternately operating said driving connections.

1,313,082. METHOD OF AND APPARATUS FOR IMPOSING FORM ELEMENTS. LE ROY B. FRANK, New Haven, Conn. Filed Apr. 30, 1917. Serial No. 165,372. Renewed Jan. 2, 1919. Serial No. 290,393. 8 Claims. (Cl. 33—184.5.)



1. Imposing apparatus for form sections employed in multi-color printing including a form section supporting base; a removable gage adapted to be superimposed upon said base, the base and gage having complementary registering formations insuring a predetermined location of the gage upon the base and including depending form section locating registering pins adjustable on said gage and over the base, said gage having slotted sides; slotted bars crossing said slotted sides; bar clamping screws passing through the slots in the bars and the slots in the sides of the gage; slotted pin holding bars crossing the other bars; and clamping screws passing through the slots of said crossed bars.

1,313,083. GLARE-PROTECTOR. WILLIAM GEIST, St. Louis, Mo. Filed June 24, 1918. Serial No. 241,718. 3 Claims. (Cl. 21—148.)



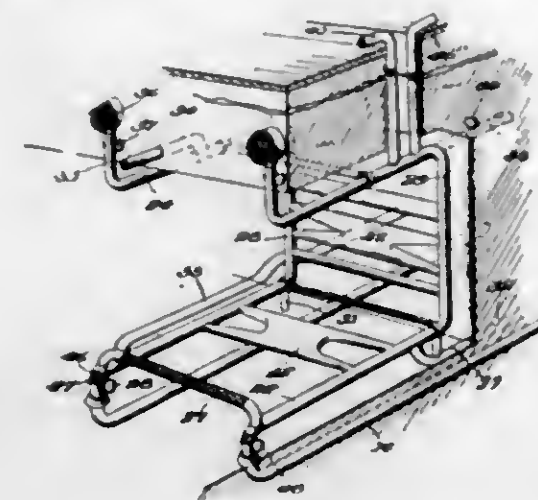
1. A glare protector comprising a support, a holder carried by said support, a body rotatably mounted in said holder and having a substantially clear area at the middle thereof and a light intercepting area at one side of the clear area.

1,313,084. FILM-REWINDER. JACOB H. GENTER, Newburgh, N. Y.; Helen C. Genter executrix of said Jacob H. Genter, deceased. Filed Apr. 19, 1916. Serial No. 92,332. 9 Claims. (Cl. 242—55.)



1. A film rewinder having a main frame, film tensioning means on the frame, and a film reel supporting arm adjustable on the frame relative to the tensioning means.

1,313,085. COMBINED ANDIRONS, RADIATOR, AND VENTILATOR. JOHN A. GREENE, Atascadero, Calif. Filed June 22, 1917. Serial No. 170,382. 1 Claim. (Cl. 126—121.)



The combination with an open fireplace, of pipe sections lying in substantially parallel planes throughout their extent, each pipe section including a horizontal portion spaced above the bottom of the fireplace to provide andirons, a vertical portion disposed adjacent the back wall of the fireplace, a forwardly projecting portion extending along the top wall of the fireplace and opening into the room above the fireplace, communicating portions connecting the sections and forming additional heating members, and means for supplying air to the forward ends of the portions of the sections disposed to provide andirons, said means including a conduit leading from outside of the building to each section, the conduit being formed with an opening adjacent its juncture with each section communicating with the room, and a valve disposed in each section movable to shut off communication from the conduit to the section, or from the room to the section, or to vary the proportion of air flowing from both sources to the section.

1,313,086. MACHINIST'S TESTING DEVICE. SAMUEL E. HANLEY, Chicago, Ill. Filed Oct. 16, 1917. Serial No. 196,807. 2 Claims. (Cl. 33—172.)

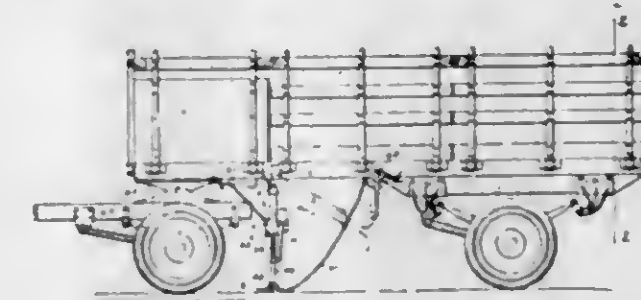


2. A testing device of the class described, comprising a base member adapted for fastening to an anchoring element; a socket member; interlocking pivotally connected lugs on said parts permitting of pivotal adjustment of said socket member; means for locking said socket member in position of pivotal adjustment relative to said base member; and a spring pressed work engaging member slidably mounted in said socket member, substantially as described.

1,313,087. SUPPORTING-JACK. HENRY F. HARTWICK, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 10, 1919. Serial No. 275,977. 6 Claims. (Cl. 264—86.)

1. The combination of a pair of supports, each embodying a screw and a nut, means to turn each nut, a shaft extending across between the supports, means to

hold said supports in a predetermined relation to each other and a crank handle to turn the shaft to actuate



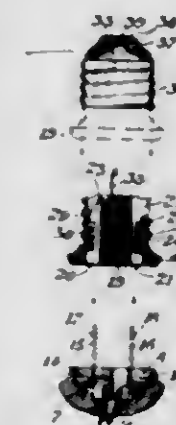
one of the nut-turning means at all times, said handle being adapted to be moved into and out of operative engagement with the other nut-turning means.

1,313,088. COVER FOR FUSES OR PROJECTILES. JOSEPH DEAN HATHAWAY, Montreal, Quebec, Canada. Filed May 7, 1917. Serial No. 167,937. 2 Claims. (Cl. 102—36.)



1. In combination, a cone-like fuse having a projecting annular shoulder near its base, and a cover adapted to be placed over the fuse; said cover consisting of a hollow member in the form of a cone with a cylindrical base portion, and a tearing-off strip encircling said cylindrical base portion and having one of its longitudinal margins soldered thereto, the edge of its opposite longitudinal margin resting upon the shoulder of the fuse and being soldered thereto and such strip also presenting a free end portion.

1,313,089. ATTACHMENT-PLUG. WILLIAM ILE, New York, N. Y. Filed Oct. 11, 1918. Serial No. 257,984. 13 Claims. (Cl. 173—343.)



2. In an electric attachment plug, a cylindrical block of insulating material externally screw threaded and having openings extending longitudinally therethrough, a threaded metallic sleeve adapted to be screwed onto the block, a metallic disk carried at the end of and insulated from the sleeve, and circuit terminal contact fingers to engage in the openings in the block and arranged to be firmly clamped to the block by the sleeve and end contact carried thereby and in electrical contact therewith as the sleeve is screwed onto the block.

1,313,090. INTERNAL-COMBUSTION MOTOR. FRANZ KRAATZ and MAX SCHÄRER, Stuttgart, Germany, assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1917. Serial No. 153,763. 9 Claims. (Cl. 123-186.)



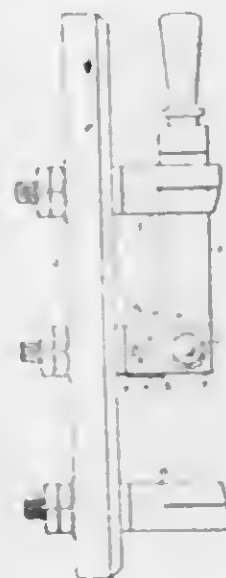
1. In an electric ignition system for internal combustion motors having a starting handle, a switch actuated by the starting handle, an adjustable interrupter having cooperative insulated and grounded elements, a contact segment carried by the interrupter, a brush electrically connecting the insulated element to the contact segment, and circuit connections which include the switch and the contact segment and which, when the handle is coupled with the motor to crank it, render the ignition system effective to fire the motor only when the interrupter is adjusted to retarded position.

1,313,091. PASSENGER AND FREIGHT TRANSFER SYSTEM. WILLIAM P. LAMAR, Atlanta, Ga. Filed Dec. 12, 1916, Serial No. 136,496. Renewed Jan. 14, 1919. Serial No. 271,161. 16 Claims. (Cl. 104-20.)



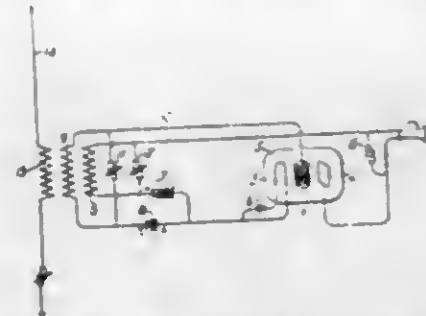
1. In a transfer system of the class described, the combination of a transfer car to be transferred to a moving vehicle, means carried by the moving vehicle for accelerating said transfer car to the speed of the vehicle and means on the vehicle for transferring said car to the vehicle.

1,313,092. CIRCUIT-INTERRUPTER. JOSEPH O. LANGMUTH, Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 12, 1917. Serial No. 180,070. 4 Claims. (Cl. 175-282.)



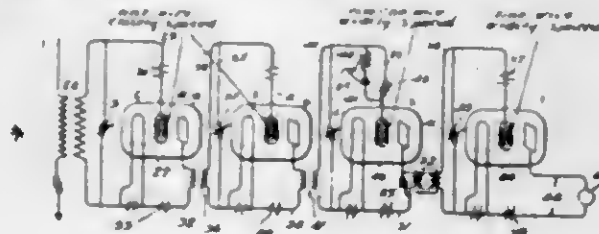
3. A double-throw, knife-blade switch provided with a sliding plate having means for adjusting it to lock the switch-blade in each of its full closed positions and the open position and for moving it out of such locking relation.

1,313,093. WIRELESS SIGNALING SYSTEM. JAVINO LANGMUTH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 11, 1916. Serial No. 83,637. 2 Claims. (Cl. 250-8.)



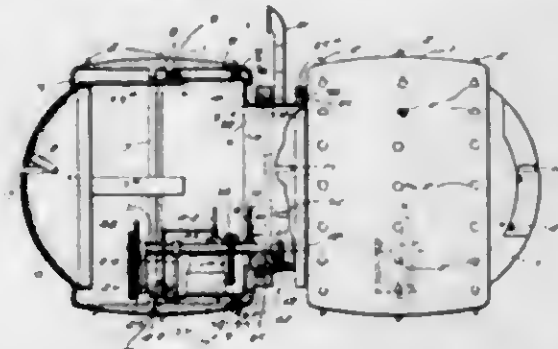
1. The combination in a wireless receiving system of an antenna, an electron discharge device having resonant plate and grid circuits, inductances in each of said circuits which are coupled to each other whereby local oscillations may be produced of a different frequency from that of the oscillations to be received, and a coil in said antenna which is coupled to both of said inductances.

1,313,094. SYSTEM FOR AMPLIFYING VARIABLE CURRENTS. JAVINO LANGMUTH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Oct. 29, 1913, Serial No. 797,965. Patent No. 1,282,439. Divided and this application filed Sept. 10, 1918. Serial No. 254,334. 4 Claims. (Cl. 179-171.)



1. The combination in an amplifying system of an electron discharge device having an electron emitting cathode, an anode and a grid between the cathode and anode, said grid being made of fine wire closely spaced, grid and plate circuits for said device, means for supplying currents to be amplified to the grid circuit of said device, a second electron discharge device having a cathode, an anode and a grid, grid and plate circuits for said second device, and means for supplying potential variations produced in the plate circuit of the first device to the grid circuit of the second device, the grid of the second device being made of coarser wire and more widely spaced than that of the first.

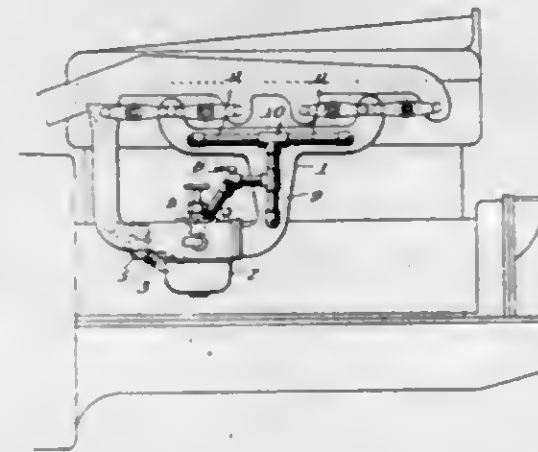
1,313,095. TRACTOR. FRANK X. LAUTERBUR, Sidney, Ohio. Filed Feb. 6, 1918. Serial No. 215,007. 33 Claims. (Cl. 180-10.)



1. A tractor of the class described, including spaced tractor wheels of substantially cylindrical form consisting of hollow rotary casings, an inner casing constituting a supporting frame and provided with external bearings re-

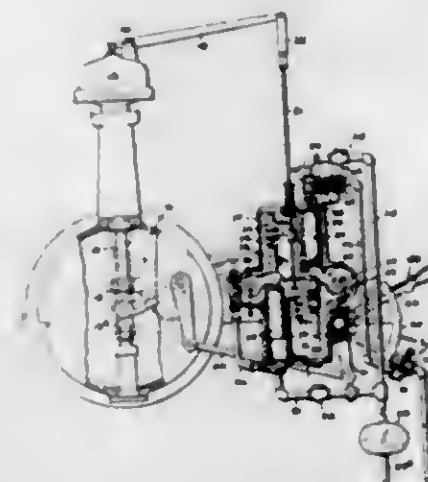
ceiving the tractor wheels and housed within the same, said tractor wheels forming continuations of the casing, and means located within the inner casing for transmitting motion to the tractor wheels.

1,313,096. FUEL-ECONOMIZER FOR INTERNAL-COMBUSTION ENGINES. STEPHEN JUSTICE LAVENDER, Barnesville, Ga. Filed Sept. 7, 1918. Serial No. 253,059. 2 Claims. (Cl. 123-122.)



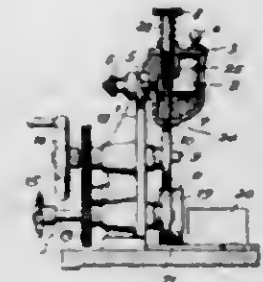
2. The combination with the intake manifold, carburetor and carburetor hot air supply connection of an internal combustion engine, of a hot air suction and distributing pipe having its receiving end connected to said hot air supply connection and having its other end branched to enter the intake manifold at a plurality of widely spaced points, said suction pipe also having a suction nozzle which communicates with the carburetor in close proximity to the fuel nozzle thereof, whereby a portion of the fuel is drawn into said suction pipe, heated and distributed in the manifold.

1,313,097. CONTROLLING MEANS FOR ENGINE-GENERATOR-DRIVEN VEHICLES. HERMANN LEMP, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 17, 1918. Serial No. 207,117. 12 Claims. (Cl. 200-17.)



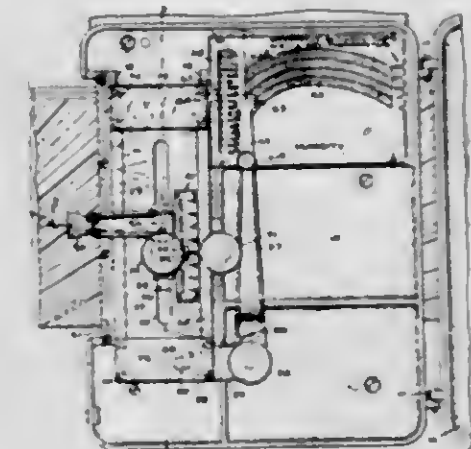
1. In a system of the character described, the combination of an engine, an electric generator driven thereby, means for regulating the supply of fuel to the engine, controller means for the generator, a speed governor, means connecting the speed governor to the regulating means and the controller means, a change speed driving means between the engine and the governor, and an operating handle for shifting said change speed driving means.

1,313,098. GLUE-APPLYING APPARATUS FOR LABELS, WRAPPERS, AND THE LIKE. RICHARD LEUMANN, Lausanne, Switzerland, assignor to the Firm of Sapal Société Anonyme des Filices Automatiques, Lausanne, Switzerland. Filed Nov. 20, 1917. Serial No. 202,937. 1 Claim. (Cl. 91-50.)



A glue-applying apparatus of the character described, comprising a glue reservoir having a funnel-shaped lower part and a straight vertical passage in its bottom, a vertically adjustable needle valve in said reservoir adapted to regulate the quantity of glue flowing through said passage, two superposed rollers arranged in superficial contact with each other and arranged beneath said vertical passage so that the vertical axis of the latter passes through the axes of the rollers whereby the glue drips along a perfectly straight vertical line through said passage onto the upper one of said rollers which transfers it to the lower one, means for rotating said rollers, means operatively connected to the last mentioned means adapted to carry labels, wrappers, or the like past the lower roller, a smoothing roller so arranged relatively to the lower one of said rollers that the labels, wrappers, or the like are smoothed before passing said lower roller, and means for positively rotating the smoothing roller.

1,313,099. VOLUME-CORRECTOR. LOUIS C. LOEWENSTEIN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 9, 1916. Serial No. 135,952. 60 Claims. (Cl. 230-24.)



11. In a volume corrector, a main indicating pointer, separate pointers for temperature, pressure, and humidity, scales over which said last named pointers move, means connecting the temperature pointer directly to the main indicating pointer so that the two move together, and means for imparting a differential movement from the other two pointers to the main indicating pointer.

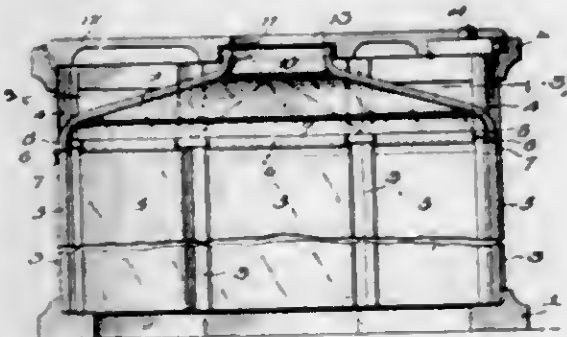
30. The combination with a centrifugal compressor having a governing mechanism which may be set to cause the compressor to deliver a certain weight of fluid under fixed conditions of temperature, pressure, and humidity, of means for adjusting said governing mechanism to correct for variations in the temperature, pressure, and humidity of said fluid.

- 1,313,100. TORPEDO-CONTROLLING APPARATUS. NICHOLAS LONGORIA, Laredo, Tex. Filed May 20, 1918. Serial No. 235,474. 1 Claim. (Cl. 114-25.)



A torpedo including a body portion, propelling means therefor, guiding means, means for firing an explosive charge, and depth controlling means comprising pivotally mounted vanes located on opposite sides of the torpedo, the vanes being formed with guides, springs normally retaining the vanes in a position to cause the torpedo to rise, a crank shaft passing transversely through the body portion, the ends of the crank shaft engaging the guides, and means for imparting rotary movement to the crank shaft effecting depth control by moving the vanes against the action of the springs.

- 1,313,101. BALLOT-BOX. THOMAS EDWARD MCNEULTY, San Francisco, Calif. Filed Mar. 14, 1918. Serial No. 222,305. Renewed Feb. 10, 1919. Serial No. 276,178. 3 Claims. (Cl. 232-2.)



1. A ballot box having a metal frame, transparent panels fitting in said frame and stopping short of the top of the frame, a transparent cover arranged within the frame and fitting on said panels, a lid hinged to the frame top and covering the transparent cover, said lid and cover having alining openings, and a plurality of locking devices carried by the lid.

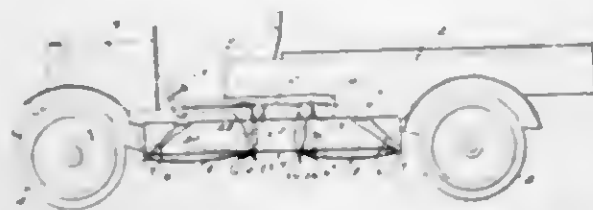
- 1,313,102. ELECTRIC SHIP PROPULSION. CAMPBELL MACMILLAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 15, 1916. Serial No. 84,470. 2 Claims. (Cl. 172-8.)



1. A propelling apparatus for vessels comprising in combination a propeller shaft, two induction motor units hav-

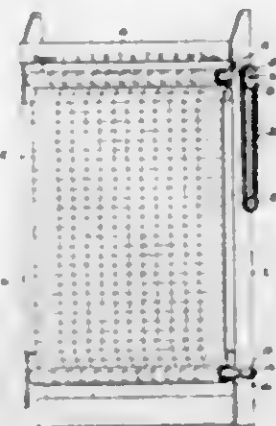
ing their rotors mounted on said shaft, an independent short-circuited secondary winding of relatively high resistance for each motor unit, a third secondary winding of relatively low resistance common to both motor units, the electrical relations of said motor units being such that the electromotive forces induced in the common conductors of said third secondary winding by said two motor units act substantially in conjunction when the primary magnetic poles of the two motor units have substantially the same angular positions in space but act more or less in opposition when the angular space relation of the primary magnetic poles of the two motor units is relatively displaced, two generators electrically connected to independently deliver electric energy to said two motor units, and means for reversing the excitation of one of said generators whereby the angular space relation of the primary magnetic poles of the motor unit electrically connected thereto are displaced with respect to the primary magnetic poles of the other motor unit.

- 1,313,103. AUTOMOBILE BRAKE. JOSEPH P. MAHONEY, Salt Lake City, Utah. Filed Sept. 26, 1918. Serial No. 235,794. 4 Claims. (Cl. 21-8.)



1. An automobile brake comprising brake shoes hingedly connected to the automobile, a rod rotatably mounted on the automobile, an arm connected to said rotatable rod and provided with an elongated opening, a hook catch connected to said rotatable rod and adapted to engage the brake shoe for holding the same in raised position, a vertical rod extending through the elongated opening in the arm, and means for sliding said vertical rod for rotating the rotatable rod and releasing the catch from the brake shoe.

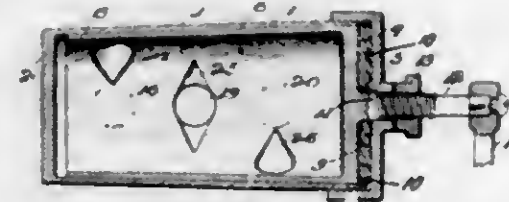
- 1,313,104. SCORE-BOARD. LESLIE MATTHEWS, Plainfield, N. J. Filed Aug. 30, 1918. Serial No. 232,056. 1 Claim. (Cl. 281-8.)



An article of manufacture a score board for the purpose indicated consisting of a frame provided with upper and lower sets of bearing elements revolvably mounted in the side members of the frame, one of the said bearing elements being provided with a sprocket wheel, and an operating chain traversing said sprocket wheel and accessible adjacent to the plane of the frame, upper and lower rollers provided with terminal studs for engagement interchangeably with sockets in said bearing element, a continuous sheet or web terminally attached to said rollers and reelable from one to the other, a head board supported by the frame above the upper roller and provided with designa-

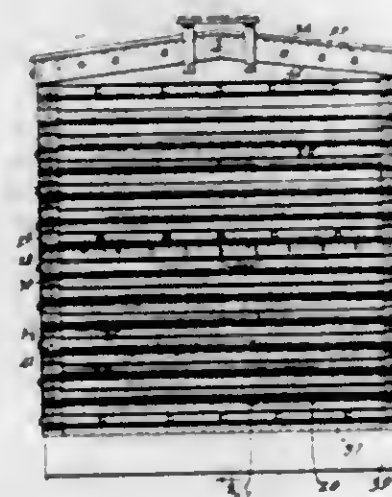
tions relating to apices on said sheet or web, and a table or platen carried by the frame between said rollers and substantially in the plane thereof for supporting the intermediate exposed portion of the sheet or web.

- 1,313,105. FAUCET. FRANK B. MORAN, Dallas, Tex. Filed July 2, 1918. Serial No. 243,040. 3 Claims. (Cl. 251-106.)



1. In a valve of the class described, a casing, and a valve body rotatably fitted in said casing, the casing having inlets for water at high, supply main, and refrigerated temperatures, the casing also having an outlet, and the valve body having an outlet and ports for communication with the respective ones of the inlets, said ports being arranged in stepped relation, the intermediate port having a maximum width midway its ends and the ports at the sides of said intermediate port being tapered in opposite directions with their minor ends their relative adjacent ends.

- 1,313,106. SHEET-METAL END STRUCTURE FOR RAILWAY-CARS. WALTER P. MURPHY, Chicago, Ill. Filed July 25, 1917. Serial No. 182,767. 10 Claims. (Cl. 105-410.)

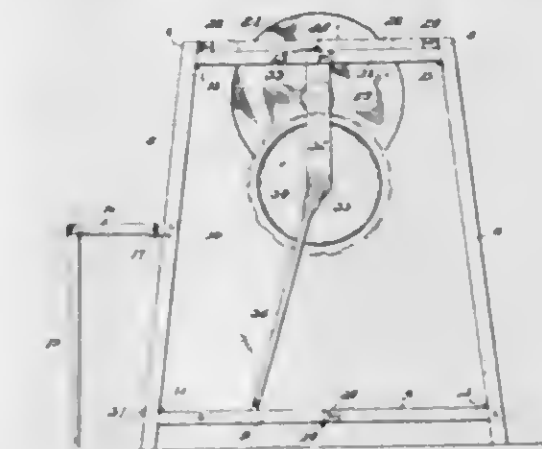


1. The combination with a railway car, of a sheet metal end structure comprising an end sheet formed with corrugations which extend to one edge of the same and merge one into the other, and a separately formed attaching member provided with corrugations which fit the corrugations of the end sheet and with a flange adapted to be secured to the body of the car.

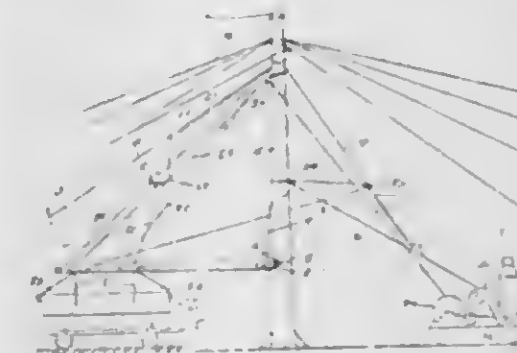
- 1,313,107. ADJUSTABLE SAW-FRAME. VICTOR NIEWIARSKI, St. Paul, Minn. Filed May 10, 1919. Serial No. 296,142. 5 Claims. (Cl. 143-43.)

4. A device of the class described comprising supporting legs, side bars hinged midway their ends and further hinged to said legs, said side bars being positioned adjacent the upper and lower ends of said legs, rigid end bars secured adjacent the upper and lower ends of said legs, latch mechanism associated with the broken portions of said side bars, a table top removably supported upon the upper side and end bars, latch mechanism for holding said

table top in operative position cooperatively carried by said table top and supporting legs, a seat hingedly connected to said frame, a saw revolvably supported by said frame and extending above said table top and operating means for said saw.

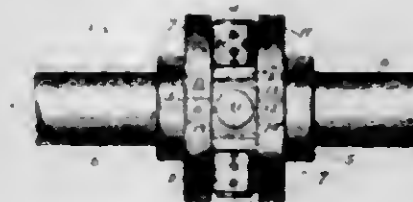


- 1,313,108. LOADING-BOOM. SYDNEY NORD and ABRAHAM ANDERSON, Sekiu, Wash. Filed Jan. 31, 1919. Serial No. 274,282. 2 Claims. (Cl. 212-61.)



1. The combination with a mast, of a boom mounted to swing therearound, a supporting cable connected to the mast and to the boom, a carriage mounted to travel on said cable, a sheave block connected to the carriage, a cable anchored at one end and extending through the sheave block, guides for said cable, means for taking up and paying out said cable, a crotch line connected to said block and extending through the boom, guides in the boom for said line, and log engaging elements carried by the crotch line.

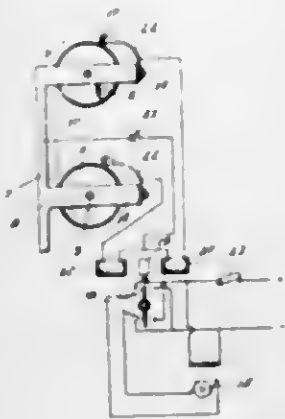
- 1,313,109. SHAFT-COUPLING. GEORGE OFELDT, Philadelphia, Pa. Filed Apr. 29, 1918. Serial No. 231,495. 5 Claims. (Cl. 64-91.)



1. In a shaft coupling, the combination of two heads each having two pairs of inwardly projecting shoulders, the shoulders of each pair having parallel inner faces, and the shoulders of each head being at right angles to the shoulders on the companion head, and a connector having members resting between the shoulders of both heads but not locked to either, the widths of said connector and its

members being of approximately the length of the shoulders so that each head forms an abutment for the shoulders on the other head.

1,313,110. ADVERTISING DEVICE. RAFAEL PADILLA, Habana, Cuba. Filed Aug. 31, 1917. Serial No. 189,195. 2 Claims. (Cl. 40-31.)



2. In a device of the class described, a plurality of rolls, a web connected with the rolls and carrying advertising matter, a plurality of magnets, means for completing a circuit through one of the rolls and one of the magnets when the web has been unwound from that roll, means for completing a circuit through the other roll and the remaining magnet when the web has been unwound from the roll last mentioned, said circuit closing means including cooperating contact elements, strips carried by the web for engaging some of the contact elements when inoperative for completing a circuit, an electric motor and a circuit therefor, means for reversing the direction of current through one element of the motor, the direction being determined by the energization of a given magnet, and means for driving the rolls from the motor.

1,313,111. BELT CONVEYER. WILLIAM KINOMAN PAGE, Orange, N. J., assignor to Chile Exploration Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 9, 1918. Serial No. 221,350. 4 Claims. (Cl. 193-4.)

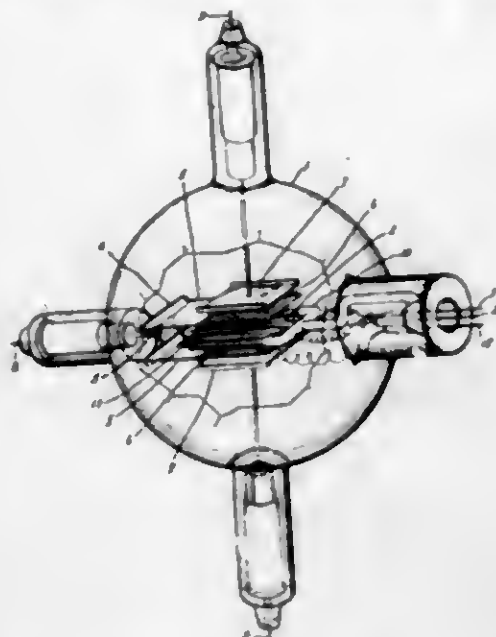


1. A belt conveyer adapted to convey materials over long distances comprising a main belt of fibrous material having an excessive length in proportion to its width and thickness, a plurality of supporting idlers disposed along the path of travel of the belt and a plurality of independently driven auxiliary belts disposed along the path of travel of the main belt adapted to contact with the idlers and with the main belt so as to exert a simultaneous driving and supporting action.

1,313,112. RADIOTELEPHONE SYSTEM. JOHN H. PAYNE, JR., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1916. Serial No. 117,126. 8 Claims. (Cl. 250-6.)

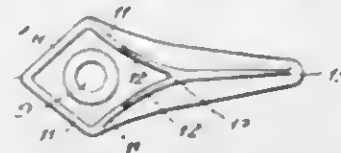
1. The combination in a wireless signaling system of an antenna, an electron discharge device comprising a cathode, an anode and two grids enclosed in an evacuated receptacle, a circuit inductively coupled to said antenna which includes said cathode and anode and a source of energy, a second circuit electrostatically coupled to the first circuit which includes the cathode and one of the

grids whereby the device acts as a self excited oscillation generator, a third circuit including the cathode and sec-



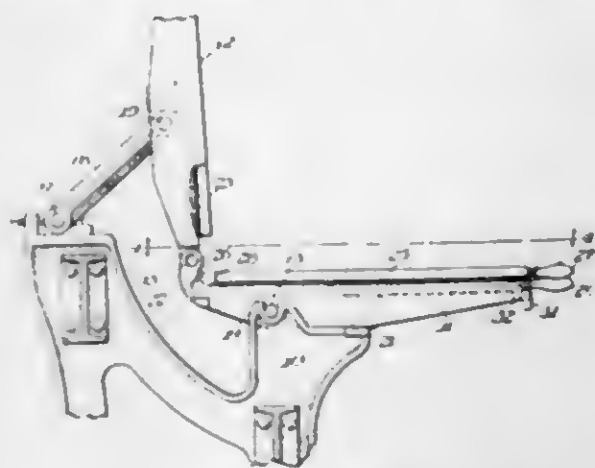
ond grid, and a telephone circuit inductively related to the third circuit.

1,313,113. CONDUIT AND CABLE CLAMP. HENRY W. PLETATRA, Westfield, N. J., assignor to Henry B. Newhall, Jr., executor of Henry B. Newhall, deceased. Filed Jan. 8, 1919. Serial No. 270,119. 5 Claims. (Cl. 248-30.)



1. A new article of manufacture comprising a conduit and cable clamp having a base, a hook member, a double reinforcing rib on the hook member extending out from the base for a portion of the length of the hook member sufficiently far to substantially assist in taking the downward strain of the conduit or cable, and from that point said double reinforcing ribs merging into a single reinforcing rib which extends to substantially the end of the hook member and assists in taking the outward strain of the conduit or cable.

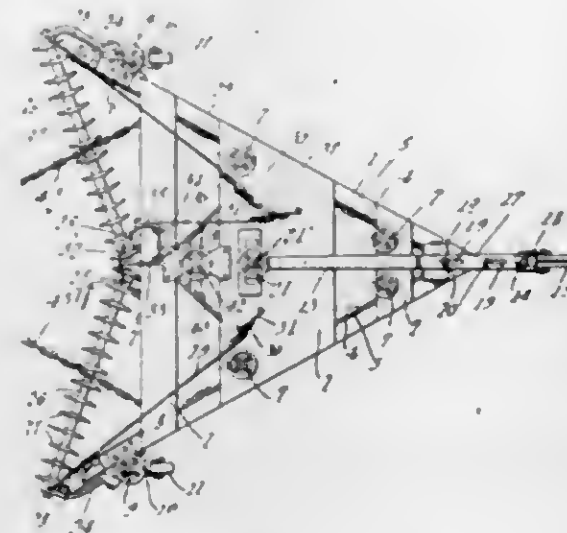
1,313,114. STEREOTYPING MACHINE. CASPER L. REDFIELD, Chicago, Ill. Filed Dec. 17, 1917. Serial No. 207,559. 14 Claims. (Cl. 22-2.)



1. In a stereotyping apparatus, the combination with a frame, of two platens, biased together, a pivotal support

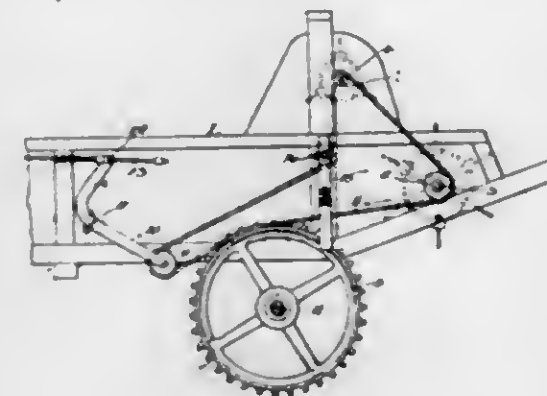
in said frame for one of said platens, a link extending from the frame to the other platen and serving to hold it in an upright position, and means by which said link serves as a clamping agent for said platens when they are closed together.

1,313,115. ROAD-SCRAPER. EDWARD J. ROBARDS, Alexandria, Minn. Filed Dec. 18, 1918. Serial No. 267,355. 2 Claims. (Cl. 37-5.)



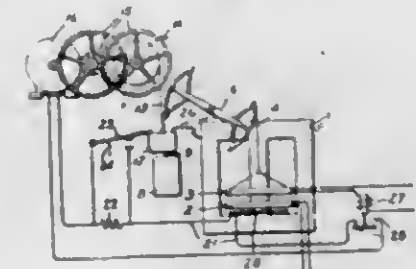
1. A road scraper including a frame having forwardly diverging side beams, scraping blades on the beams, a gang of disks between the front ends of the beams for loosening the material of the road, means in rear of said gang for spreading the loosened material toward the side beams and blades, and means between the rear portions of the beams for sliding over and packing material directed thereunder by the blades and beams.

1,313,116. GEARING FOR MANURE-SPREADERS. BRUCE B. ROLLMAN, Pittsburgh, Pa., assignor to New Idea Spreader Company, Coldwater, Ohio. Filed May 7, 1918. Serial No. 233,119. 3 Claims. (Cl. 74-31.)



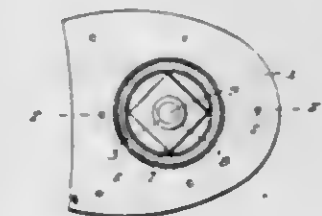
1. In mechanism of the class described, upper and lower gear elements to be driven, a swinging arm, an idler carried thereby, a driving gear element located between the first-mentioned gear elements and the said arm, an idler located above the driving gear element, and a flexible gear element trained about both of the first-mentioned gear elements and first mentioned idler and having its upper stretch passing beneath the last-mentioned idler and its lower stretch extending above the driving gear element and adapted to be moved into and out of engagement therewith by the first-mentioned idler through the swinging of said arm.

1,313,117. CONSTANT-CURRENT REGULATOR. HUGH D. SANBORN, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 5, 1917. Serial No. 200,406. 6 Claims. (Cl. 171-119.)



1. The combination with a constant current regulating device comprising a movable member and means tending to move said movable member to its lowest voltage position, of means for augmenting the effect of the first mentioned means when the regulating device ceases to supply its load.

1,313,118. RUBBER HEEL. AGOSTINO SANTACROCE, Elyria, Ohio, assignor of three-tenths to John Grumbos and three-tenths to Spyro Sadaria, Elyria, Ohio. Filed Nov. 30, 1918. Serial No. 204,782. 2 Claims. (Cl. 36-35.)



1. A heel of the class described having a pair of concentric grooves in its upper face and a concentric groove in its lower face forming a central resilient portion, the lower groove being located between the upper grooves.

1,313,119. SOLE. AGOSTINO SANTACROCE, Elyria, Ohio, assignor of three-tenths to John Grumbos and three-tenths to Spyro Sadaria, Elyria, Ohio. Filed Nov. 30, 1918. Serial No. 204,783. 1 Claim. (Cl. 36-32.)

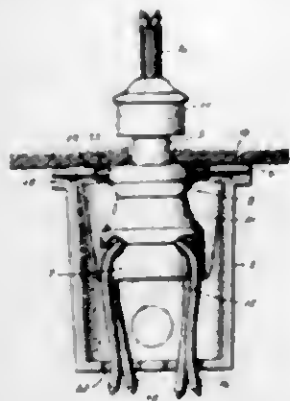


A new article of manufacture comprising a rubber sole of concavo-convex shape with its upper side edges in the same plane and having its rear part projecting upwardly on an incline with its bottom face beveled to prevent a mass of material being disposed at the instep of the shoe when the sole is applied thereto.

1,313,120. PLUG-RECEPTACLE FOR USE WITH HUGS. HOWARD R. SARGENT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 6, 1917. Serial No. 205,883. 4 Claims. (Cl. 173-330.)

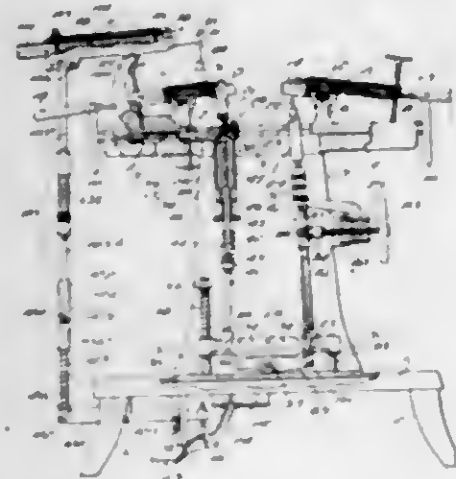
4. An intermediate part for flush receptacles comprising an insulating base with a contracted neck portion

projecting from its upper end and tunnels extending longitudinally therethrough, contacts secured in the said tunnels



nels and having contact fingers projecting from the lower end of said base, and a radial supporting plate secured to said base about the contracted neck portion thereof.

1,313,121. LASTING MACHINE. WILLIAM E. SCARLETT, East Lynn, and CHARLES F. ADAMS, North Beverly, Mass., assignors to Hamel Shoe Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1915. Serial No. 55,231. 32 Claims. (Cl. 12-14.)



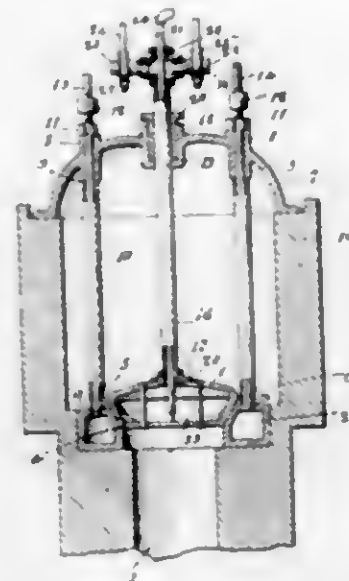
1. In a lasting machine, a heel jack post, and mechanism for moving said jack post backward and upward to jack a shoe with an initial major component of backward movement changing gradually to a major component of upward movement for the purpose stated.

17. A lasting machine, comprising wiper mechanism, a heel jack post, a yielding toe rest having provision for depressing the same to position the toe at the wiping level, an operating lever, and mechanism for operating both said heel post and toe rest by a single movement of said lever to clamp the shoe in a final pressure relation to said wiper mechanism, including a lost motion connection to the toe rest.

1,313,122. WATER-COOLED VALVE. ALFRED F. SCHUMANN, Baltimore, Md., assignor of one-third to William C. Codd and one-third to Albert G. Schumann, Baltimore, Md. Filed May 28, 1918. Serial No. 237,178. 2 Claims. (Cl. 251-168.)

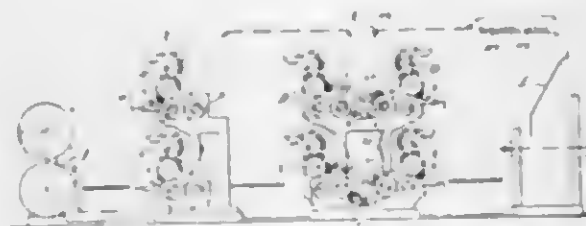
1. A device of the class described, including a duct or passage way, a valve seat therein including a hollow ring, a cap arranged above said seat, inlet and outlet pipes communicating with the hollow ring, and extending through the cap, a hollow valve arranged to coact with the seat, and protecting pipes spaced from and receiving said inlet and outlet pipes and engaging the hollow ring and cap to hold the ring and cap in correct spaced relation.

2. A device of the class described, a duct or passage way, an annular valve seat arranged therein, a hollow valve adapted to coact with the seat, a hollow outlet stem communicating with the hollow valve, outwardly



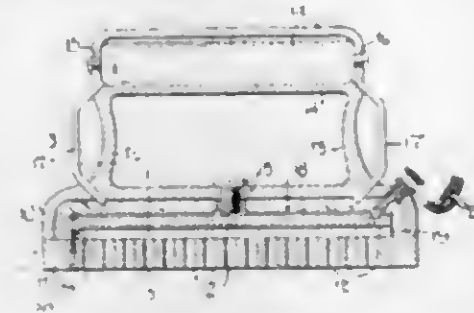
extending hollow arms carried by and communicating with the stem, an inlet pipe carried by the hollow stem and guide rollers carried by the arms, and guides to receive said rollers for rotating said valve when moved toward its seat.

1,313,123. MULTICOLOR OFFSET PRESS. DAVID JOHN SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed Sept. 29, 1916. Serial No. 122,840. 2 Claims. (Cl. 101-137.)



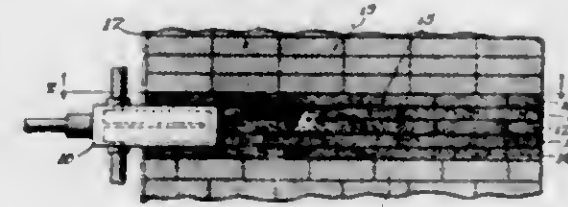
1. A multicolor offset perfecting press comprising: a plurality of groups of printing mechanisms, one group including a set of printing mechanism consisting of two units arranged to print on the same side of the paper, each unit consisting of a form-carrying, a transfer and an impression member, the form-carrying and transfer members of each unit being arranged one above the other and the impression member out of line with the other members to form an exposed operating side, said units facing the same way; another group of printing mechanisms including two sets of devices, one set including a unit consisting of a form-carrying, a transfer and an impression member, the form-carrying and transfer members being arranged one above the other and the impression member out of line with the other members to form an exposed operating side, and the other set including a plurality of units, each consisting of a form-carrying member, a transfer member and an impression member, the form-carrying and transfer members of each unit being arranged one above the other and the impression member out of line with the other members to form an exposed operating side, said units being grouped one above the other with their operating sides facing the same way, and the two sets of the second group being arranged back to back with the operating sides of the units outermost; said groups being arranged in spaced relation to provide an intervening gangway.

1,313,124. TAILOR'S STEAMING-IRON. JACOB J. SELLER, Syracuse, N. Y. Filed Nov. 18, 1916. Serial No. 132,168. Renewed Dec. 14, 1918. Serial No. 266,843. 3 Claims. (Cl. 68-28.)



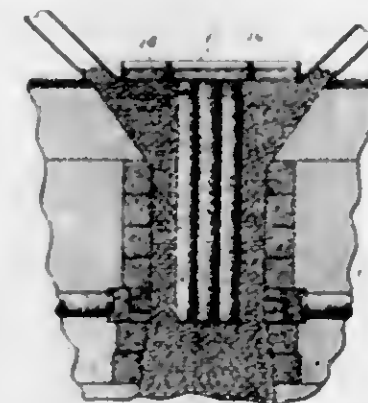
3. In a pressing iron, a hollow body having a downwardly depending side wall, upwardly extending handle supporting legs on its top wall and a hollow liquid containing handle mounted upon the legs, a relatively thick bottom plate having uniformly distributed perforations and detachably connected to the side wall of the hollow body, a heating member disposed between the bottom and the top wall of the hollow body and detachably supported upon the top wall of the hollow body in spaced relation to said top and bottom walls and in spaced relation to the side walls of the body, means for heating said member, and pipes leading from opposite ends of the hollow wall and discharging upon the upper surface of the heating plate.

1,313,125. ELECTRODE. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 21, 1918. Serial No. 258,941. 7 Claims. (Cl. 204-64.)



1. In an electric-furnace, the combination of an electrode comprising a plurality of superposed overlapping electrically-conductive members and a furnace-lining structure resting and imposing its weight on said members pressing them together, substantially as described.

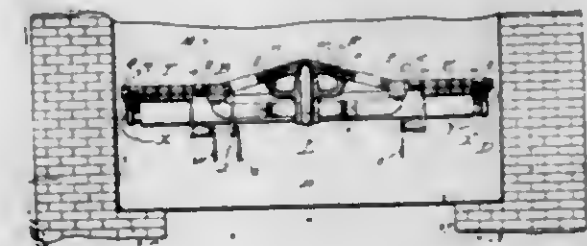
1,313,126. ELECTRIC FURNACE ELECTRODE. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 21, 1918. Serial No. 258,942. 3 Claims. (Cl. 204-64.)



1. An externally longitudinally fluted or furrowed electrode for an electric furnace or the like, comprising in combination a central, vertically-disposed, cylindrical,

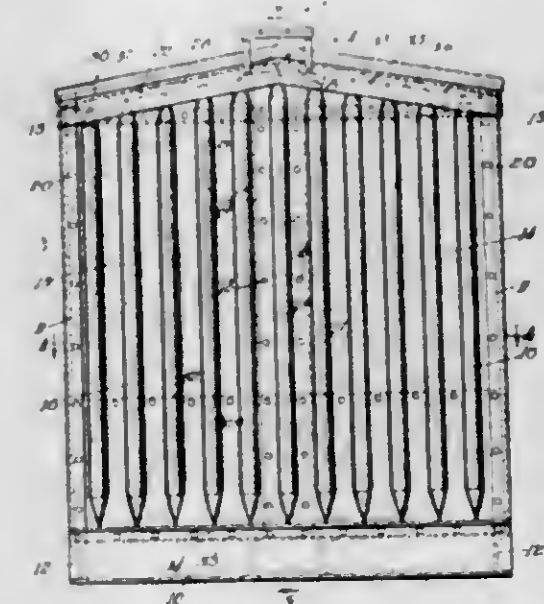
electrically-conductive element, a plurality of vertically-disposed, parallel, cylindrical, electrically-conductive elements surrounding said central element and each in longitudinal contact with said central element and with the two outer elements on the opposite sides of itself, and means supporting said electrodes individually from their upper ends only, substantially as described.

1,313,127. FURNACE-GRATE AND VAPORIZER CONSTRUCTION. JOHN T. SIMPSON, Chicago, Ill., assignor to Economy Sales Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 23, 1916. Serial No. 121,709. 6 Claims. (Cl. 110-78.)



1. A furnace grate comprising grate sections, an outer rectangular frame for inclosing and supporting the sections, forming the top of the grate at the outer edges thereof, means to support said frame, a water-receptacle extending along said frame, so that the outer frame portion of the grate structure is provided with a vaporizer which forms no portion of said means to support the grate, the outer wall of said receptacle having outlets for the steam, means to supply water to said receptacle, and means forming a combustion-chamber above the grate and an ash-pit below, said vaporizer being disposed under the grate and in the upper portion of the ash-pit.

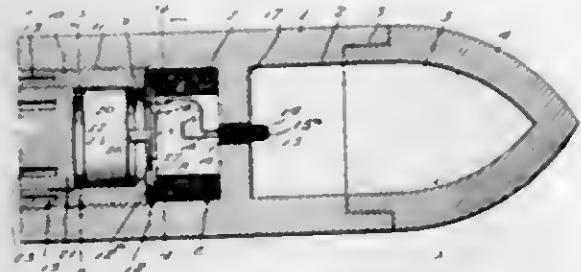
1,313,128. SHEET-STEEL CAR END. VINTON E. SIMPSON, Chicago, Ill., assignor to Walter P. Murphy, Chicago, Ill. Original application filed Mar. 29, 1915. Serial No. 17,840. Divided and this application filed Jan. 11, 1918. Serial No. 211,362. 26 Claims. (Cl. 105-410.)



4. In a railway car, the combination of a sheet metal end structure formed with substantially vertical corrugations and provided at its upper edge with a transversely extending rigidifying member attached to the framing of the car, and a plate extending across the lower portion of said sheet metal structure and anchored to the framing of the car to which said sheet metal end

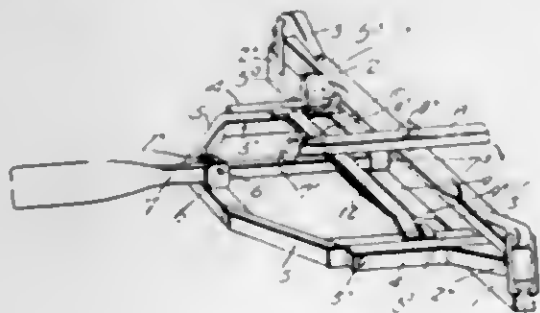
structure is secured along lines extending between said corrugations so that the corrugations of said structure form, in effect, box girders.

1,313,129. EXPLOSIVE SHELL. WILLIAM M. SMITH, Evansville, Ind. Filed Aug. 29, 1917. Serial No. 188,822. 5 Claims. (Cl. 102-38.)



1. An explosive time-shell provided with a charge, an electric generator, means deriving its current from the electric generator adapted for exploding the charge, and a self-contained time-mechanism adapted to be applied to the shell just before insertion in the gun, said shell having means adapted to complete the circuit from the generator to the exploding means, said time-mechanism constituting a self-contained, primary, and sole means for controlling the exploding means.

1,313,130. ROWING DEVICE. FRANK NAVIER SMUCK, Kitchener, Ontario, Canada. Filed Mar. 7, 1919. Serial No. 281,252. 6 Claims. (Cl. 9-25.)



1. A rowing device comprising a frame adapted to be carried by the gunwale of the boat, a divided oar, one member comprising a blade and a shank portion and the other member a handle portion and shank portion overlying the aforesaid shank portion, a rowlock carried by the outer portion of the frame in which the shank portion of the oar blade bears, a pivotal connection between the handle portion of the oar and the inner portion of the frame, a ball and socket connection between the outer end of the shank portion of the handle and the intermediate portion of the shank of the blade, and means for guiding the inner end of the shank of the blade so that the blade passes rearwardly through the water by the rearward stroke of the handle and forwardly clear of the water by the forward stroke of the handle.

1,313,131. FURNACE FLUE CLEANER. JOHN SOROKA, Beloit, Wis. Filed Apr. 17, 1919. Serial No. 290,767. 2 Claims. (Cl. 83-64.)

1. A device of the character described including a plate-like body, a bracket secured to one face thereof and formed with face bearings, a pair of actuating members slidably connected to each other and having the inner terminals designed to form journaling portions for rockable engagement in the bearings, and handles on the opposite terminals of the members designed for sliding the

members relative to each other to adjust the plate-like body in different planes with respect to the longitudinal



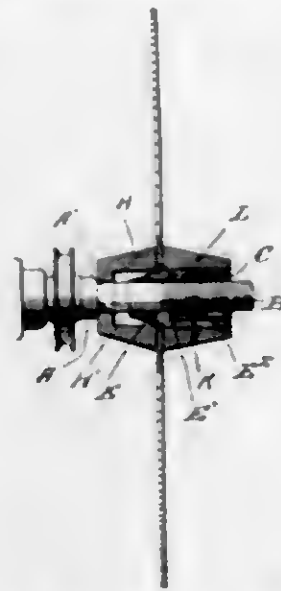
axes of the members and to also facilitate the manipulation of the device in its entirety.

1,313,132. CIGAR AND CIGARETTE HOLDER AND STUB-EJECTOR. EDWARD F. STEELE, Terre Haute, Ind. Filed Feb. 6, 1918. Serial No. 215,646. 1 Claim. (Cl. 131-10.)



A cigar and cigarette holder including a body having a socket and a longitudinally extending slot in one side wall of the socket, the longitudinal sides of said slot being provided with grooves, an ejector plate disposed below the inner surface of the socket and having its longitudinal edge portions slidably mounted in said grooves, an ejector finger carried by the rear end of said ejector plate, and a manipulating element carried by the outer side of said plate and exposed exteriorly of the body and extending at right angles thereto.

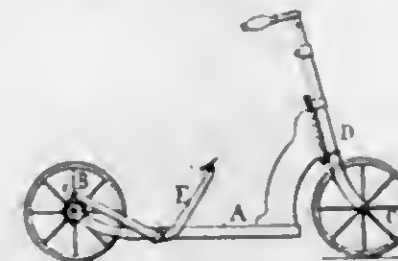
1,313,133. CENTERING DEVICE FOR CIRCULAR SAWS. JAVIN STEENARD, Montoursville, Pa. Filed Feb. 14, 1919. Serial No. 277,084. 2 Claims. (Cl. 70-79.)



1. A device for centering saws, comprising a chambered clamping collar adapted to fit loosely upon a rotatable arbor and against a shoulder thereon, a centering member having a tapering portion adapted to pass through

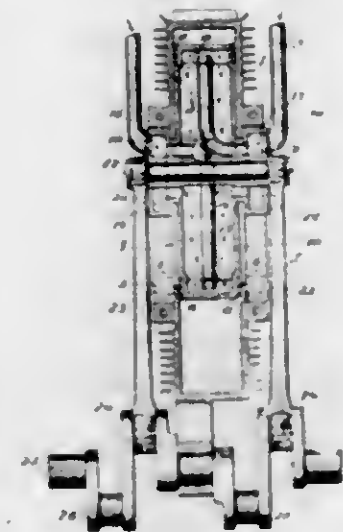
the central aperture of a circular saw, and entering the chambered portion of said collar, a screw adapted to engage a threaded portion of an arbor to hold the centering member in an adjusted position, and a clamping collar fitted about the centering member and cooperating with the other clamping collar to hold the saw securely intermediate the same.

1,313,134. SCOOTER. HARRY BENWELL STOCKS, Stockport, England. Filed Sept. 19, 1916. Serial No. 121,056. 3 Claims. (Cl. 208-38.)



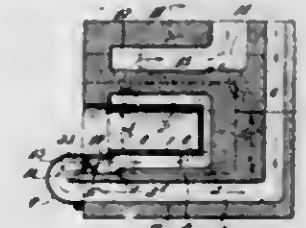
1. In a device of the class described, a frame, a steering wheel and a rear wheel mounted respectively at the front and rear ends of the frame in alignment with the longitudinal center of said frame, a handle for the steering wheel, a foot support at one side of the frame, a treadle at the opposite side of the frame, a driving means between the treadle and the rear wheel consisting of a drum loosely mounted on the axle of said rear driving wheel and having a spring disposed within the interior thereof to cause the same to return to a normal position when released, a clutch between the said drum and driving wheel adapted, when the drum is moved in one direction, to impart movement to the driving wheel, and a chain secured at one end to the drum and at the opposite end to the rear end of the treadle and normally wound around the drum and unwound from the latter by depression of the treadle.

1,313,135. INTERNAL COMBUSTION ENGINE. THOMAS C. STONE, Phoenix, Ariz. Filed July 31, 1917. Serial No. 183,713. 3 Claims. (Cl. 123-176.)



1. In an internal combustion engine, the combination of a cylinder comprising two sections secured together and having elongated slotted portions, a piston in said cylinder having an integral cross head movable in said slotted portions of the cylinder and said cross head also having a tubular central portion, a pin passing through said tubular central portion of the cross head, driving platen connected with the respective end portions of said pin, and means for conveying cooling fluid into the piston and discharging it therein near respective ends thereof, and means for permitting escape of fluid through said cross head.

1,313,136. FURNACE FOR BURNING LIQUID FUELS HAVING THE TENDENCY TO BURN WITH A STRONGLY-SOOTING-FLAME. EDUARD STRAUB, Sulgen, Switzerland. Filed Nov. 5, 1918. Serial No. 261,244. 4 Claims. (Cl. 158-4.)



1. A furnace for burning liquid fuels having the tendency to burn with a strongly sooting flame, comprising a due with a natural air draft, a vaporizer plate arranged within said due adapted to be heated by the combustion taking place in said due above the evaporating temperature of the liquid to be burned, the longitudinal axis of the plate extending in the direction in which the air of combustion admitted before said plate into the due has the tendency to stream through the latter, and means to sprinkle from above and at right angles to the current of the air of combustion streaming through the due, liquid fuel in such a quantity to said vaporizer plate during normal working of the furnace that all the supplied liquid coming in contact with the heated vaporizer is vaporized at once.

1,313,137. BOW-HOLDER. GEORGE E. TARNOW, Chicago, Ill. Filed Apr. 17, 1919. Serial No. 290,706. 2 Claims. (Cl. 132-22.)



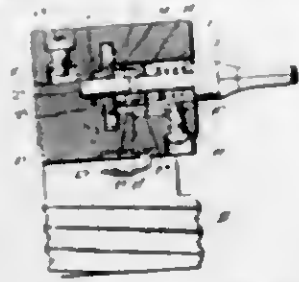
2. A device of the character described comprising a plate having thereon a fastening device, an arched clasp hinged at one end to one edge of the plate and extending across to the opposite edge, said plate having in the vicinity of the opposite edge two up-turned ears one of which is closer to the said hinge than the other, the outer ear having its upper end extending inwardly and downwardly to form a hook, and said clasp having in its free end a slot or hole adapted to receive said hook.

1,313,138. SURGICAL-BANDAGE FASTENER. JOHN H. THOMAS, Mount Vernon, N. Y. Filed Jan. 22, 1917. Serial No. 143,763. 4 Claims. (Cl. 128-171.)



3. A bandage fastener including pliable base sections connected for relative angular adjustment, and pliable bandage piercing fingers projecting from one face thereof.

1,313,139. LAMP-SOCKET. DON N. THOMPSON, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Solvay, N. Y., a Corporation of New York. Filed Nov. 2, 1917. Serial No. 199,854. 6 Claims. (Cl. 173-351.)



2. In a quick make and break switch, the combination with an insulating base of two opposed stationary contacts mounted thereon, a rotatable spindle mounted on said base, a rotary switch rotatably mounted on said spindle and adapted to make and break electrical connections between said stationary contacts, a rotary cam having lost motion connections with said spindle and said rotary switch, a non-rotatable cam movable axially of said spindle, a spring holding said cams in mutual engagement, said spring causing the axially movable and non-rotatable cam to rotate said rotatable cam and switch member with a snap action to make or break the electrical connection between the stationary contacts when the switch has been partially rotated by said spindle, and rotary cam.

1,313,140. GAS COCK. SIDNEY C. VINCENT, Baltimore, Md., assignor, by mesne assignments, to Cities Illuminating Company, New York, N. Y., a Corporation of New York. Filed June 9, 1916. Serial No. 102,648. 3 Claims. (Cl. 67-16.)

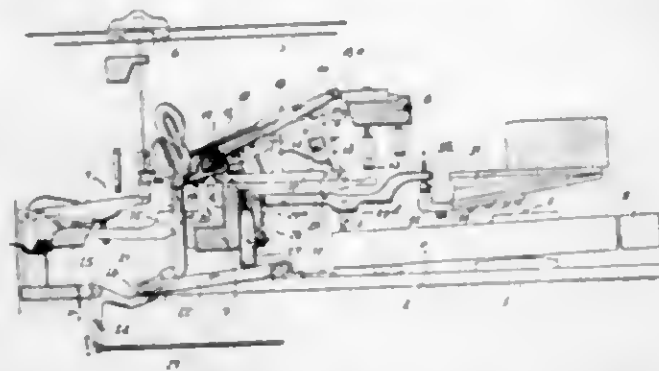


1. A gas cock comprising a body having a main passage therethrough, and a valve-bore intersecting said passage, a valve in said passage formed with a cut-away portion, and a channel adapted to register with the main passage in the body, and also with an auxiliary duct communicating with a channel in the valve, said body being formed with an extension having therein a flush channel and duct communicating with the valve bore and with the flush channel, the duct in the valve being adapted to momentarily register with the last mentioned duct in shifting from one extreme position to the other, whereby a puff of gas is permitted to pass through the flush channel, and means for regulating the flow of gas to said flush channel.

1,313,141. PIANISSIMO DEVICE FOR PIANOS. EDWIN SCOTT VOREY, Summit, N. J., assignor to The Aeolian Company, a Corporation of Connecticut. Filed Aug. 23, 1916. Serial No. 116,488. 7 Claims. (Cl. 84-61.)

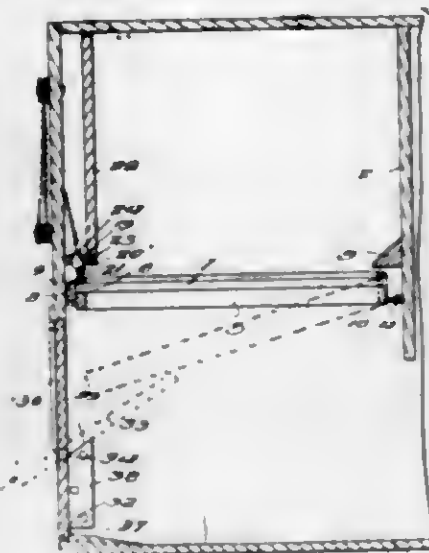
1. In combination with the actions of a piano, each comprising a hammer, a jack and a wippen; a transmit-

ting lever for each action operatively related to its wippen; striker pneumatics operatively related to and supporting the forward ends of the respective transmitting



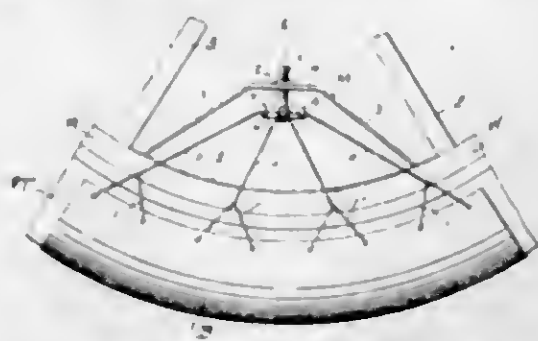
levers; and means which adjusts the distance of the hammers from the strings and correspondingly adjusts the rear ends of the transmitting levers to take-up the lost motion in the actions.

1,313,142. GRATE DUMPING AND HANDLING APPARATUS. HARLEY A. WALDEN, West Terre Haute, Ind. Filed Mar. 12, 1919. Serial No. 282,079. 5 Claims. (Cl. 126-162.)



2. In a furnace provided with a fire box and an ash pit, in combination, a vertically swinging grate, means for raising and lowering the grate, means for releasably holding the grate in either a raised or lowered position, a vertically swinging fire box door arranged beneath the grate and designed when swung inwardly to support the lower end of the grate and to act as a discharge chute, and means for supporting the door at an inclination.

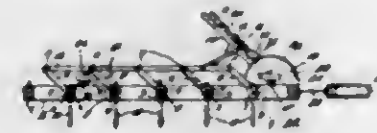
1,313,143. TIRE-BANDAGE. SIMON WEINER, Houston, Tex. Filed Apr. 14, 1919. Serial No. 290,010. 4 Claims. (Cl. 152-24.)



1. In combination with a tire bandage, a member adapted to engage the inner face of a wheel rim, inwardly directed arms carried by said member, a plate connecting

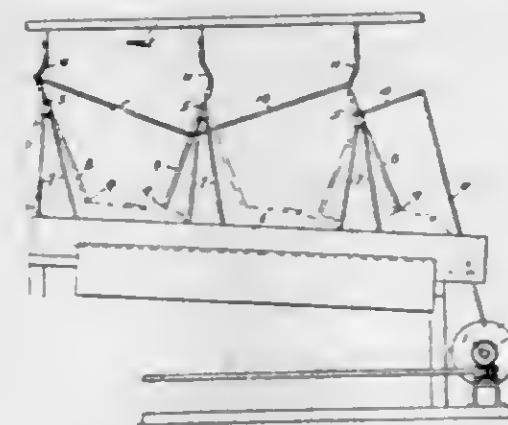
said arms, a member directed through the plate, a second plate carried by said last-named member and positioned between the first-named plate and the member adapted for contact with the rim of the wheel, means for connecting said second plate and the marginal portions of the bandage, and means coacting with the second member and the first-named plate for imparting endwise movement to said second member.

1,313,144. HARROW AND ATTACHMENT THEREFOR. HARRY M. WEITZELL, LeGrand, Iowa. Filed July 11, 1917. Serial No. 179,925. 2 Claims. (Cl. 55-103.)



2. In a harrow, a frame, a plurality of rocking rods journaled transversely and in bearings of said frame and provided with harrow teeth, means for rocking the rods simultaneously, whereby the teeth may be extended downwardly or horizontally, a tooth adjacent each end of each forward and rear rocking rod having a right angle extension, which is provided with an auxiliary extension extending in a plane corresponding to that of the tooth, and having a center wheel journaled thereon, whereby, when the tooth has been thrown horizontally, the wheel is moved to extend downwardly in engagement with the soil.

1,313,145. SIEVE FOR WOOD-PULP PLANTS. ANNAHAM GRÖNVOLD WESTER and ERIK LUDVIG HÅG, Helsingør, Norway, assignors to Aktieselskabet G. Hartmann, Christiania, Norway. Filed Oct. 15, 1918. Serial No. 258,258. 2 Claims. (Cl. 92-31.)



1. In combination with a sieve for wood pulp plants and the like, a plurality of spulling tubes located above the sieve plates and having their jet holes directed the same way along the sieve plate, and means for oscillating said spulling tubes lengthwise of and above the sieve plates, the sieve areas spuled by the jets of each tube overlapping slightly, whereby the stuff carried to a certain part of the sieve by means of one spulling tube is carried farther in the same direction by means of the next spulling tube.

1,313,146. HOG-WATERING TROUGH. JOSEPH H. WICKSTROM, Beresford, S. D. Filed May 28, 1919. Serial No. 300,280. 1 Claim. (Cl. 119-73.)

A hog watering trough, comprising a tank having a flange at the upper end, a top secured to said flange, said top having a drinking opening, and a central opening with a flange about the same, a supply pipe with float

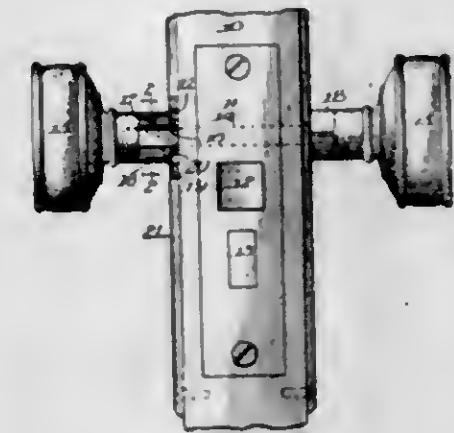
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actuated valve, a plate having a right angled flange at one end and covering said central opening with a contracted hook shaped portion for engagement over the edge



of the flange of the tank, its other end having a right angled flange which is apertured to register with an aperture in the flange of the tank, a key passing through apertures in said flanges.

1,313,147. KNOB-ATTACHING MEANS. HUGH R. WILLIAMS, Chicago, Ill. Filed Feb. 19, 1917. Serial No. 149,489. 1 Claim. (Cl. 70-87.)

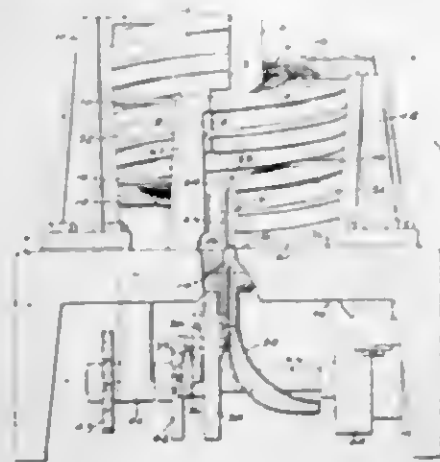


A device for adjustably connecting a door knob with a latch controlling spindle, comprising a latch controlling spindle having one end portion thereof provided with a series of teeth extending transversely of the spindle, a door knob having a hollow annular extension adapted to fit over the toothed end portion of the spindle, the annular extension having a transverse slot intermediate the ends thereof, a locking dog consisting of a flat arcuate plate, the straight edge of the plate being adapted to engage the transverse teeth of the annular extension, said locking plate being slidable laterally through the slot in said annular extension into engagement with the toothed end portion of the spindle, and a split annular spring locking ring encircling the annular extension and adapted to engage the outer curved edge face of the locking plate to hold the same in engagement with the toothed end portion of the spindle, the locking ring being adapted to yield as the knob and dog are slid inwardly on the toothed end portion, and said locking ring being slidable longitudinally of the annular extension to one side of the transverse slot therein to permit of the insertion into and withdrawal therefrom of said dog.

1,313,148. FEED MECHANISM. ERANTUS E. WINKLEY, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 19, 1917. Serial No. 155,903. 21 Claims. (Cl. 12-42.)

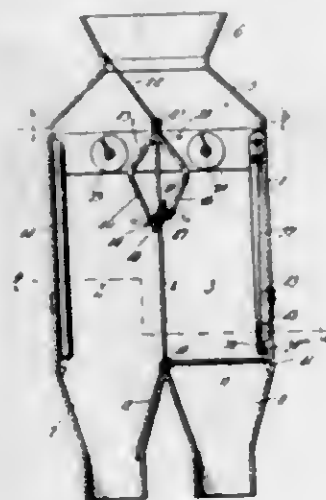
1. Feed-mechanism for a shoe machine having, in combination, means for holding tapering articles of sheet heel material in a curved stack with their tapering faces

in engagement and normal to the curvature of the stack and for advancing them in the direction of the length of



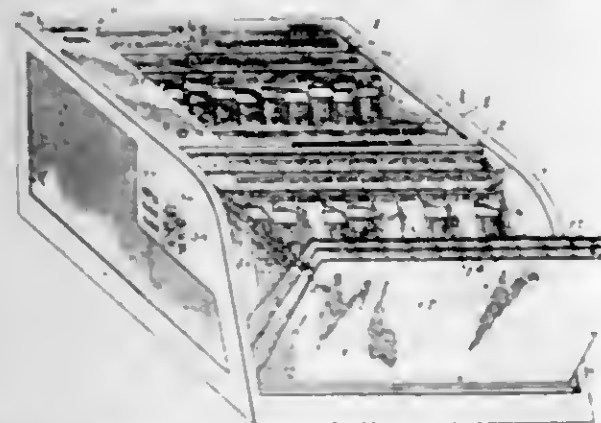
the stack; and means for discharging successive articles from the end of the stack.

1,313,149. GRAIN-MEASURING AND SACK-FILLING DEVICE. JOSEPH J. WOJCIK, Pulaski, Wis. Filed Oct. 8, 1917. Serial No. 195,350. 5 Claims. (Cl. 73-168.)



1. In a device of the character described, a plurality of measuring chambers having inlet and outlet passages, pivotally mounted plates adapted to alternately and simultaneously close and open the outlet passages of said chambers, a deflector controlling the inlet passages of both chambers, said deflector being coupled with said plates, locks for securing said plates in different positions, means for releasing said locks, and conveyers forcing the material against said lock releasing means.

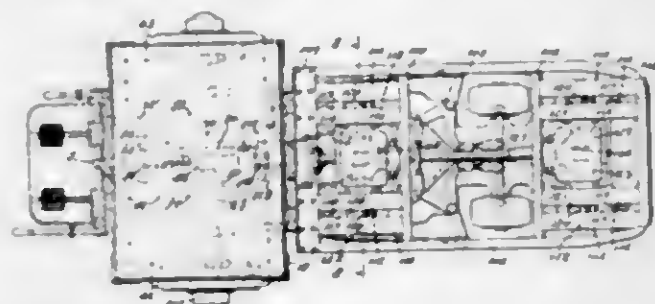
1,313,150. CREDIT-FILE. RODNEY J. WOOD, Dayton, Ohio. Filed July 20, 1915. Serial No. 40,827. 49 Claims. (Cl. 45-2.)



42. In a filing device, a normally accessible, temporary movable file, and a normally inaccessible, permanent,

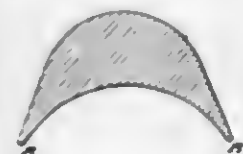
movable file to which the contents of the temporary file are transferred, and interconnecting means to control the operation of the permanent file by the operation of the temporary file.

1,313,151. TRUCK. SAMSON D. WRIGHT, EUGENE W. SCHELLENBACHER, and CHARLES C. MARTIN, Cleveland, Ohio; said Schellenbacher and said Martin assignors to Atlas Car and Manufacturing Company, Cleveland, Ohio. Filed Aug. 28, 1915. Serial No. 47,772. 7 Claims. (Cl. 180-54.)



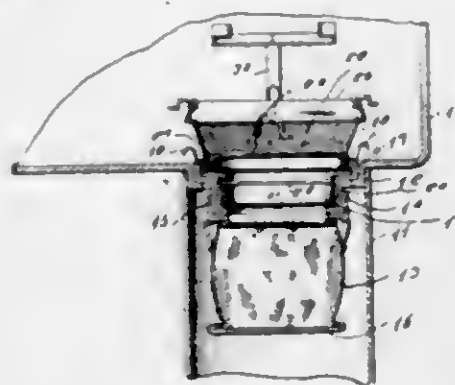
1. In a motor truck, driving wheels, a housing supported thereby, a main frame, supporting wheels therefor, a movable platform on said frame, said housing being connected to turn on a longitudinal axis relative to said main frame, motor means carried by said housing, and operating bearing for said wheels and platform connected to said motor means.

1,313,152. TURBINE-BLADE. HAROLD E. YARROW, Glasgow, Scotland. Filed June 5, 1918. Serial No. 238,347. 1 Claim. (Cl. 253-77.)



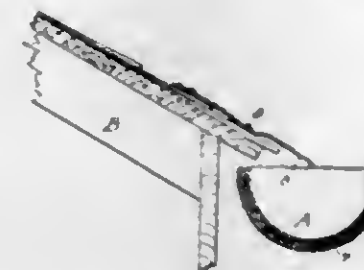
A turbine blade, the edges of which are rounded for a short portion of their length at the end projecting from the drum or casing to which the shank of the blade is secured.

1,313,153. SINK ATTACHMENT. JULIA E. ZBOYAN, Lyons, N. J. Filed Dec. 14, 1918. Serial No. 266,723. 3 Claims. (Cl. 4-35.)



1. The combination with a sink having a drainage pipe; an L-shaped annular flange arranged within the drainage pipe; a strainer element arranged within the drainage pipe and having an annular flange having screw threaded engagement with said first named annular flange; a second strainer element arranged within the drainage pipe and having screw threaded engagement with the annular flange of said first named strainer element, a garbage receptacle carried by the annular flange of said strainer element; and a closure arranged within the garbage receptacle.

1,313,154. COMPOSITION GUTTER. OTIS W. ANDERSON, Waterloo, Iowa, assignor of twenty one-hundredths to Harry T. Shepherd, twenty one-hundredths to Nicholas J. Tiedemann, and twenty one-hundredths to Walter W. Holman, Waterloo, Iowa. Filed Apr. 23, 1919. Serial No. 292,099. 2 Claims. (Cl. 108-28.)



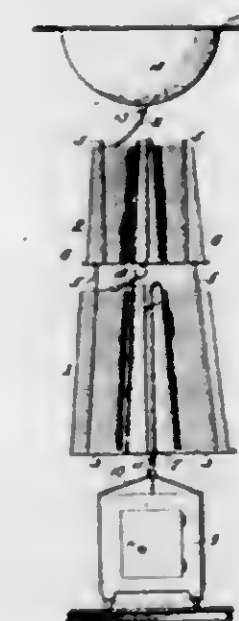
1. A conduit formed of layers of fibrous material, an intermediate layer of foraminated material, and a waterproof adhesive filling substance between and cementing the fibrous layers to said intermediate layer.

1,313,155. BELT-SHIFTING MECHANISM. THOMAS W. ANTON, East Pittsburgh, Pa. Filed May 5, 1919. Serial No. 294,631. 2 Claims. (Cl. 64-4.)



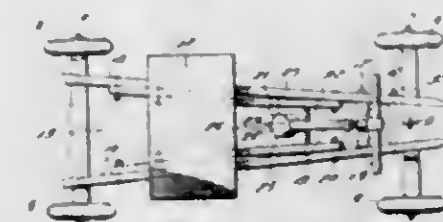
1. A belt shifting mechanism comprising a belt engaging fork, means for shifting the fork including a rod having spaced recesses and a slot establishing communication between the recesses, and a spring pressed pin slidably mounted in the slot and adapted to engage either of said recesses.

1,313,156. SAFE-SAVING DEVICE. LOUIS EAL ARMSTRONG, Pensacola, Fla. Filed July 25, 1918. Serial No. 246,756. Renewed May 19, 1919. Serial No. 298,351. 6 Claims. (Cl. 9-9.)



5. In an apparatus of the class described, the combination with a float and safe attaching means of a cable connected to said float and to said safe attaching means, and means between the float and the safe attaching means for retaining the cable normally in a coiled position, said retaining means being adapted to entirely clear said cable when the float is raised from its normal position.

1,313,157. OCCUPANT-PROPELLED VEHICLE. JOHN WILLIAM ARNET, Tomahawk, Wis., assignor to Alexander B. Leith, Chicago, Ill. Filed Dec. 8, 1917. Serial No. 206,270. 10 Claims. (Cl. 208-35.)

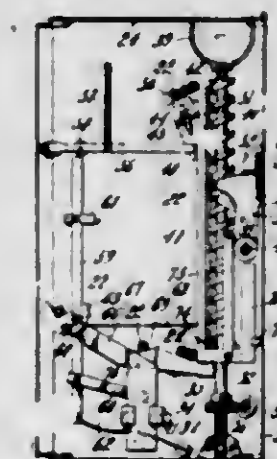


1. An occupant propelled vehicle comprising a wheeled body capable of being steered, said body having a central longitudinal space, a hand-lever pivotally connected with the front portion of the body, and a push-bar having its upper end joined by universal connection with the hand-lever and having its lower end adapted to engage the ground and cause propulsion of the vehicle when the hand-lever is swung rearwardly.

1,313,158. LIQUID FUEL. ARTHUR A. BACKHAUS, Baltimore, Md., assignor to U. S. Industrial Alcohol Co., a Corporation of West Virginia. Filed Nov. 22, 1917. Serial No. 203,400. 18 Claims. (Cl. 44-8.)

1. A fuel comprising a petroleum distillate, an alcohol and an organic chlorine compound.

1,313,159. AUTOMATIC SIGN. LYLE BREMAN, Milwaukee, Wis. Filed Jan. 14, 1915. Serial No. 2,127. 19 Claims. (Cl. 40-36.)

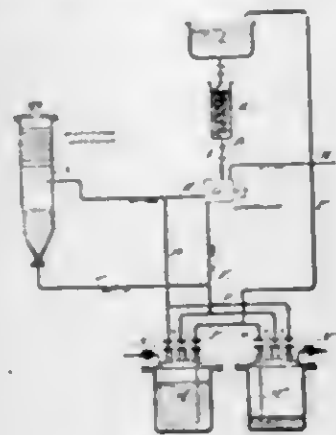


7. In an automatic sign, an elevating conveyer comprising a pair of suitably driven worm shafts, stationary guides parallel thereto, and sign plates having projecting trunnions extending between the guides and the worm shafts and between the convolutions of the worms to be elevated by the turning of the worm shafts, the movement of the bearing surfaces of the worms on which the trunnions rest being longitudinal of the trunnions.

1,313,160. PROCESS FOR COMPRESSING CHLORIN AND OTHER GASES. LEONE LEO BIANCHINI, Rome, Italy, assignor to Societa Italiana di Elettrotecnica, Rome, Italy, a Joint-Stock Company. Filed Sept. 12, 1916. Serial No. 119,769. Renewed May 17, 1919. Serial No. 297,904. 3 Claims. (Cl. 230-32.)

1. In a compressing system for chlorine and like gases, a supply tank, a rotary compressor, means for introducing sulfuric acid from the supply tank to the rotary compressor, means for supplying chlorine to the rotary compressor,

two vessels, means for equalizing the pressure in said system and vessels, means for carrying the acid from the



rotary compressor to the vessels selectively, a source of compressed air connected with the vessels for forcing out the acid through a pipe back to the supply tank.

1,313,161. FLUSH-TANK BULB. JOHN W. BOZEMAS,
Baltimore, Md. Filed Apr. 21, 1919. Serial No. 291,457.
1 Claim. (Cl. 4—5.)



The herein described one-piece rubber flush tank bulb including an upper relatively thick walled half to withstand the water pressure in the flush tank and the strain in unscrewing the valve, and a lower inverted frusto-conical half provided with a comparatively thin wall for self adaptation to numerous sizes, curvatures and bevels of valve seats in general use, the peripheral seat engaging surface of said lower half being positioned at substantially thirty degrees to the vertical axis and being relatively deep to adapt it for seating on a plurality of different sized valve seats.

1,313,162. PRODUCT USABLE AS FERTILIZER AND METHOD OF MANUFACTURING THE SAME. RICHARD G. BRINDER and AMOS H. FLINT, Chicago, Ill., assignors to Corn Products Refining Company, a Corporation of New Jersey. Filed July 3, 1918. Serial No. 243,247. 4 Claims. (Cl. 71-6.)

1. A product usable as a fertilizer or ingredient of a fertilizer composed of the soluble substances extracted from Indian corn substantially unchanged chemically and in a dry state.

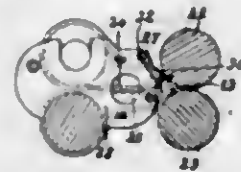
1,513,163. PRODUCT FROM STEEP WATER AND METHOD OF MANUFACTURING THE SAME. RICHARD GEY BAISLE, Chicago, Ill., assignor to Cero Products Refining Company, a Corporation of New Jersey. Filed Oct. 11, 1918. Serial No. 257,769. 9 Claims. (Cl. 71-6.)

1. A dry product composed of soluble substances from Indian corn, with the sugar ingredient caramelized

1,313,164. SPINNING FRAME. FERNANDO CASABLANCAS, Sabadell, Barcelona, Spain. Filed Dec. 13, 1917. Serial No. 207,391. 5 Claims. (Cl. 19-28.)

2. In combination with a pair of cooperating drawing cylinders, and feeding means for passing the roving to said

drawing cylinders, of a condenser interposed between said feeding means and drawing cylinders having a cut-away portion adapted to receive the coring, said condenser adapted to reduce the width of the roving as the same passes therethrough, said condenser having a curved wall



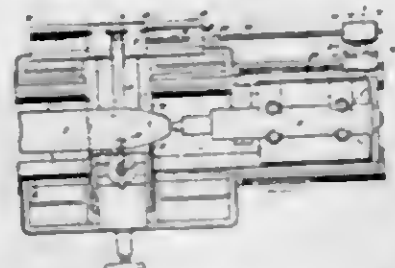
to rest upon the lower drawing cylinder, and means for supporting said condenser whereby the same may oscillate, and means to support said condenser so that it may slide freely parallel to the drawing cylinders and be carried along by the transverse reciprocating movement of the revolving, substantially as described.

1,313,165. SUSPENSORY. AMOR B. CARSELMAN, Wash-
ington, D. C. Filed Dec. 18, 1918. Serial No. 267,253.
10 Claims. (Cl. 128—158.)



3. A suspensory comprising a divided body encircling belt, a scrotum supporting bag, suspension members secured to the opposite ends of the top of the bag, and a pair of supporting members connecting the ends of the belt, there being a slidable connection between the supporting members and one end of the belt and each of said supporting members having one of the suspension members of the bag secured thereon.

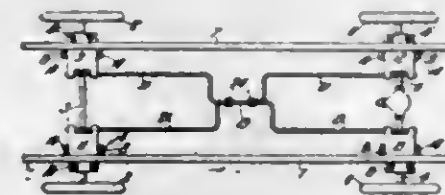
1.313.166. PROJECTILE-TURNER. FRANCIS B. COCK-
BURN and JACK C. CASLTON, Cincinnati, Ohio, assignors
to The Lodge & Shipley Machine Tool Company, Cincin-
nati, Ohio, a Corporation of Ohio. Filed June 18, 1917.
Serial No. 175,297. 17 Claims. (Cl. 82-11.)



14. In a device of the class described, a bed, carriage, and cross tool-slide, a member movable with the carriage and adapted to be held stationary when the carriage moves, means connecting said member and tool-slide to move the member in unison with the carriage and adapted to move

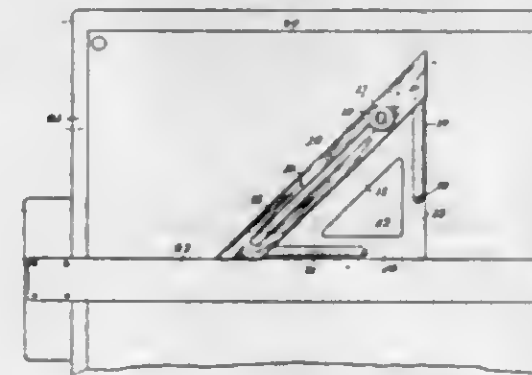
the tool-slide on the carriage when held stationary, stop mechanism for said member operative at a predetermined point in the carriage travel, and stop release mechanism operating automatically at a predetermined point in the carriage movement, whereby the tool cuts predetermined regular and irregular work during a continuous carriage movement.

1,313,167. SUSPENSION OF VEHICLES. PATRICK D. CONROVE, Cobram, Victoria, Australia. Filed Oct. 18, 1918. Serial No. 258,350. 8 Claims. (Cl. 21-105.)



1. Vehicle suspension means, comprising an intermediately pivoted laterally rocking element associated with each of the wheels of and arranged at substantially a right angle to the vehicle, means for connecting one end of each of said rocking elements with the adjacent axle, and compensating connections between the other ends of the respective diagonally rocking elements.

1,313,168. RULING ATTACHMENT FOR TRIANGLES
SIMONE DI MAIO, New York, N. Y. Filed Dec. 3, 1918.
Serial No. 265,159. 3 Claims. (Cl. 33-108.)



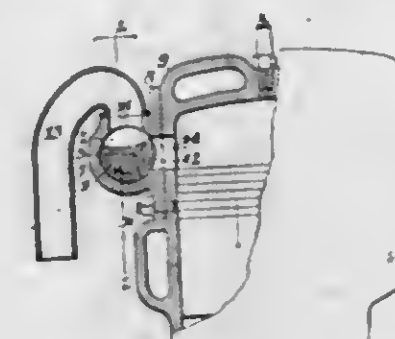
1. A ruling device, comprising a triangle having apertures, a straight edge, and arms held on the straight edge and provided with pins engaging the said apertures to hold the straight edge in parallelism with one of the sides of the triangle.

1,313,109. ROSE DRIER AND STRETCHER. JOSEPH DOMECQ. Los Angeles, Calif. Filed Mar. 17, 1910. Serial No. 283,256. 2 Claims. (Cl. 223-19.)



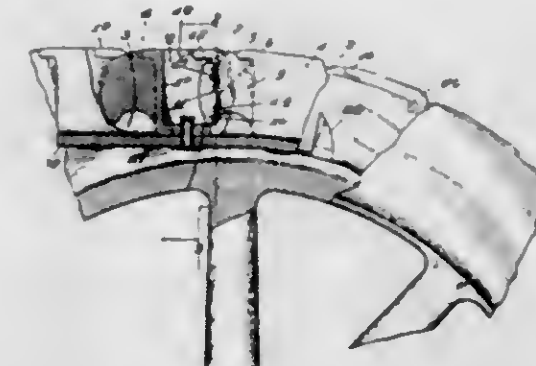
1. In a device of the class described, the combination of a supporting rod spaced from a wall, a resilient frame for stretching hose having a hook at the top of the leg portion for engagement with said rod and a finger disposed on the opposite side of said leg portion for resting against the wall.

1,813,170. INTERNAL-COMBUSTION ENGINE. CLARENCE LEONARD DOWNER, Idaho Falls, Idaho. Filed Dec. 7, 1917. Serial No. 200,007. 2 Clsims. (Cl. 123—190.)



1. The combination of an engine cylinder having a flat side with intake and exhaust cylinder ports, a valve casing including flanges secured upon said flat side, and having right angularly disposed ports communicating with the bore of the casing and the cylinder ports respectively, a solid valve body occupying the bore of the casing and having valve kerfs cut into the peripheral surface thereof, and means for rotating the valve body.

1,513,171. CHAIN DRIVING-BELT. JOHN E. DUKELOW.
Chicago, Ill. Filed June 23, 1913. Serial No. 775,293
10 Claims. (Cl. 74-64.)

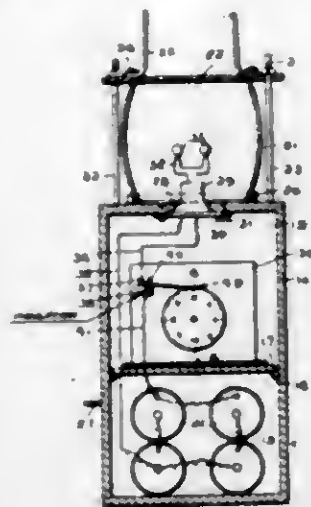


1. A chain comprising a plurality of links each having a chamber at one end and a projection at the opposite end adapted to enter the chamber of the next adjacent link, the end wall of said chamber and of said projection being each provided with a substantially flat bearing surface adapted to cooperate with a flat bearing surface upon the next adjacent link to connect said links together, said bearing surfaces having a depression at one margin thereof adapted to cooperate with a projection at one margin of a bearing surface of the next adjacent link to prevent the displacement of said latter bearing surfaces upon each other.

1,313,172. BUOY-LAMP. FRANCIS R. DYKE, Dartmouth,
Nova Scotia, Canada. Filed Nov. 13, 1917. Serial
No. 201,808. 3 Claims. (Cl. 181-27.)

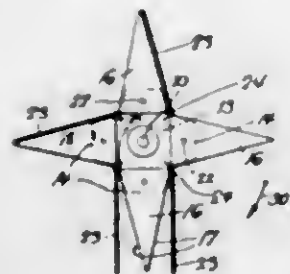
1. In circuit controlling means, a clock mechanism, a disk of electrical insulating material mounted on the main arbor of said mechanism for rotation therewith, a contact strip carried by said disk and extending a predetermined distance about the same, spaced contact fingers mounted in predetermined relation to the arbor of the clock mechanism and in rubbing contact with the peripheral surface of the disk so as to engage said contact strip during rotation of said disk, a setting disk mounted on the arbor adjacent the first mentioned disk and graduated to indicate time intervals, and means for releasably securing said setting disk and said first mentioned disk upon the arbor so as to permit the disk carrying

the contact strip to be turned about the arbor so as to space the forward edge of the contact strip a predetermined



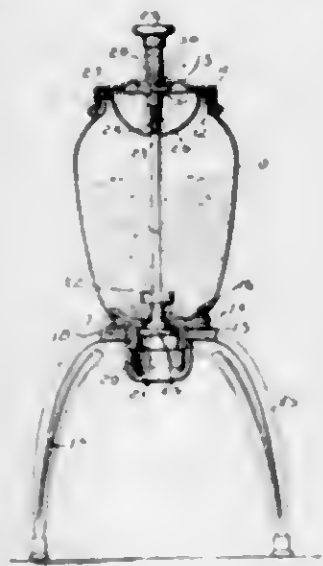
time interval in back of the point of contact between the disk and the contact fingers indicated by the setting disk.

1,313,173. ADVERTISING DEVICE. ADELBERT EASTMAN, New York, N. Y. Filed Apr. 18, 1918. Serial No. 229,270. 2 Claims. (Cl. 40-72.)



1. The combination of a shaft, hubs on said shaft, spokes on said hubs, display members having relatively fixed display surfaces and adapted to be secured to said spokes, display leaves, means for detachably mounting the same on the said hubs in relatively movable relation to the said display members and means for rotating the said shaft.

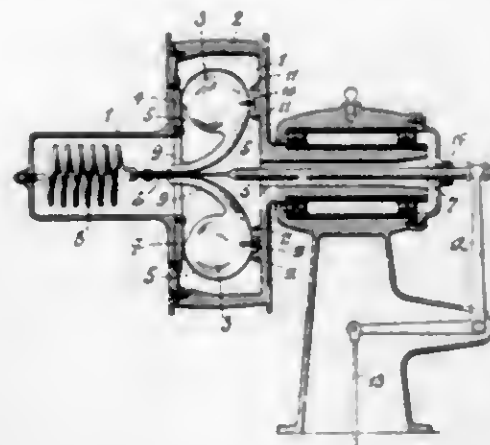
1,313,174. DISPENSING APPARATUS. WILLIAM J. EISENHART, Baltimore, Md. Filed July 6, 1917. Serial No. 178,944. 11 Claims. (Cl. 221-104.)



1. A dispenser for fluid material having an open-ended storage receptacle, a base having a flange engaging the

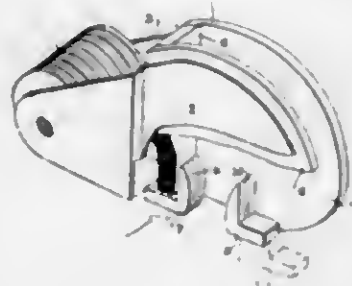
inner surface of the lower end of said receptacle and provided with a depending sleeve forming a discharge chamber, a flanged ring threaded upon the exterior of the sleeve for engagement with the exterior surface of the receptacle, a plunger operating in the bore of said sleeve from above said receptacle for controlling the discharge of the contents of the receptacle, and means within the receptacle and above the contents thereof for returning the plunger to its normal position.

1,313,175. CENTRIFUGAL GOVERNOR. JOHN ELOV ENGLISH, Kristinehamn, Sweden. Filed Dec. 20, 1916. Serial No. 138,074. 4 Claims. (Cl. 264-15.)



1. A rotatable centrifugal governor provided with plane tracks disposed perpendicular to the rotary axis of the governor, a spindle, rolling weights provided with arms bearing against said spindle, the bearing surfaces of the arms being formed substantially in accordance with involutes.

1,313,176. ELECTROMAGNETIC BLOW-OUT DEVICE. CLARENCE T. EVANS, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 23, 1916. Serial No. 132,946. 10 Claims. (Cl. 175-282.)

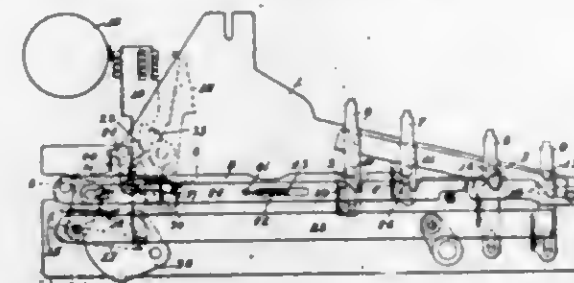


2. The method of centering an arc between the pole pieces of an electromagnetic blowout device, consisting in concentrating the magnetic flux of the device that the density thereof in the region of the arc is greatest midway between the pole pieces of the device.

1,313,177. SIGNAL PRINTING MEANS FOR CALCULATORS. WARREN FUHRMANN, Westfield, N. J., assignor, by mesne assignments, to Wilkinson Brothers and Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1918. Serial No. 261,188. 6 Claims. (Cl. 235-60.)

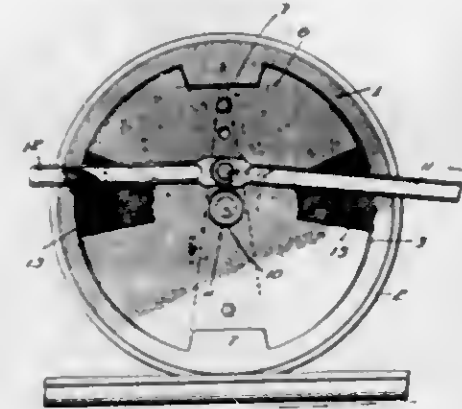
1. In a calculator, the combination with printing means and accumulating means, and special keys arranged to cause special operations of said means, of a type carrier provided with type corresponding with the keys, a bar connected with the carrier, means connecting

the bar and special keys whereby the bar is advanced by the keys for a different relative distance according to the key depressed, a signal printing member for causing said type in the carrier to print, a main operating member arranged to cock the signal printing members, and a



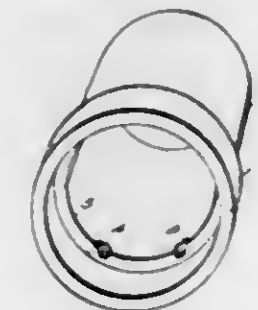
strip arranged to release the cocked signal printing member to print, said strip being arranged to be engaged by said special keys when depressed after the key has advanced said bar to position the signal printing member to effect the impression of the positioned type carrier.

1,313,178. ENGINE DRIVE-WHEEL. WILLIAM H. GARNER, Erie, Pa. Filed Aug. 27, 1918. Serial No. 251,675. 7 Claims. (Cl. 295-2.)



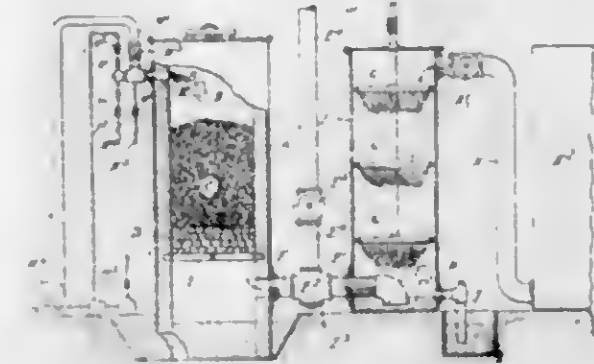
1. In an engine construction, a drive wheel, an axle therefor, a lever pivoted on said axle and having a slight movement longitudinally of the major axis of the lever and arranged to engage the drive wheel near the periphery thereof, and a connecting rod secured to said lever on the opposite side of the axle.

1,313,179. CONDUIT. WILLIAM HEALL GRAY, Louisville, Ky. Filed July 11, 1917. Serial No. 180,003. 1 Claim. (Cl. 137-75.)



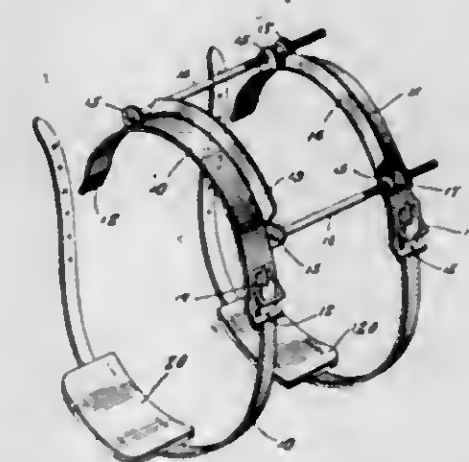
In a conduit, a series of leaves, each having at one end a bell or socket and having in the shoulder formed between the bell and the body of the length indentations extending from the outer face of the shoulder longitudinally of the length and opening radially inward into the interior of the conduit and at the shoulder, said indentations being adapted to be closed at the face of the shoulder by the abutting or spigot end of the succeeding length.

1,313,180. PROCESS OF MAKING PRODUCER-GAS. HARRY A. GRINE, Collinsville, Okla., assignor to Gas Power Machinery Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 13, 1915. Serial No. 7,943. 13 Claims. (Cl. 48-215.)



1. The process of making producer gas which consists in introducing liquid fuel, an oxygen carrying medium and a retarder medium into a gasifying chamber in such proportions that when the mixture is ignited in the chamber the retarder cooperates with the fuel and oxygen carrying medium to form two zones, one of them a volatilization zone wherein the temperature is maintained below the burning point of the fuel but above its volatilization point and the other a combustion zone wherein the temperature rises above the burning point of the fuel and wherein partial combustion takes place to form the gas.

1,313,181. PATELLA-SPLINT. WILLIAM GRUNDMANN, St. Louis, Mo. Filed Apr. 8, 1918. Serial No. 227,284. 7 Claims. (Cl. 128-83.)



7. A patella splint comprising a pair of members formed of resilient material, which members are adapted to lie over the front portion of a limb immediately above and below the patella, flexible members connected to the ends of said resilient members, and adjustable means carried by each of said flexible members for retaining the latter in alignment with the resilient members when the splint is applied for use.

1,313,182. METAL-BENCH STRUCTURE. HOWARD T. HALLOWELL, Philadelphia, Pa. Filed Apr. 29, 1916. Serial No. 94,452. 12 Claims. (Cl. 45-31.)

1. A bench leg of metal pressed into shape and provided with an integral hollow rib of considerable depth extending longitudinally of said leg, with laterally disposed flanges flanking said rib, the upper end of said ribbed leg being reduced in width, while the lower end of said leg is bent substantially at right angles to its vertical portion to form a foot, and reinforcing means for said foot.

3. A bench leg of sheet metal pressed into shape and provided with an integral hollow rib of considerable depth extending longitudinally of said leg from end to end of the same flanges having rolled edges flanking said rib, and a foot substantially at right angles to said leg and reinforced by a rib formation integral with said leg, and supplemental reinforcing means for said foot at its junction with the leg.



5. A bench leg of sheet metal bent into form, with a hollow rib of considerable depth extending longitudinally of said leg, laterally disposed flanges with rolled edges flanking said rib; said leg being flared at the lower end and the rib thereof reduced adjacent said flaring portion, a foot substantially at right angles to said leg and reinforced by a rib formation continuous with the rib of said leg, and a reinforcing plate secured to said leg and foot at the junction thereof and held in place by said rolled edges.

12. A bench support comprising a plurality of legs, each made of pressed sheet metal and having longitudinal reinforcing ribs continuous with said legs and side flanges, with feet integral with said legs and disposed substantially at right angles thereto, said flanges having rolled edges, each leg having a flaring portion adjoining its foot, cross-braces between said legs at top and bottom of the same; the upper ends of said legs being split to receive the upper cross-braces and the lower braces being disposed adjacent the flaring portion of the legs and having outwardly turned flanges at the ends underlying the rolled edges of said legs, and rivets securing the several cross-braces to the legs.

1,313,183. ROLLER-BEARING SPRING-INSERT. JOHN M. HAMILTON and FRANK A. RUOF, Los Angeles, Calif. Filed May 2, 1918. Serial No. 232,117. 5 Claims. (Cl. 207-33.)

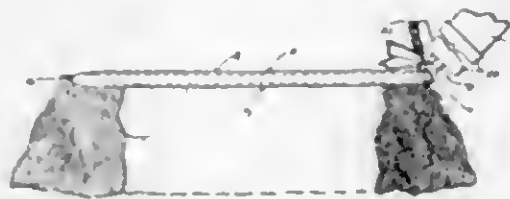


1. An anti-friction device for interposition between the leaves of springs comprising a spacing member, and an anti-friction member journaled in said spacing member, said member having slotted flexible side flanges forming tongues for cooperation with a clip so as to provide anchoring means to secure said member to the spring against endwise displacement.

1,313,184. CLEANING IMPLEMENT. HENRY A. HAYDEN, Westfield, N. J., assignor to Hayden Inventions Corporation, Westfield, N. J., a Corporation of New Jersey. Filed May 16, 1918. Serial No. 234,904. 2 Claims. (Cl. 15-28.)

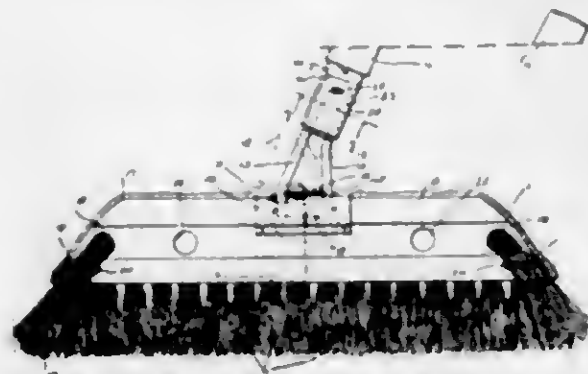
1. A cleaning implement comprising a flexible backing including a plurality of side-by-side substantially parallel pockets both pockets being open-ended along a line substantially perpendicular to the lengths of the pockets, there being a plurality of work-contacting elements on the outside of the backing, and a rigidifying support

comprising a member formed of a single piece of bent wire and including a shank portion and two substantially parallel line portions offset from the shank portion with



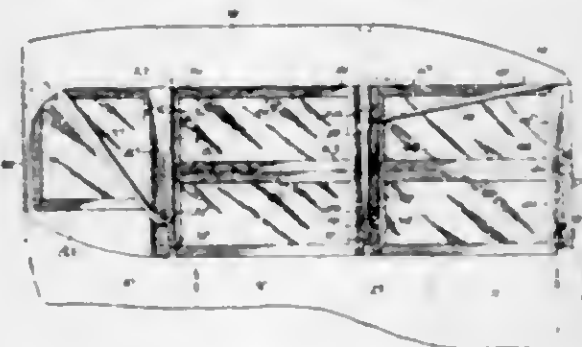
the space between the line portions substantially opposite the shank portion, each of said line portions for entering one of said pockets.

1,313,185. BRUSH. HENRY A. HAYDEN, Westfield, N. J., assignor to Hayden Inventions Corporation, Westfield, N. J., a Corporation of New Jersey. Filed Aug. 31, 1918. Serial No. 252,135. 1 Claim. (Cl. 15-13.)



In a brush, in combination, an elongated backing having a line of sockets formed in one of its long faces with substantially parallel axes, bristle tufts secured in said sockets, the backing also having transverse apertures cut therethrough near the ends of such line with their axes substantially at right angles to the axes of the sockets, and bristle tufts drawn through said apertures and looped and secured in place, with their opposite terminal portions projecting away from said apertures and inclined away from the bristles in the bottom sockets to prolong the bristle-spread beyond the ends of the backing.

1,313,186. AUTOMOBILE INCLOSURE. WALLACE E. HOWARD, Chicago, Ill. Filed Jan. 21, 1918. Serial No. 213,000. 7 Claims. (Cl. 21-62.)



2. In a vehicle inclosure of the character described the combination of a main upper support, a supplemental support hinged thereto and adapted to swing in a substantially vertical plane lengthwise the vehicle, a window hinged to and carried by said supplemental support and comprising upper and lower rigid sash-members hinged together permitting the folding of the window with the outer faces of its members together, and a catch to hold the folded window in elevated position, substantially as described.

1,313,187. METHOD OF AND MEANS FOR AMPLIFYING ELECTRICAL VARIATIONS. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 8, 1915. Serial No. 60,401. 9 Claims. (Cl. 250-27.)



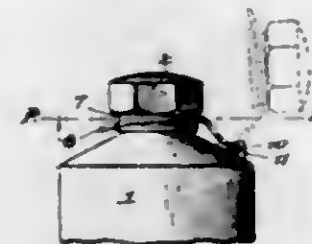
1. Means for amplifying electrical variations comprising a positive resistance and a negative resistance in parallel therewith, the two resistances being approximately equal to each other in value.

1,313,188. MEANS FOR PRODUCING ALTERNATING CURRENTS. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 8, 1915. Serial No. 60,402. 8 Claims. (Cl. 250-36.)



1. Means for producing alternating currents comprising a circuit which includes capacity and inductance and a device having a plurality of electrodes enclosed in a receptacle evacuated to such a degree that the device is operable independently of gas ionization, and sources of potential of such values applied to the electrodes that the device has a working range over which the current flow therethrough increases and decreases inversely as the potential applied thereto.

1,313,189. COLLAPSIBLE TUBE. WILLIAM C. HUNTOON, Providence, R. I. Filed Mar. 26, 1919. Serial No. 255,256. 2 Claims. (Cl. 221-60.)

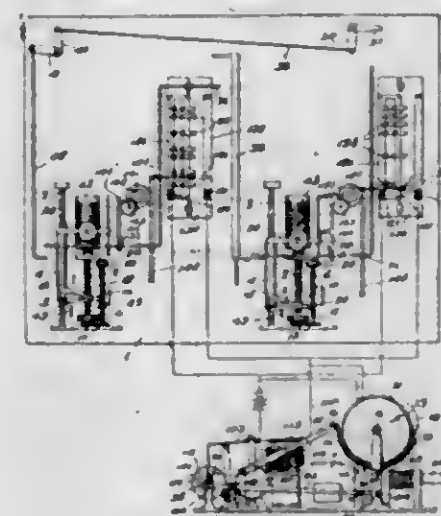


1. A collapsible tube composed of a cylindrical body having an end closing wall of somewhat conical shape and a neck extending out from the center of the end closing wall, a closure for the neck, a transversely perforated hinge knuckle formed integral with said end closing wall and located in spaced relation to the neck, and a wire loop loosely connected to the base of the cap so as to allow said cap to freely rotate, the ends of the loop being sprung into the knuckle perforation.

1,313,190. COMBINED TALKING-MACHINE AND STEREOPTICON. JOHN L. BOWEN, Boston, Mass. Substitute for application Serial No. 829,968, filed Apr. 6, 1914. This application filed May 16, 1919. Serial No. 297,715. 13 Claims. (Cl. 88-27.)

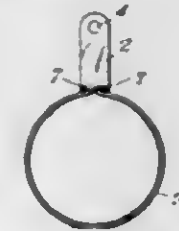
1. The combination with a talking machine and a stereopticon, of a controller for the stereopticon and interposed

multiplying means operatively connecting the talking machine with the controller to amplify the movement of



the talking machine in the controller, whereby the combined apparatus may operate automatically when set in operation, substantially as described.

1,313,191. TUBE-HANGER. JOHN KABITZKY, Garwood, N. J., assignor to Garwood Company, a Corporation of New Jersey. Filed Sept. 21, 1918. Serial No. 255,106. 1 Claim. (Cl. 248-30.)



In a tube hanger the combination of a split ring, an L-shaped supporting member having an opening to receive and lock the free ends of the ring, another portion of the supporting member being provided with an opening to receive a screw or bolt, and adapted to be bent to engage with a vertical or horizontal supporting surface.

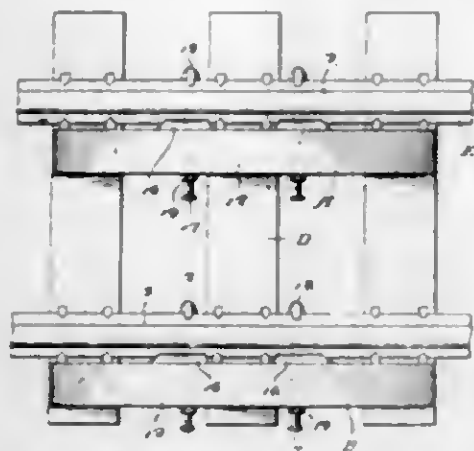
1,313,192. PROCESS OF MAKING SALT CAKE AND SULFURIC ACID FROM NITER CAKE. WILLIAM J. KES, Metuchen, N. J., assignor to The Kalsfleisch Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 19, 1918. Serial No. 254,730. 5 Claims. (Cl. 23-1.)

1. The process of producing salt cake and sulfuric acid from niter cake which comprises melting niter cake in a suitable furnace, maintaining the niter cake at such a temperature that it becomes converted into molten salt cake with evolution of sulfur trioxide, adding a sufficient proportion of a sulfate of sodium in the solid condition to the continually stirred molten mass when the reaction is substantially completed to cause the molten mass to solidify, and then withdrawing the solid salt cake from the furnace.

1,313,193. CAR-REPLACER. SAMUEL RUSH KEEBAN, Phoenix, Ariz. Filed Apr. 26, 1919. Serial No. 292,804. 1 Claim. (Cl. 104-265.)

A car replacer for railroad tracks including a member having a substantially flat bottom and a longitudinally curved top, said top being sloped in the direction of the track, series of teeth formed on the bottom adjacent each end, one series being arranged at right angles to the other to prevent displacement of the blocks when the latter is

subjected to strain, spaced apertured lugs projecting from the bottom and adapted to embrace the tie, fastening means passed through said lugs for holding the block operatively positioned, spaced shoulders projecting from one



side of the block and arranged at opposite sides of the tie, said shoulders being also disposed immediately above the flange of the rail for engagement therewith under the weight of the rolling stock.

1,313,194. PLOW. ROBERT I. KILPATRICK, Hempstead, Tex. Filed Apr. 14, 1919. Serial No. 289,807. 3 Claims. (Cl. 97-26.)



1. A plow including a beam, a runner to which said beam is secured, a stock pivoted at its upper end to said beam, a share carried by the lower end of the stock, a manual lever pivoted at its lower end to said runner, and a link connecting said lever and stock.

1,313,195. MEANS FOR SUPPORTING RADIATORS ON AEROPLANES. EMILE LETORD, Meudon, France. Filed Nov. 13, 1917. Serial No. 201,842. 4 Claims. (Cl. 248-30.)

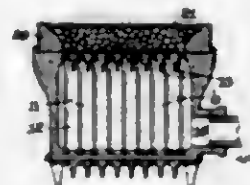


1. A radiator support for aeroplane engines, comprising in combination a tubular supporting frame and unions fixed to said frame for attachment of the radiator, each union including a cylindrical member projecting from the frame, a cylindrical member in alignment with the first-mentioned cylindrical member but spaced apart therefrom, and a coiled spring whose ends are fixed upon said cylindrical members respectively.

1,313,196. APPARATUS FOR BURNING EXPLOSIVE GASEOUS MIXTURES. CHARLES E. LOCKE, New York, N. Y. Filed Sept. 8, 1915. Serial No. 49,361. Renewed Oct. 31, 1918. Serial No. 260,544. 23 Claims. (Cl. 158-89.)

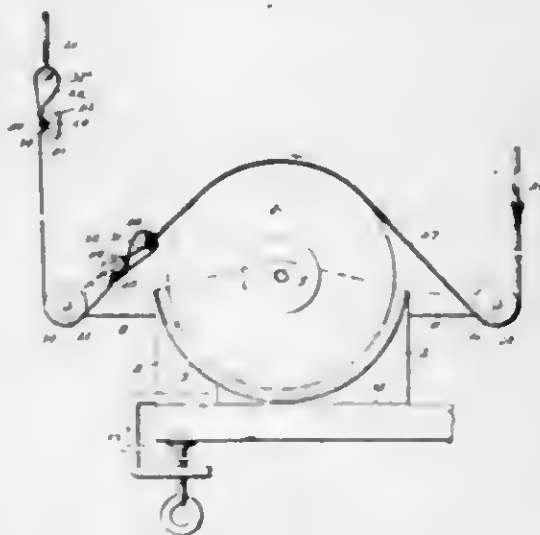
1. A burner for explosive gaseous mixtures, comprising a structure providing a body of metal of high heat con-

ductivity inclosing and forming a mixture supply chamber and a mixture discharge passage of decreasing cross area terminating in a discharge orifice having a width sufficiently small to prevent backward propagation of inflammation therethrough, said body being so formed and of such mass in portions thereof to which heat is conducted from parts adjacent to which combustion takes place that



such portions shall have sufficient heat conducting capacity to conduct the heat reaching them to a point from which heat is discharged with sufficient rapidity to keep the temperature of the walls of the discharge orifice sufficiently low to maintain the flame-interrupting property of the orifice and to prevent the walls of the discharge passage and the supply chamber from becoming heated to the ignition temperature.

1,313,197. DEVICE FOR COATING SURFACES. ARTHUR W. MCCORDY, Victoria, British Columbia, Canada. Filed Dec. 29, 1917. Serial No. 209,506. 2 Claims. (Cl. 91-31.)

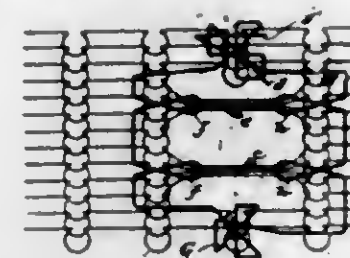


1. A portable device for coating flexible sheets or strips of material, comprising in combination, a tank; a drum mounted and rotatable within said tank; rollers one in advance and the other in rear of the drum, serving to guide the strip or sheet to be coated and to enable pressure to be applied by the strip or sheet to the drum to hold said strip in contact with the upper surface thereof; positive gripping devices for gripping the ends of the strip or sheet to be coated; and a flexible band attached to one of the gripping devices, and serving to impart initial rotation to the drum in the act of leading the strip or sheet to said drum, and thereby charging the surface of said drum with coating material from the point at which the strip to be coated meets it.

1,313,198. PROCESS OF INSERTING OPENWORK IN FABRICS. CONCETTINA MARCHESE and ANTONIETTA MARCHESE, Brooklyn, N. Y. Filed Sept. 7, 1916. Serial No. 118,903. 10 Claims. (Cl. 2-147.)

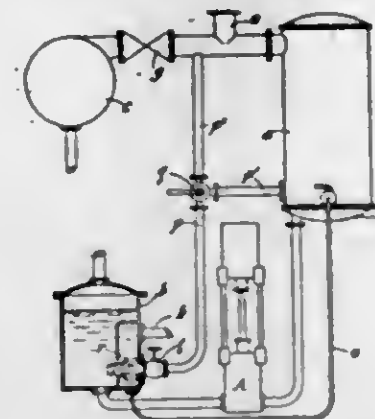
3. The method of producing open-work in drop stitch fabrics which consists in producing a run in the fabric,

encircling said run with stitching for the purpose of checking the run to preclude it from extending beyond



predetermined limits, and leaving the stitches which extend across the run intact.

1,313,199. APPARATUS FOR HEATING BOILER FEED-WATER. DONALD BARNES MORISON, Hartlepool, England. Filed July 19, 1917. Serial No. 181,602. 3 Claims. (Cl. 257-24.)



1. Feed water heating apparatus, comprising a primary steam heater receiving steam from a heating steam supply system and arranged on the discharge side of a feed pump, a secondary steam heater arranged on the suction side of said feed pump, a passage placing the heating steam supply or the primary heater in free communication with a nozzle in said secondary heater, said nozzle being placed in a submerged pipe or circulating tube and provided with multiple outlets arranged to discharge jets of steam in the direction of the axis of said pipe or tube, means for limiting the quantity of steam flowing through said nozzle to that required to heat a predetermined quantity of water flowing through the secondary heater to a desired temperature, and a loaded valve through which steam not utilized in the heaters passes from the heating system into a condenser when a predetermined pressure is reached in the primary heater.

2. Feed water heating apparatus comprising a primary steam heater receiving steam from a heating steam supply system and arranged on the discharge side of a feed pump, a secondary steam heater arranged on the suction side of said feed pump, a passage placing the heating steam supply or the primary heater in free communication with a nozzle in said secondary heater, said nozzle being placed in a submerged pipe or circulating tube and constructed in the form of a stepped cone, each step having a tooth formation with steam discharge outlets from the teeth and intermediate passages for the flow of water between the teeth, and a loaded valve through which steam not utilized in the heaters passes from the heating system into a condenser when a predetermined pressure is reached in the primary heater.

3. Feed water heating apparatus comprising a primary steam heater receiving steam from a heating steam supply system and arranged on the discharge side of a feed pump, a secondary steam heater arranged on the suction side of said feed pump, a passage placing the heating steam supply or the primary heater in free communication with a nozzle in said secondary heater, the latter

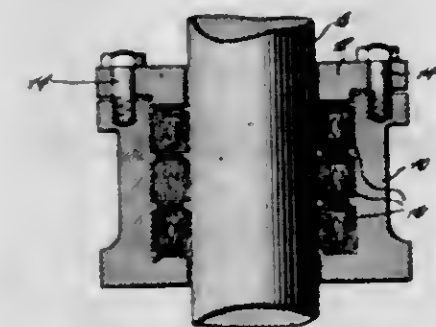
having internal compartments into one of which the water to be heated is delivered, a submerged pipe or circulating tube extending through an opening in the wall separating two of said compartments, the nozzle being placed in said pipe or tube for the purpose of circulating the heated water therethrough into the adjoining compartment, and a loaded valve through which steam not utilized in the heaters passes from the heating system into a condenser when a predetermined pressure is reached in the primary heater.

1,313,200. GARDEN-TOOL. HERBERT C. MUNDY and EDITH HARRISON, Los Angeles, Calif. Filed June 10, 1918. Serial No. 229,142. 4 Claims. (Cl. 97-42.)



1. A garden tool comprising a substantially U-shaped frame mounted horizontally; handles secured at one end to said frame near the front end thereof, said handles extending upwardly and rearwardly at an angle and terminating in hand grips; a connection from the rear of said U-shaped frame to said handles, said connection being at a point in vertical alignment with the center of the wheel axle; a wheel revolvably mounted in said U-shaped frame; and a cultivating tool mounted in the front end of said U-shaped frame to extend downwardly therefrom.

1,313,201. PACKING. GERALD F. MUSTOE, Brooklyn, N. Y. Filed Dec. 21, 1917. Serial No. 208,232. 3 Claims. (Cl. 28-5.)



1. A laterally expandable packing, comprising resilient material of substantial cross section, said packing having within said material a slit extending lengthwise of the material and having its sides in substantial contact, the greater dimension of said slit lying in the direction of gland pressure.

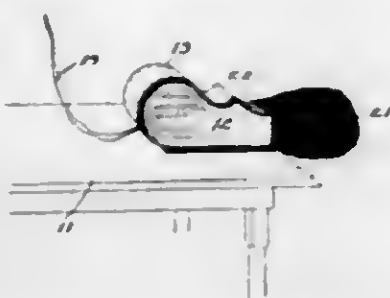
1,313,202. PACKING. GERALD F. MUSTOE, Brooklyn, N. Y. Continuation in part of application Serial No. 237,740, filed June 1, 1918. This application filed Dec. 10, 1918. Serial No. 260,044. 5 Claims. (Cl. 286-1.)



4. A packing comprising a ring having a substantial body portion adapted to contact the surface to be packed and a flange integral with the ring body and constituting an extension of the contact wall of the ring, said flange being flexible and resilient and normally exerting elastic pressure against the surface to be packed and extending

toward the pressure side of the packing with the side walls thereof exposed to the fluid pressure, and a protecting ring surrounding the flange and bearing against the body portion of the pressure ring, but not in contact with the flange thereof.

1,313,203. SECTION FLY-CATCHER. HARRY PARKMAN, Niles, Ohio. Filed Dec. 17, 1918. Serial No. 267,127. 3 Claims. (Cl. 43-1.)



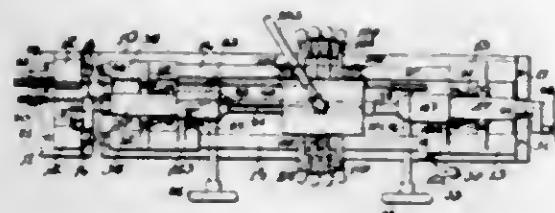
1. A fly trap of the character described comprising a casing open at one end, a fan housed within the casing adjacent its opposite end and rotating on a horizontal axis, means for rotating the fan, a partition plate disposed horizontally in the casing forwardly of the fan, and dividing the casing into upper and lower channels, respectively for the intake and exhaust of air currents induced by the fan, the upper forward portion of the said division plate being exposed for the support of a fly bait, and means adjacent the forward end of the casing to receive the flies expelled with the air through the outlet channel.

1,313,204. LUBRICATOR. WILLIAM HENRY PUTNAM, Madison, Wis., assignor to Madison-Kipp Lubricator Company, Madison, Wis., a Corporation of Wisconsin. Filed Jan. 3, 1919. Serial No. 269,448. 4 Claims. (Cl. 64-27.)



1. A lubricator comprising in combination a ported attaching member; a cylinder extending therefrom, said cylinder having a feed opening in one side thereof; a non return valve preventing return of lubricant to the cylinder from the ported member; a piston mounted in the cylinder; a piston rod extending from the piston to and through the outer end of the cylinder; a spring acting to force the piston inwardly; and a shell attached to the outer end of the piston rod and covering the outer face of the cylinder.

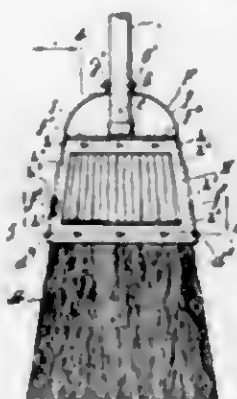
1,313,205. GLASS-BLOWING APPARATUS. HARVEY E. QUACKENBUSH and CLINTON L. QUACKENBUSH, Bloomfield, N. J., assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Filed May 12, 1916. Serial No. 97,218. 4 Claims. (Cl. 40-7.)



1. A glass blowing apparatus comprising a frame having a fixed chuck mounted thereon, a movable chuck on the frame, manually operable means for moving the chuck,

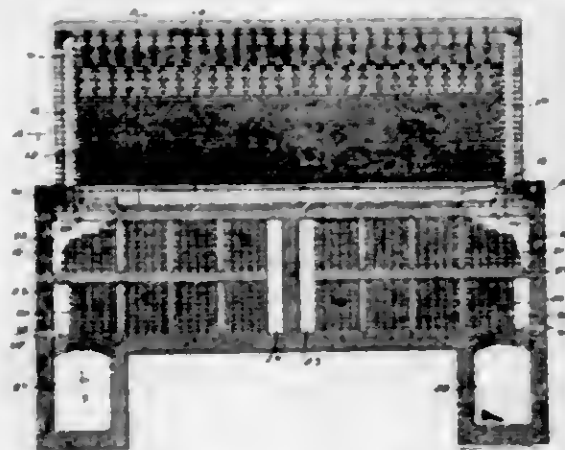
means for opening and closing the chucks in unison, means for rotating the chucks in unison, means for connecting and disconnecting the machine from a source of power, a connection between the disconnecting means and the chucks whereby the chucks cannot be opened until the disconnecting means has been operated, means for applying heat to a glass tube supported at its ends in the chuck, and means for admitting air through the fixed chuck to the glass tube.

1,313,206. BROOM. CHARLES P. REID, Louisville, Ky. Filed Apr. 2, 1919. Serial No. 286,594. 3 Claims. (Cl. 15-19.)



1. In a broom the combination with a broom-head having a stiffening bar mounted transversely therein, the ends of said bar being reduced and protruding beyond the edges of the broom-head, of a metallic holder for said broom-head comprising a frame made of sheet metal adapted to receive the upper portion of said broom-head, a jaw bladed to said frame, the said frame and jaw being provided with perforations to engage the protruding ends of said stiffening bar, and a handle secured to said frame, substantially as described.

1,313,207. REGENERATIVE COKE-OVEN. ARTHUR ROBERTS, Evanston, Ill. Filed Jan. 3, 1916. Serial No. 69,997. Renewed Nov. 8, 1918. Serial No. 281,739. 18 Claims. (Cl. 202-9.)

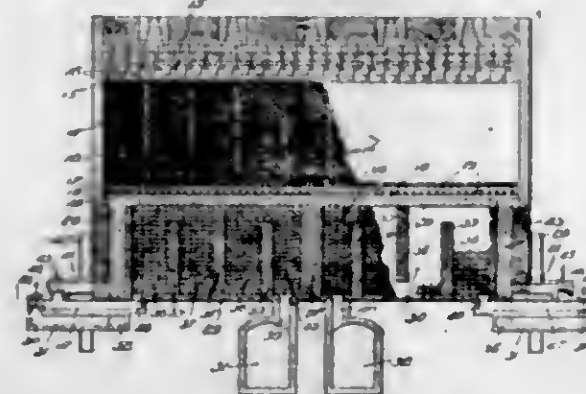


15. In a bench of coke ovens, the combination with a plurality of heating walls, of a common connection for each heating wall for the delivery of air to all portions thereof, a regenerator under each end of each heating wall, and connections from each of said regenerators to the common connection of the corresponding heating wall.

1,313,208. REGENERATIVE COKE-OVEN. ARTHUR ROBERTS, Evanston, Ill. Filed June 22, 1916. Serial No. 105,133. Renewed Nov. 8, 1918. Serial No. 261,740. 13 Claims. (Cl. 202-9.)

12. The combination with a coke oven heating wall having heating passages, and burners at one end of said

passages, there being a channel for the removal of spent gases from the other ends of all of the passages, of means for always supplying air to all of the burners in unison from either end of the heating wall, means for always removing spent gas in unison from all of the heating



passages and from either end of the heating wall, suitable regenerator mechanism for each end of the structure, and means for placing said regenerator mechanism selectively in communication with the air supply means at one end and the spent gas removing means at the other end.

1,313,209. PROCESS OF TREATING COFFEE. FLOYD W. ROBINSON, Detroit, Mich., assignor to Floyd W. Robinson Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 24, 1917. Serial No. 198,335. 12 Claims. (Cl. 99-11.)

1. In the art of treating coffee, the process which consists in placing the coffee in a condition suitable for mold growth, permitting a mold growth to attain a condition desired, and arresting further mold development.

2. In the art of treating coffee, the process which consists in placing coffee in a condition suitable for mold growth, propagating a selected mold growth to attain a desired condition, and arresting further mold development.

3. In the art of treating coffee, the process which consists in moistening coffee to soften the same, and propagating a mold on the coffee until a desired condition is attained.

4. The art of treating coffee, the process which consists in propagating molds on coffee under treatment, and subsequently drying the treated coffee to arrest further mold development.

5. In the art of treating coffee, the process which consists in moistening coffee to soften the same, propagating molds on the softened coffee, and subsequently drying the treated coffee to arrest further development of the mold.

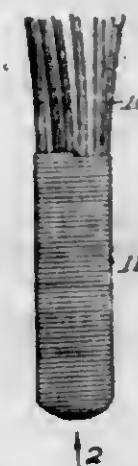
1,313,210. BUCKLE. ROBERT H. ROSA, Yarmouth, Nova Scotia, Canada, assignor of one-fourth to Arthur W. Gardner, Yarmouth, Nova Scotia, Canada. Filed Nov. 9, 1917. Serial No. 201,139. 2 Claims. (Cl. 24-170.)



2. A buckle comprising a supporting housing including a base plate, tapered side flanges formed integrally with the base plate, bars formed integrally with the upper edge of the flanges of the base plate at each end thereof and overlying the base plate, a retaining bar formed integrally with the upper edge of the flanges centrally thereof, said flanges provided adjacent one end with slots, a pivoted latch member secured to the side flanges of the supporting housing, and manipulating fingers formed integrally with one end of the latch member and arranged in the slots, said latch being provided at its opposite end with

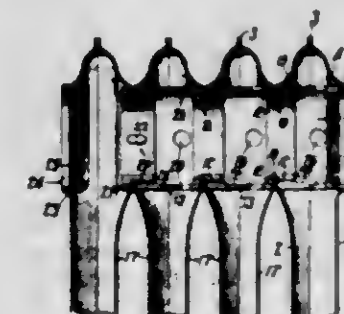
a gripping element cooperating with said retaining bar to grip a strap inserted between the latch member and retaining bar and between the bars at the ends of the flanges and said base plate.

1,313,211. HANDLE FOR KITCHEN UTENSILS. EUGENE H. REASON, Worcester, Mass., assignor to Hamblin & Russell Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1918. Serial No. 269,006. 1 Claim. (Cl. 259-144.)



As an article of manufacture, a handle for a kitchen utensil comprising a hollow wire-wound body having an end consisting of a series of convolutions of wire in contact with each other throughout and extending from the circumference of said body to a point near the center, and leaving a small opening in the center of the end for the admission and discharge of liquid to assist in the cleaning of the interior of the handle.

1,313,212. RADIATOR. FRANK J. SINGER, Detroit, Mich., assignor to American Pressweld Radiator Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 2, 1917. Serial No. 165,811. 2 Claims. (Cl. 257-140.)

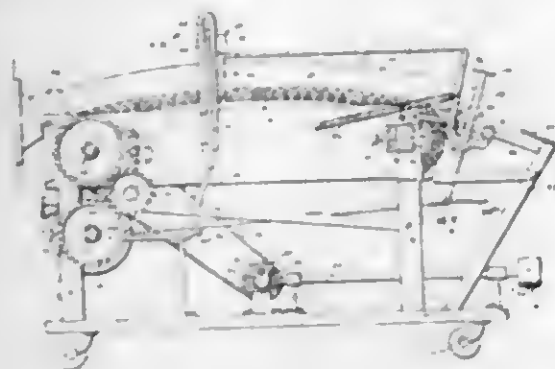


1. A sheet metal radiator including an intermediate section and an end section having perforated annular flanges lying substantially in the same plane, a combined spacing and connecting member inclosed by the intermediate section, said member being adapted to space the walls of the section apart and having an internally threaded end arranged to bear upon the inner face of the intermediate section around the perforation therein, and a nipple having an externally threaded portion projecting through the perforations in the sections and threaded into the combined spacing and connecting member, said nipple having an annular flange thereon within the end section arranged to bear upon the inner wall of said end section around the perforation therein.

1,313,213. TILE-CUTTING MACHINE. CLYDE A. THORPE, Adel, Iowa. Filed Dec. 26, 1917. Serial No. 208,848. 3 Claims. (Cl. 23-108.)

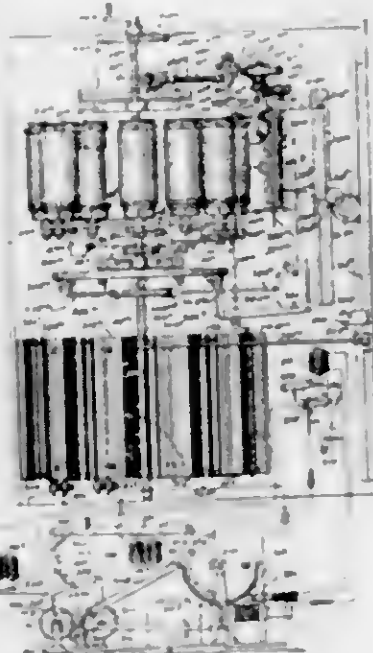
3. In a machine of the class described, an endless carrier, means for supporting the upper stretch of the

endless carrier whereby it may travel on a curved path corresponding generally to the curvature of blocks to be manufactured, means for cutting off blocks from ma-



terial traveling on said platform, said means including a cutting member, and means for actuating said cutting member whereby the blocks may be cut on radial lines.

1,313,214. COMBINED TALKING AND PICTURE-EXHIBITING MACHINE. JOHN L. BOYLE, Boston, Mass. Filed Dec. 28, 1914. Serial No. 879,280. 17 Claims. (Cl. 88-162.)



1. Apparatus of the kind described, comprising mechanism for presenting in automatic succession the contents of a plurality of talking machine records, mechanism for projecting in automatic succession a series of pictures to illustrate such records, said mechanisms being adapted for continuous repeated operation, and controlling means operated by one of said mechanisms for governing the other of said mechanisms so that it operates in timed relation to the first named mechanism.

1,313,215. GARMENT SUPPORTER. THOMAS L. CAULLEY, Wadesboro, N. C. Filed Aug. 13, 1917. Serial No. 186,032. 7 Claims. (Cl. 241-7.)



1. In a garment supporter, a resilient body having outstaring wings, adapted to be secured on a garment,

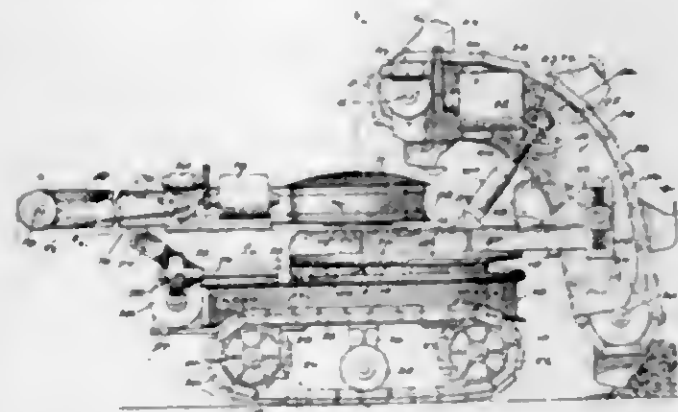
an elastic band looped through portions of the said body and having means for adjusting the same, and an engaging loop through which the said band is also extended.

1,313,216. STEERING-ROD-CONTROLLING DEVICE. PAUL H. DAKEN, Ottosen, Iowa, assignor of one-half to Christopher Ottosen, Ottosen, Iowa. Filed Oct. 22, 1918. Serial No. 259,263. 2 Claims. (Cl. 280-89.)



1. In a device of the class described: the combination of a steering wheel, an auxiliary steering device, with a flexible shaft, comprising a plurality of members pivoted together end to end, with the axes of the alternate pivots lying in planes substantially perpendicular to the planes in which the intermediate pivots lie; means for preventing buckling of said members; adjustable means at the forward end of said shaft for securing said shaft to the steering wheel; and means for securing said shaft to the auxiliary steering device.

1,313,217. LOADING-MACHINE. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 29, 1918. Serial No. 100,548. 7 Claims. (Cl. 37-24.)

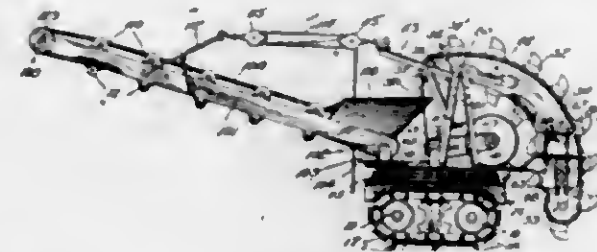


1. A loading machine comprising a carriage, a turntable rotatively mounted thereon and provided with an overhanging forwardly projecting boom support, a boom pivoted between its ends to said support and extending at its rear end over said turntable, traveling buckets carried by said boom, a take-off belt in rear of said boom, a carrier frame therefor pivoted to the turntable below the rear end of said boom and eccentric to the turning axis of the turntable and projecting rearwardly beyond said carriage, and means carried by said carriage and located below the level of the rear end of said boom to support the rear end of said carrier frame.

1,313,218. LOADING-MACHINE. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 8, 1917. Serial No. 195,213. 6 Claims. (Cl. 37-24.)

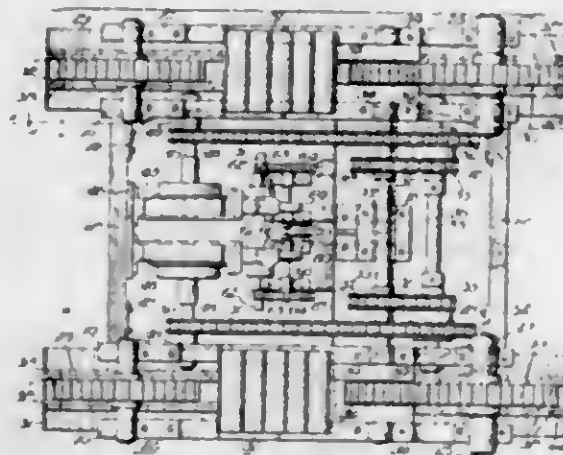
1. A loading machine comprising a carriage, a turntable supported thereon, the supporting means comprising an upper and a lower plate provided with tracks, with an annular series of rollers between the tracks, and with means to center said plates relatively to each other and the rollers, means to rotate said series of rollers comprising a motor driven shaft, with means to disconnect the motor from the shaft, a second shaft geared to said

first shaft, with clutch means to disconnect the first from the second shaft and to drive the second shaft from



the first shaft in both directions, gearing between said second shaft and the part which rotates with said series of rollers.

1,313,219. TRACTOR. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 18, 1918. Serial No. 223,058. 3 Claims. (Cl. 180-9.)



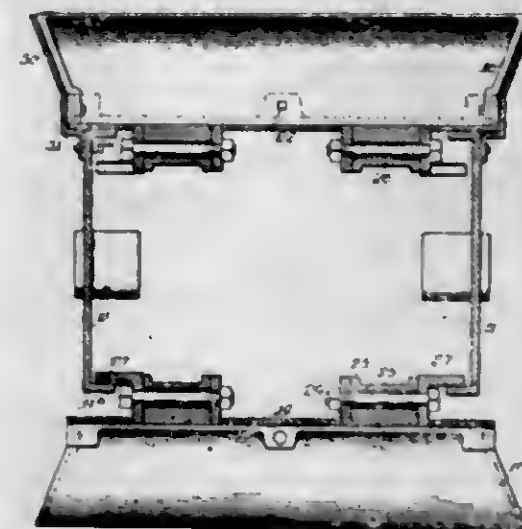
1. A creeping tractor drive comprising a rigid frame embracing a horizontal bed plate and turntable mounted thereon, front and rear pairs of toothed wheels mounted in the frame, endless creeping traction belts mounted on and driven by said wheels, power means carried by the frame and connected to the said toothed wheels to drive the same and the endless traction belts, valve mechanisms associated with said power means and a valve gear having parts co-axial with the rotative axis of the turntable on the bed plate, with means above the turntable for operating the valve gear.

2. A creeping traction drive, comprising a frame, consisting of two series of side beams and transverse cross beams with a bed plate mounted on and supported by said beams, stub shafts rotatively mounted in the side beams at the front and rear ends of the frame, toothed wheels on said shafts, endless creeping traction belts mounted on and driven by said wheels, smaller driving gears meshing with the toothed wheels, a divided shaft on which said gears are mounted, sprocket wheels carried by said divided shafts, a second shaft, sprocket wheels rotatably mounted on said second shaft, and a driving belt from sprockets on said second shaft to power shafts, power shafts, and motors driving said power shafts, substantially as set forth.

1,313,220. BUCKET STRUCTURE FOR EXCAVATING AND LIKE MACHINES. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1918. Serial No. 224,439. 1 Claim. (Cl. 37-24.)

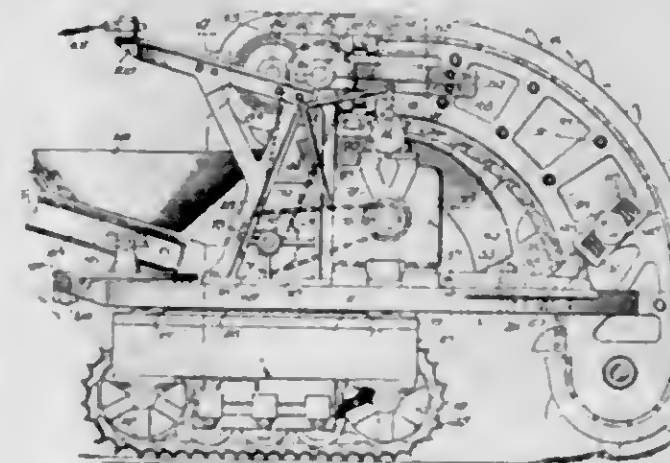
An endless bucket structure for excavating machines comprising a plurality of longitudinal solid buckets, each bucket provided on its inner side with a plurality of

pairs of spaced lugs which extend beyond the side edges of the buckets and are adapted for overlapping engagement with pairs of lugs of adjacent buckets, said lugs being made integral with the buckets, and readily detachable hinge means extending through and connecting



the overlapping portions of said lugs the ends of the buckets being adapted in the upper lap of the structure to bear upon an elevated supporting boom, and said lugs being provided with laterally extending arms to engage the boom and thereby support the lower lap of the structure.

1,313,221. BOOM AND BUCKET CONTROL FOR LOADING AND EXCAVATING MACHINES. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 22, 1918. Serial No. 230,029. 13 Claims. (Cl. 37-24.)

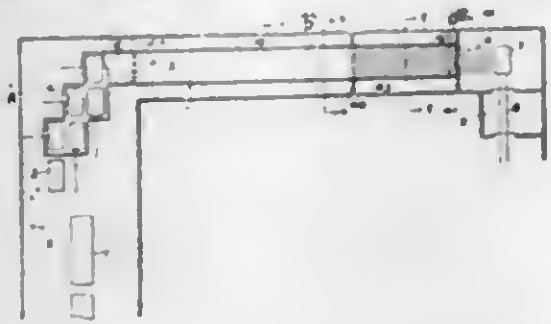


1. A machine for the purpose set forth comprising a carriage, a turntable thereon, standards rising from the turntable, a boom pivotally supported near its rear end on said standards, buffer members pivotally supported on the turntable, with means for connecting them to the boom near its forward end, an endless series of take-up devices travelable on the boom, and means to movably support said buffer members on the turntable to thereby adjustably raise and lower the front end of the boom.

1,313,222. APPARATUS FOR ANNEALING GLASS. JAMES W. CRUKSHANK, Pittsburgh, Pa., assignor to J. W. Crukshank Engineering Company, Pittsburgh, Pa. Filed Dec. 20, 1917. Serial No. 208,103. 5 Claims. (Cl. 49-47.)

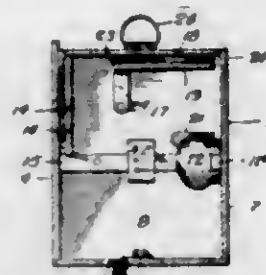
2. In combination with a plate glass annealing lehr an auxiliary cooling device comprising an enlarged cooling

chamber, continuous with and communicating with the lower runway, formed by the walls and ceiling of the building.



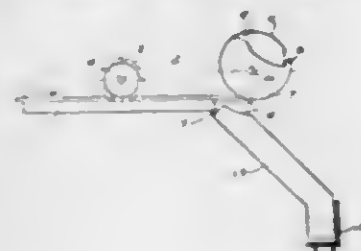
ing and cross walls in the building containing the runway, means for regulating the temperature in the chamber.

1,313,223. HATBOX FOR TRUNKS. BEN M. HAMLIN, Chicago, Ill., assignor to J. V. Meyerling Trunk Company, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1919. Serial No. 303,672. 3 Claims. (Cl. 190—3.)



3. A convertible hat box comprising an outer rectangular box having supporting cleats on its end walls, a hat ball removably secured on its back wall, and an inner box of approximately one-half the depth of the outer box and arranged to rest upon said cleats in upright position to provide two compartments, said inner box having a back hingedly secured to its bottom, latches for holding the back in upright position, and loops at the top and bottom of said inner box, said inner box being capable of being supported by said cleats in inverted position with its back folded against its bottom, to provide a single compartment of the full depth of the outer box.

1,313,224. SHINGLE-MACHINE. GOTTFRIED HULTHERR, Chicago, Ill., assignor to The Barrett Company, a Corporation of New Jersey. Filed Nov. 20, 1918. Serial No. 263,295. 7 Claims. (Cl. 164—68.)

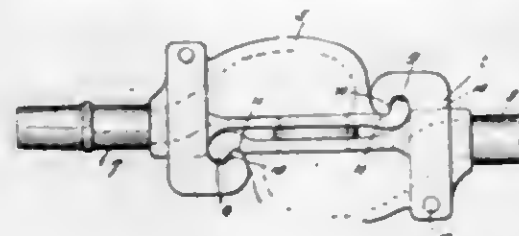


1. In a shingle cutting machine, a splitter to divide a sheet of roofing material into a plurality of strips, a severing knife to cut said strips transversely, and means to prevent shingles in transverse rows from intermingling after being severed.

1,313,225. COUPLING FOR HOSE OF AIRLINES. JAMES GOOTER, Wilmington, Del. Filed Oct. 24, 1918. Serial No. 259,467. 2 Claims. (Cl. 285—57.)

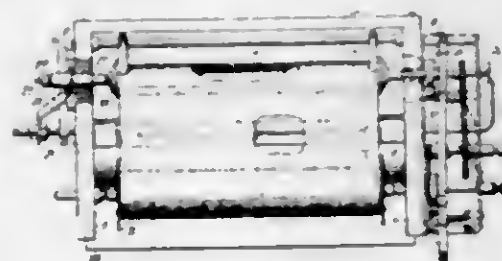
2. In a coupling for hose of air lines, heads adapted to be coupled together, each of said heads having a flange, a

clamping member having arms embracing the sides of the head, said clamping member adapted to interlock with the flange of the companion head, and relatively



weak means for connecting the ends of the arms to a head, said means being adapted to shear and release the clamping member when undue strain is applied to the heads.

1,313,226. TRACKING DEVICE FOR AUTOMATIC MUSICAL INSTRUMENTS. ADOLPH PETER GERTFAX, Chicago, Ill., assignor to M. Sebula Company, Chicago, Ill. Filed Nov. 19, 1915. Serial No. 62,265. 13 Claims. (Cl. 84—161.)



5. The combination with a music roll and means for supporting the same, of a rock shaft extended lengthwise of the music roll, means carried by said rock shaft and extended laterally from the same, said means being adapted to engage the flanges of the music roll, and means for automatically cocking said rock shaft so as to move it toward the music roll.

1,313,227. LINING FOR CENTRIFUGAL MACHINES. EDWARD D. MACKINTOSH, Brooklyn, N. Y., assignor to S. S. Hepworth Company, New York, N. Y., a Corporation of New York, and Edith M. Mackintosh, Brooklyn, N. Y. Filed July 19, 1918. Serial No. 245,756. 3 Claims. (Cl. 210—25.)

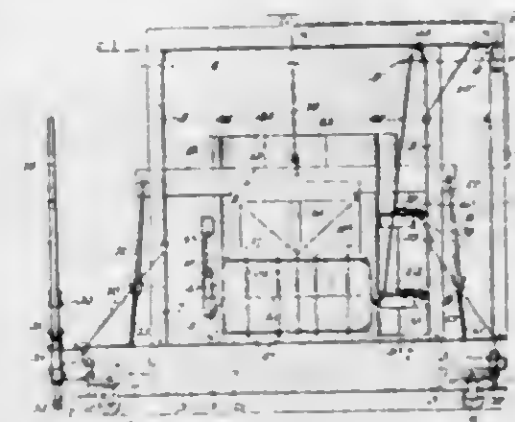


1. For use in the basket of a centrifugal machine, two foraminous linings, one lying inside of and in contact with the other and the two fastened together near an end of the inner one.

1,313,228. PRESS. SIMON B. MINNICH, Landisville, Pa., assignor to Mary C. Minnich, Landisville, Pa. Filed Feb. 8, 1918. Serial No. 213,999. 14 Claims. (Cl. 100—12.)

4. In a press, the combination of a ram, with a housing having hinged parts adapted to inclose said ram and to be

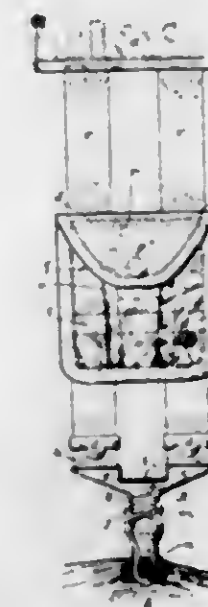
moved back therefrom so as to fully expose the surfaces of a bale covered by the closed housing.



5. In a press, a housing having separable members, in combination with a pair of arms movable in opposite directions, a second pair of arms movably connected to said arms first named, and means connected with said second pair of arms for moving them relatively to said arms first named upon the movement of the latter, whereby the members of said housing are adapted to be closed around and to be withdrawn from a bale.

6. In a press, a housing having separable members, in combination with a pair of hinged arms movable in opposite directions, and a second pair of hinged arms movable in opposite directions, whereby said members can be closed around and withdrawn from a bale.

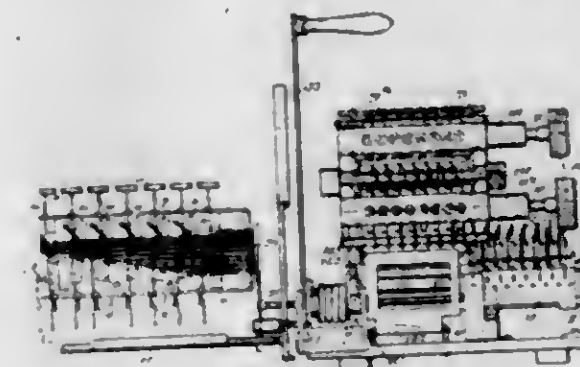
1,313,229. COMBINED SECRET POCKET AND HOSE-SUPPORTER. HARRIETT LUCINDA PETERSON, Portland, Oreg. Filed May 16, 1917. Serial No. 169,122. 1 Claim. (Cl. 241—1.)



An article of the character described comprising two pendent parallel elastic bands adapted for attaching to a supporting element fastened on the person, a hanger bar of elongated form comprising upper and lower members the ends of the upper members including horizontally aligned portions to which the lower ends of said bands are attached, means adapted to hold said lower ends against lateral movement on said upper member, a base-securing device attached at the middle of the lower member of said hanger bar, a purse, stitches fastening the upper end thereof to each of said elastic bands, and transverse loops spaced apart on the lower part of the back of the pocket, such loops encompassing said bands respectively.

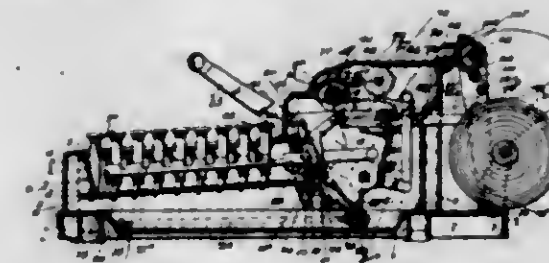
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1,313,230. ADDING AND TYPE-WRITING MACHINE. FREDRICK W. B. SCHORADT, Kittanning, Pa., assignor to Sidney L. Kaufman, Kittanning, Pa. Filed May 16, 1912. Serial No. 697,646. 8 Claims. (Cl. 235—60.)



1. A machine of the character described, including a keyboard, a carriage, a plurality of spring actuated receiving sectors upon the carriage, locking pawls for the receiving sectors, a pawl trigger which is brought successively into operative relation to the various locking pawls as the carriage is advanced, a rock shaft actuated by the keyboard and operatively connected to the carriage escapement and the pawl trigger, a second rock shaft operatively connected with the receiving sectors so as to be moved simultaneously therewith, selective stop means controlled by the keys for governing the amplitude of movement of the said rock shaft, a totalizer, and means for transferring the results from the receiving sectors to the totalizer.

1,313,231. ADDING-MACHINE. FREDRICK W. B. SCHORADT, Kittanning, Pa., assignor to Sydney L. Kaufman, Kittanning, Pa. Filed Feb. 16, 1915. Serial No. 8,545. Renewed Feb. 27, 1919. Serial No. 279,601. 24 Claims. (Cl. 235—60.)

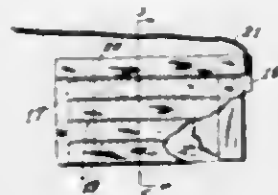


1. In an adding machine having the usual numeral wheels and shaft, and actuators for the wheels adapted to be brought into and out of engagement for adding purposes, and the usual reciprocating general operator; cam plates controlled by the general operator, hangers applied to the numeral wheel shaft and provided with seats, levers controlled by the cam plates and swung toward the seats of the hangers when the general operator reaches both limits of its movement, and means for swinging the hangers out of cooperative relation with the levers during one movement of the general operator, the numeral wheel shaft and numeral wheels being moved away from the actuators during the other movement of the general operator.

1,313,232. HAIR-WAVING MEANS AND PROCESS OF PRODUCING SAME. ERNEST O. SPECKERMAN, New York, N. Y., (now by judicial change of name Ernest Otto Fredericks,) assignor to E. Fredericks, Inc., New York, N. Y., a Corporation of New York. Filed June 30, 1917. Serial No. 177,977. 11 Claims. (Cl. 132—19.)

1. The process of forming a carrier for a hair treating substance, which consists in inclosing in an envelop of flexible material a paste formed of said hair treating substance, stitching said material within said envelop and then allowing said paste to dry.

2. The process of forming a carrier for a hair treating substance, which consists in mixing said hair treating substance with water to form a paste, forming said hair treating substance in the form of a cake and depositing the latter upon a sheet of absorbent material such as paper, folding said absorbent material about said cake so as to completely inclose the same, folding about said absorbent material a strip of cloth, then forming a line of stitches around the edges of said strip of cloth so that said cake of hair treating substance is completely inclosed, and then forming other lines of stitches through said carrier whereby said hair treating substance is prevented from moving about the interior of the envelop so formed.

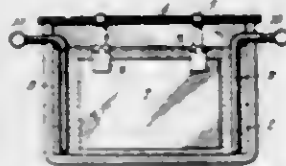


3. A device of the class described, comprising an envelop formed of textile material having located therein a hair treating substance, and a plurality of lines of stitches provided in said envelop, which pass through said hair treating substance and hold it within said envelop, said envelop when moistened being adapted to be wrapped about a tress of hair.

4. A device of the class described, comprising a casing formed of absorbent material having located therein a hair treating substance, a covering of textile material positioned about said casing, and a plurality of lines and stitches passing through said textile material and through the hair treating substance to hold the latter within said casing.

5. A device of the class described, comprising an envelop formed of textile material having located therein a hair treating substance in powdered form, said envelop being adapted to be shipped in flat form, and when moistened being adapted to be wrapped about a tress of hair so as to closely embrace the same.

1,313,233. PROCESS OF ETCHING. ERNEST GRANA, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 24, 1917. Serial No. 170,788. 9 Claims. (Cl. 41—42.)

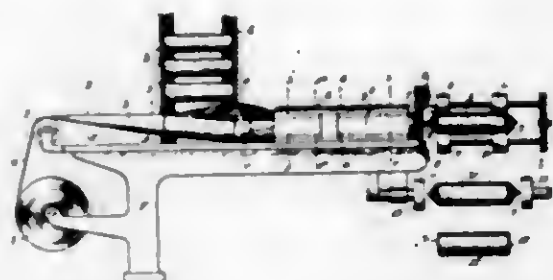


1. The process of etching a plate which comprises, holding a surface of the plate to be etched in contact with a body of etching liquid and agitating said liquid in contact with said surface by passing streams of gas through the liquid laterally of said surface.

1,313,234. WRAPPING PROCESS. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 16, 1917. Serial No. 162,520. 15 Claims. (Cl. 93—5.)

1. The process of forming wrappings about objects, which comprises assembling a sheet of flexible wrapping material with the objects to be wrapped in spaced relation

thereon, forming a tube from said material about said objects, said tube having a locked seam, twisting the portion

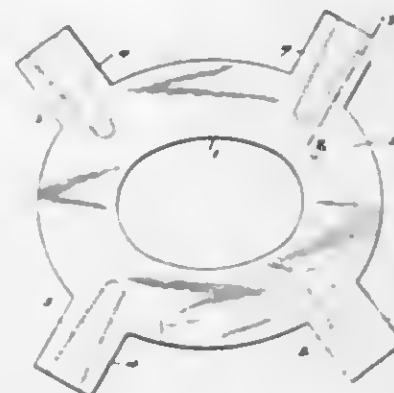


of the tube around one object relative to the tube which surrounds an adjacent object, severing the tube at the twisted portion and finally compressing a severed end.

1,313,235. PROCESS OF PRODUCING FOAM OR FROTH BATHS FOR UNGUMMING SILK AND SILK-WASTES. PETER SCHMID, Basel, Switzerland. Filed June 5, 1917. Serial No. 173,066. 2 Claims. (Cl. 8—2.)

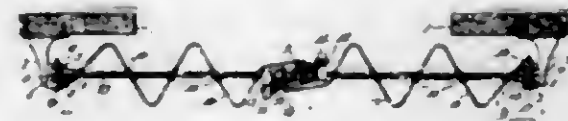
2. A process for producing a foam or froth bath for un-gumming silk and silk wastes, consisting in heating to ebullition a feeble watery solution of sodium carbonate containing only sericin as a foam producing substance.

1,313,236. COVER FOR LATRINE-SEATS. MITTIE MASON, Washington, D. C. Filed Apr. 2, 1917. Serial No. 159,290. 3 Claims. (Cl. 4—18.)



1. As a new article of manufacture, a latrine seat cover, comprising a body having a central opening, tabs integral with and extending laterally outward from the body; each tab having two thicknesses of material, and fine non-elastic wire secured in the tabs between the thicknesses of material thereof, for the purpose set forth.

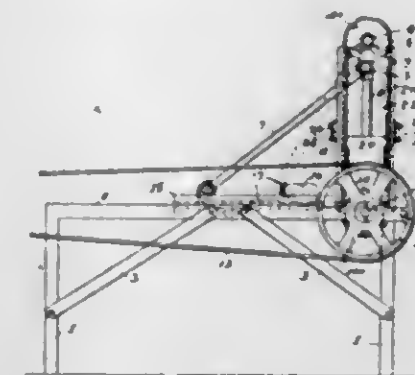
1,313,237. CURTAIN-FIXTURE. WALLACE S. HAMPSHIRE, Chicago, Ill. Filed Oct. 26, 1918. Serial No. 259,812. 8 Claims. (Cl. 136—20.)



1. A curtain fixture, comprising, in combination, bracket members for supporting the fixture at opposite ends, each comprising a pulley-block having pulleys therein, a curtain rod detachably anchored to said bracket members, curtains having predetermined portions thereof mounted

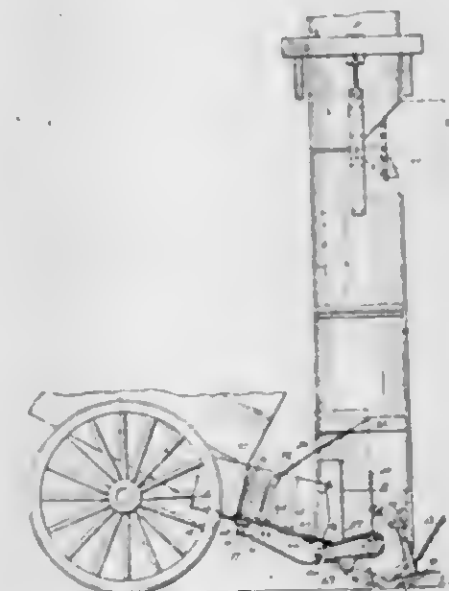
REISSUES.

14,704. POTATO-CUTTING MACHINE. BARTHOLOMEW O. CUDDEMAN, Wadena, Minn., assignor of one-third to W. H. Gehr, Wadena, Minn. Filed Dec. 17, 1918. Serial No. 260,307. Original No. 1,273,039, dated July 16, 1918. Serial No. 218,855, filed Feb. 23, 1918. 3 Claims. (Cl. 140—7.)



2. In a potato cutting machine, a frame support, a cutting device, a vertically reciprocating plunger, a chamber in which the plunger operates, spring plates constituting part of the wall of the chamber and a horizontally moving plunger adapted to feed the potatoes laterally beneath the plunger and between the spring plates, substantially as described.

14,705. ELEVATOR FOR CORN, &c. JOHN H. GILMAN, Ottawa, Ill., assignor to Klog & Hamilton Company, Ottawa, Ill., a Corporation of Illinois. Filed June 30, 1919. Serial No. 307,828. Original application filed Dec. 17, 1914. Serial No. 877,646. Patent No. 1,281,342, dated Oct. 15, 1918. Divided and application filed June 29, 1917. Serial No. 177,778. Original No. 1,303,552, dated May 13, 1919. 2 Claims. (Cl. 193—48.)

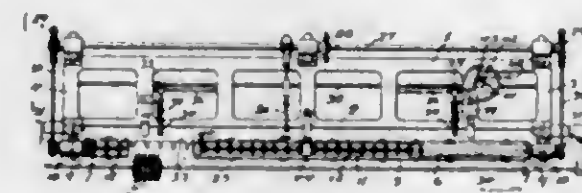


1. In an elevator for corn, etc., the combination with a narrow elevator-casing, of an endless conveyer running therein, a hopper open at its top and two ends, having its outer end wider than the casing so as to span and embrace the rear end of a wagon-bed being dumped, and its inner end narrowed to substantially the width of the conveyer pivoted to the casing so as to be folded with its bottom parallel to and in contact with the elevator-casing or extended substantially horizontally therefrom at varying angles to receive the corn poured into its outer end from the wagon-bed being dumped, and having a rectangu-

to slide in opposite directions upon said rod while a portion extending outwardly from the inner edge of each curtain is disconnected from said rod, brackets rigidly mounted upon said rod at the right and left hand respectively of its middle, one extending forwardly and the other rearwardly, a pulley on the extended end of each of said brackets, cords for connecting said pulleys respectively with the end pulley blocks farthest therefrom, one of said cords being attached to the inner edge of one and the other with the inner edge of the other of said curtains to enable said curtains to be moved in opposite directions with their inner edges overlapping each other when closed.

7. The combination with a curtain rod and means for supporting the same, of curtains having a row of eyelets in their upper edges, a supporting rod threaded through said eyelets, the curtains being arranged in folds in zig-zag form upon said rod, adjusting cords for actuating said curtains upon the rod and flexible means for holding said eyelets at predetermined distances from each other when the curtains are closed.

1,313,238. SAW-GUMMER. CLYDE D. HELM, Fort Worth, Tex., assignor to Oil Mill Machinery & Manufacturing Co., Fort Worth, Tex., a Corporation of Texas. Filed Sept. 24, 1918. Serial No. 255,441. 6 Claims. (Cl. 76—40.)



2. A saw gummer and sharpener comprising a frame, bearings mounted on said frame, a gummer casing having sleeves journaled in said bearings, a driving shaft journaled in said sleeves, gummers provided with floating shafts journaled in said casing, gearing operatively connecting said floating shafts with said driving shaft, means for rocking said casing to throw said gummers in and out of engagement with saws to be gummed, and means for shifting said frame.

1,313,239. WINDOW CONSTRUCTION. GEORGE J. HEYR, Hatboro, Pa. Filed Mar. 21, 1917. Serial No. 156,379. Renewed Jan. 18, 1919. Serial No. 271,886. 2 Claims. (Cl. 20—12.)



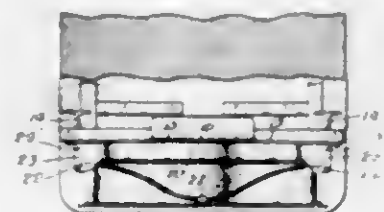
2. In a window construction, a frame having a pair of sashes slidably mounted therein, one side of said frame including parallel spaced inner and outer walls, one portion of said inner wall being movable horizontally, spring means interposed between the outer wall and the movable portion to normally hold the same in operative position, a vertically disposed rock shaft mounted in bearings on the outer wall, arms on the extremities of said shaft having their outer ends hingedly connected with the movable portion, an operating lever projecting laterally from the rock shaft through a slot in one side of the wall of said side of the frame, and means to lock the projecting outer ends of the lever in various adjusted positions.

lar bottom portion extending from the outer to the inner end of the hopper, having teeth extending across its upper face and adapted to be reciprocated between the stationary converging sides, spring connections between the sides of the elevator casing and the hopper to hold the latter in contact with the bottom of the end of the wagon-bed, and means for driving the conveyor and reciprocating the bottom portion of the hopper, for the purpose described.

2. In an elevator for corn, etc., the combination with a narrow elevator casing, of an endless conveyor running therein, a hopper open at its top and two ends, having its outer end wider than the casing so as to span and embrace the rear end of a wagon bed being dumped, and its inner end narrowed to substantially the width of the conveyor pivoted to the casing so as to be folded with its bottom parallel to and in contact with the elevator casing or extended substantially horizontally therefrom at varying angles to receive the corn poured into its outer end from the wagon-bed being dumped, the sides of the hopper consisting of the outer widely separated parallel portions cooperating with the sides of the end of the wagon-bed, the inner, closer parallel portions cooperating with the sides of the elevator casing, and the converging portions connecting said outer and inner parallel portions, said hopper having a rectangular bottom portion extending from the outer to the inner end of the hopper, having teeth extended across its upper face and adapted to be reciprocated between the stationary converging sides,

spring connections between the sides of the elevator casing and the hopper to hold the latter in contact with the bottom of the end of the wagon-bed, and means for driving the conveyor and reciprocating the bottom portion of the hopper, for the purpose described.

14,706. DIAPHRAGM BUFFING MECHANISM. EDWARD E. WHITMORE, Chicago, Ill., assigner to The Curtain Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 12, 1918. Serial No. 266,500. Original No. 1,231,680, dated July 3, 1917, Serial No. 105,111, filed June 22, 1916. 5 Claims. (Cl. 105-14.)



1. In a diaphragm buffing mechanism, the combination with the stationary and movable members of the diaphragm, of a bow spring attached in its medial portion to one of the members and at its ends to the other of said members, and links interposed in the connection at the spring ends.

TRADE-MARKS

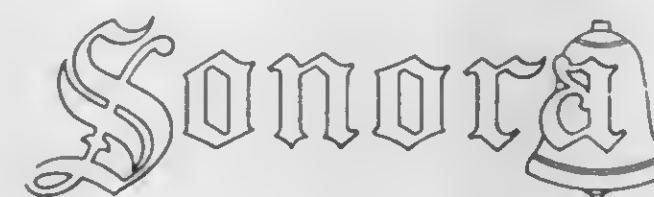
OFFICIAL GAZETTE, AUGUST 12, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 114,588. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) SONORA PHONOGRAPH CORPORATION, New York, N. Y. Filed Dec. 10, 1918.



Particular description of goods.—Talking Machines, Phonographs, Gramophones, Graphophones, Music Boxes, Phonograph-Needles, Phonograph Sound Boxes, and Tone Arms for Phonographs.

Claim used since on or about May, 1908.

TRADE-MARK REGISTRATIONS GRANTED

AUGUST 12, 1919.

126,231. PATCHES FOR REPAIRING INNER TUBES
AND TIRE-CASINGS AND OTHER RUBBER
GOODS. PHILIPP HOWER, Peoria, Ill.
Filed May 31, 1918. Serial No. 111,268. PUBLISHED
DECEMBER 17, 1918.

126,232. CERTAIN NAMED FOODS. PRICE-BOOKER
MANUFACTURING CO., Houston, Tex.
Filed August 27, 1918. Serial No. 112,896. PUBLISHED
APRIL 29, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

16,825. WALL-FINISHES, PLASTIC COMPOUNDS,
AND CEMENT. J. B. KING & CO., New York, N. Y.;
J. B. King & Co., a Corporation, assignee.
Registered July 16, 1889. Renewed July 16, 1919.

17,194. GLOVES. BENJAMIN ALTMAN, New York, N. Y.;
B. Altman & Co., assignee.
Registered November 19, 1889. Renewed November 19,
1919.

TRADE-MARK REGISTRATIONS CANCELED.

65,273. SUITS FOR BOYS AND CHILDREN. IVAN
FRANK & CO., New York, N. Y.
Registered September 17, 1907. Canceled June 2, 1919.

LABELS

REGISTERED AUGUST 12, 1919.

- 21,431.—Title: "SCOUT." (For Coffee.) HOWARD & CASEY CO., Mount Vernon, Ill. Filed June 4, 1919.
- 21,432.—Title: "HEDGES FANCY BLEND COFFEE." (For Coffee.) HEDGES-BUCK COMPANY, Stockton, Calif. Filed September 24, 1918.
- 21,433.—Title: "VICTORY PUNCH." (For Victory Punch Tablets.) STEPHEN M. ROYE, New York, N. Y., assignor to Ka-Zu Beverage Co. Inc., a Corporation of New York. Filed April 28, 1919.
- 21,434.—Title: "84." (For Cigars and Tobacco.) HUDSON COUNTY TOBACCO CO., Jersey City, N. J. Filed April 18, 1919.
- 21,435.—Title: "LA PREFERITA." (For Musical-Instrument Strings Made of Gut.) E. & O. MARI, Winfield Junction, N. Y. Filed January 22, 1919.
- 21,436.—Title: "BLOOM OF YOUTH." (For a Facial Liquid Rouge.) MARIO INCARBONE, New York, N. Y. Filed April 10, 1919.
- 21,437.—Title: "IROQUOIS INDIAN HEAD." (For a Non-Intoxicating Beverage.) INDIAN HEAD PRODUCTS CORPORATION, Buffalo, N. Y. Filed June 5, 1919.
- 21,438.—Title: "IROQUOIS INDIAN HEAD." (For a Non-Intoxicating Beverage.) IROQUOIS BEVERAGE CO., Buffalo, N. Y. Filed May 31, 1919.
- 21,439.—Title: "PHOTO FLOWERS." (For Folders Containing Photographs of Flowers.) CHARLES W. JOHNSON, Springfield, Mass. Filed May 28, 1919.
- 21,440.—Title: "HAIR-ZO." (For Hair-Tonic.) W. H. KELLY, St. Paul, Minn. Filed March 4, 1919.
- 21,441.—Title: "HOLD TIGHT." (For Hair-Wavers.) ADOLPH KLAR, New York, N. Y. Filed May 10, 1919.
- 21,442.—Title: "KOLE'S SCOTCH LOAF." (For Bread.) GEORGE O. KOLE, Hartford, Conn. Filed June 21, 1919.
- 21,443.—Title: "LA LIBERTA." (For Tomato Paste with Basilico.) LA SIERRA HEIGHTS CANNING CO., Los Angeles, Calif. Filed April 21, 1919.
- 21,444.—Title: "MILITARY BIPLANE." (For Toy Airplanes, Model Airplanes, and Scale Models of Airplanes.) LAWRENCE AIRPLANE MODEL AND SUPPLY COMPANY, Chicago, Ill. Filed May 12, 1919.
- 21,445.—Title: "LORTIE'S LAUNDRY MARVEL THE WONDER WASHING POWDER." (For a Washing-Powder.) C. & H. LORTIE, Brooklyn, N. Y. Filed April 29, 1919.
- 21,446.—Title: "KOOLMOTOR." (For Lubricating-Oil.) THE LUBRIC OIL COMPANY, Cleveland, Ohio. Filed June 2, 1919.
- 21,447.—Title: "SUPERO." (For Lubricating-Oil.) THE LUBRIC OIL COMPANY, Cleveland, Ohio. Filed June 2, 1919.
- 21,448.—Title: "MACDONALD'S EAST INDIES TEA." (For Tea.) MACDONALD & CO., San Francisco, Calif. Filed June 4, 1919.
- 21,449.—Title: "VICTOR." (For Non-Intoxicating Beverages.) FRANK A. MAIDBA, Jeannette, Pa. Filed June 21, 1919.
- 21,450.—Title: "PIAVE BRAND MACARONI." (For Macaroni.) MASSARO MACARONI COMPANY, Fulton, N. Y. Filed June 14, 1919.
- 21,451.—Title: "KE-O-KA NERVE AND BLOOD REMEDY." (For a Nerve and Blood Remedy.) EDGAR MARCUS LEACH, Columbus, Ohio. Filed February 10, 1919.
- 21,452.—Title: "JOSEPH MAJOR." (For a Preparation for Spanish Influenza, La Grippe, Lungs, and Blood.) JOSEPH MAJOR, Detroit, Mich. Filed May 16, 1919.
- 21,453.—Title: "FAIRIE DREAM." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 30, 1919.
- 21,454.—Title: "HARD CENTER CHOCOLATES." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 25, 1919.
- 21,455.—Title: "NATIONAL PRIDE." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 28, 1919.
- 21,456.—Title: "TALKED OF PACKAGE." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed July 3, 1919.
- 21,457.—Title: "BRAZIL NUTS IN CREAM." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 21, 1919.
- 21,458.—Title: "COLONIAL CHOCOLATES." (For Chocolate Candy.) MILWAUKEE PAPER BOX COMPANY, Milwaukee, Wis. Filed April 19, 1919.
- 21,459.—Title: "MOON SHINE MAGIC CLEANER." (For Cleaning Fluid.) CHARLES E. MURPHY, Chillicothe, Mo. Filed April 21, 1919.
- 21,460.—Title: "NACO." (For a Preparation for Whitening or Bleaching Clothes and other Articles of Fabric, &c.) NACO PRODUCTS CO., New York, N. Y. Filed July 2, 1919.
- 21,461.—Title: "OHIO CLUB." (For Ginger-Ale.) THE OHIO BEVERAGE COMPANY, Columbus, Ohio. Filed May 31, 1919.
- 21,462.—Title: "OWL CLIPS." (For Paper-Clips.) OWL SUPPLY COMPANY, Boston, Mass. Filed July 8, 1919.
- 21,463.—Title: "OXNARD." (For Lemons.) OXNARD CITRUS ASS'N, Hueneme, Calif. Filed Apr. 21, 1919.
- 21,464.—Title: "PASCO." (For Greases.) PAS-AMERICA SUPPLY COMPANY, INC., New York, N. Y. Filed June 10, 1919.
- 21,465.—Title: "PARASILK." (For Barber Head-Rest Paper.) THE PAPER SPECIALTY CO., Wausau, Wis. Filed April 21, 1919.
- 21,466.—Title: "LA TA'O." (For Hair Remedy.) NINA FRANCES PEPTA, San Francisco, Calif. Filed May 3, 1919.
- 21,467.—Title: "PLANTERS PENNANT PEANUTS." (For Peanuts.) PLANTERS NUT & CHOCOLATE COMPANY, Wilkes-Barre, Pa. Filed May 1, 1919.
- 21,468.—Title: "PLANTERS PENNANT PEANUTS." (For Peanuts.) PLANTERS NUT & CHOCOLATE COMPANY, Wilkes-Barre, Pa. Filed May 1, 1919.
- 21,469.—Title: "LUSCIOUS." (For Oranges.) PASADENA ORANGE GROWERS' ASSOCIATION, Pasadena, Calif. Filed June 4, 1919.
- 21,470.—Title: "POLLY-ANA." (For Bread.) PIONEER PAPER COMPANY, Los Angeles, Calif. Filed June 24, 1919.
- 21,471.—Title: "GUAR-N-TEED." (For Bread.) PIONEER PAPER COMPANY, Los Angeles, Calif. Filed June 24, 1919.

- 21,472.—Title: "SUNSHINE SPECIAL." (For Oranges.) BERT G. ROOKE, Lindsay, Calif. Filed July 1, 1919.
- 21,473.—Title: "SUNSHINE SPECIAL." (For Fresh Grapes.) BERT G. ROOKE, Lindsay, Calif. Filed July 1, 1919.
- 21,474.—Title: "MONOGRAM No. 3." (For Cigars.) MAX SACHERM, New York, N. Y. Filed May 16, 1919.
- 21,475.—Title: "EVERITE BRAND." (For Valencia Oranges.) SANTIAGO ORANGE GROWERS ASSOCIATION, Orange, Calif. Filed May 19, 1919.
- 21,476.—Title: "EPIPURE." (For Valencia Oranges.) SANTIAGO ORANGE GROWERS ASS'N, Orange, Calif. Filed May 19, 1919.
- 21,477.—Title: "STEELE BRAND." (For Canned Sardines.) STEELE PACKING CO., San Diego, Calif. Filed June 4, 1919.
- 21,478.—Title: "MILADY." (For Human-Hair Nets.) N. SELIGMAN MERCHANDISE CO., INC., New York, N. Y. Filed April 22, 1919.
- 21,479.—Title: "STEELE BRAND." (For Canned Spinach.) STEELE PACKING CO., San Diego, Calif. Filed June 4, 1919.
- 21,480.—Title: "KENILWORTH." (For Canned Sardines.) STEELE PACKING CO., San Diego, Calif. Filed June 4, 1919.
- 21,481.—Title: "SUNKIST." (For Candy.) SUNKIST CANDY CO., Los Angeles, Calif. Filed May 2, 1919.
- 21,482.—Title: "OX-WA." (For Charged Table-Water.) ABRAHAM D. SHEPARD, Chicago, Ill. Filed April 28, 1919.
- 21,483.—Title: "VELLNER'S ALBINOL." (For Soap.) EUGENE VELLNER, Philadelphia, Pa. Filed April 18, 1919.
- 21,484.—Title: "DURO-LAC." (For a Polishing and Cleansing Compound for Automobiles, Furniture, and All Varnished or Enameled Surfaces Requiring a High Polish.) FRANK B. WEBSTER, Los Angeles, Calif. Filed June 17, 1919.
- 21,485.—Title: "WHITTIER BRAND." (For Oranges.) WHITTIER CITRUS ASSOCIATION, Whittier, Calif. Filed May 19, 1919.
- 21,486.—Title: "RUB-KNOT." (For a Powdered Washing Compound.) GEORGE C. WRIGHT, Keene, N. H. Filed May 22, 1919.
- 21,487.—Title: "YUKON'S BEST." (For Pancake-Flour.) YUKON MILL & GRAIN CO., Oklahoma, Okla. Filed June 4, 1919.

PRINTS

REGISTERED AUGUST 12, 1919.

- 5,150.—Title: "THE CHIEF NUT." (For Nut and Fruit Bars.) THE NUT HOUSE INCORPORATED, Seattle, Wash. Filed March 10, 1919.
- 5,151.—Title: "BAR OF BARS." (For Nut and Fruit Bars.) THE NUT HOUSE INCORPORATED, Seattle, Wash. Filed March 10, 1919.
- 5,152.—Title: "BLACK CAT." (For Furniture.) CLIFFORD S. REUTER, New York, N. Y. Filed April 8, 1919.
- 5,153.—Title: "BALL BEARINGS." (For Ball-Bearings.) ROBERT F. ROGERSON, New York, N. Y., assignor, by mesne assignments, to Gales P. Moore, Bristol, Conn. Filed February 5, 1919.
- 5,154.—Title: "REHHERSET." (For Paint and Varnish Brushes.) RUBBER & CELLULOID PRODUCTS COMPANY, Newark, N. J. Filed May 23, 1919.
- 5,155.—Title: "THE THRIFT FAMILY." (For Clothing.) THE SAMUEL STOKES, INC., New York, N. Y. Filed June 26, 1919.
- 5,156.—Title: "TOMMY THRIFT." (For Clothing.) THE SAMUEL STOKES, INC., New York, N. Y. Filed June 26, 1919.
- 5,157.—Title: "VERA THRIFT." (For Clothing.) THE SAMUEL STOKES, INC., New York, N. Y. Filed June 26, 1919.
- 5,158.—Title: "MR THRIFT." (For Clothing.) THE SAMUEL STOKES, INC., New York, N. Y. Filed June 26, 1919.
- 5,159.—Title: "MRS THRIFT." (For Clothing.) THE SAMUEL STOKES, INC., New York, N. Y. Filed June 26, 1919.
- 5,160.—Title: "THE CHARM OF YOUTHFUL COLORS." (For Dye-Soap.) SENSAM CHEMICAL COMPANY, Chicago, Ill. Filed June 9, 1919.
- 5,161.—Title: "TUCO UNION SUITS." (For Union-Suits.) TROY UNDERWEAR CO., INC., Troy, N. Y. Filed June 17, 1919.
- 5,162.—Title: "ALWAYS WRITES ALL WAYS." (For Pencils and Fountain-Pens.) W. A. SHEPHERD PEN COMPANY, Fort Madison, Iowa; New York, N. Y.; Chicago, Ill.; Kansas City, Mo., and San Francisco, Calif. Filed May 8, 1919.
- 5,163.—Title: "ROPECONOMY." (For Ropes and Cordage.) WHITLOCK CORDAGE CO., New York, N. Y. Filed June 7, 1919.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

PARKER V. CRAFT AND REYNOLDS.

Decided April 24, 1918.

1. INTERFERENCE—INFORMALITY IN DECLARATION.

Where an interference was declared between a patent and an application, the issue being the claims of the application, which were slightly broader than the claims of the patent in that they omitted a certain limitation, but were not patentably different therefrom, *Held* that there was no informality in the declaration of the interference.

2. SAME—RIGHT TO MAKE CLAIMS.

Where one of the counts of the issue in interference called for a soft-iron pole-piece and a hardened-steel bar welded together end to end and the specification of the application did not state that the parts were so welded and the construction could not be inferred from the drawing, *Held* that the applicant could not make the claim.

3. SAME—PATENTABILITY—WELDED POLE-PIECE.

A claim for a permanently-magnetized steel bar and a soft-iron pole-piece welded thereto *Held* not patentable in view of the prior art.

APPEAL from Examiners-in-Chief.

TELEPHONE-RECEIVER.

Mr. Frederick R. Parker *pro se*.

Mr. De Witt C. Tanner and Mr. John G. Roberts for Craft and Reynolds.

Newton, Commissioner.

This is an appeal from a decision of the Examiners-in-Chief affirming the action of the Law Examiner dissolving this interference on the grounds, first, informality in the declaration; second, holding that count 1 is unpatentable and that Parker has no right to make count 2.

The counts are as follows:

1. A permanently magnetized steel bar and a soft iron pole-piece welded thereto.
2. A soft iron pole-piece and a hardened steel bar welded together end to end.

Craft and Reynolds, who are patentees, have no claims exactly in the words of the counts. Their claims 1 and 2 are as follows:

1. In a magnet system for telephone receivers, a permanently magnetized steel bar and a soft iron pole-piece welded thereto.
2. In a magnet system for telephone receivers, a soft iron pole-piece and a hardened steel bar welded together end to end.

The informality, if there is any, consists in declaring an interference between claims that are not precisely the same. The introductory clause—"In a magnet system for telephone receivers"—is not in

Parker's claims, and it would be new matter if it was inserted therein.

There has been considerable discussion in this case as to whether or not an introductory clause changes the real meaning of the claim. Without going into an academic discussion of this point it may be remarked that the claims involved are only word pictures of the mechanisms they represent. They can never be the same thing as the actual mechanisms. We have not enough words in the language to depict the exact shades of meaning that would exactly represent the mechanism for which a word claim stands; but every word gives a shade of its own to the word picture, and while an introductory clause may not import any definite element into a claim it is only common sense to read into the claim the shade of meaning that is conveyed by the introductory clause. I accept, therefore, the clause "In a magnet system for telephone receivers" to mean just what it says, and give it weight in considering the counts. I do not read into that clause any limitation that will make Craft and Reynolds's claims patentably different from Parker's claims; but it is not necessary that the claims be identically the same to authorize an interference. Indeed, before the practice announced in *Hammond v. Hart* (83 O. G. 743) was instituted it was the custom to declare interferences between narrow and broad claims, and there was no more confusion engendered that takes place under the *Hammond v. Hart* practice. Under the old practice, however, it was very essential that one count of the issue should be as broad as the broadest patentable claim of either application. So long as this rule was observed there was nothing to prevent a proper determination of the question of priority. In the present case the counts which are Parker's claims are broader than Craft and Reynolds's claims. Under all the circumstances, therefore, of the close approximation of the parties' claims to each other, there being no patentable difference between them, together with the fact that the counts are as broad as the claims of either party, there should be no reason why any relevant testimony of either party should not come under the broad issues and properly try out the question of priority, and the motion to dissolve on this ground should be overruled.

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Count 1 calls for the permanently-magnetized steel bar and the soft-iron pole-piece welded thereto. This does not mean electrically welded. In fact, this claim as it originally appeared in Craft and Reynolds's application had "electrically welded," and "electrically" was canceled. Parker's specification does not emphasize the welding. Indeed, it only states—

If it is desired that the magnets shall be provided with soft iron pole-pieces, this may be done by casting, welding or forging the soft iron on to the ends of the magnets, etc.

In other words, Parker's original specification was indifferent as to whether the pole-pieces were cast together, welded, or forged.

The references Bunnell, No. 226,485, and Stevens, No. 735,168, show every feature of count 1 except that the soft pole-pieces are not welded to the steel bars; but to weld pole-pieces to bars in order to interrupt the magnetic flux as little as possible, as well as to keep the pole-pieces from loosening under long and continuous use, is old, as shown, for example, in the Fort Wayne "MPL" generator, of record, and this being true I can see no invention in welding the soft pole-piece of Bunnell or Stevens to the permanently-magnetized steel bar of those patents, and count 1 was properly held unpatentable.

As to Parker's right to make count 2, there is nothing in his specification stating that the pole-pieces are "welded together end to end;" nor can I infer this construction from the drawings. It is true Parker's original specification (pp. 6 and 7) sets forth—

If it is desired that the magnets shall be provided with soft-iron pole-pieces, this may be done by casting, welding or forging the soft iron onto the ends of the magnets,

and the Law Examiner has held, in effect, that under this construction Parker has a right to show a steel-bar magnet with the soft-iron core attached to the end in a conventional way, and the Examiners-in-Chief have held that Stevens was the only reference showing the steel-bar magnet having soft-iron cores attached thereto, and the soft cores are not attached end to end with the steel bars. Thereupon applicant has filed a number of patents showing that the soft-iron cores are attached end to end with the steel magnets (see, for example, Bunnell, No. 226,485; White, No. 683,631; Thomson, No. 822,323, etc.) and contends that this is the conventional way of attaching soft-iron cores to steel-bar magnets. It is unsafe and difficult to say just what is a "conventional" way of doing a thing. The entire patented art shows it is as common to do it one way as another, and this being true applicant cannot now be allowed a claim the essence of which is the end-to-end arrangement when he never hinted at such arrangement in his original specification. Craft and Reynolds in their brief have pointed out the several constructions which might fall under Parker's original specification and not have the soft-iron core and magnet-bar end to end. It is held, therefore, that Parker has no right to make this claim, and the decision of the Examiners-in-Chief dissolving the interference on the ground that count 1 is unpatentable and count 2 cannot be made by Parker

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is affirmed. Their holding that there has been such irregularity as to preclude a proper determination of the question of priority is reversed.

BONINE v. BLISS.

Decided March 30, 1918.

1. INTERFERENCE—INTERFERENCE IN FACT.

An interference was properly declared between the claim of a patent which specified a "manually operated switch" and the claim of an application for a similar apparatus in which a similar part was referred to by the broader term "switch" where the result of closing the switch was the same in each case—namely, to connect a dynamo-electric machine to a battery, so that it might operate as a motor, and to open an automatic switch.

2. SAME—PRIORITY—FIRST TO CONCEIVE AND REDUCE TO PRACTICE.

Where Bonine conceived the invention not earlier than June, 1910, and filed his application July 7, 1911, and Bliss conceived in April, 1910, and filed his application June 25, 1910, Bliss is entitled to an award of priority as being the first to conceive and the first to reduce the invention to practice.

APPEAL from Examiners-in-Chief.

ELECTRIC-LIGHTING AND ENGINE-STARTING SYSTEM.

Messrs. Fraley & Paul and Messrs. Sturtevant & Mason for Bonine.

Mr. Raymond H. Van Nest for Bliss.

WHITEHEAD, First Assistant Commissioner:

This is an appeal by Bonine from the decision of the Examiners-in-Chief affirming the decision of the Examiner of Interferences awarding priority of invention to Bliss.

The invention in issue relates to an electric lighting and engine-starting system which comprises an engine, a dynamo-electric machine connected thereto, a secondary battery, an automatic switch to control the charge of the battery when the electric machine is driven as a generator, and a switch for closing the circuit when the electric machine is to be operated as a motor for starting the engine.

The issue of the interference reads as follows:

The combination of an engine, an electric machine connected thereto, a secondary battery, an automatic switch for controlling the charge of the battery by the electric machine, and a switch for cutting out the automatic switch and connecting the battery to the electric machine, whereby the same may be operated as a motor for starting the engine.

This issue corresponds to claim 11 of Bliss's application and differs from claim 1 of the Bonine patent in that in the latter the switch which cuts out the automatic switch and connects the battery to the electric machine is defined as "manually operated." Bliss could not base a claim limited to a manually-operated switch upon the disclosure of his application, because the corresponding switch therein is closed when a circuit through the lifting-coil is completed by the depression of a push-button and opens automatically.

The manually-operated switch of the Bonine patent when thrown to the position in which the battery is connected with the electric machine to run it as a motor opens the circuit, which is opened otherwise by the automatic switch. The closing of the starting-switch of the Bliss application merely

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opens the circuit of the lifting-coil of the automatic switch, and if the automatic switch system was accidentally moved to closed position the circuit in which it is inclosed would be closed. The moving of the automatic switch of the Bonine device to closed position would not close the circuit, since this circuit is also opened at the starting-switch.

Bonine moved to dissolve the interference on the ground that it had been improperly declared in that his claim included a manually-operated switch, whereas the issue merely specifies a switch, and on the ground that Bliss could not make the claim because in his system the closing of the starting-switch does not "cut out" the automatic switch. This motion was denied by the Law Examiner.

Both contentions have been insisted upon, and it is urged that certain correspondence between Bliss and the officials of the Baldwin Locomotive Works with reference to the installation of a starting system under Bliss's direction in 1906 shows that the Bliss system was defective and that the manually-operated switch and the opening of the circuit to the automatic switch are of the essence of the invention. It is also urged that Bliss be required to limit his claim by describing the starting-switch as "partly automatic" and the action not as "cutting out" the automatic switch, but as—

opening the auxiliary circuit of the automatic switch while maintaining its terminals in circuit with the main switch—

so that neither Bliss nor Bonine will have a claim that dominates the other.

The interference was, as pointed out by the Examiner of Interferences, declared upon the theory that claim 11 of the Bliss application was for substantially the same invention as claim 1 of the Bonine patent—that is, that the operation of the switch shown in the Bliss application is substantially the same as that of the starting-switch of the Bonine patent—and that Bliss could not, therefore, be allowed the claim here in issue unless he could establish priority over Bonine.

It is not seen why the interference was not properly declared. The result of closing the switch is the same in each case—namely, to connect the dynamo-electric machine to the battery, so that it may operate as a motor, and to open the automatic switch. In Bonine's system the operator must open the starting-switch when the engine commences to run and to drive the dynamo-electric machine as a generator, whereas in Bliss's system the starting-switch is opened, due to the electrical condition in the system; but these differences do not change the fact that the operation of the two systems, so far as defined by the issue, is the same.

The correspondence referred to does not show that the Bliss system was inoperative or that the manually-operated switch is of the essence of the invention. It appears therefrom that a series of breakdowns occurred when it was attempted to install the system, including a failure of the clutch, the burning out of the resistance, the breaking of the carbureter, and an unexpected drop in potential of the battery under load, and that in one instance the

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automatic switch was closed by hand. There was no testimony as to what was finally done with the device, and the correspondence does not establish that the system was inherently defective. It is to be noted that the last of the letters, which refers to a test made after the various breakdowns and after certain repairs had been made, closes with the statement:

Everything worked fine. Automatic switch closed. After running about five minutes the engine again broke down. Williams (who was connected with the Baldwin Locomotive Works) said he was satisfied I located the trouble and did not need my services any longer.

The contention as to the term "cutting out" is that it means something more than opening the automatic switch or disabling the lifting-coil—namely, an actual opening of the circuit somewhere else than at the automatic switch, so that even if it should be closed accidentally or by hand no current would flow therethrough. It is alleged that this is necessary to properly protect the system.

It is not seen why the term necessarily has this narrow meaning. When the starting-switch of Bliss is closed, the circuit is broken through the lifting-coil of the automatic switch. Its operating mechanism is thus disabled, and it is thought that this may properly be described as "cutting out" the switch. No art is cited to show that the term necessarily has this narrow meaning or which would require that Bliss restrict his claim in the manner suggested by Bonine.

The evidence introduced on the part of Bonine does not establish a conception of the invention earlier than June, 1910. He does not claim to have reduced the invention to practice prior to the latter part of that year, and his application was filed July 7, 1911. The evidence introduced on behalf of Bliss other than the evidence with relation to the experiments at the Baldwin Locomotive Works establishes a conception of the invention, as disclosed in Figure 1 of his application, as early as April, 1910, at which time, according to the testimony of Jones, certain data was turned over to him for the purpose of preparing the application for patent. The application was filed June 25, 1910. Bliss was therefore the first to conceive the invention defined by the issue and the first to reduce it to practice, and priority was properly awarded to him.

The decision of the Examiners-in-Chief is affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

BONINE v. BLISS.

Decided June 2, 1919.

1. INTERFERENCE—ALLOWABLE APPLICATION IS A RENUNCIATION TO PRACTICE.

"The rule of the Patent Office that the filing of an allowable application is constructive reduction to practice is only the expression in another form of the rule that the application of a patented invention, if it sufficiently describes the invention, is conclusive evidence that the invention was made at least as early as that date." (*Automatic Weighing Mach. Co. v. Pneumatic Scale Corp.*, 166 Fed. Rep., 288.)

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2. SAME—APPEAL TO COURT—SCOPE OF REVIEW.

The question whether or not an application is allowable and one upon which the issuance of a patent can be predicated is primarily for the experts of the Patent Office and will not be inquired into in an interference proceeding except for manifest error. (For Commissioner's decision see 265 O. G. 305.)

Mr. C. L. Sturtevant, Mr. E. G. Mason, and Mr. Jos. C. Fraley for the appellant.

Mr. R. H. Van Nest for the appellee.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This interference involves an invention relating to an electric-lighting and engine-starting system described in the single count of the issue as follows:

The combination of an engine, an electric machine connected thereto, a secondary battery, an automatic switch for controlling the charge of the battery by the electric machine, and a switch for cutting out the automatic switch and connecting the battery to the electric machine, whereby the same may be operated as a motor for starting the engine.

Bohne filed his application July 7, 1911, on which a patent was granted April 16, 1912. Bliss filed his application June 25, 1910.

The tribunals of the Patent Office unanimously found on the issue of fact that Bliss was the first to conceive and reduce the invention to practice. The rule that we will not disturb such a finding, except for palpable error, applies with exceptional force to this case. No other reasonable conclusion could have been reached from the evidence.

The further contention that the application of Bliss did not amount to a constructive reduction to practice is without merit. It is settled by repeated decisions of the courts that the filing of an allowable application constitutes a reduction to practice. (*Porter v. Loudon*, 7 App. D. C., 64, 72; 73 O. G., 1551; *Davis v. Garrett*, 28 App. D. C., 9; 123 O. G., 1991; *Telephone Cases*, 126 U. S., 2, 535.)

The question of whether or not an application is allowable and one upon which the issuance of a patent can be predicated, is primarily for the experts of the Patent Office, and will not be inquired into in this sort of a proceeding except for manifest error.

The rule of the Patent Office that the filing of an allowable application is constructive reduction to practice is only the expression in another form of the rule that the application of a patented invention, if it sufficiently describes the invention, is conclusive evidence that the invention was made at least as early as that date. (*Automatic Weighing Mach. Co. v. Pneumatic Scale Corp.*, 160 Fed., 288.)

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Court of Appeals of the District of Columbia.

IN RE OTTO, JR.

Decided June 2, 1919.

1. REISSUES—BROADENED CLAIMS—DELAY IN FILING APPLICATION.

The rule is well established that a reissue applied for more than two years after the date of the issue of the original patent, where it amounts to merely a broadening of the claims of the patent, ordinarily will not be allowed.

2. SAME—SAME—SAME.

Undoubtedly there are exceptions to the rule that an application for reissue with broadened claims must be filed within two years; but in such a case the applicant will be held to a strict rule of diligence, and it most clearly appear that he moved promptly after the discovery of the error in the original patent.

3. SAME—SAME—SAME.

Claims considered and held to be broader than the claims of the patent, and, further, held that the facts do not bring the case within any exceptions of the rule that such reissues must be filed within two years.

Mr. L. K. Gillson and Mr. C. B. Gillson for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

VAN ORSDIEL, J.:

This appeal is from the decision of the Commissioner of Patents rejecting certain claims of appellant's application for the reissue of a patent awarded to him on August 1, 1911.

The invention relates to a hay-loader, and the following claim illustrates sufficiently the issue here involved:

In a hay loader, in combination, a traveling frame having a forwardly and upwardly inclined deck, a transverse toothed gathering cylinder located in rear of the lower end of the deck and rotating forwardly at its underside upon an axis which is above the plane of the deck and a plurality of toothed elevator bars longitudinally reciprocable over the deck and oscillating in a plane which is perpendicular to the plane of the deck, the said elevator bars extending in their movement immediately adjacent the front of the said gathering cylinder.

Without stopping to compare the claims, we agree with the three tribunals below that to grant the claims of the reissue would broaden the claims of the patent. As stated by the Commissioner:

The only point involved in this appeal is whether the applicant is entitled to a reissue of his patent, which was granted August 1, 1911, and the present application for reissue filed June 30, 1916, nearly five years thereafter, where the object is admittedly to broaden the claims.

The rule is well established that a reissue applied for more than two years after the date of the issue of the original patent, where it amounts merely to a broadening of the claims of the patent, ordinarily will not be allowed. The two-year period seems to have been adopted by analogy to the statute affecting public use before application for a patent, which operates as a bar.

When a patentee takes out a patent, he, in effect, disclaims all that is not claimed. It is notice to the public that the claim to invention is for the elements or combination described, and for nothing more. That which is not claimed immediately becomes public property, and the public has the right to adopt and use it; hence, the necessity of prompt action on the part of a patentee, since tardy reissues may conflict with intervening public rights. The obvious intent of the statute providing for reissues, where, through inadvertence, accident or mistake, the full scope of the invention has not been claimed, is to secure to the inventor a monopoly of that which he has actually discovered or invented. This, however, will not excuse unreasonable delay in moving to correct the error in the original claims.

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The rule is clearly stated by Mr. Justice Brown in *Topliff v. Topliff*, (145 U. S., 156, 170,) as follows:

That due diligence must be exercised in discovering the mistake in the original patent, and that, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of an abandonment of the new matter to the public to the same extent that a failure by the inventor to apply for a patent within two years from the public use or sale of his invention is regarded by the statute as conclusive evidence of an abandonment of the patent to the public.

This court in *in re Starkey*, (21 App. D. C., 519; 104 O. G., 2150,) citing a long line of Federal cases in support of the rule, said:

We must now regard the law as well settled by the Supreme Court of the United States, that, after the lapse of two years after the issue of a patent, a reissue which seeks to enlarge the claims of the original patent will not be granted, or if granted will be held invalid, unless special circumstances are shown to excuse the delay.

The reason for the rule is clearly stated in *American Automotoneer Co. v. Porter*, (232 Fed., 456, 462,) where the court said:

We think it must be assumed that the principle of estoppel (perhaps in favor of the public generally) is at the bottom of the rule. By the issue of a patent, the inventor dedicates to the public everything which he does not claim as his monopoly. Upon this dedication, the public has a right to rely, and if members of the public devote time and money to the manufacture of a device which the inventor has so dedicated, or to the devising, inventing and patenting of structures which embody such a feature, it may be presumed that this is done upon the faith of the dedication; and so the inventor may not be permitted thereafter to enlarge his monopoly to the prejudice of these new rights, even though, except for them, the reissue would be permissible. The settled doctrine has come to be that after a delay of more than two years, and in the absence of any sufficient contrary evidence, these fatal intervening rights (public or private) will be presumed; in the presence of less delay they must be proved.

Undoubtedly, there are exceptions to the rule, and there are cases where to hold that a patent could not be reissued for an enlarged claim after the expiration of the two-year period, would work a great hardship and nullify the obvious intent of the statute. But, even in such a case, the applicant will be held to a strict rule of diligence, and it must clearly appear that he moved promptly after the discovery of the error in the original patent. On the questions of fact touching applicant's failure, through inadvertence, accident or mistake, to make originally the broad claims now sought, the tribunals below are agreed, and we find no reason to disturb their finding. On the question of law relating to applicant's delay in seeking a reissue of his patent, we find nothing in this case to bring it within any exception to the foregoing rule.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Court of Appeals of the District of Columbia.

PARKER v. CRAFT AND REYNOLDS.

Decided June 2, 1919.

INTERFERENCE—APPEAL TO THE COURT OF APPEALS—JURISDICTION OF THE COURT.

Held that no appeal lies to the court of appeals from a decision of the Commissioner "dissolving the interference on the ground that count 1 is unpatentable and count 2 cannot be made by Parker," since the order is not even the equivalent of a judgment of priority. (For Commissioner's decision see 265 O. G., 305.)

Mr. Frederick R. Parker pro se.

Mr. D. C. Tanner and Mr. W. R. Bollard for the appellees.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This is an interference proceeding in which appellant Parker appeals from an order of the Commissioner of Patents affirming the decision of the Board of Examiners-in-Chief—

dissolving the interference on the ground that count 1 is unpatentable and count 2 cannot be made by Parker.

We are confronted at the threshold with a motion to dismiss the appeal for lack of jurisdiction. We have held in many cases that an order dissolving an interference is a mere interlocutory order from which no appeal lies to this court. (*Carlin v. Goldberg*, 45 App. D. C., 540; 236 O. G., 1222; *Field v. Colman*, 47 App. D. C., 180; 247 O. G., 246.) This is based upon the ruling that, in interference, appeal will lie to this court only from a judgment of priority. (*In re Fullagar*, 32 App. D. C., 222; 138 O. G., 259; *Cosper v. Gold*, 34 App. D. C., 194; 151 O. G., 124; *In re Carvalho*, 47 App. D. C., 584; 250 O. G., 514.)

Not only was there no order of priority in this case, but such a finding would have been inconsistent with the order of dissolution. A motion to dissolve an interference fundamentally challenges the right of one of the parties to make the claims. An order sustaining the motion, therefore, is equivalent to a holding that no interference in fact exists. Before an interference can exist, or a judgment of priority be rendered, not only must both parties have a right to make the claims of the issue, but the parties must have the right to claim, and in fact be claiming, the same thing.

It, therefore, follows that the order of the Commissioner in this case was not even the equivalent of a judgment of priority.

The appeal is dismissed.

Dismissed.

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THE
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OF THE.

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Money means work. Don't labor for trivialities. Save your labor and buy Stamps.

Disclaimer.

1,197,567.—Frank W. Weeks, New York, N. Y. CINEMATOGRAPH TARGET APPARATUS. Patent dated September 5, 1916. Disclaimer filed August 7, 1919, by the assignee, by means assignments, *Animated Target Company, Inc.*

Enters this disclaimer—
"To that part of the claim in said specification which is in the following words, to wit:

"14. A cinematographic target apparatus embodying therein a screen, a projector adapted to direct moving images upon said screen, a back plate or shield movable under the impact of a bullet therewith arranged rearwardly of said screen, means whereby said projector is stopped to change said moving image to a still image substantially simultaneously with the impact of a bullet with said screen, operative connection between said back plate or shield and said means, and automatically acting means whereby said projector is again made operative to direct moving images upon said screen after the lapse of a brief interval and said back plate or shield is substantially simultaneously restored to normal."

Adverse Decisions in Interference.

PATENT NO. 1,238,931.

On July 10, 1919, a decision was rendered that Edward Murray was not the first inventor of the subject-matter covered by claims 1 and 2 of his Patent No. 1,238,931, subject, "Adjustable window-shade fixture and curtain-pole bracket," and no appeal having been taken within the time allowed such decision has become final.

Drawings.

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE.

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorization from the applicant is filed in connection with the application. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

Applicant's Address.

The requirement of Rule 33, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Patent Office Publications.

The stock of publications, exclusive of printed copies of patents, formerly held for sale by the Patent Office, has been transferred to the Superintendent of Documents, Government Printing Office. Orders for Patent Office publications should NOT be sent to the Patent Office, but to the "Superintendent of Documents," to whom all remittances for such publications should be made payable.

Printed copies of specifications and drawings of patents will be furnished by the Patent Office, as heretofore.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business August 15, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
114	1. Closure operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 19	June 5	383
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 17	Apr. 30	780
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	June 17	Feb. 15	162
214	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store Service; Traversing Hoists.	Apr. 19	July 3	463
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter; Tying Cords or Strands.	Apr. 10	Apr. 9	197
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	May 6	May 3	419
112	7. Educational Appliances; Games and Toys; Optical; Velocipedes.	May 24	July 7	345
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 26	June 5	266
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors, Fluid; Motors, Fluid-Current; Pumps.	Apr. 2	Mar. 29	345
225	10. Carriages and Wagons; Motor Vehicles.	Mar. 29	June 3	751
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 14	June 26	298
323	12. Journal-Boxes, Pulleys, and Shafts; Machine Elements.	Jan. 1	Mar. 1	1240
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Not and Bolt Locks; Turning.	Mar. 31	Apr. 9	676
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 24	May 13	319
306	15. Bread, Pastry, and Confection Making; Coating; Food; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Lamination; Plastic Block and Earthenware Apparatus; Plastic.	Apr. 3	June 5	677
112	16. Radiant Energy; Telegraphy; Telephony.	Mar. 4	Mar. 27	739
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 9	May 28	270
220	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 17	May 5	508
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 19	Apr. 21	366
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	July 11	July 2	417
212	21. Brakes and Guns; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 3	Mar. 27	373
249	22. Aeronautics; Firearms; Ordnance.	May 30	July 10	279
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 22	May 31	548
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 31	May 31	455
313	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	June 20	June 23	194
105	26. Electricity, Generation; Motive Power; Prime Mover and Dynamo Plants.	Jan. 13	Mar. 13	630
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	May 7	June 12	424
225	28. Internal-Combustion Engines.	Feb. 17	June 7	581
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	May 2	728
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 5	July 15	500
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas; Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Limer; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 24	Apr. 11	456
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Feb. 8	May 19	673
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Roofs and Pavements; Paving; Roofs.	Apr. 1	May 1	348
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	Apr. 21	Apr. 4	249
57	35. Bookies, Buttons, Claws, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	June 18	July 16	409
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	June 3	May 19	798
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, General Applications.	Apr. 22	Apr. 19	777
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice Harvesting; Stationery; Stone-Working; Wells.	July 3	July 2	241
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 21	Mar. 5	744
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	May 10	Mar. 24	518
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 3	Apr. 19	473
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electricity, Conduits; Electric Signaling.	Apr. 4	Apr. 2	555
387	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 8	June 21	211
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	June 6	May 2	149
179	45. Clothes; Lubrication; Motors; Railway Brakes.	Mar. 14	June 16	355

Oldest new case, Jan. 1; oldest amended, Feb. 13

Total number of applications awaiting action..... 21,229

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks.....	June 5	July 16	2118
	Designs.....	May 31	July 21	655
	Labels and Prints.....	July 1	July 14	324

PATENTS

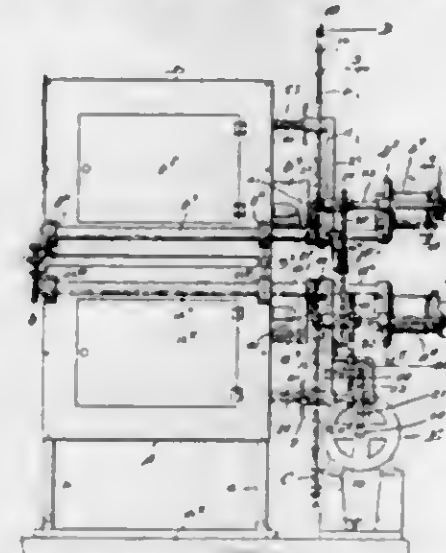
GRANTED AUGUST 19, 1919.

1,313,240. LOOSE-LEAF BOOKBINDER. HENRY T. ADAMS, Chicago, Ill., assignor to Henry T. Adams Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed July 12, 1918. Serial No. 244,582. 3 Claims. (Cl. 129-12.)



1. A loose-leaf book adapted to be used both for temporary and permanent record purposes, comprising a pair of flexible, resilient cover-sections and interposed leaves, all provided at their rear edges with perforations, and a U-shaped metal binding-member of flat cross-section having a web engaging the outer surface of the lower cover-section and having impaling arms extending loosely through the perforations in the cover-sections and the interposed sheets, whereby the leaves and cover-sections may slide freely and adjust themselves on said arms to permit the book to lie in open condition free from tendency to close, said arms being stiff, but capable of being bent to enable the binder to serve for permanent record purposes.

1,313,241. AUTOMATIC UNIVERSAL STEREOPTICON. WALTER J. ASHLEY, Chicago, Ill. Filed Apr. 1, 1914. Serial No. 828,652. 3 Claims. (Cl. 88-27.)



1. In a stereopticon, two units comprising two lamps, lenses therefor, two rotary slide carrying disks, one for each lamp, said disks having circumferentially arranged exposure openings, arranged to be brought successively into register with said lenses and having pins, one for each opening, supports for said disks, two shafts, one for each disk, a crank arm carried by each shaft and arranged to engage said pins; and therewith partially rotate the disks, each crank arm being timed to act on its disk while the other disk is at rest, one of said units being pivotally connected to the other, means for varying the angular relation between said units and means for slowly rotating said shafts in unison, including gearing between said shafts having take-up means therefor.

1,313,242. CULTIVATOR. JOHN F. ASHLEY, Dallas, Tex. Filed Apr. 2, 1918. Serial No. 226,153. 1 Claim. (Cl. 97-34.)

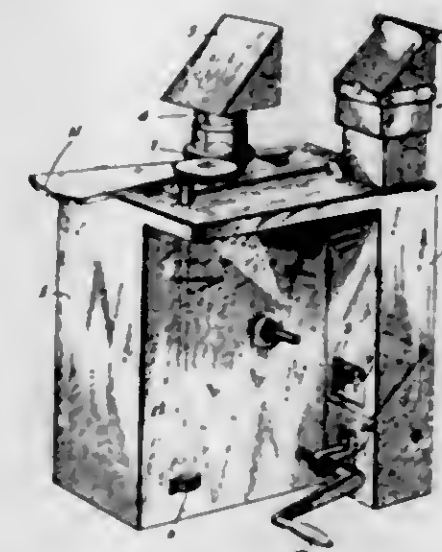
To apparatus of the character described, a wheeled frame, an agricultural implement arranged beneath and near the forward end of the wheeled frame, a cultivator

member arranged beneath the rear portion of the wheeled frame, an operator's seat secured to the rear end of the wheeled frame, a single post secured to the forward portion of the wheeled frame and projecting upwardly above the same, an approximately horizontal lever extending above the wheeled frame and pivotally connected with the single post and having its forward end connected with the agricultural implement to raise it and having its rear end terminating near the operator's seat, a second approximately horizontal lever arranged above the wheeled frame and pivotally connected at its forward end with the single post, said second lever extending rearwardly in proximity to the first named lever and terminating near the op-



erator's seat, forward and rear spaced combined uprights and racks secured to the wheeled frame and projecting above the same and arranged between the first and second named levers, approximately horizontal toggle levers pivoted between their ends with the lower portions of the combined uprights and racks, links pivotally connected with the outer ends of the toggle levers and with the opposite ends of the cultivator member, links pivotally connected with the inner ends of the toggle levers and with the second named lever at a point between the combined uprights and racks, a latch carried by the first named lever to engage the forward combined upright and rack, and a latch carried by the second named lever to engage the rear combined upright and rack.

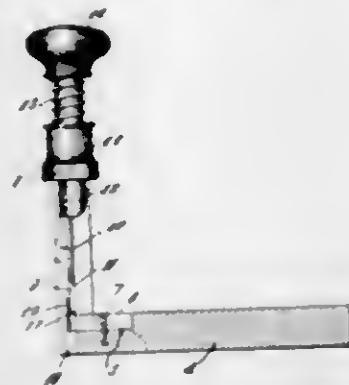
1,313,243. MOTION-PICTURE TRENCH-CAMERA. CARL E. AKELEY, New York, N. Y., assignor to Akeley Camera Inc., New York, N. Y., a Corporation. Filed Apr. 12, 1918. Serial No. 228,093. 9 Claims. (Cl. 88-17.)



1. A motion picture trench camera comprising a casing with the proper or usual mechanism for such devices contained therein, of a vertically movable slider tube in the nature of a periscope, an objective tube extending parallel

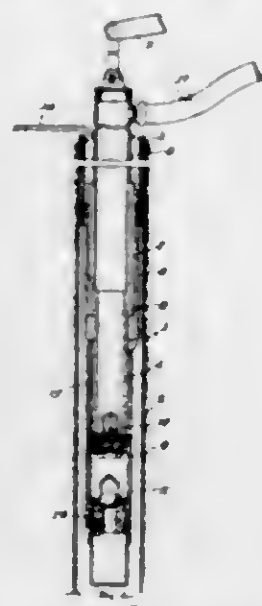
thereto and a prismatic attachment on said tube for directing the light rays received horizontally at right angles through the objective and onto a sensitized surface within the camera casing.

1,313,244. ENVELOP-CUTTING MACHINE. ELDER E. ANDERSON, Minneapolis, Minn. Filed Jan. 3, 1917. Serial No. 140,408. 1 Claim. (Cl. 164-47.)



In a device of the class described, a one-piece frame having side bars, each side bar having a groove, a cutter slidable in said grooves, a base for the frame having means with which the cutter cooperates for shearing, detachable operating means for the cutter, and stop means movable into and out of the grooves to permit insertion of the cutter therein and to secure the cutter against accidental displacement from the grooves, and said stop means serving to support the cutter during attachment of the operating means thereto and to limit the downward movement of the cutter during operation.

1,313,245. DEEP-WELL PUMP. BENJAMIN ANDRAWA, Houston, Tex. Filed May 10, 1918. Serial No. 233,025. 12 Claims. (Cl. 103-61.)



1. The method of preventing the accumulation of sand in the working barrel of a deep well pump, comprising delivering a scouring flow of fluid into the working barrel at a point in the immediate vicinity of the inlet valve within the period when the inlet valve is seated.

1,313,246. ELECTROLYTIC PROCESS AND ANODE. FRANK L. ANTISILL, Perth Amboy, N. J. Filed Aug. 17, 1918. Serial No. 250,291. 25 Claims. (Cl. 204-57.)

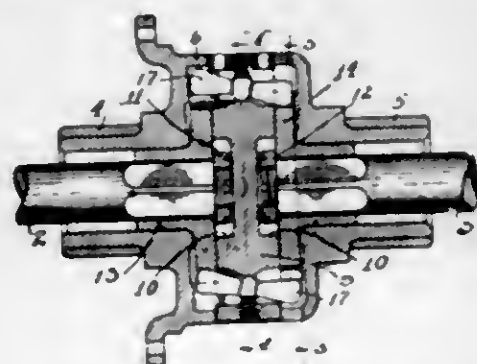
21. The method of reducing the formation of ferric sulfate in electrolysis which comprises providing sepa-

rate areas on the anode surface which in the aggregate is appreciably smaller than the area of the cathode sur-



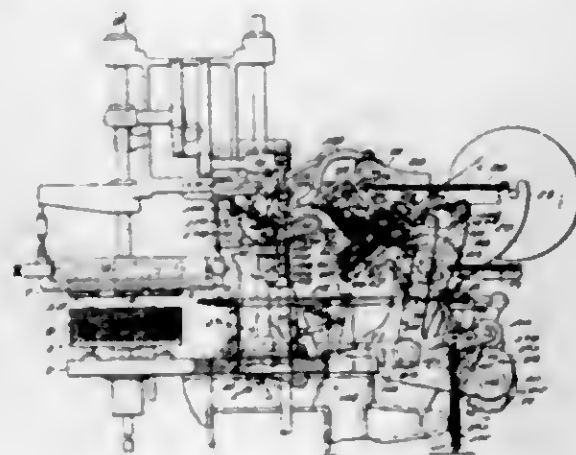
face in an electrolytic cell, and passing current through said cell.

1,313,247. DIFFERENTIAL RELEASING-CLUTCH. GEORGE D. BAILEY, Chicago, Ill., assignor to Bailey Non-Stall Differential Corporation, Chicago, Ill., a Corporation of New York. Filed Apr. 28, 1917. Serial No. 165,243. Renewed Dec. 14, 1918. Serial No. 266,811. 11 Claims. (Cl. 74-7.)



8. In a device of the class described the combination of ratchet wheels, of a one piece driving cage in which said ratchet wheels are journaled, and means within said cage for transmitting a drive from the cage to said ratchet wheels.

1,313,248. ENVELOP-MACHINE. GEORGE BALL, Philadelphia, Pa., assignor to Whiting-Patterson Company, Incorporated, a Corporation of Pennsylvania. Filed Oct. 24, 1917. Serial No. 198,224. 13 Claims. (Cl. 93-61.)



1. The combination with an envelop machine having means for supporting an envelop blank, means for gumming said blank on the back and seal flaps and around an opening therein, means for feeding the gummed blank to a position beneath a creasing plunger and means for folding the gummed blank into a completed envelop, of paper feeding means, means for severing said paper, and angu-

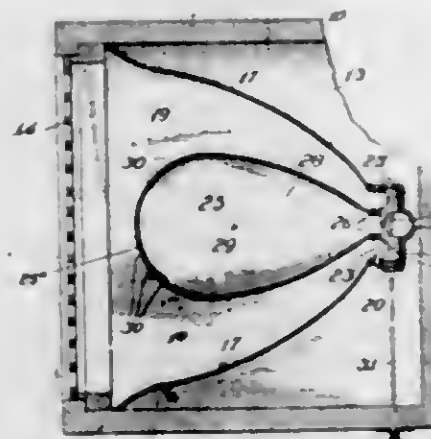
larly and radially movable means operative in its radial movement to lift a severed portion of said paper from said severing means and in its angular movement to convey said severed portion of said paper from a point adjacent said severing means to a position adjacent said envelop blank beneath said creasing plunger.

1,313,249. SAFETY DEVICE FOR USE IN REPAIRING AND RENEWING INSULATORS OF HIGH-VOLTAGE TRANSMISSION-LINES. WILLIAM S. BELLOWA, Benton Harbor, Mich. Filed Apr. 10, 1918. Serial No. 227,746. 1 Claim. (Cl. 173-313.)



In a device of the character described, an insulator, a plurality of brackets, means for securing said brackets to said insulator, each of said brackets provided with a forwardly and downwardly curved portion the rear edge of which is adapted to form an extended bearing for the bracket, a flange adapted to engage the upper edge of the insulator, a shoulder, a lug projecting from said shoulder and a lever in substantial vertical alignment with said forwardly and downwardly curved portion and pivoted to said lug.

1,313,250. PHONOGRAPH. BURN B. BLOOM, Chicago, Ill., assignor to George Heldman and Norman A. Street, Chicago, Ill. Filed Oct. 10, 1917. Serial No. 195,702. 6 Claims. (Cl. 181-27.)



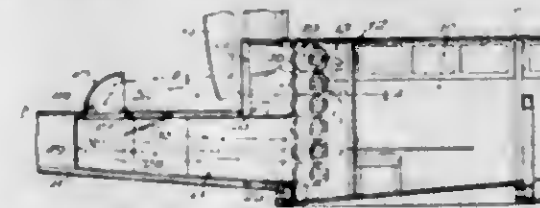
2. In a phonograph, provided with a sound-conveying conduit, a tone-chamber provided with walls converging toward said conduit and adapted to be in communication with the lower end thereof, an auxiliary tone-chamber arranged centrally within the first-mentioned tone-chamber and adapted to be in communication with said conduit, said auxiliary chamber being arranged in communication with the forward end of the main chamber, and means located in said conduit whereby the tones or sounds are transmitted either into the main tone-chamber or into said auxiliary tone-chamber.

1,313,251. STEAM-WHISTLE. DOUGLAS BARWA, Cleveland, Ohio. Filed Aug. 28, 1915. Serial No. 47,747. 1 Claim. (Cl. 116-19.)



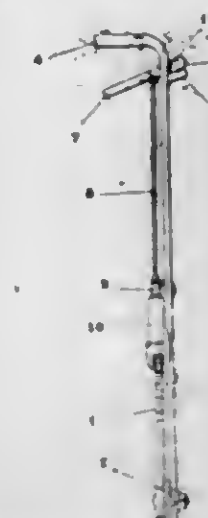
A signaling device and means to operate the same comprising a fluid actuated plunger having an exposed end and a hanger engaged with said end, an evenner having said hanger engaged with one end thereof and means at the other end of said evenner operatively connected with said device.

1,313,252. FLYING-BOAT. THOMAS PRESTON BROOKE, Chicago, Ill., assignor to The Brooke Aircraft Company, a Corporation of Delaware. Filed Feb. 20, 1919. Serial No. 278,282. 4 Claims. (Cl. 244-31.)



1. A machine of the character described embodying a body having a compartment therein, a motor arranged in the compartment and entirely housed thereby, a flue having communication with and extending beyond the compartment, said flue being also arranged within the body and having an air entrance opening through the body at a point spaced from the said compartment, said compartment having an air outlet opening out of direct communication with the said flue except through the said compartment, and a propeller operable intermediate the said air entrance and the said air outlet opening, whereby the operation of the propeller will force air into the said entrance to circulate through the flue and chamber, said propeller also operating to create a suction through the said outlet opening.

1,313,253. LEVER. THORPHILUS BROWN and CARL G. STRANGLUND, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 9, 1918. Serial No. 221,448. Renewed Nov. 7, 1918. Serial No. 261,550. 5 Claims. (Cl. 74-39.)

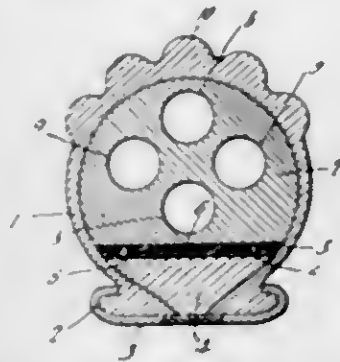


1. The combination of a pivotally supported lever, a ratch, a dog on the lever to engage with said ratch, a sup-

port on the lever projecting from one side thereof, and a rocking grip connected with said dog and extending on opposite sides of said lever and operable to raise the dog, said grip being fulcrumed on said support adjacent the lever when the dog is down and shifting its fulcrum as the dog is raised.

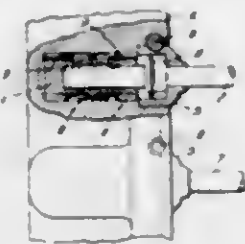
5. The combination of a pivotally supported lever, a ratch, a dog on the lever to engage with said ratch, a slot in the lever, a support on the lever extending outwardly from the base of the slot, and a rocking grip extending through said slot and in contact with said support, and a connection between said dog and grip whereby the dog is raised as the grip is rocked.

1,313,254. TIRE. JOHN W. BURGESS and GEORGE F. BURGESS, Kansas City, Mo. Filed Feb. 18, 1919. Serial No. 277,835. 2 Claims. (Cl. 152-5.)



2. A tire comprising a casing; a resilient circumferential strip in the casing; an inelastic band surrounding the strip and under tension; and a body filling the casing between the band and the tread portion of the casing, the body comprising a plurality of resilient blocks having their ends in abutment, the blocks being relatively short, and being provided with circumferential openings disposed symmetrically with respect to the median plane of the tire.

1,313,255. JOURNAL-BEARING MECHANISM FOR PICKING-FINGERS IN COTTON-PICKING MACHINES. BENJAMIN CHASTREE CALDERWOOD, Valley Falls, R. I., assignor to Price-Campbell Cotton Picker Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1913, Serial No. 764,521. Renewed Feb. 1, 1919. Serial No. 274,565. 3 Claims. (Cl. 74-30.)

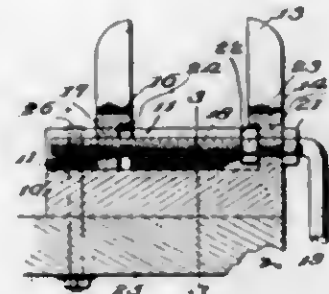


1. The combination in journal bearing mechanism for picking fingers in cotton picking machines, comprising journal bearings; a combined finger socket and spiral pinion, rotating in said journal bearings; a picker finger keyed in said combined finger socket and spiral pinion; and a driving gear for the spiral pinion.

1,313,256. VISE FOR HOLDING VEHICLE-SPRINGS. VERNON R. CANNON, Sapulpa, Okla. Filed July 22, 1918. Serial No. 246,211. 1 Claim. (Cl. 81-33.)

A vise of the character described including a base provided with a channel closed at one end by an end wall of the base, a fixed jaw rising from said end wall, a movable jaw rising from the base and provided with a head slidably engaging in said channel, a screw loosely fitted

through said end wall and engaged with the head of the movable jaw for shifting the movable jaw toward or away from the fixed jaw, and inner and outer nuts threaded upon the screw to confront opposite sides of the end wall for holding the screw against longitudinal movement there-



through, the said end wall being provided with a recess partially receiving the inner nut and the head of the movable jaw being provided with a similar recess adapted to receive the projecting portion of said inner nut whereby the movable jaw may be shifted to abut the fixed jaw.

1,313,257. BAG-RACK. AMANDER A. CARLSON, Barnesville, Minn. Filed Jan. 7, 1919. Serial No. 270,020. 1 Claim. (Cl. 211-2.)

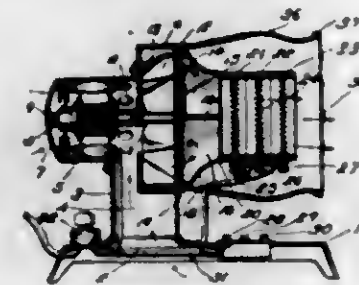


In a device of the character described, the combination of a main casing including a supporting wall which is inclined rearwardly toward its upper end, bag supporting frames carried within said casing, each frame being formed of a rectangular unobstructed back, a bottom fixed at the lower end of said back and extending at right angles thereto, a flange extending longitudinally of said bottom and parallel to said back, flanges connected to the ends of said flange and to the lower side edges of said back, whereby the side edges of the back above said flanges are unobstructed, thus allowing access to the bags carried upon the bottom, said flanges holding the bags against side displacement, said supporting frames being positioned respectively one in front of the other toward the upper portion of the casing, the upper ends of said backs being hingedly mounted upon said walls, the back of one frame bearing upon the front of the back of the frame therebelow owing to the angle of inclination of said wall, thus causing the upper supporting frame to bear upon any thickness of bags carried by the supporting frames to hold the same against displacement.

1,313,258. ELECTRIC HEATER. JAMES H. CARMAN and SAMUEL M. CARMAN, Kansas City, Mo. Filed Aug. 5, 1918. Serial No. 248,447. 6 Claims. (Cl. 219-38.)

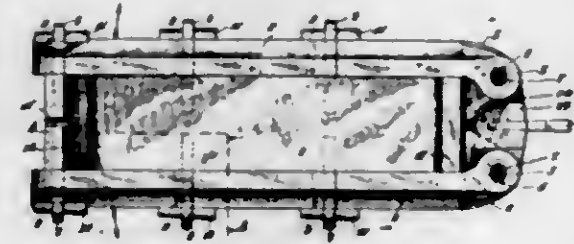
1. In a heating device, a casing an electrical heating means in the casing, an air impeller, a motor for driving the impeller, and means for directing the air in a stream

of substantially uniform density throughout a zone in which the heating elements are located, said means com-



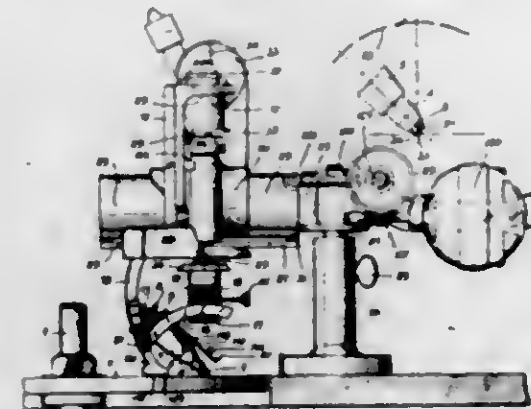
prising a group of flat blades in axial alignment with the impeller and with the heating means and a frusto-conical casing surrounding said group of blades.

1,313,259. REMOVABLE-SIDED INGOT-MOLD. RAY G. COATES, Pasadena, Calif., assignor to Valley Mold and Iron Corporation, Sharpsville, Pa., a Corporation of New York. Filed Oct. 21, 1918. Serial No. 259,082. 15 Claims. (Cl. 22-146.)



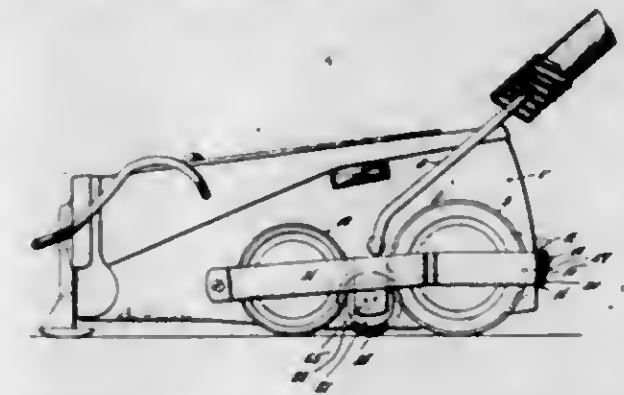
14. As an article of manufacture an ingot mold comprising a body portion, a pair of vertical slides hinged at one end to said body portion, one end of said body portion being provided with an overflow opening, and the other end of said body portion being substantially vertical, substantially as specified.

1,313,260. POLISHING-MACHINE. CLYDE J. COLEMAN, New Rochelle, N. Y., assignor to Stern-Coleman Diamond Machine Company, Inc., New York, N. Y. Filed June 22, 1915. Serial No. 35,511. 45 Claims. (Cl. 51-11.)



1. In an apparatus of the class described, the combination of a suitable frame, a carrying-head, a gem-holding arbor carried by the carrying-head, a setting-indicator for indicating the position of the stone longitudinally of the axis of the arbor and means for adjusting the arbor longitudinally with respect to its axis to bring the stone into proper relationship with the setting-indicator.

1,313,261. BRUSH-ADJUSTING MEANS FOR CLEANING-MACHINES. FREDERICK W. COLLIER, Worcester, Mass., assignor to Packmore Manufacturing Company, Washington, D. C., a Corporation of Delaware. Filed Aug. 22, 1914. Serial No. 558,093. Renewed Jan. 15, 1919. Serial No. 271,336. 4 Claims. (Cl. 15-60.)



1. The combination, in a carpet cleaning machine, with a casing, and a yoke pivoted thereto carrying a brush for acting upon the carpet, of an inclined plane device supported upon the yoke and movable laterally relatively thereto, and a bearing against which the said inclined plane device acts, arranged for adjusting the yoke and the brush it carries vertically as the inclined plane device is moved laterally.

1,313,262. MECHANICAL DEVICE FOR CONCENTRATING VISION. DOLPHUS E. COMPTON, Dallas, Tex. Filed Feb. 24, 1916. Serial No. 80,300. 3 Claims. (Cl. 2-149.)



2. In a device of the character described, two tubular eye shields and a bridge or nose piece connecting the tubular eye shields to constitute a pair of goggles, in combination with a pair of iris diaphragm shutters each secured in the outer end of an eye shield and means for operating said shutters said means comprising essentially a pin projecting from each eye shield and operatively connected with the shutters.

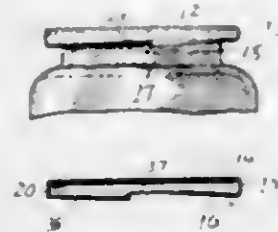
1,313,263. LEVEL. GEORGE R. CONN, Omaha, Nebr. Filed Feb. 25, 1919. Serial No. 279,068. 1 Claim. (Cl. 33-215.)



A level consisting of the stock having a central opening, a pair of sight openings and dials mounted in said opening, a dial shaft mounted in said dials, said shaft being formed with a groove near each end, hands or indicators secured on the extended ends of said dial shaft, a weight mounted on and suspended from the dial shaft, two pairs of rings having a ball track disposed over the grooves of the dial

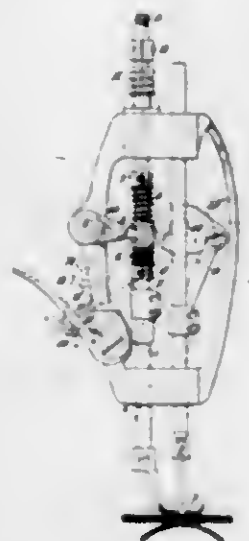
shaft, balls bearing in the track of the rings and the grooves of the shaft, and clamping collars connected to the shaft upon their inner face and engaging the two pairs of rings to retain them in proper position.

1,313,264. CLOSURE FOR CONTAINERS. MICHAEL J. COONEY and HENRY J. BENDER, Plainfield, N. J. Filed Feb. 20, 1918. Serial No. 218,330. 1 Claim. (Cl. 215-85.)



The combination of a container having outwardly projecting narrow lugs on each side of its top, a closure made of a single sheet of comparatively thin metal and comprising a top plate with a downwardly projecting continuous marginal flange having on its bottom edge an internal flange, the internal flange being provided with narrow openings to receive the lugs, the parts of the internal flange between the openings being inclined so as to approach the top plate in the same circular direction, the closure being adapted upon partial rotation to force the top plate to the top edge of the container and to provide a smooth peripheral edge to the closed container.

1,313,265. SEWING-MACHINE. HERBERT CORRELL, Heliensburgh, Scotland, assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Nov. 23, 1915. Serial No. 63,101. 8 Claims. (Cl. 112-239.)

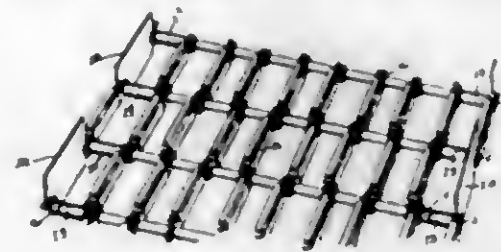


1. In a sewing machine, the combination with a presser bar, of a block slidably mounted on the said bar, oppositely-acting springs engaging the block, and means to impart up and down movements to the said block and thereby to the said bar.

1,313,266. BELT. ELBERT L. CORNH, Hartford, Conn., assignor to Couch-Brown Corporation, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 4, 1914. Serial No. 829,691. 3 Claims. (Cl. 193-20.)

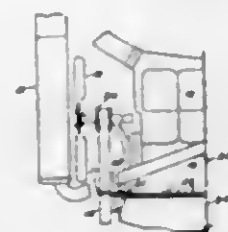
1. A carrier for frangible articles while being washed, the article carrying portion of the carrier being of open-work construction to permit the passage of the substance used in washing the article through the openings of said

carrier, and said article carrying part of the carrier having a portion softer than the body of the carrier, which directly supports the articles to prevent breakage of the same during the movement of the carrier, the body of the



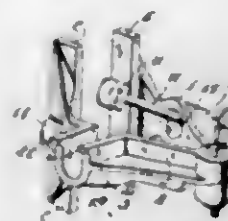
carrier having means to grip the soft portion of said carrier and said soft portion consisting of a plurality of units spaced from each other transversely of the line of movement of the carrier.

1,313,267. BELT-GUIDE. ALBY R. CRADDOCK, Hillyard, Wash. Filed Oct. 3, 1918. Serial No. 256,744. 1 Claim. (Cl. 74-51.)



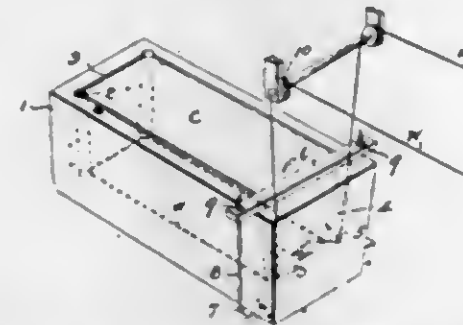
In a belt-guide for automobile gas engines, the combination with a fan-belt and an engine casing, of a plate having means for attachment to the engine casing and two turned over edges at right angles with each other, one adapted to engage the side of the fan-belt and the other adapted to engage the outer edge of the same, the contour to that portion of the plate coming in close proximity with the engine casing being adapted to fit the contour of the engine casing to form a close and rigid connection therewith.

1,313,268. CLAMP. WILLIAM P. CUNNINGHAM, Cleveland, Ohio, assignor, by means assignments, to The Guardian Savings & Trust Company, trustee, a Corporation of Ohio. Filed Apr. 24, 1916. Serial No. 93,097. 2 Claims. (Cl. 144-297.)



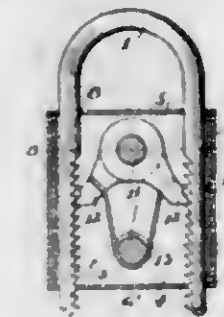
1. A clamp designed for use with sectional molds of the character set forth and comprising a pair of jaws that are pivoted together at one of their ends to swing in a substantially fixed plane with respect to each other and terminating at their opposite ends in opposed bearing heads, the jaws being bowed outward intermediate their ends, a member permanently carried by one jaw and swingable transversely of the aforesaid plane, the other jaw having a notch open at one side edge of the jaw and into which said member is adapted to be swung, said member being provided with a head for engagement with an abutment portion of the notched jaw whereby the jaws are held against separation, and means for varying the effective length of said member.

1,313,269. METHOD OF AND APPARATUS FOR STONE-WORKING. DAVID W. CUSTEA, Sydney, Australia, assignor to Edwin O. Townsend, Mansfield, Ohio. Filed Jan. 23, 1918. Serial No. 213,374. 6 Claims. (Cl. 125-1.)



6. A process for making hollow receptacles from solid stone blocks which consists in first making a continuous channel to a partial depth of the block, then cutting the core surrounded by the channel from the body of the block by applying a flexible cutter to one end of said core at the bottom of the channel to make a cut at right angles to the latter toward the center of the block, then applying said flexible cutter to the opposite end of the core to cut in the reverse direction, and subsequently removing the severed core as a unit.

1,313,270. SEAL-LOCK. HERBERT W. DAOON, Rochester, N. Y. Filed Nov. 25, 1918. Serial No. 268,958. 3 Claims. (Cl. 70-97.)



3. A seal lock comprising two casing members rigidly secured together, one of said members being formed with a back wall, a top wall, a bottom wall and two side walls formed with inwardly turned extensions, and the other of said members being formed with a closed front wall and two side walls received within the side walls of the first named member, the inwardly turned extensions on the first named member overhanging the front wall of the first named member, but being spaced from such front wall to provide retainers for a sealing device, in combination with a shackle operating through the top wall of the first named member, and a sealing device received under the inwardly turned extensions and held by the shackle.

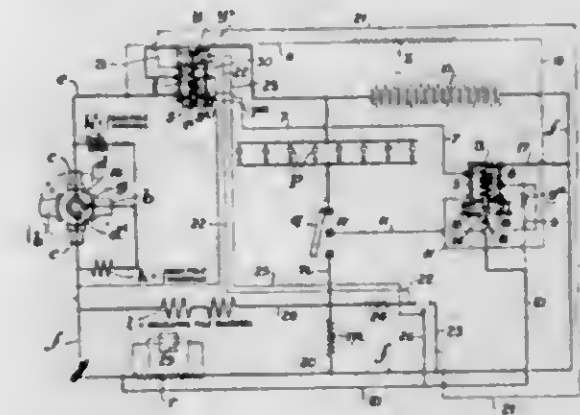
1,313,271. DEVICE FOR OPENING WATCHCASES AND OTHER ARTICLES. HUGH C. DAYNER, Martinsburg, W. Va. Filed Mar. 1, 1919. Serial No. 280,156. 3 Claims. (Cl. 81-6.)



2. A block of flexible elastic material adapted to be applied to a watch case or other disk-form article and pre-

senting a relatively thick and relatively rigid peripheral part and having a concave face and made thinner and more yielding toward the middle to permit the expulsion of the air under pressure and the formation of a vacuum to cause the adhesion of the block to the watch-case.

1,313,272. DYNAMO-ELECTRIC MACHINE AND METHOD OF AND APPARATUS FOR CONTROLLING THE OUTPUT THEREOF. ALFRED HENRY DANKER, Warkheath, England, assignor to J. Stone & Company, Limited, Deptford, England. Filed Jan. 20, 1916. Serial No. 73,091. 2 Claims. (Cl. 171-313.)



1. Apparatus of the character described, comprising in combination a dynamo having main poles, regulating poles and an auxiliary brush, main field windings of different characters connected between respective main brushes and the auxiliary brush, regulating pole windings connected across a resistance in the lamp circuit said regulating pole windings being wound to oppose distortion due to armature reaction, a battery charge resistance connected between corresponding terminals of said lamp resistance and said regulating pole windings, and a battery over-charge switch operative to reduce said battery charge resistance substantially as set forth.

1,313,273. FRUIT-CUTTING IMPLEMENT. MACK H. DAVIS, Flin, Tex., assignor of one-half to John W. Noe, Flin, Tex. Filed May 13, 1918. Serial No. 234,188. 2 Claims. (Cl. 146-7.)



1. A fruit cutting implement including a pair of movably connected levers, one of said levers having a substantially triangular cutting member, the other lever being provided with an elevated and recessed member for supporting the fruit and pushing the fruit against the cutting member, said elevated member being divided for passage on opposite sides of the cutting member.

1,313,274. MEANS FOR REDUCING ORES. DIAGO DIAS DE BARROSA, São Paulo, Brazil. Filed Dec. 27, 1917. Serial No. 299,080. 2 Claims. (Cl. 204—64.)



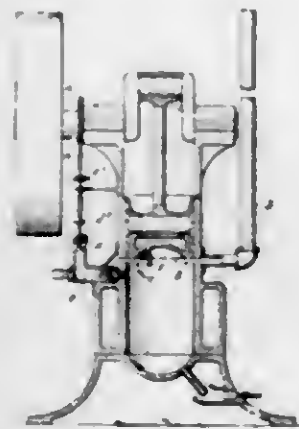
1. The process of treating ore which consists in fusing the metal obtained from the ore in two zones, dissolving carbon in one zone and ore in the other zone, and conveying the dissolved carbon from the first named zone to the other.

1,313,275. EDGE-GUIDE. ALBERT H. DE VOX, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Sept. 16, 1916. Serial No. 120,443. 11 Claims. (Cl. 112—153.)



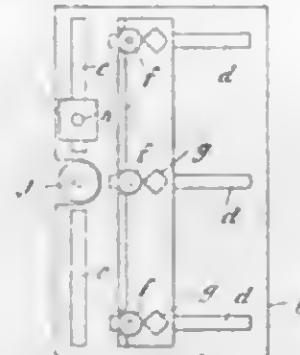
1. In a sewing machine, a cloth-plate having an opening therein, guideways along the sides of said opening, in combination with a cover-plate removably secured in said guideways, and an edge-guide having a body portion secured to the under side of said cover-plate and an active fabric edge-guiding portion at an angle thereto and extending upwardly above the upper surface of the cover-plate.

1,313,276. INTERNAL-COMBUSTION ENGINE. CHARLES E. DUNYEA, Philadelphia, Pa. Original application filed June 7, 1902, Serial No. 110,598. Patent No. 128,957. Divided and this application filed Sept. 17, 1914. Serial No. 862,195. 8 Claims. (Cl. 123—65.)



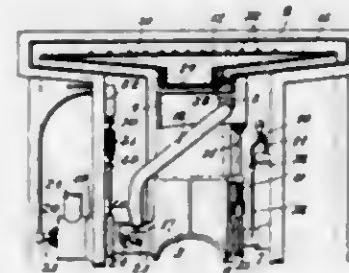
1. The method of recharging an internal combustion engine having no other means of recharging, by causing the burned gases to escape suddenly and continuously through an elongated passage with momentum sufficient to reduce the internal pressure below atmospheric and flush and recharge the cylinder with air.

1,313,277. PUNCHING-MACHINE, DRILLING-MACHINE, AND THE LIKE. BENJAMIN SCOTT ELDON, Durham, England. Filed Jan. 22, 1919. Serial No. 272,409. 1 Claim. (Cl. 164—59.)



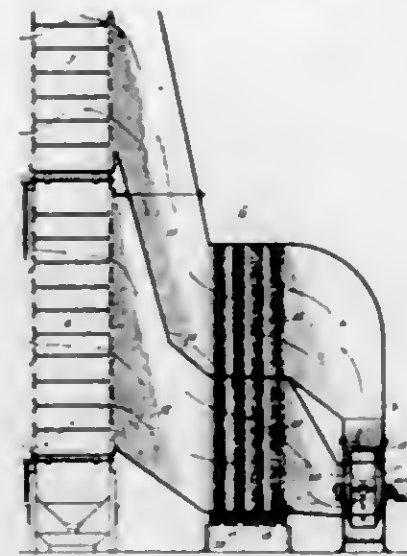
In punching drilling and like machines a platform, a fence mounted on said platform, said fence being adjustable in one direction, rollers on the fence against which the plate to be punched is adapted to bear, a stud mounted on the platform adjustable perpendicular to the direction of adjustment of the fence said stud being adapted to enter a hole made by the machine in a plate so as to regulate the spacing between the holes.

1,313,278. STEAM-ENGINE. JACOB CHRISTIAN HANSEN-ELLEHAMMER, Copenhagen, Denmark. Filed Jan. 20, 1919. Serial No. 272,160. 4 Claims. (Cl. 60—1.)



1. A rotary steam engine comprising a wheel having a hollow rim constituting a steam generator and engine cylinders secured thereto, valve chambers on said cylinders, a central shaft, valve mechanism operated from said shaft, means for supplying feed water to said steam generator, and a heating chamber inclosing said wheel.

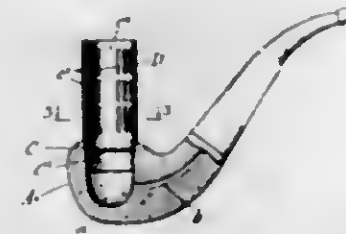
1,313,279. GRAIN-DRIER. HUBERT C. ELLIS, Evanston, Ill., assignor to Ellis Drier & Elevator Company, Chicago, Ill., a Corporation of Wisconsin. Filed Jan. 2, 1919. Serial No. 269,364. 7 Claims. (Cl. 34—34.)



1. In a grain drier, the combination of a grain shaft, a fan for forcing air through the shaft, intake and outlet

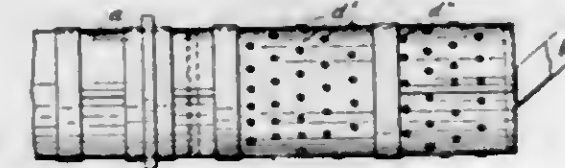
ducts for the fan, and air-heating means in both of said ducts whereby the atmospheric resistance in said ducts will be substantially balanced.

1,313,280. SMOKING DEVICE. LOTIS FALKENAU, Chicago, Ill. Filed Oct. 25, 1918. Serial No. 259,631. 4 Claims. (Cl. 131—12.)



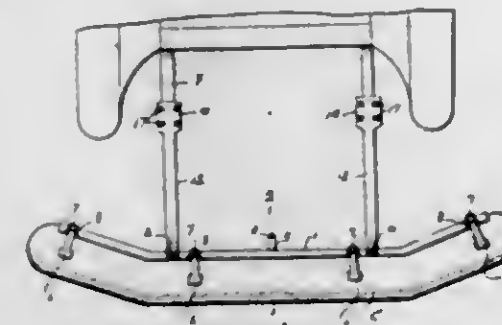
1. In combination with a holder similar to a tobacco-pipe, a tobacco-container fitting into the pipe bowl and projecting upwardly extraneously therefrom, such container consisting of a shell having side and bottom perforations, and a strip of paper extending around the outer sides of the shell and covering the side perforations thereof.

1,313,281. ROTARY KILN. JOHAN S. FARTING, Frederiksborg, near Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed July 18, 1918. Serial No. 245,522. 2 Claims. (Cl. 222—7.)



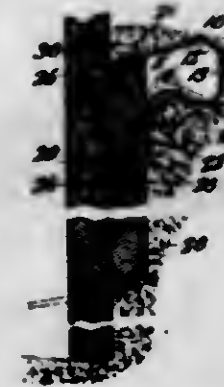
1. The combination with a rotary kiln for burning slurry, of cross chains secured to the interior of the kiln in planes oblique to the axis near the feeding end of the kiln and adapted, in the rotation of the kiln, to be dipped into the wet slurry, to become coated thereby, and to lift the slurry into the path of the hot products of combustion, each of such cross chains being helically placed with its inner end in advance, circumferentially, and in the direction of rotation, of the outer end.

1,313,282. FENDER. AMBROSE J. FINNEGAN, Castalia, Iowa. Filed Apr. 28, 1919. Serial No. 293,110. 3 Claims. (Cl. 293—55.)



1. A device of the character described including an elongated member, yielding attaching means carried thereby, an inflatable body disposed along the outer face of said member, and a casing overlying said inflatable body and detachably engaged with the member.

1,313,283. FLASHING-INSERT FOR ROOF CONSTRUCTION. THORLEIF FLIFLET, Brooklyn, N. Y. Filed Aug. 8, 1918. Serial No. 249,010. 4 Claims. (Cl. 108—26.)



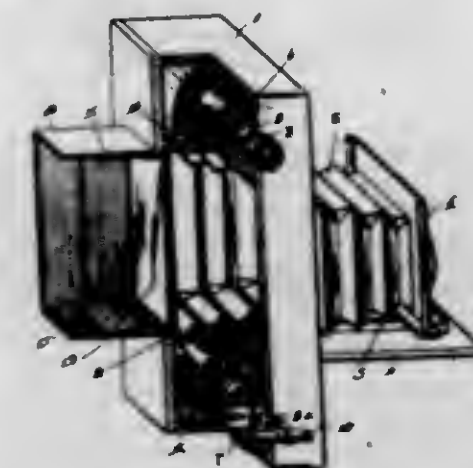
1. In a flashing construction, a metal insert bent longitudinally to form a groove arranged to be molded into the face of a wall, and means including a flange spaced from the edge of said insert to prevent moisture leaking between said insert and said wall.

1,313,284. APPARATUS FOR EXPANDING SUPER-HEATER-TUBES. ERNEST H. FOSTER, Dongan Hills, N. Y. Original application filed July 13, 1918. Serial No. 244,689. Divided and this application filed Nov. 20, 1918. Serial No. 263,254. 2 Claims. (Cl. 153—80.5.)



1. An expanding plug adapted to be forced through a tube over which rings or sections of tubing are strung consisting of a body of steel provided with means for connecting it to devices for forcing it through the tube, and tapered, from its portion of greatest diameter, and so formed that by the resilience of the metal of which it is composed, it is capable of collapsing at its enlarged portion under a pressure which is greater than that required for expanding the tube into intimate contact with the rings.

1,313,285. CAMERA. SIGMUND H. GALLMEIER, Rochester, N. Y. Filed Oct. 22, 1917. Serial No. 197,978. 4 Claims. (Cl. 95—31.)



1. A camera having a supply roller and a draft roller mounted therein, a focusing screen between said rollers, means for winding a film from said supply roller to said draft roller across said focusing screen, a spring connected to said supply roller to automatically rewind the film from said draft roller back to said supply roller.

1,313,286. ART OF MAKING CORD TIRES AND TIRE-MAKING CORD BAND THEREFOR. JOHN R. GAMMETER, Akron, Ohio, assignor to The R. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 3, 1917. Serial No. 178,351. 6 Claims. (Cl. 154-14.)



1. The method of making a cord band for tires which consists in producing a band of bias-laid cords, rendering said band substantially inextensible along an intermediate longitudinal side line thereof at a substantial distance away from the bead location, and stretching said band on the outer side and condensing it on the inner side of said line.

1,313,287. PROCESS FOR ECONOMIZING METALLIC REDUCTIONS. OSCAR GERLACH, Danville, Ill. Filed Sept. 29, 1917. Serial No. 192,364. 6 Claims. (Cl. 75-28.)

3. The process of preparing the carbon containing refuse from metal reducing retorts for use in further metal ore reduction by first separating from the carbon particles thereof the metallic or metallic oxide layer or film deposited, and coating the materials so treated with a hydrocarbon.

1,313,288. ELECTRIC FUSE-PLUG. JOSEPH GLATZ, Philadelphia, Pa. Filed Feb. 8, 1919. Serial No. 275,713. 6 Claims. (Cl. 175-277.)

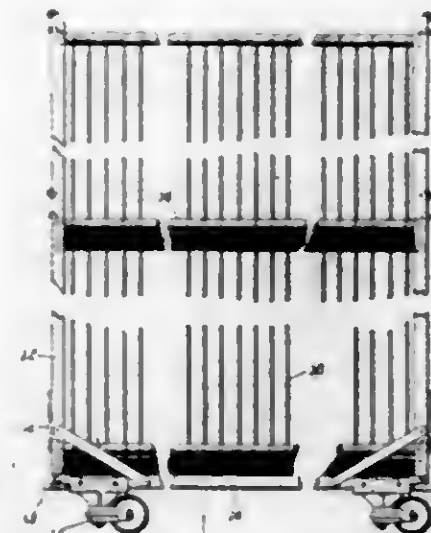


1. In a device of the character stated, a plug having a cavity therein, a non-conducting wedge, a conducting clip and a fuse adapted to be inserted and withdrawn from said cavity as a unit, and side channels extending from said fuse upwardly at each side of said wedge for permitting the escape of gases created when a fuse blows out.

1,313,289. CUT-SOLE RACK. HARVEY L. GLIDDEN, Natick, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 19, 1916. Serial No. 79,434. 6 Claims. (Cl. 211-14.)

3. A rack comprising a series of partition members having registering openings, the outer member of said series being tubular and having two openings slightly offset relatively to each other and substantially aligning with the apertures in the other partition members and a flexible parti-

tion member for insertion through the apertures in said tubular member and said other partition members whereby



when said flexible member is inserted in position it is locked against withdrawal.

1,313,290. TOY AEROPLANE. CHARLES H. GRANT, New York, N. Y. Filed Mar. 21, 1919. Serial No. 284,161. 4 Claims. (Cl. 244-14.)



1. A toy aeroplane comprising a hollow body open at the bottom, supporting planes, a propeller revolvably mounted in the front end of the body, and a rubber band motor disposed within the body and detachably connected to the propeller, said motor being insertible or removable through the opening in the bottom of the body.

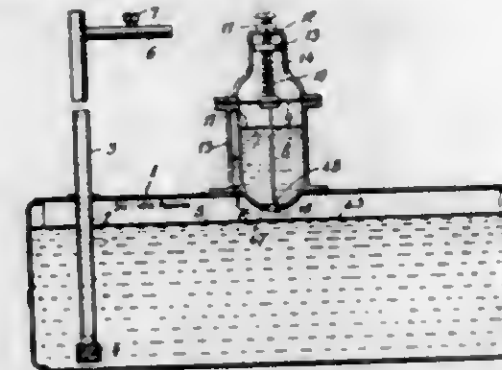
1,313,291. COMPENSATING BALANCE-SPRING FOR CHRONOMETERS AND WATCHES. CHARLES EDOUARD GUILLAUME, Sèvres, France. Filed Apr. 30, 1919. Serial No. 293,881. 11 Claims. (Cl. 55-114.)

1. A compensating balance spring for chronometers and watches which practically eliminates the secondary error when employed with a continuous balance and composed of an alloy of iron and nickel (the latter in the proportion of from 25 to 45 per cent.) containing from 10 to 20 per cent. of at least one metal capable of alloying in all proportions with the ferro-nickels.

1,313,292. AUTOMATIC FIRE-EXTINGUISHING APPARATUS. JOHN R. HAMILTON, Yonkers, N. Y., assignor to Sypho-Chemical Sprinkler Corporation, Croton-on-Hudson, N. Y., a Corporation of New York. Filed Aug. 6, 1915. Serial No. 43,912. 5 Claims. (Cl. 169-24.)

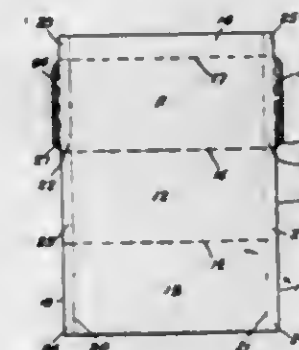
1. In automatic chemical fire extinguishing apparatus, a distributing system normally charged with carbonate extinguishing liquid and comprising automatic distributing devices, a connected supplemental supply of extinguishing liquid comprising a chemical mixing tank charged with carbonate extinguishing liquid and normally kept under the desired emergency pneumatic pressure and cooperating chemical mixing devices comprising an acid chamber provided with pressure responsive automatic discharging

means comprising a valve allowing progressively increasing rates of discharge as it opens and a directly connected pressure responsive resilient diaphragm above said acid charge and acted on on one side by the pressure within said mixing tank and acted on on the other side by atmos-



pheric pressure and an adjustable compensating spring tending to open said valve on substantial decrease of the pressure in said tank in order to compensate for any gradual pressure reduction during the inoperative condition of the system and to substantially maintain such emergency pressure during fire emergency conditions.

1,313,293. COMBINATION LETTER-SHEET AND ENVELOP. MARK HARRIS, New York, N. Y. Filed Aug. 28, 1918. Serial No. 251,743. 1 Claim. (Cl. 229-92.7.)

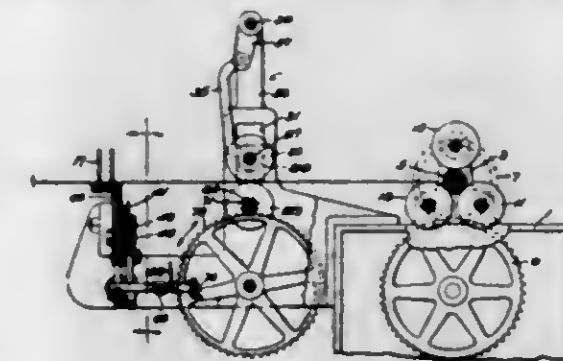


A combination letter sheet and envelop blank consisting of a body portion having on one side edge thereof an ungummed pocket flap of materially less width than the body portion and folded inwardly thereon, said body portion being provided at its opposite side edge with a member adapted to be folded inwardly upon said body portion, the free edge of said member when folded being under the pocket flap and the transverse width of said member and said pocket flap being the same, the body portion being of greater transverse dimensions than the other parts to provide unitary sealing flaps at the opposite sides thereof which are adapted to be folded inwardly upon said member and said pocket flap to form a sealed envelop, and the body portion, said member and the pocket flap being provided inwardly of the side edges thereof and inwardly of said sealing flaps with parallel rows of perforations which form strips extending the full length of the body portion, member and pocket flap which are adapted to be torn off in opening the envelop to leave a plain and unobstructed letter sheet when open, said blank before being folded for use as an envelop having the pocket flap folded down upon the body portion and certain printed matter then placed thereon.

1,313,294. TEXTILE-MACHINE. EDGAR F. HATHAWAY and CHARLES LRA, Boston, Mass., assignors to American Warp Drawing Machine Company, a Corporation of Maine. Filed Nov. 12, 1914. Serial No. 871,824. 2 Claims. (Cl. 28-14.)

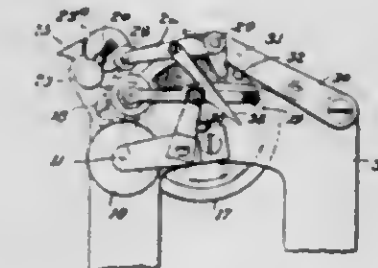
1. In a yarn setting machine, the combination with spool holding means, of means for turning the spool to wind on the yarn, a yarn spacer with means for automatically

applying the same to the yarn, means normally locking said spacer against its automatic application, a measuring roll engaging the yarn in its passage to the spool and



adapted to be turned an amount proportionate to the length of yarn delivered to the spool, and means operated by a predetermined movement of said measuring roll to release said locking means.

1,313,295. INKING MECHANISM FOR PRINTING-TELEGRAPH RECEIVERS. GEORGE S. HILTZ, New York, N. Y. Filed July 21, 1916. Serial No. 110,451. 2 Claims. (Cl. 178-23.)



1. In an inking mechanism for printing telegraph receivers, in combination, a rotary type wheel, an axially shiftable inking roller in rolling contact with the type wheel, an ink reservoir having an ink-supplying device adjacent to the inking roller, a doctor roll in rolling contact with the inking roller, a lever carrying the doctor roll, means for rocking the lever periodically to carry the doctor roll into ink-receiving contact with the ink-supplying device, a cam associated with the inking roller to shift the same axially, and means actuated by the said lever to actuate the cam and thereby shift the inking roller.

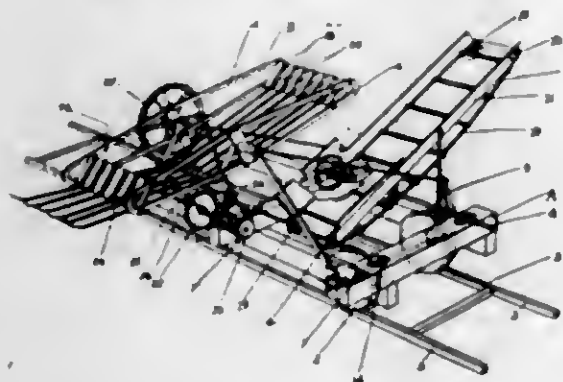
1,313,296. PORTABLE ELECTRIC LAMP. VALENTIN T. JANNINGA, Chicago, Ill. Filed Apr. 16, 1917. Serial No. 162,348. 7 Claims. (Cl. 240-54.)



1. In a portable electric lamp, an electric switch socket provided with two push buttons, a handle having a sock-

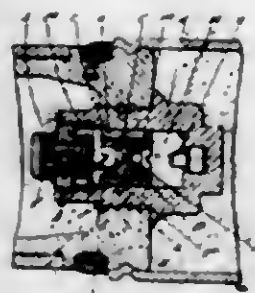
eted end for the reception of said switch socket, said socketed end having holes through its wall in alignment with the push buttons, and affording access to said push buttons, and means secured on said handle and overhanging said switch to retain the same in the socket.

1,313,297. MANURE-LOADER. PAUL H. JOHNS, Utica, Minn., assignor of one-fourth to Fred Johnson and one-fourth to A. W. Cowles, Utica, Minn., and one-fourth to E. W. Morgan, Winona, Minn. Filed June 22, 1918. Serial No. 241,363. 2 Claims. (Cl. 37-29.)



1. In a manure loader, the combination with a frame, of a rotary fork adjustably mounted on the frame said fork comprising a housing pivotally supporting a plurality of outwardly extending tines, each tine being free to move independently by gravitation at its outer end in the direction of rotation of the fork, an elevator conveyor between said fork and said frame, and means for actuating said fork and elevator conveyor.

1,313,298. SHELL-FUSE. FREDERICK GEOFFREY LEES JOHNSON, Westminster, London, England, assignor to Vickers, Limited, Westminster, London, England. Filed Nov. 11, 1918. Serial No. 262,036. 4 Claims. (Cl. 102-36.)



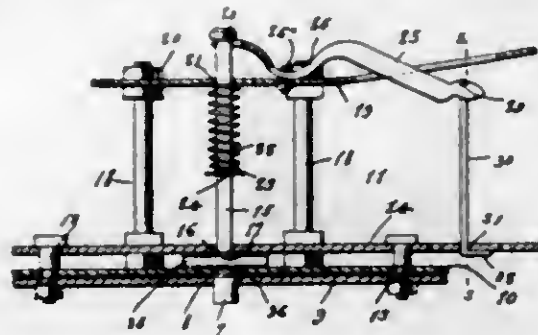
1. In a shell fuse, a gas tight fuse body, firing mechanism contained in the said body, and a column of slow burning composition which forms a seal maintaining the fuse gas tight until the combustion of the said composition is advanced sufficiently to break through and ignite the shell charge.

1,313,299. LINGERIE-CLASP. OSCAR R. JOHNSON, Providence, R. I. Filed Apr. 8, 1919. Serial No. 288,580. 3 Claims. (Cl. 24-250.)



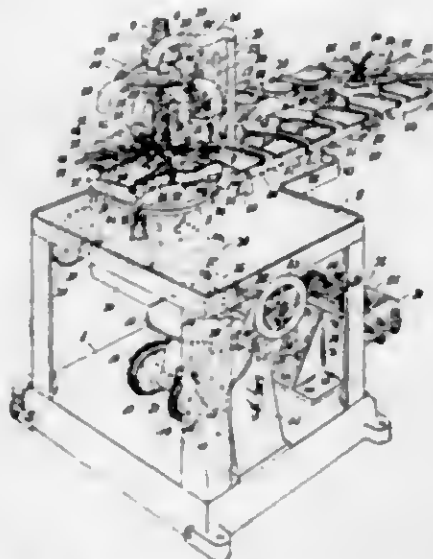
1. In a clasp having a lower member and an opposing member, a substantially U-shaped clasp borne by one of said members and formed by bowing the normal side edges of said member inwardly toward each other, said side edges forming the sides of the U and the base of the latter extending below the under face of said member.

1,313,300. BOMB. CHARLES F. KEMM, Albuquerque, N. Mex., assignor of one-third to Bibian Perca, Albuquerque, N. Mex. Filed Sept. 18, 1917. Serial No. 191,993. 3 Claims. (Cl. 102-29.)



1. In combination, a bomb, a percussion cap therefor, means to support said percussion cap, a pair of spaced parallel plates disposed adjacent said percussion cap and having openings in alignment therewith, a spring actuated firing pin slidably mounted in said openings, a firing pin lever fulcrumed on one of said plates, and a V-shaped retaining element engaging the rear end portion of said lever and having its outer portion thereof extending angularly and engaging the other of said plates.

1,313,301. FILLING-MACHINE. KARL KIEFER, Cincinnati, Ohio. Filed Apr. 21, 1917. Serial No. 163,603. 40 Claims. (Cl. 226-9.)



1. In a filling machine the combination of a carrier for containers, with controlling and discharging elements, and a rotary force pump cooperating with said controlling device.

1,313,302. DIAPHRAGM BEFFING MECHANISM. ALFRED JOHN KIPP, Milwaukee, Wis., assignor to The Curtain Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1919. Serial No. 283,766. 5 Claims. (Cl. 105-14.)



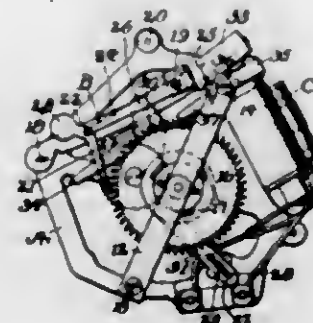
1. The combination with a diaphragm beffing spring reversely bent at its ends to provide elongated terminal loops, of keeper brackets to receive the looped ends of the spring and including members for engagement within the loops.

1,313,303. ADJUSTABLE DRESS-FORM. HARRY R. KONIKOFF, New York, N. Y. Filed May 19, 1915. Serial No. 29,093. 4 Claims. (Cl. 223-18.)



1. An adjustable dress form, comprising a base, an adjustable standard, a diaphragm carried thereby, vertical rods carried by said diaphragm, a neck-plate carried by said rods, said diaphragm, neck-plate, and rods being immovable with respect to each other, a bust portion carried by said diaphragm composed of a plurality of separable upper bust sections and lower hip sections and means for locking the same in desired relationship, and a skirt portion adjustable with said bust portion and adapted to be telescoped thereover.

1,313,304. SECONDARY ELECTRIC CLOCK. FRANK F. LANDIS, Waynesboro, Pa. Filed July 27, 1915. Serial No. 42,192. 5 Claims. (Cl. 58-27.)

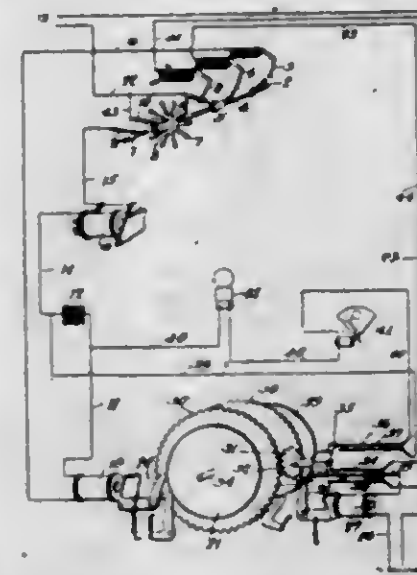


1. In a secondary electrically operated clock mechanism, the combination with the operating magnets, ratchet-wheel and pawl-carrying lever, of an armature having an operating lever rigid therewith and arranged with its upper edge in contact with the lower edge of said pawl-carrying lever, the edges of said two parts being equally curved but in reverse directions and of the same length along their contact faces, said armature being mounted to rock on a support adjacent the pole of the magnets, substantially as set forth.

1,313,305. SYNCHRONIZING CLOCK SYSTEM. CLINTON E. LASHARKE, Hinghamton, N. Y. Filed Dec. 12, 1918. Serial No. 266,419. 6 Claims. (Cl. 58-24.)

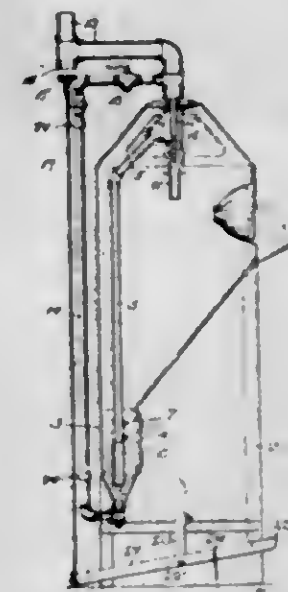
1. In a master clock for synchronizing systems, the combination of a movable member, a local circuit under the control of the clock for imparting movement at a given rate to said movable member, a second movable member, a main circuit connection, also under the con-

trol of the clock, for imparting a like movement to said second member in exact unison with the first, and means



adapted to be brought into operation by the failure of the main source of current and the departure of the two members from unison to give a signal.

1,313,306. SAND-BLAST MACHINE. WILLIAM HENRY LEIMAN and GEORGE WILLIAM LEIMAN, Newark, N. J. Filed Apr. 17, 1917. Serial No. 162,815. 2 Claims. (Cl. 51-12.)

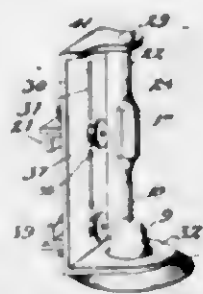


1. In a sand blast machine, a casing provided at its bottom with a sand receptacle, a mixing chamber within the casing having a downwardly directed ejecting nozzle, a sand pipe housed entirely within the casing, leading from the said receptacle to the mixing chamber, an air supply pipe leading to the mixing chamber, a sand ejecting and lifting pipe leading from the air supply pipe along the exterior of the casing and into the bottom of the sand receptacle, said air supply pipe having a bypass port, a normally open exterior valve therefor having its stem slidable in suitable guides on the sand ejecting and lifting pipe and a foot lever connected to said stem for closing said valve.

1,313,307. HOLDING MEANS FOR PORTABLE APPARATUS. JAMES B. LOCKART, Washington, D. C. Filed July 30, 1915. Serial No. 42,729. 4 Claims. (Cl. 45-52.)

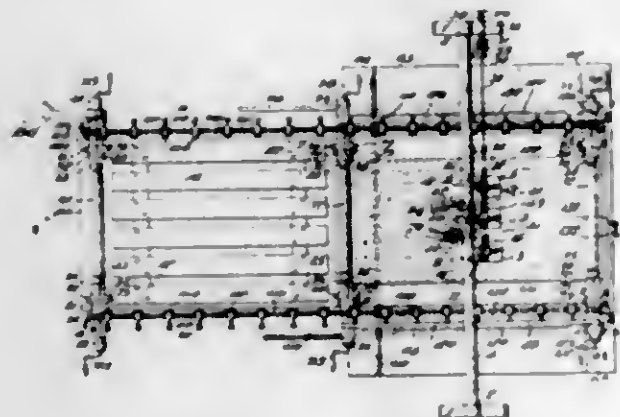
4. A holding device comprising a suction cup, engaging means adapted to engage an object to be held, a

threaded stem carried by said suction cup, a threaded stem carried by said engaging member and an adjusting



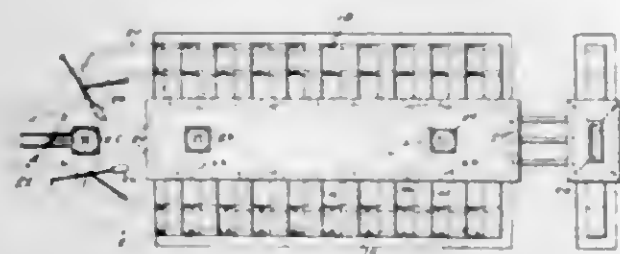
nut engaging both of said stems, said stems being oppositely threaded to feed through the nut in opposite directions.

1,313,308. QUILTING-MACHINE. WILLIAM H. LUTZ, Philadelphia, Pa. Filed July 25, 1916. Serial No. 111,101. 14 Claims. (Cl. 112-14.)



1. In a machine of the character stated, a frame, a plurality of sewing heads and a plurality of tables mounted on said frame in juxtaposed relation, a pattern, a holder for an article to be stitched, means to support said holder for lateral movement in any direction with respect to said tables, and means coacting with said pattern to impart to said supporting means a movement following the line of contour of said pattern whereby said article is correspondingly moved and stitched in lines conforming to said pattern.

1,313,309. PROCESS OF SMELTING AND REFINING ORE. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to The Mamboorg Continuous Iron and Steel Furnace Co., Lancaster, Ohio. Filed June 10, 1918. Serial No. 239,231. 3 Claims. (Cl. 75-14.)



1. The process of smelting ore which consists in providing a bed of molten metal, continuously adding a mixture including ore, a flux and a fuel, continuously heating the

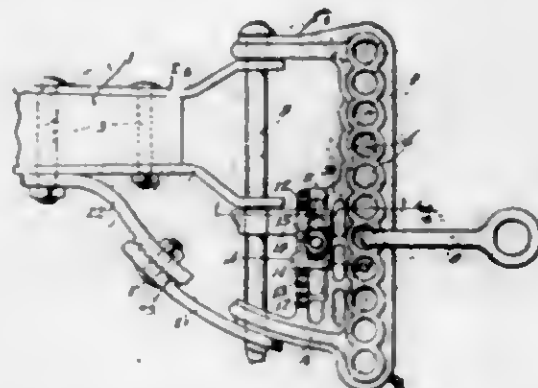
mixture in the bed to maintain the whole in a molten mass, separating the slag from the molten metal, and continuously withdrawing molten metal from the bed.

1,313,310. WEED-DESTROYER. HENRY MATTHEW, Hadsboro, N. D. Filed Mar. 13, 1919. Serial No. 282,250. 3 Claims. (Cl. 55-85.)



1. In a weed extirminator, a main frame, a rotary weeder mounted on the main frame and adapted to be adjusted vertically and including a shaft, a transverse shaft, arms projecting from the shaft and having slotted portions for receiving the shaft of the rotary weeder, an operating lever connected with the transverse shaft, and means for holding the operating lever in adjusted positions.

1,313,311. CLEVIS. CHARLES E. MERRILL, Marion, Ohio. Filed Feb. 27, 1919. Serial No. 279,520. 9 Claims. (Cl. 97-4.)



1. In a device of the character described, a frame comprising a connecting bar and arms carried by said bar to support an attaching member, one of said arms being adjustable, said frame having a clamping plate rigidly secured thereto in the rear of said connecting bar and provided with an elongated opening, and said arm having a part adapted to engage said clamping plate, and a bolt to extend through said part of said arm and the opening in said clamping plate to connect the arm in adjusted position thereon.

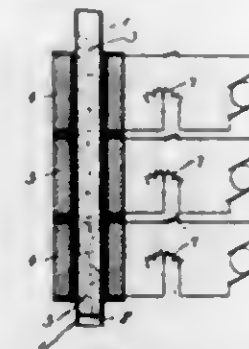
1,313,312. PRODUCTION OF FORMATES. FLOYD J. METZGER, New York, N. Y. Filed Sept. 6, 1918. Serial No. 252,532. 19 Claims. (Cl. 23-21.)

1. The method of extracting formates from products containing the same in admixture with carbonates which comprises leaching the formate from such product with a solvent in which the carbonate is insoluble or difficultly soluble, and thereby obtaining the formate relatively free from carbonate.

1,313,313. PRODUCTION AND EXTRACTION OF CYANIDS. FLOYD J. METZGER, New York, N. Y. Filed Sept. 6, 1918. Serial No. 252,533. 12 Claims. (Cl. 23-13.)

1. The method of recovering cyanids from furnace products containing the same in admixture with a relatively large amount of iron, which comprises leaching the cyanid therefrom with a solvent which retards the production and extraction of ferrocyanid.

1,313,314. SYNTHETIC PRODUCTION OF AMMONIA. FLOYD J. METZGER, New York, N. Y. Filed June 12, 1918. Serial No. 239,577. 14 Claims. (Cl. 23-21.)



1. In the catalytic production of ammonia from nitrogen and hydrogen, the method of operating at high efficiency, which comprises changing the temperature during the reaction period to restore the catalyst.

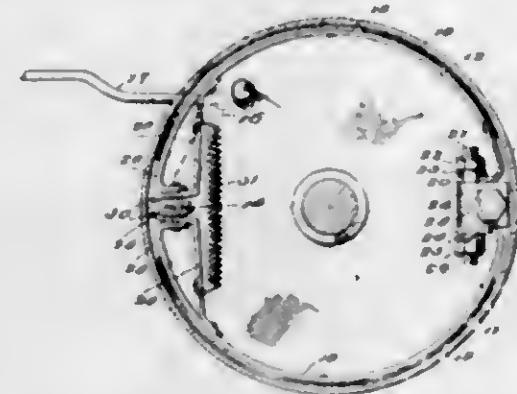
1,313,315. SYNTHETIC PRODUCTION OF AMMONIA. FLOYD J. METZGER, New York, N. Y. Filed June 12, 1918. Serial No. 239,578. 29 Claims. (Cl. 23-21.)

1. The method of producing ammonia synthetically, which comprises bringing a mixture of hydrogen and nitrogen gases into intimate contact with a fluent catalyzing composition at a temperature appropriate to the catalytic production of ammonia therewith.

1,313,316. SYNTHETIC PRODUCTION OF AMMONIA. FLOYD J. METZGER, New York, N. Y. Filed June 12, 1918. Serial No. 239,579. 17 Claims. (Cl. 23-21.)

1. The method of producing ammonia synthetically, which comprises bringing a mixture of hydrogen and nitrogen gases into intimate contact with a fluent catalyzing composition, made up of a finely divided catalyst in an unsaturated organic vehicle, at a temperature appropriate to the production of ammonia therewith.

1,313,317. INTERNAL-EXPANDING BRAKE. JOSEPH O. MICHAUD, Fort Kent, Me. Filed Mar. 5, 1918. Serial No. 220,521. 11 Claims. (Cl. 74-13.)

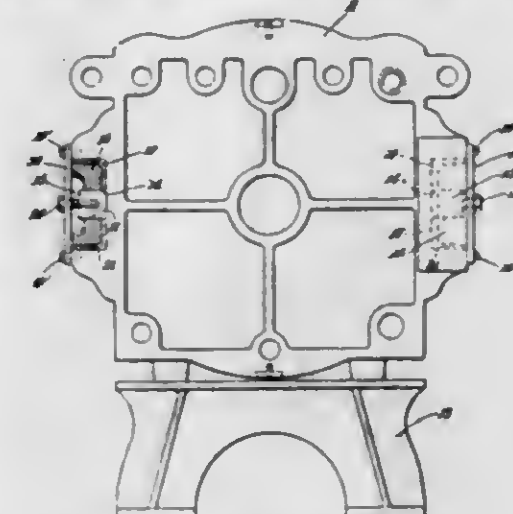


1. An internal expanding brake including companion brake shoes, an attaching clip disposed between adjacent ends of the shoes, a pin carried by said clip and loosely receiving the said ends of the shoes whereby washers may be inserted between the said ends of the shoes and the clip for spreading the shoes with respect to each other, and means for expanding the said shoes.

11. An internal expanding brake including companion brake shoes, supporting means therefor, liners normally carried inactive upon the supporting means, and means holding the liners against displacement from the supporting means, the liners being insertible beneath the inner ends of the shoes in active position for spreading the shoes.

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1,313,318. JOINT FOR FILTER-PRESS DEVICES. GEORGE F. MILLER, New York, N. Y. Filed Mar. 31, 1919. Serial No. 286,399. 9 Claims. (Cl. 189-36.)



1. In a device of the character specified, in combination, a filter press head, a recess within each opposite side face of the head capable of receiving a side bar, a side bar within each recess, an opening through the face of each side bar, a reinforcing member abuttable upon the face of each side bar, an opening through each reinforcing member, a head lug placeable through the opening in a side bar and the opening in the reinforcing member and means for preventing the movement of the side bars.

1,313,319. INTERNAL-COMBUSTION-ENGINE IGNITION-INDICATOR. JULIUS J. MILLER, St. Joseph, Mich. Filed Aug. 27, 1917. Serial No. 188,294. 10 Claims. (Cl. 175-183.)



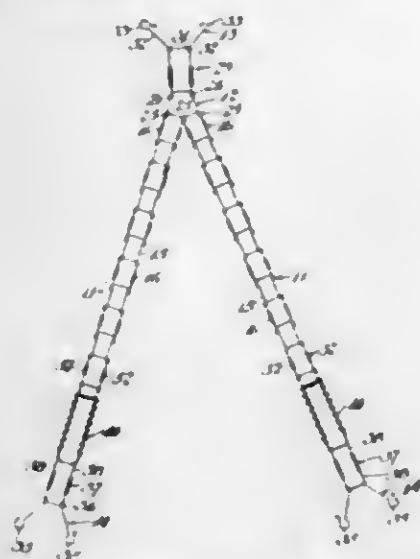
1. In combination with an internal combustion engine, and the ignition system thereof, a plurality of spark gaps arranged close together in a row, one for each cylinder of the engine, comprising metal elements spaced apart to form the gaps, a spring strip disposed adjacent to one element of each gap, means by which the strips are all grounded, a structure to support and insulate said metal elements and strips, and a push button for each spring strip, each button being operative to push its allotted strip into engagement with the adjacent element to ground the circuit of corresponding gap.

1,313,320. PACKING FOR PISTON-RODS, PLUNGERS, PISTONS, &c. NORMAN BRUCE MILLER, New York, N. Y. Filed July 8, 1918. Serial No. 243,753. 9 Claims. (Cl. 154-45.5.)



1. A packing comprising a body rectangular in cross section made up throughout of alternate layers of relatively stiff and relatively resilient material, said layers continuing through opposite exterior surfaces of the body and said layers at one side of the body being disposed in convergent relation to the layers at the opposite side of the body with the line of convergence extending substantially parallel between opposite flat sides of the body.

- 1,313,321. SUSPENDERS. JOSEPH E. MILLS, Los Angeles, Calif. Filed Sept. 18, 1917. Serial No. 192,022. 4 Claims. (Cl. 241-12.)



1. A unit for suspenders comprising a U-shaped wire member formed of a single piece of wire with a coiled spring in each leg of the member.

- 1,313,322. PROCESS OF MAKING METAL WHEELS. ALFRED CLAUDE MORIN, Paris, France. Filed Aug. 2, 1918. Serial No. 247,939. 1 Claim. (Cl. 29-159.)



The process of making the web or center portion of a metal wheel, which consists in transforming a perforated disk of sheet metal into the shape of a truncated cone, and then flattening the cone in such manner as to form radial corrugations therein which corrugations extend from near the periphery of the blank to the perforation therein.

- 1,313,323. GAS-DETECTOR. MILTON A. NOBLE, Philadelphia, Pa., assignor, by mesne assignments, to W. S. Russell, trustee, Carlisle, Pa. Filed Dec. 27, 1916. Serial No. 139,228. 12 Claims. (Cl. 177-311.)

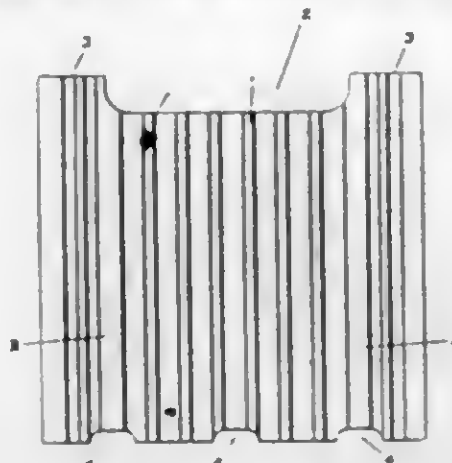


6. A gas detector consisting of an electric alarm device; a catalytic element normally maintained by an electric current at an elevated temperature; and a normally closed thermostatic switch adjacent the catalytic element adjusted to open when the temperature of the element is increased by the presence of gas.

- 1,313,324. SEPARATOR FOR STORAGE BATTERIES. HORACE W. NOBURY, Indianapolis, Ind., assignor to Indianapolis Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 18, 1917. Serial No. 191,938. 1 Claim. (Cl. 204-29.)

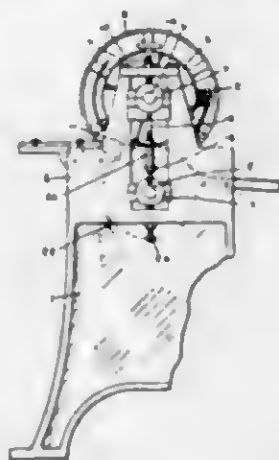
A separator for storage battery plates having bridge receiving notches formed in its lower end and upwardly projecting lugs on its upper end, two of said bridge receiving notches being in vertical alignment with the inner edges of said lugs, said separator being formed with nar-

row vertical strengthening and spacing ribs and with a pair of relatively wide ribs connecting the inner edges of



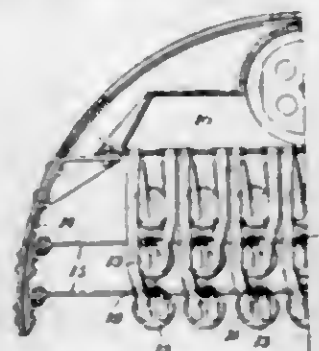
said lugs and their aligned bridge receiving notches, substantially as set forth.

- 1,313,325. WOOD-STRIP-CUTTING MACHINE. ADDISON H. NOBURY and JOHN E. NOBURY, Indianapolis, Ind., assignors to Indianapolis Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed June 13, 1918. Serial No. 239,847. 3 Claims. (Cl. 164-68.)



1. In a material severing machine a roll provided with spaced blades, a pressure roll journaled upon a shaft parallel with the axis of the severing roll and normally positioned with its periphery contiguous thereto, means to adjust the rolls relatively to each other to vary the interval between their peripheries, and means to adjust the horizontal feed plane of the rolls without disturbing their adjustment.

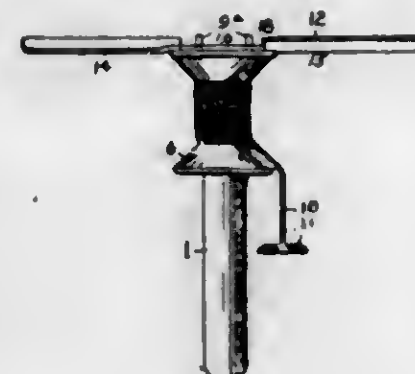
- 1,313,326. ANCHORING MEANS FOR SUPERHEATERS. LOUIS B. NUTTINO, Pelham, N. Y., assignor to Power Specialty Company, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1915. Serial No. 66,268. 8 Claims. (Cl. 122-462.)



1. A superheater having superheater units adapted to project rearwardly into the boiler flues, in combination

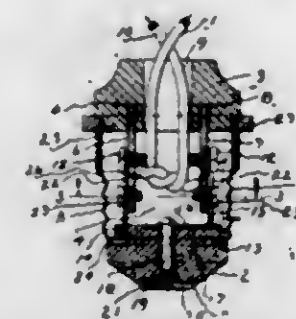
with means for relieving said units from the strains incident to vibrations and shocks, said means comprising independently secured stay members and connections between said members and the superheating elements.

- 1,313,327. TOY. FRED PARKER and ARTHUR PARKER, Wilmerding, Pa. Filed Dec. 10, 1918. Serial No. 260,043. 2 Claims. (Cl. 244-2.)



1. A toy comprising a rotatable spool, a support therefor, a pair of stuts projecting from one end of the spool, a plane adapted to be seated on the spool and including an intermediate portion having openings for the passage of said stuts, and including a pair of inclined outer portions and means for actuating the spool to project the wing, said wing being oppositely tilted at the terminal of the intermediate portion.

- 1,313,328. ELECTRICAL ATTACHMENT-PLUG. JOHANN G. PETERSON, Jersey City, N. J. Filed Dec. 1, 1917. Serial No. 204,961. 6 Claims. (Cl. 173-359.)



1. An electrical attachment plug comprising an insulating body in sections distinct and spaced from each other, a contact shell around both sections of the body, terminals extending from one of the sections of the body, said section to which said terminals are connected, having means for the passage of wires, arms separably connected with said terminals inside the shell, one of said arms being electrically connected with said contact shell, said terminals and arms constituting the sole means for mechanically connecting said insulating sections, a central end contact on the other section of the body electrically connected with the other arm, and means for electrically connecting the wires with said terminals.

- 1,313,329. OUTLET-CAP AND METHOD OF MAKING THE SAME. JAMES C. PHELPS, Springfield, Mass. Filed Nov. 1, 1917. Serial No. 199,665. 8 Claims. (Cl. 247-12.)

1. A device of the kind described, comprising a member adapted to be secured to the threaded end of an electric conduit and having openings formed therein for receiving the electric wires as they emerge from the conduit, the upper end of the member being formed with an opening designed to receive a plug for closing the end of the member and for separating the wires.

2. An insulating cap for closing the end of an electric conduit, an axially arranged opening extending therethrough, the upper and lower ends of the opening being formed with threads, one of the threaded portions being designed for attaching the cap to the conduit, the other threaded opening being designed for receiving a plug for closing the opening and having a hooded portion extending over the upper end of the cap, its lower end being formed with a conical shaped surface for separating the wires, as described.



3. The method of forming an insulating cap for closing the outlet end of an electric conduit which consists in placing the insulating material when in a plastic state into a mold, for forcing the same around a former having threads at its ends which are of different diameters and a connecting portion between the threaded portion that is greater in diameter than the smaller threaded portion whereby when the molded material has set, the former may be removed by rotating the same out of the cap as described.

4. A cap for closing the end of an electric conduit and for separating electric wires therein, said cap including an axially arranged opening therethrough, other openings extending at an angle to the axially arranged opening, means for securing the cap to the conduit, the upper end of the cap having a threaded opening and a removable plug in said opening, the upper portion of which is formed with a hood and its lower end formed with a conical shaped portion for separating the wires.

5. An outlet cap for closing the end of an electric conduit comprising a one-piece member formed with a threaded part for attachment to a conduit and an opening therethrough to receive and to permit the same to be threaded on to a conduit without disturbing or twisting the wires, the outer end portion of the opening being threaded, a removable plug for closing the outer end of the opening and for separating the wires.

- 1,313,330. CHILD'S COMBINED ROTARY CHAIR AND PLAY-TABLE. SIDNEY JOE POCOCK, Essex, England. Filed July 5, 1917. Serial No. 178,729. 1 Claim. (Cl. 155-45.)



A child's collapsible rotary chair and play table device comprising in combination, a base, a plurality of radially disposed traction ribs thereon, a two-part annular table hingedly connected together, inner and outer rims for the table, pillars for detachably securing the base and table together, a central stationary chair supporting post, a chair detachably mounted in said post and having a back extending above the inner rim of the table.

1,313,331. SEPARABLE FASTENER. STEPHEN A. D. PUTER, Berkeley, Calif., and EMANUEL J. BOXLER, New Haven, Conn., assignors to Duplex Snap Fastener Co. Inc., a Corporation of New York. Filed Dec. 7, 1915. Serial No. 65,451. 1 Claim. (Cl. 24-218.)



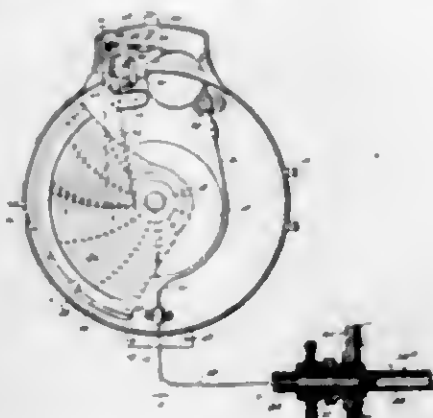
A separable fastener comprising a head member including a base; an approximately flat head disposed thereon and having a restricted neck portion; a socket member including a base plate provided with an opening through which the head is adapted to pass; a top plate secured to the base plate and provided with an opening through which a portion of the head is adapted to protrude when the members are assembled; a raised portion on the top plate extending into approximately the plane of the edges of the protruding portion of the head when the members are assembled, and forming, with the protruding portion of the head, an approximately flat surface; and a securing means housed between the top plate and base plate and adapted to engage the neck portion when the head is inserted.

1,313,332. CARBURETER. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Findelsen & Kropf Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1914. Serial No. 832,158. 28 Claims. (Cl. 261-41.)



28. In a carbureter, a plurality of fuel nozzles, independent means for controlling said fuel nozzles, a throttle valve, a manually operated mechanism adapted simultaneously to adjust the throttle valve and one of said nozzle controlling means, an automatically operated air valve, a second air valve, and means operated by said automatic air valve for operating the other nozzle controlling means as well as said second air valve.

1,313,333. INDICATING AND RECORDING INSTRUMENT. ALFRED ROESCH, Brooklyn, N. Y., assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 7, 1917. Serial No. 160,352. 4 Claims. (Cl. 234-11.)



1. An instrument of the kind described comprising a casing, a movable chart therein, a coil, a capillary tube

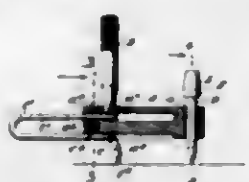
connected with said coil, a pen arm cooperating with said chart to produce a record and a compensating device bodily movable as a unit relatively to said casing and having spaced members connected at one end and comprising laminae of metals having different coefficients of expansion, the free end of one of said members of the compensating device being connected with the coil and the free end of the other member of said compensating device being connected with the pen arm.

1,313,334. SPARK-PLUG ELECTRODE. BENJAMIN ROSENBERG, Brooklyn, N. Y. Filed Feb. 27, 1918. Serial No. 219,470. 5 Claims. (Cl. 123-169.)



1. A central electrode for a spark plug comprising a hollow open metallic body and a plurality of loose bodily movable elements therein.

1,313,335. CENTER-PUNCH. FREDERICK H. RYAN, Boston, Mass. Filed Mar. 21, 1916. Serial No. 85,711. 10 Claims. (Cl. 33-189.)



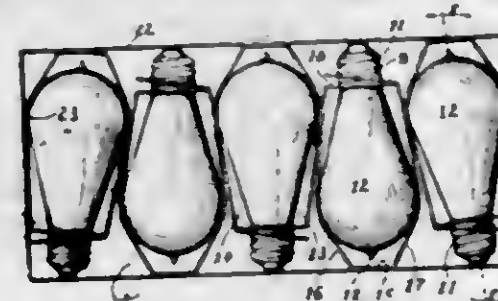
1. A device of the kind described comprising a unitary member having a punch loosely mounted therein, a spacing member comprising a spring pin parallel with said punch, its tip being adapted to rest on the surface of the work and said punch being adapted to engage and indent the same surface of the work, said spacing member adapted to slide in said unitary member toward and from said punch whereby the distance between said punch and said spacing member may be adjusted, and means for clamping said spacing member adapted to serve as a handle for said device.

1,313,336. TOOL-HOLDER. ROBERT J. SAUM, Springfield, Ohio, assignor to The Western Tool & Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed Jan. 30, 1919. Serial No. 273,956. 4 Claims. (Cl. 29-100.)



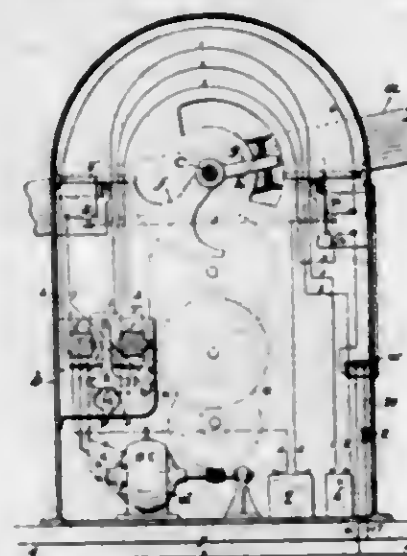
1. In a tool holder, a support having a tool receiving channel, together with a tool therein, a clamp located in said support and fitted to the top and one side of said tool, a bore in said support arranged at right-angles to said channel, a wedge in said bore, and means for tightening said wedge against said clamp.

1,313,337. ELECTRIC-LAMP CARRIER. ERICH SCHIN-SCHOLL, Ashland, N. H., assignor to General Electric Company, a Corporation of New York. Filed May 29, 1916. Serial No. 100,511. 4 Claims. (Cl. 217-29.)



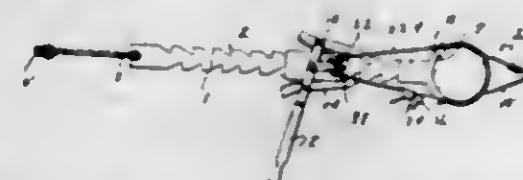
1. The combination of a lamp and a protective carrier therefor comprising a strip of sheet material, means near each end of said strip for gripping the lamp shank when said strip is wrapped endwise around the lamp, said strip being provided with a flat portion midway its length and maintained, when the strip is in place on the lamp, in a position relatively remote from the point of the lamp.

1,313,338. AUTOMATIC RAILROAD SAFETY-GATE. WALTER F. SCHLICHTER, Pottstown, and ARCHER KEIM, Spring City, Pa. Filed Nov. 10, 1917. Serial No. 201,232. 6 Claims. (Cl. 246-126.)



1. In an automatic railroad safety gate, in combination with a railroad track and a swinging gate, an electric motor, driving connections between the motor and the gate, a source of electric power, an electric circuit including the motor and source of power, switches in said circuit opened by the gate itself in either of its extreme positions, a reversing switch in said circuit, electric connections between each side of the reversing switch and one of the first named switches whereby the motor is rotated in opposite directions by operating the reversing switch to one side or the other, together with a second electric circuit for operating the reversing switch controlled by a train upon the track.

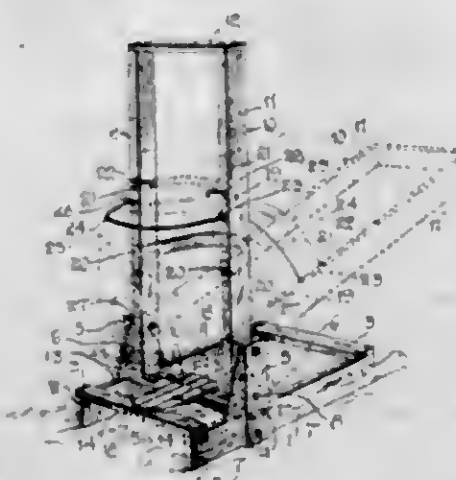
1,313,339. WIRE-STRETCHER. FRANK W. SCHUMACHER, Shawano, Wis. Filed Apr. 10, 1919. Serial No. 288,960. 6 Claims. (Cl. 254-72.)



1. In a fence wire stretcher, the combination with a bar, a slide movably mounted thereon, means for causing

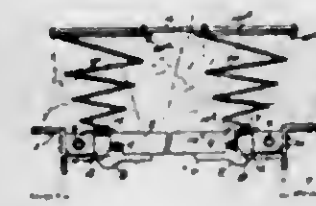
its progression along the bar, and means for attaching said bar to a fence post; of a pulley on the slide, a chain led over said pulley, and grips at opposite ends of said chain for attachment to the fence wire.

1,313,340. BARREL-RACK. EMANUEL M. SELL, Independence, Kans. Filed May 12, 1919. Serial No. 296,513. 3 Claims. (Cl. 248-38.)



1. In a barrel rack, the combination with a ground frame having cross-pieces at its opposite ends connecting the sides of the ground frame and provided with uprights rising from the opposite side pieces, of a tiltable frame fulcrumed on and between the uprights, and adapted to support a barrel, the opposite sides of the tiltable frame having means to hold the upper end of the barrel in place from tilting relatively to the tiltable frame, the bottom of the tiltable frame having means conforming to and engaging the head of the barrel and fitting within the rhines of the barrel, thereby preventing lateral movement of the barrel relatively to the tiltable frame, and whereby as the tiltable frame is disposed vertically one end edge of the barrel may rest upon one of the cross-pieces, and when the tiltable frame is tilted, the side of the barrel may rest upon the other cross-piece.

1,313,341. SPRING STRUCTURE. WOODROD SHANNON, Louisville, Ky. Original application filed Dec. 14, 1915. Serial No. 66,688. Divided and this application filed Aug. 21, 1917. Serial No. 187,496. 2 Claims. (Cl. 5-64.)

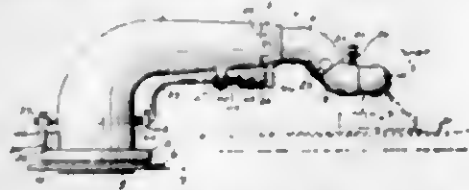


1. In a spring structure, the combination of a series of transverse slats, side rails, and cars rigidly connected to said side rails and pivotally connected to the ends of said slats so that in either position of the side rails they act as support for the spring structure.

1,313,342. COMBINED TONE-ARM AND STOP DEVICE FOR TALKING-MACHINES. JAMES T. SIBLEY, Newark, N. J. Filed July 9, 1917. Serial No. 179,365. 7 Claims. (Cl. 274-23.)

1. In a tone-arm for talking machines, the combination of a horizontally swinging sound tube having its pivot end outwardly flared to form a lower ball bearing seat and an internal annular shoulder forming an upper ball

bearing seat, a supporting member having a tubular part which telescopes into, and forms a ball raceway between its upper end and said shoulder, and a ball retaining ring secured to said supporting member to form with said ball bearing seat a ball raceway; and separate sets of balls in said raceways respectively.



2. In a tone arm for talking machines, the combination of a horizontally swinging sound tube and a support therefor, upon which said sound tube telescopes, a bearing between said tube and support comprising upper and lower ball raceways with balls therein, the upper raceway formed by an annular shoulder upon the interior of said tube and the upper end of said support, and the lower raceway formed by a flaring flange upon the lower end of said tube and a ball ring secured to said support and surrounding the lower end of said tube.

3. In a tone arm for talking machines, the combination of a horizontally swinging sound tube, with a tubular extension mounted upon the free end of said tube for vertical oscillation, an electric circuit, and means actuated by the vertical oscillation of said tubular extension to open and close said circuit.

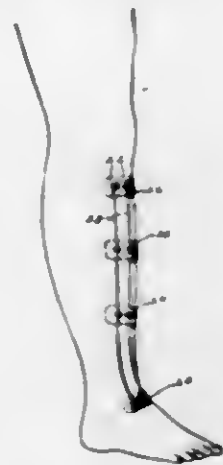
4. In a tone arm for talking machines, the combination of a horizontally swinging sound tube, having a tubular extension pivoted to the free end thereof for vertical oscillation, an electric circuit having a switch therein, means actuated by the upward oscillation of said extension to close said switch, and by the downward movement of said extension to open said switch.

5. In a tone arm for talking machines, the combination of a horizontally swinging sound tube having a vertically oscillating tubular extension at the free end thereof, an electric circuit having a translating device and a switch therein, means actuated by the upward movement of said extension to close said switch.

1,313,343. SIZE FOR WOOD-FIBER PRODUCTS. BENJAMIN WILSON STOWELL, Buffalo, N. Y., assignor to The Beaver Company, a Corporation of Ohio. Filed Feb. 26, 1919. Serial No. 279,310. 4 Claims. (Cl. 134—22.)

3. A size for wood fiber products and the like comprising a composition made up of about 47% of a resin, about 1.5% lime, about 3.5% of a wax and about 48% of a solvent.

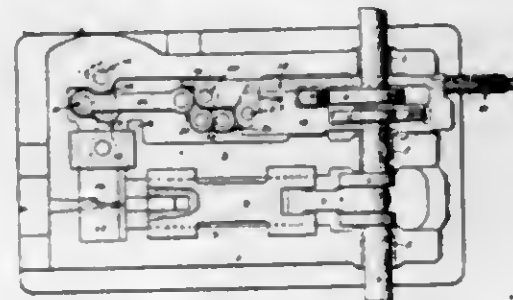
1,313,344. SURGICAL APPLIANCE. EDWARD N. SMART, Madison, Nebr. Filed Aug. 22, 1917. Serial No. 187,582. 2 Claims. (Cl. 128—87.)



1. A surgical splint comprising two flat plates spaced from each other, a series of substantially parallel and

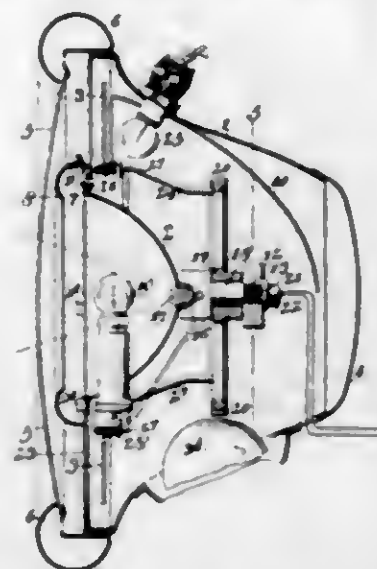
spaced wires having their opposite ends connected to said plates respectively, one or more other plates arranged transversely of said wires and connected thereto between said first plates, said plates and wires being of pliable material having sufficient rigidity to retain their applied shapes under normal conditions, whereby the splint may be shaped to required forms.

1,313,345. MACHINE FOR FORMING WRENCH-HEADS. EDWARD C. SMITH, Meadville, Pa., assignor to Meadville Wrench Company, Meadville, Pa., a Corporation of Pennsylvania. Filed July 28, 1917. Serial No. 183,344. 5 Claims. (Cl. 164—86.)



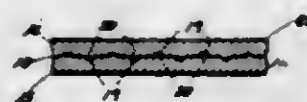
1. In a machine for forming wrench heads the combination of side dies forming a reduced space between sockets for the jaw and die ring of a wrench head; and a punch operable between the side dies to remove material between said dies extending through the jaw and guide ring and between said dies to form a guide opening.

1,313,346. AUTOMOBILE-SIGNAL. HAMPTON K. SMITH, Union, S. C., assignor to Edith K. Smith. Filed Feb. 28, 1918. Serial No. 219,708. 13 Claims. (Cl. 177—337.)



11. A signal member mounting, comprising a signal member, telescopic means for holding the signal member in operative position when secured together, continuously movable means providing the support for said signal member, and means extending from said supporting means to a portion of the signal member structure.

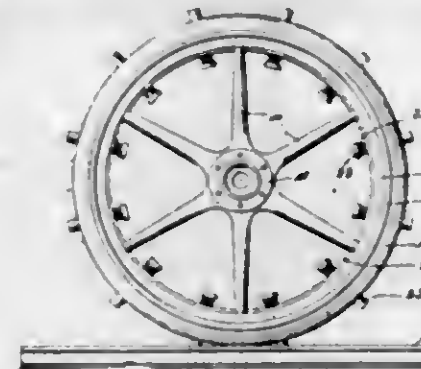
1,313,347. WINDOW-PANEL-SUPPORTING FRAME. JOSEPH SOAS, New York, N. Y. Filed Jan. 25, 1919. Serial No. 273,017. 2 Claims. (Cl. 21—220.)



1. A frame of the class described composed of two approximately similar parts, means whereby a transparent

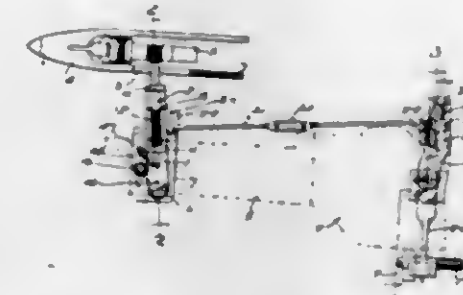
panel may be secured between said parts, and said parts being also provided in their adjacent faces but outside of the transparent panel with circularly and alternately arranged and spaced convex or pointed knobs and corresponding recesses adapted to receive said convex or pointed knobs.

1,313,348. WHEEL. NICHOLAS SPIN, Auburn, N. Y. Filed Sept. 16, 1918. Serial No. 254,269. 1 Claim. (Cl. 205—9.)



In a device of the class described, the combination with a vehicle wheel having a rim and tread, of a rigid, metallic band secured to the periphery of said rim, a plurality of spaced sleeves fixed upon the outer periphery of said band, closely adjacent to said rim and tread, plungers slidably engaged in said sleeves and band, said plungers containing lateral recesses midway of their length, within said sleeves, springs fixed within said plungers operable within their recesses, pins secured at the outer ends of said springs, movable in said recesses, said pins being engageable in the lateral openings in the walls of said sleeves, heads formed at the inner ends of said plungers, and springs encircling said plungers adapted to exert pressure against said heads, normally retracting plunger.

1,313,349. FEELER-MOTION FOR LOOMS. EDWARD S. STIMPSON, Hopedale, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 3, 1916. Serial No. 60,739. 21 Claims. (Cl. 139—85.)

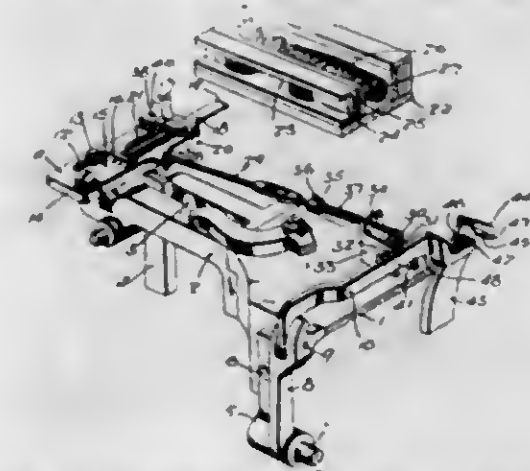


1. In a feeler motion for looms, the combination of an operating member movable toward and from the front of the loom, a controller, means normally acting to move the controller into operative relation with the operating member, a feeler connected to the controller and held from movement in a direction longitudinally of the shuttle by engagement with the filling as the lay beats up until the filling is substantially exhausted, and a slide on the controller adapted to engage the operating member on the backward movement thereof to prevent movement of the feeler from feeling position as the lay moves back.

1,313,350. FEELER-MOTION FOR LOOMS. EDWARD S. STIMPSON, Hopedale, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 16, 1916. Serial No. 75,556. 15 Claims. (Cl. 139—85.)

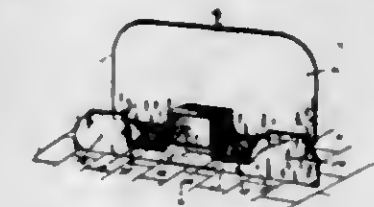
1. In a feeler motion for looms, the combination of an actuator for initiating filling replenishment, operating

means for said actuator, a feeler for governing the operative relation of said actuator and operating means, means normally acting to move the feeler in a direction longitudinally of the shuttle and prevented from effecting such



movement by engagement of the feeler on detecting beats with the mass of filling until the filling is substantially exhausted, and a part actuated by forward movement of the actuator in effecting replenishment of filling to reset the feeler.

1,313,351. ADVERTISING OR DISPLAY DEVICE. JULIEN STRANDERS, Brooklyn, N. Y., assignor to Harry B. Kruger, New York, N. Y. Filed Apr. 16, 1918. Serial No. 228,907. 5 Claims. (Cl. 211—24.)



1. A collapsible display device comprising spaced display panels and relatively movable means connecting said panels to each other, said device being adjustable to collapsed or erect position with all parts thereof in the same connected relation in both positions of the device, the device having an opening between the panels adapted to receive an article to be displayed, the article engaging the spaced panels to prevent their movement toward each other to collapsed positions, said panels and the connecting means extending in a common plane when the device is collapsed.

1,313,352. RECLAIMING AND CONVEYING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 18, 1918. Serial No. 247,239. 6 Claims. (Cl. 193—3.)



1. Apparatus for gathering, transferring, and conveying material, comprising a main conveyor belt, a truck movable longitudinally over said belt, a boom conveyor supported at one end by said truck and mounted to swing about a vertical axis passing through said truck, a tractor for supporting the outer end of said boom conveyor and for swinging it about said vertical axis, a truck movable longitudinally over said boom conveyor, a gatherer of material supported by said last mentioned truck and movable longitudinally therewith and which comprises a frame or

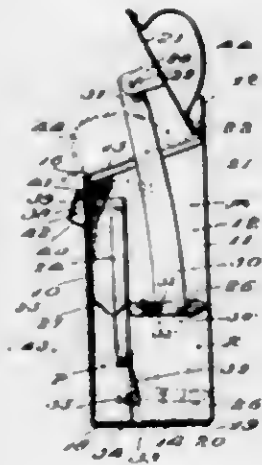
housing, a plow and a conveyer belt; a winch carried by said last mentioned truck, and a cable extending from said winch to the first mentioned truck, and thence to the gatherer carrying truck and also to the frame of the gatherer whereby the gatherer and its supporting truck may be moved longitudinally over the boom conveyer whatever be the angular position of the boom conveyer relatively to the main conveyer.

1,313,353. TRACK ELEVATING AND BALLASTING MACHINE. JOHN EDWARD TOBIN, Mansfield, Ohio. Filed Apr. 2, 1919. Serial No. 287,018. 28 Claims. (Cl. 104-7.)



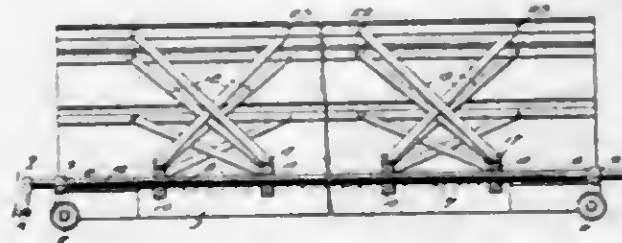
1. In a combined track elevating and ballasting machine, a frame, a roller provided with journals which are fitted to bearings arranged adjacent to the front end of the frame, and a pair of rollers secured to and adapted to movably support the frame.

1,313,354. COMBINATION MILK AND MAIL BOX. ISAK O. TORKELSON, New Brighton, N. Y., assignor of one-half to LARS O. TORKELSON, New Brighton, N. Y. Filed Jan. 24, 1919. Serial No. 272,910. 6 Claims. (Cl. 232-1.)



6. In a deposit and collection receptacle, a container, said container having an open top and having the remaining walls thereof closed, a movable closure for said open top, a vertical partition in the container, a platform movable in the container at one side of the partition and having portions projecting through the partition to operate in the compartment at the other side thereof, brackets depending from the closure, hangers having slotted connections with the brackets for pivotal movement with respect thereto, said hangers having slotted pivotal connections with the platform at the lower ends thereof, said partition being slotted, a spring member anchored thereto and depending therefrom, said spring having a resilient portion engaging through the slot and adapted to sustain the platform partly elevated at times, said slotted connections between the brackets and hangers, and the hangers and platform, serving to relieve the abutting engagement of the platform with the spring member to assist in sustaining the platform in a partly elevated position as specified, said container having a key hole in the wall adjacent the slot to receive a key for depressing the spring member from over the platform, to permit opening of the closure to elevate the platform for projecting the contents, as and for the purposes specified.

1,313,355. PLASTIC-MOLD. ISAAC TOXNER and EDMUND TETZEL, Jr., Terre Haute, Ind. Filed Jan. 2, 1918. Serial No. 209,880. 1 Claim. (Cl. 25-131.6.)



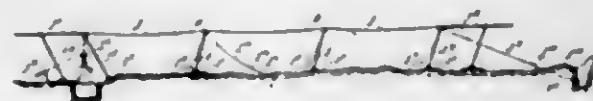
A plastic mold including a wheeled base, guide means disposed longitudinally thereof, head pieces secured to and slidable on the base, a shaft mounted in bearings longitudinally of the base, said head pieces having ways formed in their peripheral surfaces, lateral lugs carried by said head pieces adjacent the extremities of the ways, oppositely disposed crossed arms having certain of their ends engaged in said peripheral ways, a segmental bolt passing through the ways secured at its opposite ends to said lugs for pivoting the adjacent ends of the crossed arms to the head pieces, and an adjustable form supported on the remaining ends of said arms.

1,313,356. GARTER. ALBERT T. VAN ALSTYN, Grand Rapids, Mich. Filed May 15, 1916. Serial No. 97,500. 9 Claims. (Cl. 241-6.)



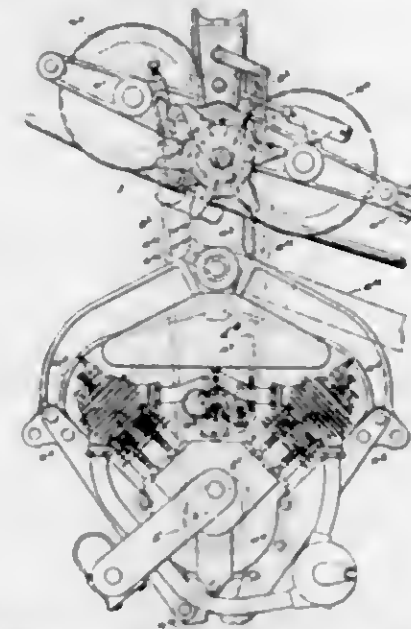
1. A hose supporter comprising in combination a band adapted to surround the leg of the wearer with its end portions crossed, detachable means for uniting the two ends at their intersection in such manner as to prevent relative bodily movement while permitting pivotal movement and a clasp at each of the ends adapted to engage the hose at spaced points.

1,313,357. AERIAL ROPEWAY AND THE LIKE. WILLIAM HUGH WATKINS, Hanwell, England. Filed Oct. 28, 1918. Serial No. 260,040. 7 Claims. (Cl. 104-117.)



1. A collapsible elevated trackway device including opposite relatively rigid terminal track units and flexible intermediate tracks connecting the same, means for anchoring one of the terminal track units, and manually controlled tensioning means associated with the other terminal unit and adapted to work in opposition to the anchoring means to hold the trackway in an elevated position.

1,313,358. TRACTOR FOR AERIAL ROPEWAYS AND THE LIKE. WILLIAM HUGH WATKINS, Hanwell, England. Filed Oct. 28, 1918. Serial No. 260,041. 16 Claims. (Cl. 105-104.)



1. An automatic tractor for elevated trackways including a traveling carriage, a hanger pendulously supported from the carriage, means for propelling the carriage, braking means for arresting the speed of the carriage and normally held in an inoperative position, means for controlling said means for propelling the carriage, and means whereby the relative movement of the carriage and hanger controls said latter means, and also the braking means.

1,313,359. PUMP. DANIEL M. WATSON, Portland, Oreg. Filed Feb. 19, 1917. Serial No. 149,324. 6 Claims. (Cl. 103-75.)

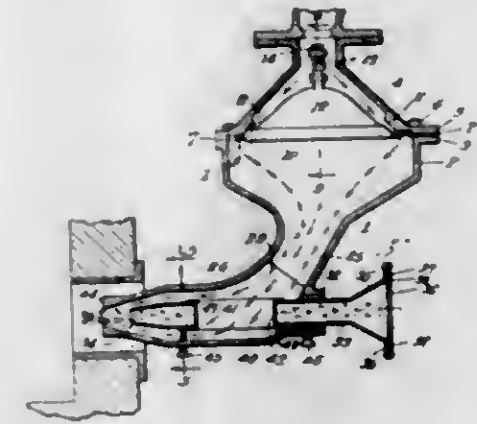


1. A pump comprising a pump casing, a working barrel within the pump casing, a displacement plunger for the working barrel, spacing means at the opposite ends of the working barrel for centralizing the latter in the pump casing, and valve members associated with one of the spacing means, said spacing means being of like construction for the association of the valve means with either spacing member.

1,313,360. GAS-BURNER. CARL A. WENDELL, Rockville Center, N. Y., and SAMUEL H. SHUTTA, Marietta, Pa. Filed Nov. 21, 1917. Serial No. 203,226. 4 Claims. (Cl. 158-118.)

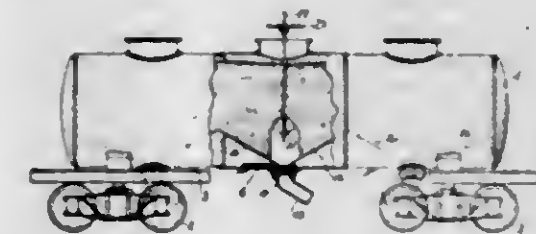
1. A gas burner comprising a gas conductor including a chamber having a converging outlet, a valve for con-

trolling the flow of gas to said chamber, a deadplate adapted to be located below said valve to seal the inlet to



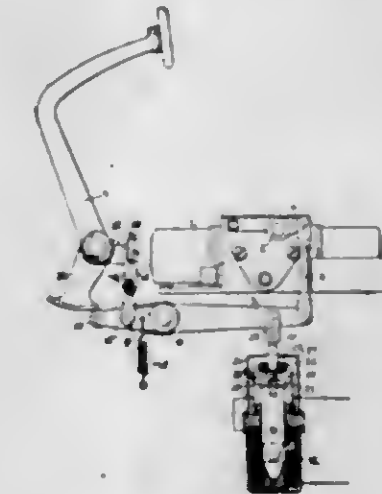
said gas conductor and means for mixing air with said gas.

1,313,361. TANK-CAR. RICHARD P. WHITE, Chicago, Ill. Filed Feb. 24, 1919. Serial No. 278,950. 4 Claims. (Cl. 105-248.)



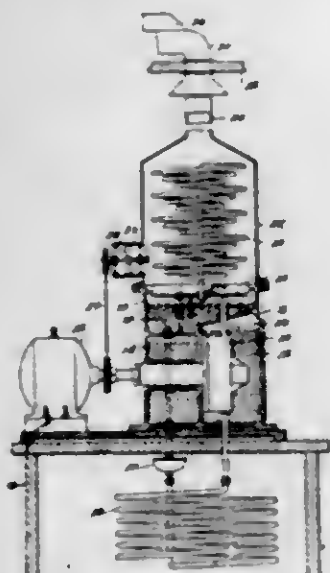
1. A tank car for conveying finely divided material comprising a cylindrical tank body closed at its ends, a series of discharge openings in the wall of said body and a deflector plate in the lower portion of said body with its lower edge at the bottom of said openings whereby material will be deflected to and discharged by gravity from said openings.

1,313,362. GEAR-SHIFTING MECHANISM. HENRY J. WIZOARD, Milwaukee, Wis., assignor to The Cutter-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 14, 1916. Serial No. 114,707. 16 Claims. (Cl. 74-81.)



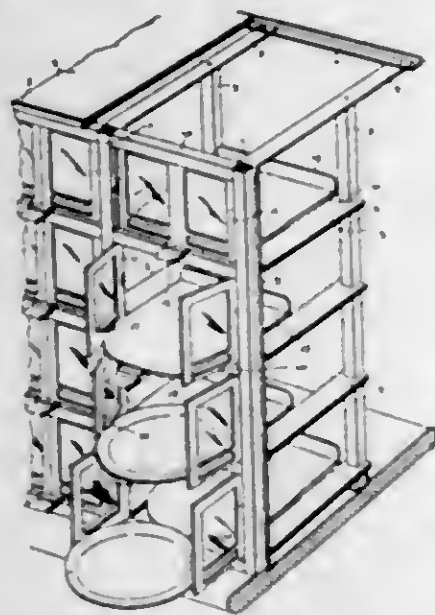
1. In a gear shifting mechanism, the combination with a manually operable neutralizing element, of power means to assist in the operation thereof.

1,313,363. AIR-COOLED CONDENSER FOR REFRIGERATING MACHINES. EDWARD THOMPSON WILLIAMS. New York, N. Y. Filed July 6, 1916. Serial No. 107,725. 6 Claims. (Cl. 62-115.)



1. In a refrigerating machine, in combination, a pump chamber having a receptacle for liquefied gas, a compressor arranged in the pump-chamber, a cooling chamber or housing mounted on the pump-chamber and above said receptacle, a condensing coil arranged in the housing, to receive compressed gas and deliver the same in liquid form to said receptacle, and means for creating a current of air through the housing and about said condensing coil to cool the gas therein.

1,313,364. SANITARY SERVING DEVICE. ERNEST S. WILLIAMS. Toronto, Ontario, Canada. Filed Dec. 16, 1918. Serial No. 267,003. 7 Claims. (Cl. 45-71.)

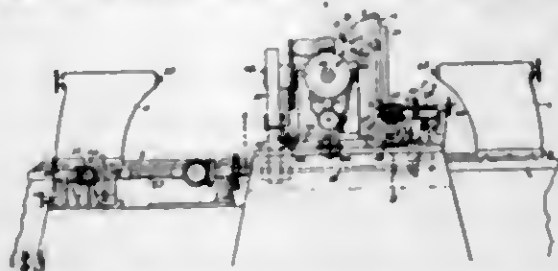


1. A sanitary serving device comprising, a frame having a plurality of compartments open at the back, closures closing the fronts of the individual compartments, and means for operating said closures actuated by the removal of an article from the compartment.

1,313,365. METAL WORKING MACHINE. JOSEPH H. WILSON, GEORGE W. DIXON, and WILLIAM EARL McLAUGHLIN, Middletown, Ohio, assignors to The American Rolling Mill Company, Middletown, Ohio. Filed Oct. 10, 1918. Serial No. 257,562. 37 Claims. (Cl. 90-15.)

1. A metal working machine comprising, a bed, a reciprocable table thereon, a pair of puppets supported by the

table, a chuck-housing bridging over the table between the two puppets, a rotatable hollow chuck mounted in such



chuck-housing, and a tool disposed at one side of the bed between the chuck and one of the puppets, combined substantially as set forth.

1,313,366. PICTURE-HOOK. JOHN W. WRIGHT, Toronto, Ontario, Canada. Filed Nov. 18, 1918. Serial No. 263,040. 2 Claims. (Cl. 40-145.6.)



1. A picture adjusting and supporting device including a wire member having a longitudinal series of hook portions for engagement by the loops at the ends of a picture wire, said hook portions being formed with bracing means engaging behind the main portions of the wire of the member.

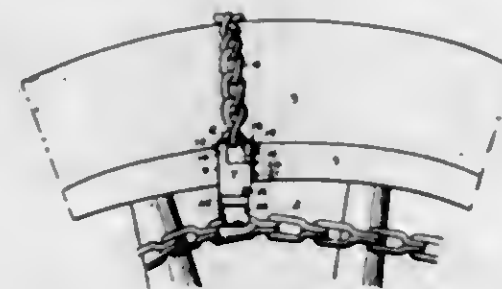
1,313,367. BORING-TOOL. HERMANN ANSCHÜTZ-KÄMPFER, Neumühlen, near Kiel, Germany, assignor to Anschütz & Co., Neumühlen, near Kiel, Germany. Filed Nov. 23, 1917. Serial No. 203,628. 5 Claims. (Cl. 255-1.)



1. In a boring tool, a bit holder, a pendulum pivotally supported upon said holder, and a motor driven sounding

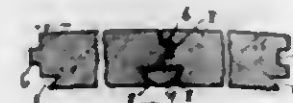
apparatus also attached to the holder and controlled by the pendulum, the motor being inoperative when the bit holder is vertical.

1,313,368. TIRE-CHAIN-FASTENING DEVICE. PAUL CRAWN, Cleveland, Ohio. Filed Feb. 26, 1919. Serial No. 279,259. 6 Claims. (Cl. 24-73.)



3. A body formed of sheet metal having a hook member extending from one end thereof and a separate U-shaped member affixed to the opposite end thereof, a plate hinged to said body having an open end adapted to interlock with said U-shaped member, and a latch pivoted on said plate adapted to interlock with said U-shaped member.

1,313,369. SILO. OSCAR A. COONA, Patterson, La. Filed Sept. 13, 1918. Serial No. 258,958. 1 Claim. (Cl. 217-4.)



A container formed of staves, fitted together, hoops surrounding said staves and securing them in position, each stave being provided with a groove in one edge, a tongue carried by the adjoining edge of the adjacent stave and fitted into said groove, the groove and tongue extending from end to end of said staves, the adjoining edges of the staves being provided with lengthwise aligned grooves, extending from end to end of the staves and calking strips fitted into said grooves and breaking the joints between the staves throughout their entire length.

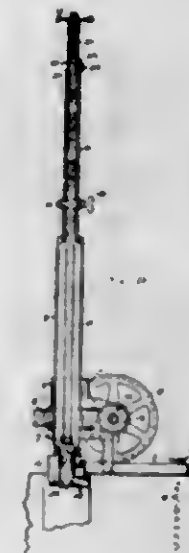
1,313,370. PROCESS OF RECOVERY OF SULFUR. RABIR LAL DATTA, Calcutta, India. Filed Sept. 25, 1918. Serial No. 255,726. 2 Claims. (Cl. 23-10.)

1. As a new process of manufacture, the oxidation of sulfureted hydrogen in a gaseous state whether as such or mixed with other gases by means of nitrous gases for the production of sulfur substantially as described.

1,313,371. BORING-TOOL. HENRY W. DEEDMAN, Houston, Tex. Filed Feb. 12, 1917. Serial No. 148,001. 4 Claims. (Cl. 77-2.)

1. A device of the character described including a frame, a sleeve rotatable relative to the frame, a clamp fixed to the frame through which said sleeve is threaded and by which a lengthwise movement is imparted to the sleeve as

it rotates, means for releasing the clamp from the sleeve to permit its free lengthwise movement, means for rotating



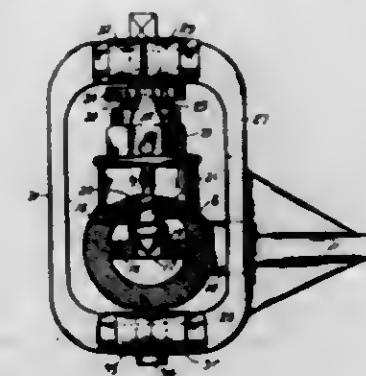
the sleeve, a cutter head fixed to the sleeve, and cutters carried by the head.

1,313,372. SWIVEL. THEODORE J. DODGE, Olympia, Wash. Filed Feb. 20, 1917. Serial No. 149,864. Renewed May 17, 1919. Serial No. 297,903. 2 Claims. (Cl. 59-95.)



2. In a swivel, a pair of sections each formed of a single strand of material, one of said sections being twisted adjacent one end to provide a stem, a clevis at one end of said stem, a socket in said clevis, a loop at the other end of said stem, the other of said sections comprising a loop and a head, the said head being rotatably supported in said socket, an offset portion on each of said loops, and the ends of said strands resting in said offsets, substantially as described.

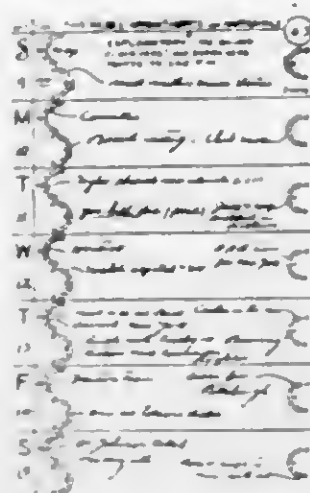
1,313,373. FEED-WATER-REGULATING VALVE FOR STEAM-BOILERS. JULIUS NELSON ELLIS, Pertham, New South Wales, Australia. Filed Aug. 9, 1918. Serial No. 249,133. 2 Claims. (Cl. 137-101.)



1. A boiler-feed regulating valve of screw-down miter type characterized in that the screw thread on the valve

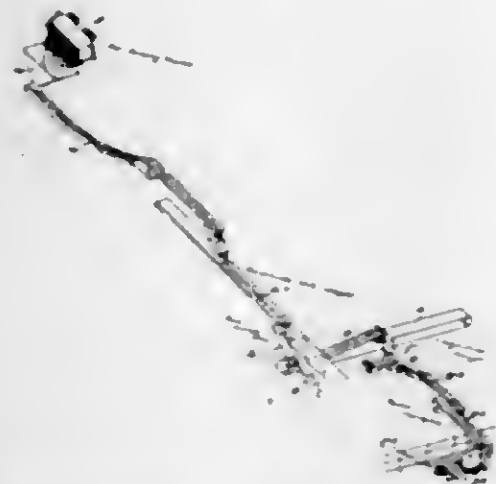
spindle is of a lead equal to the diameter of the valve aperture, and having a pivot stud projecting from the valve body on the opposite side to and in axial alignment with the valve spindle; in combination with a float-arm formed at one end into a yoke, one side of which rigidly engages the valve spindle and the other side freely engages said pivot stud, and a float on the other end of said arm.

1,313,374. POCKET-ORDERLY. GEORGE HENRIET FOLLOWS, Pittsburgh, Pa. Filed Sept. 29, 1916. Serial No. 122,579. 4 Claims. (Cl. 283—1.)



1. A pocket folder or portfolio consisting of a single sheet folded to form three superposed leaves of approximately equal corresponding dimensions constituting a receptacle open along two adjacent edges and having at least one of its inner faces provided with record-keeping spaces and each space being provided with a plurality of clock-face segments representing different time periods.

1,313,375. COALING SYSTEM. JAMES W. FRANKS, Cleveland, Ohio. Filed July 23, 1915. Serial No. 41,440. 11 Claims. (Cl. 193—1.)

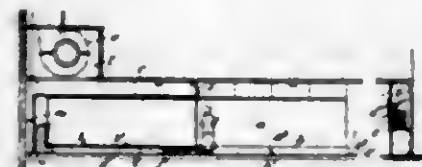


1. In a system of the character described, the combination, with a plurality of parallel conveyers, of a tripper cooperating with each conveyer, a movable tower having a conveyer arranged to receive material from the first mentioned conveyers, and chutes carried by said tower and cooperating with said trippers to deliver material therefrom to the last mentioned conveyer.

1,313,376. BUILDING AND FITMENT OF SAME FOR THE APPLICATION OF FINISHES TO SURFACES. HENRY LEONARD HALL AND CECIL ALEXANDER SHARP, Cricklewood, England. Filed Oct. 21, 1918. Serial No. 258,956. 9 Claims. (Cl. 34—40.)

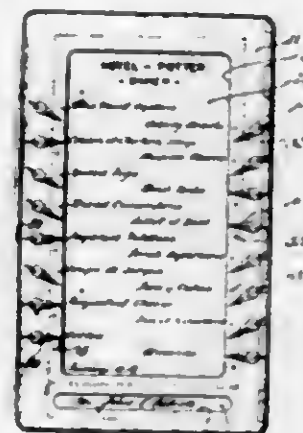
1. An improved building and fitments of same for the application of finishes to surfaces such as the parts of

aeroplanes and the like, consisting of an applying or finishing room, a drying chamber contiguous to said room, a heating battery at the end of the applying or finishing room farthest removed from the drying chamber,



ber, a second heating battery in the drying chamber, a series of horses or frames adapted to carry the work and to travel between the applying or finishing room and the drying chamber, and means for heating and circulating the air through said room and chamber.

1,313,377. MENU-HOLDER. NELS H. HANDEL, Pasadena, Calif. Filed Sept. 13, 1917. Serial No. 191,278. 1 Claim. (Cl. 116—31.)



In a menu card holder, a casing consisting of a front wall having a card display opening therein, a seat formed about said opening on the back of said wall, a menu card on said seat, a backing over said menu card to hold the card on the seat, a rear wall for said casing hinged to the front wall, latch means on the casing for engaging the rear wall, and a series of indicators on said front wall about the display opening therein, said front wall having a name display opening therein.

1,313,378. SEWER-CLEANING DEVICE. PATRICK J. HEALEY, Jersey City, N. J. Filed Feb. 1, 1919. Serial No. 274,427. 8 Claims. (Cl. 182—2.)



1. In a sewer cleaning device of the class described and in combination with two winding drums located adjacent each other, and means for operating each of said drums independently of the other; a bucket; a boom the lower end of which is pivotally connected with a suitable support so that it may swing in a vertical plane; a pulley supported at the free end of said boom; a fixed abutment secured in place within a section of sewer to be cleaned,

and at the end thereof adjacent said drums; a pulley supported by said abutment; a second fixed abutment secured in place within the section of sewer to be cleaned, and at the end thereof remote from said drums; guiding means located within the section of sewer to be cleaned, and at the end thereof adjacent said drums; a rope operated by one of said drums and passing about the pulley carried by said first-mentioned abutment, thence along a section of sewer to be cleaned, thence about the pulley carried by said second-mentioned abutment, and the end of which rope is connected with said bucket to thereby move the same in one direction; a lifting rope operated by the other of said drums and passing into operative relation with said guiding means whereby its direction is changed, and the end of which is connected with said bucket to thereby move the same in the other direction, and to lift it from the sewer; and means for discharging the contents of said bucket after it has been lifted from the sewer.

1,313,379. PROCESS OF MAKING PHOSPHORIC ACID. A. C. INGENUUM HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation. Filed June 9, 1919. Serial No. 302,730. 2 Claims. (Cl. 23—1.)

1. The method of making phosphoric acid, consisting in treating phosphate rock with a mixture of dilute hydrofluosilicic and hydrofluoric acids.

1,313,380. FORMING-TOOL. LEWIS O. HENCOCK, Oakmont, Pa. Filed May 19, 1914. Serial No. 839,535. 9 Claims. (Cl. 153—38.)



1. A forming tool for use with a press having a movable head, comprising an upper body portion carrying a die, a lower body portion carrying a die and having guiding pockets on each side of the same, grooves in the faces of said pockets, means on said upper body portion engaging with said faces, said means being adapted to partially enter said grooves, and means for regulating the amount of said first named means entering said grooves, said first named means being adapted to engage with metal to be formed and to enter said pockets in order to bend said metal over said lower die to form the same.

1,313,381. DRAFT-BAR. GEORGE A. HILLER, East Rochester, N. Y., assignor to Kate Gleason, Pittsford, N. Y. Filed Dec. 12, 1918. Serial No. 266,482. 7 Claims. (Cl. 213—67.)



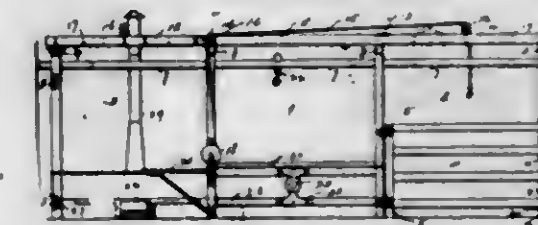
1. A draft bar comprising a strip bent between its ends to form two diverging portions, a U-shaped piece fitted between the free ends of the flat stock, transverse brace pieces connecting the two diverging portions, and a longitudinally extending brace piece arranged between the diverging portions connected at one end to the U-shaped piece, at its other end to the strip at the bend, and between its ends to the transverse brace pieces.

1,313,382. DRAFT-GEAR FOR TRAILERS. GEORGE A. HILLER, East Rochester, N. Y., assignor to Kate Gleason, Pittsford, N. Y. Filed Dec. 12, 1918. Serial No. 266,483. 5 Claims. (Cl. 213—67.)



1. A structure of the character described comprising an axle, wheel supporting spindles pivotally connected to the axle, a forwardly opening U-shaped frame pivotally mounted on the axle to turn about a vertical axis to receive the axle between its arms, a draft bar pivotally connected to one arm of the frame to swing about a horizontal axis, and connections between the other arm of the frame and the swinging spindles for turning the latter when the U-shaped frame is turned.

1,313,383. SLAUGHTERING APPARATUS. WILLIAM H. HOSKIN, Warland, Mont. Filed Oct. 30, 1918. Serial No. 260,341. 3 Claims. (Cl. 17—30.)



1. The combination with the body section, of an end section hinged to fold compactly therewith and when extended forming an animal pen, a second end section slidable with relation to the body section, an upper longitudinal brace fixed to the body section and provided with hinged locking and bracing members for the end sections, a cutting table supported in the body section, and a scalding apparatus supported in the slidable section.

1,313,384. BATTERY-SUPPORTING DEVICE. MILLER RESSA HUTCHISON and CHARLES W. NORTON, West Orange, N. J., assignors to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 20, 1917. Serial No. 143,493. 21 Claims. (Cl. 204—29.)



18. The combination with a battery compartment and a plurality of battery cells disposed therein, of means for rigidly supporting said cells in said compartment spaced and insulated from the compartment and from each other comprising a frame closely fitting in said compartment adjacent the bottom thereof, a plurality of members mounted on the bottom of the compartment and supporting said frame in spaced relation thereto, members secured to said frame and having articulated connections with the bottoms of said cells, and a plurality of elements having articulated connections with the tops of said cells, said elements extending across the battery compartment

adjacent the top thereof and being held against movement relative to the compartment, each of said articulated connections comprising a petticoat insulating device, substantially as described.

1,313,385. SPLASH-FEED OIL-CUP. CHARLES H. JOCK-MAN, Ansonia, Conn. Filed Mar. 1, 1919. Serial No. 279,958. 1 Claim. (Cl. 184-70.)



An oil cup comprising a body having a reservoir and an attaching hub, a stem secured in the hub and having a head, the stem and hub being provided with a bore and the stem being provided intermediate the hub and the head with a circular trough and with inclined openings leading from the trough into the bore, a cap adapted to slide closely over the body and having a hole through which the stem passes freely but which is of less diameter than the head, and a spring acting to normally hold the cap against the head and retain the reservoir closed.

1,313,386. FUNNEL. LEWELLYN L. JONES, Battle Creek, Mich. Filed Mar. 17, 1918. Serial No. 84,931. 1 Claim. (Cl. 226-33.)



In combination with a funnel comprising separable upper and lower sections, said sections being enlarged at their junction so as to provide a substantially offset portion, a plate positioned within the enlarged portion provided with an opening, an annular groove surrounding said opening having a gasket secured therein, a closure disk pivotally connected to the said plate and adapted to be disposed within the offset portion when in a vertical position to avoid the flow of liquid passing through the funnel, and to engage the gasket when in a closed position to provide a water tight valve, and operating means positioned within the spout of the funnel below the closure disk, operable through the movement of the liquid.

1,313,387. WELDED STEEL BARREL AND METHOD OF MAKING SAME. AONAR KASABO, Cleveland, Ohio. Filed Feb. 19, 1919. Serial No. 277,996. 3 Claims. (Cl. 220-5.)

1. The method of making steel barrels and the like, consisting in forcing smooth-walled substantially cylindrical half sections over a reinforcing ring having an annular rib on its outer surface, and then homogeneously joining such sections and said ring by flowing the metal of such rib.

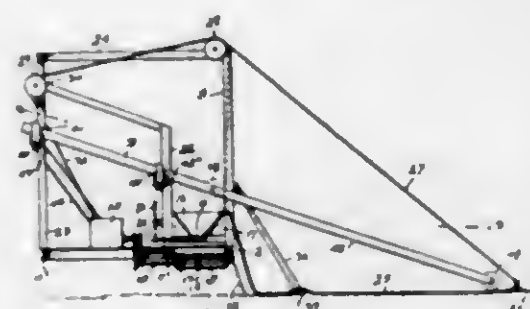
4. A metal barrel or the like comprising two open-ended substantially smooth-walled sections with their open ends adjacent each other, a reinforcing ring disposed within

the adjacent edges of said sections and in snug contact therewith, and an exteriorly projecting rib on said ring interposed between the adjacent edges of said sections,



whereby the heating of said rib to a flowing condition will effect a homogeneous union of said ring with said two sections.

1,313,388. MECHANISM FOR UNLOADING WAGONS. EDWIN KELLY, Casenovia, Wis. Filed Jan. 29, 1919. Serial No. 273,820. 9 Claims. (Cl. 214-91.)



1. An unloading mechanism of the character described including a supporting frame, an apron of flexible material having one edge operatively attached to the supporting frame and upon which material may be unloaded, means connected to the free edge of the apron whereby it may be lifted to thereby discharge the contents of the apron, means for lowering the free edge of the apron, and means for simultaneously spreading the apron flat upon the ground.

1,313,389. SPEED-INDICATOR. PERLEY L. KIMBALL, Bellows Falls, Vt., assignor to The Vermont Farm Machine Company, Bellows Falls, Vt., a Corporation of Vermont. Filed June 18, 1919. Serial No. 305,112. 10 Claims. (Cl. 116-65.)

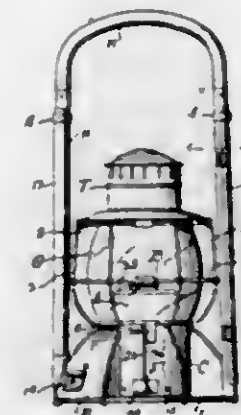


1. In a speed indicator of the bell and ball variety, a ball scoop or cup having a central block and opposite ends adapted to guide the ball to the block.

1,313,390. LANTERN. JOSEPH NORMAN KLEMA, Austin, Minn. Filed Nov. 20, 1918. Serial No. 203,336. 3 Claims. (Cl. 240-39.)

1. A lantern of the class described comprising a casing having one end open, a side wall of the casing being provided with a slot, a burner supported by the casing and

positioned outwardly of the open end thereof, an arm disposed through the slot of the casing, oppositely directed



pairs of wings carried by the arm and engaging the opposite faces of the side wall of the casing, and a color screen carried by said arm.

1,313,391. LIGHTNING-ROD COUPLING. SIDNEY D. KRETSER, St. Louis, Mo. Filed June 17, 1918. Serial No. 240,277. 3 Claims. (Cl. 287-125.)

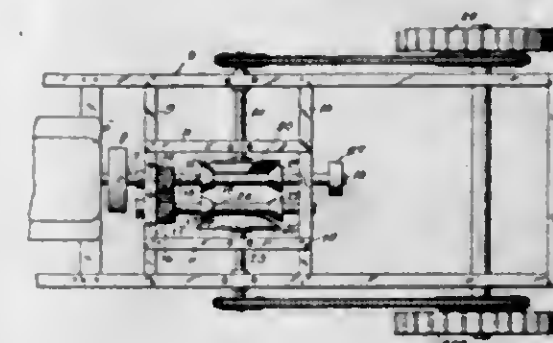


1. The combination of a flanged lightning rod section having the flanges near the end thereof straight and parallel with the axis of the rod, lips extending laterally from the flanges of the section near the end of the section, a star shaped core between said lips and the end of the section, and a coupling having a rectangular recess adapted to fit over the ends of the rod section and to receive the straight portions of the flanges in the corners of said recess, the walls of said recess being crushed inwardly to embed said lips and to engage in the spaces between said lips and said flanges.

1,313,392. TRANSMISSION MECHANISM FOR MOTOR VEHICLES. JAMES M. LARSEN, Chicago, Ill. Filed May 29, 1918. Serial No. 237,235. 1 Claim. (Cl. 180-17.)

A transmission gearing for motor vehicles, comprising in combination with the power shaft, a pair of longitudinally slidable shafts, a pinion fast on the power shaft, said pinion having a hub extension to receive one end of one of the slidable shafts, and said shaft being splined to the pinion to turn therewith, a pinion on the other slidable shaft and in mesh with the other pinion, a pair of oppositely facing friction wheels on each slidable shaft, a pair of countershafts operatively connected to the respec-

tive drive wheels of the vehicle, and a friction disk on each countershaft, one friction disk being engageable by one pair of the aforesaid friction wheels, and the other



friction disk being engageable by the other pair of the friction wheels, said friction wheels being alternately engageable with the respective friction disks by shifting the slidable shafts in the direction of their length.

1,313,393. CONCRETE-MOLD. HERMAN G. LARZELERS, New Rochelle, N. Y. Filed Dec. 18, 1918. Serial No. 267,272. 9 Claims. (Cl. 25-131.)



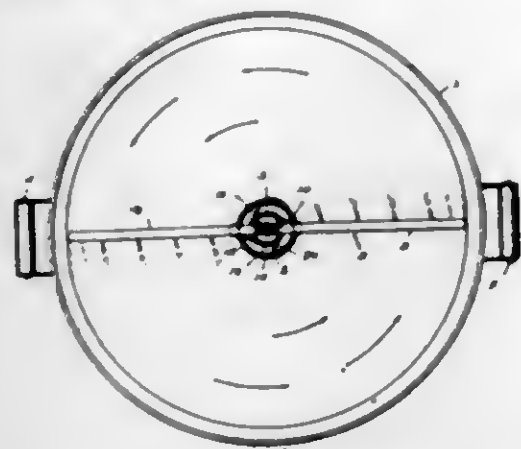
1. In a concrete mold, a post having rabbets on the inner vertical edges, to provide recesses and leave an exposed section to which reinforcing irons can be secured from the inside.

1,313,394. BROAD-GAGE ATTACHMENT FOR VEHICLES. CHARLES W. LARSEN, Fernandina, Fla. Filed Sept. 30, 1916. Serial No. 123,059. 2 Claims. (Cl. 280-96.1.)



1. In an attachment for increasing the gage of automobiles and similar vehicles, a main axle having a forked extremity, a deflected coupling member immovably fixed between the forked portions of said extremity, and a stub-axle mounted wholly between the deflected portions of said member.

1,313,395. PHOTOPRINT-WASHER. WILLIAM A. LEWZ, Lebanon, Mo. Filed Dec. 21, 1918. Serial No. 267,804. 14 Claims. (Cl. 95-97.)



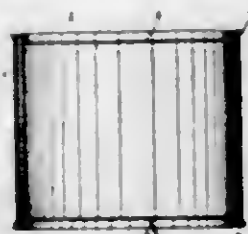
1. A washer comprising a tub having a central water trap outlet, and a spray pipe for discharging water downwardly at an angle into the tub for giving the water a whirling motion therein.

1,313,396. GEARLESS DIFFERENTIAL. WALTER W. McCaIN, Ogden, Utah. Filed Nov. 27, 1918. Serial No. 264,864. 4 Claims. (Cl. 180-18.)



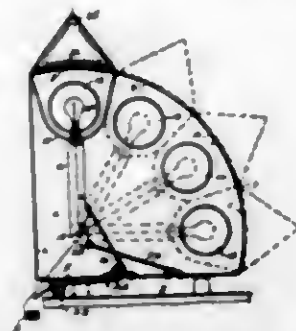
1. In a motor vehicle, the combination with steering wheels and steering gear including a transversely moveable connecting rod, a one-piece drive axle, drive wheels loose upon the ends of the drive axle, independent clutches between the drive wheels and the axle, cam plates adjustably clamped upon the steering gear connecting rod, levers mounted upon the vehicle and each arranged with one arm projecting into the path of one of the cam plates, and a pull rod between the opposite end of each of the levers and the corresponding clutch.

1,313,397. PACKAGE. THOMAS JAMES MCKENNA, Montreal, Quebec, Canada, assignor to Sherwin-Williams Company, Limited, Montreal, Quebec, Canada. Filed Sept. 21, 1918. Serial No. 255,047. 1 Claim. (Cl. 229-12.)



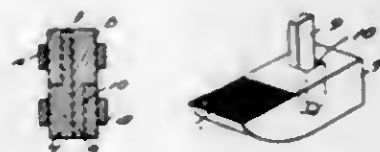
A metal bottom and a metal cover, a cylinder of paper material therebetween, said cylinder being formed of cardboard, and contained within a wrapper of several windings of coarse paper, said bottom and cover being spun into said wrapper against the surface of the card cylinder and not thereto, and caseo glue introduced between the cardboard cylinder and the wrapper and between the several windings of the coarse paper forming the wrapper.

1,313,398. VEHICLE-INDICATOR. LEWIS R. McMANUS, Houston, Tex. Filed Nov. 13, 1918. Serial No. 262,273. 3 Claims. (Cl. 40-67.)



1. An indicator, including a casing, having a front and rear wall, and a curved side wall, said front and rear walls each having a plurality of pairs of windows, the windows of each pair being oppositely arranged, and of various colors, the side wall of said casing being provided with openings corresponding to the respective pairs of windows, a lamp bracket pivoted within the casing, a lamp carried thereby, means for operating said bracket, to bring the lamp successively between the windows of the respective pairs, and a hood whose walls are formed of translucent material connected to said bracket and arranged to move along the outer side of said side wall.

1,313,399. PLIERS. ANTON MAZ, New Haven, Conn. Filed Oct. 2, 1917. Serial No. 194,332. 1 Claim. (Cl. 81-50.)



In pliers, the combination of a pair of crossed, pivotally connected, bifurcated arms, and a jaw pivotally mounted in each bifurcation, each jaw having a transverse guide opening through it, and a rigid arm at one side thereof projecting into the guide opening in the other jaw.

1,313,400. DETACHABLE HEEL. CHARLES PATRICK MAHER and EDWARD JOHN FETHERSTONHAUGH, Montreal, Quebec, Canada. Filed June 7, 1918. Serial No. 238,757. 2 Claims. (Cl. 36-36.)

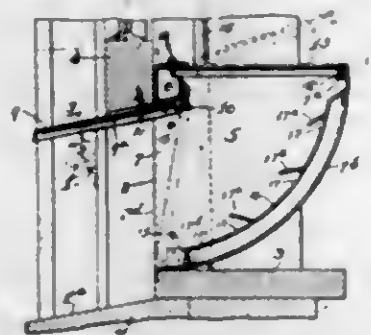


1. In a detachable heel, an upper permanent piece formed with a flat dovetail tongue formed around a cushion recess and a vertical tongue between said recess and the front of the heel, a dovetail lug projecting rearwardly from said flat tongue, and a tread piece having corresponding grooves and adapted to fit to said permanent piece, both of said pieces being of resilient material and all the parts thereof.

1,313,401. VENTILATOR. ORVILLE C. MANN, Oak Park, Ill. Filed Feb. 5, 1918. Serial No. 215,439. 3 Claims. (Cl. 95-31.)

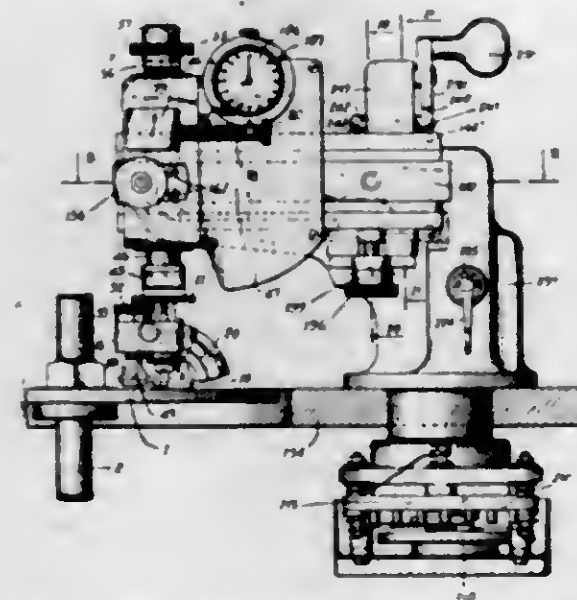
2. In combination with a window casing, a ventilator box for mounting at the sash opening having openings

extending longitudinally in one vertical side and in the top, having a third longitudinal side extending obliquely with respect to the top and outer side, and a removable false back or partition extending longitudinally of the box and provided with marginal flanges by which it is



lodged upon and spaced inwardly from said inclined back of the box, said false back or partition having apertures each provided at its upper margin with an inwardly-extending lip whereby there is formed a dust-receiving pocket into which the dust from the incoming air current is deflected.

1,313,402. POLISHING-MACHINE. JOSEPH G. C. MANTEL, New York, N. Y., assignor to Stern-Coleman Diamond Machine Co., Inc., a Corporation of New York. Filed Nov. 16, 1914. Serial No. 872,363. Renewed Sept. 23, 1916. Serial No. 121,906. 59 Claims. (Cl. 51-11.)



1. In an apparatus of the class described, the combination of a polishing lap, a suitable frame, an arcuate guide vertically moveable with respect to the lap and adapted to be rotated in a plane parallel to the lap, a dop carrying head carried by and adjustable along said arcuate guide, a gem holding arbor carried by the carrying head, a setting indicator also carried by the carrying head, and a flanged sleeve for moving the gem holding arbor toward the lap relatively to the setting indicator to bring the gem into proper grinding position, and a flanged sleeve for adjusting the setting indicator relatively to the carrying head and gem holding arbor.

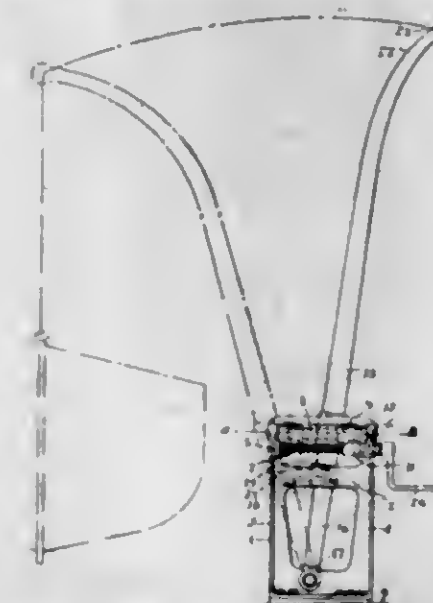
1,313,403. TREATMENT OF RICE-STRAW FOR RECOVERY OF ITS VALUES. MARK W. MANNEN, Philadelphia, Pa. Filed Oct. 28, 1916. Serial No. 128,233. 1 Claim. (Cl. 92-2.)

The method of treating rice straw for the recovery of its values, comprising the following steps, first, subjecting the straw to a preliminary steaming until it is fully saturated with hot moisture whereby it is rendered soft and pliant, second, shredding it while so conditioned, third, subjecting the shredded stock to the leaching action of steam and water in order to remove the coloring matter, silica and other

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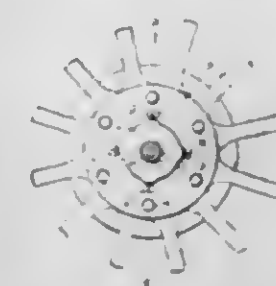
solubles and continuing this treatment until the liquor has a density of from twelve to twenty degrees Baumé, fourth, drawing off the leaching liquor and treating it with carbonate of lime preliminary to the recovery of the products of the leaching treatment, fifth, washing and refining the fiber, substantially as described.

1,313,404. SHIP'S DAVIT. THOMAS HENRY MARTEN, New York, N. Y. Filed Apr. 6, 1917. Serial No. 160,213. Renewed Jan. 13, 1919. Serial No. 270,945. 5 Claims. (Cl. 9-22.)



1. A boat davit comprising a rigid frame secured to the deck, a boom pivotally and rotatably mounted in the base of said frame and adapted to swing in a vertical plane from an inwardly inclined to an outwardly inclined position and to rotate axially, and means for effecting an axial rotation of the boom coincident with the swinging movement.

1,313,405. EMERGENCY-HUB. JOHN H. MASON, Haver, Okla. Filed Oct. 9, 1918. Serial No. 257,454. 4 Claims. (Cl. 21-31.)



1. An emergency hub of the class described comprising a sleeve provided at one end portion with an outstanding annular flange, said flange being provided with cavities, and means carried by the sleeve for securing the sleeve to the hub of a wheel for rotation therewith.

1,313,406. VACUUM-TUBE REPEATER. ROBERT C. MATHES, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1918. Serial No. 268,458. 9 Claims. (Cl. 179-171.)



1. The combination of an incoming line, an outgoing line, a thermionic repeater therebetween having divided

input circuits, and a plurality of non-inductively related transformers connecting said incoming line to said divided input circuits.

1,313,407. PROCESS AND APPARATUS FOR THE HYDROGENATION OF OILS, FATS, AND LIKE MATERIALS. EDWARD BRADFORD MARTIN, Walsall, England. Filed June 22, 1918. Serial No. 241,435. 3 Claims. (Cl. 87-12.)



1. A process for the catalytic hydrogenation of unsaturated oils, fats and like materials, which consists in passing hydrogen through the liquid under treatment in a column and in causing the liquid-gas mixture as it is projected through the column to be partially rotated alternately in opposite directions through an angle and alternately toward and from the periphery during the absorption of the hydrogen.

1,313,408. SCOOP. JAMES L. MITCHAM and JAMES W. BURNS, Rockdale, Tex. Filed Feb. 28, 1918. Serial No. 219,720. 1 Claim. (Cl. 37-33.)



In a scoop, the combination with an axle having a dropped center and spindles at its extremities supported by ground wheels; of a scoop shovel disposed wholly below the line of the spindles and having its side walls hung on the dropped portion of the axle, its front edge being positioned to travel just above the surface of the earth and normally engaging the same by preponderance of weight, a handle upstanding from the rear end of the scoop, braces from the side walls to the handle and to said spindles, and a foot rest on said rear end whereby the operator may place his weight thereon and raise the front edge of the scoop, for the purpose set forth.

1,313,409. LOCKING AND ADJUSTING DEVICE. GEORGE MONTIMER, Somerset, England, assignor to D. Napier & Son, Limited, London, England. Filed Mar. 8, 1918. Serial No. 221,331. 15 Claims. (Cl. 151-2.)

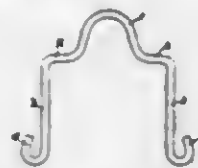
2. In a locking and adjusting device the combination of a member having a screw-threaded part and a cylindrical part, a second member a portion of which is screw-threaded and engaged by the screw-threaded part of the first member, and a spring member keyed to the second of the said members and provided with a cylindrical part adapted

to frictionally engage with the same force at all times the cylindrical part of the first member in a manner which will



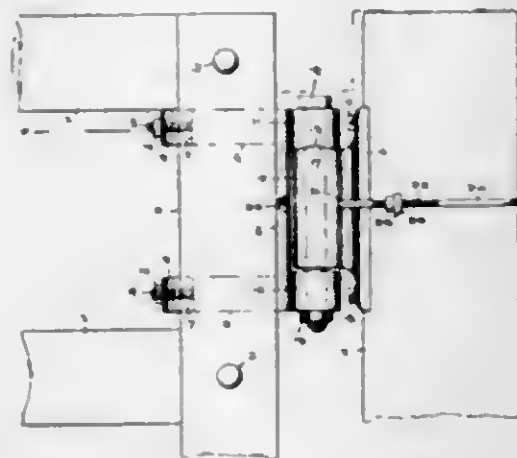
prevent relative rotation of the two members whatever their relative positions until the frictional grip of the spring member on the first member is relaxed as set forth.

1,313,410. DEVICE FOR APPLYING TIRE-CHAINS. HARRY E. MONTIMER, St. Louis, Mo. Filed Oct. 2, 1916. Serial No. 123,275. Renewed June 20, 1919. Serial No. 305,705. 1 Claim. (Cl. 152-14.)



A device of the character described, comprising a wire bent to form a U-shaped portion arranged to engage one of the spokes of the wheel and whose arms are of sufficient length to receive between them the spoke with which the U-shaped portion is engaged; said wire also being bent to provide arms extending outwardly in axial alignment with each other and in the same plane with the U-shaped portion toward opposite sides of the wheel and arranged to bear and support the entire weight of the device and of the chain against the inner surface of the felly of the wheel to which the device is applied; said wire also being bent at right angles from said arms to provide relatively long legs in the same plane in which the said arms and the U-shaped portion lie, the said legs being arranged to extend to the line in which the longitudinal side members of the chains lie and to contact with the sides of the tire of the wheel to which the device is applied; and hooks on the ends of the legs arranged to engage with the links of the longitudinal side members of a tire chain and hold the tire chain so that the same will be wound around the wheel when the wheel is turned.

1,313,411. HINGE. PERRY E. MYERS, Monroe City, Ind. Filed Dec. 30, 1916. Serial No. 139,740. 1 Claim. (Cl. 16-163.)



A gate hinge embodying a hinge member having a base plate to fit against a post, and having a cylinder and an

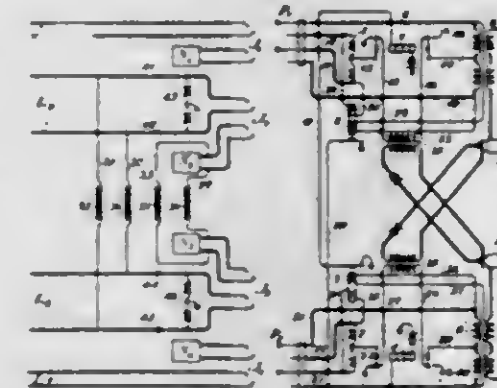
opening between said plate and cylinder, a hoop to embrace the post extending through said opening between said base and cylinder, one end of the hoop having an outstanding ear and the other end of the hoop extending through said ear, means on the last named end of the hoop bearing against the ear to contract the hoop on the post, a second hinge member having a cylinder bearing on the aforesaid cylinder, and a hinge bolt extending through said cylinders, the adjacent ends of the cylinders having depressions and projections for turning them to a predetermined position relatively.

1,313,412. LOCK FOR SHIFT-LEVERS OF AUTOMOBILES. EMIL V. NOLAN, St. Louis, Mo. Filed Feb. 14, 1919. Serial No. 277,051. 10 Claims. (Cl. 70-128.)



8. A device of the character described, comprising a pair of shafts shiftable axially in opposite directions, a pivoted support, a lever supported by said pivoted support and being movable axially to different positions in one of which it is operable to shift either one of said shafts axially and in the other of which it is inoperative to move either of said shafts, a spring supporting said lever in operative position and arranged to yield to permit movement of said lever to inoperative position, and a lock for locking said lever in its different positions.

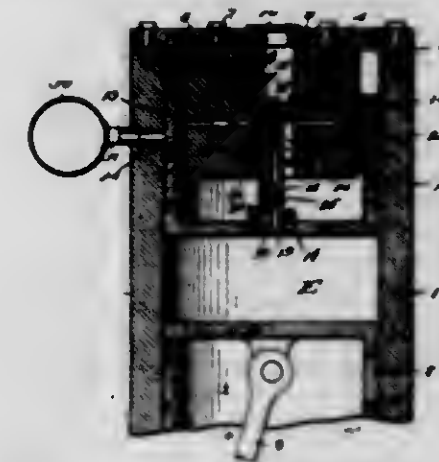
1,313,413. COMPOSITE RINGING APPARATUS. HAROLD S. OSBORN, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 1, 1918. Serial No. 247,840. 4 Claims. (Cl. 179-4.)



1. A plurality of transmission lines, networks for balancing said lines, means to connect said lines and means to connect said networks for telegraph purposes, means to connect said lines telephonically including windings associated with one of said lines and networks and windings associated with another of said lines and networks, a source of current, and means associated with one set

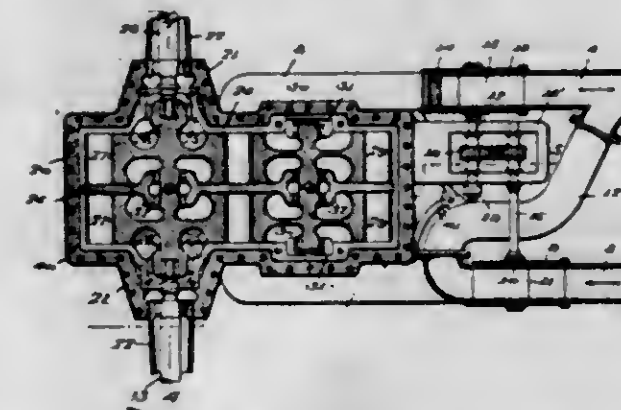
of said windings and responsive to current coming in over the line associated therewith for applying current from said source to the mid-points of said other set of windings.

1,313,414. INTERNAL-COMBUSTION ENGINE. VICTOR G. OTTEWELL, Withrow, Minn. Filed Feb. 1, 1917. Serial No. 140,010. 9 Claims. (Cl. 128-78.)



1. In an internal combustion engine, a cylinder provided with a head and having a working and an auxiliary piston and with a combustion chamber between them, said auxiliary piston having an opening communicating with the combustion chamber of the cylinder, a valve normally closing said opening, and pressure means for holding said valve closed, the pressure of said holding means being overcome by the pressure produced by the explosion in the combustion chamber of the cylinder whereby said valve is opened and the pressure medium in the combustion chamber admitted to said auxiliary piston thereby relieving the pressure on the working piston, the pressure medium in said auxiliary piston operating to advance the piston while the working piston is moving outward.

1,313,415. HYDRAULIC TRANSMISSION. JAMES ELWOOD PROPLES, Alva, Okla. Filed Apr. 17, 1919. Serial No. 290,732. 7 Claims. (Cl. 60-53.)

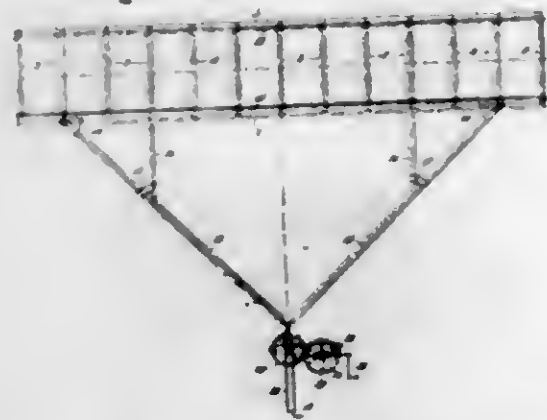


1. A hydraulic transmission apparatus embodying a liquid pump, delivery and return pipes connected thereto, and each having branches, a liquid operated reversible driving device located between and connected to said branches, controlling valves between said pipes and their branches, and a by-pass pipe connecting the delivery and return pipes and controlled by the valve of the delivery pipe.

1,313,416. TILTING PLATFORM FOR SIDE-DUMPING CARS. ANTONIA PETIT Habana, Cuba. Filed Aug. 20, 1917. Serial No. 187,251. 4 Claims. (Cl. 214-51.)

1. In combination, a tilting platform for side dumping cars, a lever fixed at a side of the platform and termi-

uating in a fork the branches of which have a longitudinal opening, a nut mounted between the two fork branches and provided with trunnions passing through



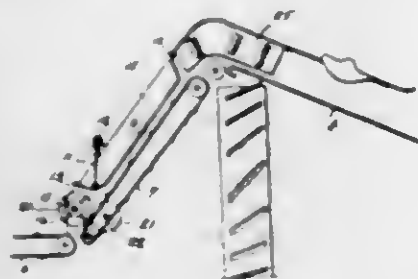
the openings of the fork branches, a screw passing across the nut and rotatively mounted on fixed supports, and means for rotating the screw.

1,313,417. KITCHEN-FORK. LILLIAN C. RAYMOND, Detroit, Mich. Filed Jan. 16, 1919. Serial No. 271,414. 1 Claim. (Cl. 65—32.)



A kitchen fork whose handle is provided with a relatively long and wide central line curved longitudinally to a slight extent and reduced in width at its front end to provide an extended prong, the greater part of the length of said line having a longitudinal slot, and a pair of comparatively short and narrow side lines disposed one on each side of said central line, said side lines being curved in the same direction as said central line and being additionally curved rearwardly.

1,313,418. GRAIN CONVEYER. WILLIAM R. REED, Baltimore, Md. Filed Jan. 28, 1919. Serial No. 273,607. 1 Claim. (Cl. 193—14.)



In a binder, the combination with an elevator canvas of a right cover plate above the same, said plate being pivoted at its rear end, and flexible suspension means connected to the forward end of the plate, said means adjustably and yieldingly holding the plate above the elevator canvas.

1,313,419. SPARK-PLUG. OTTO C. RONZ, Toledo, Ohio, assignor to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware. Filed Apr. 22, 1918. Serial No. 230,114. 7 Claims. (Cl. 123—169.)



1. In a spark plug, a shell, an electrode spindle passing through the shell, and an insulator carrying the spindle and having an insulator sleeve fitting the spindle, separate insulator sleeves fitting different portions of the shell, said sleeves extending longitudinally of the spindle and lapping each other in radially spaced relation, and insulator members disposed between said sleeves and cooperating therewith to insulate the spindle from the shell.

1,313,420. CORNER FOR BUILDINGS. JOHN K. SHAW, Minneapolis, Minn., assignor to R. G. Dahlberg, St. Paul, Minn. Filed May 23, 1918. Serial No. 236,160. 1 Claim. (Cl. 20—5.)

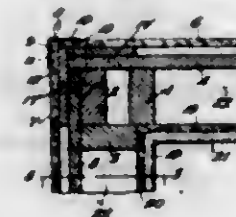


In a house the combination of a corner structure; a side wall structure joining said corner structure; a second side wall structure joining said corner structure and making an angle with said first named side wall structure; a set of overlapping porous boards of "Insulite" material having fragile edges overlying said first named side wall structure; a second set of porous overlapping Insulite boards having fragile edges overlying said second side wall structure; a pair of vertically disposed strips provided with recesses of the shape and dimensions of the end portions of said boards and into which said end portions snugly fit; wedge members located between said side wall structures and said boards, and serving to close one side of said recesses and cause the ends of said boards to be held firmly in place, substantially as described.

1,313,421. SIDE WALL AND CORNER FOR BUILDINGS. JOHN K. SHAW, Minneapolis, Minn., assignor to R. G. Dahlberg, St. Paul, Minn. Filed May 23, 1918. Serial No. 236,162. 1 Claim. (Cl. 20—5.)

In a building the combination of corner supports; a side wall joined to said supports; a second side wall joined to said supports and making an angle with said first named side wall; a set of overlapping porous insu-

lite boards having fragile edges overlying one of said side walls; a second set of overlapping Insulite boards overlying said second side wall; angular metal members of a length equal to the width of said boards having serrations from end to end on each of their side edges, enter-



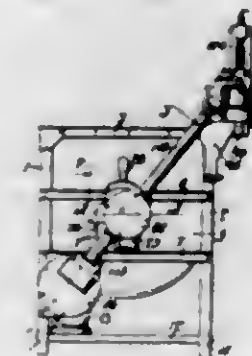
ing said boards near their meeting edges, and overlying, concealing and protecting said edges, said metal members also provided with internal lips at one end which underlie and protect the lower side edges of said boards, substantially as described.

1,313,422. TIP. MARTIN S. SNYDER, Calgary, Alberta, Canada. Filed Dec. 7, 1918. Serial No. 265,704. 3 Claims. (Cl. 135—53.)



3. A tip of the class described comprising a body having one end concave, said end being provided with a recess, the opposite end of the body being provided with a socket, said body having an opening communicating between the opposed ends of the socket and recess, a plug fitting within the recess, and a metallic shank disposed through the opening of the body and through the plug, the inner end of the shank being provided with a head overlying the inner end of the socket, the concave end of the body being provided with a groove substantially concentric to the recess.

1,313,423. GEARING FOR WASHING MACHINES. HERMAN A. SPENGLICH, Highland Park, Mich., assignor to Crystal Washing Machine Company, Detroit, Mich., a Corporation of Michigan. Original application filed Mar. 30, 1917. Serial No. 158,607. Divided and this application filed Mar. 21, 1918. Serial No. 223,731. 13 Claims. (Cl. 74—59.)



1. In a device of the character described, a supporting frame mounted to swing about a vertical axis, a pair of horizontal oppositely rotatable shafts supported in said frame, a second frame fixed relatively to said first frame and supporting the latter, a third shaft having a horizontal axis, said shaft being supported by the second

frame, inclined shaft means extending across one side of the second frame in a substantially straight line, means cooperating with one end of the shaft means for driving said first mentioned shafts in a plurality of positions of the first mentioned frame, means cooperating with said shaft means at an intermediate point in the length thereof for driving said third shaft at will, and a motor driven shaft cooperating with the other end of said shaft means for driving the same.

7. In a device of the character described, a driven gear, a shaft section for said gear, a casing for the shaft and gear, said shaft section being supported at both ends to rotate in the casing, means for holding the shaft section from shifting longitudinally of its own axis, one end of the shaft section having an opening therein of non-circular cross-section, a second shaft section of cross section corresponding to that of the opening received in said opening and being free for limited sliding movement therein longitudinally of said first named shaft section.

10. In a device of the character described, a driving shaft, a bevel gear fixed thereon, a second bevel gear in mesh with the first bevel gear and having a hub, a bearing in which the hub of the second bevel gear turns, said hub having clutch jaws, a driven shaft aligned with the second bevel gear and a clutch slidable on said driven shaft to connect the second bevel gear thereto at will.

1,313,424. TIRE. HANAT H. STERN, Moscow, Idaho. Filed Mar. 26, 1919. Serial No. 265,211. 3 Claims. (Cl. 152—1.)



1. The herein described composite cushion tire for a motor vehicle, the same made up of a plurality of scrap tire casings whereof the innermost is folded upon itself with its edges adapted to rest upon the wheel rim, the next is folded around the innermost and its edges also are adapted to rest upon the wheel rim and the outermost is folded around the second with one edge adapted to rest on the wheel rim and the other to lie against the opposite face of the next casing inward, and means passing through both leaves of each casing for holding them together.

1,313,425. SPARK-PLUG. ROBERT ALLEN STRANAHAN, Toledo, Ohio, assignor to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 10, 1918. Serial No. 253,566. 3 Claims. (Cl. 123—169.)



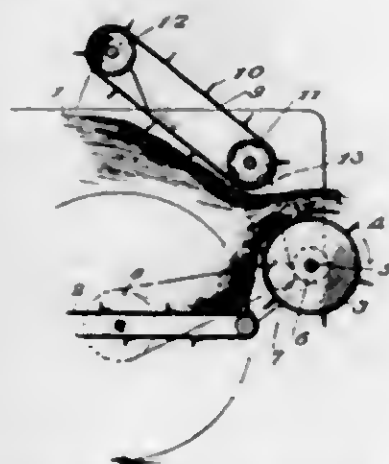
1. In a spark plug, a center electrode carrying insulator, a metal terminal member for said insulator, and a resinous condensation product cementing said member and insulator together.

1,313,426. SPARK-PLUG. MAURICE P. SULLIVAN, Torrington, Conn., assignor to Spiltdorf Electrical Company, Newark, N. J. Filed Dec. 31, 1918. Serial No. 249,154. 6 Claims. (Cl. 123-169.)



1. In a spark plug, a shell, a gland adapted to fit the upper part of said shell and having one end extending downward into the shell, a beaded electrode passing through said gland and its extended end but insulated therefrom, a bushing carried by said electrode adjacent its head, a device between said bushing and said gland end for breaking up the contiguity of the surfaces thereof, and means on the outer end of the said electrode for holding the parts carried by the gland securely thereto.

1,313,427. MANURE-SPREADER. HENRY SYCKE, Coldwater, Ohio, assignor to New Idea Spreader Co., Coldwater, Ohio. Filed Oct. 10, 1917. Serial No. 195,764. 4 Claims. (Cl. 275-5.)

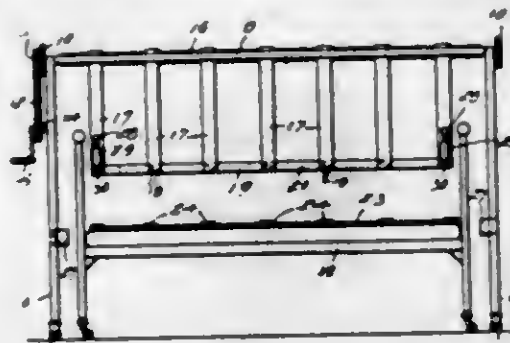


1. In mechanism of the class described, the combination with a feed conveyor, of a lower distributing cylinder having its major portion disposed in a plane above the upper surface of the rear end of the conveyor, means for rearwardly rotating the cylinder, and an endless traveling apron having a working stretch positioned to travel downwardly and rearwardly into cooperative relation with the upper portion of said cylinder.

1,313,428. INVALID LIFTER AND CONVEYER. ADALINE M. TANNER, Devils Lake, N. D. Filed Jan. 16, 1918. Serial No. 212,080. 1 Claim. (Cl. 5-44.)

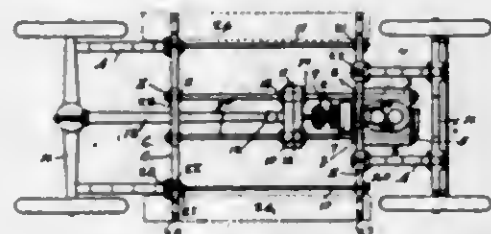
An invalid lifter including a supporting frame having vertical standards and horizontal connecting members, a pair of operating shafts extending longitudinally of the frame, means connecting the shafts for operating the same in unison, longitudinally disposed rollers rotatably carried by the frame, a lifting frame arranged within the supporting frame, a lifting pad detachably connected to the lifting frame, spaced lifting straps secured to the lifting frame and extending over said rollers and having their

lower ends secured to said shafts, sockets carried by the standards of said supporting frame, and horizontally;



pivoted arms carried by said lifting frame for engaging said sockets whereby any longitudinal movement of the lifting pad is prevented.

1,313,429. DEMOUNTABLE MOTOR-VEHICLE FRAME. GERALD TOSTEVIN DIXON LENFESTY, Toronto, Ontario, Canada, assignor of one-third to Egerton Ryerson Case, Toronto, Ontario, Canada. Filed June 22, 1917. Serial No. 176,350. 37 Claims. (Cl. 180-64.)



1. A motor vehicle frame comprising front and rear transverse load-supporting members adapted for connection respectively to the springs of the front and rear axles of a motor vehicle, and a longitudinal reach member disengageably coupled to said transverse members so that the frame may be partially and wholly demounted lengthwise.

1,313,430. WHIFFLETREE. ERVIN DEWITT TOWNSEND, Jamestown, N. Y. Filed June 17, 1918. Serial No. 240,480. 1 Claim. (Cl. 21-78.)

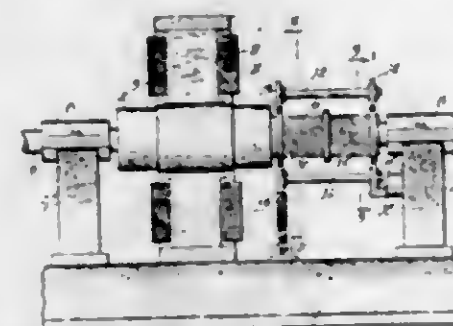


In a whiffletree, the combination of a rigid member tapered from the middle toward the ends, end irons attached to the end of the member having hooks on one side thereof, a bolt passing angularly through each of the end irons, each of said bolts having a hook thereon exposed near the end of the whiffletree, a center iron, a compression spring interposed between each side of said center iron and said hooks, U-shaped links connecting said springs with said center iron and with said hooks, said links being adapted to pass through said springs and engage the opposite ends of said springs, so as to hold said springs in compression between them, said springs lying normally against the tapered sides of the rigid member.

1,313,431. DYNAMO-ELECTRIC MACHINE. HENRY H. WATT, Chicago, Ill. Filed Aug. 22, 1917. Serial No. 187,648. 4 Claims. (Cl. 171-252.)

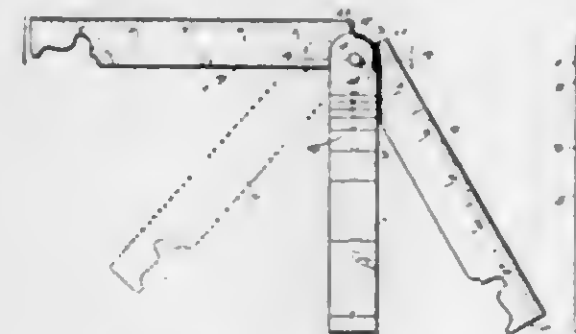
1. A dynamo electric machine including the armature and field portions thereof; a commutator; a brush structure comprising two carrier rings surrounding and concentric with the commutator, studs coupling said rings

and brushes carried upon said studs, each of said rings being split into separable sections to form the brush structure into separable portions; and a mounting structure



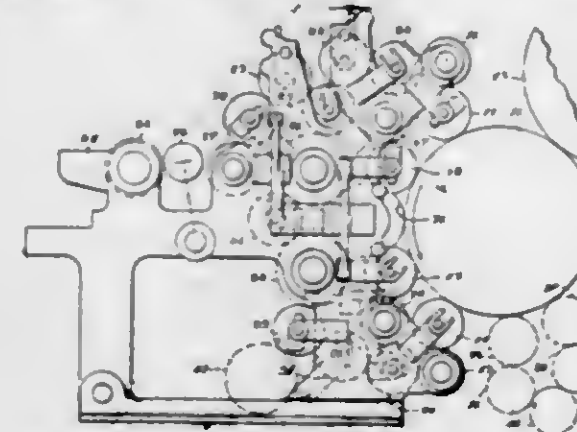
upon which said rings may be turned, this mounting structure engaging arcuate portions of said rings that are not in excess of 180° of the periphery of the rings.

1,313,432. COMBINATION TOOL. JOHN HENRY WALKER, Lexington, Ky. Filed Apr. 17, 1917. Serial No. 162,603. 7 Claims. (Cl. 33-DS.)



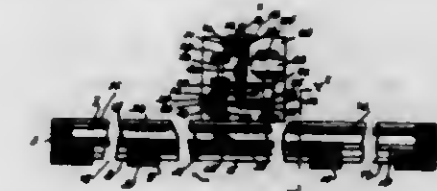
1. A tool including a stock comprising spaced plates, a blade pivoted between the plates, graduations arranged transversely on the outer surface of one of the plates to determine various angular relations of the blade relatively to the stock, said one plate having its inner surface provided with a plurality of shoulders arranged in coincidence with the graduations and against which shoulders the blade can be selectively brought for quickly and positively determining various angular positions of the blade relatively to the said stock.

1,313,433. INKING MECHANISM. JOSEPH J. WALSH, Chicago, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1917. Serial No. 143,760. 17 Claims. (Cl. 101-350.)



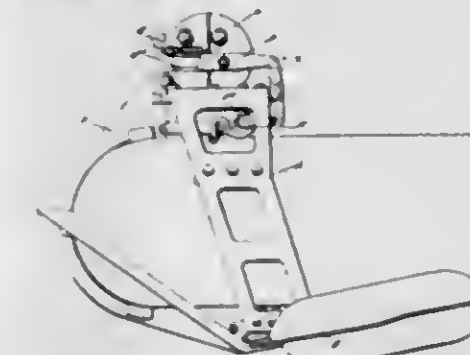
1. The combination of a rotary form cylinder adapted to carry a suitable form, two form rollers revolving in contact with the form on said cylinder, two transfer rollers revolving in contact with said form rollers respectively, a distributing roller revolving in contact with both of said transfer rollers, and an inking roller revolving in contact with said distributing roller.

1,313,434. DISPLAY-SIGN. DANIEL EDWARD WATERS, St. Paul, Minn. Filed June 17, 1918. Serial No. 240,379. 5 Claims. (Cl. 40-36.)



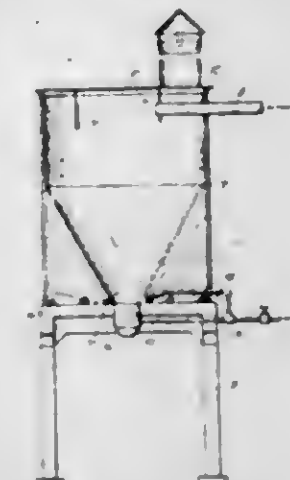
5. In a display sign, a substantially rectangular frame, a stationary sign board located centrally of the frame and providing similar exposure areas at the ends of the frame, a pair of shifting sign boards slidably mounted to the frame and each twice the length of the stationary frame and mounted to pass one another when moved endwise within the frame and the driving means for intermittently operating the movable sign boards to alternately expose the ends thereof in the exposure areas at the ends of the central sign boards.

1,313,435. CUTTING DEVICE FOR CABLES, CHAINS, AND THE LIKE. GEORGE EDWIN WATT, Westminster, London, England, assignor to Vickers Limited, Westminster, England. Filed July 31, 1918. Serial No. 247,511. 13 claims. (Cl. 114-221.)



1. A towed body, a power operated cutter mounted upon the said body, a hydraulic pressure device adapted to operate the said cutter, means for storing gaseous fluid under high compression and means for operating the hydraulic device by the gaseous pressure.

1,313,436. TANK FOR ASH-CONVEYER SYSTEMS. TOWNES K. WEBSTER, Jr., Evanston, Ill., assignor to American Steam Conveyor Corporation, Chicago, Ill., a Corporation of New York. Filed Aug. 23, 1917. Serial No. 187,776. 2 Claims. (Cl. 193-10.)

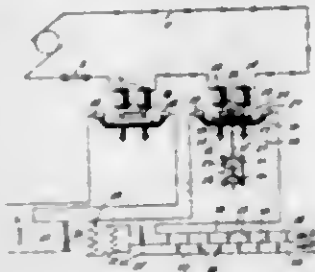


2. An ash conveyer system comprising an ash tank having a substantially flat bottom provided with a discharge opening, and means adjacent said discharge opening for projecting steam jets upwardly and away from said opening.

1,313,437. PROCESS FOR TREATMENT OF FIBROUS MATERIAL. WILLIAM WEHMER, Appleton, Wis. Filed Oct. 22, 1917. Serial No. 197,893. 4 Claims. (Cl. 99-12.)

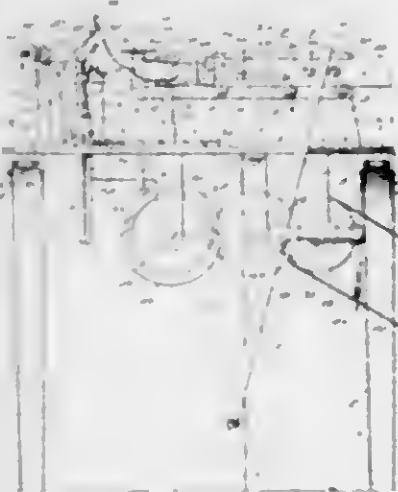
1. The process of treating fibrous material such as wood or the like which consists in impregnating the material with a solution of sodium chlorid, or the like; then boiling it in a solution of sulfur and resin, then cooling it.

1,313,438. CUT OUT FOR ELECTRIC LIGHTING SYSTEMS. DANA E. WESCOTT, South Bend, Ind., assignor to Louis M. Hammerichmidt, trustee, South Bend, Ind. Filed Mar. 31, 1916. Serial No. 88,124. 4 Claims. (Cl. 175-281.)



1. A cut out of the character described, comprising a plurality of fixed contacts, a plate for engaging said contacts to complete an electric circuit, a rod supported by said plate, means for resiliently supporting and positively moving said plate and rod in one direction and allowing them to operate in the opposite direction by gravity, a fixed frame, and cooperating means on said rod and frame to allow and prevent the engagement of the plate with said contacts by limiting and varying the degree of reciprocation in the same direction of said rod.

1,313,439. MACHINE FOR FORMING TATTLING BRAID. HARRY H. WEST, Plymouth, Pa. Filed July 3, 1918. Serial No. 243,167. 28 Claims. (Cl. 66-10.)

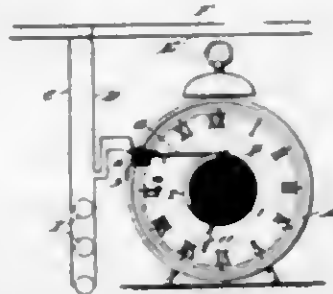


1. In a machine for forming tattling braid, means for supporting a body thread, means for carrying an additional thread around said body thread, and means for looping said additional thread and disposing the loops in position for said carrying means to pass therethrough.

1,313,440. TIME SWITCH FOR ELECTRIC CIRCUITS. LESTER CLARK WHITTAKER, Santa Rosa, Calif. Filed Mar. 1, 1918. Serial No. 219,887. 3 Claims. (Cl. 161-27.)

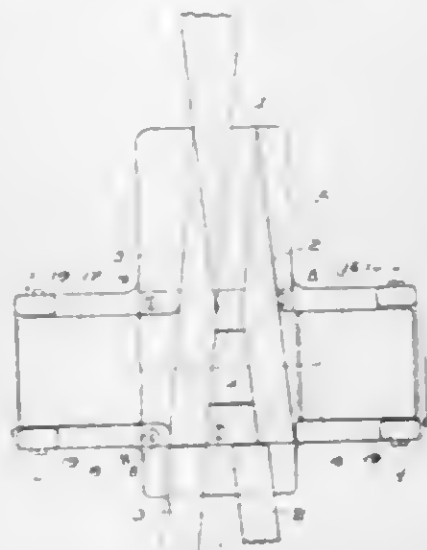
1. A time switch for electric circuits including with a clock mechanism, a commutator structure consisting of a disk of insulating material having a segmental conductive member carried thereby and which disk is provided with

a sleeve adapted to be fitted adjustably upon the hand spindle or shaft of the clock, a set screw by which the commutator structure is fixed upon the spindle or shaft, a hand to guide in setting the commutator structure, a bracket carried by the clock casing and having an insulating block supported thereby, said commutator struc-



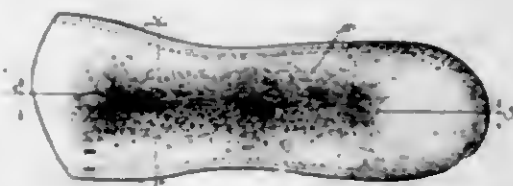
ture having guide grooves formed peripherally thereon and spaced, brushes carried by the insulating block and having their ends received in the grooves of the said commutator structure, and binding screws by which the terminals of the circuit to be controlled are connected with said brushes.

1,313,441. CONTINUOUS FROG FOR RAILWAYS. DAVID JAS. WHITE and DAVID H. HANNA, Oil City, Pa. Filed May 16, 1919. Serial No. 297,595. 2 Claims. (Cl. 246-385.)



1. In a continuous frog for railways, in combination, fixed frog point, two fixed rails converging toward but not meeting said point, an aligning rail structure comprising two rigidly united rail members shiftable to form a continuous rail between either of said converging rails and said point, means operable to shift said rail structure, and means automatically locking said shiftable structure in either of its functional positions.

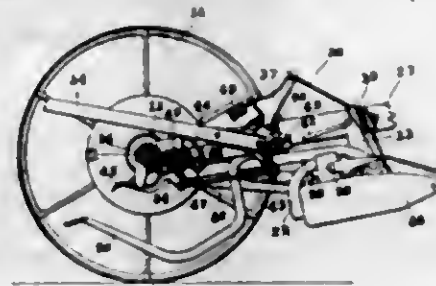
1,313,442. METATARSAL AND ANTERIOR FOOT-SUPPORT. LEE W. V. WILMA, Chicago, Ill. Filed Jan. 31, 1919. Serial No. 274,157. 5 Claims. (Cl. 36-71.)



1. A device of the character described, comprising a laminated insole having an inner layer provided at its

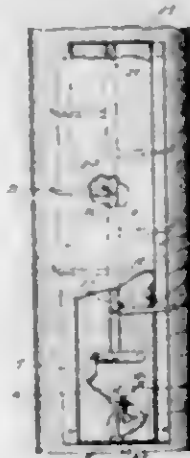
front portion with a tapered enlargement on one of its surfaces, and a resilient piece longitudinally mounted on said inner layer and secured thereto near each of the ends of said piece.

1,313,443. MOWING-MACHINE. FREDERICK D. WILSON, Moline, Ill., assignor to Deere and Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 19, 1917. Serial No. 143,371. 38 Claims. (Cl. 56-74.)



10. In a mowing machine, the combination of a frame, a cutter-bar movable relative to said frame, a lever operatively connected with said cutter-bar for raising said bar, a second lever operatively connected with said cutter-bar for also raising said bar, means for locking said bar against movement when the first named lever is released and the cutter-bar is held in raised position through the medium of said second lever, and means actuated by the locking of said cutter-bar in raised position serving to return said first named lever to position for another operative stroke, said first named lever when given such second named stroke releasing said cutter-bar from raised position.

1,313,444. RETRACTABLE STEP. HARRY M. WITHEROW, Johnson Creek, Wis. Filed July 19, 1918. Serial No. 245,679. 1 Claim. (Cl. 228-34.)

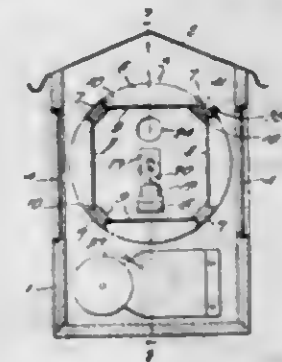


A device of the class described including an elongated casing provided with a longitudinal series of apertures, a bar longitudinally slidable in the casing, step members pivoted to the bar and extensible through the openings, and retainer plates secured to the casings above the openings, with their lower portions spaced inwardly from said openings and terminating short of and adjacent the bottoms of the openings, whereby when the steps are retracted, their outer end portions lie between the casing wall and said retainer plates.

1,313,445. ELECTRICAL GRADE-CROSSING. FREDERICK A. WRIGHT and WALLIE J. WRIGHT, Dickson City, Pa. Filed June 1, 1917. Serial No. 172,279. 2 Claims. (Cl. 40-77.)

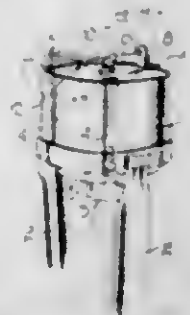
1. A signal embodying a casing having a window at one side and an opening at one end, a drum-shaped signal member mounted for rotation within the casing behind

said window and having an opening at one end normally out of register with the opening in the casing and adapted to register with the opening in the casing when the signal



member is turned to one position, whereby rays of light may be projected through the opening in the casing, and a source of light within the signal member.

1,313,446. CLAMP FOR HOG OILERS OR TANKS. MELVIN C. WRIGHT, Paris, Ill. Filed May 12, 1919. Serial No. 296,547. 5 Claims. (Cl. 248-30.)



1. The combination with a frame, of a tank thereon, a series of clamps having their lower ends detachably connected to the frame and rising upwardly adjacent the cylindrical surface of the tank, the upper ends of certain opposite clamps having a connecting member, the upper end of a certain other clamp having a device provided with adjusting means at one end, and means at the other end to engage over said member, so that when tightening up on the adjusting means, the clamps may be drawn firmly and tightly into position.

1,313,447. PRESSURE-GOVERNOR FOR GAS MAINS. WILLIAM H. WRIGHT, Indianapolis, Ind., assignor to C. J. Tagliabue Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 15, 1916. Serial No. 72,199. 13 Claims. (Cl. 236-45.)



In combination, a coke oven, an offtake main receiving gas from said coke oven, an exhaustor connected to said oven offtake main, a damper controlling the connection between said exhaustor and said oven offtake main, a fluid-pressure motor for operating said damper, a control valve controlling the pressure acting on said fluid-pressure motor, a bell floating in a liquid and operating said control valve, and a connection from an enclosed space vertically on one side of said bell to said oven offtake main.

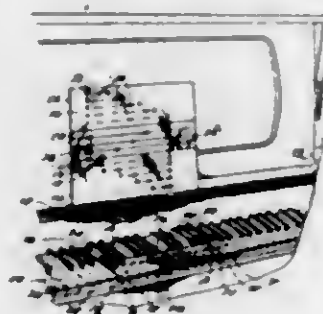
so that the pressure in such space corresponds to that in the oven of the main, said bell being provided with a variably immersed buoyancy chamber whereby the buoyancy of the liquid on the bell is increased with the depth of immersion of the latter.

1,313,448. MASSAGING IMPLEMENT. AUGUST ANDERSON, Berkeley, Calif. Filed Sept. 10, 1918. Serial No. 253,397. 5 Claims. (Cl. 128—59.)



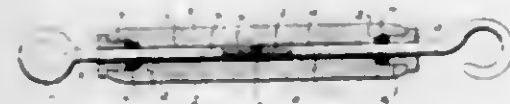
1. A massaging instrument comprising a piece of spring wire bent in a substantially V-shaped form, and hollow bulbous fingers on its ends.

1,313,449. MUSIC INSTRUCTION DEVICE. PEARL MARIE BARKER, Chicago, Ill. Filed Jan. 14, 1919. Serial No. 271,048. 3 Claims. (Cl. 84—85.)



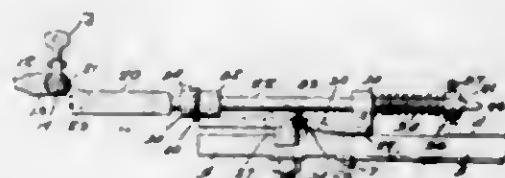
1. In a device of the kind described, in combination, an apertured board ruled upon each side to show the musical staff and the apertures of the board being arranged in a single set registering with the lines of the staff shown upon one side of the board and with the spaces of the staff shown upon the other side of the board, and a set of marker pegs constructed to enter the apertures of the board from either side of the same.

1,313,450. TURNBUCKLE. WALLACE M. BEALS, Avon, Mass. Filed Dec. 21, 1918. Serial No. 267,830. 1 Claim. (Cl. 85—36.3.)



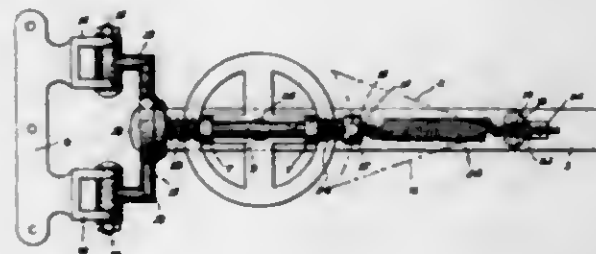
A turnbuckle comprising a body having a central bore, the bore being screw-threaded in opposite directions from the middle of the body toward its opposite ends, said screw-threaded portion of the bore terminating short of the ends of the body, draw rods inserted through the ends of the body and being smooth and uniform in diameter for the greater portion of their length but having screw-threaded inner ends adapted to engage the threads of said bore, the ends of the body being enlarged to form annular packing chambers, and gland nuts having screw-threaded engagement with said chambers and adapted to bear against the packing disposed in said chamber and through which said draw rods snugly pass.

1,313,451. COUPLING AND DRAW-BAR FOR AUTO-TRAILERS. CHARLES A. BEULEN, Cincinnati, Ohio. Filed Jan. 17, 1918. Serial No. 212,342. 19 Claims. (Cl. 213—67.)



1. The combination with a coupling formed in two detachable parts, of a drawbar, pivotal mechanism in connection with the drawbar which takes the strains in drawing, and tension springs adapted to center the coupling and drawbar when turned about the pivotal mechanism.

1,313,452. COUPLING AND DRAW-BAR FOR TRAILERS. CHARLES A. BEULEN, Cincinnati, Ohio. Filed May 17, 1919. Serial No. 297,822. 8 Claims. (Cl. 213—67.)



1. The combination in a coupling and drawbar for trailers, of a two-part jointed coupling; a fixed part of a trailer, as a pole; a fifth wheel member secured to the pole; a fifth wheel member having perforated lugs; a king bolt uniting the members of the fifth wheel and the pole; and a drawbar within the perforations of the lugs of one fifth wheel member and secured to one member of the coupling.

1,313,453. COUPLING AND DRAW-BAR FOR TRAILERS. CHARLES A. BEULEN, Cincinnati, Ohio. Filed May 17, 1919. Serial No. 297,823. 17 Claims. (Cl. 213—67.)



13. In a coupling and drawbar device, a clevis having parallel perforated arms and a head; a drawbar; a part of a trailer, as a pole; a bolt for pivotally connecting the clevis to the pole; bearings each in the shape of an arc of a circle secured to opposite sides of the pole; and bearings each in the shape of an arc of a circle in connection with the two arms of the clevis.

1,313,454. CAMERA. GEORGE C. BRIDGES, Rochester, N. Y. Filed Dec. 8, 1916. Serial No. 135,858. 7 Claims. (Cl. 242—71.)

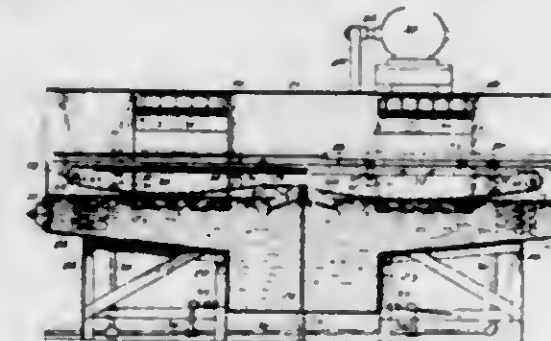
4. In a camera, a body, a cylindrical member and a sleeve rotatably mounted one within the other, said mem-

bers having slots with cutting edges, the cutting edges of the cylindrical member and sleeve being adapted to coast



for cutting film, and means within the cylindrical member and sleeve for winding film.

1,313,455. WASHING MACHINE. GEORGE S. BLAKESLEE, Chicago, Ill. Filed Feb. 9, 1916. Serial No. 77,241. 7 Claims. (Cl. 141—9.)



1. In a washing machine, the combination of two tank sections adjacent to each other and separated by a partition rising above the level of the water in said sections, an endless conveyor adapted to travel over said two tank sections at or near the surface of the water in said tank sections, means above the surface of the water in said tank sections and cooperating with the upper portion of said conveyor to conduct articles to be washed over said tank sections, and means for directing the lower portion of the conveyor over the partition between said tank sections.

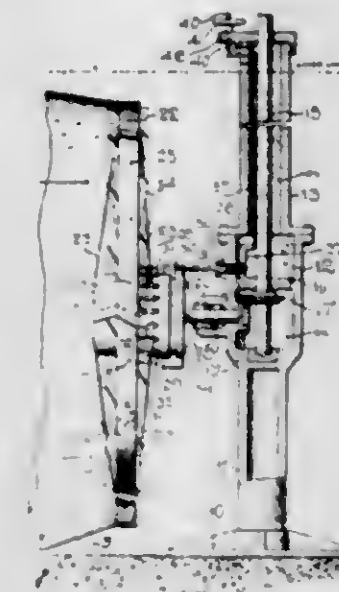
1,313,456. JOINT OR COUPLING FOR ELECTRICAL CONDUITS. WILLIAM A. BONNELL, Brooklyn, N. Y. Filed Apr. 10, 1910. Serial No. 90,069. 2 Claims. (Cl. 247—8.)



1. A coupling for electrical conduits, comprising a base section and a cover section, each section made from a single piece of suitable material, and provided near its open ends with integral spring registering means, the spring means of the base section designed for securing an electrical conduit thereto, and the integral spring means of the cover section designed for securing said cover section into locking engagement with the base section, the base section being further provided with means in the

bottom thereof for limiting the inward movement of the lower section of the conduit, the inward movement of the upper section of said conduit being limited by the integral spring means of the base section.

1,313,457. CURRENT-MOTOR. NATHAN W. BOWMAN, Durand, Wis. Filed Mar. 6, 1918. Serial No. 229,852. 3 Claims. (Cl. 170—132.)



1. A motor of the character described including a vertical housing having a supporting base, a current wheel having a shaft extending at right angles to the housing and entering the housing, a plurality of blades operatively supported upon the shaft and pivotally mounted for movement into or out of a position parallel to the shaft, said housing extending upward to a point entirely above the blades, a collar mounted upon the shaft for rotation therewith but slidable thereon, said collar having linked connection to the several blades whereby a longitudinal movement of the collar will shift the blades, a ring mounted upon the collar having a tongue engaging in a groove in the collar, a link connected to the ring extending into said housing, a bell crank lever mounted in the housing, a vertical rod extending upward through said housing and connected to the upper end of the bell crank lever, means at the upper end of the rod for vertically adjusting it to thereby adjust the blades and a driven shaft extending vertically through the housing and operatively engaged with the current wheel shaft.

1,313,458. SEPARABLE FASTENER. EMANUEL J. BOYLE, New Haven, Conn., assignor to Duplex Snap Fastener Co. Inc., a Corporation of New York. Filed Jan. 24, 1916. Serial No. 73,960. 1 Claim. (Cl. 24—218.)



A separable fastener including a head member comprising a base plate; a head thereon, provided with a restricted neck portion; a socket member including a base plate provided with an opening through which the head is insertible; a top plate secured at its outer edges to the base plate, and having a raised portion to cover the head when inserted; said top plate being in spaced relation to the base plate in the region of the opening, to constitute a housing; and a spring member having a body portion secured between the edges of the top and base plates, and

having arms extending in approximate parallelism on either side of the opening, said arms having one end free, and adapted to engage the neck portion when the head is inserted through the opening.

1,313,459. PROCESS OF MAKING PROPELLANT POWDER. ALFRED L. BROADBENT and RICHARD G. WOODMIDGE, JR., Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed July 14, 1916. Serial No. 169,240. 32 Claims. (Cl. 52-3.)

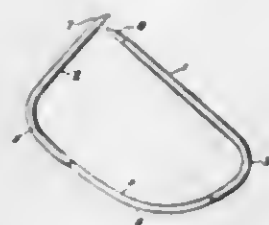
1. The process of impregnating the surface of an explosive grain insoluble in water with a deterrent material substantially insoluble in water which comprises subjecting the grain, in contact with said deterrent material, to treatment with hot water.

1,313,460. CONSTRUCTIVE DESIGN OF FACE-PLATES USED FOR THE PURPOSE OF COVERING OPENINGS IN AIR REGISTERS AND VENTILATORS THROUGH WHICH AIR PASSES. CHARLES B. BRANSON, Lincoln, Neb., Filed May 12, 1919. Serial No. 293,353. 2 Claims. (Cl. 98-49.)



2. A face plate for ventilators and registers having a plurality of bars of complete wedge shape in cross section and having the apex of the wedge directed toward the air current, whereby to minimize friction and resistance and to increase the strength of the bars by increased depth, permitting of their being spaced farther apart.

1,313,461. KNITTING NEEDLE. WILLIAM H. BROWN, Cleveland, Ohio. Filed Jan. 7, 1918. Serial No. 210,635. 3 Claims. (Cl. 66-17.)

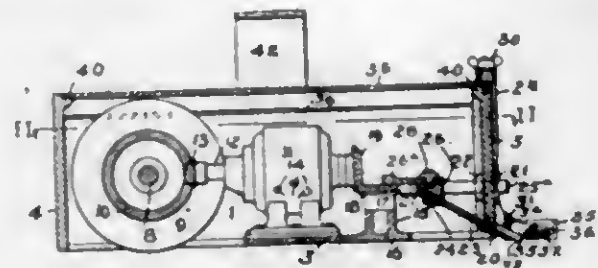


3. A knitting needle having rigid L-shaped knitting ends joined by two flat, flexible members, whose planes are transverse to the plane of the knitting ends.

1,313,462. WALL PAPER REMOVING MACHINE. WILLIAM J. BROWN, Pittsburgh, Pa., Filed Mar. 26, 1918. Serial No. 224,864. Renewed Mar. 12, 1919. Serial No. 282,193. 11 Claims. (Cl. 72-137.)

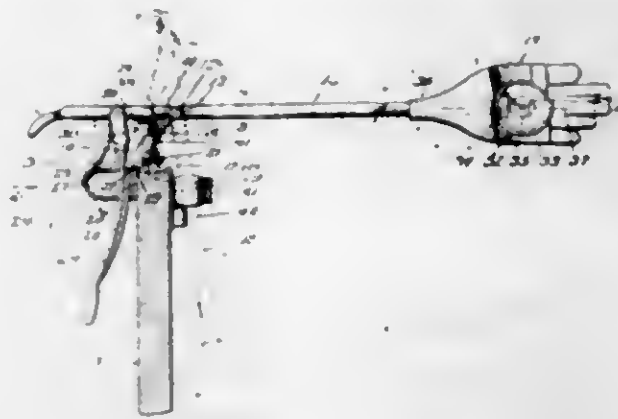
1. A wall paper removing machine comprising a reciprocating inclined scraping knife, a governing member controlling the depth of the cut of said knife during the operation thereof, and splitting knives carried by said

governing member in advance of the scraping knife, said governing member having a discharge slot for the re-



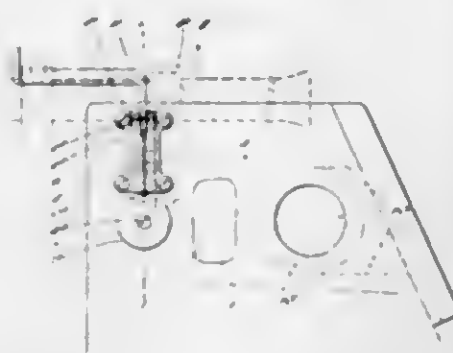
moved paper, said slot arranged rearwardly of the splitting knives.

1,313,463. AUTOMOBILE SIGNAL. FRANK W. BUCK, De Kalb, Ill., Filed Oct. 30, 1918. Serial No. 260,282. 6 Claims. (Cl. 116-31.)



1. An automobile signal, comprising a bracket, an arm pivotally supported on said bracket to swing in a vertical plane from an inactive position to and from a raised horizontal position, and having an indicating device at its outer end, and a handle at its inner end, said outer end being longer and heavier than its inner end, and a pawl pivotally secured to said arm and having a shoulder arranged to engage with said bracket when the arm is in raised position to thereby releasably hold said arm in raised position, said pawl being releasable independently of the handle.

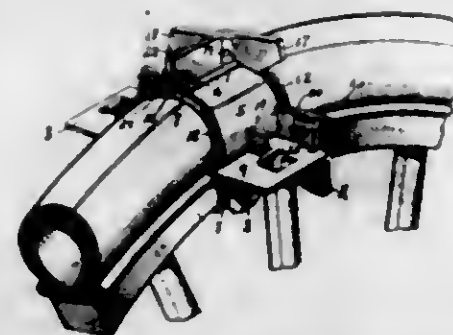
1,313,464. PEDESTAL GUN MOUNTING. GEORGE THOMAS BECKHAM, Westminster, London, England, assignor to Vickers Limited, Westminster, England. Filed July 20, 1917. Serial No. 181,927. 3 Claims. (Cl. 89-37.)



1. In a gun mounting, the combination with the carriage side check, of a trunnion block and a transversely

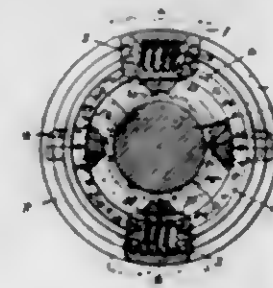
arranged locking member which, when in the locking position, passes through the trunnion block and engages with holes in the inner and outer walls of the cavity which is formed in the carriage side check for the reception of the trunnion block.

1,313,465. MUD-SHOE FOR VEHICLE TIRES. CLAUDE W. BUCKLEY, Memphis, Tenn., Filed July 9, 1917. Serial No. 179,474. 5 Claims. (Cl. 152-14.)



1. A mud shoe for vehicle tires comprising two members hinged together and adapted to fit around the tire, and means to hold said parts in position on the tire, each of said members being formed with flat laterally extending bearing plates and with inwardly and outwardly extending fins at one end of each bearing plate.

1,313,466. JOURNAL BEARING. FRANCIS E. BUXTON, Indianapolis, Ind., Filed June 22, 1918. Serial No. 241,328. 9 Claims. (Cl. 64-10.)



1. A journal bearing comprising in combination with a rotatable shaft, an outer non-rotatable casing surrounding the shaft but spaced therefrom, an inner sleeve fitting around the shaft, and means for automatically and positively revolving said sleeve at a speed less than that of the speed of the shaft.

1,313,467. SAFETY ATTACHMENT FOR CIGAR-CUTTERS. EDWARD W. CARROLL, Weston, W. Va., Filed May 17, 1917. Serial No. 169,305. 1 Claim. (Cl. 131-38.)



A cigar cutter comprising a body having an opening; and a combined cigar-guide and finger-guard of horn-shape having its smaller end attached to the body about the opening; the smaller end of the guide and guard be-

ing of sufficient diameter to receive a cigar, the axial length of the guide and guard being greater than its width across its wider end, and the wall of the guide and guard being inwardly concaved, the dimensions of the guide and guard being such that the advance of one finger of a human hand, through the opening, is prevented by the engagement of the other fingers with the upper portion of the inner flared sides of the horn-shaped guide and guard.

1,313,468. MACHINE FOR STRETCHING AND DRYING TUBULAR FABRICS. SAMUEL COHN, New York, N. Y., Filed Aug. 1, 1917. Serial No. 183,929. 12 Claims. (Cl. 20-16.)



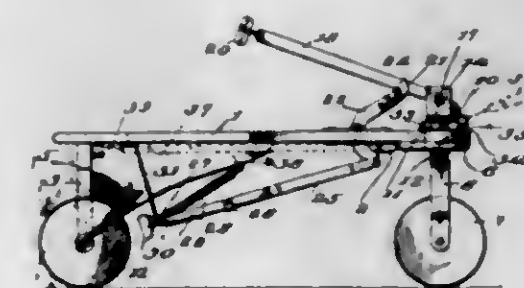
9. A machine for stretching a tubular fabric comprising a mandrel over which the fabric is adapted to be advanced, and grooved circumferentially to form adjacent abutment surfaces, and a plurality of pairs of rolling members, said pairs being spaced apart lengthwise of the mandrel and adapted to operate by a rolling pressure on the tubular fabric against the mandrel the rollers of each pair lying in one of said grooves and between adjacent abutment surfaces, and adapted to advance the tubular fabric over the mandrel.

1,313,469. COMBINED EYE SHADE AND SHIELD. NORM CROSSLEY, Toronto, Ontario, Canada, assignor of ten per cent. to Mary J. Hunt, Bracebridge, Ontario, Canada. Filed Dec. 31, 1917. Serial No. 209,687. 8 Claims. (Cl. 2-149.)



5. A device of the character described including a shade, and a shield normally carried inactive upon the shade and movable to active position binding against the shade to be held in such position thereby.

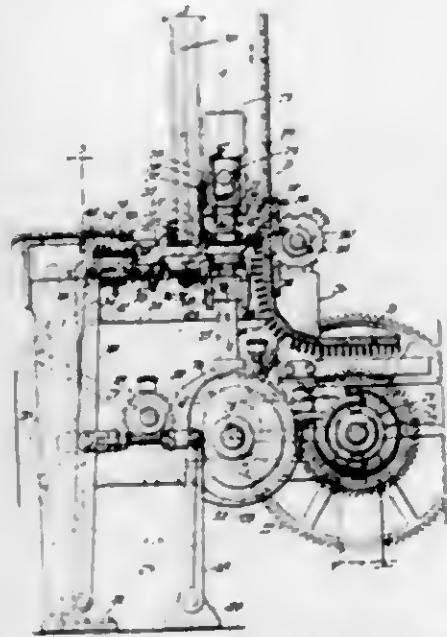
1,313,470. TOY VEHICLE. HERT J. DISCHER, Flint, Mich., Filed May 9, 1918. Serial No. 233,504. 6 Claims. (Cl. 208-165.)



1. In a toy vehicle, the combination of a platform, traveling supports for the platform, resilient hangers secured to the platform near the rear end thereof, a brake beam carried by the lower ends of said hangers, brake

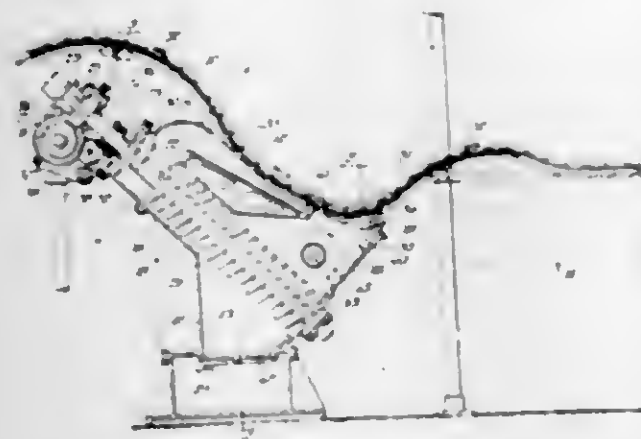
shoes carried by said beam, a spring having its rear end secured to the brake beam and its forward end secured to the platform and holding the brake beam normally retracted, a brake lever mounted upon the platform, connections between the said lever and the brake beam, and means for operating the brake lever.

1,313,471. MACHINE FOR MAKING CARD-MATCHES. JOSEPH C. DONNELLY, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 22, 1917. Serial No. 203,347. 17 Claims. (Cl. 144—51.)



1. In a match machine, the combination with a source of card supply, and splint-forming mechanism spaced therefrom comprising complementary cutter and die elements each including a series of bar members in spaced parallel relation to each other, of a transfer head having a longitudinally slotted card-supporting surface, means for reciprocating said head in a path between the source of card supply and the splint-forming mechanism, whereby in each forward stroke of the head the said surface thereof receives a card and transfers it to and between the said cutter and die elements of the splint-forming mechanism, means for preventing displacement of the card during the rearward stroke of the transfer head, and means for actuating said splint-forming mechanism when the transfer head is retracted therefrom.

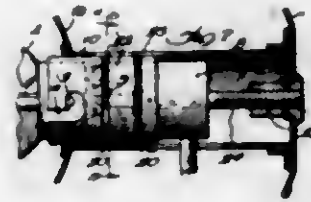
1,313,472. MEANS FOR TREATING MATCH SPLINTS WITH POWDERED MATERIAL. JOSEPH C. DONNELLY, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 12, 1918. Serial No. 211,678. 12 Claims. (Cl. 91—59.)



1. In a match machine having a splint carrier constructed to support rows of splints in spaced relation to

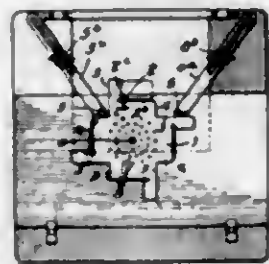
each other, a structure comprising a chamber into which the splints depend during a part of their travel, and means for feeding a compact stream of anti-glowing powder into said chamber and along with said splints during their travel.

1,313,473. REFLECTING ELECTRIC LAMP. HARRY A. DOWOLAN, Bronson, Mich., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich., a Corporation of Michigan. Filed Nov. 21, 1917. Serial No. 203,090. 3 Claims. (Cl. 240—44.)



2. A reflecting electric lamp including a reflector containing casing; a lamp; and two tubular elements, one within the other, one receiving the lamp and surrounded by the other that is connected with the casing, one of said tubular elements having a circumferentially extending slot and a longitudinal slot communicating with the other slot, these slots forming two aligned circumferentially extending oppositely directed springs that bear upon the other tubular element which is formed to have abutting and sliding engagement with the outer ends of said springs to prevent relative rotation of the tubular elements and to permit focal adjustment of the lamp.

1,313,474. FEEDING DEVICE FOR PRESSES. GEORGE H. DROTT, Chicago, Ill., assignor to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed May 1, 1919. Serial No. 294,033. 15 Claims. (Cl. 271—3.)



2. A feeding device for presses comprising a carrier free for manipulation in the feeding direction and free to shift its position in response to arresting means; said carrier having a card holder and arresting and justifying faces related thereto adapted, respectively, to cooperate with stops on a press and thereby determine the relation to the printing line of a card to be inserted in the holder.

1,313,475. PLANTER. EMMET E. ENGLEND, Moline, Ill., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill., a Corporation of Illinois. Filed July 6, 1918. Serial No. 248,571. 5 Claims. (Cl. 64—27.)



1. A shaft for rotating the seed-dropping mechanism of a planter of the class described, said shaft comprising a

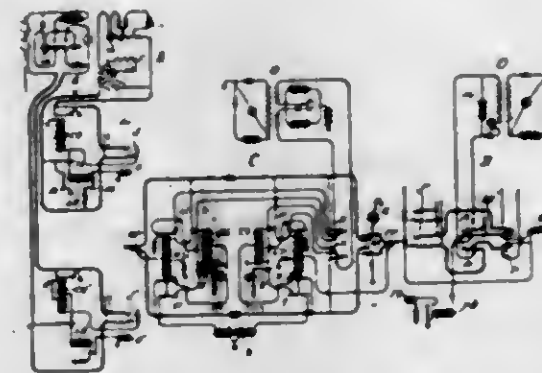
hollow body adapted to contain a lubricant and having openings through the body for the passage of such lubricant to the bearings of the shaft, a crank formed on one end of said body, and a gear secured concentrically upon the other end of said body, and having a crank-pin thereon in predetermined correct relation to the crank at the other end of the shaft.

1,313,476. ARTIFICIAL BAIT. WALTER S. EWERT, Los Angeles, Calif. Filed May 31, 1919. Serial No. 300,884. 3 Claims. (Cl. 43—30.)



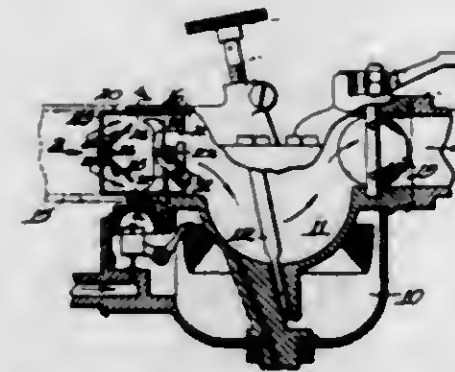
1. In an artificial bait the combination with a fish like body having downwardly and outwardly opening recesses in opposite sides thereof and a line attaching eyelet at one end and a hook at its other end, of a pair of paddle wheels mounted one in each of said recesses to revolve in a plane parallel with the longitudinal center of said body member.

1,313,477. TRUNK-CIRCUITS. HARRY N. FARIS, Kansas City, Kans., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1915. Serial No. 63,432. 13 Claims. (Cl. 179—76.)



12. A telephone system including an A-operator's link circuit, a B-operator's trunk circuit appearing in a plurality of trunk operators' positions, manual means for connecting said link circuit to said trunk circuit, a signal individual to said trunk circuit, and means located at any one of said trunk operators' positions for effecting said signal.

1,313,478. AIR-CONTROLLING DEVICE FOR CARBURETERS. ALBERT C. FONTAINE, Millbury, Mass. Filed Dec. 10, 1917. Serial No. 206,415. 3 Claims. (Cl. 277—1.)



1. An air intake device for a carburetor, having in combination, an automatic air valve comprising a sleeve

having an internal annular flange, two semi-circular hinged valve members mounted on a rod extending transversely across said intake and normally seated in a single plane against said flange, and a single tension spring having its opposite ends secured to said two hinged members and effective to yieldingly resist opening movement of both members.

2. An automatic air intake device for a carburetor, having in combination, separate awing valve members, yielding means to close said valve members, and means operable manually to prevent opening movement of said valve members, said means including a movable element adapted to engage both of said awing valve members, and means to manually advance said element to a selected operative position.

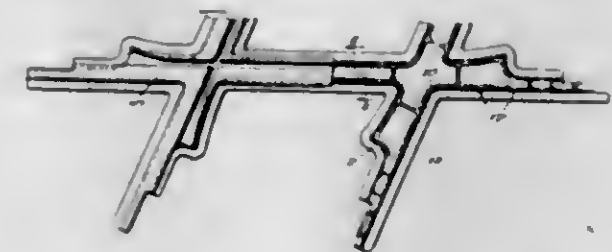
3. An air intake device for a carburetor, having in combination, a cylindrical member having a bearing surface substantially normal to the axis thereof, two semi-circular hinged valve elements mounted to swing about a common axis transverse to the cylindrical axis of said member, said elements being normally seated against said bearing surface, means to yieldingly resist opening movement of said valve elements, and manually operable means to positively prevent such opening movement of said valve elements.

1,313,479. INTERNAL PIPE-WRENCH. CHARLES L. GEORGE, Findlay, Ohio, assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio, a Corporation of Ohio. Filed Apr. 21, 1919. Serial No. 291,606. 5 Claims. (Cl. 81—72.)



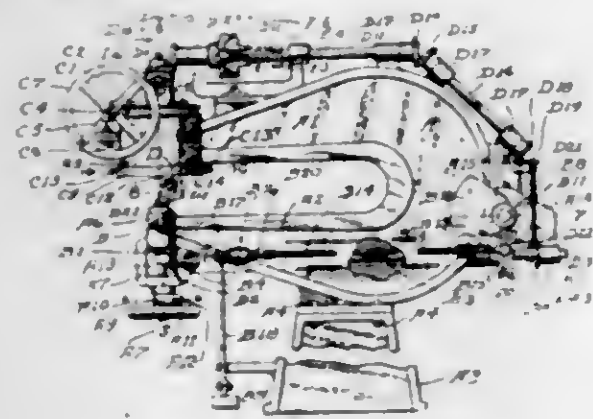
1. A wrench head adapted for projection into a pipe end, said head having a peripheral recess, a clutch member mounted for rocking movements in said recess about an axis which is offset relative to the head axis, said member having a clutch surface which is projected outward into tightening clutch engagement with an encircling pipe when the clutch member is rocked in one direction relative to the head.

1,313,480. REINFORCEMENT FOR FROGS AND CROSSINGS. BENEDICT T. GIBBS, JR., Chicago, Ill., assignor to Morden Frog & Crossing Works, Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1919. Serial No. 280,004. 4 Claims. (Cl. 246—454.)



1. A railroad trackage structure of the frog, crossing or like type, comprising a cast member of the required shape, and a reinforcing strip secured to a side of the member to maintain assembly of constituent parts of said member upon breakage thereof.

1,313,481. MACHINE FOR CUTTING SHEET FORM MATERIAL. CHARLES H. GRAY, Knoxville, Tenn. Filed Oct. 29, 1917. Serial No. 198,957. 11 Claims. (Cl. 161-63.)



1. In a machine of the nature described, a pair of rotary shearing wheels having co-working edges, means supporting the first of said wheels for rotation on a relatively fixed axis, means for supporting the second of said wheels for revolution around an axial line co-incident with the axial line of the first wheel and for rotation on an axial line which is non-co-incident with the axial line of revolution, and driving means for rotating the second wheel on its rotation axis, substantially as described.

1,313,482. FLEXIBLE RULE. AXEL E. HEGARUT, Philadelphia, Pa. Filed Dec. 8, 1916. Serial No. 135,889. Renewed Jan. 14, 1918. Serial No. 211,801. 7 Claims. (Cl. 233-177.)



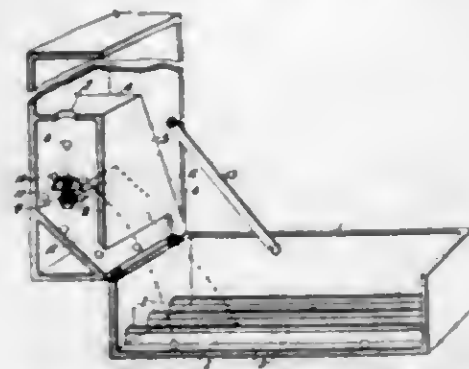
1. A flexible rule comprising elongated members adjoinable relatively to each other, lugs extending laterally from certain of said members and having their outer ends spaced apart and provided with dove-tailed recesses, other of said members having dove-tailed tongues spaced apart and slidable within said recesses, and clamping means designed to compress the portions which provide the dove-tailed recesses to bind the dove-tailed tongues therein, substantially as described.

1,313,483. HIGH-FREQUENCY CARRIER TELEPHONY. RAYMOND A. HEISING, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 11, 1916. Serial No. 114,774. 25 Claims. (Cl. 179-15.)



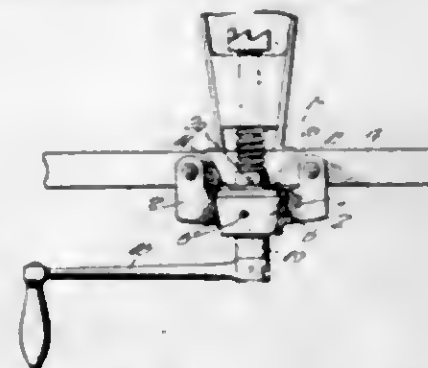
1. A multiplex transmitting system comprising a line, an anti-resonant circuit therein, a transmission circuit shunted around said anti-resonant circuit, and means for applying signalling voltages to said transmission circuit.

1,313,484. GAME APPARATUS. JAMES J. HENDRON, Chicopee Falls, Mass. Filed May 20, 1919. Serial No. 298,414. 3 Claims. (Cl. 46-91.)



3. A game apparatus comprising in combination a base member having grooves in the bottom part to receive marbles or the like, of a cover for the member, devices including an inclined plane in the cover for deflecting dropped marbles into the grooves, said devices including a semi-spherical member onto which the marbles or the like are dropped.

1,313,485. STARTING-CRANK LOCK. GRANT W. HERSHBY, Fremont, Ohio, assignor of one-half to Orrin V. Burkett, Fremont, Ohio. Filed Jan. 13, 1919. Serial No. 270,923. 1 Claim. (Cl. 127-185.)



In combination with an automobile cranking shaft, a substantially cylindrical casing through which said shaft passes co-axially, a ring fitting into said casing between the ends of the latter, said shaft passing through said ring and the latter having a wedge shaped recess in its shaft engaging side, screws passing through said casing into said ring to anchor the latter against rotation and sliding endwise of the casing, end plates closing the ends of said casing and spaced from said ring, a roller in said recess for engagement with the shaft to lock the latter against retrograde movement, headed studs on the ends of said roller, a pair of coil springs hooked over said studs and located in the spaces between said end plates and ring for drawing said roller to the narrow end of said recess and means connecting said springs to said ring.

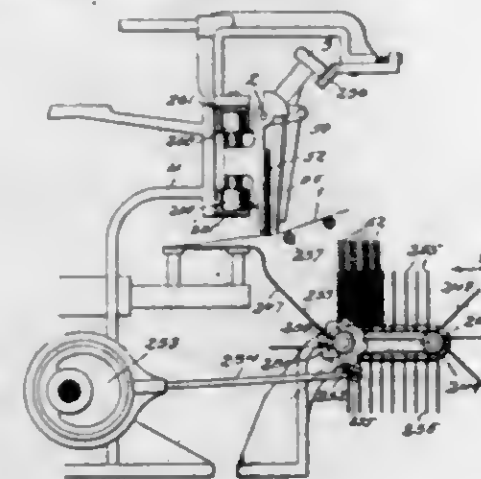
1,313,486. TRAVELING AUTOMOBILE TURN-TABLE. RICHARD H. FREEMAN, Carleton, Pa. Filed Sept. 13, 1918. Serial No. 253,952. 6 Claims. (Cl. 101-41.)



1. A traveling automobile turn table comprising in combination, a circular base, mobility wheels carrying

and fully supporting said base, a rectangular turret revolvably mounted upon said base, and automobile carriers carried by said turret and fully supported thereby.

1,313,487. DELIVERY MECHANISM. CHARLES A. JUENGT, Croton Falls, N. Y., assignor, by means assignments, to American Assembling Machine Company, a Corporation of Delaware. Original application filed Sept. 26, 1913. Serial No. 791,942. Divided and this application filed Aug. 7, 1914. Serial No. 855,616. 4 Claims. (Cl. 103-24.)



2. In a book covering machine, a longitudinally moving book conveyor, a downwardly opening clamp on said conveyor adapted to support a book in an upright position, means for causing the clamp to release the book, an inclined chute, having an opening, below said clamp, an endless delivery conveyor adjacent to the chute and moving transversely of the longitudinal conveyor, and upstanding leaves on said delivery conveyor in line with and passing through the opening in the chute, which assume an inclined position at the moment of receiving the book and for delivering the book in an upright position.

1,313,488. WIRE-SPlicing TOOL. TULLIE KING, Reynoldsburg, Ohio. Filed May 15, 1919. Serial No. 297,304. 5 Claims. (Cl. 140-110.)



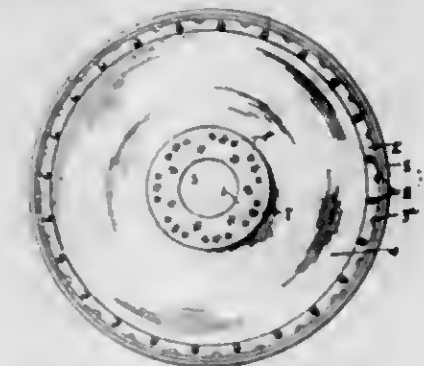
1. The herein described tool having a head provided with a radial slot for receiving a wire, a pin movable in the head to project its inner end across the slot near the bottom thereof, a bar at the outer end of the pin, the head having a recess for said bar, yielding means normally unseating the bar from the recess and retracting said pin, and means for seating the bar in said recess at will.

1,313,489. VEHICLE-WHEEL. FRED S. LACK, Paducah, Ky. Filed June 12, 1918. Serial No. 239,503. 5 Claims. (Cl. 21-69.)

1. A wheel, comprising spaced metallic hub and felly rings, and a series of spaced metallic disks interposed between and secured to said hub and felly rings, said hub rings and disks being each provided with a central opening

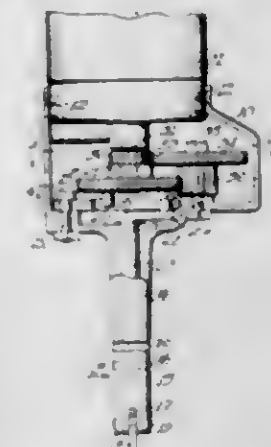
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adapted to receive an axle or hub member, and said disks converging toward said felly rings at uniform angles to



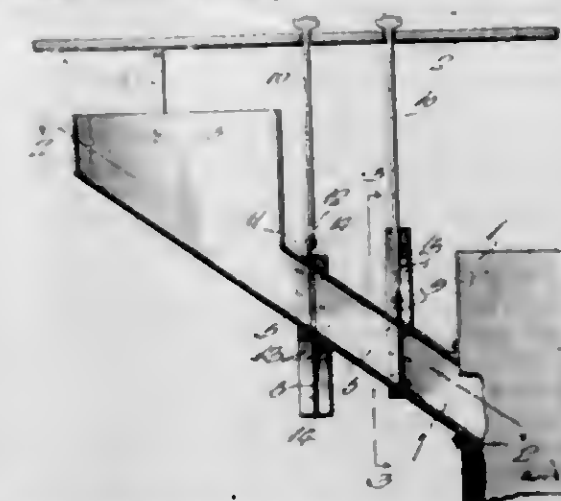
each other and abutting against each other between said felly rings.

1,313,490. VALVE-GRINDER. ALBERT W. LARSON, Worcester, Mass., assignor to Stenman Electric Valve Grinder Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1918. Serial No. 225,397. 2 Claims. (Cl. 51-4.)



1. A valve grinder comprising a casing, a shaft mounted to oscillate therein and having a crank arm thereon, a lever mounted on a pivot fixed in said casing at a point removed from the axis of said shaft, said lever extending transversely of the axis of said shaft and having a pin and slot connection with said crank arm, a motor mounted in said casing, a crank pin mounted for movement in a circular path by said motor, and a slot in said lever positioned to receive said crank pin whereby rotary movement of said crank pin effects a certain oscillatory movement of said lever and a greater oscillatory movement of the shaft connected thereto.

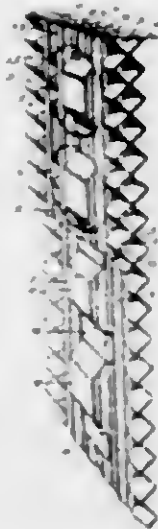
1,313,491. FURNACE FEED-CHUTE. JAMES A. LAZZELL, Columbus, Ind. Filed Dec. 12, 1918. Serial No. 266,508. 2 Claims. (Cl. 193-45.)



1. In a feeding device, a pipe formed of a pair of sections disposed end to end in slightly spaced relation, a

gate operating in the space between said sections and having its edges projecting from said sections, angle iron bars secured to the outer sides of said sections and having outwardly extending flanges receiving said projecting edges slidably therebetween, spacing bars between said outwardly extending flanges of said angle iron bars, and means securing said flanges and spacing bars rigidly together.

1,313,492. AUTOMOBILE-RADIATOR. George H. Lobbs, Toledo, Ohio. Filed Nov. 7, 1917. Serial No. 200,705. 3 Claims. (Cl. 257-125.)



1. In a radiator, a plurality of pairs of strips having corrugations extending lengthwise of the strips and forming water passage-ways, spacing strips having corrugated edges located intermediate the pairs of strips and having a plurality of openings along their central portion, elastic means located between the pairs of strips for pressing the walls of the pairs of strips and extending through the openings.

1,313,493. LEAK-DETECTOR FOR PNEUMATIC-TIRE VALVES. CHARLES W. LORRY, Birmingham, Ala. Filed Apr. 3, 1919. Serial No. 287,354. 2 Claims. (Cl. 73-51.)

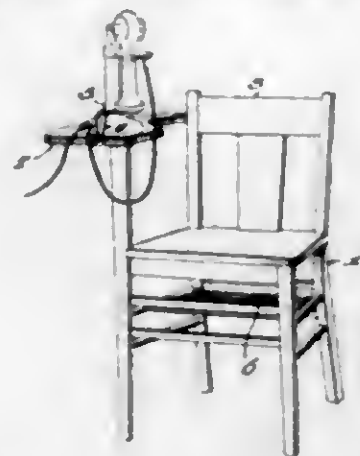


1. A handle having an opening therein, a flexible diaphragm having a marginal bead, and means to engage said bead to hold it in position against the underside of the handle with the diaphragm in position to expand through the opening in the handle.

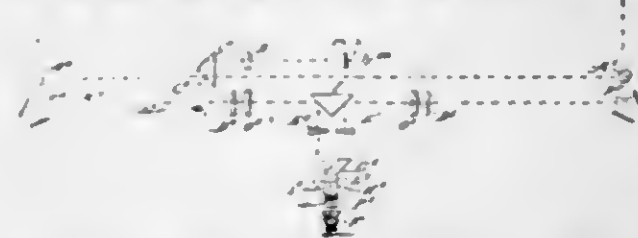
1,313,494. COMBINATION TELEPHONE-SUPPORT AND CHAIR. HARRY MCNEILL, Sheboygan, Wis., assignor to McNeill Chair Company, Sheboygan, Wis. Filed Nov. 26, 1917. Serial No. 203,970. 1 Claim. (Cl. 155-26.)

As a new article of manufacture, a telephone clamp adapted to be secured to a support and comprising a single piece of resilient wire bent upon itself midway between its ends to provide a pair of arms, the portions of said arms immediately adjacent said bend being bent away from each other to form an enlarged loop for the reception of a telephone stand, the free end portions of said arms intermediate their ends and said enlarged loop being bent laterally in the same direction, the extremities of the laterally turned portions of said arms being provided with attaching eyes disposed in the same plane therewith, said eyes and

said laterally turned portions being closer together than the enlarged loop to retain the telephone stand in the latter, they being adapted to move apart to receive said telephone stand in the loop before the eyes are secured to a support.

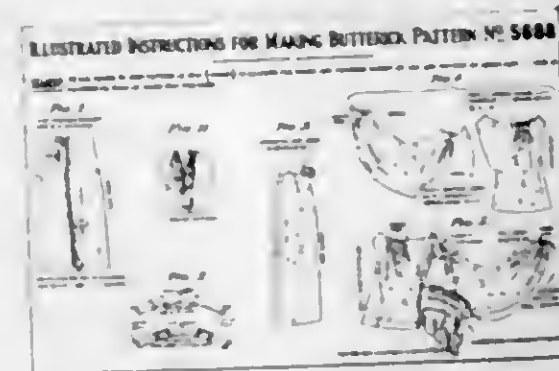


1,313,495. OPTICAL RANGE-FINDER. ALBERT A. MICHETSON, Chicago, Ill. Filed Sept. 24, 1918. Serial No. 255,459. 26 Claims. (Cl. 68-2.7.)



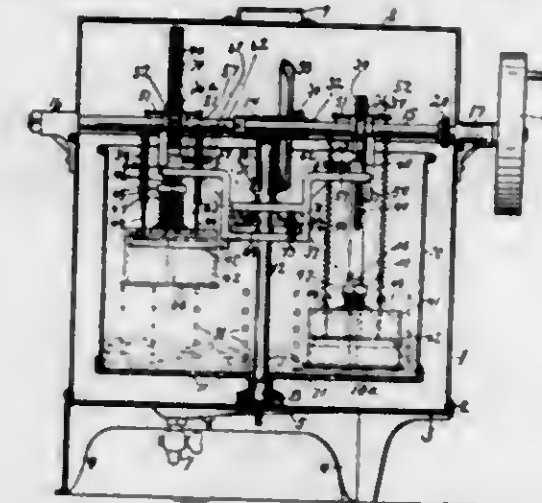
1. An optical range finder comprising two compound end reflectors, a central ocular reflecting system, two telescope objectives having axes substantially parallel to the base line and arranged relatively near to said central reflecting system and at considerably greater distances from said end reflectors, a casing having laterally projecting portions for supporting said end reflectors, and a short, inner, rigid frame whereon said objectives are mounted, said frame having central supporting means independent of said laterally projecting portions.

1,313,496. DRESSMAKER'S PATTERN OUTFIT. HANNAH G. MILLARD, New York, N. Y., assignor to The Butterick Publishing Company, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1916. Serial No. 75,128. 3 Claims. (Cl. 33-12.)



1. An instruction sheet or chart for users of dressmakers' paper patterns, comprising a sheet or chart having a series of views or figures exhibiting a series of successive stages in the making of the garment; said views or figures showing also the appearance of the individual parts or pieces as they are successively assembled and their relations to each other at the several stages and illustrating the operations by which the stages represented are reached in making the garment.

1,313,497. DRY-CLEANING AND WASHING MACHINE. ANDREW B. MILLER, Baldwin, Wis. Filed Mar. 28, 1918. Serial No. 225,154. 4 Claims. (Cl. 68-19.)



1. In a machine of the class described, a stationary cylindrical tub, a skeleton tub rotatably mounted in the middle thereof and having a vertical shaft, a horizontal drive shaft journaled across the top of the stationary tub and having operative connection with the shaft of the skeleton tub to rotate it, a frame detachably journaled on both of said shafts, two pounders arranged to work in the skeleton tub and having each a vertical rod slidable in the frame and at one side provided with a rack, two reversely arranged mutilated gears fixed on the drive shaft and arranged to engage and push downwardly said racks in alternate order, and springs arranged to raise the pounders whenever the toothed portions of the gears are turned away from the racks.

1,313,498. DISPLAY-CABINET. GEORGE H. NASON, Toledo, Ohio, assignor to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware. Filed Apr. 24, 1919. Serial No. 292,328. 3 Claims. (Cl. 211-7.)

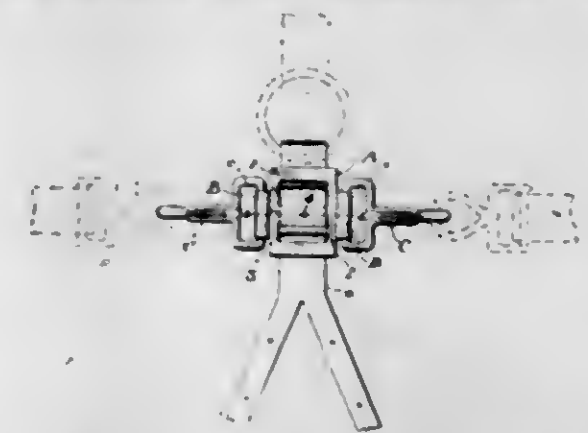


2. A cabinet having a front opening and a top opening at the upper edge of the front opening and provided with slide-ways at the sides of said openings, a glass plate slidably mounted in one of said ways and closing said front opening and removable therefrom through the top opening, a top plate mounted for sliding movements over the cabinet top and adapted to close said top opening over the glass plate, and cabinet hangers movably secured to the back of the cabinet and when in usable position coacting with said top plate to retain it in closed position.

1,313,499. TRACE-END CARRIER. GEORGE B. NEWTON, Haddam, Conn. Filed Feb. 6, 1919. Serial No. 275,895. 2 Claims. (Cl. 54-56.)

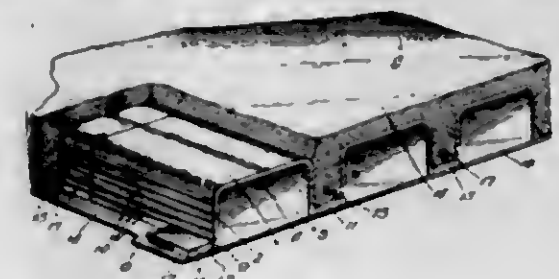
1. A trace end carrier consisting of a slotted plate formed with a side edge extension, said extension being curved upwardly and downwardly to form a long tubular bearing, and a snap-hook detachably fitted to said bearing

and adapted to receive a trace end, said snap-hook having a grooved cross-bar and the free edge of the tubular bearing terminating a sufficient distance above the top



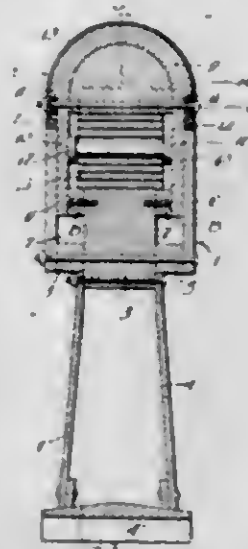
surface of the plate to form an opening adapted to freely admit said grooved cross-bar when aligned with the groove thereof.

1,313,500. FLOOR CONSTRUCTION OR THE LIKE. WILLIAM L. NISS and CHARLES R. BIRDSEY, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 2, 1916. Serial No. 123,422. 6 Claims. (Cl. 72-66.)



2. A dome of the kind described consisting of a hollow box-like body, having side, end, top and bottom walls permanently connected together and constructed with a continuous reinforcement of wire fabric embedded therein and extending completely around the top, sides, and bottom intermediate the ends thereof, the sides of the body extending at an inward inclination toward each other.

1,313,501. SPRING-WHEEL. GEORGE OBBIN, Milwaukee, Wis., assignor of one-third to John Milroy Jones, Milwaukee, Wis. Filed Feb. 6, 1918. Serial No. 215,613. Renewed Mar. 10, 1919. Serial No. 281,814. 2 Claims. (Cl. 152-37.)



1. A spring wheel of the class described comprising an inner rim having outwardly extending annular side plates,

an outer rim having inwardly extending annular side plates disposed between the latter and in sliding contact therewith, springs disposed between said rims, annular shoulders formed on the outer sides of the outer rim, said shoulders being disposed in opposing relation to the outer edges of the first named side plates, and annular compressible strips disposed between the latter and said shoulders.

1,313,502. SKEE-SKOOT. LEO D. PANGBORN, Eau Claire, Wis. Filed July 20, 1918. Serial No. 246,917. 1 Claim. (Cl. 280-12.)



A skee-skeet consisting of a pair of flat runners turned up and pointed at one end thereof, standards pivotally connected to the runners at their lower ends and arranged to be folded and lie upon said runners, a cross-bar connecting the standards at their free ends, said bar projecting beyond said standards to form handles, an arched brace connecting said runners to maintain them in parallel relationship, and foldable locking braces connecting the standards and runners.

1,313,503. BOTTLE CLOSURE. WILLIAM T. PETERSEN, San Jose, Calif. Filed Feb. 17, 1919. Serial No. 277,622. 2 Claims. (Cl. 215-52.)



1. A closure for bottles comprising a body of waxy material adapted to adhere to the interior of the bottle neck, a supporting member for said waxy material loosely engaging said bottle neck and separating said waxy material from the contents of said bottle and of less thickness than said body of waxy material, and a handle embedded in said waxy material secured to said supporting member and extending beyond the neck of the bottle.

1,313,504. GOLF CLUB. CHARLES A. ROLFE, Redlands, Calif. Filed Oct. 4, 1917. Serial No. 194,905. 6 Claims. (Cl. 46-4.)



1. A golf club embodying a shaft, a universal joint at the lower end of the shaft embodying two members one mounted upon the shaft, and the other carrying a blade,

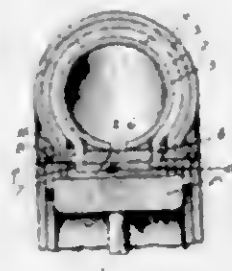
and interengaging blade setting means on the blade member and on the shaft member adapted to be thrown into and out of interengagement by movement of the blade member vertically about the joint pivot, the blade having a normal position in which said means are out of interengagement.

1,313,505. BOOT-LEG FORM. ARTHUR SCHOSHUSEN, Pittsburg, Kans., assignor to Elma Schoshusen, Pittsburg, Kans. Filed June 13, 1918. Serial No. 239,844. 10 Claims. (Cl. 12-128.)



1. A boot leg display form comprising a plurality of elements arranged in continuously overlapping relation and adjustably connected for relative expanding or contracting movement for fitting snugly within the leg portion of the finished boot.

1,313,506. AUTOMOBILE-TIRE. MARCUS ARNATAK KNEUTH SHOTWELL, Miami, Fla. Filed Aug. 5, 1918. Serial No. 248,482. 5 Claims. (Cl. 152-8.)

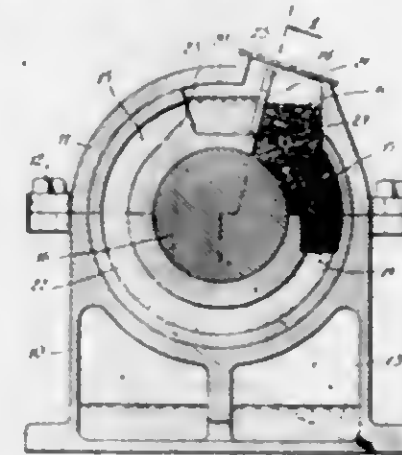


3. A tire of the class described comprising a member adapted to be disposed circumferentially around a wheel body, said member being substantially U-shaped in cross section, a plurality of transversely disposed springs, each of said springs having a base portion contacting with the member and having outwardly extending side portions in contact with the sides of the member and continued to form substantially a circle, the extremities of the spring lapping each other at the tread portion of the tire, a casing disposed over the springs and secured to the sides of the member, a tubular core disposed through the substantially circular portions of the springs, said core being circumferentially split, and a cushioning strip disposed circumferentially around the member and resting upon the base portions of the springs, the tubular core contacting with the cushioning strip.

1,313,507. WASTE-PACKED SLEEVE-BEARING. JOHN F. TRUNKER, Bayonne, N. J., assignor to Electro-Dynamic Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 7, 1918. Serial No. 248,744. 10 Claims. (Cl. 64-24.)

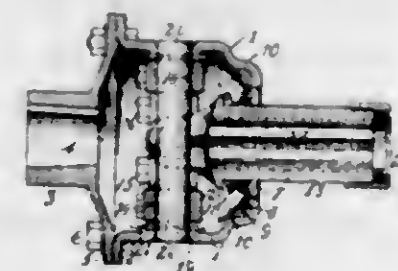
1. A waste-packed journal bearing comprising a journal box, and a bearing sleeve mounted in the journal box and having provided within itself a wide and deep pocket

which opens toward the journal and which is adapted to contain substantially the entire supply of packing and



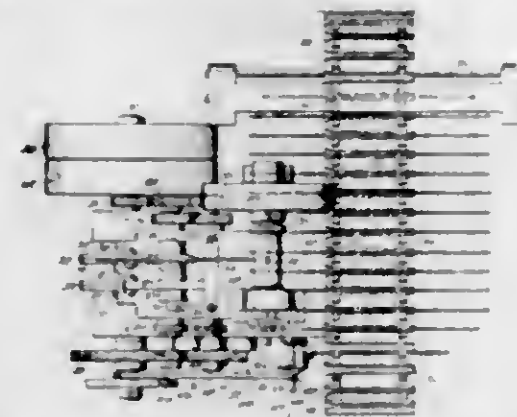
to carry the same bodily with it during any displacement of the journal and sleeve with respect to the journal box; substantially as described.

1,313,508. UNIVERSAL JOINT. BERTIN H. URRCHER, Bowling Green, Ohio, assignor to Universal Machine Company, Bowling Green, Ohio. Filed Mar. 14, 1917. Serial No. 154,654. 2 Claims. (Cl. 64-102.)



1. In a device of the described character, a shaft member, a substantially cylindrical casing adapted at one end for rigid connection with one end of such shaft member, a transverse shaft within and engaged with the opposite sides of said casing, another shaft member extending through a hole in the other end of the casing and having a bifurcated inner end with oppositely projecting gudgeons, and a ring composed of two parts having therebetween and disposed in the same plane at right angles to each other bearings for said transverse shaft and bearings for said gudgeons.

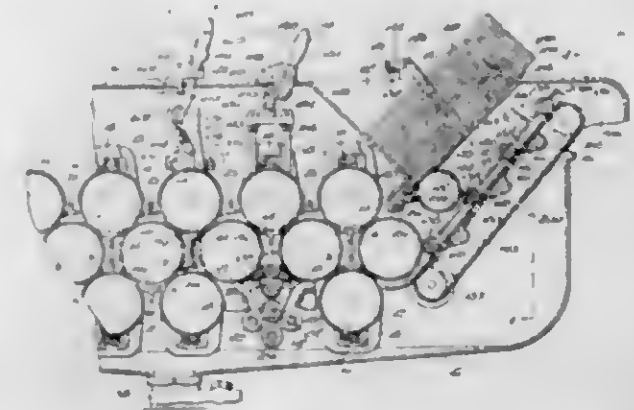
1,313,509. WIRE FORMING MACHINE. WILLIAM W. VINCENT, Kenosha, Wis., assignor to The Vincent-Alward Company, Kenosha, Wis., a Corporation of Wisconsin. Filed Sept. 7, 1918. Serial No. 252,999. 14 Claims. (Cl. 140-105.)



1. In a wire-forming machine of the character described, the combination of means to feed a wire supply, means

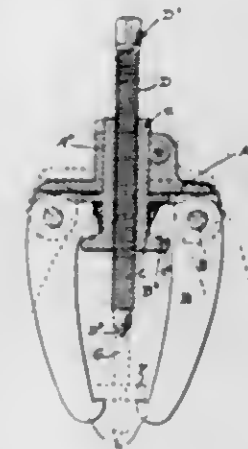
to sever said supply into lengths, means to crimp the wire comprising a pair of corrugated rollers between which the wire passes, and automatically-acting means to cause said rollers to approach one another and to separate to render them operative and inoperative on the wire, substantially as described.

1,313,510. MACHINE FOR LEATHER FLEXING AND TEMPERING. WALLACE C. WRIGHT, Lynn, Mass., assignor to Basler Machinery Company, Lynn, Mass., a Corporation of Maine. Filed Sept. 20, 1916. Serial No. 122,243. 8 Claims. (Cl. 91-17.)



1. A leather tempering machine of the kind described, having mechanism to moisten, to convey, and to undulate a leather blank in combination with means to vary the undulating action.

1,313,511. GEAR REMOVER. CHARLES P. BEACH, Littleton, N. H. Filed July 26, 1917. Serial No. 182,847. 12 Claims. (Cl. 29-85.)

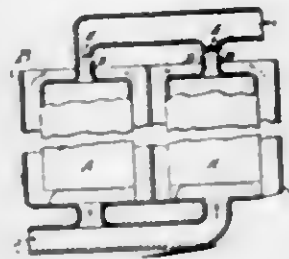


2. A gear remover comprising a base, a plurality of movable gripping members supported by said base, operating means for said gear remover, and means associated with said operating means and actuated by the same for causing said gripping members to approach each other.

1,313,512. PROCESS OF COOLING, VENTILATING, AND RENDERING INNOCUOUS STORAGE BATTERIES. CHARLES H. BEDELL and GRANT E. EDGAR, New London, Conn., assignors to Electric Boat Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 30, 1915. Serial No. 64,380. 10 Claims. (Cl. 204-29.)

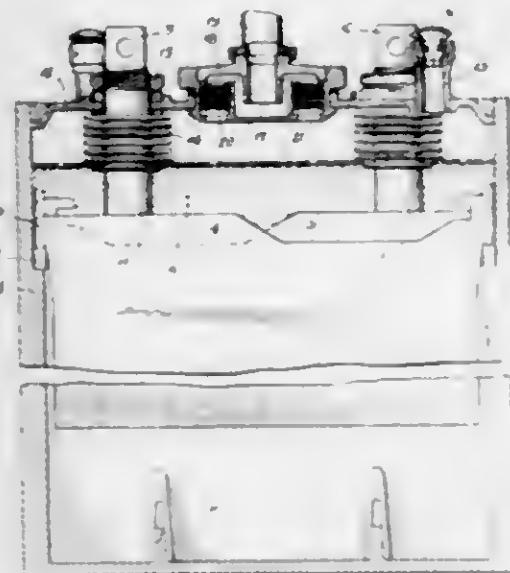
4. In a storage battery system of the class described, in combination with a compartment and a storage battery cell therein, a duct communicating directly with the interior of said cell and leading to a point exterior to said

compartment for drawing off the gases generated within the cell and provided with an opening above the top of the cell through which gases from another source may be simultaneously drawn into the duct; said duct and said



opening being so proportioned and designed that the explosive gases drawn into said duct will by the admixture therewith of said gases drawn from another source be so changed as to be made non-explosive.

1,313,513. STORAGE-BATTERY INSTALLATION. CHARLES H. REDELL, New London, Conn., assignor to Electric Hoof Company, a Corporation of New Jersey. Filed Dec. 22, 1916. Serial No. 138,366. 3 Claims. (Cl. 204—29.)

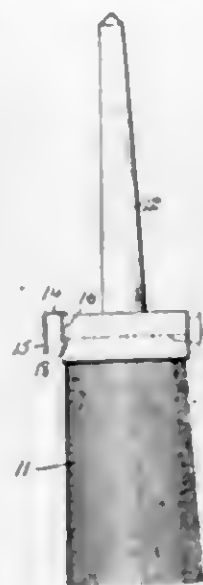


2. A storage battery cell having a casing, a cover therefor, an electrolyte within the cell, plates immersed in the electrolyte, means for making electrical connection to the plates, inlet and outlet openings in the casing of the cell for the circulation of air through the upper portion of the cell, and a diaphragm mounted within the cell near the surface of the electrolyte therein for protecting the surface of the electrolyte from the air flowing through the upper portion of the cell between the inlet and outlet openings, substantially as described.

1,313,514. MANUFACTURE OF GAS. ROBERT FRANK BACCHUSON, London, England. Filed Sept. 28, 1915. Serial No. 53,151. 6 Claims. (Cl. 48—201.)

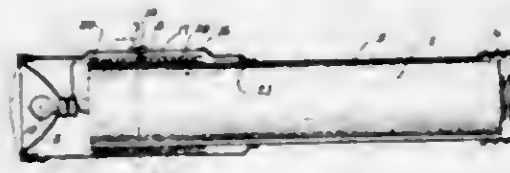
1. A process of manufacturing gas consisting in intimately mixing with coal bitumen of a hard, brittle stable and refractory nature obtained by distillation of petroleum at approximately 750° F. and subjecting the mixture to the retorts to the heat treatment usual in coal gas manufacture, substantially as described.

1,313,515. BRUSH. PETER C. CAFFEY, Newark, N. J. Filed Apr. 2, 1919. Serial No. 287,001. 3 Claims. (Cl. 248—50.)



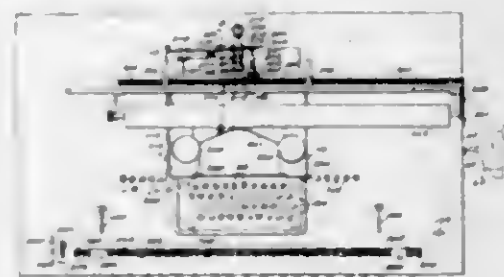
1. A brush having a one-piece hook secured thereto, the hook being pivoted to swing on an axis parallel with the bristles.

1,313,516. PORTABLE FLASH-LIGHT. KENNETH A. CANTIN, Honolulu, Hawaii. Filed Mar. 28, 1918. Serial No. 225,270. 3 Claims. (Cl. 240—8.5.)



1. In a portable flash light including a battery receiving casing and a lamp carried thereby, a resistance member wound about the casing and insulated therefrom, an outer casing surrounding the rheostat member and insulated therefrom, a contact member slidably carried by said outer casing for selective engagement with the convolutions of the rheostat member and an electrical connection between the casings.

1,313,517. CALCULATING-MACHINE. SAMUEL E. CASLIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, a Corporation of New York. Filed June 26, 1909. Serial No. 504,595. Renewed May 1, 1919. Serial No. 293,991. 173 Claims. (Cl. 235—62.)



1. In a calculating machine, the combination with a set of totalizers, of a cross totalizer, a grand totalizer, means to enable the simultaneous operation of said cross totalizer with any one of said set of totalizers, and also the simultaneous operation of said grand totalizer with said cross totalizer, means for reversing the direction of operation of the totalizers at will, and means for rendering said cross totalizer inactive, to permit the operation of subtracting the grand total, when the direction of

operation of the grand totalizer is reversed, to be performed without affecting the cross-totalizer.

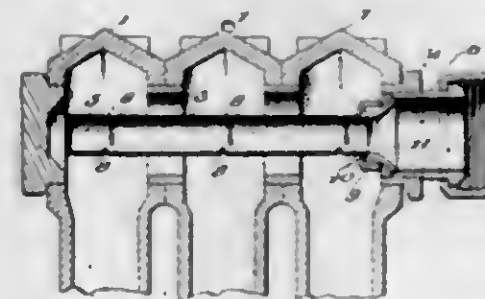
2. In a calculating machine, the combination with a set of column totalizers, of a cross totalizer, a grand totalizer, means to enable the simultaneous operation of said cross totalizer with any one of said column totalizers, and also to enable the independent or simultaneous operation of said grand totalizer with respect to said cross totalizer, individual silencing means effective for each totalizer independently of the others, and a general means for reversing the direction of operation of said totalizers at will.

3. In a calculating machine, the combination with a set of column totalizers, of a cross totalizer, a grand totalizer, means to enable the simultaneous operation of said cross totalizer with any one of said set of column totalizers, and also the simultaneous operation of said grand totalizer with said cross totalizer, means for reversing the direction of operation of all of said totalizers at will, and means for rendering the column totalizers inactive, to permit independent operation of the grand and cross totalizers, when the direction of operation of either or both of said cross totalizers and said grand totalizer is reversed.

4. In a calculating machine, the combination with a set of totalizers, of a cross totalizer, a grand totalizer, means to enable the simultaneous operation of said cross totalizer with any one of said set of totalizers, and also the simultaneous operation of said grand totalizer with said cross totalizer, means whereby the direction of operation of all of said totalizers may be reversed at will, said first-mentioned means acting to enable the simultaneous operation of said grand totalizer and said cross totalizer when a direction of rotation of said cross totalizer is reversed, means for rendering the totalizer of said set of totalizers inactive when a direction of operation of said cross and said grand totalizers is reversed, and means for rendering said cross totalizer inoperative when the direction of said grand totalizer is reversed.

5. In a calculating machine, the combination with a set of totalizers, of a cross totalizer, a grand totalizer, means to enable the simultaneous operation of said cross totalizer with any one of said set of totalizers, and also the simultaneous operation of said grand totalizer with said cross totalizer, means whereby the direction of operation of all of said totalizers may be reversed at will, said first-mentioned means acting to enable the simultaneous operation of said grand totalizer and said cross totalizer when a direction of rotation of said cross totalizer is reversed, means for rendering the totalizer of said set of totalizers inactive when a direction of operation of said cross and said grand totalizers is reversed, and means for rendering said cross totalizer inoperative when the direction of said grand totalizer is reversed; said last-mentioned means acting to enable the rendering of said cross totalizer and said grand totalizer inactive when the direction of operation of the totalizer of said set of totalizers is reversed.

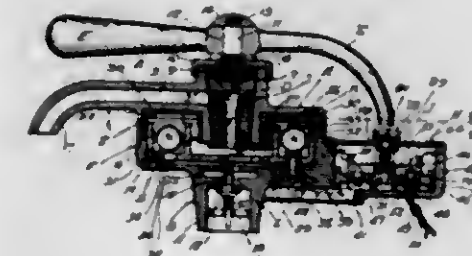
1,313,518. RADIATOR. ARTHUR T. CLARK, Saratoga Lake, N. Y. Filed Mar. 5, 1918. Serial No. 220,539. 1 Claim. (Cl. 237—151.)



The combination with a radiator, of a collar fitted therein, a coupling carried by the collar and having an outwardly flared member at its inner end, a nozzle ex-

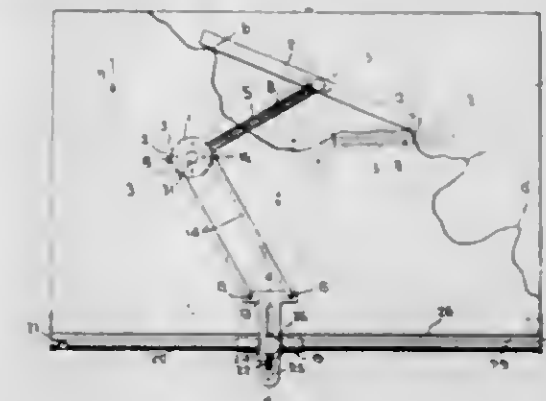
tending into the radiator and having its outer end abutting the inner end of said flared member and provided with an external annular rib, and a union secured upon the flared member and engaging over said annular rib on the nozzle, the nozzle being provided with escape openings between its ends.

1,313,519. ELECTRICALLY-HEATED FAUCET. HOWARD K. CLOVES, Los Angeles, Calif., assignor, by mesne assignments, to Clover Electrical Corporation, a Corporation of Nevada. Filed June 18, 1918. Serial No. 240,576. 9 Claims. (Cl. 219—39.)



1. In an electrically heated faucet, a housing having a discharge opening, a valve to control the flow of fluid from said housing, said housing having a fluid intake, electric heating means in said housing, a slidably mounted circuit closer controlling the supply of electrical energy to said heating means, means for operating said valve and means locking said circuit closer against sliding movement when the valve is closed, said last named means permitting operation of the circuit closer upon the opening of the valve.

1,313,520. COURSE-PROTRACTOR. JOHN F. COLE, Somerville, Mass. Filed Mar. 15, 1918. Serial No. 222,539. 2 Claims. (Cl. 33—79.)

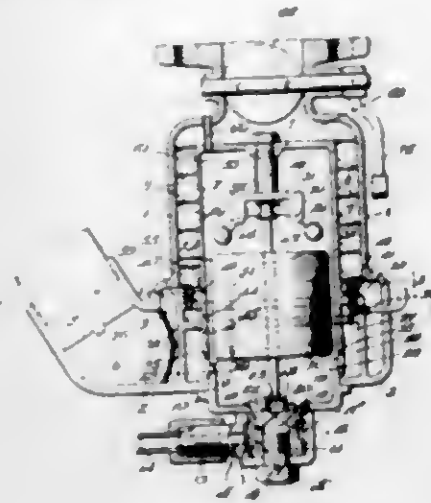


1. In a course protractor, the combination with a board for supporting a chart, of a slide carried by said board at one edge thereof and adapted to move longitudinally of the board, a carriage or holder secured to said slide for adjustment at right angles to the movement of the slide, a pair of parallel arms pivotally connected at one end to said carriage, a compass member to which the other ends of said arms are pivoted, a radius arm extending from the compass member, a course indicating member pivoted to the radius arm, and means for indicating on the compass member the direction of the course-indicating member.

1,313,521. CARBURETOR. HERSCHEL M. CONNOR and DON D. MILES, San Francisco, Calif., assignors of one-half to Albert H. Herbert, one-fourth to Myrtle C. Miles, and one-fourth to Pansy I. Connor, San Francisco, Calif. Filed July 23, 1917. Serial No. 182,342. 8 Claims. (Cl. 261—40.)

1. In a carburetor the combination of a fuel supply; automatic means for controlling the flow of fuel to said

supply; an intake through which air may be sucked; a plurality of nozzles located in the path of the sucked air; helically disposed means affording a plurality of inde-



pendent paths for said air after leaving said nozzles; and means to restrict said paths around said nozzles, substantially as described.

1,313,522. SPARK PLUG. ANSON HENRY CRESSY, Hartington, Nebr. Filed Dec. 5, 1916. Serial No. 135,218. 4 Claims. (Cl. 123-169.)

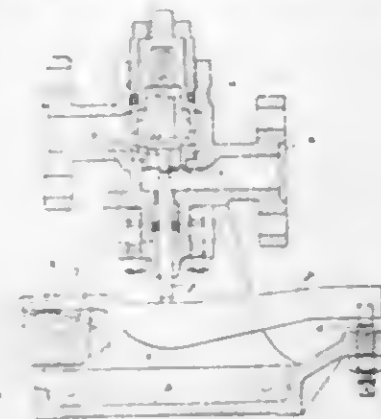


1. A spark plug having a combustion cavity in the inner portion thereof and having a valve seat formed at the inner portion of said cavity, in combination with a valve movable toward and from said valve seat to close and open said end of the combustion cavity to entrap therein and release therefrom portions of an explosive gaseous charge, said valve forming one electrode of the plug and a second electrode disposed within said combustion cavity, whereby a spark passing between said valve and said second electrode may ignite the charge entrapped in said cavity and open the valve and explode the charge within the combustion chamber of the engine.

1,313,523. OPERATING GEAR FOR HYDRAULIC VALVES. HENRY CHOWE, Saltburn, England. Filed June 24, 1918. Serial No. 241,598. 2 Claims. (Cl. 138-16.)

2. In operating gear for hydraulic valves, the combination, with valve mechanism comprising an inlet and an exhaust meter valve connected with each other, of a weight bar placed at a distance from the center line of the valves and having differential cam surfaces on one side of the center of rotation and a clearance space on the other side, means to rock said weight bar, a lever provided for each of the said valves one end of the lever resting on the corresponding cam surface of the weigh

bar, an adjustable support for the other end of the lever, a spindle resting on each of the levers and adapted to



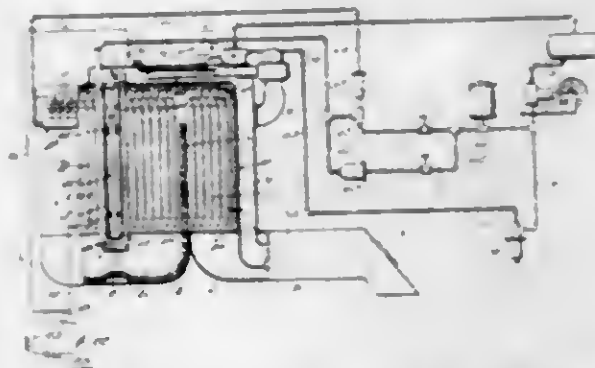
operate the corresponding valve, and means for coupling the hydraulic valve to a cylinder, all substantially as and for the purpose set forth and shown.

1,313,524. DIFFERENTIAL FEEDING MECHANISM. ALBERT H. DE VOR, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed June 10, 1916. Serial No. 102,851. 10 Claims. (Cl. 112-33.)



1. Differential feeding mechanism for sewing machines comprising, in combination, primary and secondary feed-dogs, primary and secondary levers supporting said feed-dogs, respectively, a pivotal connection between said levers, means independent of said pivotal connection whereby endwise movements derived from one of said levers are converted into differential rising-and-falling movements of the other lever, and annually controlled means for varying the action of said first mentioned means while the machine is in operation.

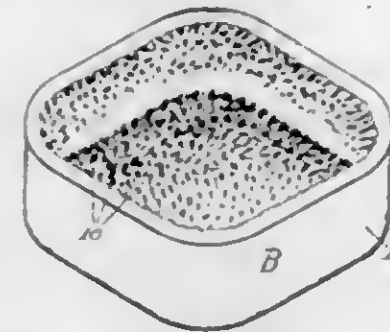
1,313,525. LIQUID-FUEL-BURNING APPARATUS. ANSON DORLE, Detroit, Mich., assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich., a Corporation of Delaware. Filed Dec. 7, 1916. Serial No. 135,712. 20 Claims. (Cl. 158-29.)



1. The combination of a combustion hearth, and fuel burning mechanism for directing the fuel upon said hearth, embodying a fuel mixing tubular member positioned to direct fuel mixture into the zone of said hearth, a fuel

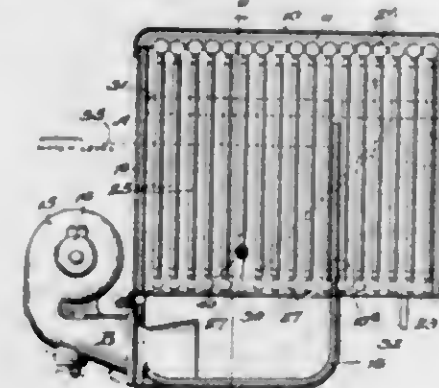
vapor releasing mechanism operable by a predetermined fuel pressure to admit fuel vapor to said mixing tubular member and having independent means for admitting fuel at a lower pressure to an auxiliary flame, a vaporizer connected with said releasing mechanism and in position to be acted upon by said main and auxiliary flames, and means for supplying liquid fuel to said vaporizer at different pressures.

1,313,526. COMBUSTION-HEARTH. ANSON DORLE, Detroit, Mich., assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich., a Corporation of Delaware. Filed Jan. 5, 1917. Serial No. 140,730. 2 Claims. (Cl. 158-28.)



1. A combustion hearth comprising a member having bottom and side walls and open at its top and composed of porous refractory material and capable of being heated to incandescence, and having its interior roughened or irregular to provide an increased exposed surface area.

1,313,527. PROTECTIVE MECHANISM FOR STEAM-AUTOMOBILE POWER PLANTS. ANSON DORLE, Detroit, Mich., assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1917. Serial No. 188,503. 6 Claims. (Cl. 110-103.)

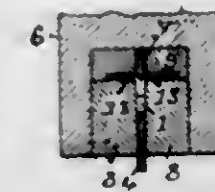


1. The combination of a steam generator having a plurality of upright water tubes with upper and lower headers, one of said lower headers being elevated above the plane of the remaining lower headers, a fuel burner for said generator and a thermostat associated with said elevated header responsive to a pre-determined water level in said tubes for rendering said burner ineffective.

1,313,528. METHOD OF MAKING FALSE-TEETH RACKINGS FROM SHEET METAL. GEORGE WILLIAM DOVER, Cranston, R. I., assignor, by mesne assignments, to American Guaranteed Tooth Company, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed May 23, 1918. Serial No. 236,202. 9 Claims. (Cl. 113-29.)

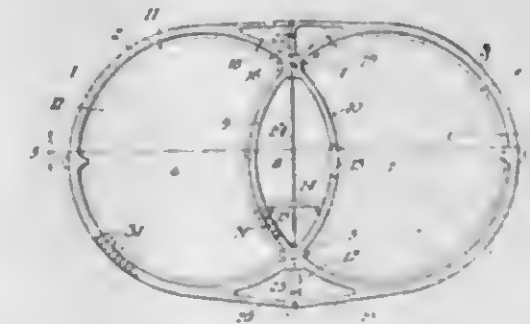
5. The improvement in the method of making seamless stemmed plates, which consists in striking out from sheet metal a flat-sided blank having a wing-forming portion

and a solid stem-forming portion, the area of the sides of the wing-forming portion being greater than that of the sides of the stem-forming portion, and splitting and



bending a part of said blank to form oppositely projecting wings integral with each other, said wings overhanging the stem in various directions and being integral with the stem.

1,313,529. VESSEL CONSTRUCTION. ROBERT P. DUNHAM, Chicago, Ill. Filed Nov. 7, 1918. Serial No. 261,402. 10 Claims. (Cl. 114-74.)



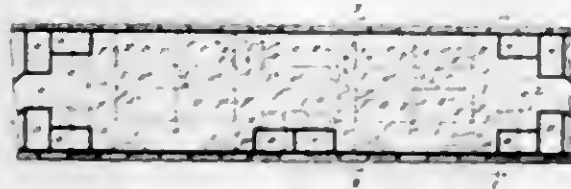
1. A vessel, comprising, in combination, a plurality of tubular members arranged in parallel relation to each other, the shell or wall of each being arranged to intersect that of its fellow to form three independent longitudinal chambers, the central one to constitute a buoyancy-chamber.

1,313,530. VEHICLE. EUGENE F. EDWARDS, Plainfield, N. J. Filed May 24, 1918. Serial No. 236,341. 6 Claims. (Cl. 74-103.)



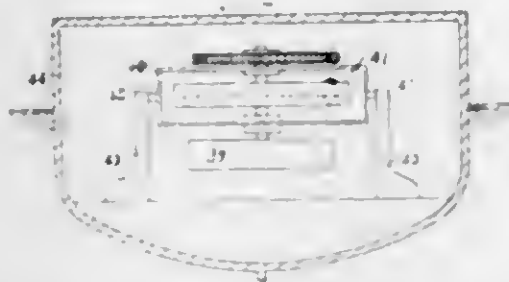
1. In a vehicle and in combination an axle having spaced end members, a bearing sleeve having a semi-spherical end portion on which there is a flange adapted to fit in the spaced end members of the axle, a cap secured to the said semi-spherical end portion of the bearing sleeve and having a flange of the same diameter as the aforesaid flange, means for pivotally connecting the said flanges in the said spaced end members of the axle, a wheel mounted to revolve on the said bearing sleeve and having a recess at the inner end of its hub adapted to receive the said semi-spherical end portion of the bearing sleeve, an axle shaft fitting within the bearing sleeve, means for connecting the axle shaft to the hub of said wheel, a driven shaft, and means for connecting the ends of the driven shaft and axle shaft within the semi-spherical end of the bearing sleeve to revolve the wheel thereby irrespective of the position the wheel may assume relatively to the axle of the vehicle.

1,313,531. CONVERTIBLE STATE-ROOM AND DRAWING-ROOM CAR. JONATHAN O. FOWLER, New York, N. Y. Filed Jan. 28, 1915. Serial No. 4,944. 10 Claims. (Cl. 105-315.)



10. In a passenger coach, a knock-down state-room comprising a side wall of the car, a part of the permanent floor of the car, upturned floor sections located on each side of the latter, and a portable partition device positioned between the floor sections adjacent to the car side, and at and around the outer edges of the floor sections located farthest away from the said side of the car.

1,313,532. GYROSTATIC APPARATUS. JOHN GRAY, London, England, and JAMES GORDON GRAY, Glasgow, Scotland. Original application filed Oct. 22, 1918. Serial No. 259,261. Divided and this application filed July 7, 1919. Serial No. 309,147. 2 Claims. (Cl. 74-78.)



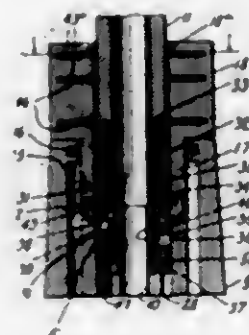
1. The herein described gyrostatic device comprising, in combination, a fly wheel and an erecting device both rotatable around a normally substantially vertical axis, a common carrier for said fly-wheel and erecting device, and a pendulum member by which said carrier is pendulously supported.

1,313,533. LOW PRESSURE ALARM FOR PNEUMATIC TUBES. WILLIAM ANDREW HARRIS, Greenville, S. C. Filed Mar. 6, 1919. Serial No. 280,889. 7 Claims. (Cl. 116-1.)



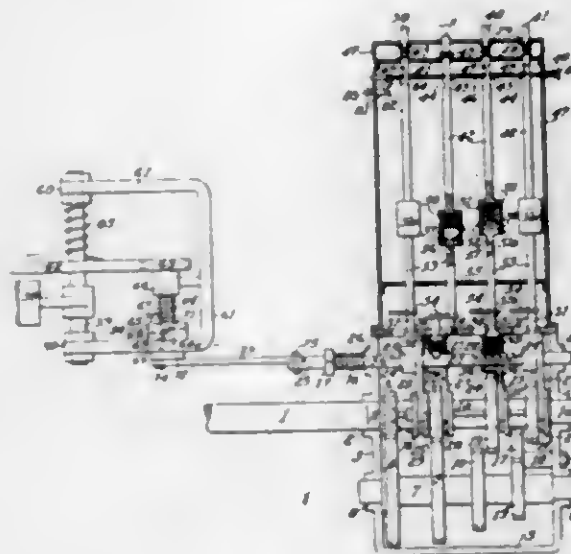
1. The combination with a tire valve and its tube, of a signal device including a tubular body, one end being internally threaded to screw on to the valve tube, said tubular body having a lateral enlargement intermediate its ends, a tubular whistle fixed in the opposite end of the tubular body having an apertured plug at its inner end, a weighted counter balance journaled in the enlarged portion of the said tubular body and having an arm projecting therefrom for engagement with the valve pin in the said valve tube, and a spring within the tubular body engaging the said counterbalance arm at one end and bearing at its opposite end against the plug of the whistle tube, as described.

1,313,534. SUBMARINE VESSEL. GEORGE EARL HOFFMAN, Pensacola, Fla. Filed Oct. 24, 1916. Serial No. 127,351. 19 Claims. (Cl. 114-16.)



1. A periscope having an ocular member formed with means for the storage of energy, whereby said member may be forcibly detached from its supporting medium.

1,313,535. SPEED-CONTROLLING MECHANISM FOR AUTOMOBILES. MARION J. HUGGINS, New York, N. Y., assignor to Automotive Development Co., Inc., New York, N. Y., a Corporation of New York. Filed May 23, 1914. Serial No. 840,533. 56 Claims. (Cl. 74-58.)

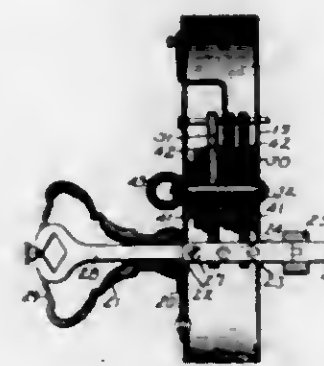


1. In an automobile, the combination with drive gears, and cooperating transmission gears, of a shifting device for each cooperating pair of said gears, a stationary member, a movable member passing through said device, a locking device for each of said shifting devices normally holding it locked to said stationary member, means to unlock any one of said locking devices from said stationary member and lock it with its shifting device to said movable member, and means to actuate said movable member to move said locked shifting device therewith.

1,313,536. COMBINATION-LOCK. WILLIAM HENRY JAY, Mohridge, S. D. Filed May 21, 1919. Serial No. 298,602. 6 Claims. (Cl. 70-53.)

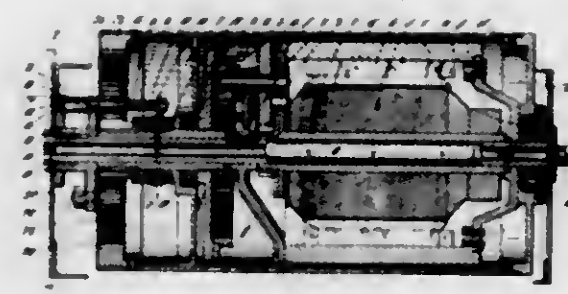
6. In a lock of the character described, the combination of a bolt throwing member, a knob or handle normally rotatable freely with respect to said member, a connecting member having a sliding non-rotatable connection with the knob or handle and movable with respect thereto into and out of engagement with the bolt throwing member, a casing through which the said connecting member is movable, a shaft in the casing parallel to the connecting member, tumbler disks rotatably disposed upon the said shaft and having openings movable into alignment with one another and the said connecting member, manual controlling means for moving the tumbler disks, including disks also rotatable on the shaft, and controlling arms ex-

tending exteriorly of the casing from the last mentioned disks, friction disks disposed between the said controlling arm disks and the tumbler disks, said shaft having



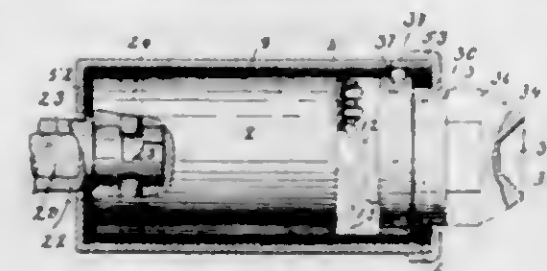
one threaded end, and a wing nut threaded on the shaft to clamp the disks of each pair in connection with one another.

1,313,537. DRIVING ARRANGEMENT OF ELECTRIC MOTORS. GEORGE JONES, Manor Park, England. Filed Dec. 21, 1917. Serial No. 208,315. 3 Claims. (Cl. 172-287.)



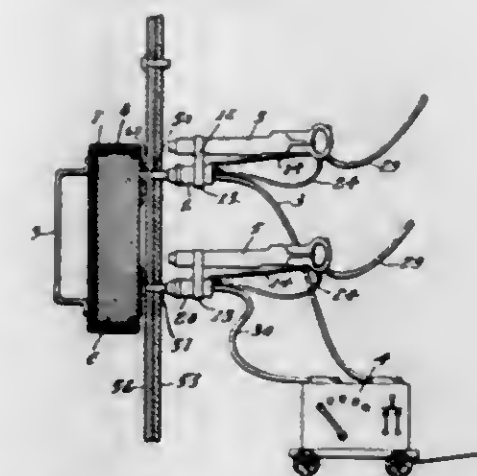
1. In combination, an electric motor having field magnets and a rotatable armature, a sleeve upon which said armature is secured, a shaft passing through said sleeve, frames secured to said shaft and carrying the field magnets, a second sleeve carried on said shaft, a clutch on the second sleeve, a surrounding drum having a part adapted to cooperate with said clutch, gearing adapted to transmit motion from the armature to said second sleeve, and means for actuating said clutch to drive said drum.

1,313,538. ELECTRIC RIVET-HEATING APPLIANCE. GEORGE A. E. JONES, New London, Conn., assignor to United States Electric Company, a Corporation of Connecticut. Filed Apr. 25, 1919. Serial No. 292,542. 3 Claims. (Cl. 219-2.)



1. A freely movable implement for heating rivets comprising an electrode composed of a main body portion, and a yieldingly movable contacting portion having a contact surface to be placed in contact with the exposed end of the rivet to be heated, and a normally open circuit closer between said portions adapted to be closed by the yielding movement of the contacting portion when the main body of the electrode is forcibly pressed toward the rivet substantially as described.

1,313,539. APPARATUS FOR HEATING RIVETS. GEORGE A. E. JONES, New London, Conn., assignor to United States Electric Company, a Corporation of Connecticut. Filed Apr. 25, 1919. Serial No. 292,543. 5 Claims. (Cl. 210-2.)



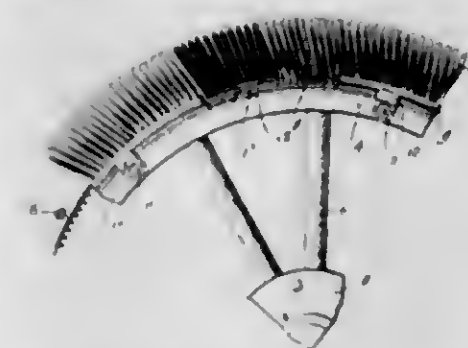
1. An apparatus for heating rivets after insertion in structural parts to be riveted thereby, comprising two contacting electrodes adapted to be placed in contact with the tips of the rivets to be heated, and being connected with the two poles respectively of a suitable source of electric current, and a bridging connecting piece of large conductivity adapted to be placed in contact with the heads of the two rivets with the tips of which the electrodes are to make contact, substantially as described.

1,313,540. BRAKE-SHOE. HARRY JONES, Suffern, N. Y., assignor to American Brake Shoe & Foundry Company, Mahwah, N. J., a Corporation of New Jersey. Filed Mar. 8, 1919. Serial No. 281,449. 2 Claims. (Cl. 188-27.)



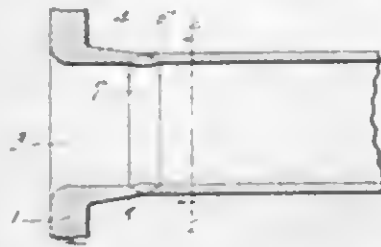
1. A brake shoe insert composed of a foraminous or open work casting of hard wear-resisting iron alloy having a core of ductile material incorporated and inclosed therein, said insert being of dovetail sectional shape substantially as and for the purpose described.

1,313,541. RESILIENT TIRE. JOHN M. JONES, St. Joseph, Mo. Filed Mar. 4, 1918. Serial No. 220,308. 1 Claim. (Cl. 152-8.)



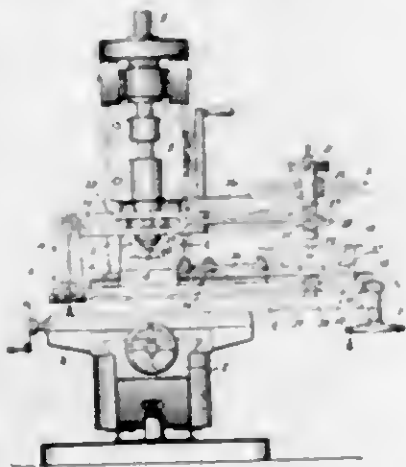
In a device of the class described, an annular tire formed of a coil spring, a band within said spring and welded to all of the convolutions of the latter, a demountable rim, the said rim being provided with recesses, and lugs projecting from said band and being adapted to engage said recesses.

1,313,542. **ROLLER TUBE AND SHEET JOINT.** WALTER A. JONES, Falls City, Nebr. Filed Dec. 12, 1910. Serial No. 136,519. 1 Claim. (Cl. 285-25.)



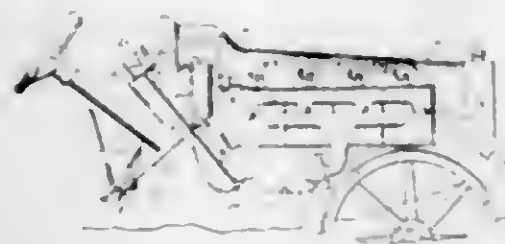
In a boiler, a sheet having an opening and provided with a boss surrounding the opening; a tube cooperating within the end of the boss, the tube and the boss being in contact and being internally beveled in opposite directions to define a V-shaped circumferencing groove in the interior of the boss and tube and closed on its outer side; and a ring within the boss and the tube, the ring being V-shaped in cross section to conform to the groove, the ring being welded to the beveled surfaces of the boss and the tube which define the groove.

1,313,543. **DIE SINKING, ENGRAVING, AND REPRODUCING DEVICE FOR MILLING MACHINES.** JOSEPH F. KELLER, New York, N. Y., assignor to Keller Mechanical Engraving Company, Brooklyn, N. Y., a Corporation of New York. Filed July 14, 1917. Serial No. 180,496. 5 Claims. (Cl. 90-13.1.)



1. In combination, a carrier arm pivoted to move in its own plane, a work clamp and a pattern clamp linearly slidable upon said arm, means connecting said clamps whereby they can be slid simultaneously, the movement of each being proportional to its distance from the pivot, and a cutter and a tracer adjacent to work and pattern clamps respectively and at distances from the pivot respectively proportional to the distances from said pivot of said clamps both cutter and tracer being axially movable and lying in the plane of the pivot axis.

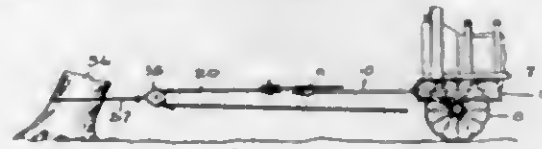
1,313,544. **DEVICE FOR PREVENTING THEFT OF AUTOMOBILES.** ANDREW KNEEL, Jr., Baltimore, Md. Filed Mar. 8, 1919. Serial No. 281,372. 8 Claims. (Cl. 180-82.)



1. In an automobile, the combination with a fuel supply valve and a brake lever, of an actuating rod operatively connected with the valve, a locking pawl movable into the path of the brake lever, a connection between

the locking pawl and the actuating rod, and an operating lever connected with the rod for actuating the latter to simultaneously close the fuel supply valve and move the locking pawl to operative position.

1,313,545. **STUMP-PULLER.** FRANK E. KENNEY, Portland, Oreg., assignor of one-half to Frank A. Sweeney, Portland, Oreg. Filed Oct. 29, 1917. Serial No. 199,374. 3 Claims. (Cl. 254-65.)

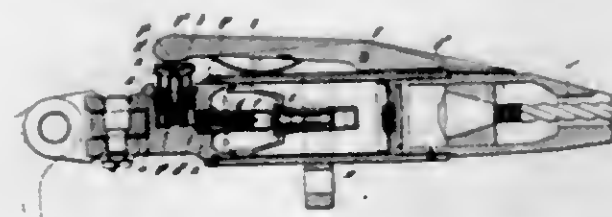


1. In a stump puller, a cable, a frame, means to reciprocate said frame, and a gripper for said cable loosely arranged in said frame, said gripper including a pair of movable clamping jaws and pivoted actuating cam levers therefor, said levers having their free ends arranged in the path of a part of said frame whereby said levers are swung to move said movable clamping jaws into clamping engagement with said cable when the frame is moved in one direction, said free ends of said levers being arranged in the path of another part of said frame whereby said levers are swung to release said jaws from said cable when the frame is moved in the opposite direction.

2. In a stump puller, a body having opposite flat sides, means to reciprocate said body, a pair of spaced arms rigidly fastened to the opposite flat sides of said body and extending forwardly from the latter in spaced relation, oppositely bowed arch members rigidly connecting the forward free ends of said arms, and a cable gripping device including a frame loosely disposed between said arch members, said cable gripping device including a pair of spaced plates having a pair of gripping jaws loosely arranged therebetween, and cam levers pivotally mounted between said plates to actuate said clamping jaws, the opposite free ends of said cam levers being operatively connected to said arms whereby movement of the body in one direction will cause said levers to move the clamping jaws toward each other and movement of said body in an opposite direction will cause said levers to free said jaws for movement away from each other.

3. In a stump puller, a body having opposite flat faces, means to reciprocate said body, a pair of arms secured to the opposite flat faces of said body and extending forwardly from the latter in spaced relation, the free ends of said arms being bifurcated, an upper arch member connecting the free ends of said arms and extending through the latter, a lower oppositely bowed arch member connected to the ends of the upper arch member below said arms, a pair of spaced plates loosely disposed between said arch members, cable gripping jaws freely carried between said plates, and cam levers pivoted between said plates to move said jaws having their free ends extended through the bifurcations of said arms, substantially as described.

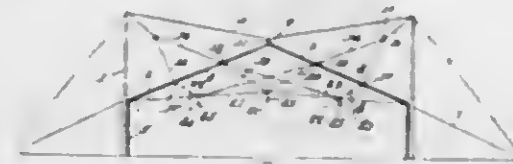
1,313,546. **SAFETY DEVICE.** FRANK EATON LANDER, Lewisham, London, England, assignor to Vickers Limited, Westminster, London, England. Filed Nov. 11, 1918. Serial No. 202,059. 3 Claims. (Cl. 102-3.)



1. In a safety device, an operating mechanism comprising primary and secondary elements normally with-

out operative connection between them, a liquid trap normally empty of liquid interposed between the said elements, and provided with an inlet by which it is filled automatically with liquid when the device is placed in condition for use, and means by which the entering liquid is retained in the trap, which liquid then forms a pressure transmitting medium between the primary and secondary elements.

1,313,547. **HANGAR.** WILLIAM MOSMAN LUEBRECHT, San Francisco, Calif. Filed Mar. 16, 1918. Serial No. 222,892. 1 Claim. (Cl. 20-1.)



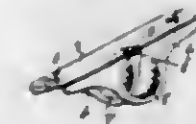
The combination with spaced masts and upper cross cables connecting the masts, of a fabric housing arranged between the masts and supported at the center of its roof by the cross cables, transverse reinforcing cables secured to the roof portion of the housing, hangers converging downwardly from opposed masts and above the roof, a bridle slidably engaging and extending downwardly from each of the hangers, the ends of each bridle being secured to one of the reinforcing cables at different distances from the side of the roof, bridles within the housing and each secured at its ends to the transverse reinforcing cables of the roof at opposite sides respectively of the center of the roof and at the points of connection between the roof and the upper bridle, a lower cross cable connecting opposed masts and below the roof of the housing, spaced rings secured to said cable and slidably engaged by the respective bridles below the roof of the housing, and hangers depending from said rings for supporting loads.

1,313,548. **DISPLAY DEVICE.** HENRY D. LYMAN, Minneapolis, Minn. Filed Nov. 26, 1915. Serial No. 63,562. 3 Claims. (Cl. 40-125.)



1. A display device comprising a dilatible, stiffened base having the shape and appearance of the lower portion of a trousers-leg, and adapted to be placed over the top of a shoe.

1,313,549. **GUN-SIGHT.** FREDERICK R. MAGILL, St. Marys, Ohio. Filed Apr. 3, 1919. Serial No. 287,112. 6 Claims. (Cl. 33-51.)

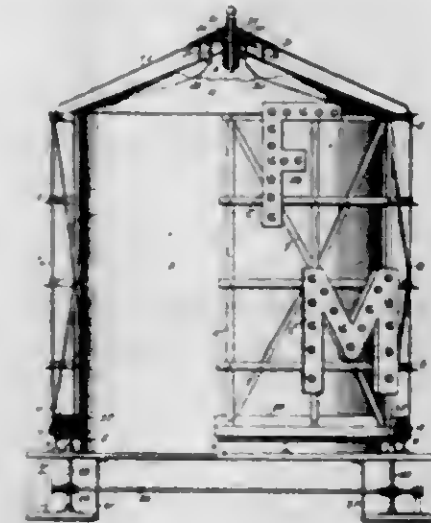


1. A gun sight, comprising an elongated base having sights on opposite end portions and provided at a central point with parallel spring fingers disposed at a right angle to the length of the base and adapted to engage a side of the gun barrel and grip the ordinary gun sight between them.

1,313,550. **WATER-TANK ELECTRIC DISPLAY-SIGN.** FREDERICK W. MEYER, Jersey City, N. J., assignor of one-half to Patrick W. B. Garyn, New York, N. Y. Filed June 25, 1918. Serial No. 241,808. 9 Claims. (Cl. 40-33.)

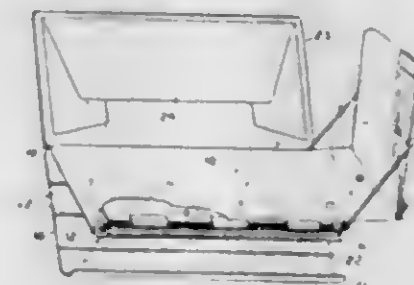
3. The combination of a water tank or equivalent object, a sign frame rotatably surrounding the same, a fixed

platform, a track on the platform, means rotatably supporting the frame on said track, letters on the frame, a gear on the frame, a motor mounted on the platform, up-



right shafts extending through the platform, gears on the shafts and meshing with the first-mentioned gear to rotate the frame, and a motor carried under the platform and operatively connected with the said shafts.

1,313,551. **SELF-ILLUMINATING NOTEBOOK.** WALTERA MAYNARD, New York, N. Y. Filed Sept. 12, 1918. Serial No. 253,789. 4 Claims. (Cl. 281-7.)



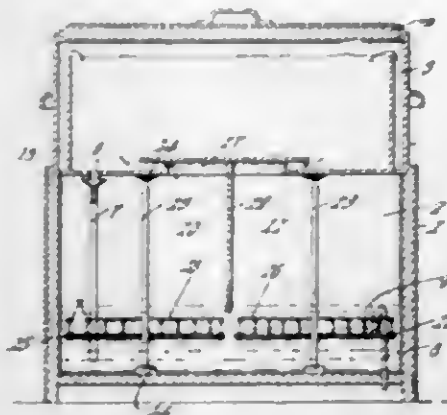
1. In combination with a support, an angularly outstanding stop shoulder at the back of said support substantially at one end thereof, a continuous strip of writing material folded in zigzag outline into a compact pad at the back of the support and resting at one end against the stop shoulder, the outer end of said strip being withdrawn from the pad and folded around the stop shoulder across the face of the support, to enable withdrawal of the strip across the face, as required, a back plate having ridges bearing on the pad and means for releasably securing said back plate to the support.

4. In combination a writing support for a strip of writing material adapted to be folded over one end and across the face of the support and a flat reel for the used portion of the strip pivoted on the support and foldable flat down upon the support.

1,313,552. **REFRIGERATOR.** JOHN HENRY NANTZ, Samson, Ala. Filed Aug. 16, 1910. Serial No. 115,251. 1 Claim. (Cl. 62-77.)

The combination with a refrigerator housing having an upper ice chamber and a lower cooling chamber adapted to receive water from the ice chamber, of a partition within the lower chamber and connecting opposed walls thereof, said partition extending downwardly from the top of said lower chamber and having its lower edge spaced from the bottom of the lower chamber, a drain pipe from the ice chamber upon one side of the partition and an overflow pipe within the lower chamber upon the other

side of the partition for maintaining the level of the water within said chamber above the lower edge of the partition



thereby to constitute a water seal between the portions of the cooling chamber at opposite sides of the partition and to provide for a circulation of the cooling medium.

1,313,553. INFLATING VALVE. FREDERIK NIELSEN, Boston, Mass., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 17, 1914. Serial No. 832,502. 19 Claims. (Cl. 152-12.)

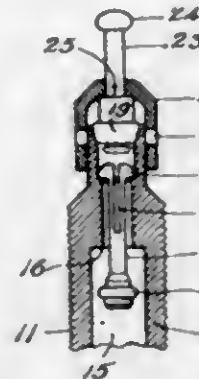


1. An inflating valve comprising a body member having an air passageway and a valve seat, a cap member for the mouth of said body member, said cap member and body member having coactive connecting screw threads, and a valve carried by said cap and arranged to coact with said seat when said cap member is attached to said body member, said valve having a stem extending through the crown of said cap member and being movable relatively to said cap member toward and from said seat, and means carried by said stem independent of such threads for co-acting with said body member to hold said valve on said seat.

1,313,554. INFLATING VALVE. FREDERIK NIELSEN, Boston, Mass., assignor, by direct and mesne assignments, to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed July 8, 1913. Serial No. 777,841. Renewed Aug. 1, 1918. Serial No. 247,870. 3 Claims. (Cl. 152-12.)

1. An inflation valve having a casing, a check valve in said casing, and a cap for closing the mouth of said casing, said cap comprising a member adapted to engage said casing and having a part adapted to engage the check valve to unseat it, said member and part being relatively movable in a longitudinal direction, and said part extending through said member and being adapted to make a

tight joint with said casing whereby said part may be manipulated from the exterior to close the mouth of the



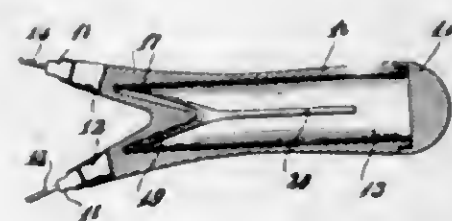
casing and unseat said check valve and said member may be manipulated to engage said casing and hold said part in its closed position.

1,313,555. CABINET-TYPE SAFETY SWITCH-PANEL. WILLIAM F. O'NEILL, Wilkesburg, Pa. Filed Apr. 20, 1918. Serial No. 229,843. 6 Claims. (Cl. 247-13.)



6. The combination with a base member formed of insulating material, centrally located bus bars, a series of switches on each side thereof, fuses located beyond said switches, a cover for preventing access to said bars and fuses and provided with a depending flange surrounding said switches, a shield carried by said cover covering said buses and a door hinged to said cover permitting access to said switches.

1,313,556. SADDLER'S IMPLEMENT. WENDELIN PARR, Export, Pa. Filed Jan. 2, 1918. Serial No. 210,017. Renewed Mar. 8, 1919. Serial No. 281,544. 2 Claims. (Cl. 223-37.)



1. A device as described, consisting of a hollow handle open at one end, the open end of said handle being threaded, a threaded cap engaging the threaded end of said handle, the opposite end of said handle being bifurcated so as to provide forked extremities diverging outwardly from said hollow handle chucks carried by the forked extremities of said handle adapted to receive needles, the inner ends of said forked extremities terminating in a central wedge-shaped portion projecting toward the center of said hollow handle.

1,313,557. METHOD OF DRYING BANANAS. BAONO PILORE and ROBERT OTTO FRITZ STANGE, Honolulu, Hawaii; said Pilore assignor to said Stange. Filed Mar. 28, 1918. Serial No. 225,383. 1 Claim. (Cl. 99-5.)

A method of utilizing bananas which consists: first, in subjecting the ripe, peeled fruit to steam under pressure, whereby the albumin contained therein is coagulated, the outer cell walls broken and a part of the soluble solids of the fruit driven off in the form of a liquid formed by

these solids and the condensation water of the steam; second, in decreasing the moisture content of the steamed fruit to 25% by drying by means of warm, filtered air; third, in cooling and pressing the dried fruit; and, fourthly, in packing the same in air-tight packages.

1,313,558. METHOD OF MOLDING. RALPH NELSON SARGENT, Perth Amboy, N. J., assignor to The Roesler & Hasselacher Chemical Co., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1914. Serial No. 810,544. 4 Claims. (Cl. 18-26.)

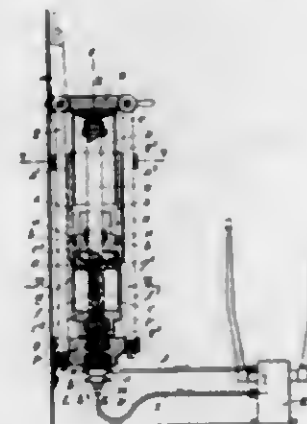
1. The method of molding a non-metallic fusible chemical substance comprising fusing the substance, discharging the fused substance serially into a series of moving molds and forming the substance into groups of cakes connected by the substance itself in vertical alignment with each other, each mold being adapted to form a plurality of the cakes in groups one beneath the other, the cakes in each group being formed serially beginning with the lowermost.

1,313,559. METHOD OF MANUFACTURING TONE-ARMS FOR TALKING-MACHINES AND THE LIKE. FREDERICK SAVAGE, London, England. Filed Dec. 28, 1918. Serial No. 268,761. 1 Claim. (Cl. 154-2.)



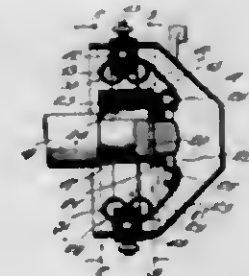
The method of manufacturing tone arms of non-metallic material which consists in molding non-metallic substances in sections, fastening together the sections, treating their interior with melted resin, and winding the whole externally with strip material.

1,313,560. MACHINE FOR RESTRAIGHTENING GUN-CHARGE CASES. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 14, 1918. Serial No. 217,199. 2 Claims. (Cl. 153-32.)



1. In a machine for re-straightening gun charge cases after having been fired, the combination of a matrix-mandrel having an annular recess for receiving the open end of the case to be re-straightened, a cylinder for receiving fluid under pressure, constituting a coaxial prolongation of said mandrel, a piston or diaphragm working in said cylinder, a rod carrying said piston or diaphragm, extending through both ends of said cylinder with a portion projecting beyond said mandrel, a support for the case to be re-straightened, located on said projecting rod portion, and longitudinal ducts pierced in the other rod portion projecting beyond the opposite side of said diaphragm, for distributing the fluid on to one side of said diaphragm and discharging the fluid confined on the other side of said diaphragm, and vice versa.

1,313,561. TIMER. HIRAM H. SHELTERS, Burlington, Vt. Filed Mar. 28, 1918. Serial No. 225,292. 7 Claims. (Cl. 123-167.)



1. In a timer, the combination with a set of contact elements, of a second set of contact elements, a brush movable to close circuit alternately with said second contact elements, and a set of clamping elements of conducting material each removably secured by its inherent clamping effect to a contact element of one of said sets, each of said clamping elements being electrically connected to one of the contact elements of the other of said sets.

7. A timer brush holder formed of a single blank of sheet material having one end bent about a central line to form a tubular shaft-embracing portion, the opposite side of the blank being bent about a central line parallel to the first said central line so as to form a tubular brush-receiving portion, a tongue being struck up from the blank and extending into the interior of said brush-receiving portion so as to form a seat for a spring to act against a brush when said brush is held by the brush-receiving portion.

1,313,562. METAL SCREEN. ISAAC ROY SHEPARD, River Junction, Fla. Filed June 7, 1917. Serial No. 173,426. 2 Claims. (Cl. 156-14.)



1. A screen construction embodying a screen frame including a sheet metal plate doubled on a longitudinal line with the wings extending inwardly, the bend of the plate having a rounded hollow bead, a rod in said bead, one wing of said plate having a corrugation near the edge thereof, a rod in said corrugation, a screen extending between the edges of said wings, and between the second named rod and one wing, and means clamping said wings together and clamping said screen and rods therein.

2. A screen structure embodying a casing and a screen frame each including a doubled sheet metal plate, the edge portions of the frame plate extending inwardly, said frame plate having a hollow rounded bead at its bend, a rod in said bead, a screen extending between the edge portions of the frame plate, means clamping the edge portions of the frame plate together to clamp the screen therein, the casing plate having a rounded bead forming a seat for the bead of the frame, and a rod in the bead of the casing plate.

1,313,563. AEROPLANE-WING STRUCTURE. WALTER GEORGE TARRANT, Hyfleet, England. Filed Apr. 30, 1919. Serial No. 293,827. 4 Claims. (Cl. 244-31.)

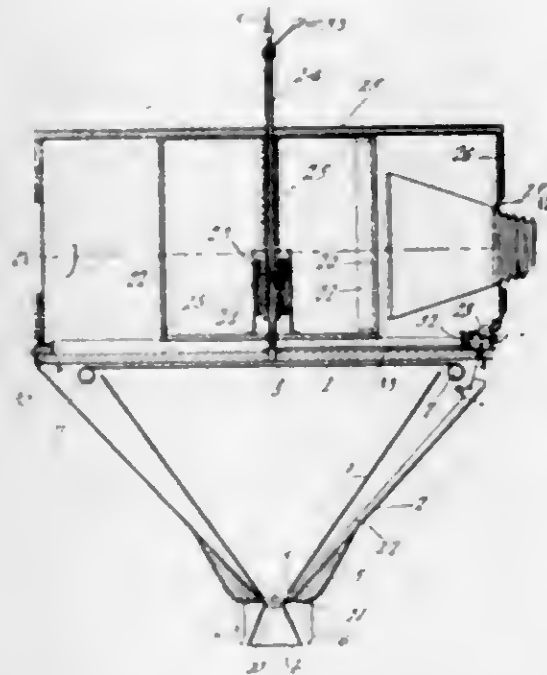
1. In an aeroplane wing structure, the combination of a number of ribs, a front spar and a rear spar both passing through the ribs, a pair of strips in front of each

spar in each rib, a pair of strips behind each spar in each rib and a tongue passing through each spar in each



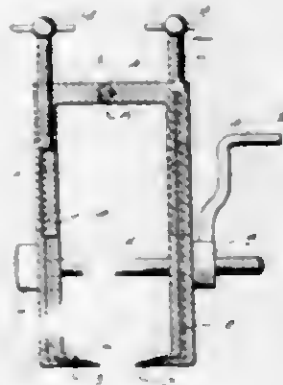
rib and having its front portion lying between the two strips of the front pair and its rear portion lying between the two strips of the rear pair.

1,313,564. AERIAL CAMERA. FREDERICK A. TODD, Butte, Mont. Filed Nov. 4, 1918. Serial No. 261,102. 5 Claims. (Cl. 95-123.)



1. An aerial camera including a base, means thereunder for photographing the area under the camera, means on the base for holding a sensitized material in cylindrical form, a lens carrier mounted for rotation about said sensitized material, means for holding the carrier against rotation, electrically operated means controlled from a point remote from the camera for simultaneously releasing the lens carrier and the shutter of the first mentioned photographing means, and means for rotating the lens carrier when released.

1,313,565. LEAF SPRING LUBRICATING TOOL. JOSEPH H. TARDONING, Greeley, Colo. Filed Oct. 9, 1917. Serial No. 195,593. 1 Claim. (Cl. 84-3.)



A leafspring lubricating tool including two sides or members hinged together at the top and provided at the

bottom with inwardly extending tapered spring engaging portions adapted to spread the leaves, said sides or members being both provided with lubricant passages arranged in pairs, one member of each pair being enlarged to form a chamber, plungers operating in the chambers for forcing lubricant through the passages leading therefrom when the device is inverted, and means for adjustably connecting the sides or members.

1,313,566. MEDICINE DISPENSER. HENRY C. TROW-ATON, Gloucester, Mass. Filed Apr. 1, 1918. Serial No. 225,856. 5 Claims. (Cl. 61-67.1.)



1. A medicine dispenser having, in combination, a tube, a closure for a bottle attached to one end of said tube, said closure consisting of a collapsible bulb and a sleeve integral therewith constituting a stopper and adapted to project into and fit the neck of a bottle and a wad of absorbent material inserted in the opposite end of said tube.

1,313,567. TROLLING ATTACHMENT FOR FISHING-LENS. CHARLES B. ELRICH, Jamestown, N. Y. Filed Aug. 16, 1918. Serial No. 250,122. 13 Claims. (Cl. 43-30.)

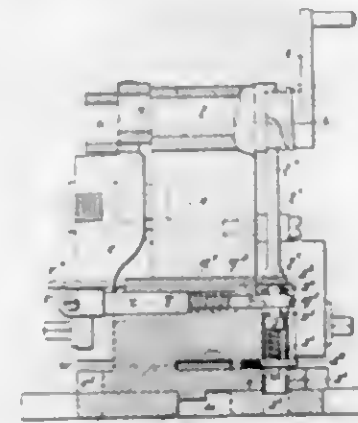


1. The combination with a fishing line, a hook and a spinner, of a rigid buoyant member interposed between and constituting a connection between the fishing line and the hook, there being a swivel joint between the hook and the buoyant member, and guard arms carried by the buoyant member and diverging rearwardly and terminating short of the fish hook, the buoyant member having a buoyancy such as to maintain the device at or adjacent the surface of the water.

1,313,568. DEVICE FOR CUTTING SCREW-THREADS BY CHASERS. EDWARD MILTON WILDEY, Canonbury, London, England. Filed Feb. 1, 1918. Serial No. 215,012. 6 Claims. (Cl. 10-100.)

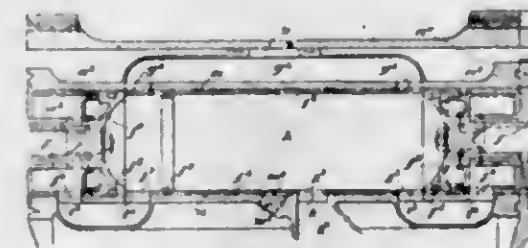
1. In a device of the class described the combination of a lathe saddle, a supporting control device or server for chasers, a slide guide connection of the device or server to the saddle, mechanism for jacking said device to the lathe saddle, mechanism for holding the chasers

to duty, and releasing mechanism for said locking and holding mechanism, said releasing mechanism operatively



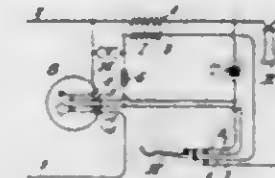
co-acting with a face or flange of the work, substantially as described.

1,313,569. INTERNAL-COMBUSTION ENGINE. ARTHUR HAROLD WILKS, Olton, near Birmingham, and PRACY HAROLD HAUTSHORNE, Birmingham, England. Filed Sept. 28, 1917. Serial No. 193,706. 6 Claims. (Cl. 123-43.)



1. An internal combustion engine operating on the two-stroke principle comprising a rotary member, an annular series of parallel cylinders embodied in the said member, two reciprocating pistons arranged in each of said cylinders, a valve sleeve connected to one of said pistons, induction, transfer and exhaust ports adapted to be controlled by said sleeve, cam tracks adapted to accommodate the action of the piston in effecting the rotation of the rotary member comprising oppositely inclined contact edges or surfaces disposed outward of the opposite ends of the series of cylinders and bearing devices on the rods of the pistons for engaging said cam tracks.

1,313,570. SUBSTATION TELEPHONE CIRCUITS. REAGAN D. WILLIS, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1910. Serial No. 116,457. 8 Claims. (Cl. 179-81.)

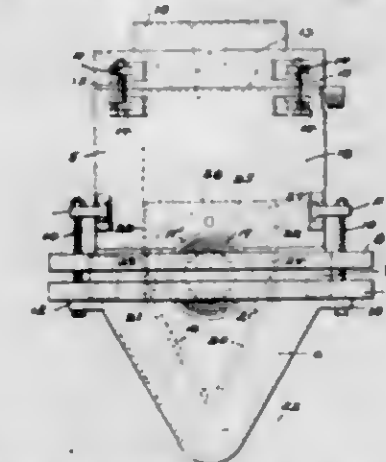


1. In a substation telephone set, a line circuit, a bridge of said line including a transmitter, a second bridge of said line including a receiver, a third bridge of said line including a condenser, said first and second bridges normally open, means controlled by the switch hook for closing said normally open bridges, a calling device comprising a pair of impulse springs in series with one line conductor, and a single pair of shunt springs

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effective only when the receiver is removed to short-circuit all of said bridges upon the operation of said calling device.

1,313,571. FORM FOR OUTLINING ELECTRIC-FURNACE CHANNELS. JAMES R. WYATT, Philadelphia, Pa., assignor to The Ajax Metal Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1918. Serial No. 211,124. 38 Claims. (Cl. 204-64.)



1. A form for outlining the channel path in an electric furnace having a cross section of different materials, one a conductor of electricity and the other adapted to occupy space during the placing of the lining and to permit expansion of the conducting material into this space subsequently.

24. The method of forming an electric furnace channel which consists in providing an electric conductor extending the length of the channel and of less cross section than the channel at the sides in the direction of the longitudinal expansion of the channel, completing the cross section of the conductor for the initial formation of the channel, removing the additional material added, heating the conductor to dry out the channel and finally melting out the conductor.

1,313,572. ELECTRIC WELDING TOOL. JOHN K. BAKER, Irwin, and THOMAS E. MCGUIRE, East Pittsburgh, Pa. Filed Dec. 9, 1918. Serial No. 265,945. 8 Claims. (Cl. 219-8.)



1. An electric welding tool comprising a handle, a shank carried by and projecting from the handle, a spring extending along the shank and fast at the handle end thereof, and at the other end tending toward the shank, clamping jaws on the outer end of the shank and corresponding end of the spring for holding an electrode, and means for moving the spring in opposition to its normal tendency.

1,313,573. MACHINE FOR PACKING ARTICLES OF PAPER-BOARD AND THE LIKE. FRANK E. BEAM, Toledo, Ohio. Filed Dec. 24, 1917. Serial No. 208,665. 4 Claims. (Cl. 271-87.)

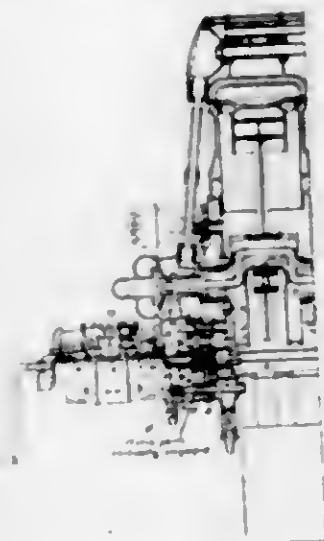
2. In a device of the described character, a frame, a series of spaced conveyor-belts mounted upon the frame, a corresponding series of chutes in operative relation to the belts, a corresponding series of push rods, a correspond-

ing series of fingers, said push rods and fingers being disposed at an angle to each other, a cross-bar to which the



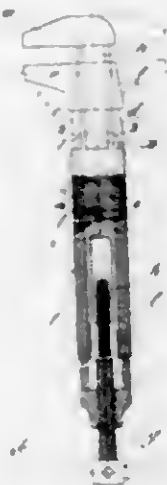
push rods are secured, a cross-bar to which the fingers are secured, and means for oppositely and alternately actuating said bars.

1,313,574. ELECTRIC STARTING AND IGNITION SYSTEM. JOHN GODFREY PARRY THOMAS, Barnes, London, England, assignor to Leyland Motors (1914) Ltd., Leyland, England. Filed Jan. 4, 1919. Serial No. 269,658. 3 Claims. (Cl. 290—35.)



1. In an electric starter system for internal combustion engines in which the usual dynamo machine serves normally as starting motor and battery charging generator, means for manually driving said dynamo, without using it as a starting motor, at a speed greatly in excess of that of the engine shaft during the starting period and means whereby the dynamo may rotate either accompanied by or independently of rotation of the engine shaft, whereby said dynamo may take the place of a auxiliary ignition magneto for starting purposes.

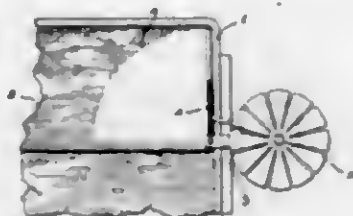
1,313,575. SCREW-WRENCH IN WHICH NO DETRIMENTAL PLAY CAN OBTAIN. NERI MARTINI BERNARDI, Florence, Italy. Filed June 13, 1917. Serial No. 174,464. 6 Claims. (Cl. 81—140.)



1. A wrench comprising a stationary jaw having a shank, a sliding jaw having a tapered cavity to receive

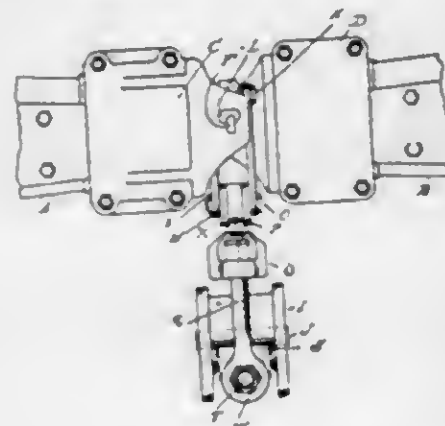
the shank, wedges disposed upon the opposite edges of the shank adapted to work in the cavity, and means for actuating the wedges to lock the sliding jaw against movement.

1,313,576. WIND-SHIELD-CLEANING DEVICE. PETER BIMELE, Zoor, and ERNST T. DIERINGER, Bolivar, Ohio. Filed Oct. 23, 1918. Serial No. 259,380. 6 Claims. (Cl. 15—59.)



2. A wind shield cleaner comprising an arm designed to wipe over the surface of a wind shield glass and wind operated means for actuating said arm.

1,313,577. TRACK-SCALE. JOHN H. A. BOUAFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Sept. 13, 1915. Serial No. 50,332. 8 Claims. (Cl. 265—71.)

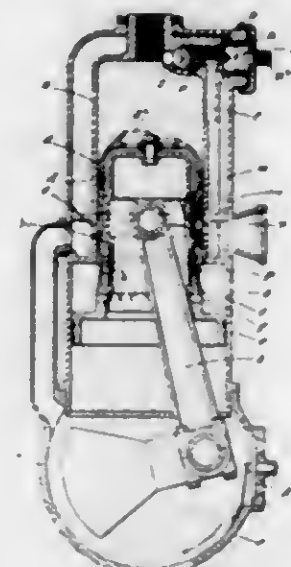


1. In a track scale, the combination with a plurality of levers and a lever extending transversely thereof, of a connection between said first mentioned levers and said other lever arranged symmetrically of the line formed by the intersection of vertical planes in which the axes of the levers are respectively situated and adjustment means for maintaining said symmetrical arrangement.

1,313,578. INTERNAL-COMBUSTION ENGINE. JOHN HILARY PYNE BEACHETT, Kew Gardens, England. Filed Sept. 26, 1917. Serial No. 193,300. 3 Claims. (Cl. 123—97.)

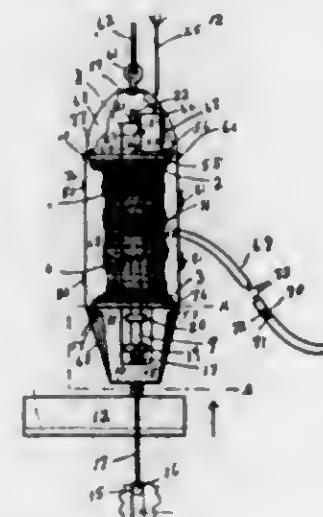
1. A two stroke cycle internal combustion engine comprising a power cylinder, a crank case, a compression cylinder, of larger diameter than the power cylinder, disposed between the power cylinder and the crank case, said compression cylinder being provided for the purpose of containing air or a mixture of air and fuel which is forced into the power cylinder and a part of which is utilized for forcing fuel into the power cylinder, a trunk piston working in said cylinders, said piston being provided with packing rings at each end, one end working in the power cylinder and the other end being provided with a collar adapted to work in the compression cylinder, said collar being provided for the purpose of forcing the air or mixture of air and fuel contained in the compression cylinder into the power cylinder, ports in said piston, a sleeve in said piston, a channel in said sleeve

adapted to connect the ports in said piston; said ports being provided to lead the air contained in the compression



tion cylinder to the power cylinder during the major part of the last stroke, and means for moving the sleeve in relation to said piston.

1,313,579. CARCASS-SPLITTING MACHINE. HUGH E. CONGER and CHARLES W. WALLER, Chicago, Ill. Filed May 24, 1918. Serial No. 236,299. 6 Claims. (Cl. 17—30.)



6. A carcass splitting machine provided with cutting means, a housing or casing being tapered, and said housing or casing being located above said cutting means.

1,313,580. SLIDE-CLOSURE. CARL D. COKE, Detroit, Mich. Filed Feb. 28, 1919. Serial No. 279,698. 3 Claims. (Cl. 21—220.)



1. A slide closure for automobile curtains comprising a casing adapted to be mounted in an opening in an auto-

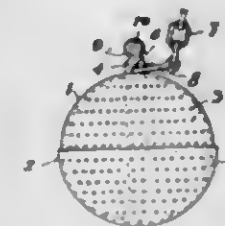
mobile curtain, said casing having an opening, a slide shiftable in said casing adapted to close the opening thereof, flanges at the marginal edges of the casing opening and adapted to hold the marginal edges of the automobile curtain opening, and a strip carried by one of the flanges of said casing adapted to bear against said slide and prevent rattling thereof in said casing.

1,313,581. METAL PARTITION CONSTRUCTION. CONNELIUS COLLINS, Burlingame, Calif. Filed Sept. 16, 1913. Serial No. 790,038. Renewed Feb. 8, 1917. Serial No. 147,495. 2 Claims. (Cl. 72—118.)



2. A metallic studding comprising a vertically disposed channel iron having parallel flanges, said flanges being formed with dove-tailed slots, a sheet metal clip securely fastened in said slots and having its edges in contact with the side walls of said slots thereby forming substantially four points of contact with said channel, and lath securing prongs formed on the end of said clip and adapted to be bent at right angles thereto.

1,313,582. TEA-BALL. HENRY COWAN, New York, N. Y. Filed May 13, 1919. Serial No. 296,759. 5 Claims. (Cl. 53—3.)

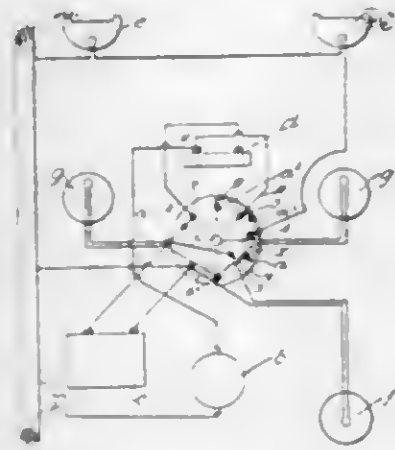


1. An article of the class described, comprising a hollow perforated body, formed of two parts detachably connected together, an extension on one of said parts extending through the other part and projecting beyond the plane of the same, and means engaging said projecting part to hold the two parts of said body detachably united.

1,313,583. MEANS FOR CONTROLLING THE ELECTRIC LIGHTING OF MOTOR-VEHICLES. WALTER CURTIS, Willesden Green, London, England. Filed Mar. 2, 1917. Serial No. 151,929. 4 Claims. (Cl. 171—97.)

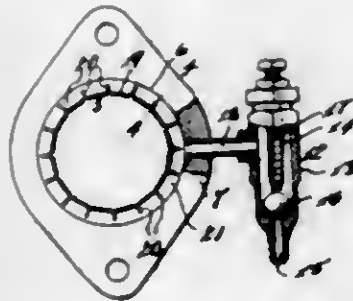
1. In combination, head lamps, side and tail lamps, a generator, an accumulator, a circuit including said lamps, said generator and said accumulator, a switch controlling said circuit in such manner that when it occupies one position, the head lamps are connected in series with the generator and the side and tail lamps are connected to said accumulator in parallel; when in another position,

said switch connects all of said lamps to said generator in series parallel, and when in a third position, said



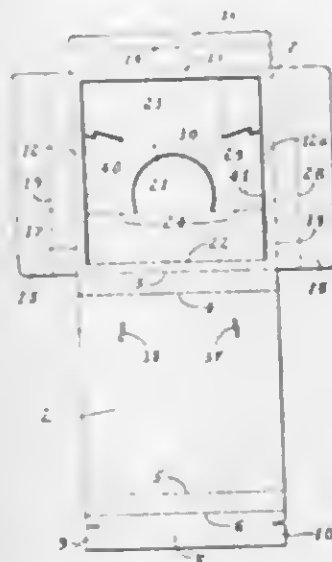
switch connects said side and tail lamps to said generator in series, while said head lamps are disconnected from said generator.

1,313,584. AIR-INLET DEVICE. ARTHUR A. CRUICK, New York, N. Y. Filed Feb. 12, 1917. Serial No. 148,955. 3 Claims. (Cl. 48-180.)



1. An auxiliary air inlet for internal combustion engines, an intake duct for the engine, a ring U-shaped in cross section and snugly fitting within the intake duct forming between the wall of said duct and said ring an annular chamber, ports in said ring leading from the chamber to the intake duct and an inlet through the wall of said duct communicating with said chamber.

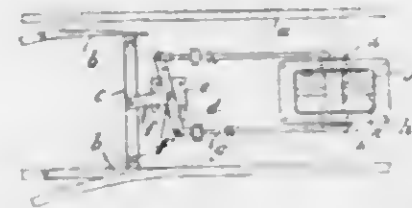
1,313,585. DISPLAY-CARTON. ADOLPH DIETSCH, Forest Hills, N. Y., assignor to American Lithographic Company, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1917. Serial No. 203,118. 4 Claims. (Cl. 200-44.)



1. In a display carton the combination of a blank foldable into box-like conformation, a top portion having op-

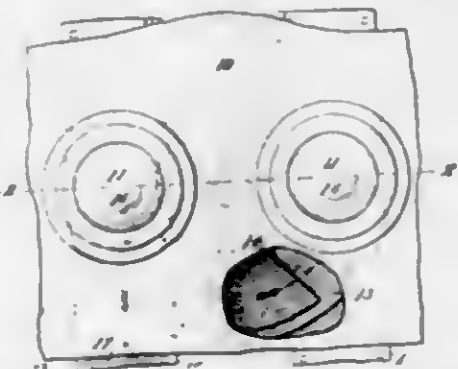
posite side rails, and a bottom portion terminating in a flap adapted to be folded under one end of said top portion, said flap being provided with opposite ears for engagement with the side rails of said top.

1,313,586. MEANS FOR OPERATING SWITCHES FOR TRAM-ROADS IN MINES, QUARRIES, OR THE LIKE. THOMAS DIXON, Langley Park, England. Filed Nov. 29, 1918. Serial No. 264,753. 1 Claim. (Cl. 240-328.)



Means for operating facing points of a track by a pair of axes of a passing vehicle comprising a bar joining the tongues of the points, a pivoted T shaped lever disposed horizontally between the rails of the track, the stem of the T lever being connected to said bar by a pin and slot connection, a horizontal shaft mounted between the rails of the track, two cranks and a four spoke hub on said shaft and links connecting said cranks to the cross arms of the said T lever.

1,313,587. CINEMATOGRAPHY. LEON F. DOUGLASS, San Rafael, Calif. Filed Dec. 5, 1916. Serial No. 135,157. 6 Claims. (Cl. 88-16.6.)



1. In cinematography, the method of producing a positive film for moving picture machines which consists in making two or more negatives having substantially the same series of images, one through a red filter and the other through a green filter with blank spaces between images and then printing these negatives on a single positive so that the latter has consecutive images as in a regular moving picture film, except that adjacent images are derived from different negatives and have different color values.

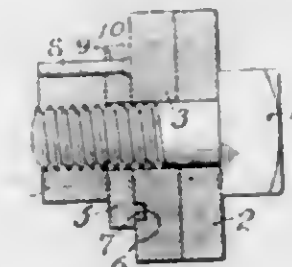
1,313,588. MECHANICAL POSTING. CHARLES J. DUNBAR, Kalamazoo, Mich., assignor to Accounting Devices Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 18, 1918. Serial No. 212,406. 2 Claims. (Cl. 120-1.)



1. A ledger having, in combination, a back, two covers, and a separable hinge connection between one of said covers and the ledger back, said connection comprising perforated elements upon the cover and the ledger back, a

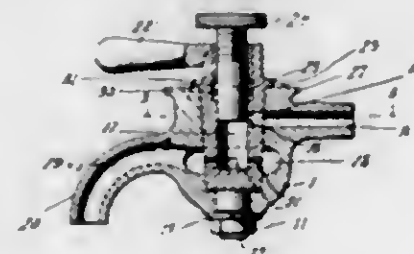
pin withdrawably inserted in said perforated elements, and means to prevent the pin from being accidentally disengaged from said perforated elements, said ledger back having a ledge to support the inner end of said removable cover with the perforated elements on said cover in axial alignment with the perforated elements on the ledger back.

1,313,589. NUT-LOCK. REASON B. EATON, Oswego, Kans., assignor of one-third to William J. Carpenter, Kansas City, Mo. Filed July 27, 1918. Serial No. 246,068. 1 Claim. (Cl. 151-57.)



In a nut lock, the combination with a nut and bolt, of a washer having extending from the outer side to its inner side a transverse hole the inner end of which is countersunk, and a malleable locking pin in said hole and in the path of the corners of the nut and having its inner end upset and expanded in said countersink of the hole.

1,313,590. MULTIPLE MIXING-VALVE. ABRAHAM ENGEL, New York, N. Y. Filed June 4, 1918. Serial No. 238,098. 1 Claim. (Cl. 277-32.)

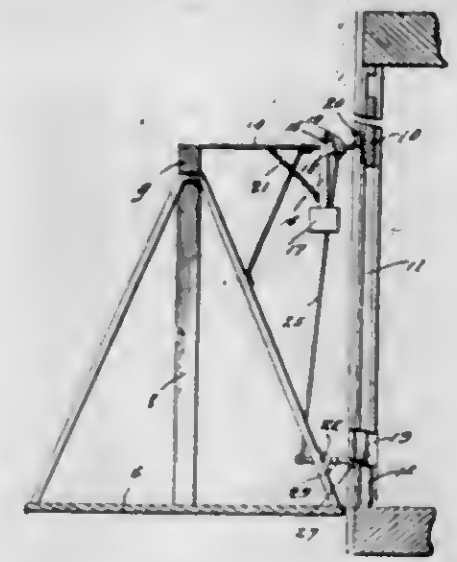


A device of the class described comprising a casing containing a vertical bore, a plurality of lateral inlets to said bore, an annular compartment surrounding said bore and an outlet therefrom, a rotatable plug hollowed to provide a mixing chamber, said plug being seated in said bore and having a horizontal slot adapted to wholly or partly communicate said mixing chamber and one or more of said inlets, depending upon the angular position of said plug, a plurality of ports beneath said slot communicating said annular compartment and said mixing chamber, a cock, loosely secured in the top of said plug for controlling the volume of influx into said mixing chamber, projecting downwardly and movable vertically therein, plus protruding from said cock, shoulders in said plug to engage said pins and thereby limit the uppermost and lowermost positions of said cock.

1,313,591. DOOR-ACTUATING MECHANISM FOR ELEVATORS. SAM EVERSEN, Billings, Mont. Filed June 18, 1918. Serial No. 240,575. 3 Claims. (Cl. 187-60.)

3. The combination with a car and a door; of pawls on said car one designed to engage the door and to open the

same when the car ascends and the other designed to close the door when the car descends, a weight normally hold-



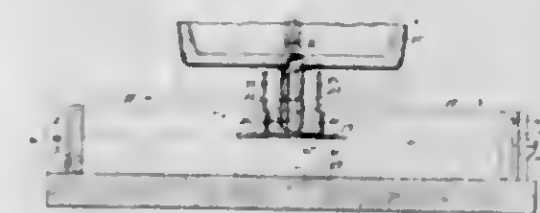
ing one of said pawls in operative position, and a link connecting the said weight with the other of said pawls.

1,313,592. CONCRETE SHIP. SECONDO GILETTI, San Francisco, Calif. Filed July 9, 1918. Serial No. 244,055. 8 Claims. (Cl. 114-65.)



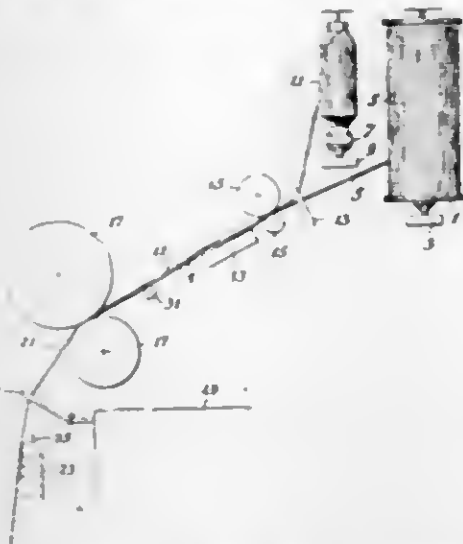
1. In a concrete ship, a hull having a double bottom and sides which latter are double at their lower portions, a lower deck having its opposite sides extending across the space between the double portions of the sides at the respective upper edges of said double portions of the sides, an upper deck, spaced vertical girders between the two decks integral with each and with the parts of the hull sides between the decks, and a pair of arches extending from bow to stern, said arches being integral with the said last named hull sides, with the adjacent of said vertical girders and with the lower deck and with the upper deck at the highest points of the arches, said arches extending below the lower deck and having portions integral therewith and being also integral with the outer walls of said double portions of the hull sides.

1,313,593. ART OF CASTING. JACOB K. GRIFFITH, Pittston, Pa., assignor to A. J. Griffith, Pittston, Pa. Filed July 11, 1916, Serial No. 108,562. Renewed Dec. 19, 1918. Serial No. 207,537. 9 Claims. (Cl. 22-216.)



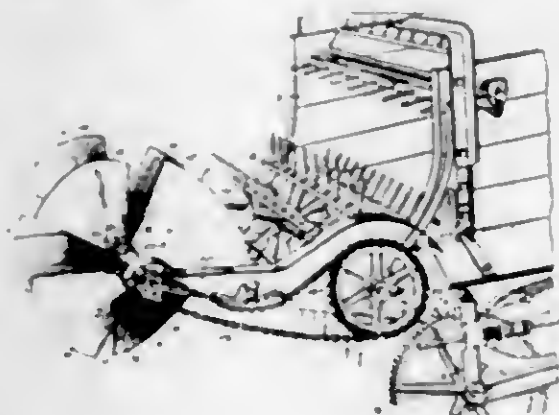
7. The method of making castings, consisting in pouring and uniformly distributing molten steel over a bottom chill, progressively freezing the metal upwardly from the bottom and thereby preventing piping and segregation, and maintaining the top of the casting in a fluid condition by means of a fused superheated non-metallic layer; substantially as described.

1,313,594. TEXTILE ART. WILLIAM D. HARTSHORN, Methuen, Mass., assignor to The Text Corporation, Lawrence, Mass., a Corporation of Maine. Filed Dec. 1, 1916, Serial No. 134,363. Renewed Apr. 14, 1919. Serial No. 290,107. 5 Claims. (Cl. 28—5.)



1. As a new article of manufacture, a wholeness thread spun directly from roving composed of a plurality of strands one of a relatively long fiber or filament such as wool, and another of shorter fiber or filament such as cotton, each strand having a distinct entity and said strands being regularly involved in said thread to impart mutual support.

1,313,595. FERTILIZER-DISTRIBUTER. SHEPHERD C. HARTROCK, Moline, Ill., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 2, 1919. Serial No. 286,928. 6 Claims. (Cl. 275—6.)



3. A device for spreading material delivered from a fertilizer-distributor, said device comprising a rotatable shaft having a plurality of inclined blades secured thereon so as to project therefrom in staggered relation, one blade at each side of the midpoint of the length of the shaft being reversely inclined from the other blades at the same side of such midpoint.

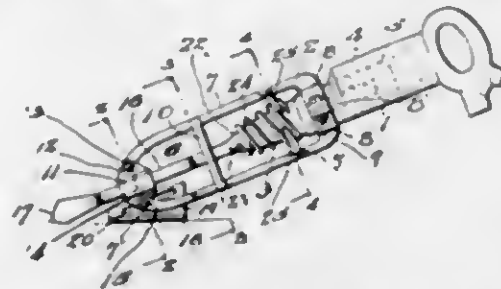
1,313,596. HAND-LOOM. CHARLES HENDRICK, New York, N. Y. Filed Dec. 11, 1918. Serial No. 266,274. 3 Claims. (Cl. 139—12.)



1. A hand loom adapted for elevated support, comprising a loom frame, a heddle movable vertically therein, a

beater frame pivoted at its lower end in the loom frame, and a beater reed pivoted at its upper end in the upper end of the beater frame.

1,313,597. TOOL-HOLDER. ALBERT HUNTER, Vancouver, Wash. Filed Aug. 31, 1918. Serial No. 252,207. 4 Claims. (Cl. 121—20.)



1. The combination with a power driven device having a reciprocal driving member, of a detachable frame secured to the device including a cross head, a tool reciprocable in the head and supported in the device and adapted to be actuated by the driving member for its working stroke, and means for returning the tool.

1,313,598. PROPELLER-WHEEL. JAMES INGALLS, Muskegon, Mich. Filed Apr. 28, 1917. Serial No. 165,202. 2 Claims. (Cl. 170—161.)



1. In combination with an aeroplane wheel hub having angling flanges formed around it near the longitudinal center, spring metal buckets secured to, and radiating from the flanges at an incline from the longitudinal surface of the hub, the back edges of said buckets prominently curved at the outer ends and the curves disappearing before reaching the hub.

1,313,599. AEROPLANE PROPELLER AND TRACTOR. JAMES INGALLS, Muskegon, Mich. Filed May 3, 1918. Serial No. 282,406. 3 Claims. (Cl. 170—159.)

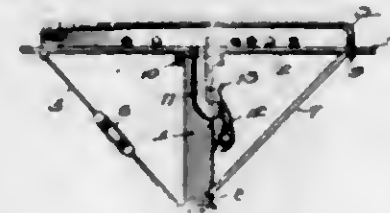


1. In an aeroplane tractor, wings made with thin concavo-convex sheet metal backs and thin plane sheet metal fronts forming slightly spiral hollow wings that are thick and open at one end and are lenticular in cross section, the spirality and thickness of the wings diminishing until the outer ends are flat and closed, the edges of the front metal plates folded over the edges of the back metal plates and integrally connected therewith, a hub having arms made integral therewith and positioned at sharp angles with the longitudinal center thereof, said arms made of size and form to extend well into, and to closely fit the openings in the ends of the wings, and means for firmly securing the wings upon said arms.

1,313,600. GAME-BOARD. CHARLES H. JOHNSON, Sacramento, Calif. Filed July 18, 1918. Serial No. 245,569. 2 Claims. (Cl. 46—61.)

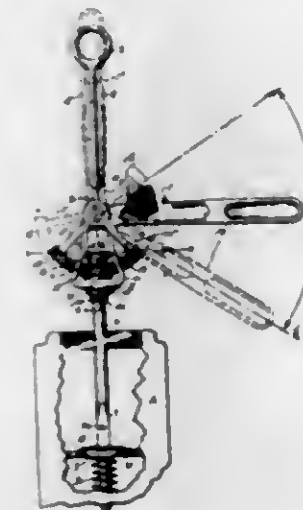
1. A game board including a plate having a ball-receiving aperture, a support depending from the center of the

plate, a receptacle, means to detachably suspend the receptacle from the support, and a means arranged within



the support and communicating with the aperture and receptacle for conveying balls to the receptacle.

1,313,601. VALVE-GRINDER. JOHN H. JUAN, Syracuse, N. Y. Filed May 14, 1917. Serial No. 168,397. 1 Claim. (Cl. 51—4.)



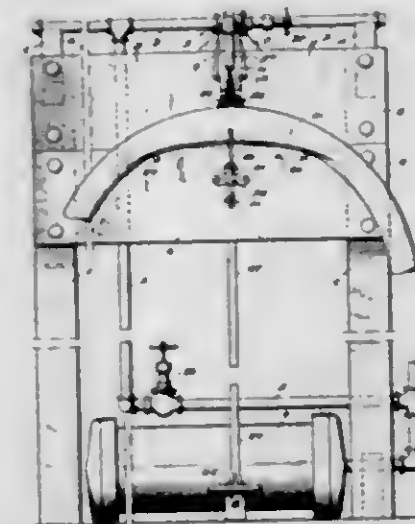
A tool of the character described comprising a supporting member having a transverse bearing therein, and a vertical bearing below said transverse bearing, an implement rotatably mounted in said vertical bearing and having secured thereto a pinion, and means for operating the pinion to rotate the tool comprising a toothed segment mounted to swing from the transverse bearing, said segment having an integral handle projecting outwardly therefrom on the same side of the vertical supporting member as the segment and at right angles to a line intersecting the central portion of the segment whereby a movement of the handle on one side of the supporting member permits the entire toothed portion of the segment to cooperate with the pinion to rotate the same.

1,313,602. CASTING DEVICE. WILLIAM LUXMORE, Chicago, Ill. Filed Sept. 9, 1918. Serial No. 253,212. 4 Claims. (Cl. 22—68.)



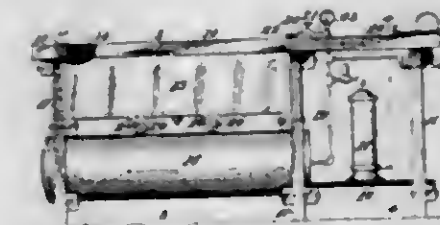
1. A casting device comprising a cup-shaped cover, a handle, and means for flexibly connecting said handle with said cover, comprising a coil spring having one end secured to said cup and the other end secured to said handle.

1,313,603. INNER-TUBE DEFLATER. ROBERT MCCLINTOCK, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y., a Corporation. Filed Feb. 19, 1919. Serial No. 278,047. 7 Claims. (Cl. 154—9.)



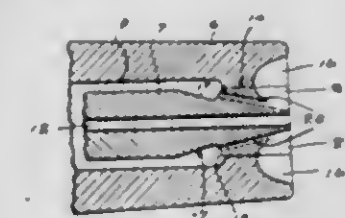
1. In a machine for deflating inner tubes of pneumatic tires, a pair of mounted opposing jaws, a mounted fork having prongs, means to open or close said jaws and raise or lower said fork whereby the interior wall of an inner tube may be held out of contact with the base of the inner tube valve stem during the deflating process.

1,313,604. REPAIR-BENCH. WILFREY MARLIN PORTER and EDWARD HARMON SPRAGUE, Sacramento, Calif. Filed Apr. 16, 1919. Serial No. 290,625. 4 Claims. (Cl. 144—286.)



1. A radiator testing bench comprising a flat working bench, a tank in one end thereof and of sufficient dimensions to permit a radiator to be submerged therein, and a self-contained air supply unit carried by the bench and for connection with the radiator to be tested.

1,313,605. CUTTING-TORCH TIP. JOY S. REYNOLDS, Seattle, Wash. Filed Dec. 2, 1918. Serial No. 265,184. 3 Claims. (Cl. 158—27.4.)



1. A cutting torch tip comprising a tubular casing having a section of reduced diameter adjacent its outer end and provided with a concave recess in its outer end, a stem of less diameter than the bore of said casing extending lengthwise therein, a head on said stem said head being adapted to fit snugly within said section of reduced diameter and to project outwardly into said con-

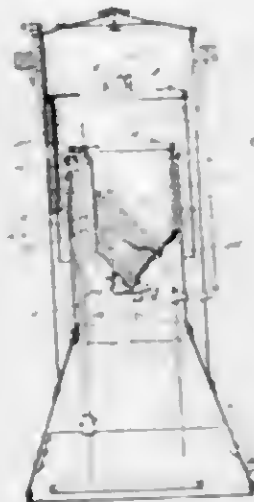
cave recess in the end of said casing, said head and said stem having a concentric passageway therethrough and said head having peripheral notches in its outer end and being provided with perforations that communicate with the space within said casing and terminate in said notches.

1,313,606. **PRINTER'S BORDER-MITERING JIG.** MARDARD J. E. ROYBART, Portland, Oreg. Filed May 9, 1918. Serial No. 233,475. 5 Claims. (Cl. 143—6.)



3. In a device for mitering type borders, a mitering saw having a circular saw with a horizontal slidable table upon which is mounted a frame member capable of being set and held at an angle to the cutting line of the saw table, the end of said frame near saw member being pivoted to said saw table while the opposite end of the saw frame member has an adjustable stop at right angles to the length of the frame member and pointing away from the operator, in combination with a mitering jig having a body member whose cross section is rectangular in form and whose length is greater than the breadth of said frame member and having at one end of said body member a work stop member secured thereto and projecting beyond one lateral face of said body member in a manner to form an obtuse angle thereto, while at the opposite end of said body member, and projecting past the said face of body member as does the angular projection of said work stop member, is a jig stop member and pivotally mounted in a slot in the upper face of said body member are a number of blade members arranged in a manner that any part of same can be interposed between said frame member and its said jig stop member, substantially as described and illustrated.

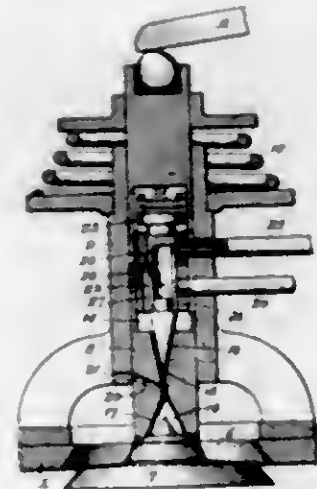
1,313,607. **ACETYLENE GENERATOR.** FLOYD A. RUCKMAN, Columbia City, Ind., assignor to Johnson Acetylene Gas Company, Crawfordsville, Ind., a Corporation. Filed Feb. 6, 1918. Serial No. 215,672. Renewed May 13, 1919. Serial No. 296,926. 3 Claims. (Cl. 48—46.)



3. In an acetylene generator, the combination with a magazine having a downwardly inclined contracted mouth, of a carbide feed receptacle having a closed bottom

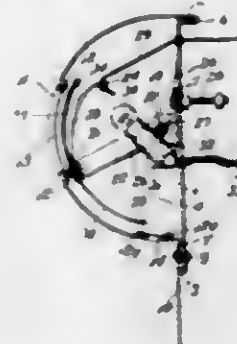
and pivoted on said magazine to swing below the mouth, the mouth of said magazine extending into and spaced above the bottom of said receptacle, one wall of the receptacle having a discharge aperture therein at one side of the magazine mouth, a cut-off plate supported below said magazine at the opposite side of the mouth, an automatically controlled operating means to oscillate said receptacle to discharge carbide therefrom through said aperture at one stage and to register said aperture and mouth for direct discharge of carbide therefrom at another stage and to engage said aperture over said plate to close the aperture at the extreme limit of swing of the receptacle and thus cut off flow of the carbide.

1,313,608. **INTERNAL-COMBUSTION ENGINE.** JAMES SHAW, Chicago, Ill. Filed Sept. 12, 1918. Serial No. 253,669. 6 Claims. (Cl. 123—32.)



1. In a gas engine, an engine cylinder having an inlet opening at one end and an outlet orifice at its other end adapted to be uncovered by the piston, a main valve closing said inlet opening and having a carrying stem formed with upper and lower chambers connected by a communicating passage, the lower chamber opening into the explosion chamber, a hollow fuel supply head arranged in the upper chamber aforesaid and forming a piston therefor, a valve member carried by said head and adapted to control the communicating passage aforesaid, means for holding said supply head in stationary relation to the main valve stem, and means for imparting intermittent reciprocation to said main valve and stem, substantially as set forth.

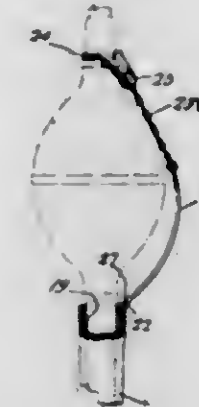
1,313,609. **SIGNAL.** SOTOMON H. SHAW, Grand Rapids, Mich. Filed Apr. 22, 1919. Serial No. 291,957. 6 Claims. (Cl. 40—67.)



1. In a device of the character described, a housing having a vertical back and a curved front member, said front member having an opening therein, a signal member mounted to move in a curved path up and down back

of the front member; said signal member having an upper opening therein covered by a transparency including a red section, and having a series of letters cut through its lower portion, yielding means normally holding the signal member in lower position to bring the upper opening in said signal member back of the opening in the front member in the housing, means for moving the signal member upwardly to bring the series of letters back of said opening in the front member, and a light within housing back of the movable signal member, substantially as described.

1,313,610. **STOMACH-PUMP ATTACHMENT.** WALTER ST. CLARA and BENJAMIN S. ROBERTSON, Rockymount, Va. Filed Sept. 23, 1916. Serial No. 121,839. 1 Claim. (Cl. 128—231.)



A stomach pump comprising an inlet tube; an outlet tube; a pumping mechanism interposed between the tubes and connecting the tubes, the pumping mechanism being of greater diameter than either tube; an incompressible tubular guard wherein the inlet tube slides; and a connection having one of its ends attached to the guard, the connection bridging the pumping mechanism and terminating at its other end in a releasable loop engaged around the outlet tube and of smaller diameter than the pumping mechanism, the pumping mechanism having a three-fold office, in that it constitutes a liquid-handling means, a stop limiting the backward movement of the guard, and a stop for the loop thereby limiting longitudinal movement of the connection and a forward movement of the guard.

1,313,611. **PLOW ATTACHMENT.** JOHN STALLINO, Grabow, La. Filed Mar. 19, 1918. Serial No. 223,320. 2 Claims. (Cl. 97—64.)

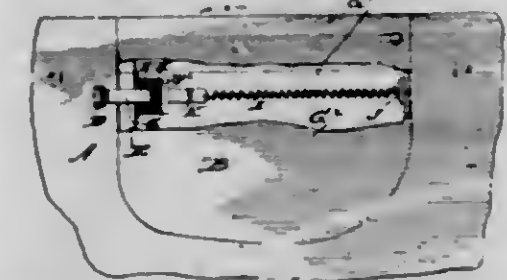


1. In a device of the character described, a wheel comprising two dished sheet steel disks having central portions pressed inwardly to form abutting cylindrical skirt elements and having meeting peripheral edge portions, and a filling of base metal.

1,313,612. **COMBINED DOOR-CHECK AND DOOR-CLOSING DEVICE.** GEORGE W. STOLAR, Detroit, Mich. Filed June 12, 1919. Serial No. 308,738. 3 Claims. (Cl. 16—97.)

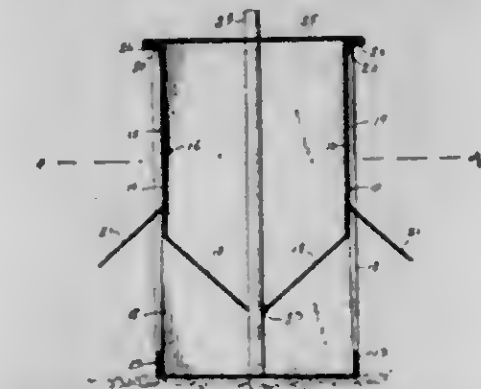
1. In a device of the character described, a spring having one end secured to the free end of the door frame, a flexible strap connected with the other end of the spring,

means for securing the opposite end of the strap to the inner wall of the body of the vehicle and out of the plane of the door frame, whereby the spring may operate to



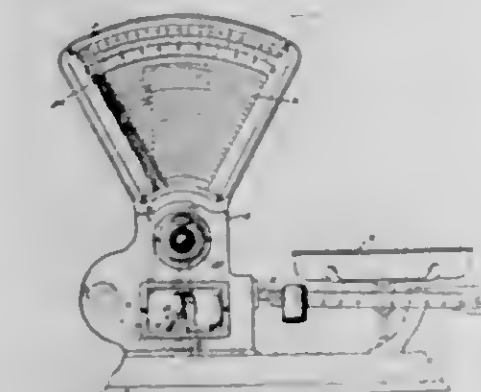
close the door, and means for guiding said strap from its connection with the inner wall of the body of the vehicle to the plane of the door frame.

1,313,613. **SELF-FEEDING CONTAINER.** EINAR A. TANNAS, Ambrose, N. D. Filed May 10, 1919. Serial No. 296,207. 5 Claims. (Cl. 110—52.)



1. A container of the character described having a bottom and side walls, the front and rear margins of the side walls being bent toward each other to form flanges, front and rear walls each consisting of two plates of metal, one of the plates having marginal flanges extending downward from its upper end a distance less than the length of the plate and engageable with the flanges on the side wall and being angularly bent below these flanges, the other plate at its lower end being angularly bent in divergent relation to the first named angular bend, the upper end of one of said plates being angularly flanged, said flange forming a stop limiting the downward movement of the front or rear plate with reference to the side walls, and a cover having sliding engagement with said last named flanges.

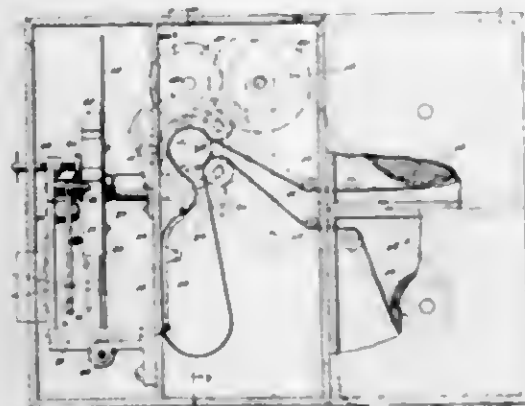
1,313,614. **AUTOMATIC WEIGHING-SCALE.** JOHN L. THEOBALD, New York, N. Y., assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Sept. 22, 1915. Serial No. 51,912. 9 Claims. (Cl. 265—30.)



1. The combination with pendulum scales, of an auxiliary weight for the pendulum, mechanical operating means

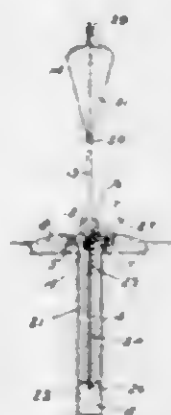
for displacing and replacing the weight, comprising manually-operated means for raising the weight to an elevated position, holding means for retaining the weight in such raised position, and means slidable longitudinally of the pivot of the pendulum for detaching the holding means to permit the falling of the weight.

1,313,615. METHOD OF AND APPARATUS FOR PHOTOGRAPHIC EXPOSURES AND PROJECTION. WILLIAM M. THOMAS, New York, N. Y., assignor, by mesne assignments, to Thomas Oberkirch Company, Limited, New York, N. Y., a Corporation of New York. Filed Dec. 17, 1915. Serial No. 67,332. 9 Claims. (Cl. 88—16.4.)



1. An apparatus for taking motion pictures in color including a lens, means to move a light sensitive film, a plurality of color screens adapted to filter the light successively, a diaphragm for the lens and means for regulating the opening of the diaphragm in accordance with the actinic effect of the color screens successively in register with the lens.

1,313,616. STREET-SEMAPHORE. JOHN M. WALSH, Petaluma, Calif. Filed Feb. 19, 1917. Serial No. 149,420. 5 Claims. (Cl. 189—28.)



1. In a semaphore, a casing adapted to be embedded in a street pavement, a cover plate for said casing, a signal standard having a flattened base arranged on said plate, means for preventing lateral displacement of said base from said plate and means for resisting other than lateral displacement of said base from said plate.

1,313,617. MEANS EMPLOYED IN KEY SYSTEMS FOR TITLE EXAMINERS. NEWSBERRY W. WHEELER, East Cleveland, Ohio. Filed May 3, 1917. Serial No. 166,693. 4 Claims. (Cl. 283—36.)

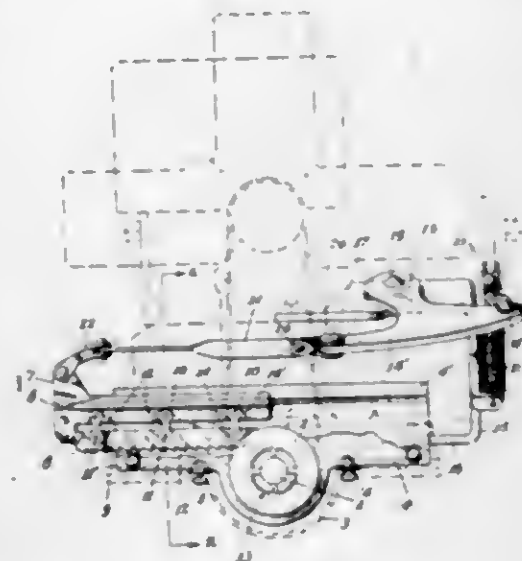
1. In means employed in key systems for title examiners, the combination with consecutive court case num-

bers; of an arbitrary system of indications, disposed adjacently thereto and based on the terms of court, for de-

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1 34 1	07 57 4	75 6 4	82 56 4	43 5
2 45 2	03 5 1	70 5 1	75 5 1	43 5
3 45 2	04 5 1	70 5 1	75 5 1	43 5

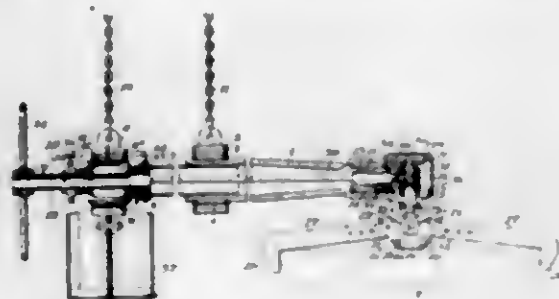
noting in which terms any decrees or other actions affecting or potentially affecting title to real estate were had in the several cases.

1,313,618. MOTOR-STARTER. ERNEST D. BASSETT, New York, N. Y., assignor to Barrett Motor Starter Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1917. Serial No. 206,000. 3 Claims. (Cl. 74—54.)



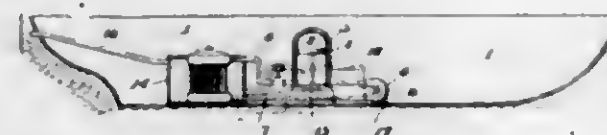
1. In a motor starter, the combination with the shaft of a motor, of a ratchet wheel secured to said shaft and adapted to rotate therewith, a slidable carriage, a longitudinal guide therefor, a rack yieldingly secured to said carriage and provided with teeth adapted to mesh with said ratchet wheel, and means for positively forcing the teeth of said rack into engagement with said ratchet wheel in order to impart a substantial rotary impulse to said shaft.

1,313,619. MACHINE FOR CHARGING SLAUS, BILLETS, &c. EDGAR E. BAORICA, Pittsburgh, Pa. Filed May 25, 1918. Serial No. 236,646. 14 Claims. (Cl. 214—28.)



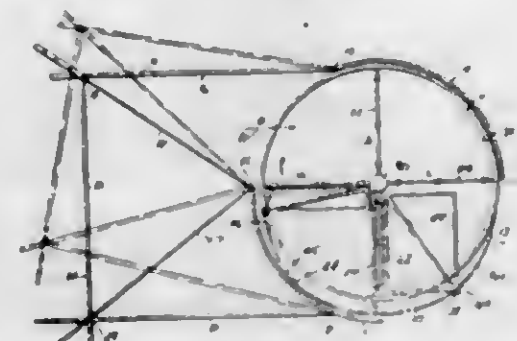
9. In apparatus of the character described, the combination with a horizontal peel, of tongs suspended from the outer end portion of the peel, and means for rotating the tongs about a vertical axis adjacent to the point of support of the tongs on the peel, substantially as described.

1,313,620. COOLING SYSTEM FOR INTERNAL-COMBUSTION MOTORS. LEON CAMMEN, New York, N. Y. Filed June 15, 1917. Serial No. 174,931. 2 Claims. (Cl. 123—17.4.)



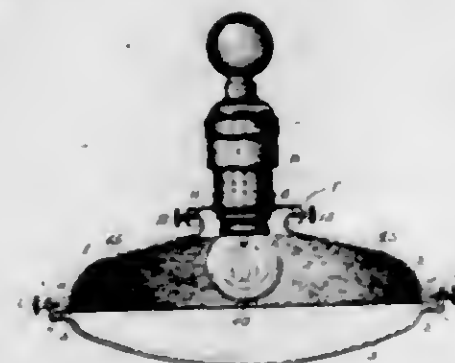
1. In an internal combustion engine having a cooling jacket and a radiator, means to circulate water there-through, a radiator cooling system, means to cause a separate, continuous, non-circulatory flow of cooling water over said radiator, and means, governed by variation in temperature of the circulatory water, to regulate the volume of said continuous flow.

1,313,621. WIND OR WATER POWER. EDWARD DAMMANN, St. Louis, Mo. Filed Nov. 13, 1918. Serial No. 262,371. 3 Claims. (Cl. 170—116.)



1. In a device of the class described, the combination of a casing comprising a base having a pair of fixed walls thereon, said walls being curved throughout their entire length in the arc of a circle, one of said walls being shorter than the remaining wall, said short wall having a rigid partition extending at substantially right angles thereto and projecting in the direction of the remaining wall, elongated gates hingedly mounted upon the ends of said fixed walls, bars pivotally mounted upon said short fixed wall and being adjustably connected to said gates adjacent their outer ends, a top bar directly mounted upon said gates, whereby the gates will be adjustably held in set positions to direct fluid into the interior of said casing, and a rotor revolvably mounted within said casing.

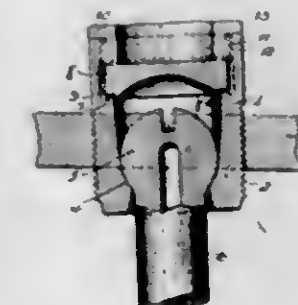
1,313,622. LAMP. ETHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,741. 2 Claims. (Cl. 240—1.)



1. Illuminating means, comprising a flattened globe having the upper portion thereof coated with phosphorescent material which will emit light and also reflect the

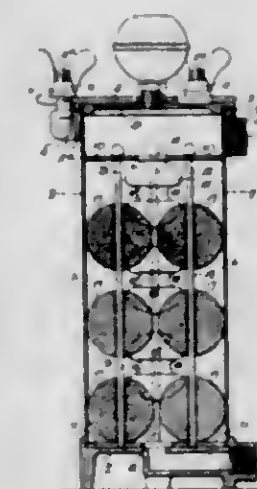
same through the lower portion of said flattened globe, said material constituting the principal light giving element of the lamp, and a source of artificial light within the globe for activating said phosphorescent material in the upper portion thereof.

1,313,623. STAY-BOLT STRUCTURE. ETHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Apr. 26, 1918. Serial No. 230,894. 1 Claim. (Cl. 35—1.5.)



In a staybolt structure, the combination with a bearing sleeve having a slotted wall, of a cap plate disposed within said bearing sleeve and removable through the slotted wall, and a cap member having an opening there-through normally closed by the removable cap plate, said cap member serving normally to clamp said cap plate in place within the bearing sleeve.

1,313,624. COOLER. DANIEL L. EVANS and FRANK A. PHILLIPPI, Pottstown, Pa., assignors to Sanitary Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 3, 1917. Serial No. 200,096. 6 Claims. (Cl. 137—112.)

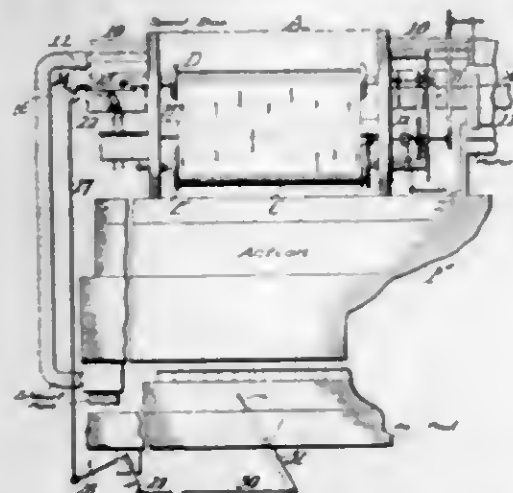


2. The combination in a cooler of a casing; a plurality of guide rods mounted in said casing; and series of overlapping baffle structures rotatably mounted on said rods.

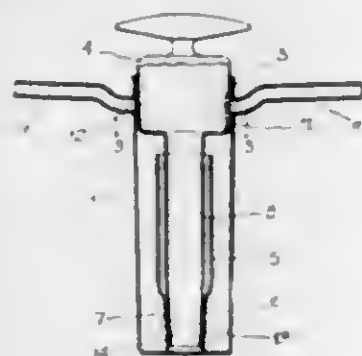
1,313,625. PLAYER-PIANO FOR PRODUCING SOLO EFFECTS. JOSEPH B. FIALA, New York, N. Y., assignor to Standard Pneumatic Action Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1916. Serial No. 134,667. 4 Claims. (Cl. 84—160.)

1. In a player piano having a plurality of actions and automatic operating mechanism therefor, in combination, flexible damping devices operative in long sections to

control the extreme bass and treble actions and in a plurality of short sections to control the intermediate actions, and sheet-controlled means for automatically moving any section of said damping devices to operative or inoperative position.



1.313,626. ABSORPTION BOTTLE. HARRY L. FISHER, New York, N. Y. Filed May 13, 1919. Serial No. 296,858. 2 Claims. (Cl. 23-3.)



1. An absorption bottle having an inner tube secured therein to form an annular chamber, and a hollow stopper having a tubular extension to form a chamber in concentric relation to said annular chamber, means of communication between said chambers, and means operable by a relative turning movement between said bottle and stopper, to open or close said means of communication.

1.313,627. STAY BOLT FOR BOILERS. JOHN ROGERS FLANNERY and ETHEAN L. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Feb. 21, 1917. Serial No. 150,205. 3 Claims. (Cl. 85-15.)

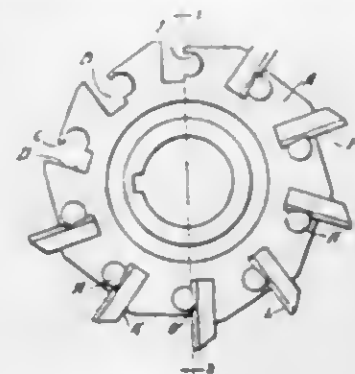


3. A headed stay bolt having a tell-tale hole extending longitudinally from the inner end of the bolt into but not through the headed end of the bolt and having a plug in the inner end of said tell-tale hole.

1.313,628. MILLING-MACHINE CUTTER. BION D. FORD, Cleveland, Ohio. Filed Nov. 27, 1916. Serial No. 133,526. 5 Claims. (Cl. 29-105.)

2. A milling machine cutter comprising a body portion having peripheral blade receiving sockets, the bottom of

each socket being concaved on the arc of a circle, one wall of said socket being recessed, said recess being parallel to the axis of the body of the cutter, blades fitting into said sockets, the bottom of each blade being

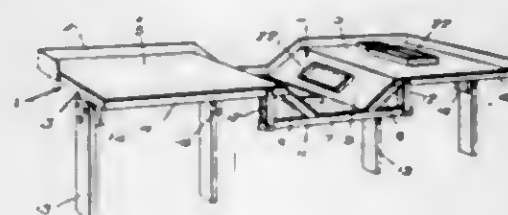


convexed and curved on the same arc as the concaved bottom of socket, and a wedge adapted to be inserted in the longitudinal recess of each socket, said wedge having a flat face adapted to engage a corresponding face upon the blade.

1.313,629. ART OF REFINING PETROLEUM PRODUCTS. CHARLES K. FRANCIS and DAVID G. MORGAN, Tulsa, Okla., assignors of one-half to Cowden & Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Dec. 10, 1918. Serial No. 267,007. 5 Claims. (Cl. 196-26.)

1. In the art of refining petroleum hydrocarbons to obtain water white products, the process which comprises commingling with the hydrocarbon liquid a saponaceous mixture containing an excess of alkali, and distilling the resultant mixture.

1.313,630. MOLDING APPARATUS FOR BUILDINGS. JOHN GALAN, Elmhurst, N. Y. Filed Mar. 4, 1919. Serial No. 280,626. 7 Claims. (Cl. 25-1.)



3. An apparatus for molding walls, comprising a platform having spaced sections mounted for turning movement on a horizontal axis, and an offset frame portion secured to and connecting said platform sections.

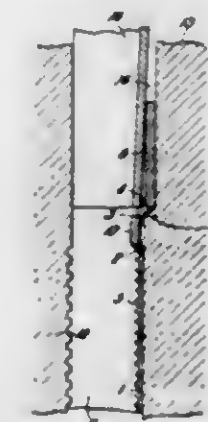
1.313,631. TYPE-WRITER RIBBON-SPOOL AND MOUNT THEREFOR. JOHN A. HAGERSTROM, Scranton, Pa., assignor to Victor Typewriter Company, New York, N. Y., a Corporation of New York. Filed July 10, 1917. Serial No. 159,665. 5 Claims. (Cl. 242-70.)



1. In a device of the character described, a spindle hollowed interiorly, so axially slidable bolt therein, which

protrudes at one end of said spindle, said spindle being provided with a ribbon supporting flange, a latch pivoted on said flange and movably engaging said bolt, and a ribbon spool adapted to be engaged by said latch.

1.313,632. STEREOTYPE'S MATRIX AND VERTICAL MOLD FOR CASTING STEREOTYPE-PLATES FROM IT. JOHN JAMES HISHOP HARRIS, Broadbeath, England, assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 9, 1913. Serial No. 740,951. Renewed Jan. 14, 1919. Serial No. 271,163. 8 Claims. (Cl. 22-5.)



1. As an article of manufacture, a vertical stereotype mold having a matrix provided with a top bolster and a guard arranged in position in the mouth of the mold to engage said bolster and direct the falling metal from the top side of said bolster as the metal descends in the mold.

1.313,633. STOVEPIPE. JOSEPH L. HAMF, St. Louis, Mo. Filed May 17, 1915. Serial No. 28,620. 2 Claims. (Cl. 126-309.)

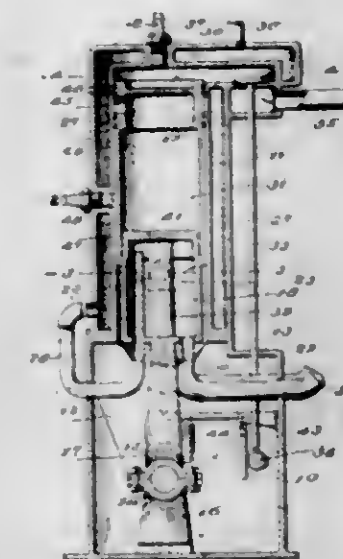


1. A stove-pipe section, formed from a single piece of sheet-metal and provided along one margin with a continuous and unbroken outwardly bent hook-flange and on one end with an outwardly formed shoulder pressed from the section adjacent to and paralleling the edge of said flange against which the opposing edge is adapted to rest and provided on the opposite margin with an inwardly turned hook-flange of less length than the first mentioned flange and with a notch cut beyond the edge of the inward flange, the portion of the pipe section of the end adjacent the notch, being inwardly bent, the margins of the section being fastened together by twisting the section in helical form and engaging the flanges so that the flanged margin of one end may be inserted in the notch and over the inwardly bent portion and the opposite flanged margin may be positioned behind the outwardly formed shoulder whereby the section is assembled for use without any other operation.

1.313,634. INTERNAL-COMBUSTION ENGINE. JAVINO JAYNE, Edwall, Wash. Filed Nov. 24, 1917. Serial No. 203,539. 3 Claims. (Cl. 123-63.)

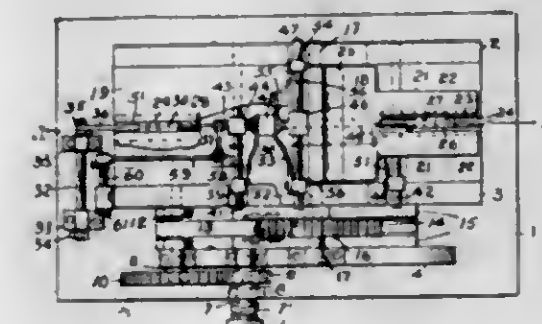
1. In engine construction, a working cylinder, a hollow stationary abutment therein, a piston mounted to slide over the abutment within the said cylinder, firing chambers at opposite sides of said piston, intake and exhaust ports for one of said chambers, means for opening and

closing said ports, intake and exhaust ports for the other of said chambers opening through the abutment, intake and exhaust pipes leading through the abutment and com-



communicating with said last mentioned ports, means carried by the abutment for opening and closing the said last mentioned ports, and means for supplying a cooling fluid within the abutment around said pipes to contact therewith.

1.313,635. DOUBLER. WILLIAM L. JENKINS, Sr., and WILLIAM L. JENKINS, Jr., Niles, Ohio. Filed Mar. 7, 1919. Serial No. 281,118. 6 Claims. (Cl. 153-16.)



1. In a doubler, a table, a gage-holder at each end of the table movable toward and away from the center thereof and having holes arranged lengthwise of the table, a gage-pin for each holder, each gage-pin being insertible in any hole in its respective holder, means for moving the gage-holders simultaneously toward and from each other, and means for doubling a sheet adjusted between the gage-pins.

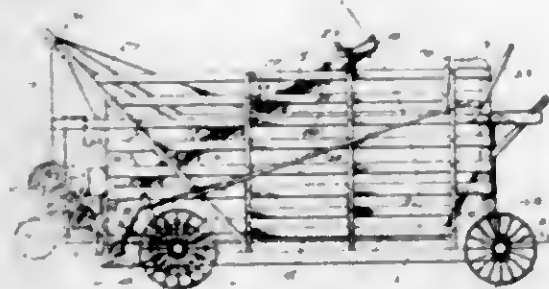
1.313,636. WATCHCASE. WILLIAM J. LARKIN, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn., a Corporation. Filed Sept. 26, 1917. Serial No. 103,291. 1 Claim. (Cl. 58-105.)



In a watch, the combination with the center-band of the watch-case and the hands and the dial of the watch, of a front cover formed with openings shaped and arranged for the exposure of the hands and dial of the watch and having its edge turned inwardly to form a retaining-flange for its application to the said center-band and for the production of an annular recess; and a transparent clo-

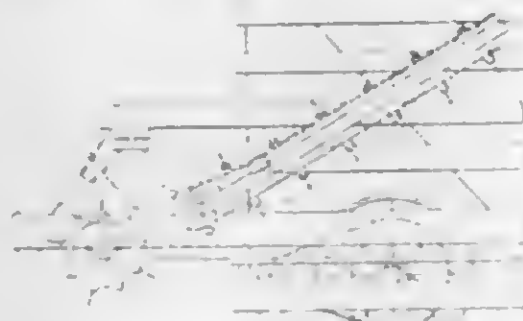
sure installed within the said cover and having its edge inserted into the said recess, whereby the openings in the said cover are closed with provision for exposing the said bands and dial to view.

1,313,637. STRAW-SPREADER. HENRY L. LITCHFIELD and VICTOR SPEER, Waterloo, Iowa; said Speer assignor to said Litchfield. Filed Mar. 19, 1918. Serial No. 223,263. 64 Claims. (Cl. 275-3.)



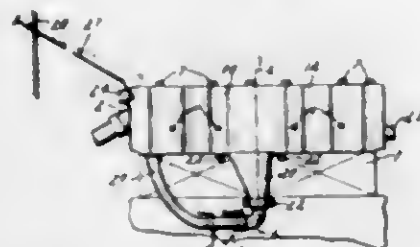
1. A vehicle comprising a broad, deep body or rack underslung from front and rear supporting wheels so as to bring the bottom thereof close to the ground, a long frame hinged at one end to the rear end of the body or rack so as to be capable of swinging from an approximately upright position into a position approximately parallel with and adjacent to the body or rack, raking mechanism carried by said frame for feeding the top of the load toward the rear, and means at the rear end of the body or rack for receiving material from said raking mechanism and discharging it directly downward upon the ground.

1,313,638. SPREADER. HENRY L. LITCHFIELD and VICTOR SPEER, Waterloo, Iowa; said Speer assignor to said Litchfield. Filed Mar. 27, 1918. Serial No. 224,935. 25 Claims. (Cl. 275-3.)



1. In a spreader, means for feeding material from the load in the spreader to a discharge point and tending to return it to the load to be mingled therewith, and means at said discharge point permitting a portion of the material to be so returned.

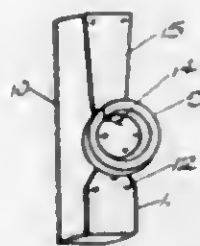
1,313,639. AIR HEATING ATTACHMENT FOR INTERNAL-COMBUSTION ENGINES. LEWIS D. NELSON, Union City, Mich., assignor of one-half to Robert M. Neale, Union City, Mich. Filed Sept. 19, 1917. Serial No. 192,110. 7 Claims. (Cl. 257-241.)



7. In an internal combustion engine the combination with the engine body, of a carburetor, intake and exhaust

manifolds, a manifold housing embracing said manifolds, air inlets for said housing provided with valves, and an air intake pipe for said carburetor connected to said housing.

1,313,640. COMBINED BUTTON AND BELT-LOOP. CHARLES OSTEN, New Haven, Conn. Filed Aug. 26, 1918. Serial No. 231,434. 1 Claim. (Cl. 24-73.)



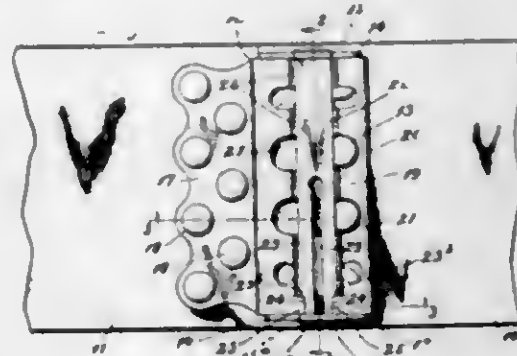
A combined button and belt loop formed from a single strip of metal folded to form a rectangular loop comprising a front plate and a back plate formed by the ends of the strip, said plates connected at the top and bottom, one end of the strip terminating in a disk struck up to form a button.

1,313,641. ELECTRIC SWITCH. JOSEPH C. REGAN, New Britain, Conn., assignor to The Trumbull Electric Mfg. Co., Plainville, Conn., a Corporation of Connecticut. Filed Apr. 10, 1919. Serial No. 288,962. 5 Claims. (Cl. 175-282.)



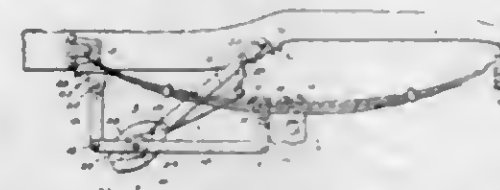
1. In an electric switch construction, a switch box, a hub mounted in the side thereof and provided with a central boss and a shoulder eccentric thereof, a handle provided with a recess for said boss and a shoulder co-acting with the shoulder on said hub, and means for securing said handle to said hub.

1,313,642. BELT-FASTENER. CHARLES E. SCHWEIS-COON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 20, 1918. Serial No. 241,051. 4 Claims. (Cl. 24-31.)



4. In a belt fastener, the combination of a keeper plate adapted for attachment to one end of the belt, a hook-plate adapted for attachment to the other end and interlocked with said keeper plate, and a sliding retainer bar for holding said plates in interlocked relation, said bar being formed with a pair of spring arms adapted to interlock the bar with one of said plates by their separating movement.

1,313,643. SHOCK-ABSORBER. ERNEST SINGAL, New York, N. Y., assignor of one-half to Michael Cooper, New York, N. Y. Filed July 17, 1918. Serial No. 245,285. 4 Claims. (Cl. 267-19.)



1. A shock absorbing device of the class described including in combination a vehicle frame and supporting spring, of a bar loosely secured to said frame and spring, a projection upon said bar, a pair of levers fulcrumed upon each other, and adapted to bear upon opposite sides of the said projection, a contractile spring connecting the ends of said levers, and means for attaching one of said levers to the frame of the vehicle.

1,313,644. WATCH AND OTHER BRACELET. ADOLPH SIMON, London, England. Filed Mar. 27, 1918. Serial No. 224,993. 1 Claim. (Cl. 224-4.)



An expansible and contractile bracelet for a wrist watch, comprising a thin substantially flat wrist-encircling band of flexible material that will snugly conform to the wrist of the wearer, with means for connecting the ends of the same to opposite sides of a watch, a frame having opposite guides through which the band slidably passes and from which it is freely removable when detached from a watch, a roller journaled in the frame between the guides and engaged with the band to cause the latter to wrap thereon, said roller extending parallel to the flat sides of the band and transversely of said band, and spring means engaged with the roller and the frame to rotate the roller and cause the band to wrap thereon to take up the slack of said band when applied to the wrist of the wearer.

1,313,645. SLACK-ABSORBER FOR BRACELETS OR THE LIKE. ADOLPH SIMON, London, England. Filed Feb. 28, 1919. Serial No. 279,916. 3 Claims. (Cl. 242-107.)

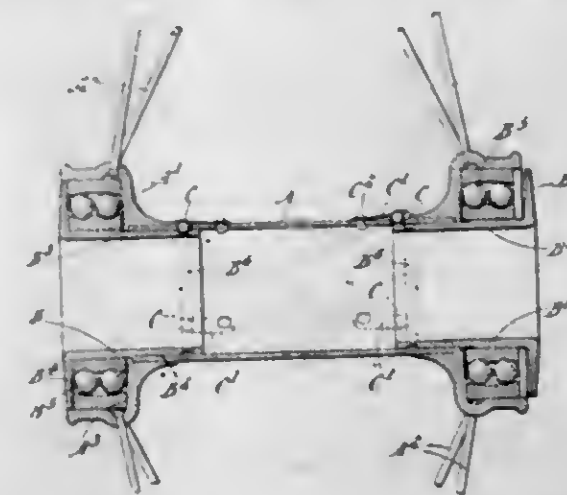


1. A slack-absorber of the character described, the combination with a roller, of a single-piece sheet-metal frame having two opposite sides bent down to constitute two supporting-ears carrying each one end of the roller, and the two intermediate opposite sides perforated and bent down to constitute guides for a ribbon to be taken up on the roller.

1,313,646. AEROPLANE-WHEEL BEARING. THOMAS SLOPER, Devises, England. Filed July 25, 1917. Serial No. 152,648. 4 Claims. (Cl. 21-2.)

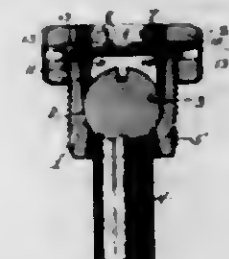
1. For aircraft-wheels the combination of a wheel-hub, loose bearing-bushes one in each end having exterior and

interior bearing-surfaces, and spring-controlled detents on the hub one for each bush, each detent engaging an



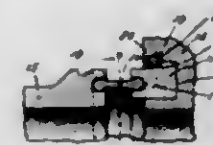
annular groove in the exterior face of its bush to retain it against endwise movement, for the purpose set forth.

1,313,647. STAY-BOLT STRUCTURE. BENJAMIN E. D. STAFFORD and ETHAN I. DOODS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed May 14, 1918. Serial No. 234,418. 4 Claims. (Cl. 85-1.5.)



1. In a staybolt structure, the combination with a bearing member for a staybolt, and a removable cap plate for closing the same, of an annular locking member adjustably connected with said bearing member and provided with a seat having an open portion, said locking member adapted to seat on the cap plate.

1,313,648. ELASTIC-FLUID TURBINE. CHRISTIAN STEENSTROP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 28, 1918. Serial No. 214,099. 1 Claim. (Cl. 253-94.)



In an elastic fluid turbine, the combination with a ring to be carried, a retaining ring, and an expansion ring fastening the ring to be carried to the retaining ring, of a carrying part, and means for fastening the retaining ring thereto, comprising a rectangular groove in the carrying part into which the retaining ring fits, said groove having an edge cut back at an angle to form an overhanging ledge thereby providing a V-shaped annular channel at the mouth of said rectangular groove, the retaining ring being provided with a cut-away portion on one side to form an angular wall complementary to the angular wall of said ledge, said retaining ring fitting into the bottom of said rectangular groove to position the ring, and a calking ring located in the recess formed between said

angular walls, whereby said retaining ring is accurately positioned in said rectangular groove and firmly held against movement.

1,313,649. ELASTIC-FLUID TURBINE. CHRISTIAN STEENSTROP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 26, 1918. Serial No. 246,906. 7 Claims. (Cl. 253-94.)

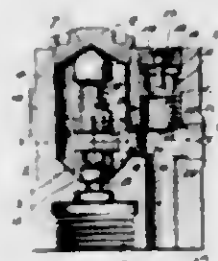


1. In combination, a pair of annular members which are subjected to different temperatures, one of said members having a portion of an annular socket of circular cross-section formed therein, an expansion ring connecting the members which has a circular enlargement on one extremity which enters the socket, a holding ring which forms the remainder of the socket, means for securing the holding ring to its supporting member, and means for uniting the opposite extremity of the expansion ring and the second member.

1,313,650. COMPOSITION FOR DETONATORS. CHARLES MILTON STINE, Chester, Pa., assignor, by means assignments, to E. I. du Pont de Nemours and Company, a Corporation of Delaware. Filed Dec. 13, 1913. Serial No. 806,416. 8 Claims. (Cl. 52-2.)

1. A detonator charge containing nitrated hemi-cellulose and a primer containing a primary detonating compound.

1,313,651. FUSE FOR PROJECTILES. FRANCIS A. SUTTON, Oakhurst, Ashford, England, assignor to Clarence C. Williams, acting chief of ordnance, U. S. Army, trustee. Filed Dec. 15, 1917. Serial No. 207,313. 6 Claims. (Cl. 102-39.)



1. In combination with a projectile, a fuse therefor adapted to function upon impact of the projectile head-on, base-on or laterally; a locking device for the fuse; a spring serving to withdraw said locking device; a latch of the set-back type for holding said locking device in position; and a ball normally holding the latch in operative relation with the locking device.

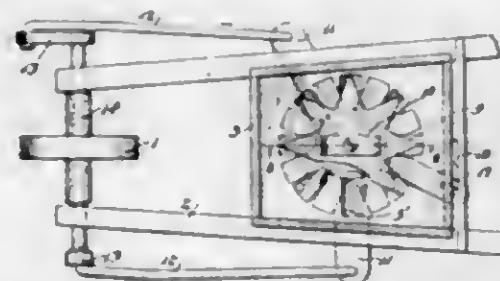
1,313,652. RADIATOR. CECIL HAMELIN TAYLOR, Detroit, Mich. Filed July 22, 1916. Serial No. 110,732. 3 Claims. (Cl. 257-125.)



1. In a radiator, an upper and a lower reservoir, a hollow spacer extending between said reservoirs and com-

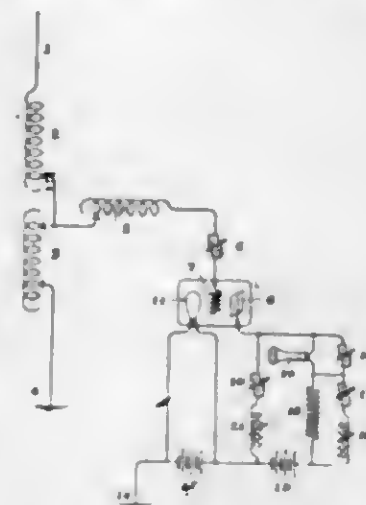
municating with their interiors, and a core between said reservoirs communicating with the interiors of the same independent of the spacer, and means for establishing a rate of flow of water through said spacer relative to that through the core, so that the spacer and core shall expand and contract proportionately owing to their change of temperature under the influence of the circulating water.

1,313,653. FERTILIZER-DISTRIBUTING APPARATUS. JAMES L. TOWNSEND, Manquin, Va. Filed Apr. 18, 1919. Serial No. 291,002. 3 Claims. (Cl. 221-120.)



1. Fertilizer distributing apparatus of the class described comprising a hopper, spaced closure plates arranged at the bottom of said hopper each having openings, the openings of one arranged in staggered relation to the openings of the other, distributing means arranged between the plates comprising a pair of agitating plates operable independently, and a crank connection for each of said plates to provide for oscillation thereof, to effect distribution of the material in the hopper.

1,313,654. RECEIVER OF ELECTRICAL OSCILLATIONS. ROY A. WRAGANT, Roselle Park, N. J., assignor to Marconi Wireless Telegraph Company of America, a Corporation of New Jersey. Filed Apr. 25, 1914. Serial No. 834,305. 16 Claims. (Cl. 250-20.)

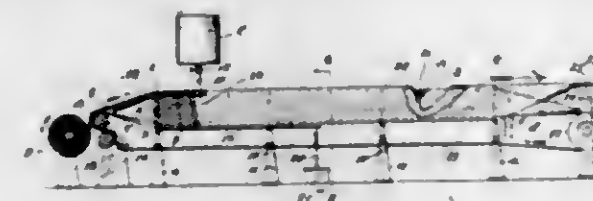


1. The method of receiving substantially continuous radio oscillations comprising impressing a sufficiently high electro-motive force on a local circuit of a vacuum receiver to produce a note in a telephone included in said local circuit, and thereafter adjusting a shunt to said telephone so as to eliminate said note while maintaining said electro-motive force.

1,313,655. PROCESS AND APPARATUS FOR PRODUCING SMOOTH-SURFACED COATING ON TEXTILE FABRICS. EMIL WEINHEIM, New York, N. Y. Filed May 3, 1919. Serial No. 294,437. 7 Claims. (Cl. 91-68.)

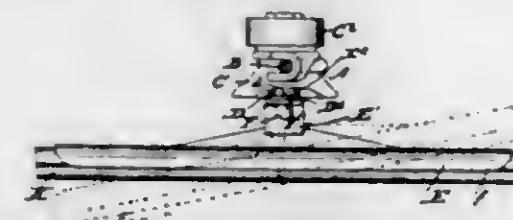
2. Producing a smooth surfaced coating on a textile fabric having a characteristic irregular surface by flowing the surface of said fabric in an inclined position with

suitable dope and maintaining said flowed surface free from contact with any solid until said coating is set.



7. Apparatus for producing a smooth surfaced coating on the irregular surface of a textile fabric comprising an elongated roof-like guide-table having opposite inclined sides symmetrical about a central, longitudinal ridge; an endless driven apron having a progressing portion conforming to and sliding along said guide-table for the purpose of conveying the strip of textile fabric to be coated; and means for feeding dope at the locality of said ridge.

1,313,656. TROLLEY-WIRE HANGER. BEAT A. WHITE, Detroit, Mich. Filed Oct. 21, 1916. Serial No. 126,813. 2 Claims. (Cl. 191-42.)



1. A trolley wire hanger, comprising a supporting member, having a lower flattened vertically disposed end provided at the top thereof with a horizontal shoulder, a tiltable trolley wire clamp provided with an ear having a horizontal flange normally located in spaced relation to the shoulder of the supporting member and adapted to engage the same to limit the tilting movement of the clamp, and a pin piercing the flattened end of the supporting member and the ear of the clamp and having a cut away portion engaged with the flange of the clamp whereby the pin is held against rotary movement in the ear of the clamp.

1,313,657. ANTISYPHILITIC ARSENICAL PREPARATION AND PROCESS OF MAKING THE SAME. JOHN M. WHITE, Meridian, Miss. Filed Dec. 12, 1918. Serial No. 266,465. 4 Claims. (Cl. 23-24.)

3. A process of making an antisyphilitic medicine which comprises reacting with benzyl alcohol on an alkali metal dimethyl arsenic in aqueous solution.

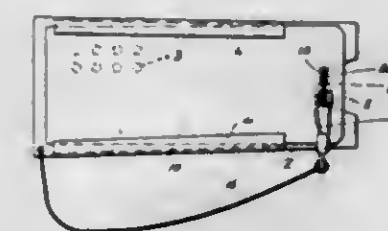
1,313,658. PROCESS OF PRODUCING WALL-COVERING AND PRODUCT THEREOF. ROLLIN IL WIGGIN, East Orange, N. J., assignor to H. B. Wiggin's Sons Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Sept. 9, 1915. Serial No. 49,682. 7 Claims. (Cl. 91-68.)

1. A fabric having a water-resisting face, and a water-absorbent back, the body of the fabric in between said face and back increasing in water-solubility from the face to the back.

3. A process of producing a fabric having a water-resisting surface, comprising impregnating said fabric with an aqueous solution of an albuminoid substance and with a soluble soap, and rendering said albuminoid substance insoluble with a solution of formaldehyde and said soap insoluble with an aqueous solution of a water-soluble metallic salt.

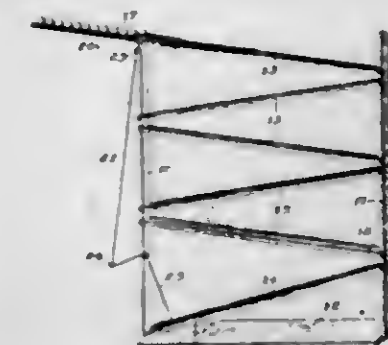
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1,313,659. LABEL-HOLDER. ENOS OSCAR WONDER, Altoona, Kans. Filed Mar. 25, 1919. Serial No. 284,888. 2 Claims. (Cl. 40-17.)



2. A label holder, comprising a plate provided at two opposite sides with retaining flanges for the label to slide in, said plate having also at one end a notch open at one end to permit the end portion of the label to be seized by hand, said plate having also a tongue projecting at a right angle at the closed end of the said notch and adapted to engage with a hole in the label and prevent it from sliding in the retaining flanges, and a docking device engaging with the said tongue and holding the label in engagement with it.

1,313,660. AMUSEMENT DEVICE. CARL F. ZIPP, Johnstown, Pa. Filed Feb. 28, 1919. Serial No. 279,669. 5 Claims. (Cl. 46-57.)



1. An amusement device of the character described comprising a rack including a plurality of rails alternately inclined in opposite directions, and each having a discharge opening at its lower end above the upper end of the next succeeding rail, the lowermost rail having a discharge recess and a lengthwise slot adjacent said recess, a ball holding rail adjoining the upper end of the upper rail and having a ball holding abutment, a rod, the upper end of which is movably mounted through the ball holding rail adjacent to the said abutment, and a bell crank, one end of the said rod, and the other free end of which is shiftable in the slot of the lower rail.

1,313,661. METHOD OF PRODUCING SYNTHETIC CAMPHOR. ROLAND L. ANDREAU, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1917. Serial No. 172,084. 11 Claims. (Cl. 23-24.)

1. The process which comprises producing camphor from isoborneol by a treatment thereof with nitric acid in the initial absence of lower oxides of nitrogen and in the presence of a substance comprising a halogen.

1,313,662. FOLDING TABLE. WASLEY J. ARMSTRONG, Buffalo, N. Y., assignor to McKinnon Dash Company, Buffalo, N. Y. Filed Sept. 28, 1916. Serial No. 122,046. 8 Claims. (Cl. 45-116.)

1. In a folding table, the combination of legs adapted to be folded together, arms hinged to said legs, parts on

said arms adapted to engage said legs to limit the movement of said arms relatively to said legs, and a metal table top having one end thereof bent to form a socket



in which one of said arms is pivotally secured and having the other end bent to form a hooked portion adapted to releasably engage another arm.

1,313,663. SHIP CONSTRUCTION. SHOZO ARAKAWA, Kanagawa-Ken, Japan. Filed Apr. 16, 1918. Serial No. 228,861. 2 Claims. (Cl. 114-79.)



1. In a ship, the combination with a double bottom having longitudinal bars extending substantially the entire length of the vessel and transverse intercostal short bars connecting the same, of longitudinal shell and inner bottom plating connected to said bars, and a side framing formed only of vertically extending bars having their lower ends connected to said double bottom in the way of the intercostal bars.

1,313,664. MATCHED-BOARD LAYER. RAY E. AYLVORTH and LAMBERT WIGGMA, Grand Rapids, Mich., assignors of one-third to Harvey E. Kilmer, Grand Rapids, Mich. Filed Feb. 19, 1919. Serial No. 277,956. 1 Claim. (Cl. 254-12.)

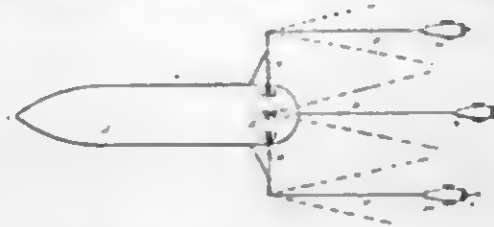


A board layer comprising a hollow elongated body, a shank secured within one end of said body, a head formed on said shank and having a pointed end and anvil face, a rack bar slidable in said body, means carried by said rack bar for engagement with a board, and means actuating the rack bar.

1,313,665. MEANS FOR DESTROYING VESSELS AND PROTECTING SHIPS FROM TORPEDO ATTACKS. LINDELL T. RATES, New York, N. Y. Filed Aug. 3, 1917. Serial No. 184,327. 5 Claims. (Cl. 102-3.)

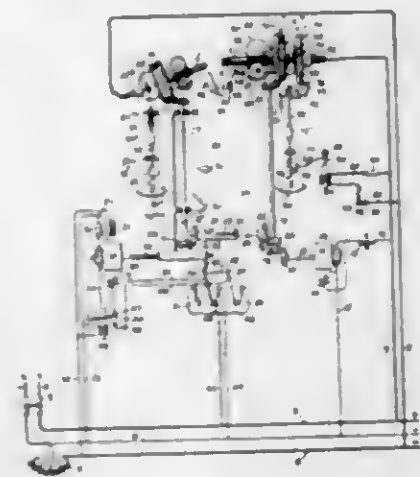
7. In combination with a ship or vessel, a plurality of tow-lines extending therefrom; a mine secured to each

line; and means carried by each mine to cause the mine to move laterally through the water with reference to



the axis of the ship, first in one direction and then in another, and also to cause it to move up and down while moving laterally.

1,313,666. SEARCH-LIGHT ARC-LAMP. HEINRICH BECK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 15, 1916. Serial No. 103,881. 22 Claims. (Cl. 170-66.)



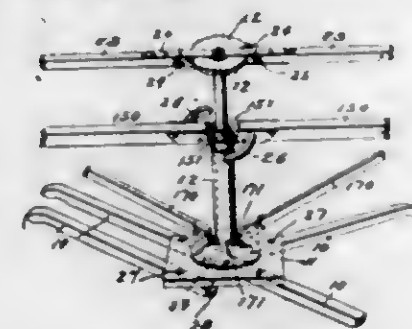
18. In a searchlight, the combination with an electrode and means for rotating the same about its axis, a device for feeding the electrode actuated at periods controlled by the speed of rotation of the electrode, and means for adjusting the rate of feed per period.

1,313,667. CULVERT CONSTRUCTION. LEONHARDT W. BENZ, New Orleans, La. Filed Mar. 13, 1917. Serial No. 154,530. 3 Claims. (Cl. 137-75.)



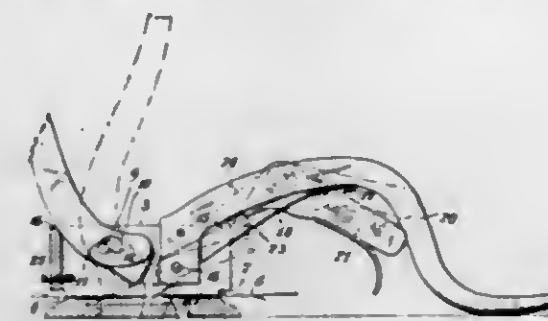
1. A culvert comprising a plurality of metal sections varying in length and having overlapping association, the sections being provided with opposite series of slots adjacent to the side edges thereof and the shorter sections having similar slots in the opposite side edges thereof less in number than the slots of the longer sections, the distance between each pair of slots in the respective sections being uniform so that a registration of any two of the slots in the said sections may be effected, staple fastening devices having opposite terminal wing portions with slots therein disposed exactly opposite each other to removably engage any of the coinciding slots of the respective sections, and a wedge pin removably inserted in the two slotted extremities of each fastening and having an inner straight edge bearing against the adjacent portion of the outer section to tighten the joint formed between the sections.

1,313,668. MERRY-GO-ROUND. ALLEN F. BOURDON and LEO R. BOURDON, Woodstock, Vt., assignors to Woodstock Manufacturing Company, Woodstock, Vt., a Corporation. Filed Oct. 16, 1916. Serial No. 125,930. 3 Claims. (Cl. 46-27.)



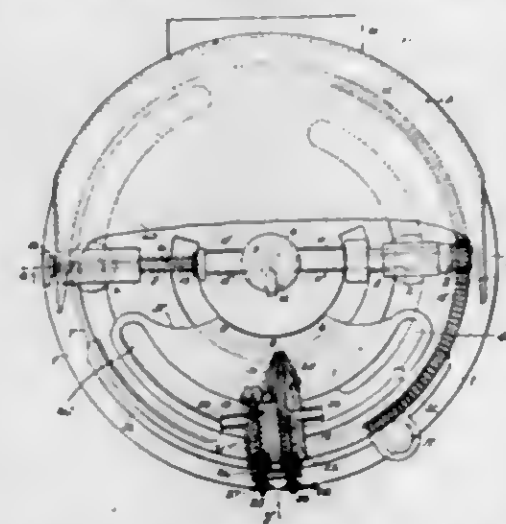
2. In a device of the class described, the combination of a supporting base, a plurality of seats mounted for independent rotation horizontally about a common vertical axis, and means for propelling a seat independently of adjacent seats in the rotation thereof about said common axis, whereby the distance apart of the seats may vary in their movement around such axis.

1,313,669. STRAP-TIGHTENING TOOL. EDWARD J. BAOOKS, East Orange, N. J. Filed Oct. 23, 1918. Serial No. 259,388. 5 Claims. (Cl. 254-51.)



1. A strap tightening tool comprising: a support for the ends of a strap to be tightened, a carrier, an oscillatory tightening member, and a shifting fulcrum connection between the carrier and member comprising a pin and a slot that automatically shift with respect to each other at the end of a stroke of the tightening member in either direction, the tightening member engaging the strap during its feeding stroke and disengaging the strap during its return stroke.

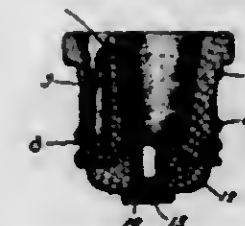
1,313,670. PAINTING-MACHINE. CHARLES LAURENCE BROADICK, Wood Green, London, England. Filed Feb. 1, 1918. Serial No. 214,932. 24 Claims. (Cl. 91-44.)



1. In a painting machine, means for holding and rotating an article to be painted, a sprayer, and means for moving the sprayer along curved and radial paths simul-

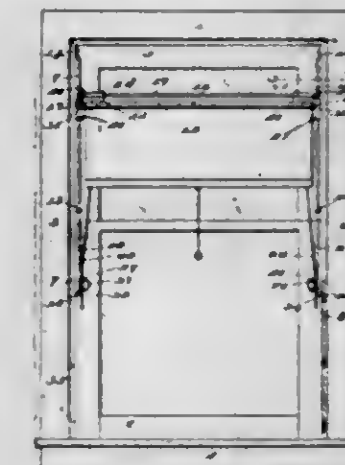
taneously such that the resultant path of movement of the sprayer is similar to the contour of the article to be painted.

1,313,671. FUSE-PLUG. FRANK CAPELLO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 20, 1917. Serial No. 192,401. 7 Claims. (Cl. 175-277.)



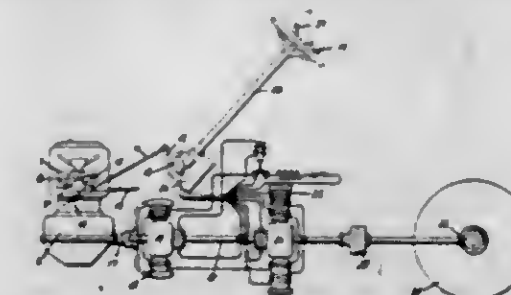
1. In a fuse plug, the combination with an insulating base having an annular conducting member and a central contact member one of which members is provided with a cavity, of a fusible element entering said cavity, and a slug of conducting material arranged in said cavity and deformed to press said fusible element into conducting relation with one of said members.

1,313,672. WINDOW-SHADE MOUNTING. ALBERT H. CARRIER, Asheville, N. C., assignor of one-half to E. W. Grove, St. Louis, Mo. Filed Nov. 6, 1916. Serial No. 129,878. 7 Claims. (Cl. 156-27.)



1. In a window shade device of the class specified, a horizontal cross rod, and a pair of vertically disposed side members, each having its upper portion coiled around and shiftable laterally on the cross rod, each side member also having a lower grip and an outwardly extending catch member, parts of the device also being provided with means for engagement by the ends of a shade roller, the cross rod and side members being unitarily vertically shiftable to dispose a window shade at different elevations relatively to a window frame and sash.

1,313,673. POWER-GENERATING SYSTEM. FRANK E. CASE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1917. Serial No. 175,319. 9 Claims. (Cl. 290-15.)



4. In a power generating system, the combination of an electric generator having a series field winding, means

providing initial excitation for said winding, and means controlled by the current generated by the generator for cutting off said initial excitation.

- 1,313,674. ATTACHED-HANDLE CLOSURE-DISK. HARRY L. COMPTON, Washington, D. C., assignor to American Dairy Supply Company, Washington, D. C., a Corporation of Maine. Filed Mar. 16, 1918. Serial No. 222,844. 5 Claims. (Cl. 215-14.)



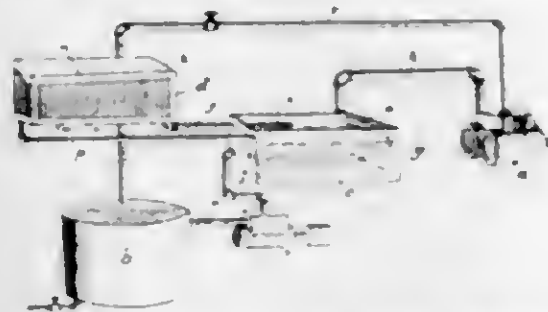
1. An attached-handle closure disk consisting of a single flat paper-material disk at its top side having a recess formed by a displaced portion of the disk, said recess opening through the edge of the disk and extending therefrom inwardly of the disk, and a straight flexible free-end handle strip of relatively tough material pressed into the previously completed recess and onto the flat floor thereof and clipped to said floor, said separate strip being approximately flush and parallel with the top surface of the disk to permit face use of the disk in capping machinery and to permit ready access to and bending up of the free end of the strip from the recess to form a pull handle.

- 1,313,675. WINDOW-FRAME. HENRY P. DAVIS, New York, N. Y. Filed Mar. 15, 1918. Serial No. 222,706. 6 Claims. (Cl. 21-220.)



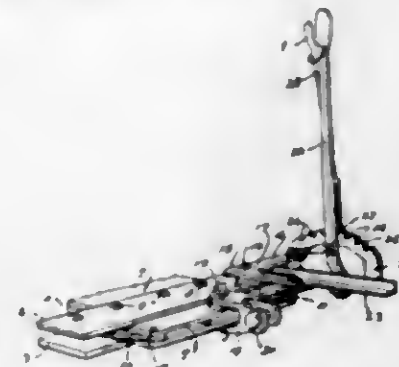
6. A window frame comprising a plurality of relatively separable sections adapted at one side to receive the edge of a transparent medium therebetween, flanges on the respective sections at the opposite sides thereof between which the object with which the frame is arranged for connection is adapted to be received, and a spring extending over the joint between the sections and co-acting with the flanges to hold the sections in clamped relation.

- 1,313,676. WATER AND STEAM SYSTEM FOR STEAM-DRIVEN AUTOMOBILES. FRANCIS I. DU PONT, Wilmington, Del. Filed Jan. 18, 1919. Serial No. 305,017. 3 Claims. (Cl. 60-95.)



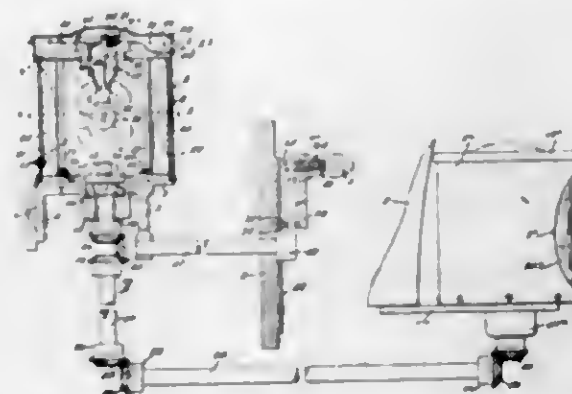
2. In a water and steam system for steam-driven automobiles, the combination with the engine, of a tank for the water supply, a water supply heater in the water supply tank, an exhaust pipe connection from the engine to the water supply heater, a condenser, and two outlets from the water supply heater, one for steam to the condenser and the other for condensed water to the upper part of the water supply tank.

- 1,313,677. TRACTOR ATTACHMENT. LEWIS G. DAVIS, Cattaraugus, N. Y. Filed Apr. 24, 1919. Serial No. 292,499. 6 Claims. (Cl. 213-67.)



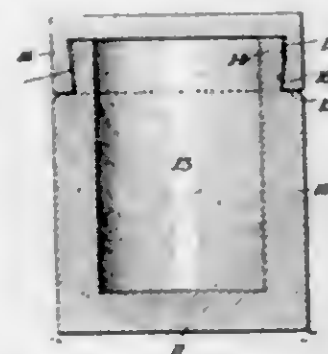
1. The combination, with a tractor, of an attachment comprising a stationary member, rigidly connected to the tractor, a movable member, having a free swinging movement, and means for pivotally connecting the stationary and movable members so that they will assume a normal, substantially parallel relation to each other, the longitudinal planes of the members lying at substantially right angles to the line of travel of the tractor.

- 1,313,678. SIGNAL. HENRY J. EAGLE, Terre Haute, Ind. Filed July 16, 1918. Serial No. 245,200. 4 Claims. (Cl. 40-77.)



1. In a device of the class described, a fixed casing; a shaft journaled in the casing; a tubular signal carried by the shaft within the casing and including a removable cover having an opening; a removable retainer in the casing and having lamp supporting means extended through the opening; and an anti-friction device carried by the retainer and engaging the cover.

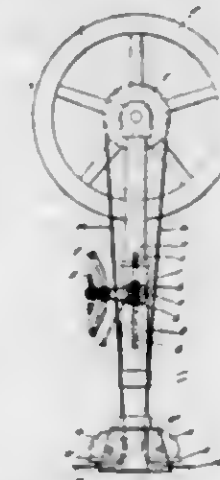
- 1,313,679. RECEPTACLE. WEBSTER C. ESTES, New York, N. Y., assignor to E. H. Estes & Sons, New York, N. Y., a Corporation of Maine. Filed Mar. 13, 1919. Serial No. 282,477. 4 Claims. (Cl. 217-56.)



1. A receptacle comprising a body member and a cap therefor, one of the said members having a circumferential

tionally mortised portion adjacent one end thereof and the other member having a continuously tenoned portion adapted to snap into engagement with the said circumferentially mortised portion to normally maintain the body member and cap in associated relationship and also to readily snap out of engagement with the said circumferentially mortised portion to separate the cap from the said body member.

- 1,313,680. CONTROLLING DEVICE FOR AEROPLANES. CHARLES RICHARD FAIRBY, Hayes, England. Filed Apr. 23, 1919. Serial No. 292,164. 1 Claim. (Cl. 244-29.)



In an aeroplane, a telescopic control-pillar having a movable section and a fixed section, said movable section being disposed within said fixed section, a manually-operable drum mounted to rotate upon said movable section, a cable connected with the wings of the aeroplane and wound upon said drum to vary the cambers of both wings simultaneously but in reverse directions respectively, a rack formed on said movable section, bearings on said fixed section, a spindle mounted to rotate in said bearings about a substantially horizontal axis extending transversely of the aeroplane, a portion of said spindle being of rectangular cross section and a portion being screw-threaded, a hand wheel slidable along the portion of rectangular cross section of said spindle, a second hand wheel in threaded engagement with the screw threaded portion of said spindle to force the first mentioned hand wheel against one of said bearings, and a pinion secured to said spindle, said pinion being in mesh with said rack, to vary effective length of said control-pillar.

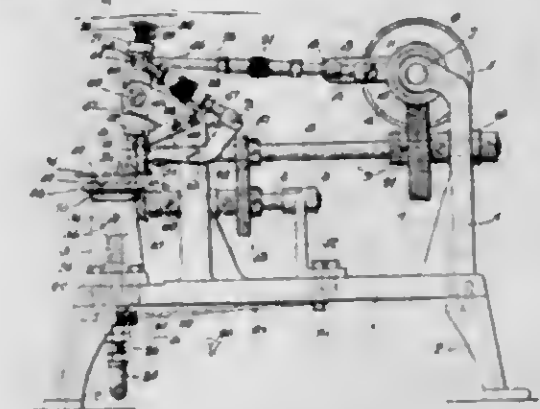
- 1,313,681. CONTROLLING DEVICE FOR AEROPLANES. CHARLES RICHARD FAIRBY, Hayes, England. Filed Apr. 23, 1919. Serial No. 292,166. 1 Claim. (Cl. 244-29.)



In an aeroplane having wings each of which has a trailing marginal portion whereof the inclination is vari-

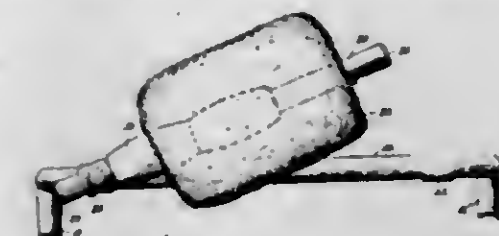
able relatively to the main portion of the wing, the combination of a telescopic control-pillar comprising a plurality of sections one of which is fixed and another of which is movable for varying the effective length of the pillar, a manually-rotatable drum carried by said movable section, a cable wound on and extending from opposite sides of said drum and attached by its opposite ends to the trailing marginal portions of the respective wings for varying the cambers of both wings simultaneously but in reverse directions respectively, a fixed nut carried by the fixed section of the pillar, a bearing on the movable section of the pillar, a screwed rod rotatable in said bearing but held against endwise movement therethrough and in threaded engagement with said nut, a bevel wheel fast on said screwed rod, a spindle passing coaxially through and rotatable relatively to said drum, a bevel wheel fast on said spindle and in mesh with the first-mentioned bevel wheel, and means for rotating said spindle for moving the movable section of the pillar to vary the cambers of both wings simultaneously in the same direction.

- 1,313,682. MACHINE FOR PREPARING SOLES. FRANK C. FITZ, Cincinnati, Ohio, assignor, by means assignment, to Armstrong Cork Company, a Corporation of Pennsylvania. Filed Sept. 26, 1916. Serial No. 122,213. 5 Claims. (Cl. 12-20.)



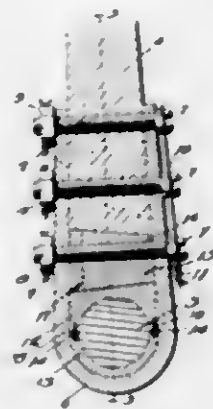
4. A machine of the class described, comprising feeding means and a plurality of beating devices, said devices consisting in pivoted hammers, means to actuate said hammers by oscillating them upon their respective pivots, the feeding means automatically holding and moving an insole adjacent the hammers to beat reinforcing material about both sides of an insole rib and on the insole itself, in combination with an adjustable guide for the insole and a stationary trimming knife.

- 1,313,683. BABY-CARRIAGE OR PERAMBULATOR. JOSEPH GABANI, Newark, N. J. Filed Nov. 21, 1918. Serial No. 263,526. 4 Claims. (Cl. 280-49.)



1. In a baby carriage or like conveyance, a handle-bar structure including a fixed element and a rotatable element each provided with a transversely extending holding head, and a handle-bar adapted to span the distance between the holding heads, connected at one end with the holding head of the rotatable element so as to swing with the same as upon an axis, said handle-bar at its opposite end being engageable in the holding head of the fixed element, as and for the purpose specified.

1,313,684. CONNECTING-ROD. JOSEPH GASDNER, Tucumcari, N. Mex. Filed Mar. 20, 1918. Serial No. 223,544. 2 Claims. (Cl. 74-17.)



1. A connecting rod for connecting pistons to crank shafts comprising a rod body, a yoke comprising a body embracing the crank shaft and arms extending on opposite sides of the rod, said arms and rod body having registering openings, and the openings in one arm being threaded, a sectional bearing between the crank shaft and the yoke, the end of the rod adjacent to the crank shaft and the adjacent face of the adjacent bearing being beveled in opposite directions, a wedge fitting between the beveled faces, said wedge having a threaded opening registering with the adjacent openings of the arms of the yoke, a bolt threaded through the wedge and engaging the yoke openings, the heads of the bolts having registering openings for receiving a wire to prevent turning thereof, a wire engaging the openings, a nut engaging each bolt, and a cotter pin connecting each nut to the bolt.

1,313,685. APPARATUS FOR REPRODUCING THE MOTIONS OF THE UPPER PART OF VESSELS IN MOTION. WALTER RALPH GILBERT, London, England. Filed Feb. 14, 1919. Serial No. 277,122. 9 Claims. (Cl. 59-37.)

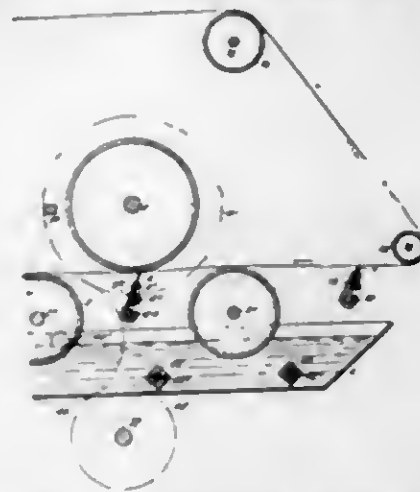


1. An apparatus for reproducing the movements of the upper portion of a vessel in motion, comprising a fixed support, a platform mounted to oscillate on said support, means for imparting rising and falling movements to the edges of said platform, a main frame, said main frame being revolvable about said support, connections between said main frame and said platform so that the platform revolves with said main frame, means for imparting side-wise movement to the platform to reproduce a "yawing" movement, and gearing between said main frame and said support so that the platform may be turned to reproduce a "trailing" movement.

1,313,686. MACHINE FOR FILLING OR LOADING FABRICS. JOHN J. HAMERSON, London, England. Filed Apr. 24, 1919. Serial No. 292,487. 7 Claims. (Cl. 91-33.)

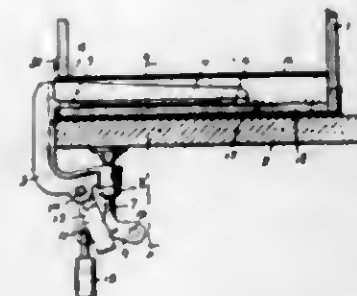
2. In a filling loading or impregnating machine of the class specified, a vertically adjustable top squeezing roll, a pair of horizontally adjustable bottom rolls arranged in tandem, a filling containing tank having the bottom rolls

operating therein to convey the filling to the fabric to be treated, and a movable doctor knife below the top roll and



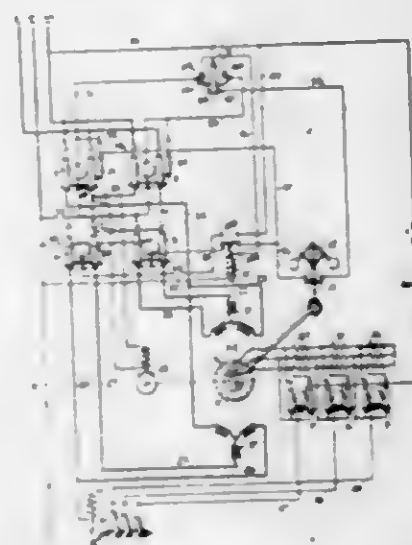
between the bottom rolls and having means for shifting the blade thereof into and away from an operative position relatively to the fabric and top roll.

1,313,687. TRUNK-FASTENING. HENRY HELLWAG, Milwaukee, Wis., assignor of one-half to Louis Schleisinger, Milwaukee, Wis. Filed Oct. 31, 1917. Serial No. 199,415. 1 Claim. (Cl. 224-29.)



The combination with a trunk provided with an aperture and a tube on the inside of the trunk in line with said aperture, the inner end of said tube being closed, of a clamp provided with an arm adapted to extend through said aperture into the trunk and also provided with a clamping member, and means for locking the clamp to prevent the unauthorized removal of the trunk.

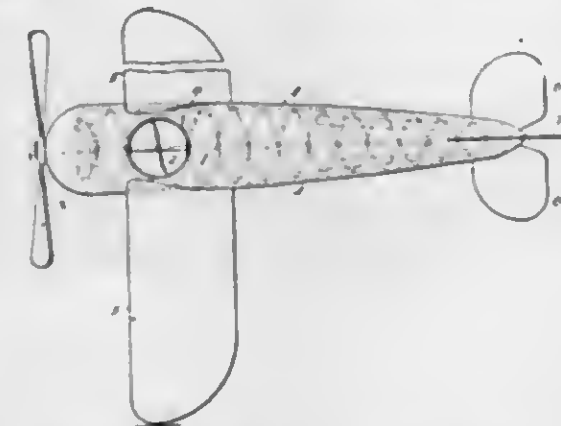
1,313,688. MOTOR-CONTROLLER. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 15, 1916. Serial No. 91,390. 15 Claims. (Cl. 172-179.)



2. In a controller for electric motors having separate slow speed and high speed windings, in combination, sep-

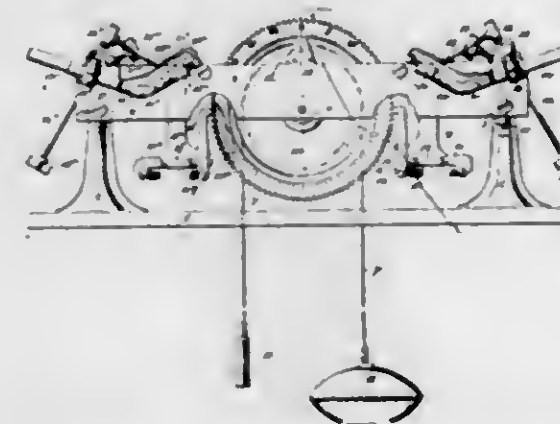
arate control switches for the motor windings and common reversing means for the motor windings, said reversing means and said switches cooperating to connect the motor windings in circuit selectively for operation of the motor at selective speeds in either direction, said reversing means upon actuation tending to effect immediate actuation of the switch controlling the slow speed winding of the motor.

1,313,689. FUSELAGE. JOHN HENDERSON, Chicago, Ill. Filed Oct. 1, 1917. Serial No. 194,149. 2 Claims. (Cl. 244-30.)



1. A fuselage for aeroplanes, comprising a metal frame-work having longitudinal frame members, and a continuous transverse member extending helically from end to end and the spirals thereof engaging each of said longitudinal members and being welded at the intersections, thereby forming an integral frame structure.

1,313,690. SENDER FOR WATER-STAGE RECORDERS. WENDELL HEAS, Jr., Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed Feb. 18, 1918. Serial No. 217,914. 8 Claims. (Cl. 177-331.)

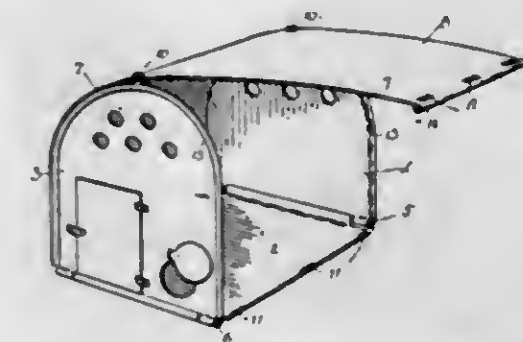


2. In a device of the character specified, the combination of two toothed actuating wheels; float-controlled means serving to oscillate said wheels; a circuit-closer associated with each wheel; and a pawl-actuated mechanism interposed between each wheel and its circuit-closer and actuated directly by the toothed wheel for operating the latter circuit closer when the wheel moves a predetermined distance.

1,313,691. COOP. CALVIN D. HIXSON, Hiawatha, Kan. Filed Mar. 27, 1919. Serial No. 285,419. 1 Claim. (Cl. 119-19.)

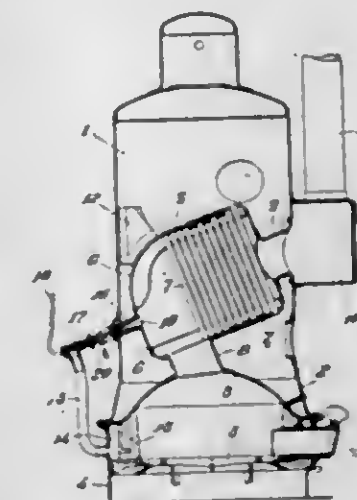
In a sheet metal coop, a rectangular base, two end pieces hinged to said base, a bridging and connecting member hinged to said base at right angles to the hinges of said end pieces, said member being normally flat and bendable upwardly, transversely and downwardly over said end pieces to form the side walls and top wall of the

coop, said end pieces having central vertical pins and said member having lateral slots engaging said pins for



guiding and holding purposes, the free end of said member having spring snap engagement with the adjacent side of said base.

1,313,692. VERTICAL CYLINDRICAL WATER-TUBE BOILER. HISOBUKI HONCHU, Taiwan, Japan. Filed Mar. 13, 1917. Serial No. 154,643. 3 Claims. (Cl. 122-140.)

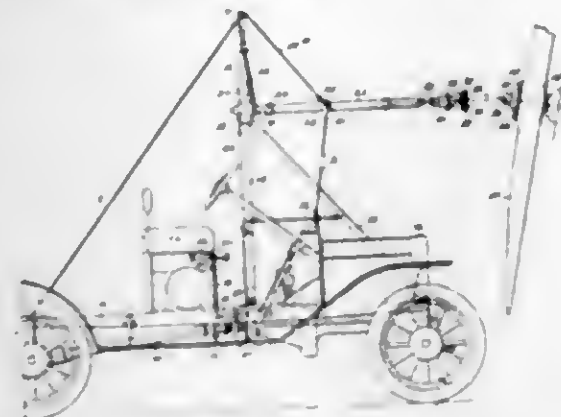


1. A vertical cylindrical water tube boiler, comprising a furnace shell, a boiler shell having a concave end plate mounted on the furnace shell and removably supported and forming an annular space between the circular wall of the grate and the furnace shell, a broad cylindrical combustion chamber within the boiler shell in a slightly inclined position, a number of vertical water tubes slightly inclined and extending through the upper and lower plates of the combustion chamber and arranged to leave a suitable space in the rear portion thereof and open to the central part of the end plate by an inclined flue, a smoke tube communicating with the front face of the combustion chamber and communicating with a chimney, a pipe leading from the annular space and ejecting hot air into the rear space of the combustion chamber by an injector and said injector having a flat turnable nozzle normally held horizontal for supplying a thin and powerful current of hot air uniformly to the flame ascending from the flue, and adapted to clean the water tubes when turned in a vertical position.

1,313,693. MEANS FOR STARTING THE ENGINES OF AEROPLANES. BENTFIELD CHARLES HUCKE, London, England, assignor to The Aircraft Manufacturing Company Limited, Westminster, London, England. Filed Sept. 20, 1918. Serial No. 255,873. 13 Claims. (Cl. 244-1.)

1. The combination with a motor car, of a power-driven device for starting the engines of aeroplanes, comprising a substantially horizontal shaft capable of angular dis-

placement about its point of support on the car and adapted at one end for being geared to the engine-shaft



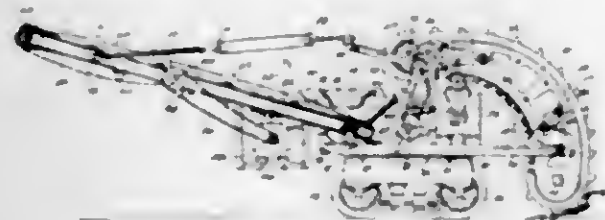
of the car and at the other end for being detachably clutched to the hub of the aeroplane propeller, substantially as set forth.

1,313,694. GAS-BURNER. JOHN HUNTER, Barrow-in-Furness, England. Filed Aug. 6, 1918. Serial No. 248,575. 2 Claims. (Cl. 158-118.)



1. A gas burner composed of a burner tube at the bottom of which is a chamber having perforations for the admission of air and a contracted axial aperture or nozzle having a flaring entrance the inclination of which is such that the angle or shoulder formed at the junction of the flaring mouth with the said nozzle is only a little more than forty-five degrees to the axis of the burner, and a gas supply nozzle which projects up into the flaring entrance and is chamfered exteriorly at the top so that the angle of the chamfer substantially corresponds to the angle of the flaring entrance but leaves a space between of no considerable capacity, whereby gas emerging from the nozzle draws in air through the perforations in the chamber and causes it to be drawn laterally over the jet of gas by which a more thorough mixing of the gas and air is obtained.

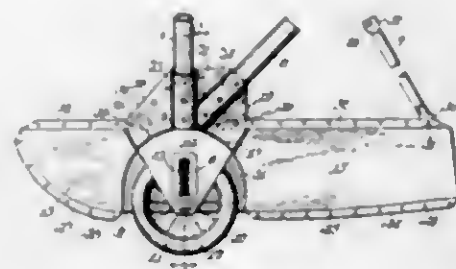
1,313,695. LOADING-MACHINE. GEORGE W. JACKSON, Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 26, 1918. Serial No. 246,839. 8 Claims. (Cl. 37-24.)



1. In a loading machine, the combination of a boom supporting superstructure supported on a turn-table, a

turn-table, a boom pivoted to the superstructure and carrying an endless series of pick-up devices, a take-off belt frame connected to the turn-table by a vertical pivot eccentric to the axis of the turntable and pivoted also to swing vertically, and means not higher than the discharge end of the boom for supporting the free end of the take-off belt frame, substantially as shown.

1,313,696. LANDING-GEAR FOR FLYING-MACHINES. RALPH C. JOHNSON, Chicago, Ill. Filed Dec. 11, 1918. Serial No. 266,195. 2 Claims. (Cl. 244-2.)



1. A landing gear for flying machines comprising a wheel for land use, supporting structure for said wheel, a pair of pontoon sections formed to fit together and constitute a single pontoon, each section having its inner wall formed with a recess, said recesses facing each other and constituting a partial housing for said wheel, means for securing said sections readily removably to each other, and means for securing the pontoon as a whole readily removably to said supporting structure.

1,313,697. WOMAN'S GARMENT. LOESSER KALINA, New York, N. Y. Filed Dec. 17, 1918. Serial No. 267,131. 7 Claims. (Cl. 2-81.)

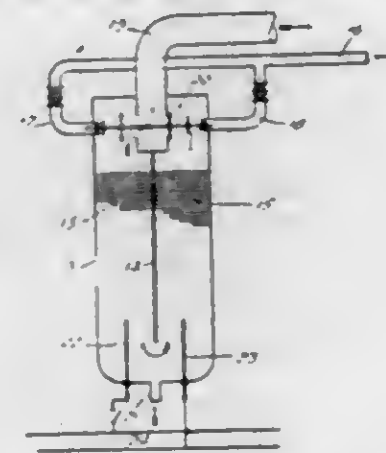


5. In a garment, an outer dress having a skirt and a waist provided with sleeves, a lining, coacting perforate bands at the waist line of the said dress and lining, lacing strings detachably connecting the said bands with each other, co-acting perforate bands at the armholes of the said sleeves and lining and lacing strings detachably connecting the said armhole bands with each other.

1,313,698. METHOD OF GENERATING PRESSURE. ALEXANDER T. KASLEY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 31, 1917. Serial No. 158,868. 14 Claims. (Cl. 60-46.)

1. The method of generating fluid pressure which consists in initially heating a carbonaceous heat storing and transmitting material in a closed chamber in which the pressure is to be generated, in delivering an oxygen bear-

ing liquid and fuel to said chamber and in contact with said material, storing within said chamber the vapors and



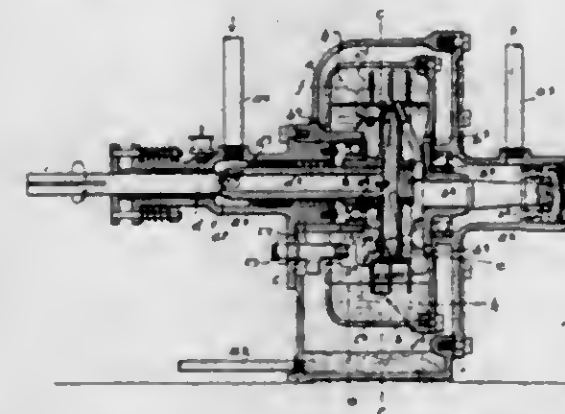
gases evolved by the combustion taking place within the chamber and subjecting the heat storing material to the heat of combustion within said chamber.

1,313,699. ADJUSTABLE PUNCH-HOLDER. ENOCH KAVANAUGH, Des Moines, Iowa, assignor of one-fourth to H. P. Cramblet and one-fourth to H. H. Gerard, Des Moines, Iowa. Filed Mar. 6, 1917. Serial No. 152,485. 1 Claim. (Cl. 164-93.)



A punch holder formed with a plurality of bores and also formed with a groove intersecting said bores, punches removably and replaceably mounted in said bores, a plate slidably mounted in said groove and adapted to extend across said bores, said plate being formed with a plurality of holes adapted to register selectively with said bores, whereby different combinations of said punches may be placed in inoperative position and the remaining punch or punches be placed in operative position, said plate being formed with a plurality of notches, and a spring normally bearing upon said plate, carried by said punch holder and adapted to be engaged selectively in one or another of said notches, whereby sliding movement of the plate positively is prevented.

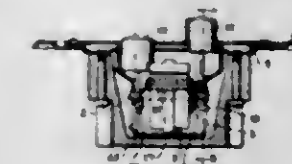
1,313,700. PUMP. CHARLES B. KING, Detroit, Mich. Filed Dec. 16, 1916. Serial No. 137,280. 7 Claims. (Cl. 230-22.)



1. In an apparatus of the kind described, the combination of a revoluble part having a cavity therein opening

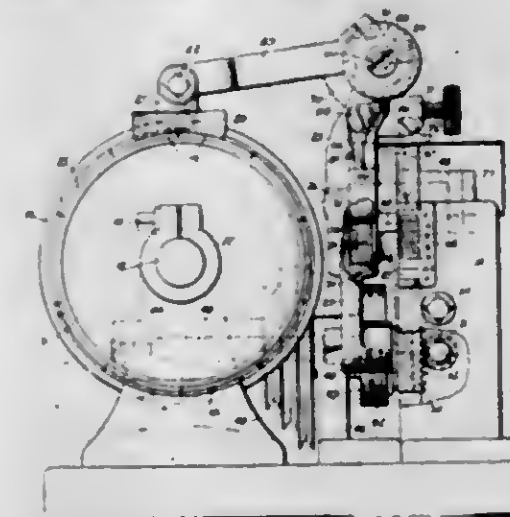
at the periphery of said part, a revoluble casing inclosing said revoluble part and having its axis eccentric thereto, and adapted to hold an annular body of water at its outer wall, a body of water in said casing, said cavity being provided with an intake passage and a discharge passage, said passages being so arranged that the one passage shall be sealed by the water when the other passage is within the surface of the water.

1,313,701. ELECTRIC SWITCH. CHARLES J. KLEIN, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed July 3, 1914. Serial No. 848,754. 8 Claims. (Cl. 175-203.)



1. In an electric flush switch, in combination, a pair of movable operating members, a contact member pivoted at right angles to the direction of movement of said operating members, an energy storing connection between said contact member and said operating members, restraining means for said contact member and means on said contact member to be positively actuated by said operating members for overcoming the restraint of said restraining means.

1,313,702. LENS-GRINDING MACHINE. HUGO KATZGER, New York, N. Y. Filed Feb. 18, 1919. Serial No. 277,842. 7 Claims. (Cl. 51-3.)

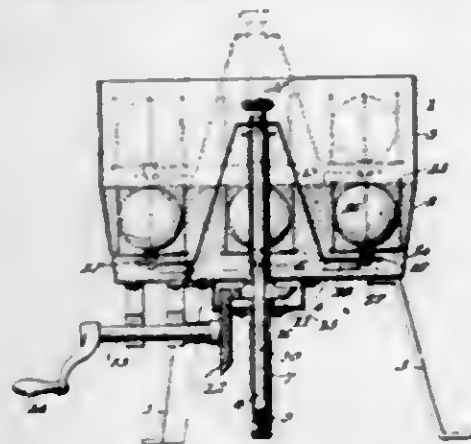


2. In a grinding machine for grinding toric lenses, a revoluble lens carrying wheel adapted to carry on its peripheral face a row of lenses to be ground, a non-rotatable grinding tool arranged in operative relation with the top of the said wheel to grind the said lenses, an arm on which the said tool is pivoted, a lever on which the said arm is mounted to swing up and down, the said lever having a large socket, a slide mounted to slide up and down and provided with a bearing engaged by the said socket for the said lever to rock in a plane at a right angle to the plane of the said lens carrying wheel, and a rack and pinion mechanism connected with the said slide to adjust the latter up or down.

1,313,703. MACHINE FOR WASHING GOLF-BALLS AND OTHER ARTICLES. GEORGE H. LAMBERT, Asheville, N. C. Filed Dec. 16, 1918. Serial No. 266,893. 7 Claims. (Cl. 141-7.)

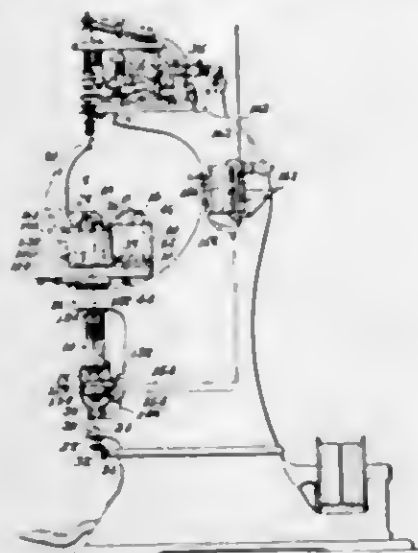
1. A machine for washing golf balls and other articles, comprising a container having a tapered bottom portion,

a rotary shaft arranged in said container, a ball carrier adapted to turn with said shaft, and ball holders having an axial connection with said carrier and moving with it



and contacting with the wall of the tapered bottom portion and thereby having also independent rotation on said carrier.

1,313,704. WAX-THREAD SEWING-MACHINE. BENJAMIN S. LEE, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 3, 1915. Serial No. 25,471. 9 Claims. (Cl. 112-20.)



1. A wax thread sewing machine having, in combination, stitch forming device, a support for the wax receptacle, a wax receptacle slidable on said support, an electrical heating device for the wax receptacle, and circuit connections therefor comprising a plug member carried by said support, and a cooperating plug member carried by the wax receptacle arranged to be engaged with and disengaged from the plug member carried by said support by the sliding of the wax receptacle along the support.

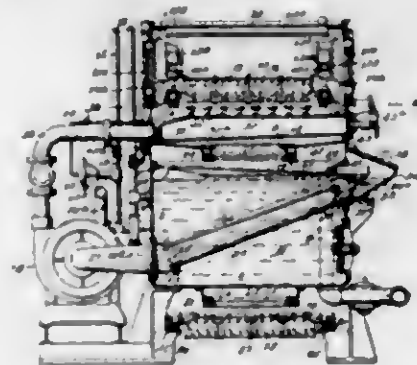
1,313,705. REED. WILLIAM G. LERCH, Akron, Ohio, assignor to Miller Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 19, 1918. Serial No. 245,717. 1 Claim. (Cl. 46-37.)



In combination, a tube having an abrupt shoulder spaced apart from its end and a substantially cup-shaped thin rubber member normally of less diameter than the end of said tube and of less depth than the distance between

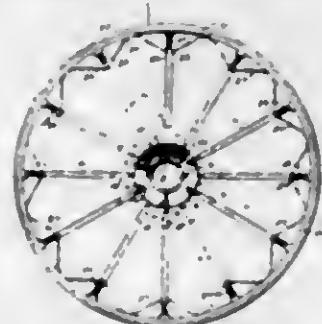
the end wall of the tube and the shoulder, the end wall of said member being provided with spaced apart slits extending in parallel relation across the central portion of the same and the edge of the open end of the member being provided with a bead adapted by stretching the cup shaped member to be forced behind said shoulder, whereby the end of the member is stretched and held permanently in stretched condition so that the slits in the end thereof are opened and the intact part of the wall between the slits are placed under the tension requisite to cause it to emit sound due to its vibration under the action of air forced through the tube.

1,313,706. BOTTLE-WASHER. CHARLES H. LOEW and JOHN R. GRETTER, Cleveland, Ohio, assignors to The Loew Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 18, 1912. Serial No. 721,197. 35 Claims. (Cl. 141-7.)



1. In an apparatus of the character set forth, the combination of a track, an endless bottle conveyor having a pair of side chains mounted on the track, said chains having ratchet teeth, means for supplying liquid to bottles on said conveyor, a pair of pawl carriers reciprocally mounted above the conveyor and extending along opposite sides thereof, pawls carried thereby adapted to engage the ratchet teeth on the chains by gravity and to slide along said chains, and means for reciprocating said pawl carriers.

1,313,707. RESILIENT WHEEL. THOMAS LOANER McKENNA, Linden, Colo. Filed Mar. 12, 1919. Serial No. 282,177. 6 Claims. (Cl. 152-28.)

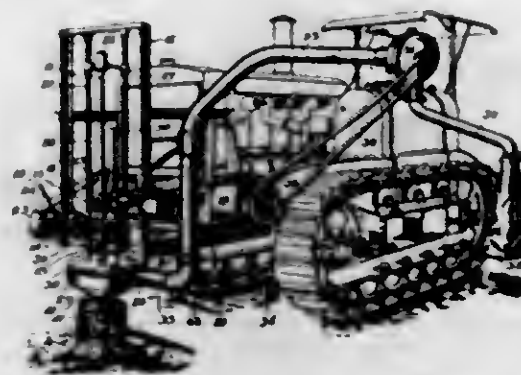


1. In a resilient wheel, the combination with a hub member provided with a channel, of a plurality of coil springs secured in the channel concentrically with the hub, said springs having laterally extending spring arms, a rim, and spokes connecting the rim and the spring arms.

1,313,708. STUMP-HARVESTER. EDWIN A. MCKAY and GEORGE D. MOORE, New Orleans, La. Filed Sept. 21, 1917. Serial No. 192,566. Renewed July 9, 1919. Serial No. 309,766. 15 Claims. (Cl. 144-2.)

1. In a stump harvester, a dirigible power plant, a boring tool comprising a cutter head having a recess opposite its cutting surface, a housing forming with the recess a chamber to receive the cuttings and means to dis-

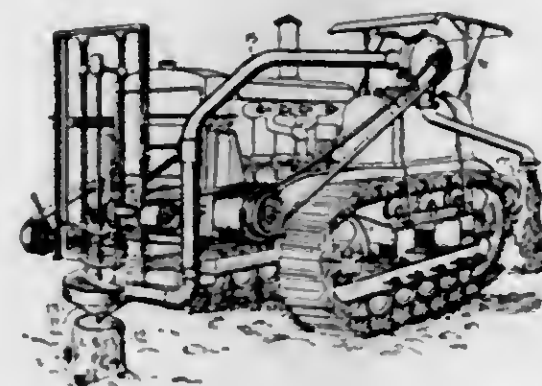
charge the cuttings from the housing to a pre-determined depository.



8. In a stump harvester, a power carrying vehicle, a boring tool mounted upon the vehicle comprising a diaphragm cutter head having its cutting element upon the exterior, a housing embracing the head and forming with the head a chamber to receive the cuttings, means to discharge the cuttings from the housing to a pre-determined depository and means to actuate the boring tool from the power.

15. In a stump harvester, a power carrying vehicle, a cutting tool carried by and driven from the power comprising a cutter head having a recess opposite its cutting surface, a housing forming with the recess a chamber to receive the cuttings, an exhaust mechanism, a conduit leading from the cutting tool to the exhaust mechanism and provided with means for compensating for the movement of the cutting tool, means to drive the exhaust mechanism and means to discharge the cuttings from the exhaust mechanism.

1,313,709. METHOD OF HARVESTING STUMPS. EDWIN A. MCKAY and GEORGE D. MOORE, New Orleans, La. Filed Sept. 21, 1917. Serial No. 192,567. Renewed July 9, 1919. Serial No. 309,767. 6 Claims. (Cl. 144-309.)



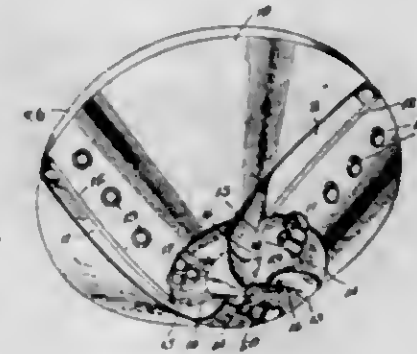
1. The process of harvesting stumps which comprises, providing a hollow conical cutter head having knives arranged to deliver inwardly into the hollow of the head and of a diameter approximately as large as least as the diameter to be harvested and applying said head to the upper end of a stump and forcing it downwardly therein while rotating the head.

4. The process of harvesting stumps which comprises, providing a hollow cutter head having knives upon its exterior arranged to deliver cuttings inwardly into the hollow of the head and of a diameter approximately as large as the diameter to be harvested and applying said head to the upper end of a stump and forcing it downwardly therein while rotating the head.

1,313,710. CUTTER-HEAD. EDWIN A. MCKAY, New Orleans, La. Filed Oct. 31, 1917. Serial No. 199,518. Renewed July 9, 1919. Serial No. 309,780. 15 Claims. (Cl. 144-219.)

1. A cutting head having openings formed therein, cutters positioned to direct the cuttings into the in-

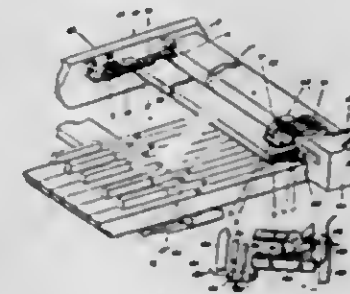
terior of the cutting head and means within the cutting head to trajectory the cuttings therefrom.



6. A cutter head comprising a body having openings therethrough, cutters positioned to direct the cuttings through the openings into the interior of the cutter head and curved members formed within the cutter head adapted to direct the cuttings upwardly and outwardly by centrifugal force.

13. A cutter head comprising a conoidal body having slots formed in its sides, cutters positioned to direct the cuttings through the slots into the hollow interior of the conoid, propeller-shaped members positioned to receive the cuttings from the slots and discharge them therefrom by centrifugal force and means embracing the base of the conoid adapted to restrain the centrifugal discharge of the cuttings throughout a portion of the circumference.

1,313,711. EXPRESSION ORGAN-KEYBOARD. EDWARD A. MCMURTRY, Chicago, Ill. Filed Sept. 25, 1916. Serial No. 122,069. 17 Claims. (Cl. 84-23.)



1. An organ comprising swell shutters, one or more electro-pneumatic actions for operating the same, switches for playing the actions successively in and out of operation, playing keys, and means controlled by said keys at will for actuating one or more of said switches.

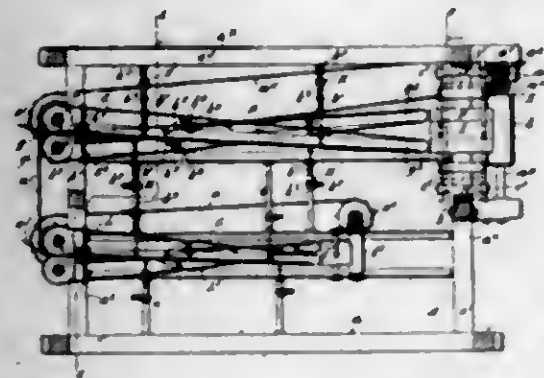
13. An electric organ comprising playing keys, electro-pneumatic swell shades, multiple contact switch mechanism for controlling said swell shades, and means actuated by each of said keys for controlling said switch mechanism.

15. In an organ the combination of a plurality of keys, a plurality of electric switches, and means controlled by each of said keys at will for actuating one or more of said switches.

1,313,712. SHEET-FOLDING MACHINE. ALLISON M. MACFARLANE, Buffalo, N. Y., assignor to Leo M. Kohn, Buffalo, N. Y. Filed Dec. 14, 1915. Serial No. 66,863. 15 Claims. (Cl. 270-86.)

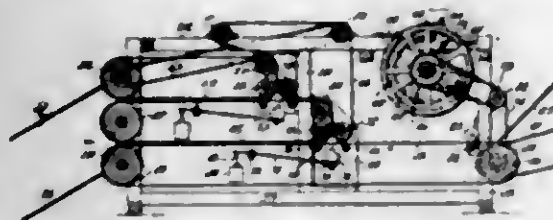
2. In a sheet folding machine, the combination of a plurality of cords which are adapted to receive a sheet and which converge horizontally from the receiving end of the machine to fold the sheet when the same passes through the machine, means for adjusting said cords relatively to each other to adapt the machine to vary the

sine of the folds, a plurality of substantially upright blades arranged at the discharge ends of said cords and converg-



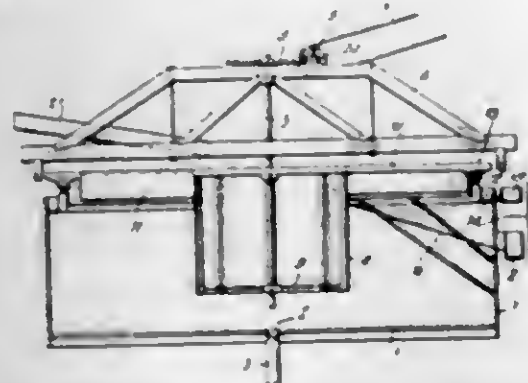
ing from the receiving end of the machine, and means for adjusting said blades vertically.

1,313,713. SHEET-FOLDING MACHINE. ALLISON M. MACFARLAND, Buffalo, N. Y., assignor to Leo M. Kohn, Buffalo, N. Y. Filed Apr. 12, 1916. Serial No. 90,739. 72 Claims. (Cl. 270-81.)



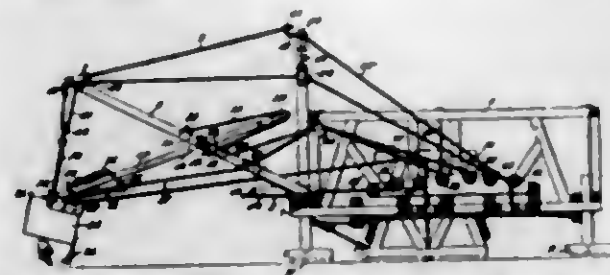
1. The combination of a mechanism for folding sheets of different lengths, and mechanism controlled by the length of the sheets for timing the actuation of the folding mechanism to cause the folding mechanism to fold sheets of different lengths at different distances from the ends of the sheets proportional to the lengths of the sheets.

1,313,714. SETTLING-TANK. LACHLIN DONALD MACRAE and PETER A. MACRACHSEN, Nacozari, Mexico. Filed Nov. 29, 1918. Serial No. 264,701. 2 Claims. (Cl. 83-82.)



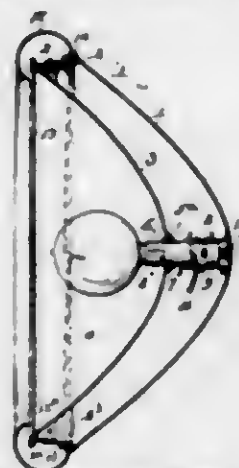
1. A device of the character specified comprising a circular tank having a discharge opening at the center of the bottom, a shaft journaled at the axis of the tank, means for rotating the same, said shaft having oppositely extending skimmers rotating therewith, and supporting a bottomless tank coaxial with the main tank and depending from near the bottom of the other tank and spaced apart from the said bottom to provide unobstructed settling of the solution within the bottomless tank, the skimmers extending between the bottomless tank wall and the main tank, means for feeding the material to be settled to the bottomless tank, and a froth launder to which the skimmers deliver.

1,313,715. EXCAVATOR. CLARENCE MARVIN, Mather, Wis. Filed Aug. 1, 1917. Serial No. 183,921. 1 Claim. (Cl. 214-137.)



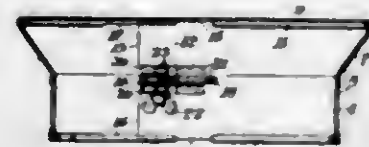
An excavator comprising a frame; first, second and third drums journaled on the frame; an inclined mast supported on the frame; a guide pivotally mounted on the mast; a boom slidable in the guide; an idler on the rear end of the boom; an inner idler on the mast to the rear of the guide; an outer idler on the forward end of the mast; a bucket pivoted to the forward end of the boom; a sheave assembled with the bucket; means releasable from a remote point for holding the bucket against tilting on the boom; a first flexible element having its ends connected to the mast in advance of the guide and to the first drum, the intermediate portion of the flexible element being formed into oppositely projecting loops engaged, respectively, with the inner idler on the mast and with the idler on the boom; a second flexible element having its ends connected to the second drum and to the forward end of the boom; and a third flexible element having its ends connected to the third drum and to the forward end of the mast, the third flexible element passing over the outer idler on the mast and comprising a loop receiving the sheave which is assembled with the bucket.

1,313,716. HEAD-LAMP. SALVATORE MAZZEO, Cleveland, Ohio, assignor to The Adams-Bagnall Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 31, 1916. Serial No. 75,235. 10 Claims. (Cl. 240-41.)



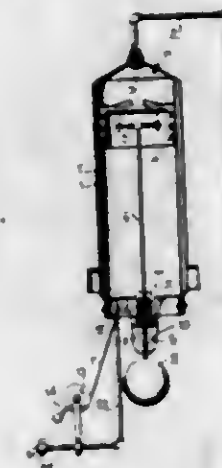
1. In a lamp, a body terminating at the front in a flange, and a glass carrying ring adapted to fit over said body flange, said flange and ring having each a diagonally located laterally extending projection, the projection of one of said parts being located at and formed by the free edge thereof.

1,313,717. CAP-COVER BLOCK. WILLIAM F. MESSITER, Brooklyn, N. Y. Filed July 12, 1918. Serial No. 244,515. 5 Claims. (Cl. 223-21.)



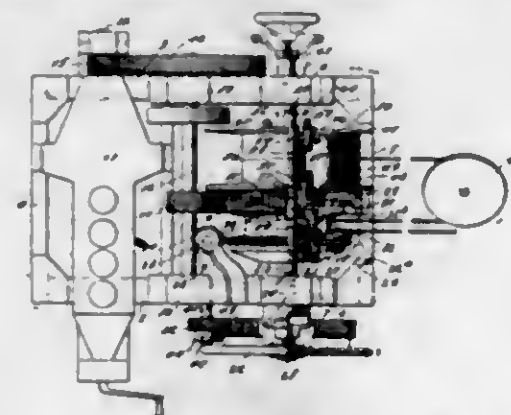
1. A cap cover block comprising a band of circular form with the ends arranged in overlapped relation, and a rack and pinion carried at the ends of the band operable to contract and expand the band for the purpose specified.

1,313,718. WATER-ELEVATING DEVICE. VASTUM MITCHELL, Pageland, S. C. Filed June 4, 1919. Serial No. 301,608. 2 Claims. (Cl. 103-62.)



2. A water elevating device, consisting of a cylindrical tank, and a valved pipe adapted to extend into a well and communicating with the upper portion of the tank, a valved piston within the latter, a stem fixed to said piston and movable through a suitably packed gland in the bottom of the tank, a weight secured to said stem outside the tank, a chain fastened at one end, pulley upon the piston stem under which said chain passes, and a pulley fastened to the tank over which the chain passes, and a drum about which the chain is adapted to wind.

1,313,719. WINDING-ENGINE. THOMAS SPENCER MILLER, South Orange, N. J. Filed Jan. 21, 1918. Serial No. 218,113. 31 Claims. (Cl. 254-172.)



1. In combination, a winding drum, a motor, a connection between the motor and the drum admitting of the overhauling of the drum, and means actuated by the overhaul whereby the resistance to the overhaul is increased.

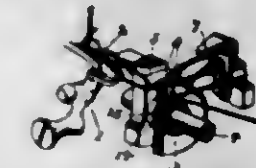
1,313,720. SOUND REPRODUCING AND RECORDING APPARATUS. ROBERT G. MITCHELL, Mount Vernon, N. Y. Filed Mar. 24, 1919. Serial No. 284,764. 5 Claims. (Cl. 274-27.)



1. In a sound box, two spaced diaphragms, a housing surrounding the diaphragms mounted therein to substan-

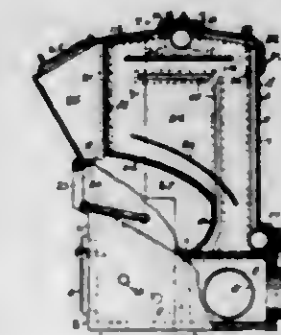
tially inclose the space between the same, and means within said space to cause pulsations of air created by the vibration of one diaphragm to impinge primarily against the central part of the other diaphragm.

1,313,721. TAKE-UP MECHANISM FOR SEWING-MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 17, 1916. Serial No. 98,149. 3 Claims. (Cl. 112-26.)



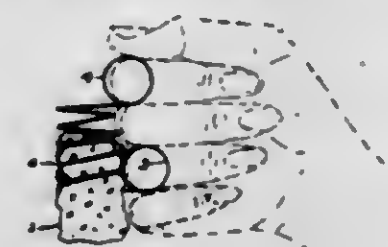
1. The combination of a shaft, a take up cam having a supporting sleeve, a support, means for fixedly securing said support to the shaft in a predetermined position thereon and means for adjustably connecting said sleeve to said support whereby said sleeve may be adjusted about said shaft for changing the time of action of the take up surface of the take up cam.

1,313,722. STEAM AND HOT-WATER BOILER. JOHN W. MOENKE and GEORGE W. CRANE, Syracuse, N. Y. Filed Nov. 4, 1918. Serial No. 261,127. 5 Claims. (Cl. 122-223.)



1. A boiler including a number of upright sections clamped together having a common combustion chamber formed by cutting away the corresponding lower edges of the sections, each section having a broad thin water compartment disposed centrally and vertically, one side of the end sections and the opposite sides of the intermediate sections correspondingly recessed, and the recesses of the adjacent sections cooperating for forming a plurality of inverted L-shaped flues which alternate with the water compartments, and discharging the smoke at a point below the lowest water level of said compartments, and a gravity-feed fuel magazine disposed outside of said sections.

1,313,723. ENVELOP-MOISTENER. JOHN B. MULLALLY, Seattle, Wash. Filed July 31, 1918. Serial No. 247,625. 11 Claims. (Cl. 91-54.4.)

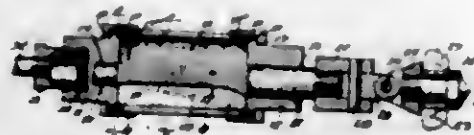


5. An envelop moistener comprising an absorbent body and a holder therefor having rings for the reception of a plurality of the fingers of the hand.

1,313,724. INSECTICIDE OR COMPOUND FOR DESTROYING COTTON BOLL-WEEVIL. JOHN M. MURKIN, Youngstown, Ohio. Filed Feb. 18, 1919. Serial No. 277,720. 1 Claim. (Cl. 167-6.)

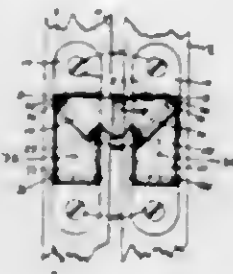
The insecticide or compound for treatment of the boll-weevil, composed of alum, potash, Cayenne pepper, Paris green, and a glutinous binder, in solution or suspension for use as a spray, the alum and potash being in smaller percentage than the Paris green and Cayenne pepper.

1,313,725. BOILER-TUBE CLEANER. HOUGHTON L. NEEDHAM, Chicago, Ill. Filed May 28, 1917. Serial No. 171,444. 3 Claims. (Cl. 121-78.)



1. A boiler tube cleaner having, in combination, a casing having concentric inner and outer peripheral walls, heads closing the opposite ends of the casing and having annular external flanges abutting against the extreme ends of the casing, collars treaded upon the ends of the casing on the outer periphery thereof and having inwardly extending flanges which surround the heads and engage with the flanges thereon to clamp the heads to the casing, and a rotor in the casing having journals at its opposite ends mounted in said heads eccentrically thereof and also of the outer periphery of the casing; there being a motive fluid inlet port in one of the heads and an outlet port in the casing, said rotor having blades adapted to pass said ports successively in the movements of the rotor, and one of said journals being extended and having a tool mounted on its extended end.

1,313,726. HINGE. NORMAN C. NICOL, Buffalo, N. Y. Filed Mar. 8, 1918. Serial No. 221,103. 6 Claims. (Cl. 16-105.)

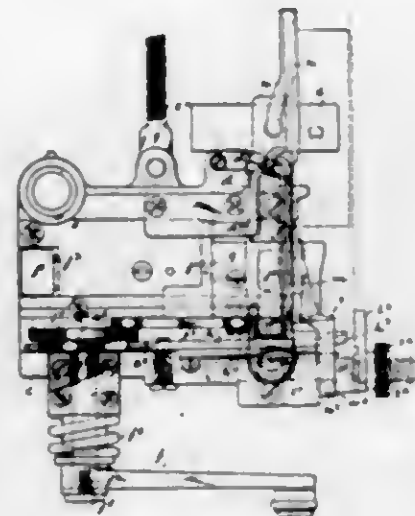
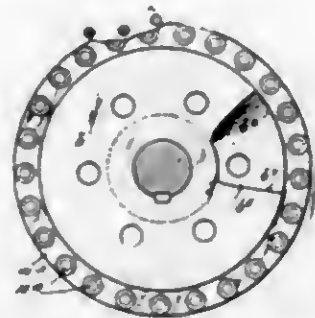


3. A hinge comprising box-shaped casings, a two-leaf supplemental hinge provided with a central pivot, a stop carried by one of the leaves of said supplemental hinge and arranged to engage the other leaf of said hinge, a pivot pin for the outer end of each leaf of the supplemental hinge, each pin being mounted in the casings, and means, formed from the side walls of the casings, for supporting the pivot pins.

1,313,727. MACHINE FOR FILLING THE MAGAZINES OF MACHINE-GUNS. HARRY ROBERT NORTHOVER, Winnipeg, Manitoba, Canada. Filed June 25, 1917. Serial No. 176,863. 16 Claims. (Cl. 42-87.)

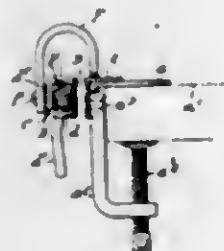
1. In a machine for filling gun magazines of the character described, the combination with a revoluble maga-

sine pan, of means for alternately feeding cartridges side-wise into the magazine, and rotating the pan, said means



comprising two independently-acting devices, and a common operating mechanism for driving both of said devices.

1,313,728. SAW-VISE. FRANK E. PARA, Buffalo, N. Y. Filed Dec. 15, 1917. Serial No. 207,371. 5 Claims. (Cl. 76-78.)

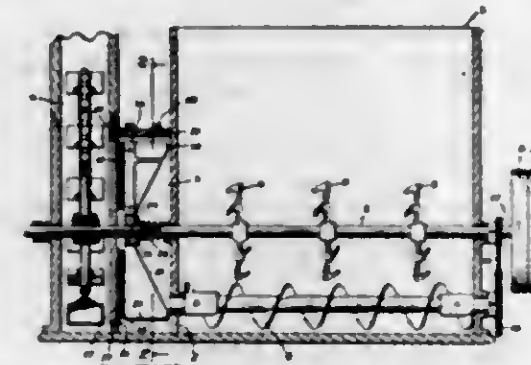


2. In a vise, the combination with a fixed jaw and a movable jaw spaced apart to form a slot to receive the work, and means for pressing said movable jaw toward said fixed jaw, of connecting members each of which has a pivotal connection with said fixed jaw and with said movable jaw and which may be swung into a position in which the slot between the jaws opens upwardly or into a position in which the slot opens downwardly.

1,313,729. FLOUR-SIFTING APPARATUS. EDWARD T. PARSONS, Newark, N. J. Filed Nov. 14, 1917. Serial No. 202,038. 9 Claims. (Cl. 83-56.)

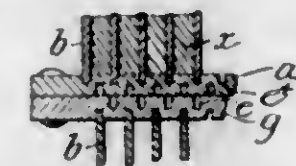
1. The combination with a sifting chamber providing an upright screening wall, and means for supplying flour to said sifting chamber from outside the same, of a brush arranged and adapted to rotate in said sifting chamber in a plane parallel to the screening wall and dis-

tribute flour from the bottom of the sifting chamber throughout said sifting chamber and cause the same to



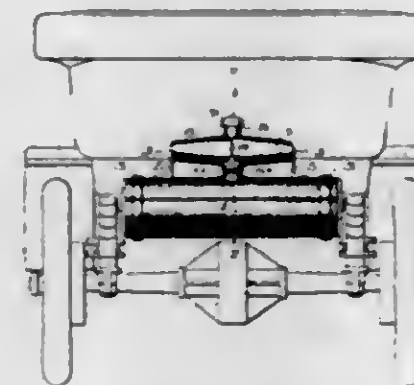
pass through the screening wall, whereby the flour is aerated in the sifting chamber as well as sifted.

1,313,730. GILLED HEAT-INTERCHANGING APPARATUS. EDWARD LLOYD FRANK, Darlington, England. Filed Apr. 6, 1917. Serial No. 160,305. 15 Claims. (Cl. 257-256.)



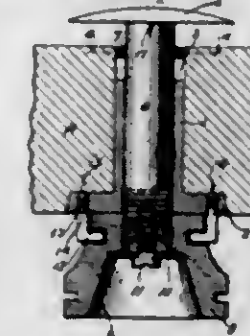
1. Apparatus for the transmission of heat from one fluid to another, comprising substantially flat metal plates connected together and having between them a conduit for fluid, one of said plates having on one face thereof, outside said conduit, a number of parallel grooves extending in the same direction as that in which fluid is to pass through said conduit and metal gills tightly fixed to said grooves and in good metallic contact with the metal side walls thereof.

1,313,731. MEASURING DEVICE. GEORGE L. PRATT, Atlanta, Ga., assignor to Margaret L. Pratt, Atlanta, Ga. Filed Nov. 10, 1916. Serial No. 130,622. 2 Claims. (Cl. 221-107.)



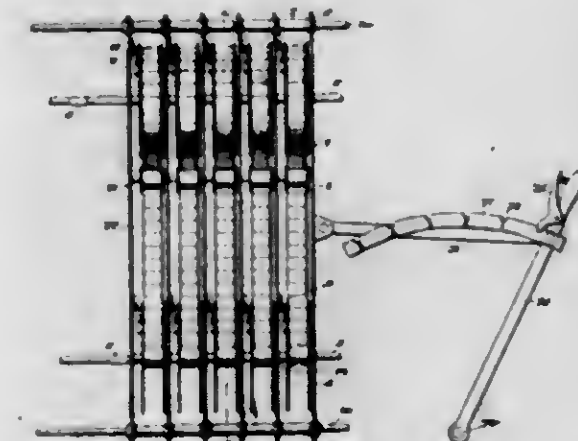
1. The combination with a main receiving and storing tank, of an auxiliary measuring and filling tank, said filling tank being of predetermined capacity and including a body-portion comprising frusto-conical members joined at their bases and closed at their opposite ends; a filling-instrumentality for the measuring and filling tank; and means for transferring the contents of the filling tank to the main receiving and storing tank, said means comprising a conduit of comparatively large interior diameter, connected to the measuring tank at the point of juncture of the bases of the frusto-conical members, and at its opposite end with the main receiving and storing tank.

1,313,732. DRAWING-BOARD ATTACHMENT. PAUL LOUIS RARRO, New York, N. Y. Filed Apr. 16, 1919. Serial No. 290,376. 4 Claims. (Cl. 45-131.)



1. A drawing board attachment of the character described, comprising in combination; a screw threaded bolt, a clamping head formed thereon, a knurled thumb nut inwardly threaded and screwed on the threaded bolt, means for confining the knurled thumb nut upon the bolt, and a pin secured to the bolt and registering in a slot to prevent rotation of the bolt.

1,313,733. FILM WINDING AND REWINDING APPARATUS. JOHN C. RAMSHAW, Shenandoah, Pa. Filed Feb. 28, 1919. Serial No. 270,701. 7 Claims. (Cl. 242-65.)



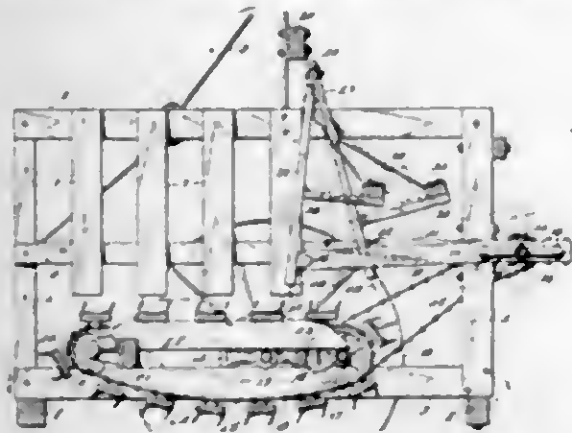
1. The combination of a shaft having a driving portion, a plurality of reels loose and movable laterally on the shaft and successively into engagement with said driving portion to be rotated thereby, and means through which the reels are so moved.

1,313,734. ORE-CLASSIFIER. CHARLES ALFRED RAN-DALL, Halleybury, Ontario, Canada. Filed Jan. 31, 1916. Serial No. 75,357. Renewed Jan. 20, 1919. Serial No. 272,165. 1 Claim. (Cl. 83-86.)



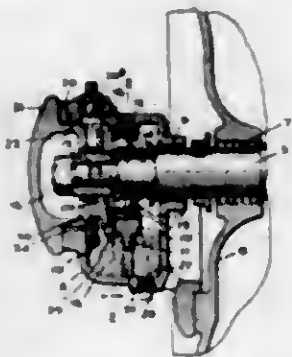
An ore classifier comprising a substantially pear-shaped casing supported from a cylindrical power driven end and terminating at the other end in a similar cylindrical neck flared outwardly at the extremity, a screen rigidly secured in said neck and converging from the entrance to said neck to the center and from there projecting beyond said neck, a launder secured under said projecting screen and receiving discharge from said neck and a stationary flushing pipe extending into said screen and having nozzles directed to the ore being screened.

1,313,735. STRAW-SPREADER. MATHEW RAPP, Morton, Ill., assignor to Kramer Rotary Harrow Company, Morton, Ill., a Corporation of Illinois. Filed Nov. 1, 1917. Serial No. 199,656. 26 Claims. (Cl. 275-5.)



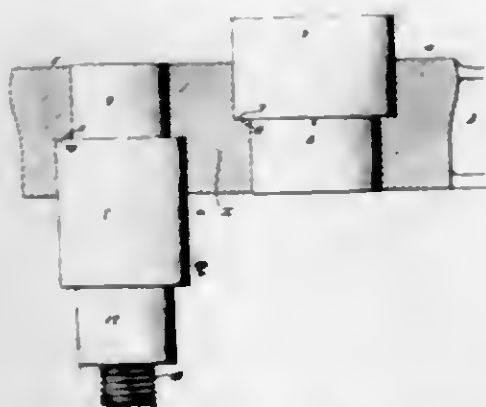
13. In a straw spreader, a container, an endless carrier therein, combing means located above the carrier, a series of means borne by the carrier to engage the straw from beneath the latter so as to bite into the straw and thereby resist the action of the combing means, and means to actuate the combing means and the carrier.

1,313,736. BEARING AND OILING MEANS THEREFOR. RICHARD H. RICE, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 13, 1917. Serial No. 185,864. 4 Claims. (Cl. 64-24.)



1. In an apparatus of the character described, the combination of a casing having a lubricant reservoir therein, a bearing in the casing, means forming a pocket adjacent and to one side of the bearing from which lubricant is fed to the bearing, and an oil ring which conveys lubricant from the reservoir to said pocket.

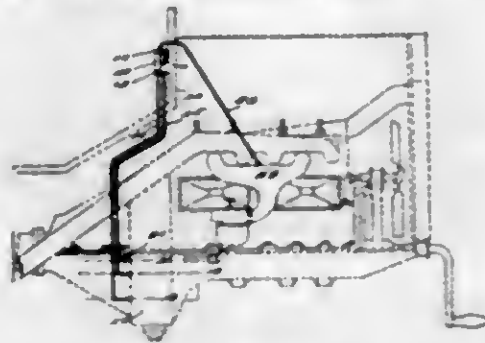
1,313,737. DRIVING-WHEEL AND CRANK. KENNETH RUAHTON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 12, 1919. Serial No. 296,581. 2 Claims. (Cl. 74-38.)



1. The combination of a crank arm; an axle having a reduced portion; a wrist pin, also having a reduced por-

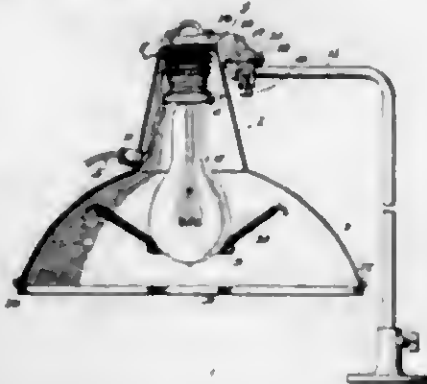
tion, both the axle and the wrist pin being adapted to the crank pin, the enlarged portion of the wrist pin being opposite the reduced portion of the axle.

1,313,738. LIQUID-LEVEL INDICATOR. JAMES RYAN, Indianapolis, Ind. Filed May 14, 1919. Serial No. 297,078. 18 Claims. (Cl. 116-31.)



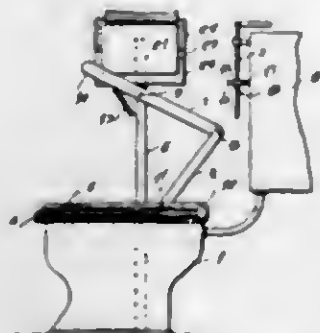
17. In an internal combustion engine, a crank-case for containing lubricant, and means operated by suction from the engine for indicating whether the lubricant in said crank-case is above or below a predetermined level.

1,313,739. LAMP-MOUNTING. CHARLES S. EYESSON, Norfolk, Va. Filed Aug. 31, 1918. Serial No. 252,160. 4 Claims. (Cl. 240-90.)



1. The combination of a reflector having a reduced upper portion, closed at its upper end, a coiled spring, of inverted truncated cone shape, bearing loosely at its outer end against the said closed end of the reflector portion, a lamp receptacle disposed in said spring and having a flange bearing against and connected with the lower end thereof, wires leading through the wall of the reflector portion and between intermediate whirls of the spring to the lamp receptacle, an annular spring member adapted to seat the base of the lamp bulb held in the receptacle, and radial spring members interposed between and connected with the annular spring member and the comparatively large portion of the reflector.

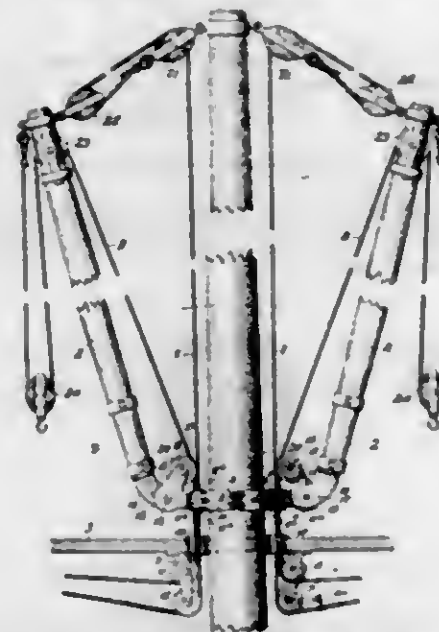
1,313,740. FLUSHING AND COVER-OPERATING MECHANISM FOR TOILETS. PETER H. SACKE, Marianna, Fla. Filed Mar. 15, 1918. Serial No. 222,670. 4 Claims. (Cl. 4-18.)



1. In a device as set forth, the combination with an ordinary water closet bowl including a hinged cover, of a standard supported along side of said bowl, a band

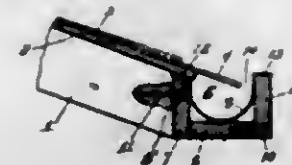
lever pivotally connected intermediate its ends to said standard and lying in a plane above the bowl and cover, a bar pivotally connected to the inner end of said hand lever and pivotally connected to said cover a short distance forwardly of the hinge of the cover for raising and lowering the cover upon pivotal movement of the hand lever, an ordinary flushing mechanism for said bowl, and means operated by the inner end of said lever during the pivotal movement thereof to move said cover into a closed position for operating said flushing mechanism.

1,313,741. DERRICK. THOMAS J. SCANLAN, El Paso, Tex. Filed Dec. 28, 1918. Serial No. 268,709. 8 Claims. (Cl. 212-58.)



1. A derrick comprising a mast, a fitting which is pivoted to the mast to swing horizontally in relation thereto, a boom pivoted to the fitting so that it may be raised or lowered and will also swing with the fitting, the vertical pivotal connection between the fitting and the mast being hollow, and fall and hoist ropes for the boom which pass downwardly through the hollow pivotal connection aforesaid.

1,313,742. DETACHABLE EAVES-TROUGH. JACOB SCHAD, Bloomington, Ill. Filed June 30, 1919. Serial No. 307,684. 3 Claims. (Cl. 108-28.)



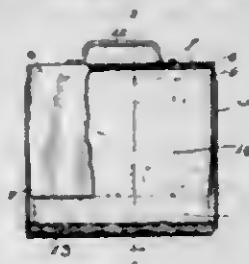
1. The combination with a roof structure, of an eaves trough comprising a bottom wall, an inner wall and an outer wall, the latter being detachably connected with the bottom wall, a gutter disposed in said trough and having its sides provided with bent edge portions engaging the upper free edges of said inner and outer walls, and fastening members for connecting the inner wall of the gutter and inner board or plate of the trough with the roof rafters.

1,313,743. SAW-OLLER. JESSE SCHMIDT, Tracy, Calif. Filed Apr. 12, 1919. Serial No. 289,493. 1 Claim. (Cl. 184-1.)

A saw oller comprising a shell of rectangular cross section having a closed end and an open end, the walls of said shell adjacent said open end converging so as to contract said open end, a rectangular block of felt secured in said shell by frictional engagement with the inner walls thereof and by the action of said contracted open end, said block having an integral swab extending from said shell, a container adapted to house said shell

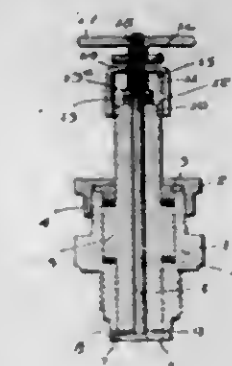
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and swab, said container having upper walls in snug working fit with the walls of said shell adjacent its outer



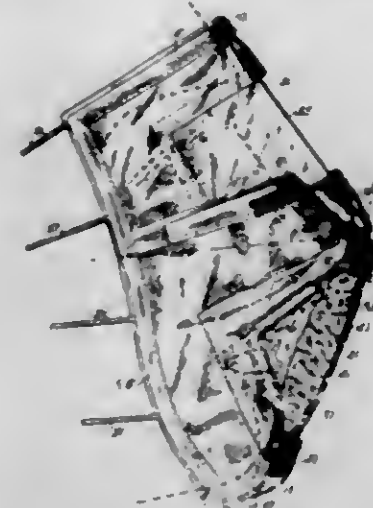
closed end, and having a chamber formed by the bottom wall and lower side walls of said container adapted to effect resaturation of said block.

1,313,744. SPARK-PLUG. WALTER E. SCHUBERT, Brooklyn, N. Y. Filed Jan. 6, 1919. Serial No. 269,848. 1 Claim. (Cl. 123-169.)



A spark-plug comprising a casing which is a conductor for electricity and a therewith-mounted insulation plug having a lengthwise bore, the inner end of the casing being continuously flat without dependent projections and forming a ground wall; a rotatable electrode rod mounted in the bore of the insulation plug and provided at its lower end with an exteriorly accessible ground wall scraper; a compression-holding disk of yielding material around the rod and bearing on the upper end of the insulation plug, the upper end portion of the electrode rod being threaded; a nut on such threaded portion of the rod, and bearing compressibly on the compression-holding disk; a coiled spring around the upper portion of the rod positioned to bear against said nut; an internally-threaded spring-adjusting cap having a screw connection with the upper end of the insulation plug, such cap having a hole for passage therethrough of the upper end portion of said rod; and means exteriorly of said cap for connection of a lead.

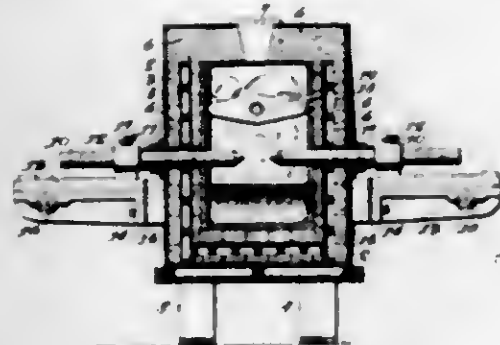
1,313,745. GAS MASK AND RESPIRATOR. NATHAN SCHWARTZ, New York, N. Y. Filed June 27, 1918. Serial No. 242,270. 7 Claims. (Cl. 128-141.)



1. A gas mask and respirator, comprising a body having an upper and a lower section, the sections standing

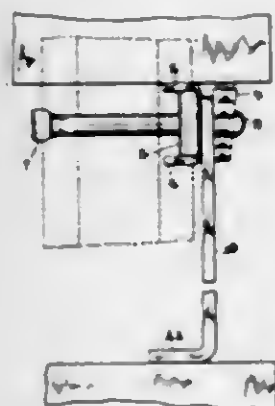
at an angle to one another, the upper section having a diaphragm plate therein and the lower section having a perforated inhaling member, said body being provided on the inside at the junction of the sections with an upwardly and inwardly extending nose piece, and means for securing the body to the face of the wearer.

1,313,746. ELECTRIC MELTING-FURNACE. JAMES D. SHIPTON, Vancouver, British Columbia, Canada. Filed Feb. 8, 1919. Serial No. 273,790. 3 Claims. (Cl. 204—64.)



1. In an electric furnace of the class described wherein is provided an internal chamber and a charging opening, and wherein the heat of the arc is radiated onto the metal to be melted, means located in the upper part of the furnace chamber for preheating the metal intended later to form a part of the charge in the lower part of the chamber.

1,313,747. RAIL-ANCHOR. FREDERICK L. H. SIMS, Toronto, Ontario, Canada. Filed Feb. 8, 1918. Serial No. 219,011. 3 Claims. (Cl. 238—324.)

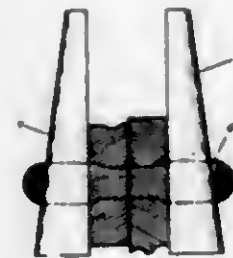


2. In a device of the class described, an abutment member adapted to be clamped to one edge of a rail base, in combination with a bolt adapted to extend under the rail base, the said bolt comprising a bar bent on itself to form a slot adjacent the abutment, the double part extending through a hole in the abutment, the bolt also having a hook formed at the other end to engage the other edge of the rail base, and a wedge key adapted to be driven into said slot to engage the outer surface of the abutment member to clamp the latter in place.

1,313,748. KEY BOLT. FREDERICK L. H. SIMS, Toronto, Ontario, Canada, assignor to The Diaphone Signal Company, Limited, Toronto, Canada. Filed Dec. 11, 1918. Serial No. 266,243. 5 Claims. (Cl. 85—7.)

7. A substantially cylindrical bolt formed with a non-slotted middle portion and with end portions each having

a substantially flat sided slot formed longitudinally therein, a longitudinal division extending through the middle



portion to the ends of the said slots and substantially parallel to the sides thereof, and a transverse division extending through one part of the divided middle portion.

1,313,749. PNEUMATIC TIRE. FRED K. SMALL, Lisbon Falls, Me. Filed Apr. 14, 1919. Serial No. 289,866. 3 Claims. (Cl. 152—5.)



4. A pneumatic tire comprising an outer shoe, an inner casing completely filled with hollow compressible balls, a circular ring adapted to be expanded against said casing and balls and when expanded being of a larger circumference than the inner circumference of said casing, and overlapping ends on said ring to lock it in the expanded position, substantially as set forth.

1,313,750. HAIRPIN. ARTHUR J. SMITH, New York, N. Y. Filed May 7, 1919. Serial No. 295,266. 1 Claim. (Cl. 132—22.)



The herein described hair pin whose prongs and bight are formed of wire round in cross section throughout, excepting that the lower side of the bight is flattened or compressed so as to render it thin and narrow between the inner faces of the prongs and leave it rounded on its outer face, for use as substantially hereinbefore set forth.

1,313,751. VIBRATION-TRANSFERRING MEANS. HARALD SMITH, Copenhagen, Denmark. Filed Aug. 23, 1916. Serial No. 116,425. 14 Claims. (Cl. 179—139.)

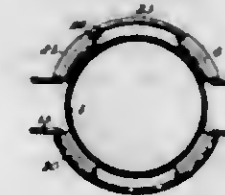
1. The combination of vibratable vibration responsive means and vibration transferring means comprising a

member connected with said vibratable means and a second member in relatively movable frictional relationship



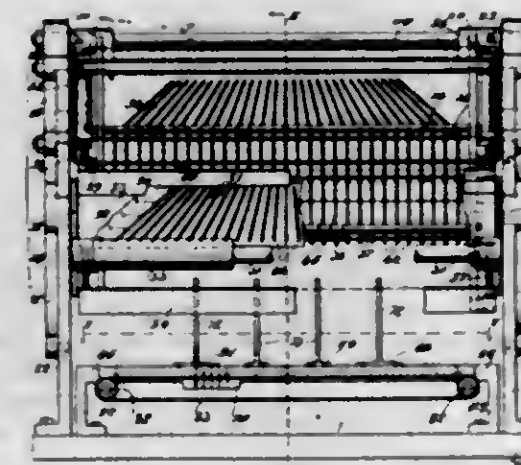
with said first named member and controlling said vibration responsive means.

1,313,752. LIFTING-TONGS FOR JARS. HERMAN C. SMITH, Waterloo, Iowa. Filed Dec. 4, 1918. Serial No. 265,197. 1 Claim. (Cl. 65—12.)



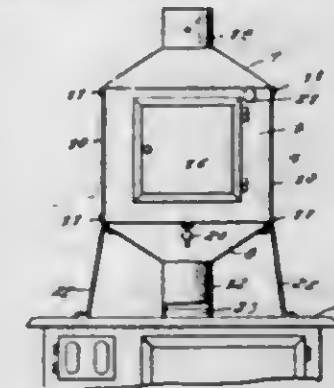
A device of the character described, comprising a pair of rods formed into closed loops and hinged together medially, the cross-connection of each loop at one end being medially offset outwardly to provide shoulders, and relatively short elastic pads mounted on said cross-connections on each side of and engaging said shoulders to provide four approximately equally spaced self-adjusting clamps to releasably grasp jars of differing diameters between them.

1,313,753. MULTIPLE-SLICING MACHINE. CARL SONNEMANN, New York, N. Y. Filed Apr. 21, 1919. Serial No. 291,485. 5 Claims. (Cl. 17—24.)



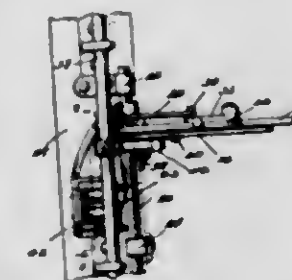
1. In a multiple slicing apparatus, the combination with a rigid frame comprising base and said elements, said side elements containing pairs of spaced arcuate concentric slots, of a cutter frame, a plurality of cutters adjustably secured therein, extensions from said cutter frame engaged in the mentioned slots and means for manually actuating said cutter frame.

1,313,754. WATER-HEATER AND AUXILIARY OVEN FOR STOVES. THOMAS H. STEDMAN, Turffontein, Johannesburg, South Africa. Filed July 15, 1916. Serial No. 109,507. 1 Claim. (Cl. 126—17.)



A water heater and auxiliary oven comprising a rear wall, tapered top and bottom walls secured to the rear wall, a front wall secured to the top and bottom walls and having a doorway, a hinged door closing said doorway, flanges formed upon the side edges of the top and bottom walls, removable sides slidably mounted within said flanges and having abutting engagement with the front and rear walls, an oven secured to the front and rear wall and in communication with the doorway of the front wall, said oven being relatively spaced from the top, bottom, and side walls to form a chamber, partition walls carried by the front and rear walls and spaced from the oven and side walls to form a water jacket about the oven, oppositely arranged baffle plates positioned within the passage occurring between the partition walls and the removable side walls to cause the products of combustion passing through the outer passage to traverse a circuitous course, a pipe connecting the apex of the bottom wall with the flue of a stove, legs for supporting the device upon a stove, an outlet pipe connected to the apex of the top wall, and a damper within said outlet pipe.

1,313,755. STOP-MOTION FOR LOOMS. JULIA STEER, Methuen, Mass. Filed Nov. 23, 1915. Serial No. 68,056. 3 Claims. (Cl. 139—91.)

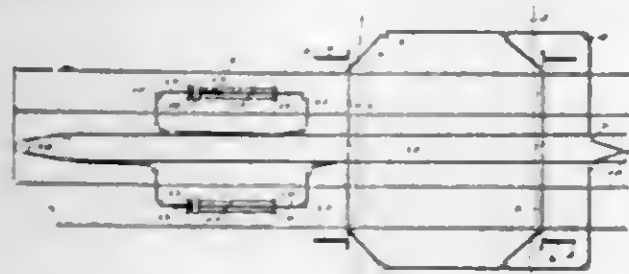


1. In a stop motion for looms, a rock shaft for actuating the shipper mechanism, a curved arm secured thereto, a second arm having a projection engaging said first mentioned arm, a bracket to which said second arm is pivoted and provided with a curved finger above which said second arm normally projects, a tripper lever carried by the lay of the loom and arranged to slide on said finger so as to engage said second arm, a balanced lever pivoted at a central point to said bracket and normally projecting above said second arm and normally holding said tripper lever out of engagement with said finger, an electro-magnet for holding said lever in its normal position, a circuit therefor including the balanced lever, and warp controlled means for closing said circuit upon breakage of the warp threads.

1,313,756. RAILWAY-CROSSING GATE. JOHN SCOTCHIFFE, Rimdel, British Columbia, Canada. Filed Dec. 6, 1918. Serial No. 265,548. 2 Claims. (Cl. 246—301.)

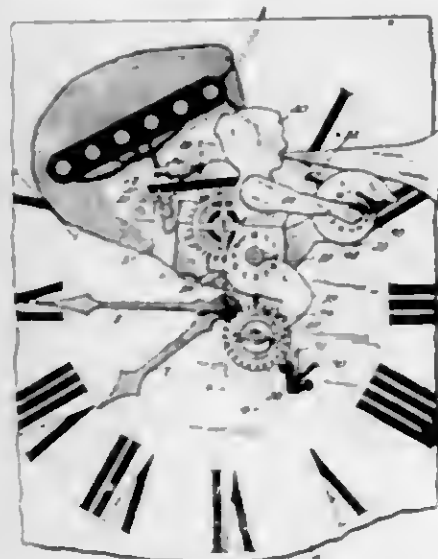
1. A crossing gate comprising panels hingedly mounted, springs for normally holding the panels at predetermined

positions, a bell crank lever pivotally mounted, means operatively connecting the bell crank lever with the panels,



bars mounted at fixed positions and having inclined ends, a block slidably mounted on the bars and means operatively connecting the block with the first mentioned means.

1,313,757. AUTOMATIC SIGN. SAMUEL CLYDE SWINDELLER, PRATT, KANS. Filed Mar. 22, 1919. Serial No. 80,035. 13 Claims. (Cl. 101-27.)



1. A device of the character set forth including an electric conductor, a distributing switch electrically connected to said conductor and adapted when operated to successively open and close a plurality of electric circuits, a second switch in said conductor, and means adapted to open and close said second switch and to operate said distributing switch only during the time said second switch is closed.

1,313,758. TOOL. JOHN KENNEY TAYLOR, Windsor, Ontario, Canada. Filed Mar. 10, 1919. Serial No. 281,000. 2 Claims. (Cl. 254-25.)



1. A tool of the class described comprising a handle beveled at one end and having a longitudinally disposed

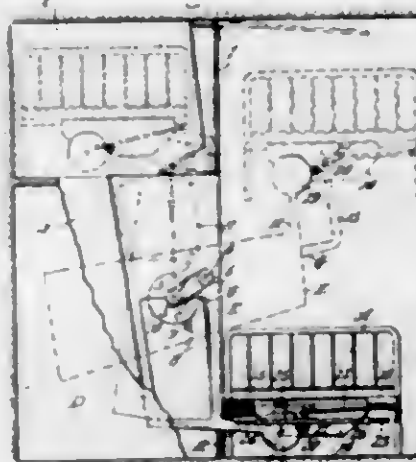
slot in said end, a disk mounted upon said end and capable of rotation thereon, a plurality of radially disposed slotted arms carried by said disk, said arms being capable of having their slots brought into register with the slots of the handle with their ends projecting slightly beyond the adjacent ends of the handle to provide means for initially positioning the tool, spaced flanges arranged in pairs upon the face of the handle to provide shoulders for engagement with the arms and means for holding the disk against movement.

1,313,759. NUT-LOCK. WILLIAM TAYLOR, Lowell, Ind. Filed Mar. 26, 1919. Serial No. 285,140. 2 Claims. (Cl. 151-25.)



1. In combination with a bolt and a nut threaded thereon, a lock member formed as a length of flexible material secured at one end upon the nut and rolled about said bolt to provide a convolution completely encircling the bolt and normally spaced slightly therefrom, the free end portion of said lock member extending away from the bolt and being bent toward itself to provide a tongue extending toward the bolt, and the extremity of said tongue being formed with a point engaging between successive threads on the bolt.

1,313,760. DISAPPEARING BED. GEORGE W. TRINDALE, St. Louis, Mo. Filed Jan. 6, 1919. Serial No. 269,855. 17 Claims. (Cl. 5-18.)

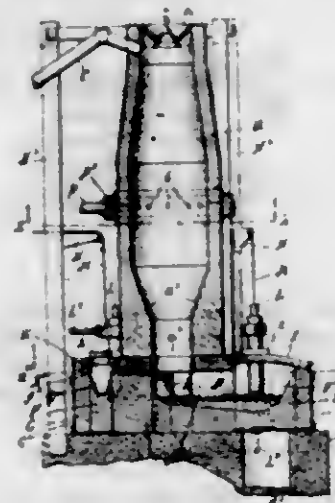


1. A disappearing bed, comprising a frame, a bed mounted on said frame, mechanism for moving said bed into and out of a compartment arranged outside of the room in which the bed is used and above the floor of said room, and means connecting said bed and frame so that said bed is caused to move horizontally in both directions with respect to said frame during the operation of moving the bed and frame.

1,313,761. ELECTRICAL FURNACE. ANTONIO MEXNERA TRINZEIRA, Ipanema, São Paulo, Brazil. Filed Nov. 7, 1918. Serial No. 261,505. 11 Claims. (Cl. 204-64.)

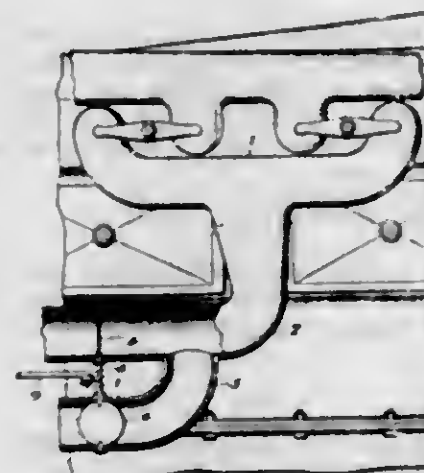
1. The combination with a central shaft furnace, of a group of electric furnaces surrounding the base of the

shaft furnace, and connected with one another through the hearth of the shaft furnace, and also by means of lateral



channels located exterior of the hearth of the shaft furnace, substantially as described.

1,313,762. INTERNAL-COMBUSTION ENGINE. CHARLES THOMAS, Victoria, British Columbia, Canada. Filed Jan. 28, 1919. Serial No. 273,678. 1 Claim. (Cl. 123-100.)

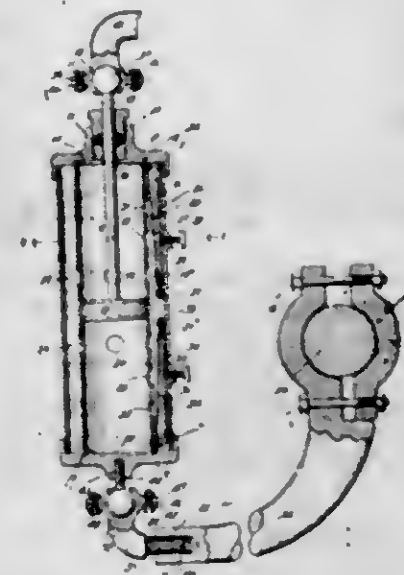


The combination with the intake pipe of an internal combustion engine, and a branch pipe communicating with the intake pipe and opening into the atmosphere, of a duplex valve including a stem, and a valve disk on each end of the stem, said disks being arranged within said pipe and disposed in right angular relation, whereby when one of said valves is closed the other is opened, an eye projecting horizontally from said stem and arranged between said pipes and a manually operable rod having a hooked extremity engaged in said eye to rotate said stem and simultaneously operate said valves.

1,313,763. SHOCK ABSORBER. EDMUND P. THOMAS, Centralia, Wash. Filed Jan. 18, 1918. Serial No. 212,435. 11 Claims. (Cl. 74-69.)

7. In a shock absorber, a cylinder having two heads, one with an opening, a casing having an orifice which forms with the cylinder a by-pass, the cylinder having ports leading to the by-pass, a piston in the cylinder, a piston rod secured to the piston and disposed in the opening, a leaf spring secured at one end to the cylinder which

acts as a valve for controlling the flow of a fluid through one of the ports, a control member disposed through the



orifice for operating the leaf spring, and means on the leaf spring for engagement by the control member.

1,313,764. FLEXIBLE PITMAN. ELMER A. THURSTON, Norfolk, Nebr., assignor of one-half to JAMES A. MASON, Norfolk, Nebr. Filed Dec. 3, 1918. Serial No. 265,425. 4 Claims. (Cl. 74-48.)



1. A pitman comprising a rod section having provision at one end for connection to a power wheel, and a spring section secured to and forming a continuation of the rod section, said spring section comprising a helical coil spring having its convolutions in close juxtaposition, one end of said helical coil spring being firmly secured to the adjacent end of said rod section, and a stud firmly secured in the other end, the said stud being adapted to be fastened to a treadle or other operating device.

1,313,765. LOOM FOR HEADWORK. DAVID TRAMM, New York, N. Y. Filed May 14, 1919. Serial No. 296,968. 1 Claim. (Cl. 139-12.)

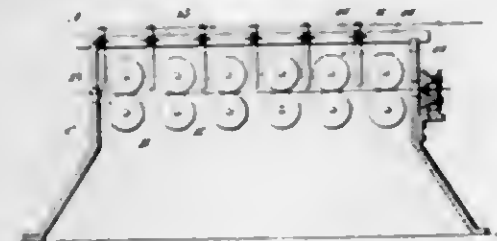
A head work loom comprising: a base member in which a longitudinal slot is cut, a warp thread holding adjustable bolt inserted within the slot, an up-standing plate fixed to each end of the base member and each up-standing plate provided with a groove, a bar confined

within the groove of one up-standing plate, and a clamp slide confined within the groove of the other up-standing plate, a thread guide fitted to each up-standing plate, and



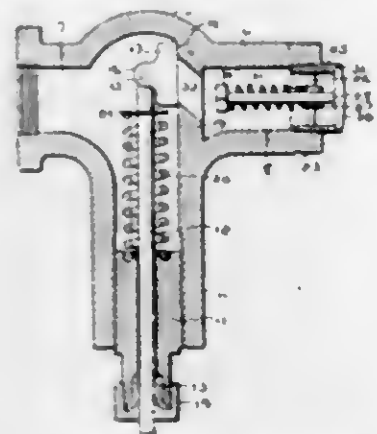
a warp thread guide fixed to one of the up-standing plates in order to increase the linear capacity of the bead work loom.

1,313,766. ALARM FOR TIN-CLEANING MACHINES. IRA U. ULAM, Chester, W. Va. Filed Nov. 4, 1918. Serial No. 261,028. 4 Claims. (Cl. 177-311.)



1. In combination with a tin cleaning machine including a casing and a series of coacting rolls journaled therein and engaging upon opposite sides of sheets of tin passing through the machine; an alarm mechanism comprising a plurality of contacts disposed between the successive rolls in non-obstructing position in relation to the normal path of travel of the sheet and in position to be engaged by said sheet upon buckling thereof, said contact members being included in a circuit including a source of current and a signal.

1,313,767. VALVE FOR AIR STARTER SYSTEMS. JOHN F. CROON, Sapulpa, Okla. Filed Apr. 29, 1919. Serial No. 293,467. 6 Claims. (Cl. 60-16.)

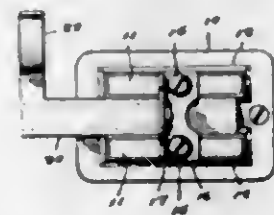


1. A valve for engine starters including a housing having inlet and outlet ports, a valve arranged in the housing and controlling the passage of fluid between the ports, a stem carried by the valve, means for normally retaining the valve in closed position, means connected with the stem for opening the valve, and means for automatically disengaging the stem from the opening means during the opening movement of the valve.

1,313,768. CURTAIN-BRACKET. VINCENT WESTERVELT, Bloomington, N. J. Filed Nov. 21, 1918. Serial No. 263,539. 2 Claims. (Cl. 156-24.)

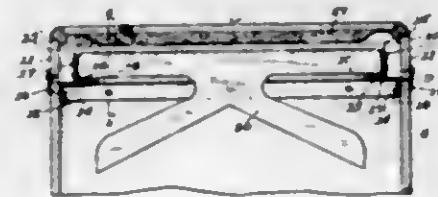
1. A shade and curtain support comprising a base plate having longitudinally disposed parallel grooves, outward-

ly extending inclined flanges surrounding said grooves to define longitudinal adjusting seats, a shade bracket contacting with the outer edges of the inclined flanges, threaded fastening devices engageable with said bracket, nuts threaded upon said device, inclined edges for said



nuts, said edges being adapted for contact with the inclined flanges, whereby the nuts are wedged into the adjusting seats, a curtain bracket and means whereby the shade bracket will hold the curtain bracket upon the base plate.

1,313,769. TRUNK COLLAR AND TRACK. GEORGE HENRY WHEART, Racine, Wis. Filed May 3, 1918. Serial No. 232,351. 16 Claims. (Cl. 190-13.)



1. The combination of a trunk, of a collar and track therefor, comprising strips of material shaped to conform to the contour of a trunk portion and having opposite inwardly projecting portions forming a track for supporting garment hangers and upwardly extending portions forming a collar.

1,313,770. AUTOMOBILE-SIGNAL. JERRY MONROE WHITE, Boston, Mass. Filed Mar. 20, 1918. Serial No. 223,613. 1 Claim. (Cl. 177-329.)



In an automobile signal, the combination with a casing, parallel horizontal rods carried thereby, the signal proper, guides thereon movably mounted on said rods, one of said guides having a rack bar, and a pinion engaging said rack bar, of driving mechanism connected by a train of gearing to said pinion, means for reversing the direction of action of said pinion, push bars for actuating said reversing means, slide bars in line with the push bars, and a hammer on the shaft of one of said train of gears having arms for actuating said slide bars according as the hammer is turned, for the purpose set forth.

1,313,771. RAIL-JOINT. PAYTON WILLIAMS, Johnetta, Pa. Filed May 6, 1919. Serial No. 295,093. 6 Claims. (Cl. 238-235.)

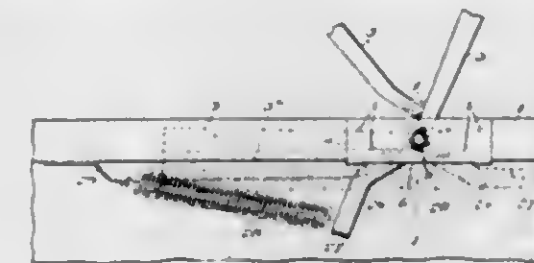
1. A rail joint comprising two abutting rails, one rail having a longitudinal slot at one end and a socket extending downward into the base of the rail from the slot

and a vertical socket in the head of the rail, said sockets located in vertical alignment, the other rail having upper



and lower tongues engaging in the sockets, the sockets and tongues being enlarged at the inner and outer ends respectively.

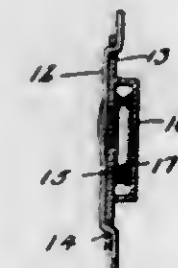
1,313,772. VEHICLE-TOP SUPPORT. DANIEL M. WILKINS, Binghamton, N. Y. Filed Dec. 8, 1917. Serial No. 266,194. 2 Claims. (Cl. 296-113.)



1. In a support for a vehicle top, the combination with the top rail of the vehicle frame or body, of a channel iron embracing said top rail and having a slot in its bottom, an oscillatory member adapted for having a bow socket detachably connected thereto, said member being journaled in both sides of the channel iron, an arm connected to the oscillatory member and projecting downward through said slot and movable therein, and power actuating means for said arm.

2. In a support for a vehicle top, the combination with the top rail of the vehicle body, of a channel iron embracing said top rail, an oscillatory member adapted for the attachment of a bow socket thereto, said member being journaled in one of the sides of the channel iron and provided at its end with a screw threaded portion, a lock nut on said screw threaded portion, said nut having a hub which is journaled in the other side of the channel iron, said oscillatory member having a flattened portion located inside the channel iron, said channel iron having a slot, an arm having an eye which is slipped over and engaged with the flattened portion on the oscillatory member, said arm being adapted to play in said slot, and power actuating means for said arm.

1,313,773. ELECTRIC DROP-LIGHT. ANDREW A. WINER, Ocala, Fla. Filed Dec. 29, 1917. Serial No. 269,550. 1 Claim. (Cl. 248-6.)



In a device of the class described, an apertured block and a pulley carried thereby, a cord passing through one of the apertures of the block to the opposite side of said block, then along the surface of the block to another aper-

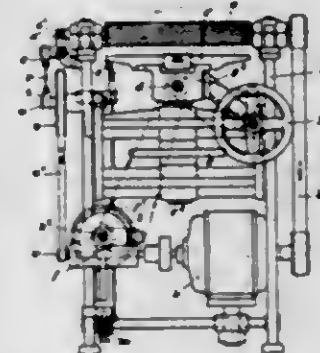
ture and through the latter, a counterbalance and a pulley connected therewith, said cord passing around the pulley first named and around the second named pulley, and a plurality of slidable members carried by the cord, an engaging device flexibly connected with each slidable member, and a lamp socket connected with one of the free ends of the cord.

1,313,774. MOLD FOR STEREOTYPE-PLATES AND THE LIKE. CARL WINKLER, Berne, Switzerland. Filed July 26, 1916. Serial No. 111,488. 2 Claims. (Cl. 22-4.)



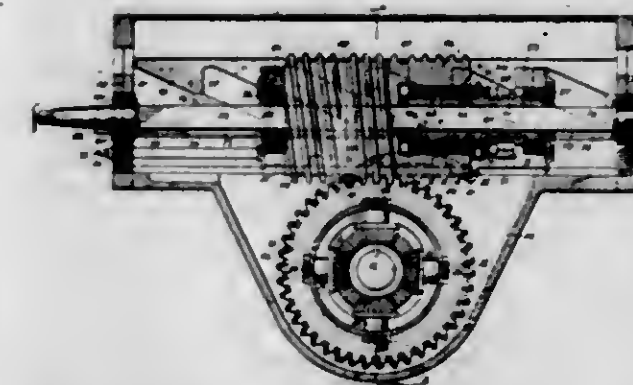
1. The combination with a mold for stereotype plates, and the like, having cooling chambers in the parts thereof, of means to prevent the cooling agent used from coming into immediate contact with the walls of said cooling chambers, substantially as, and for the purpose, set forth.

1,313,775. MACHINE FOR TRIMMING STEREOTYPE-PLATES. CARL WINKLER, Berne, Switzerland. Filed Oct. 24, 1916. Serial No. 127,400. 9 Claims. (Cl. 90-14.)



1. A milling machine for trimming stereotype plates, comprising a work table to support the plate to be treated, an elongated cylindrical rotary milling tool adapted to operate with its entire length simultaneously, means for rotating the tool, and means for quickly moving the tool longitudinally backward and forward, substantially as and for the purpose set forth.

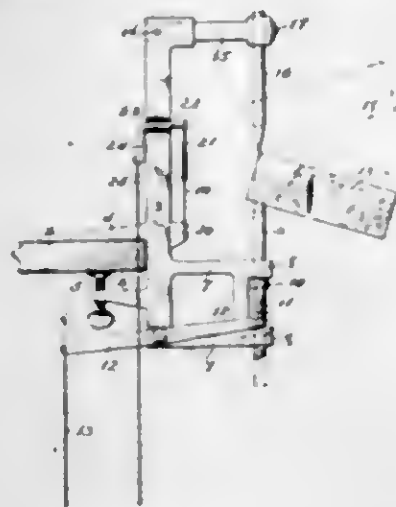
1,313,776. TRANSMISSION MECHANISM. ALFRED WOSPITZ, New York, N. Y. Filed June 3, 1918. Serial No. 237,975. 10 Claims. (Cl. 74-36.)



1. A transmission mechanism incorporating a plurality of worm segments, the threads whereof are disposed at

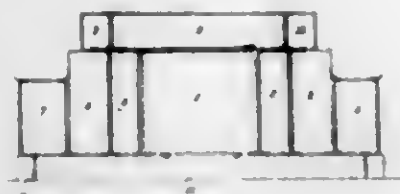
different angles; a worm wheel having teeth disposable for correspondence with the angles of the threads on all of said segments; and means for lifting said segments from engagement with said wheel.

1,313,777. GARMENT CORNER-TURNING AND EDGE-CREASING MACHINE. AMOS M. ZIMMERMAN, Akron, Pa. Filed Sept. 21, 1918. Serial No. 255,204. 1 Claim. (Cl. 223-20.)



A machine for turning corners and creasing the edge of parts of garments comprising a frame, two corner turning fingers carried by the frame and located in the same plane end to end, means for moving one of said fingers longitudinally toward and away from the other finger, a fixed clamping blade also carried by the frame, connected yielding clamping jaws adapted to be moved onto the part of the garment placed on the fixed blade and means for moving the said clamping jaws toward and away from the fixed blade.

1,313,778. KNOCKDOWN PICTURE FRAME. FRANK L. ATKINSON and NATHAN SCLAR, Hoboken, N. J. Filed Apr. 16, 1919. Serial No. 290,554. 5 Claims. (Cl. 40-155.)

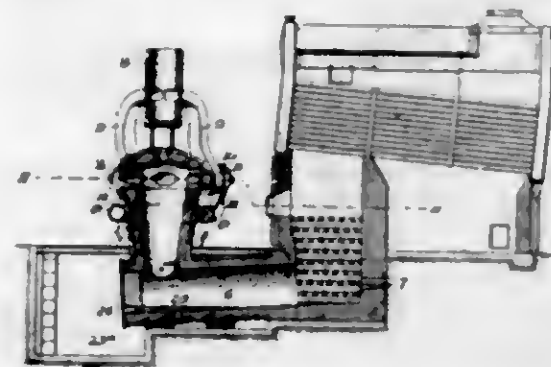


2. A knock-down picture frame embodying therein a plurality of independent panels, some of which are of the same height and some of which are of a different height, connecting elements uniting said panels of the same height each of said elements comprising two pivotally connected members having at the outer end thereof respectively oppositely disposed spring flanges extending substantially parallel with the axis of said pivotal connection and adapted to engage the top or bottom bars of said panels, and connecting elements uniting the shorter panels with the longer panels consisting of a member having oppositely disposed spring flanges adapted to engage the top or bottom bar of said shorter panel, and a right angular member pivotally connected to said first named member and also having oppositely disposed spring flanges adapted to engage the side bar of the adjacent longer panel, whereby the angular relation of said panels may be varied, and said panels may be separated to dismantle the entire frame structure.

1,313,779. FURNACE. JOHN R. BELL, New York, N. Y. Filed Aug. 7, 1915. Serial No. 44,196. 6 Claims. (Cl. 158-7.)

1. A furnace of the character described, comprising: a primary mixing and combustion chamber having a re-

stricted outlet, means for introducing fuel into said chamber mixed with air to produce a vortex action within the chamber, and a secondary mixing and combustion chamber connected to said restricted outlet and leading to



heating apparatus, said chamber being approximately circular in cross section and extending in a generally horizontal direction, said secondary chamber having means for permitting the removal of slag or dust therefrom, substantially as described.

1,313,780. RAILWAY-FROG. BENJAMIN B. BETTS, St. Louis, Mo. Filed Jan. 19, 1918. Serial No. 212,754. 8 Claims. (Cl. 246-273.)



1. A railway frog comprising a base, a frog point pivotally mounted on the top thereof, guards carried by the base and disposed on each side of the frog point adjacent its connection to the base, a guard lever pivotally secured to said base, a guard secured to said base on each side of said guard lever, said guards being provided with seats to receive the end of the frog point when thrown in operative position, and a lever connection between the frog point and guard lever whereby the operation of one in a given direction will cause the other to be operated in an opposite direction.

1,313,781. RAILWAY-FROG. BENJAMIN B. BETTS, St. Louis, Mo. Filed Apr. 22, 1918. Serial No. 229,912. 11 Claims. (Cl. 246-273.)

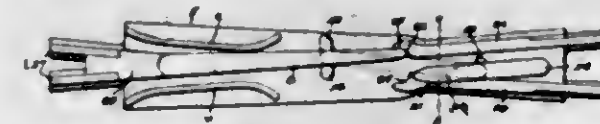


1. A railway frog comprising a pivoted frog point and a pivoted guard lever, a connection between said frog point and lever whereby the operation of one in a given direction will cause the other to be operated in the opposite direction, and a projection located in the path of travel of the wheel flange and adapted to be actuated by the wheel flange for operating the frog point, and, consequently, the guard lever.

1,313,782. RAILWAY-FROG. BENJAMIN B. BETTS, St. Louis, Mo. Filed May 12, 1919. Serial No. 290,580. 9 Claims. (Cl. 246-448.)

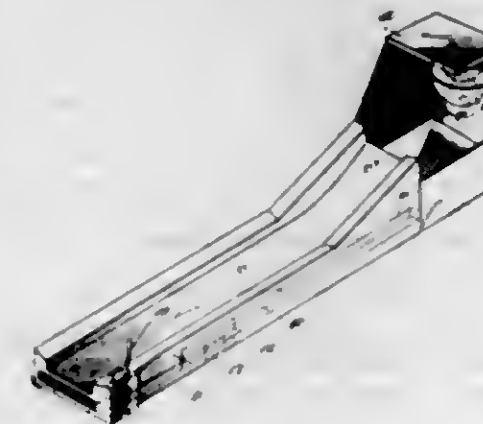
1. A railway frog comprising a base, a frog point pivotally mounted on the top thereof, an integral flange formed on the upper edge of the frog point, rail extensions car-

ried by the base and disposed on each side of the frog point, a switch point pivotally secured to the base, guard rails located at each side of the switch point adjacent its pivoted end, recesses formed in the rail extensions adjacent the frog point to receive the end of the switch point



when thrown in operative positions, and a lever mechanism connecting the switch point and frog point and pivotally secured on the under side of the base for operating the frog point and switch point in opposite directions simultaneously.

1,313,783. GAME APPARATUS. WILMUTH E. BLACKBURN, Summit, N. J. Filed Mar. 13, 1919. Serial No. 282,324. 14 Claims. (Cl. 40-66.)



3. Apparatus of the character specified in claim 1 characterized in that the apparatus includes mechanism for controlling the activity of the transfer means.

1,313,784. PISTON-RING. FREDERIC D. BLAUVELT, East Orange, N. J. Filed June 8, 1918. Serial No. 238,947. 4 Claims. (Cl. 121-108.)

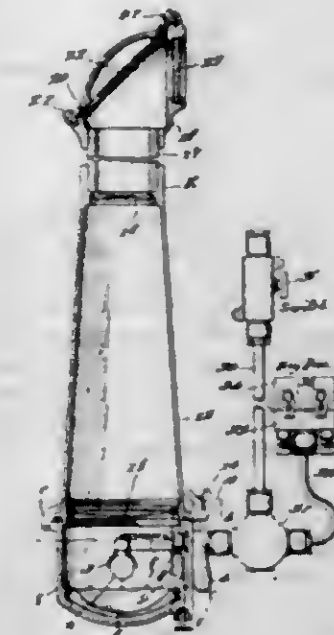


1. A composite piston ring comprising a carrier ring having an outer annular groove, an expansion ring in said groove, a pair of packing rings encompassing said carrier ring and each presenting a beveled surface adapted to bear against the expansion ring and whereby the packing rings are each maintained against the wall of a cylinder and the sides of a piston groove, and means for preventing the rotation of the packing rings on the carrier ring.

1,313,785. SUBMARINE SIGNALING APPARATUS. CHARLES S. BOOKWALTER and FREELAND A. DAUBIN, Washington, D. C. Filed Aug. 23, 1917. Serial No. 187,817. 6 Claims. (Cl. 177-339.)

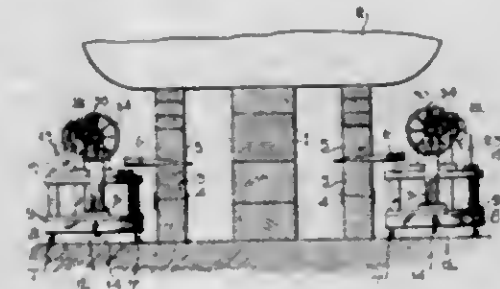
1. Signaling apparatus for use on submarines, comprising a tube projecting above the top of the submarine with means for turning said tube in azimuth, a lamp chamber mounted beneath said tube, an electric lamp and a mirror mounted in said lamp chamber, a head piece secured over

the top of said tube and provided with a mirror and an opening opposite said mirror, with a glass plate closing



said opening, and means for making and breaking the electric circuit through said lamp, substantially as described.

1,313,786. SHIP-LAUNCHING DEVICE. JOSEPH N. BOUGLIN, Seattle, Wash. Filed Nov. 30, 1918. Serial No. 264,830. 2 Claims. (Cl. 61-67.)



1. Means for launching a ship comprising in combination, keel blocks and launching ways, wedges interposed between the launching ways, tracks arranged parallel with the launching ways, trucks which travel on the tracks, and hammers mounted on the trucks to strike the wedges and drive same in between the launching ways.

1,313,787. SPRINKLER-HEAD. JOHN F. DWASS, Downers Grove, Ill. Filed July 9, 1917. Serial No. 179,337. 6 Claims. (Cl. 169-5.)



6. A sprinkler head comprising a head having a nozzle opening, a valve governing such opening, and a valve support consisting of two similar arms pivoted on each other and each including two members, one adapted to tilt on the other but normally restrained by fusible solder, a link connecting said two tiltable members, and a projection on one of the arms to contact the yoke in case the arms should swing toward the same.

1,313,788. CLINKER-TONGS. JAMES W. BROWN, Omaha, Neb., Filed Jan. 31, 1919. Serial No. 274,355. 3 Claims. (Cl. 126-321.)



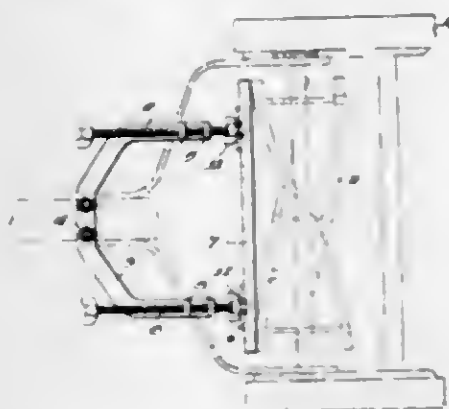
2. An implement of the class described, comprising a channelled longitudinal main member having an integral jaw extending laterally at one end thereof and an integral handle at the other end extending first laterally and then returned parallel with the main member, and a rod having a rectilinear body slidable in the channel of the main member, said rod having at one end a laterally extending portion adjacent to said jaw and having at the other end a laterally extending portion guided by said handle.

1,313,789. SHIP'S-BOAT-LAUNCHING TACKLE OR GEAR. WILLIAM BELMAN, Kirkdale, FRANCIS WALTER SMITH, Liverpool, and WILLIAM JONES, Southampton, Eng. and, Filed Dec. 24, 1918. Serial No. 269,133. 2 Claims. (Cl. 9-22.)



1. A device of the character described, comprising pulley blocks provided with upwardly projecting portions extending above the same and having transverse openings formed therein, a bar having its end portions arranged in the transverse openings, each end portion being provided with a longitudinal recess, and a pivoted keeper carried by each block and adapted to be moved to a position to project into the recess.

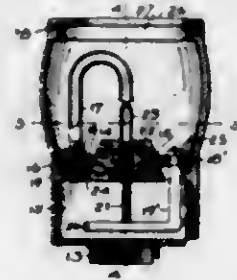
1,313,790. MOWER-KNIFE SHARPENER. JOHN CALDWELL, Corry, Pa. Filed Aug. 3, 1917. Serial No. 184,290. 1 Claim. (Cl. 51-8.)



A blade sharpener for lawn mowers including an abrasive element having transverse recesses formed in one side thereof in spaced relation and opening onto one edge of said element, slotted metal pieces secured to the abrasive element and arranged over the recesses therein, the slots in said pieces being of less widths than the widths of said recesses, headed screw threaded rods engaged in the recesses and slots in said metal pieces, means for locking the screw threaded rods in adjusted positions with respect to said abrasive element, and attaching means secured to a portion of the lawn mower and receiving said

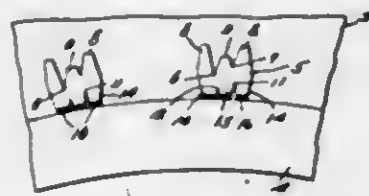
screw threaded rods therethrough whereby to permit adjustment of the same to vary the positioning of the abrasive element with relation to the lawn mower blade to permit sequential engagement of the same therewith.

1,313,791. AUTOMOBILE-RADIATOR ATTACHMENT. JOSEPH J. CAVANAUGH, Los Angeles, Calif. Filed Oct. 23, 1918. Serial No. 259,318. 3 Claims. (Cl. 220-56.)



3. An attachment for a radiator filling tube of an automobile including a casing, a horizontal wall in the casing having a central opening forming a valve seat, a member mounted in the casing and having a stem extending upwardly through said opening, a valve slidable on the stem and arranged to engage said seat to prevent escape of water from the radiator, said wall having an opening adjacent the central opening, a bent steam escape pipe disposed for vertical adjustment through the last-named opening, the valve having a vertical projection arranged to enter but not close the upper end of the bent pipe, whereby steam will escape from the radiator through said pipe when the valve is engaged on its seat.

1,313,792. REINFORCEMENT FOR TIRE-CASINGS. TOMMY JOSEPH CONVERSE, Hellingham, Wash. Filed Jan. 2, 1919. Serial No. 269,189. 2 Claims. (Cl. 152-26.)



1. A reinforcement for tire casings, comprising a plate provided in its opposite edges with notches defining first and second arms, the first arms terminating in clenching prongs and the second arms terminating in hooks, the notches in the respective edges of the plate being of different lengths, whereby the first arms will be of different lengths and whereby the second arms will be of different lengths.

1,313,793. PACKAGING ICE-CREAM. JOHN H. DALTON, Pittsburgh, Pa. Filed Mar. 13, 1919. Serial No. 282,371. 3 Claims. (Cl. 90-11.)



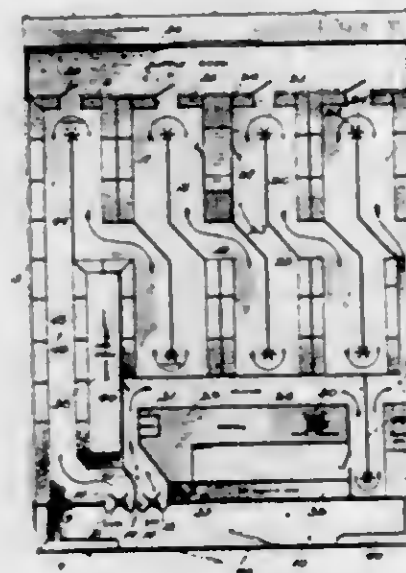
1. The method of packaging ice cream in merchantable units which consists in filling a paper container with the

ice cream while in plastic condition and thereafter chilling the ice cream to a hardened condition in the paper container; substantially as described.

2. The method of packaging ice cream in merchantable units which consists in filling a paper container with the ice cream while in a plastic condition and supporting the walls of the container during the filling operation and thereafter chilling the ice cream to a hardened condition in the paper container; substantially as described.

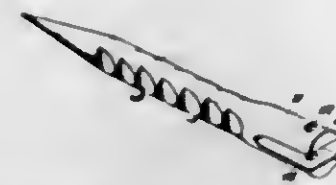
3. As a new article of manufacture, a merchantable unit comprising an ice cream brick and a paper container inclosing and protecting the ice cream brick and into which the ice cream had been run in a plastic condition so as to completely fill the same, and subsequently hardened therein; substantially as described.

1,313,794. SELF-SERVING STORE. EDWARD L. DA ROZA, Elk Grove, Calif. Filed Nov. 7, 1918. Serial No. 261,498. 5 Claims. (Cl. 211-8.)



3. In a salesroom, two rows of cabinets spaced to leave a longitudinal aisle between them, each row being made up of two units with their inner ends spaced to produce an inlet opening to one side of the aisle and an outlet opening from the other side hereof, a partition rail along said aisle dividing it into paths, the rail being in two sections spaced from each other at the inner ends and bars connected with the inner ends of said rails and leading oppositely to respectively opposite units in said rows of cabinets, one to one side of said inlet and the other to the opposite side of said outlet, the bars being spaced from each other to produce a "cross-over" path, as described.

1,313,795. WIRE-HOLDER. ALGER P. DAVIS, White Rock, Colo., assignor of one-third to Winthrop S. Davis, White Rock, Colo. Filed Dec. 14, 1917. Serial No. 207,175. 2 Claims. (Cl. 85-10.)



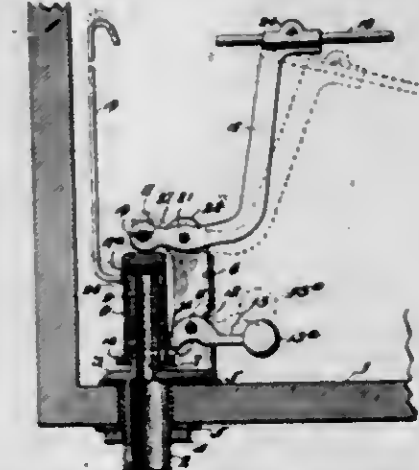
1. In combination with a fence post designed to receive line wires of a fence, of a wire holder including a shank and a bifurcated head, said shank being barbed on the sides thereof in a line with the bifurcation of the head, said head having openings therethrough, and a wire retaining element passing through said openings and secured to said head.

1,313,796. TOBACCO-PIPE. DESIRÉ DELBET, San Francisco, Calif. Filed Feb. 11, 1918. Serial No. 210,546. 2 Claims. (Cl. 131-12.)



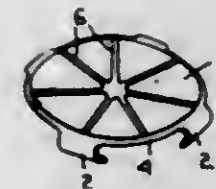
1. A tobacco pipe comprising an outer hollow stem; a plurality of hollow shells telescoping within said stem and resting in surface contact, and having continuous grooves in their outer surfaces and having their adjacent ends joined by transverse passages through said shells.

1,313,797. BALL-COCK. DAVID G. DE MILT, Tampa, Fla. Filed July 23, 1918. Serial No. 246,348. 3 Claims. (Cl. 137-104.)



5. In a mechanism of the class described, the combination with a base plate having an opening therethrough, of an inlet hollow extension projecting vertically from said base plate and in communication with said opening, a vertical frame integral with said base plate to one side of said hollow extension, a slidable plunger casing mounted upon and adapted to close said hollow extension, said plunger casing provided with an extension at its lower end and with an extension at its upper end, a catch movably mounted on said frame and extending therethrough and being adapted to engage the extension on the lower end of said plunger casing for preventing accidental displacement of said casing, and lever means movably mounted upon the upper end of said frame and connected to the extension at the upper end of said plunger casing for normally controlling the movement of said casing upon the hollow extension on the base plate.

1,313,798. WATCH-PROTECTOR. WILLIAM P. DEVINE, Dorchester, Mass., assignor to Devine Mfg. Co., Inc., Boston, Mass., a Corporation of Massachusetts. Filed Aug. 28, 1918. Serial No. 251,793. 1 Claim. (Cl. 58-91.)



A protector for the hands or crystal of a watch comprising a body of celluloid having ribs formed on that portion

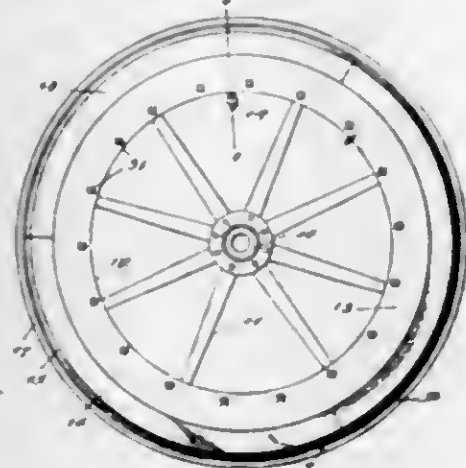
of its exposed face which overlies the figures or numerals on the watch dial, said ribs having such relation to each other as to protect the portion of the body through which said figures or numerals are seen from becoming marred or scratched by ordinary wear.

1,313,799. AUTOMATIC WEATHER-STRIP. WILLIAM J. DILLARD and JOHN D. TAYLOR, Portland, Oreg. Filed May 29, 1918. Serial No. 235,601. 1 Claim. (Cl. 20-68.)



An automatic weather strip comprising a door having a recess in its lower end and provided with two cross-bars which are spaced apart and provided with slots in staggered relation, pins passing through apertures in the lower of said bars, each pin having a head adapted to contact with the under-surface of the upper bar to limit its upper movement, coil springs upon the pins interposed between the lower bar and the heads of pins, a longitudinally movable member resting upon the upper surface of the upper of said bars and having contracted portions extending into apertures formed in the door, curved levers pivotally mounted in slots in the lower bar and having portions extending through slots in the upper bar and engaging apertures in said longitudinally movable member, said levers having curved portions frictionally engaging the upper surface of a strip vertically slidable in said recess and actuated by said coil springs.

1,313,800. AUTOMOBILE TIRE. VERNON DOWKE, Bremerton, Wash. Filed Feb. 28, 1919. Serial No. 279,856. 2 Claims. (Cl. 152-35.)



1. A wheel structure comprising a pair of overlapping annular members adapted to slide and move circumferentially one over the other, projections extending from one of said members, resilient rings interposed between the two members and encircling the projections, and means for guiding sliding movement of the two members.

1,313,801. PRIMER DETONATOR. JAMES A. DORAN, Providence, R. I. Filed Oct. 30, 1918. Serial No. 260,278. 10 Claims. (Cl. 102-43.)

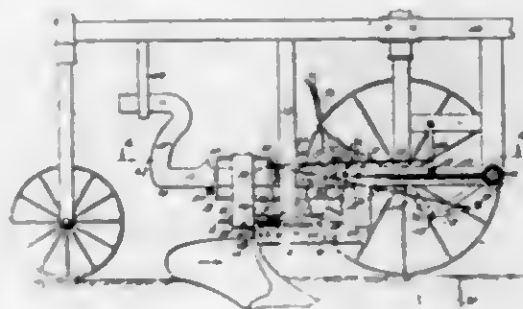
1. A primer-detonator having an external casing, a detonator cup arranged therein and containing a detonat-

ing compound, a primer cup arranged in the casing next to the detonator cup and containing the primer, a cushion



interposed between the cups, and means to secure the parts in fixed relation.

1,313,802. YIELDING MOUNT FOR PLOWS AND OTHER TOOLS. ELON DUNLAP, Diamond Springs, Calif. Filed Oct. 10, 1918. Serial No. 257,646. 37 Claims. (Cl. 97-36.)



1. In a yielding mount for plows and other tools, a frame, a plow movable longitudinally of the frame, resilient means for holding the plow yieldingly in operative position, means under the control of the operator during the operation of the tool to weaken the resilient means, and means to raise the plow relatively to the frame when it reaches a predetermined point in the retardation of its movement relatively to the forward movement of the frame.

1,313,803. ARTICLE-HOLDER. JAMES A. DUNN, Saugus, Mass. Filed Mar. 1, 1918. Serial No. 219,753. 1 Claim. (Cl. 20-85.)

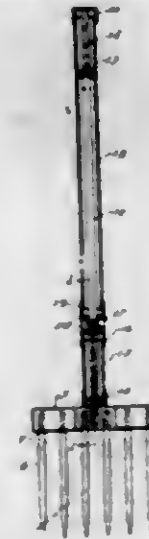


A device of the character described having, in combination, a bracket having a channel therein adapted to receive one side rail of a ladder, a pindle on said bracket, the median axial line of said pindle being substantially parallel to said channel, an auxiliary bracket pivoted on said pindle and having a bore therein, the median axial line of which extends substantially at a right angle to the median axial line of said pindle, a holder comprising a journal rotatable in said bore, said auxiliary bracket being split longitudinally of said bore and at one side thereof, a clamp-screw having a screw-threaded engagement with the split portion of said auxiliary bracket, whereby said split portion may be clamped upon said journal to position said holder thereon, and an annular arm on said journal adapted to receive a container for liquid.

1,313,804. ICE-PICK. ELMER EKLEND, Jamestown, N. Y. Filed Apr. 12, 1919. Serial No. 289,622. 3 Claims. (Cl. 83-62.)

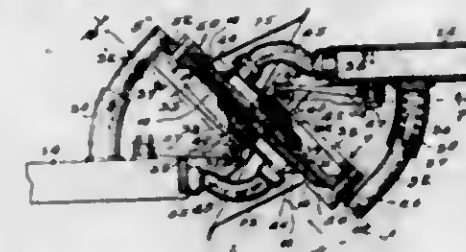
3. In a device of the character described, a bar, cutting elements carried thereby, a rod extending from the bar, a barrel positioned upon the lower end of the rod and

bearing against the bar, a striking head having an opening therein receiving the rod, the striking head being positioned upon the upper end of the barrel, and a re-



ciprocaly striking member mounted upon the rod engageable with the striking head to drive the cutting element into the object being cut.

1,313,805. AUTOMATIC HOSE-COUPLING. ANDREW B. FENNEWOLD, Westphalia, Mo. Filed Dec. 29, 1917. Serial No. 209,569. 5 Claims. (Cl. 284-5.)



1. In an automatic hose coupling, a mounting device including a plurality of telescoping members, a spring controlling the position of one of said members, an apertured and vertically located plate forming one of the contacting members of the coupler proper, an air duct extending longitudinally through the mounting device and having connection with the aperture of the plate, locking means mounted on the outer side of the apertured plate and arranged to swing into locking positions, and means for operating the locking member upon the reciprocal movement of one of the telescoping members, said means last named including a fixedly mounted element carried by the telescoping member last named, an angle lever one arm of which is provided with a slot engaged by the fixed element, and devices under the control of the other arm of the angle lever for moving the locking member.

1,313,806. ARTICLE ADAPTED TO BE USED AS LIGHT-REFLECTOR, VASE, OR THE LIKE. HARRY FORD, Utttoxeter, England. Filed Jan. 15, 1916. Serial No. 72,251. 8 Claims. (Cl. 41-21.)



1. As a new article of manufacture, a light diffuser composed of a solidified compound consisting of pieces of solid material, and a bladder, the latter being translucent when set.

1,313,807. COUNTERBALANCING-HOOK. BERT CYRUS FRAZIER, Wichita, Kans. Filed Mar. 21, 1919. Serial No. 284,055. 1 Claim. (Cl. 248-24.)



A counterbalance hook for supporting bunches of bananas, etc., comprising a wire which is bent at right angles forming an eye at the angled portion thereof, one end serving as a counter weight, the other end bent to form a hook the end of which is laterally curved, said hook normally held inverted by the counterbalanced end, and over which a loop, adapted to support an object, is caught, the weight of the article being supported by and adapted to tilt the hook and the laterally curved end thereof to automatically catch into the loop as it swings down to its lowest limit.

1,313,808. ROD-HANGER. KENNETH D. FULLER, Whittier, Calif. Filed Nov. 18, 1918. Serial No. 262,979. 2 Claims. (Cl. 248-22.)



1. A rod hanger comprising an eye having a flexible cable secured thereto, a hook secured to said flexible cable, said hook having its end off-set from the shank at an angle for disposal beneath a shoulder on a rod, and an elevation on the hook intermediate the opening therein adapted to engage said shoulder.

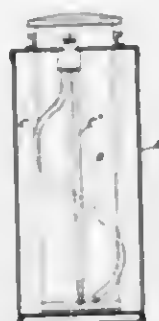
1,313,809. APPARATUS FOR THE MANUFACTURE OF STABBED SHEET METAL. THOMAS GARE, Sudbury, England. Filed June 24, 1919. Serial No. 306,478. 3 Claims. (Cl. 164-99.)



1. An apparatus for the manufacture of stabbed sheet metal having teeth of sharp-point character for grinding and grating purposes, said apparatus comprising a pair of rotary members mounted in opposition, one of said members having closely arranged and acutely pointed teeth, and the other member being channeled to receive the teeth of the said member and the struck out points of the metal as the latter is passed between the members.

the toothed member including a cylindrical organization of relatively circumferentially adjustable sections having the said teeth, and lateral spacing means between the sections, whereby the teeth can be set in groups at the desired displaced relation to each other, or in alignment parallel to the axis of the cylinder.

1,313,810. ACETYLENE GENERATOR. LOUIS GIBBO, London, England, assignor to Fallolite Limited, Westminster, England. Filed Oct. 14, 1918. Serial No. 258,057. 3 Claims. (Cl. 48-17.)



1. In an acetylene generator, in combination with a water-vessel and a carbide-chamber contained therein, a feed pipe of the siphon type for establishing a feed connection from near the bottom of the water-vessel to the bottom of the carbide-chamber, the rising branch of the pipe being curved to define a tortuous path for the ascending water.

1,313,811. GREENHOUSE. WALTER FAIRBRIEVE GOUINLOCK, Toronto, Ontario, Canada. Filed Jan. 17, 1916. Serial No. 72,498. Renewed July 17, 1919. Serial No. 311,681. 1 Claim. (Cl. 47-27.)

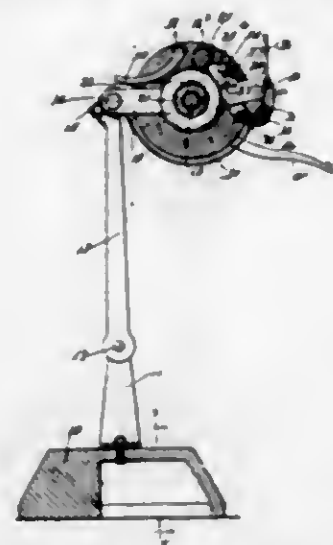


In a greenhouse, a heating chamber, a series of beds having front and rear walls arranged one above the other so that each bed is fully exposed to the sun's rays, means for directing the heating medium from the heating chamber successively over each bed, including a non-heat conducting curtain extending from the front wall of a higher bed to the rear wall of a lower bed.

1,313,812. COPY-HOLDER. ELMER GRAHAM, Wray, Colo., assignor to The Graham Copy-Holder Company, Wray, Colo. Filed Mar. 30, 1918. Serial No. 225,712. Renewed June 24, 1919. Serial No. 360,489. 9 Claims. (Cl. 120-32.)

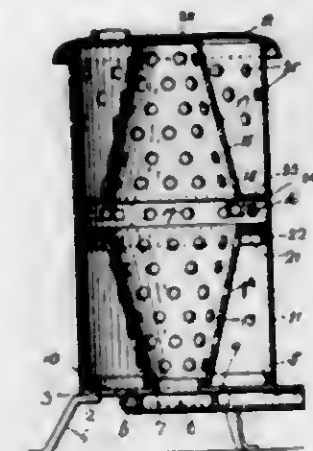
1. The herein described copy holder comprising a hollow cylinder adapted to hold within it a roll of material to be copied and through the curved surface of which one or more sheets are adapted to protrude outward, said cylinder comprising two relatively movable parts for the inser-

tion of said roll and constituting gripping means for the protruding sheet or sheets, means to support the cylinder



for rotation, means to impart to it a step-by-step rotation, and a line gage coöperating with the projecting sheet or sheets.

1,313,813. GAS HEATING-STOVE. DANIEL N. GROSS, South Fort Smith, Ark. Filed Dec. 26, 1918. Serial No. 268,313. 1 Claim. (Cl. 126-85.)



In a gas heating stove, a bottom provided with a central air opening, and an annular burner surrounding said opening, a drum fitting upon said bottom, a cover for said drum, and a heating device including a lower downwardly tapering portion communicating at its lower contracted end with said central perforation, and an upper upwardly tapering portion, said drum having air admitting perforations communicating with the middle portion of said heating device, both the upper and lower portions of the latter being spaced apart from the drum by an annular space and provided with perforations.

1,313,814. BOTTLE-CLEANING APPARATUS. JOHN R. GAUTIER, Cleveland, Ohio, assignor to The Loew Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 17, 1912. Serial No. 691,478. 32 Claims. (Cl. 141-7.)



1. In an apparatus of the character set forth, the combination of a tank having a plurality of compartments

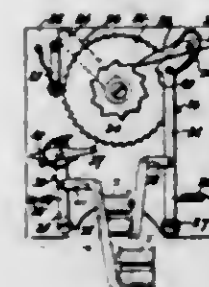
for cleansing liquids, a track above said compartments, a plurality of crates adapted to be mounted on said track and to support bottles in an inverted position, a nozzle-carrying device in each compartment, means for supplying liquid from each compartment to the corresponding device and for raising the liquid to return to such compartment, means for reciprocating said devices to insert the nozzles into and withdraw the same from the bottles thereabove, and mechanism operating to advance the crates along the track after the withdrawal of the nozzles from the bottles thereon.

1,313,815. COMBINED PRINTING, ENLARGING, AND DIMINISHING APPARATUS FOR PHOTOGRAPHIC USE. JENS PETER HANSEN, Copenhagen, Denmark. Filed Nov. 15, 1918. Serial No. 262,749. 6 Claims. (Cl. 88-24.)



3. In an apparatus of the character described, a stand, a vertically movable sensitive paper carrying frame on the stand, means for adjusting said frame, and an adjustable band for limiting the height to which the frame can be raised, and for permitting the frame when lowered to be raised to the same height to which it was before being lowered.

1,313,816. ADVERTISING DEVICE. HENRY KINGAROD HARRIS, Westminster, London, England. Filed Feb. 5, 1914. Serial No. 816,780. 8 Claims. (Cl. 40-53.)

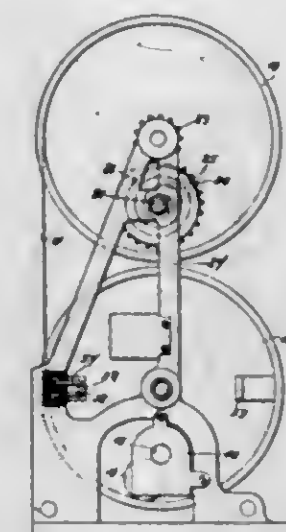


1. In an advertising device having a series of elements each provided with advertising carrying members, means for controlling the position of the advertising members of each element, and means for operating the controlling means to move it through a unit distance or through a multiple of unit distance by a single impulse in each case.

1,313,817. ADVERTISING DEVICE. HENRY KINGAROD HARRIS, London, England. Filed Dec. 19, 1914. Serial No. 878,064. 9 Claims. (Cl. 40-53.)

5. An advertising device, a movable advertising member, a selector wheel for controlling said movable member, a counting wheel upon which the selector wheel is loosely mounted, an operating magnet, means whereby the

selector wheel can move forward under impulses sent thereto without moving the counting wheel, and means



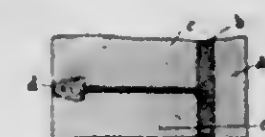
moving in synchronism with the movable member for moving the selector wheel backward by the counting wheel when the same is rotated.

1,313,818. BELT-HOOK. JOHN M. HAMMONT, Des Arc, Ark. Filed Sept. 21, 1917. Serial No. 192,507. 1 Claim. (Cl. 241-11.)



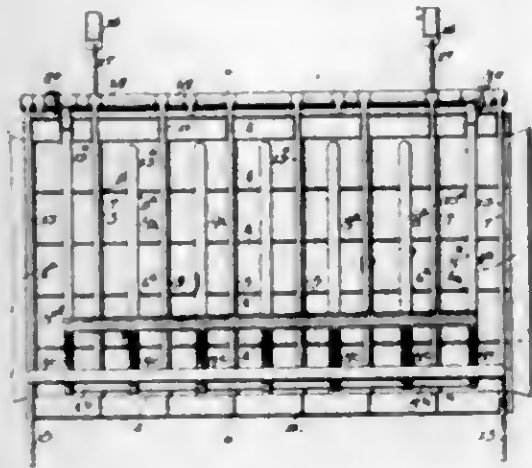
In a device of the class described, a hook formed of a single blank or sheet metal having one end thereof bifurcated to form a pair of penetrating prongs, said prongs being bent back upon the body plate in spaced parallel relation thereto, and a tongue formed on the opposite end of said body plate and bent back upon the same in opposite directions to the retaining prongs in spaced parallel relation to the body plate, said tongue being adapted to receive and hold the supporting belt carried by said trousers, as and for the purpose specified.

1,313,819. VESSEL FOR CONTAINING ACIDS AND OTHER LIQUIDS. WALTER HAYHURST, Woodlands, Accrington, England. Filed Mar. 26, 1919. Serial No. 285,354. 1 Claim. (Cl. 72-14.)



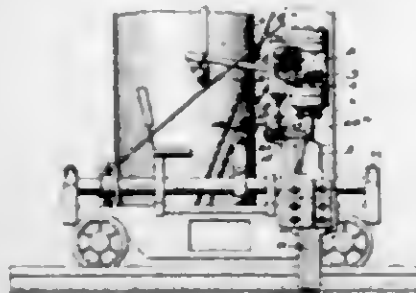
The combination with a metal vessel of a continuous lining of acid resisting cement arranged against the inner surfaces of the walls and the bottom of the vessel, a plurality of tiles embedded in the lining throughout the area thereof and positioned so as to leave a relatively narrow joint between the edges of the tiles, the side and end edges of the tiles being recessed near the outer faces to provide pockets and a retaining binding of acid resisting cement molded in the pockets and having the outer face lying flush with the outer faces of the tiles and having its inner portion joined with the joints of cement between the tiles.

1,313,820. STRAW-TOOTHPICK-MAKING MACHINE. FRANCIS EDWARD HERR, Blackwell, Okla. Filed Oct. 22, 1918. Serial No. 259,248. 7 Claims. (Cl. 164-41.)



1. A straw toothpick making machine, comprising means for holding a number of straw bundles, said means being arranged to insure a substantially even number of straws in each bundle, cutting means arranged to be brought down across the bundles to cut the straws in uniform toothpick lengths, and pressing means coacting with said cutting means for holding the toothpicks down and yielding to force them out after being cut.

1,313,821. STONE CHANNELING MACHINE. GEORGE DUNN HUNTER, Bloomington, Ind., assignor to Sullivan Machinery Company, Claremont, N. H., a Corporation of Massachusetts. Filed Aug. 25, 1915. Serial No. 47,375. 34 Claims. (Cl. 121-19.)



1. The combination in a stone channeling machine, of a cutter, a motor for driving said cutter, a valve for said motor, operating mechanism for said valve, a movable eccentric carried by said mechanism for changing the reversing positions of the valve, and means for positively locking the eccentric to the operating mechanism, substantially as described.

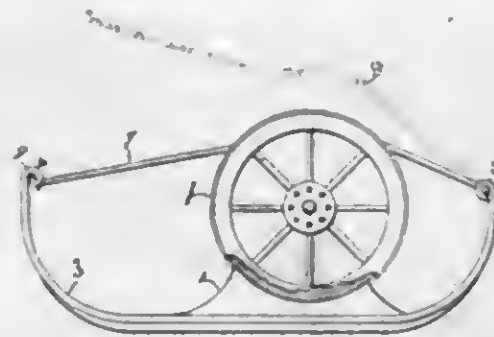
1,313,822. NECKTIE HOLDER. ALBERT KATZKE, Milwaukee, Wis. Filed Nov. 4, 1918. Serial No. 262,062. 2 Claims. (Cl. 2-84.)



1. A neck tie holder of the character referred to comprising a body having wing portions at its upper end and having its lower end bent rearwardly, a cooperating member slotted to receive the bent lower end of said body, means holding said body and said cooperating mem-

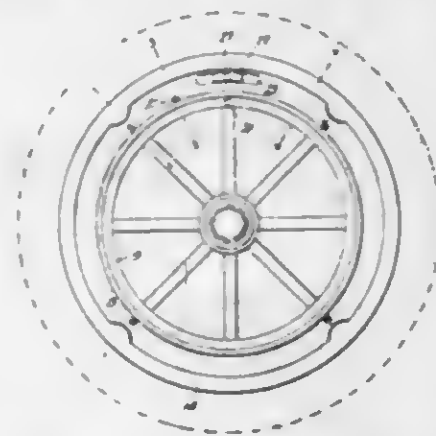
ber in sliding engagement with each other, said cooperating member being adapted at its upper end to hook over a collar button, and means normally and yieldingly moving said body and said cooperating member in opposite directions longitudinally of each other, substantially as described.

1,313,823. AUTOMOBILE-WHEEL SLED. LOUIS N. KELLY, Lancaster, N. Y. Filed Oct. 20, 1917. Serial No. 197,703. 1 Claim. (Cl. 280-13.)



In an automobile-wheel sled, a steel runner provided with a wheel rest having a grooved semi-circular surface adapted to receive a wheel and prevent longitudinal movement of same, a clamping bar pivotally connected to one end of said runner and adapted to engage a hook shaped member formed on the opposite end of said runner, said clamping bar having a semi-circular portion provided with a concave surface adapted to engage the upper portion of the wheel.

1,313,824. DEMOUNTABLE RIM. GEORGE KNOWLING, JR., St. John, Newfoundland. Filed Feb. 26, 1918. Serial No. 219,230. 4 Claims. (Cl. 152-21.)

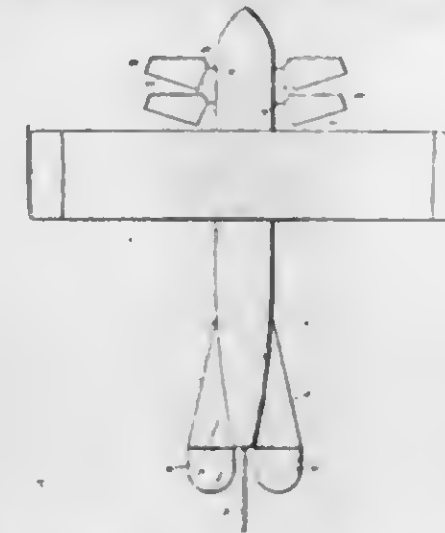


4. In a wheel, a wheel body having side flanges and lugs on its periphery, the flanges and lugs being provided with grooves and one of the flanges with a slot, a detachable rim having slotted lugs fitting in said grooves, a ring revolvably mounted in the body between the lugs and one flange and provided with wedge shaped members engaging the slots of the keys, apertured lateral extensions, and a lateral lug projecting through the slot of the body, rods mounted in the body between the lugs thereof and passing through the apertures of the extensions of the ring, springs on the rods between the extensions and lugs, and means for locking the ring against the action of the springs.

1,313,825. FLYING-MACHINE. JOHN KEATON, Indian Orchard, Mass. Filed Dec. 8, 1917. Serial No. 266,306. 4 Claims. (Cl. 244-13.)

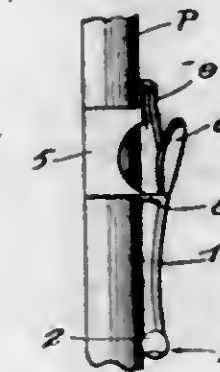
1. In a flying machine, the combination of a fuselage, and propelling means, said propelling means comprising a propeller beam pivotally mounted for rocking movement

centrally of itself, an engine supported by the fuselage, driving connections between said engine and propeller beam for imparting a rocking movement to said beam, flexible propeller blades extending from and carried by the opposite end portions of said propeller beam, means ex-



erting a constant stretching action on each propeller blade, said stretching means comprising a movable stretching member, and yieldable means acting against said stretching member to hold the blade taut while permitting the same flex.

1,313,826. PEN AND PENCIL CLIP. FREDRIK FERDINAND LASSON, Waterbury, Conn. Filed Apr. 14, 1919. Serial No. 289,546. 1 Claim. (Cl. 24-11.)



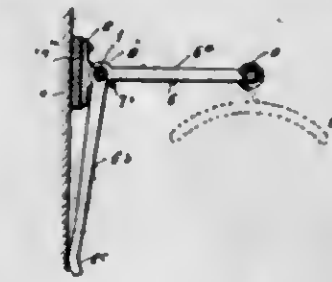
A device of the class described formed from a substantially T-shaped metal blank and having a relatively narrow strip extending vertically from the head at a point midway its length, the opposite ends of the head of the T-shaped blank being bent laterally in the same direction to form instrument engaging arms, the depending shank being adapted to grip the edge of a pocket, said shank and the intermediate portion of the head being stamped forward to provide a thumb piece for moving the shank, and to form arms for connecting the shank and head, said narrow strip being bent forward and downward to contact with the inner face of the thumb piece for forcing the shank into contact with the edge of a pocket.

1,313,827. CLOTHES-RACK. GRANT I. LAXMAN and HENRY T. BURKEY, Tulsa, Okla. Filed Oct. 17, 1918. Serial No. 258,522. 2 Claims. (Cl. 45-13.)

1. In a clothes rack, a supporting rod, means for securing said rod to a wall, supporting arms mounted on the rod each comprising two members mounted for independent rocking movement about the supporting rod, and means for releasably securing one of said members in adjustment about the rod so as to extend substantially

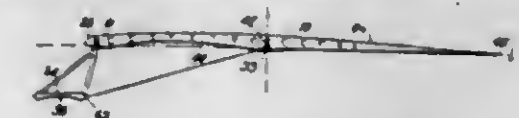
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horizontally therefrom, the other said member bearing against the wall surface so as to hold the first mem-



tioned member in adjustment, and a hanger bar carried by the horizontal members of said arms.

1,313,828. AEROPLANE. ALFREDO GUILLERMO LEIGH, Santiago, Chile. Filed Sept. 17, 1918. Serial No. 254,473. 4 Claims. (Cl. 244-12.)



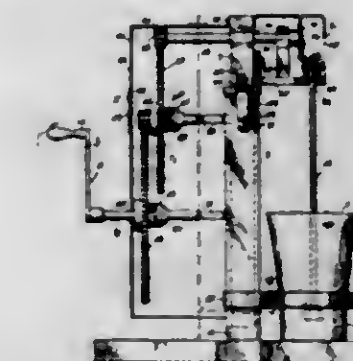
1. In an aeroplane, a main lifting plane, a plane of high aspect ratio below and ahead of the leading edge of the lifting plane, and means to hold the plane of high aspect ratio rigid with respect to the main plane, and with its rear or trailing edge located at a distance from the leading edge of the main plane not greater than the chord of the plane of high aspect ratio.

1,313,829. FAN-BELT RETAINER. WILLIAM J. MEIKLEHAM, Denver, Colo. Filed July 6, 1918. Serial No. 243,623. 6 Claims. (Cl. 74-51.)



1. A fan belt retainer comprising a spring member having a U-shaped body, a long arm at right angles thereto having an eye adapted to be pivotally connected to a motor casing, and a short arm with a hook thereon adapted to engage a belt tensioning screw.

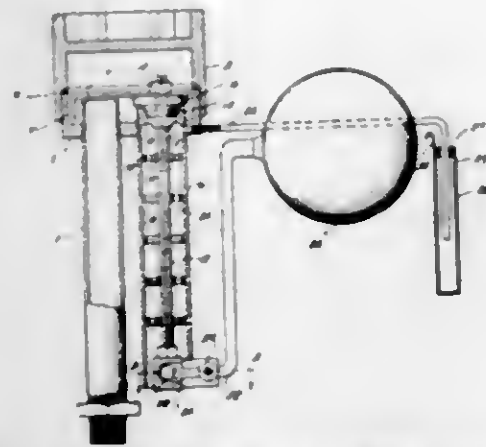
1,313,830. STIRRING DEVICE. CLARENCE MINSK, New York, N. Y. Filed May 6, 1919. Serial No. 295,068. 6 Claims. (Cl. 259-108.)



1. In a manually operable stirring device, telescoping members, one of said members comprising a relatively

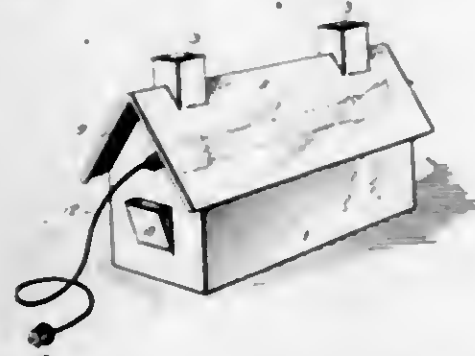
fixed hollow shaft member and the other member comprising a post-like member guided within said shaft member and movable relative thereto and a means for holding the post-like member in a predetermined position, said means comprising a notched surface carried by the post member and a cooperating yielding stop connection carried by said shaft.

1,313,831. MUFFLER-VALVE BALL-COCK. JESSE C. OWENS, Los Angeles, Calif. Filed Mar. 20, 1919. Serial No. 283,825. 5 Claims. (Cl. 137-104.)



5. In a ball cock structure, the combination of a closed valve compartment having an intake, a discharge tube connected to said compartment, said discharge tube being provided with a bracket at its lower end, a valve seating over said discharge tube within said compartment, a splash plate fixed to said valve and disposed over said intake so that water entering therein will impinge upon said plate, a valve rod mounted within said discharge tube and secured to said valve, baffle plates mounted upon said valve rod, and a float lever pivotally secured to said bracket and to said valve rod for lifting the latter.

1,313,832. ELECTRIC HUMIDIFIER. RALPH JOSHUA PATTERSON, Berlin, N. H. Filed Jan. 2, 1919. Serial No. 269,194. 1 Claim. (Cl. 167-3.)



A device of the character specified, comprising a pair of tanks arranged in vertically spaced relation and rigidly connected, the tanks being adapted to contain water, a wick dipping into both tanks, and a casing inclosing the tanks and the wick and having ventilating openings near the top and bottom of the same.

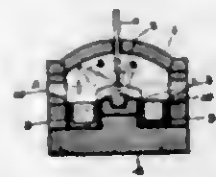
1,313,833. INK-APPLYING DEVICE. SHERMAN H. PAXTON, St. Paul, Minn. Filed Aug. 26, 1918. Serial No. 231,481. 2 Claims. (Cl. 91-54.5.)



1. An ink applying device consisting of an absorbent pad and an ink applying member secured thereto, said applying member having a multiplicity of filaments similar to plush or velvet extending therefrom adapted to carry

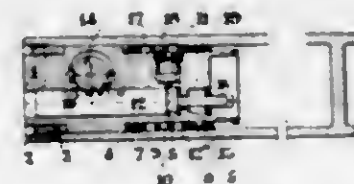
a limited quantity of ink whereby a thin film of ink may be applied to the characters of a printing member by contact with said filaments.

1,313,834. ELECTRIC FURNACE. IVAR BENNERFELT, Djarsholm, Sweden. Filed May 12, 1919. Serial No. 296,591. 2 Claims. (Cl. 204-64.)



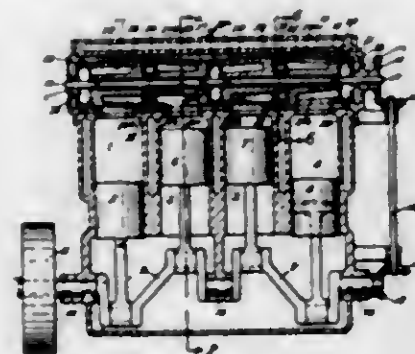
1. In an electric furnace the combination of a plurality of electrodes suspended from above into a furnace room in a substantially vertical plane, a projection from the bottom of the furnace room underneath the electrodes, a conducting layer of carbon in suitable form on the said projection forming contacts for arcs from the electrodes and crucibles on the bottom of the furnace, along the heating zone of the arcs.

1,313,835. DEVICE FOR FEEDING BUFFERS FOR ORDNANCE WITH LIQUIDS. EMILE RIMAILHO, Paris, France, assignor to Compagnie des Forges et Acieries de la Marine et D'Homecourt, Paris, France. Filed July 27, 1917. Serial No. 183,205. 6 Claims. (Cl. 103-63.)



1. A device for feeding buffers for ordnance with liquid, comprising a buffer body provided with a buffer chamber, a pump body in the buffer body, and a chamber between the buffer and pump bodies and into which the liquid is forced by the pump, said chamber communicating with the buffer chamber.

1,313,836. GAS-ENGINE. WILLIAM E. ROBERTS, Riverdale, Oreg. Filed Mar. 30, 1917. Serial No. 158,553. 5 Claims. (Cl. 123-59.)

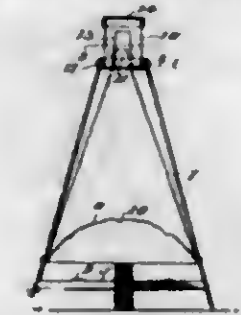


4. In an engine, a valve casing having tapered valve seats therein, two tapered valve members rotatably seated in said valve seats at a space apart, means for driving them together in the same direction, and means interposed therebetween normally moving said valve members apart and into their respective valve seats.

1,313,837. FLYTRAP. SAMUEL SCHRENTZ, St. Louis, Mo. Filed May 19, 1919. Serial No. 298,230. 1 Claim. (Cl. 43-22.)

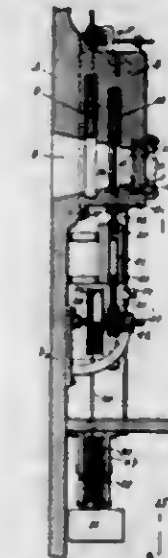
A fly trap comprising a supporting frame including a plurality of upwardly converging supports, a ring secured

to the upper ends of said supports, cross bars secured to the lower portions of said supports and adapted to support bait, a conical member of wire screen secured within said frame and having its upper end open and extending above said ring, an upwardly extending bottom closure for said conical member provided with a plurality of holes, and a chamber member detachably engaged upon the upper



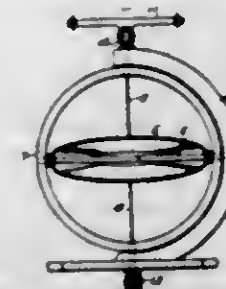
end of said frame and including a ring removably engaging said first named ring, a cylindrical screen portion secured to said second named ring, a detachable cover for said cylindrical portion, and an upwardly extending funnel-shaped portion formed upon the lower end of said cylindrical portion and disposed in spaced relation to the wall thereof and in encircling relation to the upper end of said conical member.

1,313,838. SUBMARINE OBSERVATORY. EDWARD D. STODOLSKY, New Rochelle, N. Y. Filed May 22, 1919. Serial No. 298,593. 12 Claims. (Cl. 61-69.)



1. A submarine observatory comprising a caisson, a stairway in said caisson, observation windows below the water level, means for illuminating the water in the field of view from said windows, and an electrically operated pump, and a float for automatically actuating said pump.

1,313,839. AEROPLANE-RUDDER. CARL A. STROM, Floral Park, N. Y. Filed June 28, 1918. Serial No. 242,478. 6 Claims. (Cl. 244-29.)



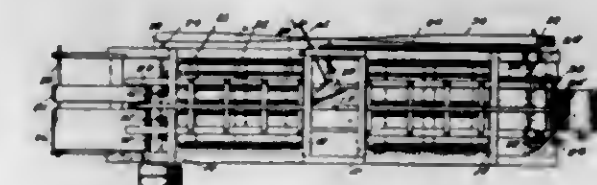
6. A control device for aeroplanes in the shape of a hollow flattened frustocone open at the ends and adapted to be mounted to present the larger end to the air current.

1,313,840. SAFETY WINDOW-CATCH. CARL EDWIN STROM and CARL SWANSON, New Britain, Conn. Filed Dec. 16, 1918. Serial No. 267,005. 6 Claims. (Cl. 16-119.)



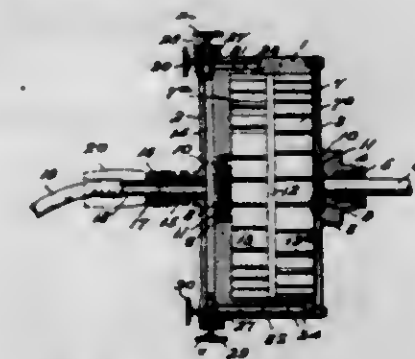
1. In combination with a pair of window sashes, a safety catch comprising a stop member that is mounted on the lower sash and has a nose directed outwardly toward the upper sash and a keeper member that is mounted on the said upper sash, the said keeper member having a spring keeper made of flat spring material that is provided with an opening for receiving the said nose, and having a frame for the said keeper, the said frame having a pair of sockets in spaced relation for housing the ends of the said keeper, and the said keeper having the said ends housed in the said sockets and having the body portion intermediate the said ends of bowed form, normally projecting over the path of the said nose and operative to yield in bringing the said nose into registration with the said opening.

1,313,841. SCUTCHER. BERTRAND S. SUMMERS, Port Huron, Mich. Filed Sept. 13, 1915. Serial No. 50,425. 12 Claims. (Cl. 13-18.)



3. In a machine of the class described, sets of scutcher devices, a pair of gripper belts arranged to feed fiber successively to said scutcher devices, means for releasing the grip of said belts intermediate the scutcher devices, a frame pivoted adjacent the belts intermediate said scutcher devices, means for angularly adjusting the frame, a pair of endless belts mounted on the frame and adapted and arranged to grip the fiber and shift it laterally of the gripper belts, and means for positively driving said shifter belts.

1,313,842. AIR-MOTOR. SALVATORE TRIDICO, Brooklyn, N. Y. Filed Aug. 24, 1918. Serial No. 251,218. 2 Claims. (Cl. 253-2.)



1. In a motor of the character stated, a casing provided with front and back closed end portions, a rotor mounted within said casing and fitting snugly the interior thereof, a packing ring secured about said rotor at the central portion thereof and fitting snugly the interior of the casing so as to divide the rotor chamber into two

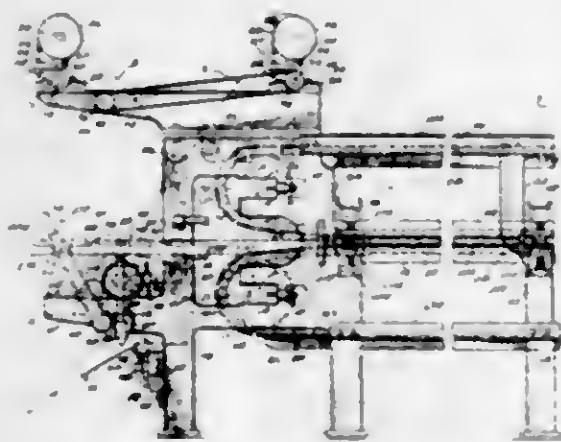
separate compartments, the rotor at one side of said ring being provided with a plurality of tangentially disposed outwardly projecting blades and having, at the other side of the ring, a plurality of similarly disposed and oppositely directed blades, said back end portion being provided with a diametrically extending main inlet duct and the peripheral wall of the casing being provided with supplemental inlet ducts communicating with the respective rotor compartments and with the opposite ends of said main inlet duct, means for supplying pressure fluid to the main inlet duct at the central portion thereof, and fluid pressure control valves threaded in the ends of the main inlet duct for controlling flow of pressure fluid therefrom into said supplemental inlet ducts.

1,313,843. WRIST-WATCH. CHARLES F. THOMAS, New York, N. Y., assignor to A. Wiltner & Co., New York, N. Y., a Corporation of New York. Filed Nov. 27, 1918. Serial No. 264,327. 4 Claims. (Cl. 224-4.)



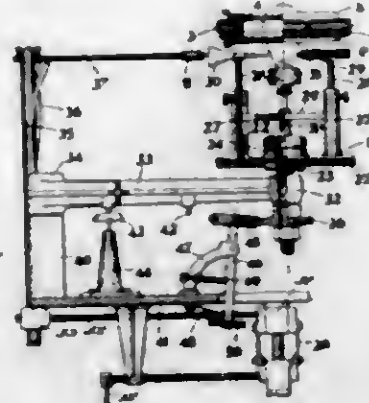
1. A wrist watch comprising a watch case having integral thin lateral rigid extensions; a plurality of rigid clasp sections, said sections being pivotally attached to said lateral extensions, the free ends of the said clasp sections being arranged in overlapping sliding relation, the back of the watch case, the said extensions and the said clasp sections forming an encircling means for the wrist of the wearer; means for normally contracting said clasp sections; and means for holding said clasp sections in relatively adjusted positions.

1,313,844. MACHINE FOR MAKING CORRUGATED BOARD. MELVIN L. TWOMLEY, Chicago, Ill., assignor, by means assignments, to Sefton Manufacturing Corporation, Millbrook, N. Y., a Corporation of New York. Filed July 9, 1914. Serial No. 849,932. 37 Claims. (Cl. 154-32.)



1. In a machine of the class described, a paste roll, means for receiving a strip to which paste has been applied and attaching a liner thereto, means for guiding a strip into contact with said paste roll and thence to said receiver and liner-applying means, means for adjusting said guiding means to carry a strip thereon into and out of contact with said paste roll, means for starting and stopping said liner-applying means and hand-operated means common to said adjusting means and said starting and stopping means.

1,313,845. MACHINE FOR CUTTING ELECTRIC BULBS AND REGENERATING THEM. ADOLPH BARON OTT VON HATONKEE UND VERINKHAZ, West Kensington, London, England, assignor to Aladdin Lamp Syndicate Limited, (in liquidation,) London, England. Filed May 7, 1914. Serial No. 837,095. 3 Claims. (Cl. 40-50.)



1. A machine for transversely cutting the bulbs of electric incandescent lamps, consisting of an annular support, means carried by the said support for holding the lamp and comprising two rings adjustable with respect to each other and identically curved arms pivoted to one of the said rings and engaging at their opposite ends with the other ring within guide slots formed therein, means for moving the said rings in relation one to the other, means for holding the lamp at its lower extremity, means for the rotation of the lamp in the position in which it is held as aforesaid and means for cutting the lamp on its rotation, substantially as described.

1,313,846. SAFETY-PIN. JULIUS WEIS, St. Paul, Minn. Filed Aug. 19, 1918. Serial No. 250,614. 8 Claims. (Cl. 24-159.)

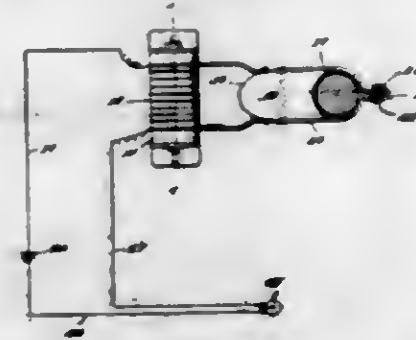


6. In a safety-pin, having a substantially rectangular body portion, an offset portion formed in one of the long sides of said loop for receiving the folds of a garment to which said pin is adapted to be attached, means projecting from said offset portion for preventing the rotation of said pin about the offset portion, a sheath or guard formed on said pin, a pin arm forming one side of said loop, the free end of which is adapted to be held in said sheath, and a spring shoulder formed in said sheath for engaging said arm to hold it in said holding recess and preventing accidental or horizontal movement of the free end of said arm, to prevent said arm from accidentally becoming disengaged from said sheath.

1,313,847. CONTROL FOR TAIL-LIGHTS. HOWARD A. WILKINSON and WILLIAM B. NIXDOER, JR., Oneida, N. Y. Filed Dec. 14, 1917. Serial No. 207,126. 1 Claim. (Cl. 177-329.)

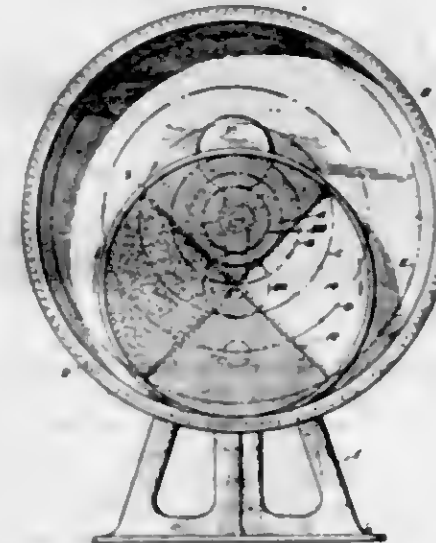
The herein described mechanism for controlling the tail lamp of an automobile, including in combination with the gear shift lever of the machine, spaced uprights disposed adjacent to the lever, an insulated block secured between the uprights, spring contact fingers on the block extending outwardly therefrom and having their free ends rounded inwardly, a resistance coil around the block between the fingers, a lamp in electric circuit with the source of energy and with the fingers, a collar of insulating material on the lever, a bridging block having its outer end rounded and its inner end concaved, and said

concaved end engaging the insulated collar, spring side members connected to the bridging block and extending beyond the rear portion thereof and having interned



round portions which engage with the collar and parallel extensions beyond the round portions, and a blading element between the last mentioned portions for compressing the side members against the collar.

1,313,848. KALEIDOSCOPE. CHARLES W. DRUMMOND, San Francisco, Calif. Filed May 29, 1918. Serial No. 287,630. 7 Claims. (Cl. 240-6.)



1. A kaleidoscope comprising a member having colored sectors thereon and mounted to rotate on its center; means for revolving the center of the said member around an axis approximately concentric with one of the sectors; and means for rotating said member on its axis.

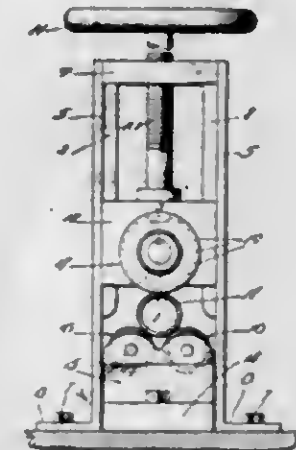
1,313,849. TOY AEROPLANE. ROSARIO GENOVESE, New York, N. Y., assignor of one-half to Morris Farber, New York, N. Y. Filed Feb. 19, 1919. Serial No. 278,009. 7 Claims. (Cl. 46-48.)



1. A toy aeroplane device comprising a body portion having front transverse planes and a rear transverse tail plane, hangers suspended from the front part of the body portion, an axle mounted in said hangers, wheels mounted on said axle, a spring power mechanism mounted in the body portion above said hangers and provided with

a forwardly directed propeller shaft which is driven by said power mechanism, and another shaft operated by said power mechanism and in operative connection with said axle to rotate the wheels thereof, to move the device over a surface.

1,313,850. PIPE-CLEANING MACHINE. JOHN GROH, Chicago, Ill. Filed Mar. 20, 1919. Serial No. 283,737. 8 Claims. (Cl. 29-81.)



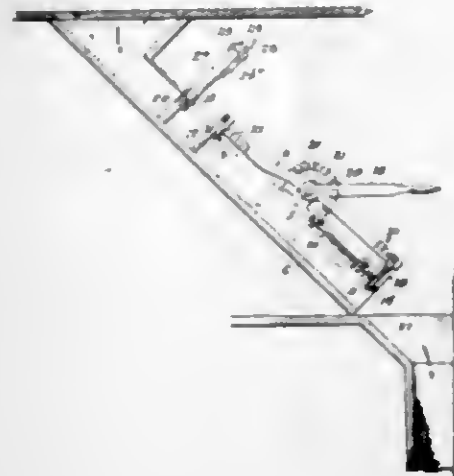
1. In a pipe cleaning machine, the combination of a driving and two driven rollers arranged to receive between them a pipe for treatment, the three rollers having parallel axes and being of substantially the same length with the ends of the driven rollers coincident, the driving roller, however, being misaligned therewith, the acting surfaces of each roller being grooved circumferentially, substantially as described.

1,313,851. LATCH-KEY CARRIER. ROSE C. HANSEN, Philadelphia, Pa. Filed Aug. 10, 1915. Serial No. 44,782. 3 Claims. (Cl. 24-282.)



2. A latch key carrier comprising the combination of snap hook including a swivel at the top thereof, of a flexible connection of soft material permanently attached to said snap hook, said connection being of a length to hold said hook suspended at a position a little below the knee of the wearer when the upper end of said flexible connection is attached to a hose supporter, whereby the rotation of said hook does not twist said flexible connection and said hook may be brought to a position at or about the lower edge of the skirt of the wearer by bending the knees.

1,313,852. CHUTE FOR PROPORTIONING AND FORWARDING MATERIALS. STEPHEN V. JOYCE, New York, N. Y. Filed May 28, 1919. Serial No. 237,116. 11 Claims. (Cl. 221-96.)



1. The combination with a chute, alternately opening and closing charge measuring gates mounted within the chute at a predetermined distance apart, and a gate arranged above the charge measuring gates to regulate the flow of material thereto.

1,313,853. RHEOSTAT. EDWARD M. BENTLEY, Lawrence, N. Y. Filed May 9, 1919. Serial No. 295,945. 30 Claims. (Cl. 219-48.)

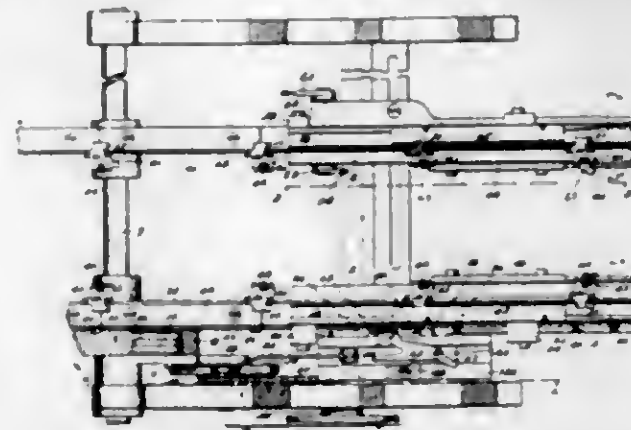


1. A rheostat comprising a bare flexible conductor extended longitudinally between separated points of support and a second conductor arranged to be pressed into contact therewith progressively.

1,313,854. WIRE-BOUND-BOX MACHINE. SERAPHINA F. BACWENS, Chicago, Ill., assignor, by mesne assignments, to Wirebounds Patents Company, Kittery, Me., a Corporation of Maine. Filed Apr. 8, 1912. Serial No. 659,197. Renewed Feb. 13, 1919. Serial No. 276,860. 109 Claims. (Cl. 1-14.)

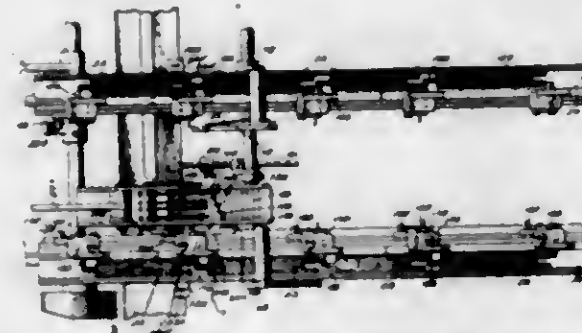
1. The combination in a box machine, of an endless feeding conveyor for feeding wire bound box sides there-

through; cutting means for the wires on said box sides; and means on said conveyor arranged to automatically



control the operation of said cutting means, substantially as described.

1,313,855. WIRE-BOUND-BOX MACHINE. SERAPHINA F. BACWENS, Chicago, Ill., assignor, by mesne assignments, to Wirebounds Patents Company, Kittery, Me., a Corporation of Maine. Filed Sept. 25, 1914. Serial No. 863,421. 32 Claims. (Cl. 1-14.)



30. A machine of the class described comprising, in combination, a step-by-step fed conveyor for feeding box sections; mechanism to fasten binding wire to said sections at intervals; stop mechanism independent of the conveyor for determining feed steps; and means automatically controlling said stop mechanism comprising successively presented members moving with the conveyor.

1,313,856. CIRCUIT-INTERRUPTER. JOHN F. CAVANAGH, Meriden, Conn., assignor to Connecticut Telephone & Electric Company, Inc., Meriden, Conn., a Corporation of Connecticut. Filed Nov. 15, 1918. Serial No. 262,641. 6 Claims. (Cl. 123-168.)



1. In a circuit interrupter, the combination of relatively separable contacts, a flexible spring diaphragm tensioned to hold said relatively movable contacts in engagement and means for flexing said diaphragm to accomplish the separation of said contacts.

1,313,857. INCANDESCENT LAMP. ARTHUR R. DENINGTON, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Mar. 16, 1915. Serial No. 14,859. 4 Claims. (Cl. 176-40.)

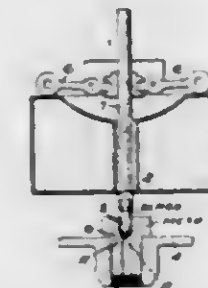
3. In an electric incandescent projection lamp a filament comprising a plurality of spaced and closely wound

coils each capable of forming a band of light, said coils being so disposed in parallel relation to each other that



their projection upon a plane normal to the projecting axis of the lamp are substantially contiguous.

1,313,858. VALVE. HOWARD H. EDGS, Bridgeport, Conn., assignor to The Locomobile Company of America, Bridgeport, Conn., a Corporation of West Virginia. Filed Nov. 9, 1916. Serial No. 130,473. 3 Claims. (Cl. 251-158.)

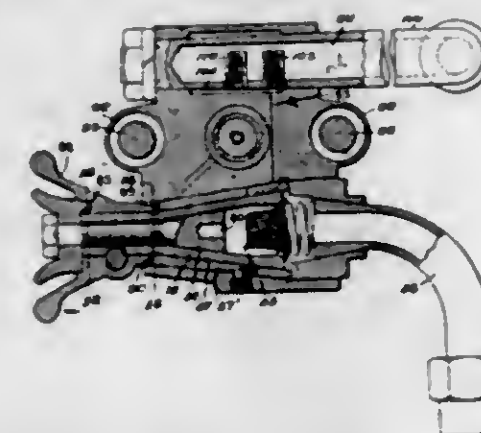


1. A valve having a port presenting an annular diaphragm seat of soft metal and a cooperating valve of dense, non-corrodible lapideous material having a tapered end adapted to enter the port through said seat whereby to provide a permanently fitting line contact with the same.

2. The combination of a non-metallic mineral valve and a valve-stem therefor, said valve being provided with a head and a neck, and said valve-stem being provided with a cup-like recess snugly to receive said head, and an integral annular wall embracing said neck and retaining said head in said recess.

3. The combination of a non-metallic mineral valve and a valve-stem therefor, said valve being provided with an annular groove, and said valve-stem being provided with a cup-like recess in which a portion of said valve is fitted, and an annular wall fitted within said annular groove and holding said valve in said recess.

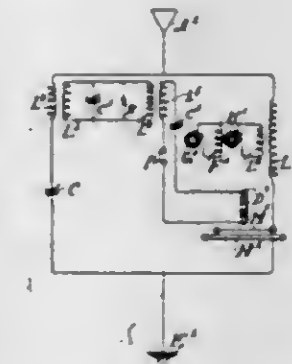
1,313,859. DRILLING APPARATUS. GEORGE H. GILMAN, Claremont, N. H., assignor to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1916. Serial No. 69,938. 18 Claims. (Cl. 121-20.)



1. Drilling apparatus comprising in combination a drill steel, percussive means, drill steel rotating means independent of said percussive means, and controlling

means for coordinately controlling the concurrent admission of pressure fluid to said percussive motor and to said drill steel rotating means, said controlling means including a part normally moving therewith but movable relatively thereto to cut off the supply of pressure fluid to said drill steel rotating means while continuing the supply of pressure fluid to said percussive means.

1,313,860. ELECTRIC-WAVE-RELAYING SYSTEM. JOHN HAYES HAMMOND, Jr., Gloucester, Mass. Filed June 12, 1912. Serial No. 703,219. 12 Claims. (Cl. 250-6.)



2. A system for the relaying of wireless signals, which comprises a sending station emitting electric waves having a fixed characteristic and a variable characteristic, a receiving station, and a relay station provided with means for receiving and emitting electric waves of different fixed characteristics and the same variable characteristic.

1,313,861. HOT-AIR DENTAL SYRINGE. JAMES ERNEST REID, Moorestown, and FREDERICK W. SIDE, Camden, N. J.; said Side assignor to said Reid. Filed May 21, 1919. Serial No. 298,752. 6 Claims. (Cl. 128-257.)

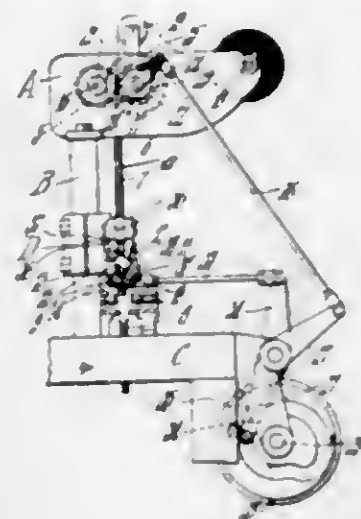


1. A hot air dental syringe including the combination of an electric air heater and, its circuit connections, a supply of air under pressure and its controlling valve, and a circuit maker and breaker interposed in said connections and responsive to air pressure on the outlet side of the valve and adapted to make and break the circuit of the heater.

1,313,862. STRIP FEEDING AND CUTTING MECHANISM. ELMER L. SMITH, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 5, 1919. Serial No. 276,186. 6 Claims. (Cl. 164-42.)

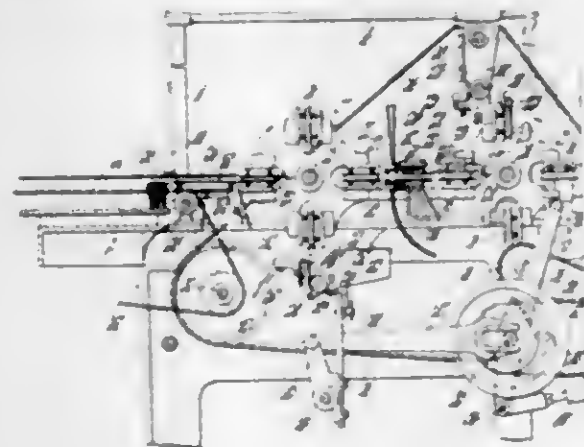
2. The combination with strip feeding mechanism, of shears arranged in advance of the feeding mechanism to

sever the strip fed by the latter, said shears having only one movable blade, and means controlled by the opening



of the shears to positively move the severed end of the strip away from the stationary blade.

1,313,863. WRAPPING-MACHINE. ELMER L. SMITH and ARTHUR E. PHILON, Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 5, 1919. Serial No. 275,220. 13 Claims. (Cl. 93-7.)



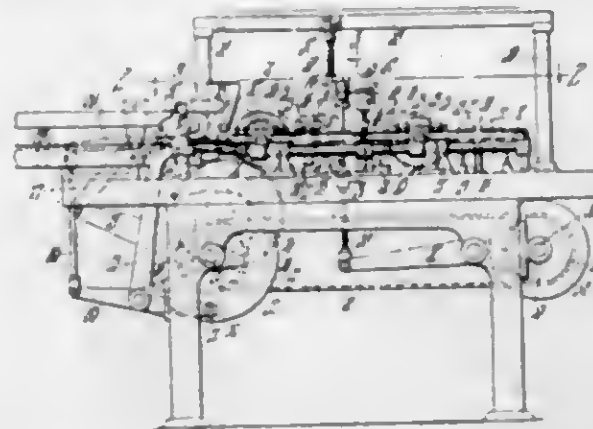
1. In a wrapping machine, a folding finger having an outwardly tapering wrapper engaging end and arranged to first engage the wrapper extension near its outer end and with the thicker portion of the finger, whereby the extension is first spread to insure the subsequent engagement of the thin extreme end of the finger with the extension.

13. In a wrapping machine, an intermittently movable carrier having a pocket in which a partially wrapped article may be positioned with an end wrapper extension projecting substantially at right angles to one wall of the pocket, ejecting means to move the article out of the carrier, and means controlled by the ejecting means to fold said extension flat against said wall during an interval of rest of the carrier.

1,313,864. WRAPPING-MACHINE. ELMER L. SMITH and ARTHUR E. PHILON, Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1919. Serial No. 278,889. 20 Claims. (Cl. 93-2.)

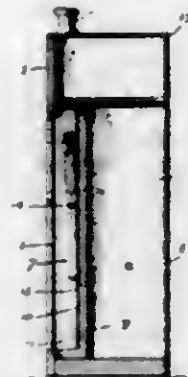
2. In a wrapping machine, a chute comprising upper and lower plates and adapted to receive an article with

a wrapper associated therewith, folding means adjacent the chute, and means for moving a portion of the chute



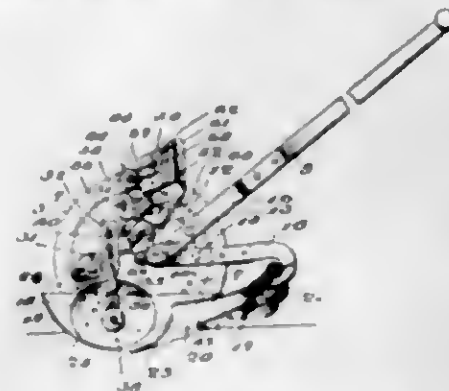
including part of both the upper and the lower plates, together with the article, into the folding means.

1,313,865. COUNTER DISPLAY CASE AND CABINET. JOHN H. HARR, Sauk City, Wis. Filed Nov. 13, 1918. Serial No. 262,321. 1 Claim. (Cl. 211-23.)



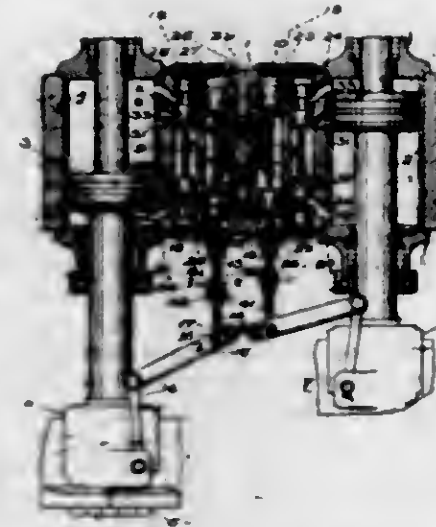
A counter display cabinet embodying a box-like casing having a glazed front, a displaceable back, bottom and side walls, and a vertical partition dividing the interior into a display compartment and a reserve stock compartment, and a vertically movable and displaceable combined article supporting rack and tray arranged between said front and partition and having at the top thereof a backwardly projecting propping flange which constitutes a closing cap for the casing when the parts are assembled.

1,313,866. COMBINATION LAWN-EDGE TRIMMER. JOSEPH SOROVAK, Cedar Rapids, Iowa. Filed May 7, 1917. Serial No. 166,917. 14 Claims. (Cl. 56-19.)



1. A machine of the class described embodying trench forming, mowing, and trench clearing devices, and means whereby said devices may be selectively operated.

1,313,867. PISTON-CONTROLLING MECHANISM. HERBERT H. MAUCK, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 14, 1916. Serial No. 78,259. 29 Claims. (Cl. 121-11.)



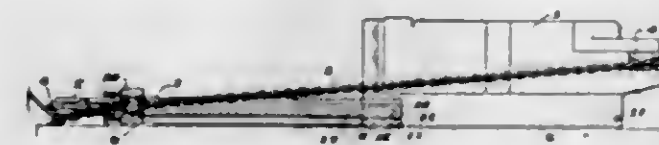
1. In combination, a fluid inlet, piston mechanism, operative connections between the same including a reverse valve, and means adjustable by a single operation for regulating the dwell of said reverse valve in each position thereof.

1,313,868. PUNCTURE-CLOSING DEVICE FOR TIRES. BENJAMIN URICH, Milwaukee, Wis. Filed Jan. 9, 1919. Serial No. 270,434. 5 Claims. (Cl. 152-27.)



1. In a puncture closing device for tires, the combination with a suitable handle, provided with a needle having a bifurcated extremity, of a hook having a shank portion pivotally connected with the handle, and extended to form an operating piece, said hook being free to oscillate to a position between its pivotal connection with the handle, and the needle, and being also adapted, when swung to such position, to engage an elastic band, looped through the bifurcated end of said needle, and said operating piece being disposed for manipulation by the thumb or finger of the user to swing the hook to band releasing position.

1,313,869. MINING-MACHINE. CHARLES BRANT OFFICER, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 5, 1917. Serial No. 205,649. 18 Claims. (Cl. 262-28.)



1. In a mining machine, a machine frame having a cutter bar thereon, and means operatively connected tele-

scopically with said frame including a member disposable in different longitudinal positions beneath the bottom of said frame or in the plane of the bottom thereof.

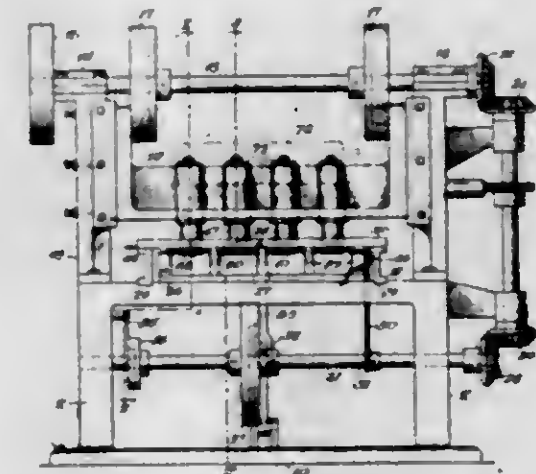
REISSUES.

14,707. SELF-LUBRICATING PISTON. SAMUEL F. ARBUCKLE, Indianapolis, Ind. Filed Mar. 24, 1919. Serial No. 284,838. Original No. 1,294,023, dated Feb. 11, 1919. Serial No. 219,208, filed Feb. 26, 1918. 8 Claims. (Cl. 103-63.)



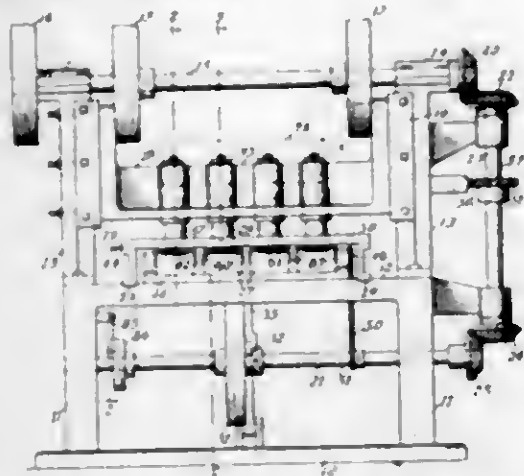
3. A piston rod, an imperforate cup shaped piston member on said rod with one side open, a disk-shaped packing member on said rod and closing the opening in said piston member and forming a chamber for holding liquid lubricating material and extending outward beyond said chamber so as to transmit said material to the periphery thereof by capillary attraction, and a washer on the piston rod of substantially the same diameter as said chamber and on the side of the packing opposite said chamber.

14,708. CAN-END AND GASKET ASSEMBLING MACHINE. CHARLES W. GRAHAM, Allendale, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 25, 1918. Serial No. 230,865. Original No. 1,154,245, dated Sept. 21, 1915. Serial No. 730,900, filed Dec. 10, 1912. 29 Claims. (Cl. 113-80.) Division A.



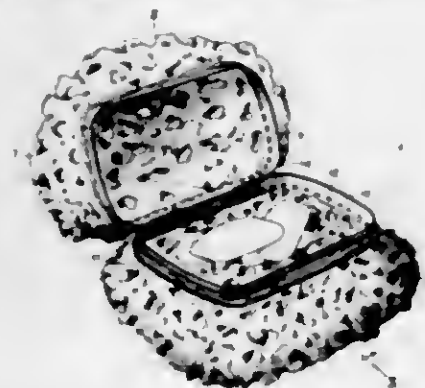
1. In a machine for cutting and applying gaskets to container closures, means for cutting a gasket and assembling it on a closure, said means including a male and female die relatively axially movable, the male die carrying the gasket when cut and arranged to deposit it on a closure when one is placed between the male and female dies, in combination with means for feeding container closures successively, and at the intervals between the die-punching operations, into line between the said male and female dies, substantially as specified.

14,709. PROCESS OF APPLYING GASKETS OR RING-LINERS. CHARLES W. GRAHAM, Allendale, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 3, 1918. Serial No. 238,049. Original No. 1,154,245, dated Sept. 21, 1915, Serial No. 736,900, filed Dec. 16, 1912. 7 Claims. (Cl. 113—80.) Division B.



1. A process of lining can ends which consists in first simultaneously cutting a liner from a web of suitable material and securing said liner in safe position and maintaining control of it individually, and reciprocating said liner without moving it edgewise and delivering said liner onto a can end before releasing it.

14,710. TOILET ARTICLE. ROBERT F. HONSA, Great Neck, N. Y. Filed Sept. 30, 1916. Serial No. 123,182. Original No. 1,173,802, dated Feb. 29, 1916, Serial No. 61,946, filed Nov. 17, 1915. 4 Claims. (Cl. 15—26.)



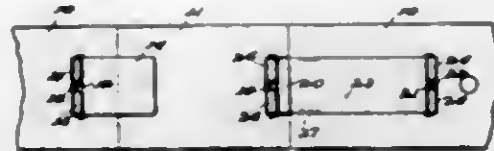
4. An article of the class described comprising a pair of soft resilient body rubbing cover members freely permeable to water and attached to frames which are operatively united so as to constitute a receptacle, substantially as and for the purpose set forth.

14,711. DESIGN FOR A SIGN-POST. DECATUR S. McDANIEL, Jr., Moline, Ill. Filed May 14, 1919. Serial No. 297,177. Term of patent 7 years. Original No. 52,750, dated Dec. 10, 1918, Serial No. 253,832, filed Sept. 12, 1918, for 7 years.



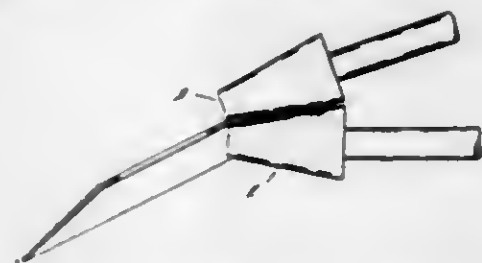
The design for a sign post as shown.

14,712. EXPANSIBLE WHEEL-RIM. JOSEPH H. M. MICRON, Baltimore, Md., assignor of one-eighth to Joseph B. Latimer, Washington, D. C. Filed July 11, 1919. Serial No. 310,220. Original No. 1,278,367, dated Sept. 10, 1918, Serial No. 181,140, filed July 17, 1917. 11 Claims. (Cl. 152—21.)



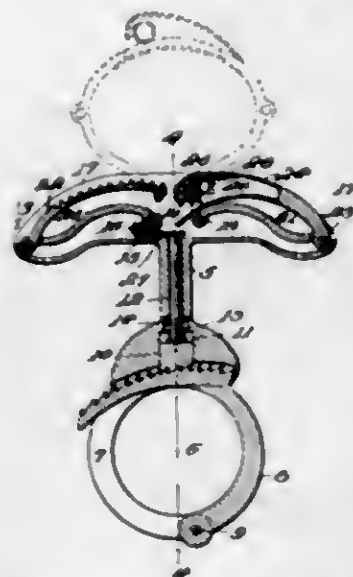
1. A device of the character described including a split rim body, a rim section, a pivot bar carried by one extremity of the rim body, a bracing web for the said bar, a hinge plate having complementary lugs engaging the said bar at opposite sides of said web and pivotally connecting the rim section with the said extremity of the rim body, the rim-section being movable to a position for disengaging said lugs from the said bar, and means swingingly connecting the free extremity of the rim section with the rim body adjacent its opposite extremity, the said section being movable to spread the extremities of the body of the rim and fit between the ends thereof.

14,713. PROCESS OF FORMING TAPERING CROSS-SECTION DISKS. ALDEN L. PUTNAM, Detroit, Mich., assignor to Detroit Pressed Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 19, 1918. Serial No. 212,789. Original No. 1,245,270, dated Nov. 6, 1917, Serial No. 151,600, filed Feb. 28, 1917. 9 Claims. (Cl. 29—156.)



1. The method of forming disks of tapering cross-section comprising the bending of a sheet-metal blank into annular form, welding the opposite ends of said blank to form an integral annulus and expanding one end of the annulus to change the same into disk form.

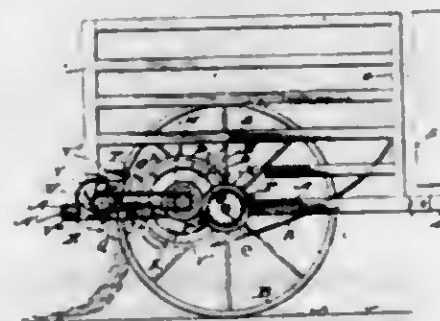
14,714. POLICEMAN'S NIPPERS AND HANDCUFFS COMBINED. GEORGE W. PRATT, Oakland, Calif. Filed Dec. 18, 1918. Serial No. 267,337. Original No. 1,203,778, dated Nov. 7, 1916, Serial No. 61,849, filed Nov. 16, 1915. 10 Claims. (Cl. 70—24.)



1. In police nippers, in combination a tubular stock, a transverse hollow handle connected therewith, an artic-

ulated hand-cuff connected to said hollow handle, and adapted to be folded therein; a flap pivoted in said hollow handle, a cam on one of the connected ends of said articulated hand-cuff, and adapted to actuate said flap; a rod connected to a retaining pawl, slidably arranged in the tube of said tubular stock; a pin connected to said rod, said pin projecting through a slot in the wall of said tubular stock, a spiral spring surrounding the lower end of said rod, teeth on the under face of said retaining pawl, a bifurcated semi-circular part connected to the lower end of said tubular stock, a sickle-shaped tongue, the lower end of which is pivoted to and in the opening of said bifurcated part, teeth on the upper side of said tongue, said teeth engaging with the teeth of said retaining pawl, said tongue adapted to swing in a complete circle through said bifurcated part, substantially as described.

14,715. STRAW-SPREADING MACHINE. MATHIAS RAPP, Morton, Ill. Filed May 26, 1919. Serial No. 299,966. Original No. 1,282,946, dated Oct. 29, 1918, Serial No. 148,604, filed Feb. 14, 1917. 19 Claims. (Cl. 275—3.)



18. A straw-spreading trailer attachment for wagons and the like, including a wheeled trailer frame, a hopper borne by the frame, straw-advancing means associated with the hopper, means cooperating with the advancing means and disposed adjacent thereto for acting upon the material in a direction opposed to the direction of feed of the material so as to comb and loosen the mass of material prior to its discharge from the hopper, means to actuate the straw-advancing means, and means whereby to attach said wheeled frame as a unit from a wagon or the like.

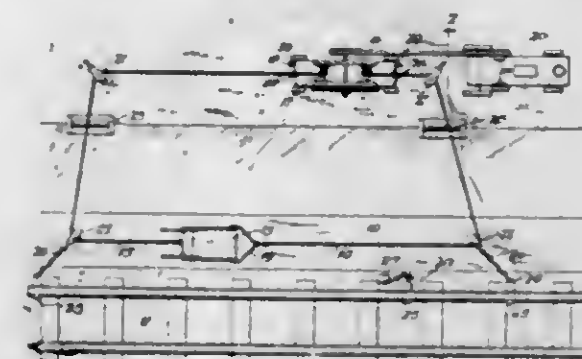
14,716. PACKING BOX OR CARTON. JOHN G. REACH, deceased, Chicago, Ill., by Sefton Manufacturing Corporation, Millbrook, N. Y., and Chicago, Ill., a Corporation of New York, assignee, by mesne assignments. Filed Apr. 17, 1917. Serial No. 162,802. Original No. 893,652, dated July 21, 1908, Serial No. 242,392, filed Jan. 23, 1905. 6 Claims. (Cl. 229—23.)



3. A folding packing box or receptacle comprising an inner and an outer box portion and also a series of strips fitting upon each other, and, when inserted in the inner box, forming compartments for receiving bottles or the like, the inner box consisting of a bottom, four sides binged thereto, one or more of which sides is provided with end extensions adapted to fold inwardly in pairs from opposite sides to form the top of such inner box, and

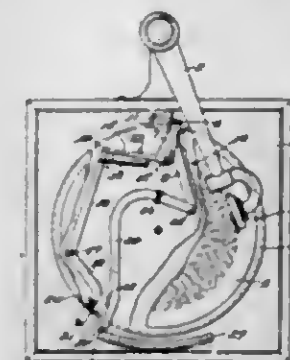
the outer box consisting of four sides or walls corresponding in size to the sides of the inner box, one or more of said walls having extensions to form top and bottom covers or closures for the outer box; substantially as described.

14,717. SCRAPING AND EXCAVATING APPARATUS. JAMES E. REDMOND, Crandall, Ga., assignor, by direct and mesne assignments, to John S. Pratt, Toledo, Ohio. Filed Oct. 26, 1918. Serial No. 259,875. Original No. 1,066,655, dated July 8, 1913, Serial No. 714,655, filed Aug. 12, 1912. 3 Claims. (Cl. 37—19.)



1. In a scraping apparatus a scraper, operating cables connected to the front and the rear of the scraper, winding drums on which the cables are wound, guide pulleys for the cables located in front of the winding drums, a guide pulley behind the scraper from which pulley the rear cable passes to the scraper, a pair of guide pulleys in front of the scraper over one of which pulleys the front cable passes to the scraper, said front cable being disengageable from the last mentioned pulley and the rear cable being engageable with the other one of the front pulleys when the scraper is adjacent to said front pulley.

14,718. PHONOGRAPH-STOP DEVICE. DANIEL M. WINANS, Binghamton, N. Y., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed Jan. 19, 1916. Serial No. 73,055. Original No. 1,084,993, dated Jan. 20, 1914, Serial No. 688,129, filed Apr. 3, 1912. 12 Claims. (Cl. 74—46.)



11. An automatic stop device including in combination with a turntable and an oscillating arm, a pivoted brake lever adapted to be arranged beneath said turntable, a brake on said brake lever in position to cooperate with said turntable, a pivoted latch adapted to be mounted beneath said turntable and to cooperate with said brake lever to hold the same in an inoperative position, a spring connecting said brake lever and said retaining member, a releasing member adjustable with respect to said latch and pivoted coaxially therewith, said releasing member being adapted to be engaged by said oscillating arm to disengage the latch.

DESIGNS.

53,696. LIGHTING-FIXTURE. HARRY C. ADAM, St. Louis, Mo. Filed Apr. 9, 1919. Serial No. 288,890. Term of patent 14 years.



The ornamental design for a lighting fixture, as shown.

53,697. LIGHTING-FIXTURE. HARRY C. ADAM, St. Louis, Mo. Filed Apr. 18, 1919. Serial No. 291,136. Term of patent 14 years.



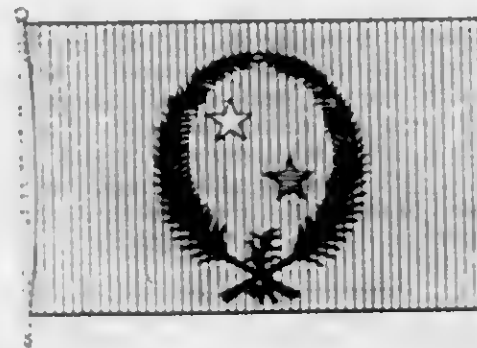
The ornamental design for a lighting fixture, as shown.

53,698. SERVICE FLAG. LEONARD BARTELMER, Wilkesburg, Pa. Filed Mar. 7, 1919. Serial No. 281,319. Term of patent 3½ years.



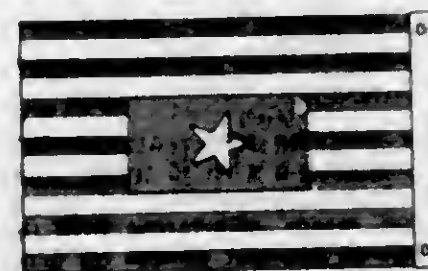
The ornamental design for a service flag, as shown in the accompanying drawing.

53,699. FLAG, BANNER, PENNANT, SIGN, EMBLEM, OR ARTICLE OF A SIMILAR NATURE. ISALYNE M. BREMER, Los Angeles, Calif. Filed Oct. 21, 1918. Serial No. 259,020. Term of patent 3½ years.



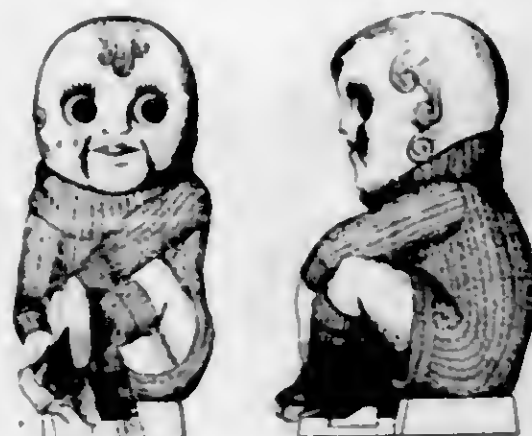
The ornamental design for a flag, banner, pennant, sign, emblem or article of a similar nature as shown.

53,700. FLAG, PENNANT, SIGN, EMBLEM, OR ARTICLE OF A SIMILAR NATURE. JOHN W. BELL, Jr., Brooklyn, N. Y. Filed Dec. 22, 1917. Serial No. 208,524. Term of patent 3½ years.



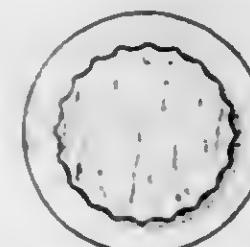
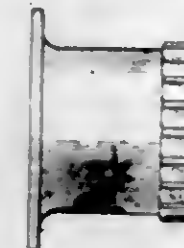
The ornamental design for a flag, pennant, sign, emblem or article of a similar nature as shown.

53,701. STATUETTE OR FIGURE. FERDINAND BRACHITZ, New York, N. Y., assignor to Elektra Toy & Novelty Co., New York, N. Y. Filed Apr. 16, 1919. Serial No. 290,617. Term of patent 3½ years.



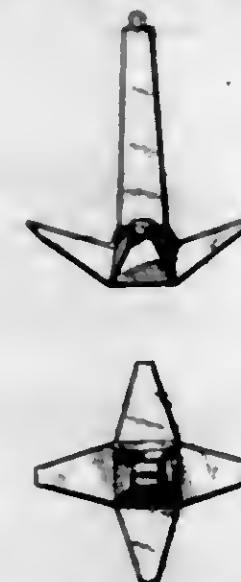
The ornamental design for a statuette or figure as shown.

53,702. CASING FOR SIGNAL-HORNS. HARRISON HURLBERT BORCE, Forest Hills, N. Y. Filed Jan. 20, 1915. Serial No. 3,420. Term of patent 3½ years.



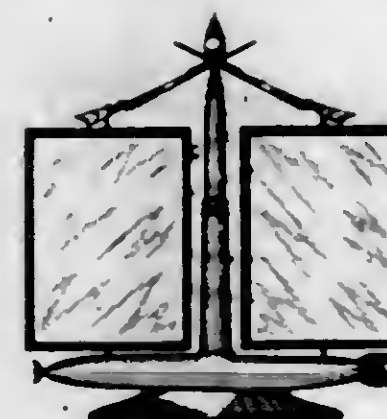
The ornamental design for a casing for signal horns as shown.

53,703. ANCHOR. CHARLES H. BOYLES, Seattle, Wash. Filed Apr. 1, 1919. Serial No. 286,777. Term of patent 7 years.



The ornamental design for an anchor, as shown.

53,704. PHOTO FRAME OR STAND. CHARLES CAMPBELL and DUNCAN CAMPBELL, Philadelphia, Pa. Filed May 13, 1919. Serial No. 296,934. Term of patent 14 years.



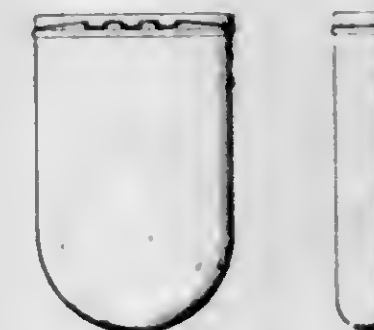
The ornamental design for a photo frame or stand, as shown.

53,705. EMBLEM, BUTTON, RING-TOP, PIN, OR ARTICLE OF SIMILAR NATURE. CALVIN DEAN, Providence, R. I. Filed Jan. 25, 1919. Serial No. 273,164. Term of patent 3½ years.



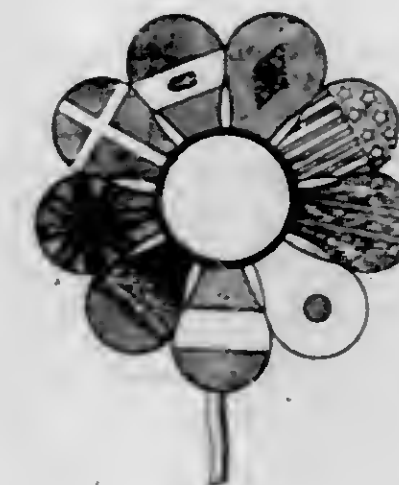
The ornamental design for an emblem, button, ring top, pin, or article of similar nature, as shown.

53,706. TOBACCO-BOX. ELLA F. DE FOREST, New Canaan, Conn. Filed Feb. 26, 1919. Serial No. 279,448. Term of patent 14 years.



The ornamental design for a tobacco box substantially as shown and described.

53,707. PIN AND PICTURE-FRAME. EMMANUEL M. DIALYNAS, Baltimore, Md. Filed May 21, 1919. Serial No. 298,802. Term of patent 14 years.



The ornamental design for a pin and picture frame as shown.

53,708. BEVERAGE-DISPENSING STAND. CHARLES M. EARL, Detroit, Mich. Filed Feb. 6, 1919. Serial No. 275,477. Term of patent 14 years.



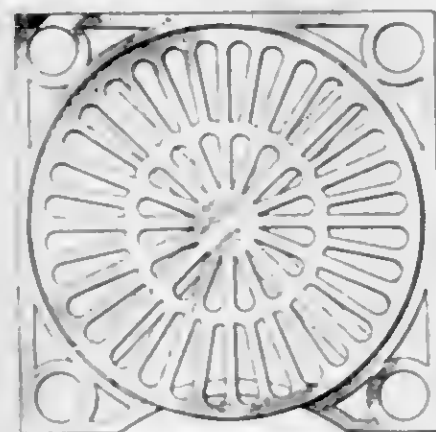
The ornamental design for a beverage dispensing stand as shown.

53,709. TIRE. CHARLES W. GARANE, Toledo, Ohio, assignor to The Bowling Green Rubber Company, Toledo, Ohio, a Corporation of Ohio. Filed May 15, 1919. Serial No. 297,410. Term of patent 14 years.



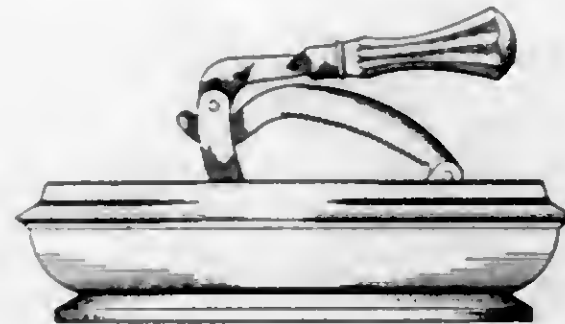
The ornamental design for a tire as shown.

53,710. OVEN TURN-TABLE. ERNEST PARRAZ HOWE, Clinton, Mass. Filed July 6, 1918. Serial No. 243,724. Term of patent 7 years.



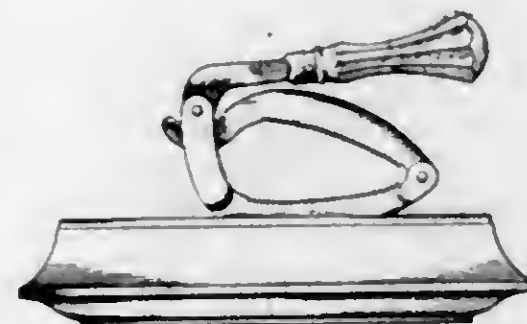
The ornamental design for an oven turn table, as shown.

53,711. COMBINATION NUT BOWL AND CRACKER. JESSE S. KEPLER, Dayton, Ohio, and MILTON O. KEPLER, New York, N. Y. Filed Mar. 10, 1919. Serial No. 281,865. Term of patent 14 years.



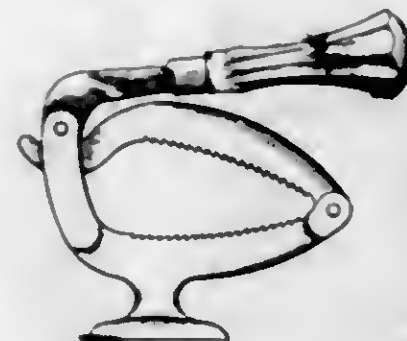
The ornamental design for a combination nut bowl and cracker, substantially as shown.

53,712. COMBINATION NUT BOWL AND CRACKER. JESSE S. KEPLER, Dayton, Ohio, and MILTON O. KEPLER, New York, N. Y. Filed Mar. 10, 1919. Serial No. 281,866. Term of patent 14 years.



The ornamental design for a combination nut bowl and cracker, substantially as shown.

53,713. NUTCRACKER. JESSE S. KEPLER, Dayton, Ohio, and MILTON O. KEPLER, New York, N. Y. Filed Mar. 10, 1919. Serial No. 281,867. Term of patent 14 years.



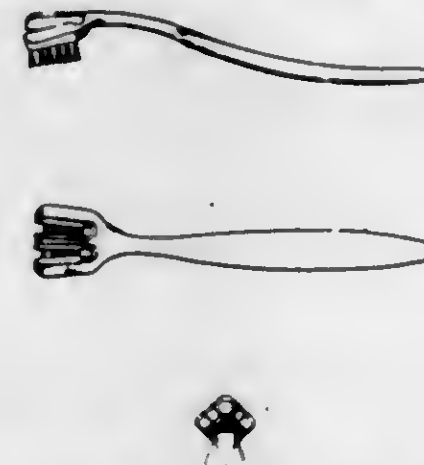
The ornamental design for a nutcracker, substantially as shown.

53,714. RADIATOR-HOOD FOR AUTOMOBILES. GROSSE W. KERR, Racine, Wis. Filed May 2, 1919. Serial No. 294,331. Term of patent 7 years.



The ornamental design for a radiator hood for automobiles as shown.

53,715. TOOTH-BRUSH. EDWIN J. SAMSON, New York, N. Y., assignor of one-third to Herman R. Voigtlaender and one-third to Arthur S. Bandler, New York, N. Y. Filed Mar. 20, 1919. Serial No. 283,939. Term of patent 14 years.



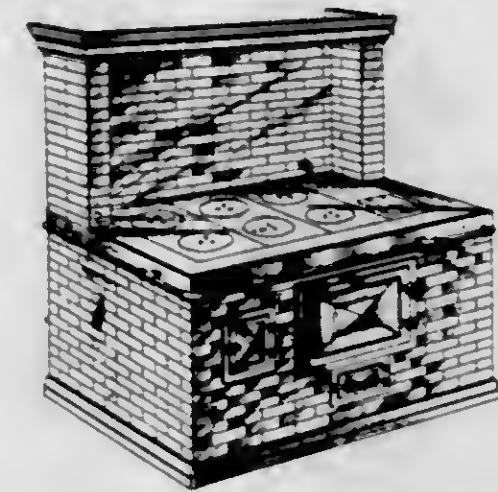
The ornamental design for a tooth brush as shown.

53,716. STATUETTE OR SIMILAR ARTICLE. RAY SMITH, Portland, Oreg., assignor to Richard L. Hardin, Portland, Oreg. Filed Feb. 5, 1919. Serial No. 275,259. Term of patent 3 1/2 years.



The ornamental design for a statuette or similar article, as shown.

53,717. STOVE. ALEXANDER SOKOLOWSKI, Peru, Ill. Filed Mar. 14, 1919. Serial No. 282,757. Term of patent 3 1/2 years.



The ornamental design for a stove, as shown.

53,718. AQUARIUM AND FOUNTAIN. MORRIS STEIN, Philadelphia, Pa. Filed May 20, 1919. Serial No. 299,995. Term of patent 7 years.



The ornamental design for an aquarium and fountain, as shown.

53,719. AQUARIUM. MORRIS STEIN, Philadelphia, Pa. Filed May 26, 1919. Serial No. 299,996. Term of patent 7 years.



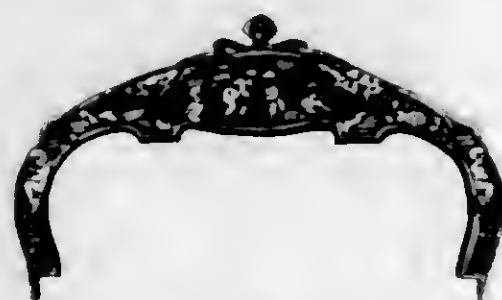
The ornamental design for an aquarium, as shown.

53,720. INTERNATIONAL PATRIOTIC EMBLEM. PIUS O. TOGNELLI, Lincoln, Calif. Filed Oct. 24, 1918. Serial No. 259,592. Term of patent 3½ years.



The ornamental design for an international patriotic emblem, as shown.

53,721. HAND-BAG FRAME. WILLIAM TUSTON, Newark, N. J., assignor to The Art Hand-Bag Frame Co., New York, N. Y., a firm composed of Florindo Mazza and Charles Mazza. Filed Apr. 18, 1919. Serial No. 291,147. Term of patent 3½ years.



The ornamental design for a hand-bag frame, as shown.

53,722. AUTOMOBILE-BODY. B. WICKLIFFE TWYMAN, Muncie, Ind. Filed Apr. 21, 1919. Serial No. 291,748. Term of patent 7 years.



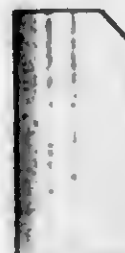
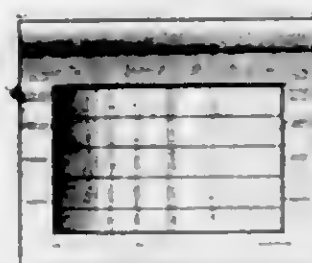
The ornamental design for an automobile body as shown.

53,723. BAG FOR CONTAINING MERCHANDISE. JOHN H. WILKINS, Washington, D. C. Filed Mar. 26, 1918. Serial No. 224,909. Term of patent 14 years.



The ornamental design for a bag for containing merchandise, as shown.

53,724. CARTON. PHILIP K. WAGLEST, Chicago, Ill. Filed May 28, 1919. Serial No. 300,494. Term of patent 14 years.



The ornamental design for a carton, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 19, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 70,824. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN F. CHAMBER, Freeport, Ill. Filed June 2, 1913.

Ser. No. 101,401. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MOUNTAIN STATES MANUFACTURING Co., Provo, Utah. Filed Feb. 15, 1917.

EGG-O-GENE

Particular description of goods.—An Egg Substitute. Claims use since Jan. 1, 1917.

Over=All

Particular description of goods.—Canned Fruits, Canned Vegetables, Teas, Coffee, Spices, Flavoring Extracts for Food, Jellies, Fruit Preserves, Tapioca, Catsup, Mince-Meat, Olives, Pickles, Cotton-Seed Salad-Oils, Cocoa, Cooking and Baking Chocolate, Cider Vinegar, Rice, Raisins, Dried Currants, Canned Salmon, Evaporated Milk, Corn-Starch, Shredded Coconut, Wheat-Flour, Prepared Mustard, and Jams.

Claims use since July 3, 1910.

Ser. No. 88,512. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE TOWLE MAPLE PRODUCTS COMPANY, Wilmington, Del., and St. Paul, Minn. Filed Aug. 9, 1913.

LOG CABIN



No claim being made to the words "Ready-Spread" apart from the mark shown.

Particular description of goods.—Confection Paste. Claims use since Dec. 19, 1910.

Ser. No. 99,211. (CLASS 37. PAPER AND STATIONERY.) THOMAS FINLAY, Auckland, New Zealand. Filed Nov. 10, 1910.

THE GOLDEN RULE

Particular description of goods.—Guide-Rulers for Scholastic Purposes.

Claims use since July 1, 1910.

265 O. G.—29

Ser. No. 104,243. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.



Particular description of goods.—Piece Goods Comprising Woolen and Cotton Dress Goods. Claims use since on or about June 5, 1912.

Ser. No. 104,290. (CLASS 15. OILS AND GREASES.) UNION PETROLEUM COMPANY, Philadelphia, Pa. Filed June 5, 1917.

UNION

Particular description of goods.—Mineral Oils, Compounded Mineral Oils, Greases, and Oil Compositions—Namely, Lubricating, Slushing, Cutting, Tempering, Paper-Saturating, Electrical-Transformer, Burnlog, Illuminating, and Mineral Lard Oils; Locomotive, Car, Cup, Driving-Rod, Box, Elevator, Gear, Wire-Rope, Wire-Cable, and Slushing Greases; Petroleum Jelly for Slushing, Lubricating, and Anticorrosive Purposes and as a Base for Oils and Greases for Such Purposes; Benzine, Naphtha, and Gasolene; Paraffin; and Paraffin-Wax.

Claims use since on or about the year 1896.

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Ser. No. 105,530. (CLASS 39. CLOTHING.) UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Aug. 7, 1917.

GOLDEN RULE

Particular description of goods.—Rubber Boots and Shoes.

Claims use since 1890.

Ser. No. 107,410. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THOMAS P. LIPPITT, Washington, D. C., and San Juan, Porto Rico. Filed Nov. 16, 1917.

TIP-TOP

Particular description of goods.—Fresh Fruits—Namely, Oranges, Bananas, Pineapples, Grape-Fruit, and Coconuts.

Claims use since June, 1915.

Ser. No. 108,531. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KIICHI MIYAUCHI, Nodasam-Mora, Nodasam-Gun, Japan. Filed Jan. 18, 1918.

MIYAUCHI



No claim is made to the surname "Miyachi" apart from the trade-mark shown in the drawing.

Particular description of goods.—Canned Lobster, Canned Crabs, Canned Fish, and Canned Shell-Fish.

Claims use since Mar. 23, 1917.

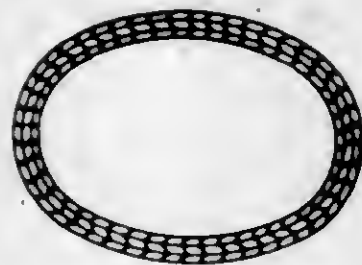
Ser. No. 109,270. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MINT PRODUCTS COMPANY, INC., New York, N. Y. Filed Feb. 28, 1918.

LIFE SAVERS

Particular description of goods.—Chewing-Gum and Candy.

Claims use since Apr. 1, 1916.

Ser. No. 110,082. (CLASS 12. CONSTRUCTION MATERIALS.) VENESTA LIMITED, London, England. Filed Apr. 9, 1918.



Particular description of goods.—Composite or Compound Sheets of Wood Made of Ply Material.

Claims use since the month of September, 1917.

Ser. No. 110,375. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) B. L. JOHNSON & Co., Knoxville, Tenn. Filed Apr. 22, 1918.



Particular description of goods.—Caramels, Chocolates, Cream Candles, Coconut Candles, Pan-Candles, Marshmallow Candles, Hard-Bolled Candles, Peanut Confections, Popcorn Confections, Chewing-Gum, Ice-Cream Cones, Cakes, Jelly Candles, and Gum-Drops.

Claims use since Nov. 1, 1917.

Ser. No. 110,403. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SHEPARD ELECTRIC CRANE & HOIST CO., Monticello Falls, N. Y. Filed Apr. 23, 1918.



Particular description of goods.—Electrically-Operated Cranes and Electrically-Operated Hoisting Machinery.

Claims use since Mar. 18, 1918.

Ser. No. 110,485. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.



The picture of the man appearing as a part of the trade-mark is fanciful.

Particular description of goods.—Air-Drying Enamel, Ready-Mixed Rim-Paint, Engine-Enamel, Ready-Mixed Tire-Paint, Bronze Paint, Varnish, Prussian Blue in Oil, Furniture-Polish, and Prepared Shellac.

Claims use since Jan. 1, 1918.

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Ser. No. 111,038. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) CUPPLES COMPANY, MANUFACTURERS, St. Louis, Mo. Filed May 18, 1918.

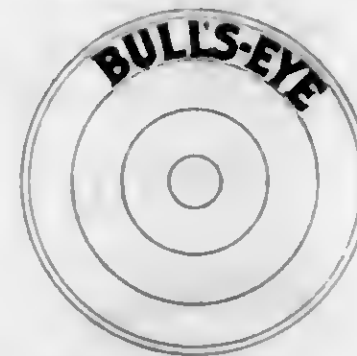
BESIONE

No claim being made to the word "Best" or the word "Tone" apart from the mark shown.

Particular description of goods.—Photographs.

Claims use since on or about the 1st day of April, 1918.

Ser. No. 111,176. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOLT & COMPANY, New York, N. Y. Filed May 24, 1918.



Particular description of goods.—Wheat-Flour.

Claims use since Mar. 20, 1900.

Ser. No. 111,291. (CLASS 37. PAPER AND STATIONERY.) ADAMS, CUSHING & FOSTER, INC., Boston, Mass. Filed June 1, 1918.

DEVONSHIRE

The word "Devonshire."

Particular description of goods.—Writing and Printing Paper and Writing-Tablets.

Claims use since Mar. 1, 1907.

Ser. No. 112,065. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) IDEAL SHEET METAL WORKS, Chicago, Ill. Filed July 11, 1918.

Ideal

Particular description of goods.—Radiators for Automobiles.

Claims use since November, 1911.

Ser. No. 113,376. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CARLOTTA PINDER, Chicago, Ill. Filed Sept. 25, 1918.

PICK ME UP

Particular description of goods.—Raisins, Sugar-Coated Peanuts, and Chocolate-Coated Peanuts.

Claims use since July 17, 1918.

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Ser. No. 113,693. (CLASS 15. OILS AND GREASES.) ISLAND PETROLEUM COMPANY, Baltimore, Md. Filed Oct. 11, 1918.



Particular description of goods.—Illuminating and Lubricating Oils and Greases.

Claims use since 1917.

Ser. No. 113,764. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GENEVA CUTLERY CORPORATION, Geneva, N. Y. Filed Oct. 17, 1918.



PYRAMID

The cross-hatch lines on one face of the pyramid indicate a shadow.

Particular description of goods.—Cutlery—Namely, Razors.

Claims use since May, 1916.

Ser. No. 114,539. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) U. T. HUNGERFORD BRASS & COPPER CO., New York, N. Y. Filed Dec. 7, 1918.



The use of the words "Hungerford" and "Brand" as part of the trade-mark is hereby disclaimed.

Particular description of goods.—Steel Tubing.

Claims use since Aug. 1, 1918.

Ser. No. 114,879. (CLASS 39. CLOTHING.) ALBERT M. DAVIS, Philadelphia, Pa. Filed Dec. 30, 1918.



RIGHT OFF THE BLOCK

No claim is made for the words "Right Off the Block" apart from the mark shown in the drawing. The picture of the man shown in the trade-mark is fanciful.

Particular description of goods.—Felt Hats.

Claims use since about Dec. 10, 1917.

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Ser. No. 114,896. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) D. E. BROOKS & Co., Newburgh, N. Y. Filed Dec. 31, 1918.



Particular description of goods.—Canned Tomatoes, Canned Beets, Canned Refugee-Beans, Canned Pumpkins, Canned Corn, Canned Squash, Canned Spinach, Canned Peas, Canned Asparagus-Tips, Canned Succotash, Canned Wax-Beans, Canned Lima Beans, Canned Tuna Fish, Canned Salmon, Canned Cherries, Canned Green-Gage Plums, Canned Apricots, Canned Pineapples, Canned Peaches, Canned Pears, Dried Beef, Horse-Radish, Cocoa-nut, and Tomato Catsup.

Claims use since Feb. 1, 1896.

Ser. No. 115,252. (CLASS 39. CLOTHING.) LOUIS FRASATCH, Chicago, Ill. Filed Jan. 18, 1919.



Applicant does not claim any statutory rights to the word "Brand" as a trade-mark apart from the mark shown on the drawing.

Particular description of goods.—Underwear Made of Textile Fabric.

Claims use since Dec. 20, 1918.

Ser. No. 115,736. (CLASS 15. OILS AND GREASES.) PENN AMERICAN REFINING CO., Oil City, Pa. Filed Feb. 10, 1919.



The individual words "Penn" and "American" being disclaimed except as used in conjunction with each other as shown.

Particular description of goods.—Fuel and Lighting Oils, Engine and Automobile Lubricating Oils, and So-called Paraffin-Wax.

Claims use since about Nov. 1, 1918.

Ser. No. 115,891. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ALBERT FRED WOLKE, Louisville, Ky. Filed Feb. 15, 1919.



Without waiving any common-law right applicant hereby disclaims the words "Light & Power" and the word "Lite" apart from the mark shown.

Particular description of goods.—Self-Contained Electric Lighting and Power Plants.

Claims use since June, 1917.

Ser. No. 115,998. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MASON, AD & MAGENHEIMER CONF. MFG. CO., Brooklyn, N. Y. Filed Feb. 19, 1919.

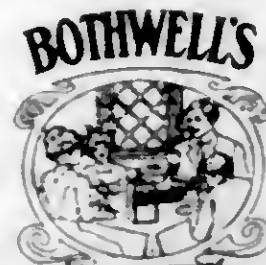


The lining is for shading purposes only and does not indicate color. The exclusive right to the use of the word "Mint" is hereby disclaimed.

Particular description of goods.—Candies and Chocolate.

Claims use since Jan. 29, 1918.

Ser. No. 116,243. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEO G. VOLL, Denver, Colo. Filed Mar. 1, 1919.



No claim is made to the exclusive use of the name "Bothwell's" apart from the mark as shown, and the pictures shown in the mark are fanciful.

Particular description of goods.—A Compound Flour Composed of Wheat and Corn, and Syrup Which is a Blend of Maple, Cane, and Corn Syrups.

Claims use since Mar. 1, 1900.

Ser. No. 116,407. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CARLE DRAPER BAKING CO., Detroit, Mich. Filed Mar. 8, 1919.



Particular description of goods.—Bread.

Claims use since about March, 1918.

Ser. No. 116,460. (CLASS 12. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) FOSTER, MERRIAM & COMPANY, Meriden, Conn. Filed Mar. 11, 1919.

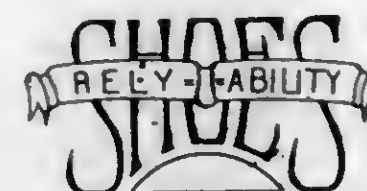


Particular description of goods.—Drawer-Handles, Escutcheons, Furniture-Handles, Furniture-Knobs, Drawer-Knobs, Table-Brackets, Desk-Slides, Toilet-Screws, Customer-Hooks, Hat and Coat Hooks, Hinges, Metallic Sliding Shoes for Moving Heavy Furniture, Sliding Tips for Furniture-Legs, and the Following Styles of Casters: Plate, Roller-Bearing, Ball-Bearing, Grip-Neck, Socket, Bracket, Bed, Metal Bed, and Caster-Sockets.

Claims use since on or about the 10th day of January, 1915.

[Vol. 265. No. 3.]

Ser. No. 116,503. (CLASS 39. CLOTHING.) SCHMOLL FILLS & CO., New York, N. Y. Filed Mar. 12, 1919.



We make no claim to the word "Shoe" apart from the mark shown on the drawing.

Particular description of goods.—Shoes Made of Leather and Rubber.

Claims use since about January, 1919.

Ser. No. 116,594. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE DEFIANCE MACHINE WORKS, Defiance, Ohio. Filed Mar. 15, 1919.

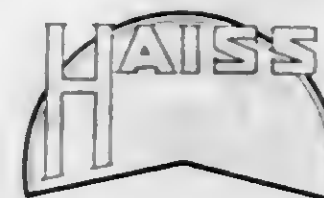


Consisting of the word "Defiance."

Particular description of goods.—Metal-Working Machinery—viz., Lathes and Machines for Planing, Slotting, Shaping, Bending, Drilling, Punching, Milling, Balancing, and Shearing and Parts Thereof—and Woodworking Machinery Comprising Wood-Turning, Mortising, Sawing, Planing, Polishing, Boring, Shaping, and Bending Machines.

Claims use on woodworking machinery since July 9, 1898, and on metal-working machinery since Apr. 21, 1917.

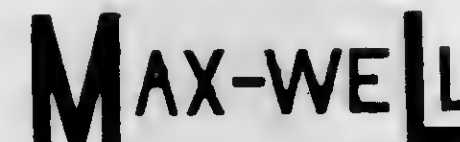
Ser. No. 116,599. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GEO. HAISS MFG. CO. INC., New York, N. Y. Filed Mar. 15, 1919.



Particular description of goods.—Wagon-Loaders of the Elevator Type.

Claims use since Feb. 24, 1919.

Ser. No. 116,843. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) HENRY MCKINNIS, Pittsburgh, Pa. Filed Mar. 24, 1919.



Particular description of goods.—Gascocks, Oil, and Solid Fuel Burning Stoves, Coolers, Ventilators.

Claims use since June 1, 1918.

[Vol. 265. No. 2.]

Ser. No. 116,960. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WILLIAM J. BIENEMANN, El Paso, Tex. Filed Mar. 28, 1919.



Particular description of goods.—A Polish for Furniture, Floors, and All Polished-Wood Finishes.

Claims use since about September, 1915.

Ser. No. 117,059. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NATIONAL DAIRY CO., Toledo and Pioneer, Ohio, and Ennis and Morenci, Mich. Filed Mar. 31, 1919.



Particular description of goods.—Sterilized Milk Put Up in Sealed Containers.

Claims use since Mar. 29, 1919.

Ser. No. 117,139. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HENDLER CREAMERY CO., Baltimore, Md. Filed Apr. 3, 1919.



Particular description of goods.—Ice-Cream, Frozen Custards, and Ices.

Claims use since Apr. 1, 1919.

Ser. No. 117,155. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) FRED D. DIVINE CO., Utica, N. Y. Filed Apr. 4, 1919. Under ten-year proviso.



Particular description of goods.—Fishing-Rods.

Claims use since the year 1882.

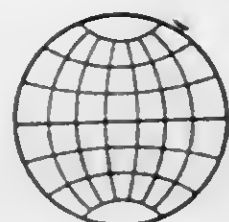
[Vol. 265. No. 2.]

Ser. No. 117,189. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LATTI-MARTIN PUMP CO., Hickory, N. C. Filed Apr. 5, 1919.



Particular description of goods.—Pumping Systems, Pneumatic Displacement Pumps, Automatic Sewage-Ejectors, Automatic Cellar-Drainers, Filter-Press Pumps, Steam-Pumps, Air-Pumps, and Feed-Pumps.
Claims use since July, 1913.

Ser. No. 117,190. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LATTI-MARTIN PUMP CO., Hickory, N. C. Filed Apr. 5, 1919.



Particular description of goods.—Pumping Systems, Pneumatic Displacement-Pumps, Automatic Sewage-Ejectors, Automatic Cellar-Drainers, Filter-Press Pumps, Steam-Pumps, Air-Pumps, and Feed-Pumps.
Claims use since July, 1913.

Ser. No. 117,191. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LATTI-MARTIN PUMP CO., Hickory, N. C. Filed Apr. 5, 1919.

UNIVERSAL

Particular description of goods.—Pumping Systems, Pneumatic Displacement-Pumps, Automatic Sewage-Ejectors, Automatic Cellar-Drainers, Filter-Press Pumps, Steam-Pumps, Air-Pumps, and Feed-Pumps.
Claims use since July, 1913.

Ser. No. 117,197. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SCHWABENBACH-HILSON COMPANY, New York, N. Y. Filed Apr. 5, 1919.



CLUB

Particular description of goods.—Silk, Woolen, and Cotton Piece Goods, a Combination of Silk and Cotton Piece Goods, and Knitted Fabrics in the Piece.
Claims use since Feb. 1, 1919.

Ser. No. 117,209. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS A. WALSH, Yonkers, N. Y. Filed Apr. 5, 1919.

BULGARLAC

Particular description of goods.—A Bacteriological Culture of *Bacillus Bulgaricus* for Intestinal Putrefaction.
Claims use since Jan. 1, 1917.

Ser. No. 117,214. (CLASS 37. PAPER AND STATIONERY.) THE BANKERS SUPPLY CO., Denver, Colo., and Chicago, Ill. Filed Apr. 7, 1919.



Particular description of goods.—Safety-Paper.
Claims use since about the 14th day of March, 1919.

Ser. No. 117,215. (CLASS 37. PAPER AND STATIONERY.) THE BANKERS SUPPLY CO., Denver, Colo., and Chicago, Ill. Filed Apr. 7, 1919.



Particular description of goods.—Safety-Paper.
Claims use since about the 14th day of March, 1919.

Ser. No. 117,302. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WHITE-STOKES CO., INC., Chicago, Ill. Filed Apr. 10, 1919.

Valmore

Particular description of goods.—Cocoa, Icing, and Cake-Filler, Fillers for Cream-Puffs, Eclairs, and Topping for Ice-Cream Sodas, Topping for Sodas, and Topping for Beverages, and Confectioners' Marshmallow.
Claims use since August, 1913.

Ser. No. 117,397. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) BARTHA'S MANUFACTURING COMPANY, Glendale, N. Y. Filed Apr. 12, 1919.



Particular description of goods.—Braids Known as Novelty-Braids, Rick-Rack Braids, and Lingerie-Braids, Sometimes Called Tapes.
Claims use since about Feb. 14, 1919.

Ser. No. 117,399. (CLASS 37. PAPER AND STATIONERY.) ESLECK MANUFACTURING COMPANY, Turners Falls, Mass. Filed Apr. 12, 1919.

ESCOLITE

The trade-mark consisting of the word "Escolite."
Particular description of goods.—Bond-Paper for Writing Purposes, Correspondence, Non-Carbonized Type-Writer Paper, and Manifold Writing-Papers and Onion-Skin Papers.
Claims use since Feb. 26, 1919.

Ser. No. 117,563. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FLEISCHMANN'S VIENNA MODEL BAKERY, (INC.) New York, N. Y. Filed Apr. 17, 1919.

DOUGHBOYS

Consisting of the word "Doughboys."
Particular description of goods.—Doughnuts.
Claims use since Feb. 13, 1919.

Ser. No. 117,609. (CLASS 38. PRINTS AND PUBLICATIONS.) ASHWELL, DAVIS & CO. INC., New York, N. Y. Filed Apr. 19, 1919.

EXPORT TRADE

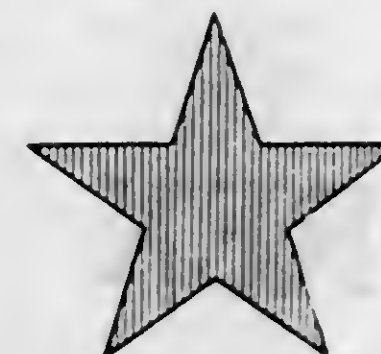
Particular description of goods.—A Weekly Magazine.
Claims use since Mar. 29, 1919.

Ser. No. 117,757. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WHITTIER CITRUS ASSOCIATION, Whittier, Calif. Filed Apr. 22, 1919.

QUAKER GIRL

Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges, Lemons, and Grape-Fruit.
Claims use since about June 1, 1901.

Ser. No. 117,814. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) GROVER N. MAINERT, Atlanta, Ga. Filed Apr. 24, 1919.



The star is colored green.
Particular description of goods.—Charcoal.
Claims use since about 1914.

Ser. No. 117,834. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DAIRY FRANKLIN, Jacksonville, Fla. Filed Apr. 23, 1919.

"DAISY-O-LA"

Particular description of goods.—Hair-Growing Preparations.
Claims use since Sept. 2, 1918.

Ser. No. 117,870. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) COLUMBIA MANTLE COMPANY, Brooklyn, N. Y. Filed Apr. 26, 1919.

Recordion

Particular description of goods.—Talking-Machines.
Claims use since January, 1917.

Ser. No. 117,942. (CLASS 39. CLOTHING.) MATHER-HOFFMAN CO., INC., New York, N. Y. Filed Apr. 28, 1919.

Daddy Junior

Particular description of goods.—Young Men's Coats, Trousers, and Waistcoats.
Claims use since Apr. 1, 1919.

Ser. No. 118,017. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) KIMBERLY-CLARK COMPANY, Neenah, Wis. Filed Apr. 30, 1919.

CELLU-NAPS

The arbitrarily-selected hyphenated word-symbol shown in the accompanying drawing.
Particular description of goods.—Sanitary Napkins Made from Tenuous as Well as Fibrous and Absorbent Material, Intended Principally for General Commercial Use and Also in Hospitals.
Claims use since on or about Apr. 2, 1919.

Ser. No. 118,037. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ATLAS VALVE COMPANY, Newark, N. J. Filed May 1, 1919.



No claim is made to the exclusive use of the representation of the valve nor to the words "Valve Co." and "Newark, N. J." apart from the mark as shown in the drawing.
Particular description of goods.—Reducing-Valves, Float-Valves, Unions, and Swing-Joint Fittings.
Claims use since Jan. 30, 1919.

Ser. No. 118,056. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) LIBERTY STEEL PRODUCTS CO. INC., New York, N. Y. Filed May 1, 1919.

LIBERTY

Particular description of goods.—Brake-Beams for Vehicles.
Claims use since Mar. 20, 1919.

Ser. No. 118,106. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CROMWELL BROTHERS, New York, N. Y. Filed May 3, 1919.



Particular description of goods.—Textile Fabrics Known as Sateens, Canvases, Voiles, Poplins, Sheetings, Trucks, Silk and Cotton Mixtures, Repps, Percalloes, Lawns, Piques, and Dress Linings for Use in the Manufacture of Wearing-Apparel.
Claims use since about January, 1909.

Ser. No. 118,155. (CLASS 39. CLOTHING.) KZASLER WAIST CO., INC., New York, N. Y. Filed May 3, 1919.



Particular description of goods.—Ladies' Waists for Outer Wear.
Claims use since Feb. 11, 1919.

Ser. No. 118,226. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE GENERAL ORDNANCE COMPANY, Derby, Conn. Filed May 7, 1919.



Particular description of goods.—Tractors and Tractor Parts.
Claims use since Apr. 1, 1919.

Ser. No. 118,245. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN W. COUGHLIN, Fall River and Boston, Mass. Filed May 7, 1919.

ALKALYPTINE

Particular description of goods.—A Vegetable and Chemical Composition to be Used as a Remedy for Throat and Nose Diseases and All Irritations and Inflammations of Same.
Claims use since Mar. 1, 1919.

Ser. No. 118,288. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THORNDIKE AND GERRISH COMPANY, Boston, Mass. Filed May 8, 1919.



No claim is made to the word "Brand" apart from the mark as shown in the drawing.
Particular description of goods.—Dressed Poultry.
Claims use since Nov. 10, 1907.

Ser. No. 118,457. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BIRNBOIM CO., Milwaukee, Wis. Filed May 14, 1919.



Particular description of goods.—Candies.
Claims use since Apr. 8, 1918.

Ser. No. 118,517. (CLASS 39. CLOTHING.) HIGH ROCK KNITTING COMPANY, Philmont, N. Y. Filed May 15, 1919.



Particular description of goods.—Underwear for Men, Women, and Children.
Claims use since 1911.

Ser. No. 118,523. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SAMUEL C. PANDOLFO, St. Cloud, Minn. Filed May 15, 1919.



Particular description of goods.—Tractors.
Claims use since on or about the 1st day of January, 1918.

Ser. No. 118,590. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) COE-STAPLEY MANUFACTURING CORPORATION, Bridgeport, Conn. Filed May 17, 1919.



Particular description of goods.—Automobile and Bicycle Pumps.
Claims use since on or about the 1st day of February, 1919.

Ser. No. 118,659. (CLASS 12. CONSTRUCTION MATERIALS.) THE JOHN D. EMACK CO., Philadelphia, Pa. Filed May 19, 1919.



Particular description of goods.—Roofing-Slate.
Claims use since January, 1916.

Ser. No. 118,716. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TAPO CITRUS ASS'N, Santa Susana, Calif. Filed May 19, 1919.



Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges and Lemons.
Claims use since Dec. 10, 1918.

Ser. No. 118,719. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WASH-CO. ALFALFA MILLING CO., Riverton, Wyoming, and Fort Calhoun and Nebraska City, Nebr. Filed May 19, 1919.



Particular description of goods.—A Mixed Live-Stock Feed Containing Alfalfa, Grains, and Molasses.
Claims use since Apr. 15, 1919.

Ser. No. 118,726. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AUTOMOTIVE PASTE COMPANY, Indianapolis, Ind. Filed May 20, 1919.



Particular description of goods.—Fans for Cooling the Engines of Automobiles, Trucks, Tractors, and Motor-Propelled Vehicles.
Claims use since July, 1918.

Ser. No. 119,035. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THOMAS A. EDISON, JR., Orange, N. J. Filed May 29, 1919.

ECOMETER

The trade-mark consists of the word "Ecometer."
Particular description of goods.—Devices or Instruments Designed to be Attached to the Primary Air-Inlets of the Carbureters and to the Intake-Pipes or Manifolds of Internal-Combustion Engines and Adapted Automatically to Regulate the Amount of Air Admitted to Such Carbureters and to Effect and Control the Admission of Auxiliary Air to Such Air-Inlets or Manifolds.
Claims use since May 7, 1919.

Ser. No. 119,077. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES MCADAM COMPANY, Chicago, Ill. Filed May 31, 1919.

Revelation

Particular description of goods.—A Glove-Bleach.
Claims use since Apr. 1, 1919.

Ser. No. 119,284. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WYETH CHEMICAL CO., Dover, Del., and New York, N. Y. Filed June 6, 1919.

REJUVILINA

The trade-mark, consisting of the word "Rejuvilinea," appears in black letters on a white background.
Particular description of goods.—A Hair Remedy and a Restorative of Gray Hair to Its Natural Color.
Claims use since May 29, 1918.

Ser. No. 119,294. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DARWIN & MILNER, INC., New York, N. Y. Filed June 7, 1919.

"PYREKS"

Particular description of goods.—Compound Anhydrous Salts.
Claims use since January, 1918.

Ser. No. 119,387. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BASKET STORES COMPANY, Omaha, Nebr. Filed June 10, 1919.

INDEPENDENT

Particular description of goods.—Coffee.
Claims use since about Jan. 1, 1911.

Ser. No. 119,407. (CLASS 46. FOODS AND INGREDIENTS OF FOODS. G. G. CORNWELL & SON, INC., Washington, D. C. Filed June 10, 1919.

CREST

Particular description of goods.—Ice-Cream Cones.
Claims use since about May 1, 1919.

Ser. No. 119,421. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MARATHON FISHING & PACKING Co., Seattle, Wash. Filed June 10, 1919.

Loyal

Particular description of goods.—Canned Salmon.
Claims use since July 29, 1918.

Ser. No. 119,449. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STEELE PACKING Co., San Diego, Calif. Filed June 10, 1919.

LA PLAYA

Particular description of goods.—Canned Sardines.
Claims use since Mar. 1, 1918.

Ser. No. 119,453. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) STEARNS-HOLLINSHEAD Co., Portland, Oreg. Filed June 10, 1919.

S^NH

Particular description of goods.—Cough-Candies.
Claims use since Jan. 1, 1919.

Ser. No. 119,463. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WASHINGTON FRUIT & PRODUCE Co., Yakima, Wash. Filed June 10, 1919.

INDEPENDENT

Particular description of goods.—Fresh Apples.
Claims use since July 16, 1916.

Ser. No. 119,479. (CLASS 12. CONSTRUCTION MATERIALS.) THE TEXAS COMPANY, Houston, Tex., and New York, N. Y. Filed June 11, 1919.

HELMET



Particular description of goods.—Felt Roofing and Roofing-Cements.
Claims use since January, 1914.

Ser. No. 119,556. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GOODSELL-PRATT COMPANY, Greenfield, Mass. Filed June 13, 1919.

GP 777

Particular description of goods.—Hacksaw-Blades.
Claims use since January, 1915.

Ser. No. 119,557. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GOODSELL-PRATT COMPANY, Greenfield, Mass. Filed June 13, 1919.

GP 888

Particular description of goods.—Hacksaw-Blades.
Claims use since January, 1911.

Ser. No. 119,599. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FLEITMANN, WATJEN & CO. INC., New York, N. Y. Filed June 14, 1919.

FLYWATCO

Particular description of goods.—Food Products, as follows: Dried Fruits, Evaporated Milk, Canned Fruits, Canned Fish, Canned Vegetables, Lard, Coconut-Oil, Cocoa Powder.

Claims use since about Mar. 1, 1919.

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Ser. No. 119,658. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEVER BROTHERS COMPANY, Cambridge, Mass. Filed June 16, 1919.

Twink

Particular description of goods.—Soap Dyes.
Claims use since June 7, 1919.

Ser. No. 119,676. (CLASS 15. OILS AND GREASES.) STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed June 16, 1919.

FiNoL

Particular description of goods.—Lubricating Oils.
Claims use since the 23d of November, 1916.

Ser. No. 119,677. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPERRY FLOUR COMPANY, San Francisco, Calif. Filed June 16, 1919.

SUREMILK

Particular description of goods.—Stock Food.
Claims use since September, 1913.

Ser. No. 119,678. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPERRY FLOUR COMPANY, San Francisco, Calif. Filed June 16, 1919.

SURELAY

Particular description of goods.—Poultry Food.
Claims use since 1908.

Ser. No. 119,679. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPERRY FLOUR COMPANY, San Francisco, Calif. Filed June 16, 1919.

SUREGROW

Particular description of goods.—Poultry Food.
Claims use since July, 1912.

Ser. No. 119,699. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CAR-BO-THYMOL COMPANY, Atlanta, Ga. Filed June 17, 1919.

HYDROLIPTINE

Particular description of goods.—A Medicated Oil, Used as a Spray in Treating Acute and Chronic Catarrhal Conditions of the Nose, Throat, and Bronchi.
Claims use since Sept 1, 1917.

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Ser. No. 119,748. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OCEANICA LABORATORIES, Rockaway Beach, N. Y. Filed June 18, 1919.

DEOMA

Particular description of goods.—An Antiseptic Powder.
Claims use since May 22, 1919.

Ser. No. 119,755. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS THOMAS, Chicago, Ill. Filed June 18, 1919.



The trade-mark showing my portrait and autographic signature.

Particular description of goods.—Liquid to be Used Externally for Scalds and Burns Upon the Skin.
Claims use since about Jan. 1, 1919.

Ser. No. 119,761. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE BLEMO COMPANY, Canton, Ohio. Filed June 19, 1919.

BLEMO

Particular description of goods.—Ointment for External Use for Pimples, Blackheads, Tetter, Itch, Eczema, and other Forms of Skin Disease.
Claims use since June 17, 1919.

Ser. No. 119,801. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HANNIBAL PHARMACEUTICAL COMPANY, St. Louis, Mo. Filed June 20, 1919.

Neet

Particular description of goods.—An Antiseptic Lotion for Use as a Depilatory.
Claims use since about Mar. 10, 1919.

Ser. No. 119,826. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE EMBALMERS' SUPPLY Co., Westport, Conn. Filed June 21, 1919.



Particular description of goods.—Embalming Fluid.
Claims use since the year 1918.

Ser. No. 119,827. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FEDERAL MILLING COMPANY, Lockport, N. Y. Filed June 21, 1919.

PEACE TABLE



Particular description of goods.—Wheat-Flour.
Claims use since Apr. 3, 1919.

Ser. No. 119,868. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROSS DRUG COMPANY, Vicksburg, Miss. Filed June 23, 1919.

Krap-Shooter

Particular description of goods.—A Liquid Tonic Used for Treatment of the Liver and Kidneys and Pills for Treatment of the Liver.
Claims use since Mar. 1, 1919.

Ser. No. 119,869. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE STERLING POTATO BRITTLE CO., Wilkes-Barre, Pa. Filed June 23, 1919.



Particular description of goods.—Potato Chips.
Claims use since May 1, 1919.

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TRADE-MARK REGISTRATIONS GRANTED

AUGUST 19, 1919.

126,233. REFRIGERATORS. THE ALASKA REFRIGERATOR COMPANY, Muskegon Heights, Mich.
Filed February 1, 1919. Serial No. 115,563. PUBLISHED APRIL 29, 1919.

126,234. DOLLS. ESTELLE ALLISON, New York, N. Y.
Filed February 4, 1918. Serial No. 108,780. PUBLISHED APRIL 22, 1919.

126,235. MEDICINAL PREPARATION FOR TREATING CERTAIN NAMED DISEASES AND CERTAIN NAMED DISORDERS. AIGI AWAMOTO, Nagasaki, Japan.
Filed October 15, 1918. Serial No. 112,742. PUBLISHED APRIL 22, 1919.

126,236. OLEOMARGARIN. AMERICAN BUTTERING CO., Jersey City, N. J.
Filed March 12, 1919. Serial No. 116,476. PUBLISHED APRIL 29, 1919.

126,237. ICING FOR USE AS A FOOD. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y.
Filed February 12, 1919. Serial No. 115,796. PUBLISHED APRIL 8, 1919.

126,238. CIGARETTES. THE AMERICAN TOBACCO CO., New York, N. Y.
Filed March 2, 1919. Serial No. 116,247. PUBLISHED MAY 6, 1919.

126,239. CIGARETTES. THE AMERICAN TOBACCO CO., New York, N. Y.
Filed March 2, 1919. Serial No. 116,248. PUBLISHED MAY 20, 1919.

126,240. COFFEE. G. AMBROCK & CO., INC., San Francisco, Calif.
Filed March 13, 1919. Serial No. 116,500. PUBLISHED MAY 6, 1919.

126,241. COFFEE. G. AMBROCK & CO., INC., San Francisco, Calif.
Filed March 13, 1919. Serial No. 116,510. PUBLISHED APRIL 29, 1919.

126,242. COFFEE. G. AMBROCK & CO., INC., San Francisco, Calif.
Filed March 13, 1919. Serial No. 116,512. PUBLISHED MAY 6, 1919.

126,243. COFFEE. G. AMBROCK & CO., INC., San Francisco, Calif.
Filed March 13, 1919. Serial No. 116,513. PUBLISHED MAY 6, 1919.

126,244. CEREAL FOOD-DRINK. THE JOHN F. BAUER CO., Elmira, N. Y.
Filed January 11, 1919. Serial No. 115,115. PUBLISHED APRIL 15, 1919.

126,245. LIQUID READY-MIXED PAINT AND VARNISH. THE WILLIAM CAIL BITUM COMPANY, New York, N. Y.
Filed December 17, 1918. Serial No. 114,684. PUBLISHED APRIL 22, 1919.

126,246. MEDICINAL TONIC IN LIQUID OR TABLET FORM FOR TREATING CERTAIN NAMED AILMENTS. THE BLACKBURN PRODUCTS CO., Dayton, Ohio.
Filed January 21, 1919. Serial No. 115,235. PUBLISHED APRIL 22, 1919.

126,247. LAXATIVE TONIC FOR TREATING CERTAIN NAMED CONDITIONS AND SYMPTOMS. THE BLACKBURN PRODUCTS CO., Dayton, Ohio.
Filed January 21, 1919. Serial No. 115,236. PUBLISHED APRIL 22, 1919.

126,248. NON-ALCOHOLIC UNFERMENTED CARBONATED GRAPE-JUICE. MAURICE R. BLACKMAN, Philadelphia, Pa.
Filed February 24, 1919. Serial No. 116,075. PUBLISHED MAY 6, 1919.

126,249. POLISHING AND CLEANING LIQUID FOR USE ON CERTAIN NAMED SURFACES. LOUIS A. BLOCK, New Orleans, La.
Filed November 5, 1918. Serial No. 114,051. PUBLISHED APRIL 8, 1919.

126,250. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. BENNY VISE & TOOL WORKS, INC., Philadelphia and Abington, Pa., and New York, N. Y.
Filed January 16, 1917. Serial No. 100,846. PUBLISHED MARCH 25, 1919.

126,251. CANNED SARDINES. BOOTH FISHING CO., Chicago, Ill.
Filed March 13, 1919. Serial No. 116,518. PUBLISHED MAY 6, 1919.

126,252. CANNED SARDINES. BOOTH FISHING CO., Chicago, Ill.
Filed March 13, 1919. Serial No. 116,520. PUBLISHED MAY 6, 1919.

126,253. CANNED SARDINES. BOOTH FISHING CO., Chicago, Ill.
Filed March 13, 1919. Serial No. 116,521. PUBLISHED MAY 6, 1919.

126,254. HARD CANDIES. E. J. BRACK & SONS, Chicago, Ill.
Filed January 22, 1919. Serial No. 115,964. PUBLISHED MAY 6, 1919.

126,255. CERTAIN NAMED FOODS. THE J. S. BROWN MERCANTILE CO., Denver, Colo.
Filed November 25, 1918. Serial No. 114,220. PUBLISHED MAY 6, 1919.

126,256. LIQUID POLISH FOR FURNITURE, FLOORS, AND AUTOMOBILE-BODIES. STEPHEN T. BOWEN, Chicago, Ill.
Filed February 18, 1919. Serial No. 115,945. PUBLISHED APRIL 15, 1919.

126,257. CANES, PARASOLS, UMBRELLAS, AND PARTS THEREOF. THE CELLELOID COMPANY, New York, N. Y.
Filed February 18, 1918. Serial No. 109,063. PUBLISHED APRIL 15, 1919.

126,258. CANES, PARASOLS, UMBRELLAS, AND PARTS THEREOF. THE CELLELOID COMPANY, New York, N. Y.
Filed February 18, 1918. Serial No. 109,095. PUBLISHED APRIL 15, 1919.

126,259. CANES, PARASOLS, UMBRELLAS, AND PARTS THEREOF. THE CELLELOID COMPANY, New York, N. Y.
Filed May 6, 1918. Serial No. 110,674. PUBLISHED APRIL 15, 1919.

126,260. SCIENTIFIC INSTRUMENTS. CHICAGO APPARATUS COMPANY, Chicago, Ill.
Filed October 8, 1917. Serial No. 106,650. PUBLISHED APRIL 15, 1919.

126,261. WHEAT-FLOUR. CHIPPEWA MILLING COMPANY, Montevideo, Minn.
Filed March 8, 1919. Serial No. 116,404. PUBLISHED APRIL 29, 1919.

- 126,262. METAL-WORKING ENGINE-LATHES. THE CINCINNATI LATH AND TOOL COMPANY, Cincinnati, Ohio.
Filed October 29, 1918. Serial No. 113,928. PUBLISHED APRIL 1, 1919.
- 126,263. PREPARATION FOR DESTROYING RATS, MICE, ROACHES, BEDBUGS, AND OTHER VERMIN AND INSECTS. COMMON SENSE MANUFACTURING CO. INC., Buffalo, N. Y.
Filed March 19, 1919. Serial No. 116,700. PUBLISHED MAY 13, 1919.
- 126,264. PREPARED FLOOR-COVERINGS OF THE OILED-CLOTH TYPE. THE CONGOLEUM COMPANY, Philadelphia, Pa.
Filed January 6, 1919. Serial No. 115,004. PUBLISHED APRIL 22, 1919.
- 126,265. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. C. R. COOK PAINT COMPANY, Kansas City, Mo.
Filed July 28, 1917. Serial No. 105,338. PUBLISHED SEPTEMBER 10, 1918.
- 126,266. CANDIES. COX CONFECTIONERY COMPANY, Boston, Mass.
Filed January 25, 1919. Serial No. 115,417. PUBLISHED APRIL 29, 1919.
- 126,267. GARMENTS FOR IMPARTING ELECTRIC HEAT AND RADIATION TO THE HUMAN BODY FOR THERAPEUTIC PURPOSES. WILLIAM F. CRADDOCK, Seattle, Wash., assignor to Vit-O-Net Manufacturing Company, a Corporation of California.
Filed July 22, 1918. Serial No. 112,247. PUBLISHED APRIL 22, 1919.
- 126,268. POTATO CHIPS. WILLIAM CROFT, Salem, N. H.
Filed February 26, 1919. Serial No. 116,147. PUBLISHED APRIL 15, 1919.
- 126,269. LEAD-PENCILS, PENHOLDERS, RUBBER ERASERS, FOUNTAIN-PENS. EAGLE PENCIL COMPANY, New York, N. Y.
Filed March 27, 1919. Serial No. 116,965. PUBLISHED MAY 20, 1919.
- 126,270. BOND AND WRITING PAPERS. EASTERN MANUFACTURING COMPANY, Bangor, Me.
Filed January 14, 1919. Serial No. 115,174. PUBLISHED FEBRUARY 18, 1919.
- 126,271. VEGETABLE SHORTENING. EDIBLE OIL CO., INCORPORATED, Louisville, Ky.
Filed November 12, 1918. Serial No. 114,140. PUBLISHED MAY 6, 1919.
- 126,272. CERTAIN NAMED RECEIPTABLES. CLINTON ELLIOTT, New York, N. Y.
Filed March 6, 1919. Serial No. 116,332. PUBLISHED MAY 20, 1919.
- 126,273. PERMANENT MAGNETS. THE ESTERLINE COMPANY, Indianapolis, Ind.
Filed January 11, 1919. Serial No. 115,118. PUBLISHED FEBRUARY 18, 1919.
- 126,274. SHORTENING COMPOUND CONTAINING COTTON-SEED OIL AND OLEO-STEARIN. THE N. K. FAIRBANK COMPANY, Union township, near Guttenberg, N. J., and Chicago, Ill.
Filed February 14, 1918. Serial No. 108,989. PUBLISHED MAY 6, 1919.
- 126,275. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. FAWCETT & FAWCETT, Brooklyn, N. Y.
Filed January 17, 1917. Serial No. 100,667. PUBLISHED APRIL 22, 1919.
- 126,276. MEDICINES FOR CONSTIPATION, BILIOUSNESS, INDIGESTION, AND BACKACHE. OROBORO W. FILLARD, Chattanooga, Tenn.
Filed February 12, 1919. Serial No. 115,812. PUBLISHED APRIL 22, 1919.

- 126,277. LAUNCHING-GREASE. FISKE BROTHERS REFINING CO., New York, N. Y.
Filed January 24, 1919. Serial No. 115,400. PUBLISHED MARCH 18, 1919.
- 126,278. PARAFFIN-WAX AND CERTAIN NAMED VEGETABLE WAXES USED IN MANUFACTURING CANDLES, PETROLEUM, AND LUBRICATING-OILS. J. C. FRANCESCONI & COMPANY, New York, N. Y.
Filed January 17, 1919. Serial No. 115,245. PUBLISHED APRIL 15, 1919.
- 126,279. FUEL-BRIQUETS. FUEL BRIQUET COMPANY, New York, N. Y., and Trenton, N. J.
Filed January 6, 1919. Serial No. 115,061. PUBLISHED MARCH 25, 1919.
- 126,280. PLAYING-CARDS. JAMES C. GAFFNEY, New York, N. Y.
Filed March 3, 1919. Serial No. 116,256. PUBLISHED APRIL 22, 1919.
- 126,281. PLAYING-CARDS. JAMES C. GAFFNEY, New York, N. Y.
Filed March 3, 1919. Serial No. 116,257. PUBLISHED APRIL 22, 1919.
- 126,282. PLAYING-CARDS. JAMES C. GAFFNEY, New York, N. Y.
Filed March 3, 1919. Serial No. 116,258. PUBLISHED APRIL 22, 1919.
- 126,283. GENERAL TONIC AND SYSTEM-PURIFIER. CLARENCE M. GAINES, Bowling Green, Ky.
Filed January 15, 1919. Serial No. 115,203. PUBLISHED APRIL 8, 1919.
- 126,284. SELF-RISING BUCKWHEAT-FLOUR. C. A. GAMBRILL MANUFACTURING COMPANY, Baltimore, Md.
Filed February 4, 1919. Serial No. 115,617. PUBLISHED APRIL 15, 1919.
- 126,285. NON-ALCOHOLIC MALTLESS BEVERAGE NOT OF A CEREAL NATURE SOLD AS A SOFT DRINK. ALEXANDER GINSBURG, New York, N. Y.
Filed February 3, 1919. Serial No. 115,560. PUBLISHED MAY 6, 1919.
- 126,286. CANNED PEACHES, CANNED PLUMS, CANNED APRICOTS, AND CANNED PINEAPPLES. THE G. H. HAMMOND COMPANY, Chicago, Ill.
Filed January 24, 1919. Serial No. 115,404. PUBLISHED MAY 6, 1919.
- 126,287. LADIES' AND MISSES' LEATHER, FABRIC, AND THE COMBINATION OF LEATHER AND FABRIC SHOES. THE HELMING-MCKENNE SHOES COMPANY, Cincinnati, Ohio.
Filed December 28, 1918. Serial No. 114,854. PUBLISHED APRIL 16, 1919.
- 126,288. CIGARETTES. THE HILLS BROTHERS COMPANY, New York, N. Y.
Filed February 6, 1919. Serial No. 116,661. PUBLISHED MAY 6, 1919.
- 126,289. HOLDER OR CASE FOR SHAVING-BRUSHES. ABRAHAM L. HOLTSMAN, Philadelphia, Pa.
Filed December 30, 1915. Serial No. 61,840. PUBLISHED MAY 13, 1919.
- 126,290. CERTAIN NAMED CANNED OR PRESERVED FOODS. EVAN W. HOOK & CO., INC., Baltimore, Md.
Filed March 8, 1919. Serial No. 116,416. PUBLISHED APRIL 29, 1919.
- 126,291. CIGARETTES. PERCY ERNEST HURST, Croydon, England.
Filed October 21, 1918. Serial No. 113,827. PUBLISHED APRIL 29, 1919.
- 126,292. CANNED CORN AND CANNED BEANS AND PORK WITH TOMATO SAUCE. INDEPENDENT CANNING CO., Chicago, Ill.
Filed February 17, 1919. Serial No. 115,917. PUBLISHED APRIL 29, 1919.

- 126,293. CERTAIN NAMED CONSTRUCTION MATERIALS. INSULATION MANUFACTURING COMPANY, Salt Lake City, Utah.
Filed August 16, 1918. Serial No. 112,748. PUBLISHED APRIL 22, 1919.
- 126,294. ROOFING-CEMENT FOR REPAIR OF ROOFS. INSULATING MATERIALS COMPANY, Detroit, Mich.
Filed February 14, 1919. Serial No. 115,857. PUBLISHED APRIL 29, 1919.
- 126,295. BREAD. GENEVIEVE JACKSON, Los Angeles, Calif.
Filed January 30, 1919. Serial No. 115,531. PUBLISHED APRIL 8, 1919.
- 126,296. WRITING AND PRINTING PAPER. CHARLES DUBRY JACOBS, New York, N. Y.
Filed January 2, 1919. Serial No. 114,952. PUBLISHED APRIL 22, 1919.
- 126,297. EGGS. RAYMOND A. JENNINGS, Maitoon, Ill.
Filed March 17, 1919. Serial No. 116,657. PUBLISHED APRIL 29, 1919.
- 126,298. MACARONI AND SPAGHETTI. KANSAS CITY MACARONI CO., Kansas City, Mo.
Filed March 6, 1919. Serial No. 116,346. PUBLISHED MAY 6, 1919.
- 126,299. CERTAIN NAMED FURNITURE. S. KARPEN & SONS, Chicago, Ill.
Filed January 28, 1919. Serial No. 115,484. PUBLISHED MAY 6, 1919.
- 126,300. CERTAIN NAMED FURNITURE. KNITH-O'BRIEN COMPANY, Salt Lake City, Utah.
Filed April 29, 1918. Serial No. 116,537. PUBLISHED APRIL 1, 1919.
- 126,301. CHICKS AND EGGS. ELIAS WELLS KELLOGG, Milwaukee, Wis.
Filed September 21, 1918. Serial No. 118,307. PUBLISHED APRIL 22, 1919.
- 126,302. PNEUMATIC TIRES OF RUBBER AND FABRIC. KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y.
Filed June 18, 1918. Serial No. 111,651. PUBLISHED MARCH 25, 1919.
- 126,303. MEDICINAL GASES FOR THE TREATMENT OF DISEASES OF THE THROAT, NOSE, AND LUNGS. KING CHEMICAL COMPANY INC., New York, N. Y.
Filed February 8, 1919. Serial No. 115,691. PUBLISHED APRIL 8, 1919.
- 126,304. CERTAIN NAMED FOOD PRODUCTS IN TINS, GLASS, AND PACKAGES. ROSEBELL B. KINOMAN, Orange, N. J., and San Francisco, Calif.
Filed August 14, 1918. Serial No. 112,711. PUBLISHED APRIL 15, 1919.
- 126,305. TRUNKS, HAND-BAGS, SUITCASES, AND POCKET-BOOKS. GUSTAV KLICHE, Chicago, Ill.
Filed April 18, 1918. Serial No. 110,297. PUBLISHED MAY 6, 1919.
- 126,306. BOTTLE-STOPPERS, BOTTLE-CAPS, AND JAR-CLOSURES. KOSCHERAK SIPHON BOTTLE WORKS, Hoboken, N. J.
Filed December 9, 1918. Serial No. 114,564. PUBLISHED MARCH 25, 1919.
- 126,307. WHOLE, GROUND, AND MIXED SPICES. M. P. KUCZOR & CO., INC., New York, N. Y.
Filed November 30, 1918. Serial No. 114,429. PUBLISHED MAY 6, 1919.
- 126,308. PIECE GOODS—VIZ., A FABRIC MADE WITH A COTTON WARP AND A FILLING OF MOHAIR OR WOOL OR ALPACA, SINGLY OR COMBINED. LEONER, WHITMAN & CO., INC., New York, N. Y.
Filed February 4, 1919. Serial No. 115,623. PUBLISHED MAY 6, 1919.

- 126,309. CANNED SARDINES. LUBEC SARDINE CO., Lubec, Me.
Filed March 13, 1919. Serial No. 116,543. PUBLISHED APRIL 29, 1919.
- 126,310. CANNED SARDINES. LUBEC SARDINE CO., Lubec, Me.
Filed March 13, 1919. Serial No. 116,544. PUBLISHED APRIL 29, 1919.
- 126,311. CANNED SARDINES. LUBEC SARDINE CO., Lubec, Me.
Filed March 13, 1919. Serial No. 116,546. PUBLISHED APRIL 29, 1919.
- 126,312. CANNED SARDINES. LUBEC SARDINE CO., Lubec, Me.
Filed March 13, 1919. Serial No. 116,547. PUBLISHED APRIL 29, 1919.
- 126,313. ANTISEPTICS. MAXITOL COMPANY, Rochester, N. Y.
Filed March 12, 1919. Serial No. 116,497. PUBLISHED MAY 6, 1919.
- 126,314. SALAD-OIL CONSISTING OF A COMPOUND OF COTTON-SEED AND OLIVE OIL. BASIL G. MAERIS, New York, N. Y.
Filed December 20, 1918. Serial No. 114,743. PUBLISHED APRIL 1, 1919.
- 126,315. OLEOMARGARIN. THE MIAMI BUTTERINE CO., Cincinnati, Ohio.
Filed January 27, 1919. Serial No. 115,462. PUBLISHED APRIL 1, 1919.
- 126,316. TIMER-BRUSHES FOR IGNITION SYSTEMS. EARL L. MILLER, Overbrook, Kans.
Filed December 16, 1918. Serial No. 114,585. PUBLISHED MARCH 4, 1919.
- 126,317. CHEMICAL FERTILIZERS. THE MOLASSINE COMPANY LIMITED, Greenwich and London, England.
Filed November 16, 1917. Serial No. 107,412. PUBLISHED MAY 13, 1919.
- 126,318. LUBRICATING-GREASES AND LUBRICATING-OILS. MONARCH MANUFACTURING COMPANY, Council Bluffs, Iowa, and Toledo, Ohio.
Filed January 22, 1919. Serial No. 115,378. PUBLISHED APRIL 15, 1919.
- 126,319. COAL. MONROE COAL MINING COMPANY, Cambria township, Cambria county, and Philadelphia, Pa.
Filed December 19, 1918. Serial No. 114,714. PUBLISHED MAY 27, 1919.
- 126,320. NON-INTOXICATING MALTLESS FRUIT BEVERAGE SOLD AS A SOFT DRINK. THE MONTCLAIR MERCANTILE CO., Detroit, Mich.
Filed December 31, 1918. Serial No. 114,913. PUBLISHED APRIL 22, 1919.
- 126,321. CABINET-PHONOGRAPHS. MUSIC MASTER CO., Sturgis, Mich.
Filed November 15, 1915. Serial No. 96,655. PUBLISHED APRIL 22, 1919.
- 126,322. COMBINATION PORTABLE DESKS COMPRISING A BLACKBOARD ATTACHED THERETO, A ROLLER-SCROLL, AND VARIOUS COMPARTMENTS. LEWIS E. MYERS, Valparaiso, Ind.
Filed July 20, 1916. Serial No. 96,694. PUBLISHED MAY 6, 1919.
- 126,323. TRUNKS. NATIONAL VENEER PRODUCTS COMPANY, Milwaukee, Ind.
Filed August 22, 1918. Serial No. 112,834. PUBLISHED MAY 6, 1919.
- 126,324. CIGARETTE-PAPERS. A. B. NEWMAN CO., New York, N. Y.
Filed February 18, 1916. Serial No. 92,949. PUBLISHED APRIL 29, 1919.
- 126,325. MIXTURE TO BE USED IN PLACE OF EGGS IN BAKING AND COOKING. THE NEWTON TEA & SPICE CO., Cincinnati, Ohio.
Filed December 26, 1918. Serial No. 114,828. PUBLISHED APRIL 29, 1919.

126,326. WHISKY. G. S. NICHOLAS & SON, LTD., New York, N. Y.
Filed June 5, 1918. Serial No. 111,379. PUBLISHED APRIL 22, 1919.

126,327. CERTAIN NAMED FURNITURE. NORTHERN FURNITURE COMPANY, Sheboygan, Wis.
Filed October 8, 1917. Serial No. 106,672. PUBLISHED NOVEMBER 19, 1918.

126,328. CANDIES. KNEZE O. NYMAN, Cincinnati and Springfield, Ohio.
Filed November 9, 1918. Serial No. 114,118. PUBLISHED MAY 6, 1919.

126,329. ELECTRIC PUSH-BUTTONS, ELECTRIC SWITCHES, ELECTRIC FUSES, AND ELECTRIC INCANDESCENT LAMPS. FRITZ W. OSTINGER, New York, N. Y.
Filed January 14, 1919. Serial No. 115,182. PUBLISHED MARCH 18, 1919.

126,330. CANDIES. THE OHIO CONFECTION COMPANY, Cleveland, Ohio.
Filed February 15, 1919. Serial No. 115,884. PUBLISHED MAY 6, 1919.

126,331. WHEAT-FLOUR. OTTAWA MILLING COMPANY, Kansas City, Mo., and Ottawa, Kans.
Filed January 11, 1919. Serial No. 115,126. PUBLISHED APRIL 1, 1919.

126,332. CANDY. PALMER CANDY COMPANY, Sioux City, Iowa.
Filed February 28, 1919. Serial No. 116,208. PUBLISHED APRIL 22, 1919.

126,333. ANTISEPTIC, INSECTICIDE, AND DISINFECTANT FOR LIVE STOCK, USED TO PREVENT WORMS, TICKS, AND DISEASES. PARSON'S CHEMICAL WORKS, Grand Ledge, Mich.
Filed December 31, 1918. Serial No. 114,924. PUBLISHED APRIL 5, 1919.

126,334. INSECTICIDE AND DISINFECTANT FOR LIVE STOCK. PARSON'S CHEMICAL WORKS, Grand Ledge, Mich.
Filed January 25, 1919. Serial No. 115,430. PUBLISHED APRIL 22, 1919.

126,335. SOFT DRINKS CONTAINING MALT AND LESS THAN ONE-HALF OF ONE PER CENT. ALCOHOL BY VOLUME. PENINSULA PRODUCTS COMPANY, Wilmington, Del.
Filed February 14, 1919. Serial No. 115,862. PUBLISHED APRIL 22, 1919.

126,336. FLOUR MADE FROM WHEAT. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed February 7, 1919. Serial No. 115,679. PUBLISHED APRIL 15, 1919.

126,337. MALTLESS CARBONATED NON-ALCOHOLIC BEVERAGES NOT OF A CEREAL NATURE SOLD AS SOFT DRINKS. EDWARD FORT, Baltimore, Md.
Filed January 20, 1919. Serial No. 115,508. PUBLISHED MAY 6, 1919.

126,338. CEREAL BREAKFAST FOODS. PORTUM CEREAL COMPANY, Battle Creek, Mich.
Filed February 19, 1919. Serial No. 116,008. PUBLISHED APRIL 15, 1919.

126,339. MOLASSES. PURE CANE MOLASSES CORPORATION, New York, N. Y.
Filed December 21, 1918. Serial No. 114,770. PUBLISHED APRIL 22, 1919.

126,340. TEAS. THE REILY-TAYLOR COMPANY, New Orleans, La.
Filed November 28, 1916. Serial No. 99,605. PUBLISHED APRIL 15, 1919.

126,341. GROWING AND PRESSING HAIR-OIL. M. LINDA RICHIE & CO., Jacksonville, Fla.
Filed September 27, 1918. Serial No. 113,457. PUBLISHED APRIL 22, 1919.

126,342. CERTAIN NAMED PAINTERS' AND DECORATORS' TOOLS AND SUPPLIES. THE RIDGELY TRIMMER COMPANY, Springfield, Ohio.
Filed April 1, 1919. Serial No. 117,093. PUBLISHED MAY 20, 1919.

126,343. PEARL BUTTONS FOR WEARING-APPAREL. SAMSTAD & HILDEBROS., New York, N. Y.
Filed January 10, 1919. Serial No. 115,108. PUBLISHED APRIL 29, 1919.

126,344. COUGH-SYRUP. AUGUSTIN F. SCHAMBER, Manchester, N. H.
Filed February 14, 1919. Serial No. 115,866. PUBLISHED MAY 6, 1919.

126,345. CIGARS, CHEROOTS, AND LITTLE CIGARS. E. M. SCHWARZ & CO. INC., New York, N. Y.
Filed February 9, 1918. Serial No. 108,932. PUBLISHED APRIL 22, 1919.

126,346. REFRIGERATORS. SIMMONS HARDWARE COMPANY, St. Louis, Mo.
Filed March 15, 1919. Serial No. 116,615. PUBLISHED MAY 20, 1919.

126,347. ICE-CREAM FREEZERS. SIMMONS HARDWARE COMPANY, St. Louis, Mo.
Filed March 25, 1919. Serial No. 116,906. PUBLISHED MAY 13, 1919.

126,348. CERTAIN NAMED OILS AND GREASES. SIX-CLARK REFINING COMPANY, Chicago, Ill.
Filed February 8, 1919. Serial No. 115,098. PUBLISHED APRIL 8, 1919.

126,349. DENTAL ENAMEL. LEE S. SMITH & SON MANUFACTURING COMPANY, Pittsburgh, Pa.
Filed November 9, 1917. Serial No. 107,271. PUBLISHED MAY 13, 1919.

126,350. CANDY. THE SNYDER CHIFFERS CO., Columbus, Ohio.
Filed November 15, 1918. Serial No. 114,192. PUBLISHED APRIL 15, 1919.

126,351. CERTAIN NAMED TOYS AND SPORTING GOODS. A. G. SPALDING & BROS., New York, N. Y.
Filed September 25, 1918. Serial No. 113,296. PUBLISHED APRIL 22, 1919.

126,352. CANDY. THE STAMPEDE COMPANY, St. Paul, Minn.
Filed February 15, 1919. Serial No. 115,869. PUBLISHED MAY 6, 1919.

126,353. CANDY. STANDARD CANDY COMPANY, Nashville, Tenn.
Filed May 10, 1918. Serial No. 110,825. PUBLISHED MAY 6, 1919.

126,354. VARNISHES, READY-MIXED PAINTS, JAPANS AND PAINT-DRIERS. STANDARD COOPER-BELL CO., Chicago, Ill.
Filed September 19, 1918. Serial No. 112,267. PUBLISHED APRIL 15, 1919.

126,355. COMPOSITION ROOFINGS AND BUILDING-PAPERS. THE STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y.
Filed February 28, 1919. Serial No. 116,217. PUBLISHED APRIL 22, 1919.

126,356. HEADACHE REMEDY. FRANKLIN STEPHENS, Atlantic City, N. J.
Filed February 28, 1919. Serial No. 116,218. PUBLISHED APRIL 22, 1919.

126,357. DOLLS. ARBIE B. STEVENS, Atlanta, Ga.
Filed March 25, 1919. Serial No. 116,911. PUBLISHED MAY 13, 1919.

126,358. OLEOMARGARIN. OTTO F. STIFEL'S UNION BREWING COMPANY, St. Louis, Mo.
Filed March 8, 1919. Serial No. 116,279. PUBLISHED APRIL 29, 1919.

126,359. CIGARS. STODDARD, GILBERT & CO. INC., New Haven, Conn.
Filed March 5, 1919. Serial No. 116,310. PUBLISHED MAY 13, 1919.

126,360. CIGARS. STODDARD, GILBERT & CO., INC., New Haven, Conn.
Filed March 5, 1919. Serial No. 116,311. PUBLISHED MAY 13, 1919.

126,361. CIGARS. STODDARD, GILBERT & CO., INC., New Haven, Conn.
Filed March 5, 1919. Serial No. 116,316. PUBLISHED MAY 13, 1919.

126,362. ANTISEPTIC OINTMENTS FOR BURNS, INFECTED SORES, AND CHAPPED FLESH. JOSEPHINE WATSON TOOMBS, Boston, Mass.
Filed February 8, 1919. Serial No. 115,702. PUBLISHED MAY 6, 1919.

126,363. CANNED PEACHES. UNITED CANNERS COMPANY OF CALIFORNIA, Oakland, Calif.
Filed December 31, 1918. Serial No. 114,937. PUBLISHED MAY 6, 1919.

126,364. CIGARS, CIGARETTES, AND SMOKING AND CHEWING TOBACCO AND SNUFF. UNITED CIGAR STORES COMPANY OF AMERICA, Jersey City, N. J., and New York, N. Y.
Filed February 24, 1919. Serial No. 116,120. PUBLISHED APRIL 22, 1919.

126,365. CERTAIN NAMED BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES. UNITED STATES RUBBER COMPANY, New Brunswick, N. J., and New York, N. Y.
Filed July 6, 1916. Serial No. 96,382. PUBLISHED AUGUST 7, 1917.

126,366. FURNITURE-POLISH. VANDERPAN BROTHERS, Denver, Colo.
Filed February 19, 1919. Serial No. 116,016. PUBLISHED APRIL 29, 1919.

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126,367. CERTAIN NAMED FOOD. THE VIROCACAO COMPANY INC., New York, N. Y.
Filed October 2, 1918. Serial No. 113,529. PUBLISHED APRIL 22, 1919.

126,368. BREAD, BISCUITS, AND CAKES. WILLIAM B. WARD, Buffalo, N. Y.
Filed January 11, 1919. Serial No. 115,132. PUBLISHED MARCH 4, 1919.

126,369. SHAVING-BRUSHES. WARNER-PATTERSON CO., Chicago, Ill.
Filed December 12, 1918. Serial No. 114,610. PUBLISHED APRIL 29, 1919.

126,370. CANNED FISH, CANNED FRUIT, AND CANNED VEGETABLES. WEST COAST PACKING CO., Los Angeles, Calif.
Filed February 21, 1918. Serial No. 109,108. PUBLISHED APRIL 29, 1919.

126,371. PLASTER OF PARIS FOR DENTAL MEDICAL, AND SURGICAL PURPOSES. H. H. WIGGIN'S SONS COMPANY, Bloomfield, N. J.
Filed October 29, 1918. Serial No. 113,933. PUBLISHED APRIL 22, 1919.

126,372. PAPER BAGS. WORTENDYKE MANUFACTURING COMPANY, Richmond, Va.
Filed February 7, 1919. Serial No. 115,085. PUBLISHED APRIL 22, 1919.

126,373. CERTAIN NAMED TOYS MADE OF CERTAIN NAMED MATERIALS. ZADEK FELDSTEIN CO., INC., New York, N. Y.
Filed February 17, 1919. Serial No. 115,943. PUBLISHED MAY 13, 1919.

126,374. TIMERS FOR INTERNAL-COMBUSTION-ENGINE IGNITION SYSTEMS. ZENITE METAL COMPANY, Indianapolis, Ind.
Filed December 20, 1918. Serial No. 114,758. PUBLISHED MARCH 4, 1919.

DECISIONS

OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE HAMMOND.

Decided June 10, 1918.

PATENTABILITY—INVENTION—DUST-CAP FOR TIRE-VALVES.

Claims covering the combination, with a tire-valve casing having a mutilated external screw-thread, of a dust-cap having a mutilated internal screw-thread and a resilient washer at the bottom *Held* unpatentable in view of prior patents, one showing a dust-cap screw-threaded onto a tire-valve casing and another for a hose-coupling showing the same arrangement of screw-threads and a washer in the same location, described as "flexible," it being only fair to assume that it is resilient.

[NOTE.—This application resulted in Patent No. 1,302,792.]

APPEAL from Examiners-in-Chief.

DUST-CAP FOR VALVES OF PNEUMATIC TIRES.

Messrs. Prosser, Turk & Myers for the applicant.

NEWTON, Commissioner:

This is an appeal from the decision of the Examiners-in-Chief affirming the action of the Primary Examiner in his final rejection of claims 3, 4, 5, and 6, of which claim 5 is an example:

5. The combination of a tire valve casing and a dust cap, said casing having a body portion with inter-engaging means thereon, a flattened side, and a nipple of smaller diameter than said body portion, said dust cap being elongated and of greater internal diameter than said nipple, said dust cap having an integral base and inter-engaging means thereon adapted to cooperate with the inter-engaging means on said casing, said inter-engaging means on the cap being adapted to pass longitudinally along the flattened side of the casing, and to be brought into fastening position by a partial rotation of the cap.

At the hearing applicant requested the following claim to be substituted for claim 4:

A dust cap for tire-valves, comprising a tubular member adapted to slip over and house the end and the part of the body of a tire-valve casing which extends beyond the rim, and adapted to abut against the rim, or a rim-nut thereon, said cap having interrupted screw-threads thereon adapted to engage screw threads on the tire valve casing, and a resilient means between said cap and the rim, or rim-nut, admitting of compression, by pressing the cap against the rim, or rim-nut, to bring threads on the dust cap into position to engage the grooves between threads on the valve-casing, particularly where the threads on the cap would be opposite threads on the valve-casing, by reason of the uncertain relation of the rim-nut, or rim, to the threads on the valve-casing.

and the following claim to be substituted for claims 7 and 8 of his brief:

The combination of a tire-valve casing and a dust cap adapted to slip over and house the end and the part of the body of said tire-valve casing which extends beyond the rim, and adapted to abut against the rim, or a rim-nut, said cap and valve casing having interrupted screw threads admitting of the cap being slid longitudinally along the valve stem into approximately its final position over the casing, and a resilient means between said cap

and the rim, or rim-nut, admitting of compression, by pressing the cap against the rim, or rim-nut, to bring threads on the dust-cap into position to engage the grooves between threads on the valve-casing, particularly where the threads on the cap would be opposite threads on the valve-casing, by reason of the uncertain relation of the rim-nut, or rim, to the threads on the valve-casing.

The references are: Gear, 618,224, January 24, 1899; Schwamberger *et al.*, 703,210, June 21, 1904; Keller, 793,937, July 4, 1905.

The invention covered by the appended claims is a tire-valve casing having a cover, which may be put over the casing and pushed lengthwise thereof rapidly until the bottom of the cap comes into contact with an abutment, the cap having a resilient ring at the bottom, whereby after coming in contact with the abutment the cap can always be pushed a little farther, so that if the mutilated screw-threads on the cap and casing do not mesh they can always be made to mesh the one with the other by slight pressure.

Keller shows the cap having a packing at the bottom. Schwamberger *et al.* and Gear show the mutilated screw-threads, Schwamberger *et al.* showing at 8', Figure 5, even the uncut part of the thread to prevent too great rotation. In view of these references, although Schwamberger *et al.* and Gear are in somewhat different arts, I can see nothing patentable in any of the appealed claims, and in coming to this conclusion I have not overlooked the applicant's argument to the effect that the packing 11 of Schwamberger *et al.* may not be resilient. Such packings ordinarily are. Schwamberger *et al.* say it is "flexible," and it is only fair to assume that it is resilient.

I have also considered applicant's argument to the effect that by having this packing resilient it is always possible to make the screw-threads mesh on applicant's device, wherein on account of the variations in thickness of the parts at the bottom of the casing there is uncertainty in how far the cap can go down on the casing 1. These same difficulties would be met in Schwamberger *et al.* or Keller, and even if the packing of Schwamberger *et al.* was not resilient, which is unlikely, it would only be the work of a mechanic to insert a resilient ring at the bottom of Keller's cap, so that it could be compressed slightly and make the screw-threads mesh.

The decision of the Examiners-in-Chief must therefore be affirmed.

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DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

HADLEY v. ELLIS.

Decided June 2, 1919.

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE—SIMPLE DEVICE.

A linked bracelet is not such a simple device that the mere making of it, without some test of its utility, will amount to reduction to practice.

2. SAME—SAME—DILIGENCE.

Conceding that a device made by H. in April, 1912, showed a conception of the invention, it was not a reduction to practice, and as he did nothing further toward completing the invention until after the entry of E. into the field in the fall of 1912, but worked on an invention of another, and did not file his application for over a year and a half after the filing of E.'s application, *Held* that H. was lacking in diligence and that priority was properly awarded to E.

Mr. Charles D. Davis and Mr. James H. Thurston for the appellant.

Mr. A. D. Salinger for the appellee.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This appeal is from the decision of the Commissioner of Patents in an interference proceeding awarding priority of invention to appellee Ellis for an invention relating to the manner in which the parts of an expansible bracelet are connected together, and includes the means for connecting the two parts of the guide-links.

The issue is in three counts, of which count 1 is illustrative.

1. In a bracelet, an interconnecting guide-link and slide-link, said guide-link comprising a pair of trough-shaped members connected together at one end by an integral bridge and folded at said bridge to set opposite and spaced apart from each other, the free ends of said members being provided with extending portions folded one about the other to positively lock said free ends together, said extensions also serving as a cross-bar for guiding the slide-link, said slide-link being slidably mounted between said trough-shaped members and a spring for normally retaining said links in contracted position.

The application of Ellis was filed November 4, 1912, on which patent issued November 24, 1914. Hadley filed his application November 4, 1914.

While Ellis alleges conception of the invention on June 15, 1912, he was properly held by the tribunals below to his filing date for constructive reduction to practice. Hadley pitches his case upon an alleged reduction to practice in April, 1912. He testified that he made a link at this time and later a bracelet which he showed to witnesses Kuehner and Test. Test was a tool-maker employed by the Hadley Jewelry Company. Hadley relies upon this for a reduction to practice. It does not appear that it was tested, and Hadley admits that the links were thrown away and nothing further done with the device until the fall of 1912, after Ellis had come into the field. As to these links, Kuehner testified that he did not regard them as satisfactory, and that he told Hadley so.

The device in issue is not so simple that the mere making of it, without some test of its utility, will amount to reduction to practice. We, therefore, agree with the Commissioner that what Hadley did in 1912 amounted to merely an abandoned experi-

ment. Conceding that Hadley had established conception of the invention in 1912, he spent the summer of that year perfecting an invention for Kuehner, and did nothing until after Ellis came into the Patent Office. Indeed, nothing was done toward making application for a year and a half, and then the application was not filed until the fall of 1914. The tribunals of the Patent Office were in agreement upon the issues of fact, and we find no occasion to interfere with their conclusions.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Court of Appeals of the District of Columbia.

LEONARD AND LEONARD v. YOUNG.

Decided June 2, 1919.

INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* insufficient to establish that the appellants, who filed their application after the patent had issued to the appellee, were the prior inventors.

Mr. Frank E. Liverance, Jr., for the appellant.

Mr. Stuart C. Barnes, Mr. J. H. Milons, Mr. C. T. Milons, and Mr. C. R. Stickney for the appellee.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This appeal is from an award of priority of invention to appellee Young.

Appellants filed their application in the Patent Office after patent had issued to Young; hence, to succeed they must establish their case beyond a reasonable doubt. (*Blackstone v. Wild*, 43 App. D. C. 392; 215 O. G., 667.)

The case turns upon a question of fact. While the Examiner of Interferences awarded priority to appellants, he was reversed by both the Board of Examiners-in-Chief and the Commissioner. On the same evidence the right of Young to priority was sustained by Judge Sessions in a suit brought in the United States District Court for the Western District of Michigan for the infringement of the Young design patent against the assignee of the Leonard application, (*Young v. Grand Rapids Refrigerator Co.*, decided July 11, 1918, and not reported.) In the opinion the court said:

Depositions taken in an interference case in the Patent Office have been stipulated into the record and constitute the evidence upon which this question of fact must be decided. . . . Construing this testimony most favorably to defendant, its officers had but a vague and general idea of what was desired and did not attempt to go into the details of the design. In fact, they make no claim to the invention as a completed whole. The testimony of the superintendent of plaintiff's factory and the draftsman who made the drawings tends to sustain the contentions of plaintiff rather than those of defendant. . . . Upon the whole record, I am constrained to hold that defendant has not sustained the burden of proof required to overcome the presumption of validity and priority of invention arising from the issuance of the patent to plaintiff.

From a careful review of the evidence, we are convinced that the decision of the Commissioner, sustained by the able opinion of Judge Sessions, is right. The decision of the Commissioner of Patents is affirmed.

Affirmed.

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Court of Appeals of the District of Columbia.

SWINGLEHURST v. BALLARD.

Decided June 2, 1919.

1. INTERFERENCE—EVIDENCE—ORIGINALITY—REBUTTAL.

Where S. sought to show that B. was not the original inventor, but derived his knowledge from him through one L., testimony offered in rebuttal to show that L. was in the employ of B.'s company *Held* properly excluded as improper rebuttal, since it was a part of S.'s case-in-chief.

2. SAME—SAME—SAME.

Evidence that L. was in the employ of B.'s assignee *Held* insufficient to establish that B. derived his knowledge of the invention from S., especially as when L. was called by S. as a witness in making out his *prima facie* case he was not asked as to any disclosure to B.

3. SAME—SAME.

The fact that B. was not called as a witness to testify that he was the inventor is immaterial. He swore that he was, in his application, and having filed first he was presumably the first inventor, which presumption remains with him until it has been overcome by proof.

4. SAME—PRIORITY—REDUCTION TO PRACTICE.

Where the machine involved in the issue was made for the purpose of eliminating dog-lines in knitted fabrics, *Held* that a machine which did not do this, but only made the dog-lines somewhat less, and which was not put upon the market, though a machine for the purpose indicated was much desired by the trade, was not a reduction to practice.

5. SAME—SAME—DILIGENCE.

Assuming that an early machine made by S. embodied the invention, the tests made thereof did not demonstrate its practicability, and S. was lacking in diligence at the time that B. entered the field, and priority was properly awarded to B.

Mr. T. Walter Fowler and Mr. Hubert Hanson for the appellant.

Mr. William F. Hall for the appellee.

SMYTH, C. J.:

The invention involved in this interference relates to an attachment for rib-knitting machines. There are thirteen counts, of which the following two are typical:

1. In combination in a circular knitting machine, a needle cylinder, a needle dial and connecting means between them to maintain them in fixed relation to each other, said connecting means having a plurality of passes for the fabric, with means for effecting the opening of said passes in succession for the unrestrained movement of the fabric therethrough, the opening of each pass being followed by the closing of its members to thereby maintain the needle cylinder and dial in said fixed relation while another pass is open, substantially as described.

13. In a knitting machine, dial holding means comprising relatively fixed abutments, two or more dogs, levers carrying said dogs, an operating connection for said levers, and means for moving said operating connections to hold one or more of said dogs in an operative position with respect to said fixed abutments during release of another of said dogs.

Ballard filed his application on January 9, 1915; Swinglehurst filed his on February 6, 1915. Swinglehurst is therefore the junior party, and, of course, the burden is on him.

The machines of the prior art made in the knitted fabric what was known as "dog lines." This was undesirable. To develop a machine which would not make the lines was the problem to be solved. Ballard proved that a machine embodying the claims of the issue was constructed under his supervision on or about January 1, 1915, more than a month before Swinglehurst filed. Swinglehurst claims that he conceived the invention in March,

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1912, and soon thereafter disclosed it to one Larkin, who made a drawing of it at or about the time. This drawing is the same as that set forth in Swinglehurst's application. At the time that Ballard filed Swinglehurst was inactive and there is nothing to show he had done anything upon his invention for months prior thereto.

Swinglehurst contends that Ballard is not an original inventor, but derived his knowledge of the invention from Larkin, and thereby indirectly from him. He says in this regard that during the fall of 1914 Larkin was employed as a designer of knitting-machines by the Wildman Manufacturing Company, Ballard's assignee, and from that circumstance he reasons that Ballard had an opportunity of acquiring the requisite knowledge from Larkin, and therefore that he had thus acquired it. In support of the claim that Larkin was employed by the Manufacturing Company he presented in rebuttal a deposition of Larkin to that effect, but it was excluded on the ground that it was not proper rebuttal. He asserts that this was error. If he is wrong there is no evidence of Larkin's employment by the Manufacturing Company, and the basis of his claim that Ballard derived the invention from him disappears.

The purpose of his offer was to show that he was entitled to priority over Ballard by reason of the fact that the latter had derived the invention from him. This was manifestly a part of his case-in-chief, and no error was committed in denying it admission as rebuttal. Besides, if it was permissible in rebuttal, no prejudice could have resulted from its exclusion. The mere fact that Larkin possessed the knowledge and worked for the Wildman Manufacturing Company, the establishment in which Ballard's machine was constructed, did not prove, or even tend to do so, that Ballard had an opportunity of acquiring the knowledge. It was under the control of Larkin and he does not show in his deposition that he was willing to impart it to Ballard or anybody else. How, then, can it be said that Ballard had an opportunity to get it? Moreover, Larkin does not say that he divulged the knowledge either directly or indirectly to Ballard. He was Swinglehurst's witness, called by him in chief, and the fact that he was not interrogated upon the point at that time, or when he was put on in rebuttal, tends strongly to show that Swinglehurst knew he had not revealed the information to Ballard. Swinglehurst had it in his power to extract the truth from Larkin when he was on the witness stand. Why did he not do it instead of asking the court to draw an unwarranted inference from the circumstance of Larkin's employment? His failure to do so raises a presumption against the verity of the contention which he makes. (*Gallagher v. Hastings*, 21 App. D. C., 88, 98; 103 O. G., 531; *Alexander v. Blackman*, 26 App. D. C., 541; 121 O. G., 1979; *Schmidt v. Clark*, 32 App. D. C., 290; 135 O. G., 765; *Huff v. Gulick*, 38 App. D. C., 334; 179 O. G., 579.)

Complaint is made because Ballard was not called to prove his inventorship, and in this relation.

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tion it is asserted that an application is a mere pleading—not proof. But this is a misconception of the law. He who files first is presumably the inventor, and that presumption remains with him until it has been overcome by proof. (Patent Office Practice Rules, 116; *Hunter v. Stikeman*, 13 App. D. C., 214; 85 O. G., 610; *Smith v. Smith*, 31 App. D. C., 518; 130 O. G., 850.)

Ballard is assailed for not testifying that he was the inventor. He swore that he was in his application, and that was enough until there was evidence to the contrary. There is no ground for the criticism.

Swinglehurst urges that he reduced the invention to practice in the early part of March, 1912, by building a machine embodying it, and that a satisfactory test of the machine was made about that time. The testimony of Swinglehurst and the witness Morley, the only other person interrogated concerning the matter, is to the effect that by the machine in question the objectionable dog-loops were made "somewhat less"—"that there was not evidence of the same extreme dog marks" that had been "noticed in other machines of this character." But this did not remove the difficulty which the workers in the art complained of. They required a machine that would do more than somewhat lessen the undesirable lines, and this machine, according to Swinglehurst's testimony and that of his witness Morley, did not answer that purpose.

If Swinglehurst believed in 1912, at the time he made the test just mentioned, that his machine met the requirements of the situation, why did he not build it and put it upon the market? He knew that such a machine was much desired by the trade and would command a large sale, but he did nothing until another had entered the field, nearly three years afterward.

In view of all the facts, the Acting Examiner of Interferences found that the test did not demonstrate the practicability of the machine; that even if it did, Swinglehurst was not diligent, and that having failed to prove that Ballard was not the original and independent inventor, Swinglehurst's case failed, and priority must be awarded to Ballard. The Examiners-in-Chief and the Assistant Commissioner concur in the finding of the Acting Examiner of Interferences. We have made an independent investigation of the facts and wholly agree with the action of the three tribunals. But this investigation was not necessary, since it is an established rule of decision that where the three tribunals concur with respect to the facts we will not disturb the ruling, unless it is palpably wrong. (*Metcum v. Richards*, 47 App. D. C., 582; 250 O. G., 1000, decided April 1, 1918; *Jobski v. Johnson*, 47 App. D. C., 230; 247 O. G., 479; *Bourn v. Hill*, 27 App. D. C., 201; 123 O. G., 1284; *Flora v. Poirie*, 23 App. D. C., 195; 109 O. G., 2443; *Gammeter v. Thropp*, 42 App. D. C., 564; 210 O. G., 1397.) The case does not come within the exception.

The decision of the Commissioner is affirmed.

Affirmed.

[Vol. 265. No. 3.]

Court of Appeals of the District of Columbia.

IN RE WILSON.

Decided June 2, 1919.

PATENTABILITY—DOUBTS RESOLVED IN FAVOR OF THE APPLICANT.

The question whether two of the appealed claims define an invention over the art *held*, under all the circumstances, not to be so clear that the patent should be refused, the doubts as to the patentability being resolved in favor of the applicant.

Mr. H. S. Hill for the appellant.

Mr. T. A. Hostetter for the Commissioner of Patents.

SMITH, C. J.:

This is an appeal from a decision of the Patent Office rejecting claims 4 to 10, inclusive, of appellant's application for a patent on a device relating to an elevator for raising castings or tubings out of oil-wells and the like. We have no doubt with respect to the correctness of the decision except as to claims 4 and 10, which read:

4. Improvements of the character disclosed, comprising two relatively movable clamping and holding members having a hinge connection and capable of being opened or closed at such hinge connection when a pipe is between the same, suspension means connected with one only of the clamping members, and securing means whereby said members are held together in working relation; said member with which said suspension means are connected being provided with an abutment upon which is seated the swinging end of the other clamping member.

10. In improvements of the character disclosed, two relatively movable clamping and holding members, suspension means connected with only one of said members and at both ends thereof, connection means whereby the members are hinged at an end of each, and securing means whereby the free ends of the members are held together; said securing means comprising a device applied to said members parallel with the vertical axis of the bore between the members.

These claims were rejected on Patent 471,806 issued to Richards and on Patent 834,537 to Riggs. The tribunals of the Patent Office do not agree as to the grounds on which they place these rulings. The Examiner says that claim 4 is anticipated by Riggs, although he admits that Riggs's device is probably inoperative. He holds, however, that invention would not be necessary to make it work. Claim 10 is disposed of by him on the footing that it, with other claims, is a perfectly obvious variation over the construction shown by Riggs. On the other hand, the Examiners-in-Chief find that the Riggs structure is not necessarily inoperative, but do not decide the question. They say that both claims read on Richards's, which they admit might have to be changed by cutting a slot in member B and placing a tongue on member F. This, they assert, is suggested by the Riggs patent. The change, according to them, would not require invention but could be accomplished by any skilled mechanic.

The First Assistant Commissioner holds that the Riggs device is "obviously inoperative," and does not suggest a modification of the Richards device. He placed his decision upon the ground that claims 4 and 10, with others, do not fully bring out the difference between the appellant's device and the construction of the references.

The Richards device was patented in 1892 and the Riggs in 1906. In one case about seventeen and in the other three years elapsed after the

patents emerged before Wilson entered the Patent Office, which was in 1909. During this period no skilled mechanic succeeded in making the changes which the Examiner believes, and the Examiners-in-Chief think, might be necessary to produce the Wilson device. If the changes were taught by the references, is it not somewhat singular that no one had learned how to make them prior to Wilson's time? While this is not conclusive it is worthy of consideration. Persons needing an elevator, and familiar presumably with the Richards and Riggs structures, have adopted the Wilson device, which has practically driven the other structures from the commercial field. We have compared a model of the Riggs patent and the Richards drawings with Wilson's application and think that the difference between the latter's device and those of the references is quite clear. Giving full weight to the contrary of opinion among the experts of the Patent Office and considering the other pertinent facts mentioned, we are in doubt as to whether or not Wilson is entitled to claims 4 and 10, and this being so it is our duty to resolve the doubt in favor of the applicant. (*In re Lewis D. Rowell*, — App. D. C., —; 250 O. G., 778; *in re Thomson*, 26 App. D. C., 419, 426; 120 O. G., 2756; *in re Schraubstadter*, 26 App. D. C., 331; 120 O. G., 1167; *in re Enslwood*, 33 App. D. C., 201; 144 O. G., 819; *in re Harbeck*, 30 App. D. C., 555; 191 O. G., 586; *in re Handschuck*, 46 App. D. C., 155; 245 O. G., 279.)

The Commissioner's decision is affirmed as to all the claims involved in the appeal excepting 4 and 10, and as to them it is reversed and those claims are allowed as patentable to Elihu C. Wilson.

U. S. Circuit Court of Appeals—Fourth Circuit.

ROSEMARY MFG. CO. v. HALIFAX COTTON MILLS, INC.

Decided January 7, 1919.

[257 Fed. Rep., 321.]

1. PATENTS—INVENTION.

In a large majority of cases the conception of a general result wished for may be obvious, and it is the discovery of a way of obtaining the result which calls for the exercise of invention; but it may also be that invention lies in the conception that a new and useful result will be obtained by combining two or more old machines; that as soon as the advantage of the combination is understood the means for bringing it about is within the capacity of any fairly-skilled mechanic.

2. SAME—VALUITY—POWER-LOOM.

The Patterson reissue patent, No. 12,159, (original No. 722,243,) for power-loom, *held* void as claiming, broadly, a combination of Jacquard mechanism with a plain power-loom equipped with an automatic weft-replenishing device, which was not the patentee's invention.

APPEAL from the District Court of the United States for the Western District of Virginia, at Lynchburg; Henry Clay McDowell, Judge.

Suit in equity by the Rosemary Manufacturing Company against the Halifax Cotton Mills, Incorporated. Decree for defendant, and complainant appeals. Affirmed.

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Mr. William W. Dodge and Mr. Robert Fletcher Rogers (Messrs. Caskie & Caskie on the brief) for the appellant.

Mr. Melville Church (Mr. Titian W. Johnson and Messrs. Coleman, Easley & Coleman on the brief) for the appellee.

Before KNAPP and WOODS, Circuit Judges, and ROSE, District Judge.

ROSE, Dis. J.:

The plaintiff, the Rosemary Manufacturing Company, is the owner of reissued Letters Patent No. 12,159, granted September 29, 1903, to Samuel F. Patterson. It charges infringement by the defendant, the Halifax Cotton Mills, Incorporated. The lower court dismissed its bill, and it has appealed. If the patent is valid, its claims can be read upon the looms used by the defendant. The latter, however, denies validity, and in the alternative says it has a license. In the view we take of the first contention, it is unnecessary to consider the second. In substance the claims are for a combination of Jacquard mechanism with a plain power-loom equipped with automatic devices for replenishing or renewing the weft-thread. The plain hand-loom is millenniums old. More than a century has elapsed since men found how it might be driven by steam. The invention of Jacquard was made a hundred years or more ago, and for that length of time the combination of the Jacquard mechanism with the plain power-loom has been in general use. As early as 1834 it was perceived that such a combination as the plaintiff now claims would be a great improvement in the art. In the year mentioned two British inventors obtained a patent for a loom which they thought embodied it. In point of fact their device did not work, and their machine does not anticipate the plaintiff's.

In many inventions there are two distinct steps: first, the conception of the general result wished for; second, the discovery of a way of obtaining it. In a large majority of cases, perhaps, the first may be obvious to every one interested in a particular art, and it is the second which calls for the exercise of inventive genius. But that is not always so. It may well be that two or more machines, appliances, or tools are old and well known. Some day it dawns on some one that, if they are combined, new and useful results will be obtained. It may be that, so soon as the advantages of the combination are understood, the means of bringing it about are within the capacity of any fairly-skilled mechanic. In a third class of cases inventive genius may be required both in perceiving the combination that is desirable and in finding out a practical way of making it.

In applying these platitudes to the instant case it will be seen that there is nothing new in Patterson's idea that the combination claimed by him would be useful. That was then at least sixty-five years old. All the greater would be the presumption of invention in one who after such a length of time found the way to attain the end. One who so succeeded could, it is true, not claim

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a monopoly of the combination, however brought about, because the conception of that combination was not his contribution to the art. But he would be entitled, not only to a patent for his way of making that combination workable, but also to an extremely liberal construction of his claim, so as to cover a broad range of equivalents. Unfortunately Patterson's claims are in fact for the combination, no matter how effected, and of that he was not the inventor. It is true that some of these claims apparently go somewhat into detail; but the patent does not clearly tell us in what the invention lies, unless it is in the combination, nor have we been able to discover in what other than such combination it is supposed to be found, although we have had the benefit of the testimony of highly-qualified experts and of the briefs and oral arguments of able and experienced counsel.

The patent law requires the patentee to tell in what his invention consists. This is the rule, which we may not relax, even if we would; but this is a case which from every standpoint calls for its reasonable application. Why, after the desirability of the combination was perceived, did

two-thirds of a century pass before it was effected? The record shows that for sixty-one out of the sixty-five years no one knew how to supply one of the elements. It was not until 1895 that in the Draper-Northrop loom the world first saw an automatic web-replenishing device successfully applied to even a plain power-loom. Some years elapsed before its merits were fully recognized, and in 1899 Patterson says he conceived his invention. At that day all that was open to his appropriation was the method by which he successfully combined the new Draper-Northrop loom with the old Jacquard. If he had limited his claims to the way or ways in which he had achieved this end, the court and the public would have been able to say whether invention was displayed in what he did. In passing on that question he would have been entitled to whatever favorable presumptions were raised by the admitted success of his loom and the use of it by the defendant. As it is, his claims call for more than was open to his monopolization, and are in consequence invalid.

Affirmed.

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Issue of August 26, 1919.

Patents.....	622—No. 1,313,870 to No. 1,314,491, inclusive.
Designs.....	35—No. 53,725 to No. 53,759, inclusive.
Trade-Marks.....	131—No. 126,375 to No. 126,505, inclusive.
Reissues.....	1—No. 14,719.
Total.....	789

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Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 19, 1919.

W. W. Morgan & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications of Red Diamond Clothing Company, of St. Louis, Mo., and D. L. Marx Co., of Twenty-eighth and Commercial avenue, Cairo, Ill., for registration of a trade-mark and trade-mark registered January 6, 1891, No. 18,898, to W. W. Morgan & Co., of 1009 and 1011 Main street, Kansas City, Mo., and a notice of such declaration sent by registered mail to said W. W. Morgan & Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said W. W. Morgan & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

J. T. NEWTON, Commissioner.

Delivery of Patent.

RULE 169. The patent will be delivered or mailed on the day of its date to the attorney of record, if there be one; or, if the attorney so request, to the patentee or assignee of an interest therein; or, if there be no attorney, to the patentee or to the assignee of the entire interest, if he so request.

Important Information.

In ordering manuscript copies much time will be saved if the order states specifically what is desired, viz: Application as originally filed. (Petition, specification, oath, and drawings as received.) Application as amended. (Petition, specification, oath, and drawings with amendments entered.) Application as allowed. (Petition, specification, oath, and drawings as passed by the Examiner for issue.) Original application. (Facsimile petition, specification, oath, and drawings at present time.) Specification as originally filed. (As received in Office.) Specification as amended. (With amendments entered.) Specification as allowed. (As passed by the Examiner for issue.) Original specification. (Facsimile at present time.) File-wrapper. (File-wrapper only.) File-wrapper and contents. (File-wrapper, contents of record, including photoprints of any tracings or of prints within file-wrapper. In patented cases, printed copy of the specification and drawings of the patent is furnished.) File-wrapper, contents, and drawings. (File-wrapper and all of the contents of record, including photoprints of any tracings, exhibits, or prints within the file-wrapper. In pending cases, photoprints of the pending drawings only, omitting any canceled. If patented, copy of the specification and drawings of the patent being furnished, photoprints are not made of the original drawings unless specially ordered. If canceled drawings are wanted, they must also be specially ordered.) Assignment. (Give the liber and page of the record as well as the name of the inventor.) Printed publications in possession of the Office. (Give title and date of publication, also page and exact portion to be copied.) Orders for copies of any other records not mentioned above must state specifically the exact paper to be copied.

Notaries Public.

[Public—No. 362.]

An act to amend section five hundred and fifty-eight of the Code of Law for the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section five hundred and fifty-eight of the Code of Law for the District of Columbia, relating to notaries public, be amended by adding at the end of said section the following: "Provided, That the appointment of any person as such notary public, or the acceptance of his commission as such, or the performance of the duties thereunder, shall not disqualify or prevent such person from representing clients before any of the Departments of the United States Government in the District of Columbia or elsewhere, provided such person so appointed as a notary public who appears to practice or represent clients before any such Department is not otherwise engaged in Government employ, and shall be admitted by the heads of such Departments to practice therein in accordance with the rules and regulations prescribed for other persons or attorneys who are admitted to practice therein: And provided further, That no notary public shall be authorized to take acknowledgments, administer oaths, certify papers, or perform any official acts in connection with matters in which he is employed as counsel, attorney, or agent or in which he may be in any way interested before any of the Departments aforesaid."

Approved, June 29, 1906.

APPLICATIONS UNDER EXAMINATION.

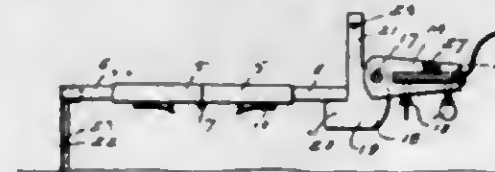
Condition at Close of Business August 22, 1919.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 28	June 5	374
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 25	Apr. 9	778
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	June 11	Feb. 15	246
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 11	June 21	466
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manufacturing; Music; Printed Matter; Tying Cords or Strands.	Apr. 10	Apr. 29	190
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	May 12	May 16	415
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes.	June 9	July 14	371
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	June 6	July 25	134
221	9. Air and Gas Pumps; Hydraulic Motors; Injectors and Ejectors; Motors; Fluid; Motors; Fluid-Current; Pumps.	Apr. 2	Apr. 29	351
225	10. Carriages and Wagons; Motor Vehicles.	Apr. 4	June 6	745
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 14	June 26	312
222	12. Journal-Boxes, Pulleys, and Shafts; Machine Elements.	Jan. 17	Mar. 1	919
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Apr. 13	Mar. 24	655
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Packaging Liquids; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 27	May 16	363
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Apr. 12	June 12	708
111	16. Radiant Energy; Telegraphy; Telephony.	Mar. 10	Mar. 27	735
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 9	June 5	279
229	18. Fluid-Pressure Regulators; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 17	May 7	537
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	Apr. 19	Apr. 21	356
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Sales; Undertaking.	July 11	July 3	474
312	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 5	Mar. 27	384
249	22. Aeronautics; Firearms; Ordnance.	May 20	July 10	283
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 22	June 2	565
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines.	Jan. 31	May 31	454
315	25. Agitating; Buttebering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	June 27	July 8	204
105	26. Electricity; Generation; Motive Power; Prime Mover and Dynamo Plants.	Jan. 16	Mar. 14	670
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	May 16	July 8	428
225	28. Internal-Combustion Engines.	Feb. 17	June 9	590
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 3	Apr. 3	798
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	May 3	July 15	532
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 26	Apr. 11	492
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Refrigeration.	Feb. 8	May 19	667
70	33. Bridges; Hydraulic and Earth Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roads and Pavements; Roofs.	Apr. 3	May 9	356
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Switches and Signals; Railway Ties and Fasteners; Railway Wheels and Axles; Track-Sanders; Vehicle-Fenders.	May 1	June 17	237
57	35. Buckles, Buttons, Claps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet.	July 1	July 16	412
204	36. Urine, Geometrical Instruments; Measuring Instruments; Photography; Force Measuring.	June 3	May 19	837
107	37. Electric Lamps; Electricity; Circuit Makers and Breakers; Electricity, General Applications.	Apr. 30	Apr. 19	723
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Mining, Quarrying, and Ice-Harvesting; Stationery; Stone-Working; Wells.	July 2	July 8	286
320	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Valves; Water Distribution.	Jan. 21	Mar. 7	740
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	May 10	Mar. 24	516
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 3	Apr. 15	671
111	42. Electricity; Conductors; Electricity-Transmission to Vehicles; Electricity, Conducts; Electric Signaling.	Apr. 9	Apr. 3	574
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 8	June 28	241
283	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships.	Jan. 6	May 3	169
379	45. Clutches; Lubrication; Motors; Railway Brakes.	Feb. 8	Mar. 3	736
Oldest new case, Jan. 3, oldest amended, Feb. 15.				22,003
Total number of applications awaiting action.				
103	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			2296
	Trade-Marks.	June 3	July 11	
	Designs.	May 3	July 2	
	Labels and Prints.	July 14	Aug. 1	

PATENTS

GRANTED AUGUST 26, 1919.

1,313,870. FOLDING-BED ATTACHMENT FOR AUTOMOBILES. DAVID ALLENSON, Riley, Kans. Filed Feb. 27, 1918. Serial No. 219,459. 1 Claim. (Cl. 5-9.)



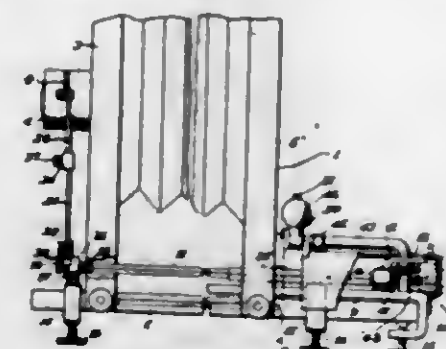
A bed attachment for automobiles including a collapsible bed, supporting members consisting of body portions having extensions and shoulders and having said bed secured to the shoulders, a rod connecting the body portions of said members, clamps journaled to the bed and secured to the running board of an automobile, said extensions adapted to rest on the running board when the bed is folded thereon, and spring catches secured to the extensions and bed and co-operating with each other in securing the bed to said extensions when folded.

1,313,871. DETACHABLE LINK BELT. WALTER E. AMBERG, Chicago, Ill., assignor to Amberg Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1917. Serial No. 205,792. 4 Claims. (Cl. 74-44.)



1. A new article of manufacture comprising a detachable link belt or chain adapted for use on sprockets designed for single-piece-link belts or chains, and composed of parts or links of only two forms, both made of wire; each of the first being substantially rectangular, presenting straight, but cross-sectionally round pintle portions, and rounded corners, and having a thin assembly neck at at least one corner, and the links of the second form being semi-roller or rocker elements; crescent-like in shape, of a depth corresponding to the pitch depth of the complementary sprocket wheel, and in each case pivotally containing two pintles of adjacent links in intimate but non-contacting relation and thus serving as a coupler for said links and the links of the two forms being assembled by co-action of the assembly necks of the first links and the crescent ends of the second links, and said second links or couplers having, after assembly, only a limited longitudinal play upon respective coupled pintles, being restrained by the rounded corner portions of the connected links.

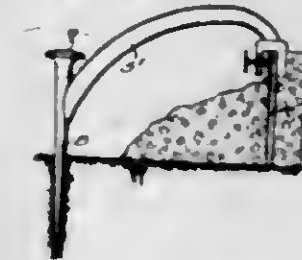
1,313,872. DIAPHRAGM-CONTROLLING ATTACHMENT FOR CAMERAS. JOHN A. ANDERSON, Amsterdam, N. Y. Filed Feb. 27, 1917. Serial No. 151,346. 7 Claims. (Cl. 95-64.)



1. In a device for operating the diaphragms of cameras, the combination of a diaphragm actuating element, operat-

ing means therefor including an operating element at the rear of the camera, and means co-operating with said operating element for indicating degrees of movement thereof, and means for removably mounting all of said means on the camera.

1,313,873. DEVICE FOR AND METHOD OF INSTALLING JOINT-FILLING MATERIAL IN CONCRETE OR OTHER TYPES OF PAVEMENT. JOHN AVERY, Yonkers, N. Y. Filed Sept. 19, 1917. Serial No. 192,121. 2 Claims. (Cl. 94-39.)



1. As an article of manufacture, a unitary device for holding a filler strip in position in the construction of a concrete pavement, comprising an arm arched to extend above the upper level of the pavement terminating in a depending clamp at one end adapted to engage the upper edge of the strip and hold it in vertical position, and a device at the other end below the surface of the pavement for positioning the device in the roadway whereby the filler strip may be held against lateral displacement by means of a plurality of said devices in any desired vertical position in the pavement.

1,313,874. PIGMENT AND PAINT. LOUIS E. HARTON, Niagara Falls, N. Y., assignor to The Titanium Alloy Manufacturing Company, New York, N. Y., a Corporation of Maine. Filed Mar. 21, 1916. Serial No. 85,561. 4 Claims. (Cl. 134-58.)

3. As a new article a composite pigment comprising particles of an insoluble sulfate base and thereto-adhering smaller particles of titanate oxide mixed with zinc oxide.

1,313,875. PROJECTILE. JOSEPH BONAL, Jeanerette, La. Filed July 12, 1918. Serial No. 244,633. 1 Claim. (Cl. 102-2.)



A projectile of the class described comprising a cylindrical body portion having a tapered nose at its front end, a closure for the butt end of said projectile, threaded therein, a rudder carried by said closure, a firing pin extending longitudinally through said body portion and project-

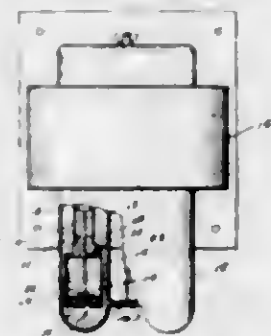
ing at its front end through the nose thereof, a flange on said pin for limiting its outward movement, a coiled spring for forcing said pin outward, a plurality of explosive containing pockets carried by said body portion and opening through the periphery thereof, said pockets being arranged in longitudinally spaced series, firing caps projecting from said pockets, and a plurality of hammers carried by said firing pin and positioned to engage said caps when the pin is moved inwardly.

1,313,876. ARTIFICIAL FUEL AND METHOD OF MAKING SAME. HENRY M. BRIGHAM, Brooklyn, N. Y., assignor to American Industrial Company, a Corporation of New Jersey. Filed Feb. 23, 1918. Serial No. 218,661. 7 Claims. (Cl. 44-7.)

1. An artificial fuel comprising ethyl alcohol, acetone, cellulose having a nitrogen content which renders it soluble in a mixture of ethyl alcohol and acetone, and water.

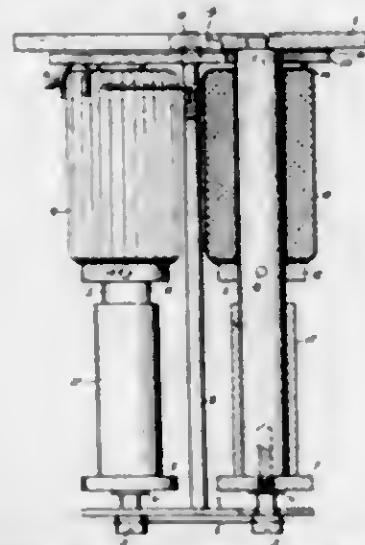
7. The process of producing artificial fuel consisting of mixing dehydrated ethyl alcohol and acetone, adding cellulose having a nitrogen content which renders it soluble therein and agitating the mixture to cause dissolving of the cellulose, and adding to such mixture sufficient commercial alcohol to bring the colloid to the desired degree of viscosity.

1,313,877. TIME ELEMENT FOR CIRCUIT-CONTROL. LEROY. GEORGE A. BURNHAM, Saugus, Mass., assignor to Sears B. Condit, Jr., Boston, Mass. Filed Dec. 18, 1917. Serial No. 207,747. 7 Claims. (Cl. 74-69.)



1. A time element for circuit controllers comprising a cylinder having an open end, an enclosing casing therefor, a piston operably arranged within said cylinder, means to actuate said piston, means to entrap a body of oil between said piston and cylinder, and means to permit a restricted flow of oil from said cylinder upon actuation of the piston.

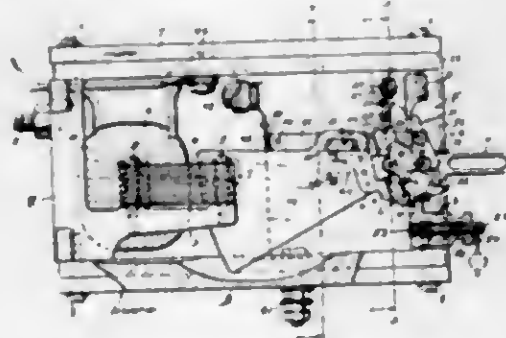
1,313,878. ELECTROMAGNETIC DEVICE. FRANK T. CASPER, Gates, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Apr. 2, 1917. Serial No. 159,201. 8 Claims. (Cl. 246-138.)



7. In an electric interlocking system, the combination with an electrically operable function having a motor

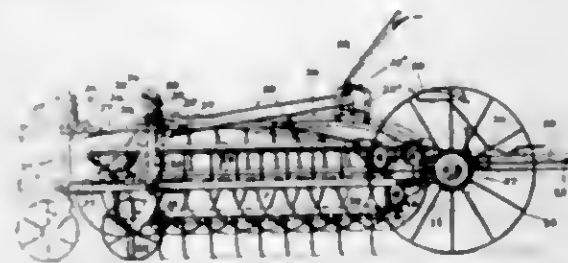
adapted to operate on alternating current and to generate direct current dynamically, of an electromagnetic indication device comprising two cores connected by a yoke, an operating winding on each core, said cores extending beyond the ends of the operating windings, a sleeve of electrical conducting material surrounding the extending portion of each core with a space between the sleeve and the winding, and a movable armature associated with the ends of the cores.

1,313,879. PROTECTIVE DEVICE FOR ELECTRIC INTERLOCKING SYSTEMS. AINSLIE T. CARTER, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed May 1, 1917. Serial No. 165,091. 9 Claims. (Cl. 246-138.)



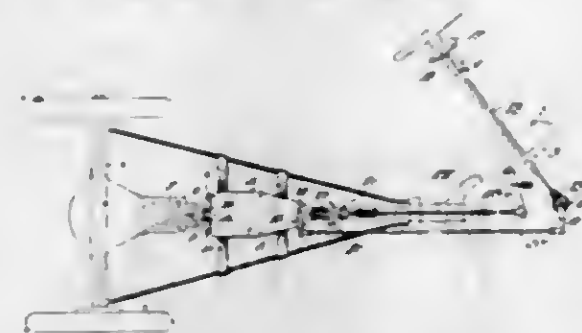
1. A protective device for electric interlocking systems comprising an electromagnetic device including a movable member, a handle for restoring said movable member to its normal position, a fixed contact piece and a cooperating movable contact finger, two links having their adjacent end pivotally connected and having their opposite ends connected to said contact finger and said handle respectively, said links being substantially in alignment when contact finger is in its closed position, the restoring movement of said handle causing bodily movement of the links to move said contact finger to its open position, and means operatively connecting said movable member and said links and acting upon movement of said movable member to its operated position to throw the links out of alignment and to move the contact finger to its open position.

1,313,880. SIDE-DELIVERY ROTARY RAKE. LEON R. CLAESSEN, Ottumwa, Iowa, assignor to The Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed Nov. 6, 1910. Serial No. 129,877. 20 Claims. (Cl. 56-115.)



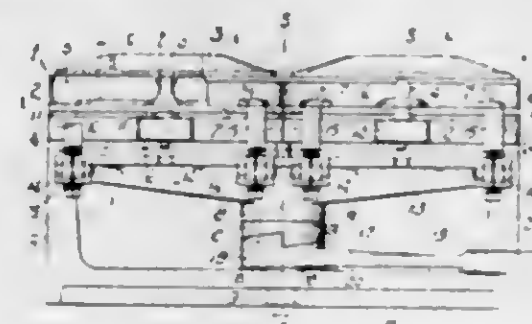
20. The combination with an agricultural implement frame adapted to be raised and lowered at its rear end, of a caster-wheel having a vertical standard rotatably mounted in said frame, and said frame and standard being vertically adjustable relative to each other, a cap on the upper end of the standard, a U-shaped bolt passing through said cap and lying in an annular groove in the standard, a depending guide member clamped to the cap by said bolt and having sliding engagement with a keeper on the frame, an operating lever, a flexible connection between said lever and non-rotatable cap, and a pulley journaled in the frame and under which such connection passes.

1,313,881. AUTOMOBILE SPEED-CHANGING MECHANISM. KENTON COTTRILL, Fresno, Calif., assignor of three-fourths to C. S. Pierce, Carl A. Lisenby, and R. J. Woodward, Fresno, Calif. Filed Nov. 9, 1917. Serial No. 201,103. 14 Claims. (Cl. 74-55.)



1. A mechanism of the class described comprising a pair of gear shifting elements, a pivoted longitudinally movable shifting element engaging member, said member being normally spaced from the shifting elements, means for moving said member about its fulcrum for selectively opposing the end of the same with either of said elements, and means for moving the member longitudinally when aligned with one of said elements to shift the same.

1,313,882. PATTERN-DRAWING MACHINE. HENRY H. CUMMINGS and ARDEN J. MUMFERT, St. Louis, Mo., assignors to McQuay-Norris Manufacturing Company, a Corporation of Missouri. Filed Oct. 3, 1918. Serial No. 250,748. 11 Claims. (Cl. 22-48.)



9. In a pattern drawing machine, a fixed support for the pattern, a centrally disposed spindle mounted below and contiguous to the support, a vertically reciprocating member on the spindle, and means on the member for engaging and lifting a flask deposited over the pattern.

1,313,883. HAND-TRUCK. GEORGE ERNEK and EDWARD JUSCHKA, Belleue, Ohio; said Erne assignor to said Juschka. Filed Nov. 15, 1917. Serial No. 202,202. 1 Claim. (Cl. 214-634.)



A hand truck of the character described, comprising a transverse axle, wheels carried by the axle, a pair of longitudinal bars arranged upon and secured to the transverse axle and projecting forwardly beyond the same and beyond the wheels for a substantial distance so that the bars raise the wheels from contact with the ground when the truck is moved to substantially a vertical position.

a transverse longitudinally curved grip secured to the longitudinal bars at a point arranged near and spaced from the transverse axle and spaced from the forward ends of the longitudinal bars, said grip being adapted to engage between two rims of the barrel, a longitudinally curved strip secured to the longitudinal bars rearwardly of the wheels, a head connected with the strip and forming therewith a socket for the reception of the upper end of the barrel so that such upper end is held against rearward longitudinal displacement and may be readily released when the barrel is shifted to the vertical position, a ball pivotally connected with the longitudinal bars at a point disposed forwardly of and near said strip, said ball being adapted to encircle the upper end of the barrel to prevent displacement thereof, and allowing the truck to be turned slightly upon said head to move the forward end thereof away from the barrel so that the grip disengages from between the two rims while retaining the truck connected with the upper end of the barrel, and hand-grips secured to the rear ends of the longitudinal bars.

1,313,884. APPARATUS AND PROCESS FOR THE PRODUCTION OF AMMONIA. JOHN J. ELBERT, Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Nov. 5, 1918. Serial No. 261,212. 8 Claims. (Cl. 23-21.)

1. In an apparatus for producing ammonia from a cyanamid or other compound the combination of a holding means for said compound; a measuring tank for the liquor used in making a slurry of said compound; a mixing tank for said slurry; means to deliver said compound from said holding means to said mixing tank; means to deliver said liquor after it has been measured from said measuring tank, to said mixing tank; an autoclave and means for delivering the slurry from said mixing tank to said autoclave, substantially as described.

5. The process of making ammonia from a crude cyanamid or similar compound which consists in measuring the hot liquor from a previous operation; proportioning the quantity of said compound to the quantity of said liquor used; mixing said liquor and compound into slurry; passing said slurry through a pipe line into an autoclave; forcing fresh liquor through said pipe line to clear the same of slurry; and subjecting said slurry to the action of heat and pressure in said autoclave sufficient to produce ammonia, substantially as described.

1,313,885. PROCESS FOR THE PRODUCTION OF AMMONIA. JOHN J. ELBERT, Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Nov. 5, 1918. Serial No. 261,213. 5 Claims. (Cl. 23-21.)

1. The process of making ammonia from commercial cyanamid consisting in making a slurry of said cyanamid with water; applying heat to said slurry to bring it to a reacting temperature; permitting the initial reacting to complete its course; discharging the ammonia thus generated; again applying heat to said slurry and maintaining a higher temperature and pressure for a period of time; again discharging from the apparatus any ammonia generated; and finally discharging the residual products of the reaction from the reaction vessel; substantially as described.

1,313,886. PROCESS OF PURIFYING AMMONIA. JOHN J. ELBERT, Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Nov. 5, 1918. Serial No. 261,214. 2 Claims. (Cl. 23-21.)

1. The process of preparing pure ammonia from ammonia produced from impure cyanamid or cyanid compounds by autoclaving, condensing in rectifying and removing water from the ammonia gas discharged from the autoclave; and treating the residual gas with cuprous chloride and oil, substantially as described.

1,313,887. METHOD OF PRODUCING SOLES FOR SHOES. KARL ENGEL, Arlington, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 2, 1916. Serial No. 134,703. 7 Claims. (Cl. 12-146.)



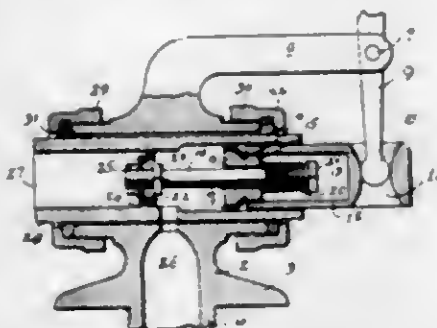
1. That improvement in the art of producing soles which consists in dieing out a single blank having each of its opposite end portions forming the forepart of a sole and, being connected by an intermediate portion forming the shank portion of a sole, and then separating the blank into two sole blanks each having a shank portion of uniform thickness which is substantially less than the adjacent forepart of the sole blank.

1,313,888. SEALING-TAG. FRED EVANS, New York, N. Y., assignor to Henry R. Stevens, Jr., New York, N. Y. Filed July 22, 1915. Serial No. 41,351. 1 Claim. (Cl. 40-20.)



A reinforcing device for a tag or the like comprising a body of material adapted to rest upon one surface of the tag, the body having a T-shaped slit therein, the triangular portions of the body formed by the intersection of the head and stem portions of the slit being bent to form attaching means for attaching the body to the tag, and a portion of the stem of the slit providing gripping means for holding a cord attached to the tag.

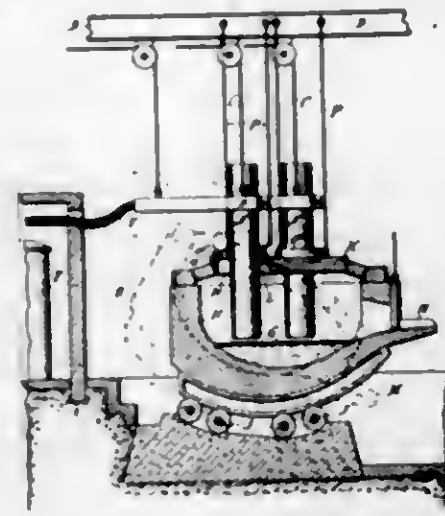
1,313,889. FLOAT-CONTROLLED VALVE FOR FLUSHING-TANKS AND THE LIKE. WILLIAM B. FORD, Birmingham, Ala. Filed Apr. 20, 1917. Serial No. 163,483. 5 Claims. (Cl. 137-104.)



4. A valve casing having a longitudinal bore and an inlet intermediate the ends of said bore, a slide movable in one end of said bore and comprising a body having an actuator receiving slot, and a recess, a plug threaded in one end of the recess, a valve stem slidable through an opening in the plug, yielding connecting means between the slide and stem within the recess and a valve connected to the end of the stem distant from the recess and providing a space between the plug and said valve.

5. In a float valve mechanism, a casing, an independently removable tubular lining member in the casing, said tubular member having open ends and a float actuated valve slidably mounted within said lining.

1,313,890. ELECTRIC FURNACE. JAMES H. GRAY, New York, N. Y. Filed May 18, 1918. Serial No. 235,260. 11 Claims. (Cl. 204-64.)



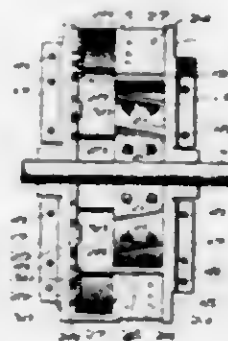
1. An electric furnace having an electrode passing through its roof, and having a cooling ring on top of the roof surrounding the electrode, the furnace being adapted to tilt about a center substantially on a line with the top of the roof without moving the electrode and cooling ring from their working positions.

1,313,891. LOCK FOR MOTOR-VEHICLES AND THE LIKE. CLEVELAND J. HEINRICH, St. Louis, Mo., assignor of one-half to Fred W. Arnold, St. Louis, Mo. Filed Dec. 11, 1918. Serial No. 266,181. 2 Claims. (Cl. 70-181.)



1. In combination with the H-plate of an automobile or the like, a pair of plates having holes through both ends and a pin passing through the said holes at one end thereof and affording a slidable and pivotal connection for the said plates at that end, and a padlock, the hasp of which passes through the holes at the other end of the said plates, the ends of the plates being spaced apart and engaging the opposite edges of one of the lips of the H-plate and the pin connecting the plates fitting under and engaging the said lip, the opposite end of the said plates and the said padlock being above the opposite lip of the said H-plate and the gear-shifting lever being locked in "neutral" between the said plates.

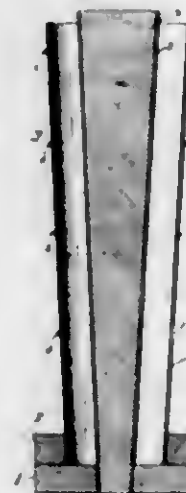
1,313,892. MEASURING AND MIXING APPARATUS. IRVIN F. HEPPEL, Narberth, Pa., assignor to General Refractories Company, New York, N. Y., a Corporation of West Virginia. Filed June 30, 1917. Serial No. 177,866. 3 Claims. (Cl. 83-44.)



1. A measuring-device comprising a plurality of juxtaposed disk-members; spacer-members on one disk and

forming therewith an open-ended pocket; a pocket-end-forming member disposed on another disk-member whereby the size of the pocket is varied upon movement of the disks toward or away from each other; and a lining of soft material in said pocket in engagement with the end-forming member.

1,313,893. POST-MOLD. WILLIAM A. HESS, Perry, Okla. Filed Aug. 25, 1910. Serial No. 116,831. 1 Claim. (Cl. 25-127.)

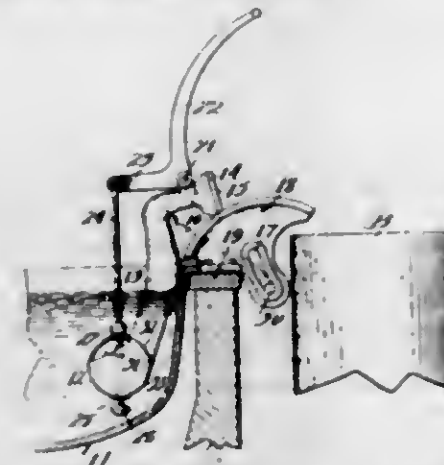


A hollow mold for fence posts comprising a supporting base formed of a relatively thick disk shaped member having a plane lower surface, said member having a central tapered opening extending therethrough, a ring mounted on the upper surface of the member and extending flush with the outer surface thereof, the inner walls of the ring member being inclined downwardly and outwardly, a vertically disposed frusto-conical shaped casing having its lower end frictionally seated within the ring, a vertically disposed frusto-conical core arranged within the casing and spaced from the sides thereof and having its lower end frictionally seated in the tapered opening in the member, the lower surface of the core extending flush with the plane lower surface of the member, as and for the purpose specified.

1,313,894. STEEL ALLOY. WILLIAM C. HONHORST, Newport, Ky. Filed Dec. 8, 1917. Serial No. 206,191. 4 Claims. (Cl. 75-1.)

1. A steel alloy, having high tensile strength and great torsional resistance, the specialized characteristics of which as distinguished from ordinary steel are determined by the alloy containing dominating components of chromium and copper, not to exceed five per cent., and carbon in proportion appropriate for tempering.

1,313,895. STEREOTYPE-METAL CONVEYER. CHARLES E. HOPKINS, New York, N. Y. Filed Jan. 7, 1913. Serial No. 740,015. Renewed Jan. 14, 1919. Serial No. 271,164. 20 Claims. (Cl. 22-79.)



1. As an article of manufacture, a device for conveying molten metal by the action of gravity, movable into and

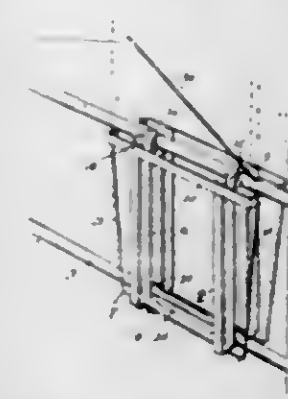
out of the molten metal and having a transverse receiving chamber adapted to be submerged in the molten metal and provided with a valved intake at the bottom thereof.

1,313,896. RACK FOR UMBRELLAS AND THE LIKE. NEIL MACINNES, Chicago, Ill. Filed July 3, 1915. Serial No. 37,905. 5 Claims. (Cl. 45-33.)



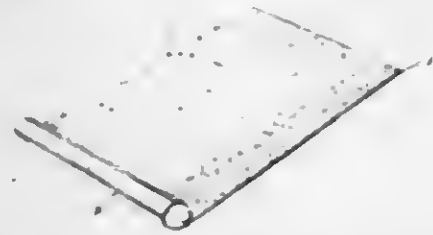
3. A device of the class described comprising a spring-held umbrella lock; a locking rod operatively connected with said umbrella lock at one end, said rod being arranged to release said umbrella lock on longitudinal movement thereof; a lock housing inclosing the other end of said rod; a spring catch in said housing arranged to be thrown into inoperative position upon longitudinal movement of said rod; and a key arranged to be inserted in said housing to contact with the end of said rod and move the same longitudinally, there being a notch in one side of said key arranged to automatically engage with said spring catch upon insertion of said key, substantially as described.

1,313,897. DISPLAY DEVICE. RICHARD C. KAISER, New Rochelle, and NICHOLAS J. MIANO, New York, N. Y., said Miano assignor to said Kaiser. Filed Nov. 14, 1918. Serial No. 262,439. 3 Claims. (Cl. 211-14.)



1. In combination, a frame having upper and lower bars and a bracket secured thereto, each said bracket comprising two foundation members having substantially U-shaped branches on each side of the said bars, the said branches being joined above the top of the uppermost of said bars and secured thereto, a substantially horizontal holding member secured to said two foundation members and passing between the inner legs of the said U-shaped branches and the said bars, and side holding members secured to the bottoms of the said substantially U-shaped branches and to the said substantially horizontal holding members.

1,313,898. PAPER TUBE AND METHOD OF MAKING THE SAME. JOHN W. KIECKHEFER, Milwaukee, Wis., assignor to Kieckhefer Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 1, 1918. Serial No. 231,881. 14 Claims. (Cl. 93-94.)



4. As an article of manufacture, a tube of paper or other fibrous material comprised of a plurality of superimposed plies or layers the exterior and interior plies being impregnated with a waterproofing compound containing oil.

1,313,899. UMBRELLA. PERCIVAL FAULKNER KING, Vancouver, British Columbia, Canada. Filed July 12, 1918. Serial No. 244,598. 14 Claims. (Cl. 135-30.)



8. In a foldable umbrella, a jointed pole, a sleeve having an enlarged upper end slotted with as many slots as there are ribs and having an internally threaded revoluble lower end adapted to coact with a correspondingly threaded portion on the pole whereby said upper end may be advanced or retracted, ribs jointed at substantially mid-length each provided with a movable sleeve normally covering said joint and having an enlargement on its upper end, said enlargement being adapted to engage the inside of said sleeve when the rib is mounted in its respective slot, a retaining flange secured to the pole against the underside of which the upper end of said sleeve may be advanced to prevent upward movement of the ribs tending to displace them out of the said slot, a cover having an apertured flange at its center adapted to be passed over said pole and seated on said retaining flange and provided with a plurality of inside loops each adapted to loop over a rib and a plurality of members around its outer edge each adapted to detachably engage a rib tip, and a rotatable sleeve mounted on said pole adapted to bear on the upper face of said cover flange provided with a bayonet slot co-acting with a locking pin carried by said pole.

1,313,900. BREAD-BOARD. GEORGE J. KLINE, St. Paul, Minn. Filed Apr. 29, 1918. Serial No. 231,516. 1 Claim. (Cl. 146-12.)

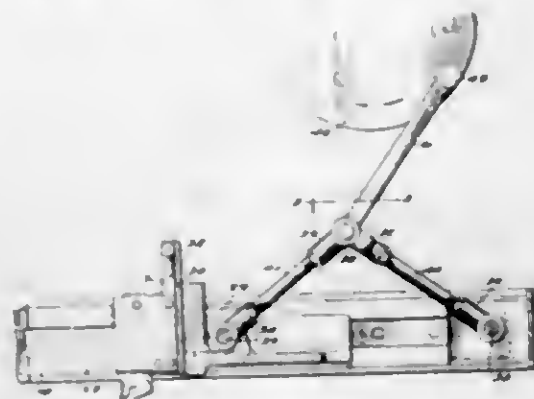
A bread board, consisting of a cutting palette, having an annular groove in its periphery, and a thin circular shell formed into an annular gutter having its inner up-

turned edge extended inwardly to form a spring releasable engagement around the periphery of said palette in said groove with the gutter in position to catch crumbs from the palette, and a portion of said shell adjacent to said



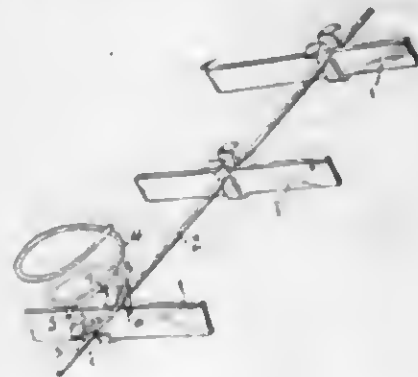
turned edge being turned downwardly and inwardly to form an inwardly projecting annular shell above the plane of the lower portion of the gutter upon which the palette is adapted to be detachably supported.

1,313,901. MACHINE FOR AND METHOD OF SCARFING METAL. PHILANDER E. LANE, Atlantic City, N. J. Filed Dec. 19, 1918. Serial No. 267,500. 35 Claims. (Cl. 90-38.)



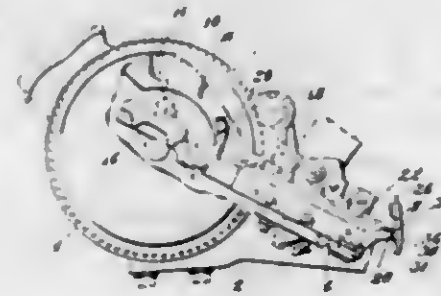
1. A machine for scarfing metal including with a cutting tool, means to feed said tool to accomplish a deepening cut, and power means acting to increase the force applied to said cutting tool as the cut is deepened.

1,313,902. SPRING BED-BOTTOM AND MANUFACTURE OF THE SAME. JOSEPH P. LACOURT, Carthage, Mo. Filed Aug. 27, 1917. Serial No. 188,325. 2 Claims. (Cl. 5-29.)



1. In a spring bed bottom, a longitudinal supporting member having a transverse hole, a V-shaped securing member embracing the sides and lower edge of the longitudinal member, each arm of the securing member having a transverse hole, a spring having a coil supported by the upper edge of the longitudinal member, and a transverse tie member extending through the holes in said arms and said longitudinal member and holding the V-shaped securing member properly positioned on the longitudinal member, the arms of the V-shaped member being depressed so as to hold the transverse tie member under tension and holding the coil under tension at opposite sides respectively of the longitudinal member.

1,313,903. FASTENING-INSERTING MACHINE. FRED L. MAC KENZIE, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 19, 1917. Serial No. 197,495. 17 Claims. (Cl. 1-18.)



1. In a machine of the class described, in combination, a raceway having a plane end surface and a fastening supporting surface arranged in a horizontal plane, a driver, a driver guide provided with a passage to receive a previously formed fastening and to receive said driver, a part extending from said driver guide in the direction of and to a point closely adjacent to the plane end surface of the delivery end of the raceway, said part having its upper surface substantially in the same horizontal plane as the upper fastening supporting surface of the delivery end of raceway and being slotted to receive a previously formed fastening from the raceway and to support and guide it to the passage in the driver guide, and means for moving the fastenings one by one along said part to the passage in the driver guide.

1,313,904. ELECTRICAL RAILWAY SIGNALING SYSTEM. FRANCIS J. MARSH, Gilt, Kans. Filed Feb. 12, 1916. Serial No. 77,825. 2 Claims. (Cl. 246-90.)



1. In a railway electrical signaling system, a normally open single circuit, a circuit closer and a circuit breaker in said circuit and an arm projecting from a trolley pole adapted for successively actuating the same, said circuit closer comprising a magnet armature pivotally mounted on a vertical axis, a magnet in the circuit and contacts on said magnet and armature, and a spring for normally holding the armature in open position, said magnet being energized upon closing of said contacts, substantially as described.

2. In a railway electrical signaling system, a normally open single circuit, a circuit closer and a circuit breaker in said circuit, and an arm projecting from a trolley pole adapted for successively actuating the same, said circuit breaker comprising an insulated bearing member, an arm pivotally mounted at its upper end to said member and having an outwardly curved lower end, and a contact member below said insulated bearing, and said bearing and said contact being connected in said circuit, and the latter being adapted to be normally engaged by said arm, substantially as described.

1,313,905. PISTON LUBRICATION. ARDEN J. MUMFERT, St. Louis, Mo., assignor to McQuay-Norris Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 6, 1917. Serial No. 152,656. 3 Claims. (Cl. 121-108.)



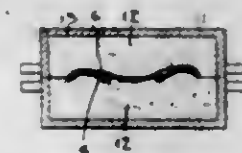
1. In combination with a cylinder of an internal combustion engine, a reciprocating piston, one or more packing rings therefor operating with a maintained flow of oil between them and the walls of the cylinder, an oil-intercepting ring interposed between said packing rings and the end of the piston adjacent the combustion chamber, means on said ring for collecting the oil intercepted by it with one stroke of the piston, and for returning said oil to the cylinder walls with the opposite stroke, thereby confining the flow of the oil to the portions between said oil-intercepting ring and the opposite end of the piston.

1,313,906. RECEPTACLE FOR DISPLAY. FRANK M. PEREZ, Brooklyn, N. Y., assignor, by mesne assignments, to David Brody, New York, N. Y. Filed Mar. 31, 1917. Serial No. 158,970. 11 Claims. (Cl. 200-44.)



1. A receptacle comprising a body and a cover hinged to one end thereof, the cover being adapted to be turned down across said end, and to be folded about a transverse line beneath the body, the portion between said line and the hinged end of the cover being longer than the depth of the body, whereby said portion may elevate said end of the body and support the body in display position.

1,313,907. METHOD OF MAKING DENTAL MOLDS. JACOB PETRY, Pittsburgh, Pa. Filed Nov. 8, 1915. Serial No. 60,350. 7 Claims. (Cl. 22-106.)



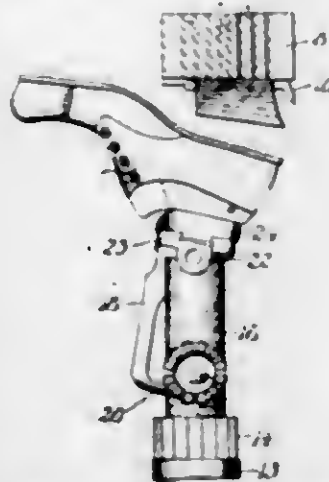
1. The method of forming a pattern, which consists in taking an impression of the part to be fitted; covering a portion of the area of said impression with a removable filling member; covering the remainder of the impression with a layer of plastic, fusible material; placing over the first filler member a second filler member of greater area, but similar outline; molding plastic material over the first plastic layer and the second filler member to the shape of the opposite side of the pattern; separating the plastic layers; removing the filler members and re-assembling the plastic layers to form a pattern having an undercut socket whose bottom parallels in all parts the molded face of the impression member.

- 1,313,908. SHIELD FOR WELDERS AND THE LIKE. SAMUEL H. POLANKY, Chicago, Ill., assignor to F. A. Hardy & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1919. Serial No. 279,021. 8 Claims. (Cl. 2—149.)



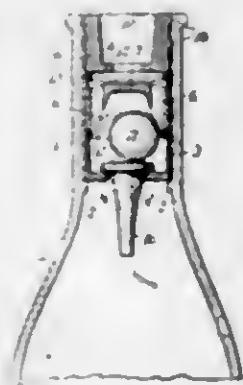
3. A viewing device comprising a fenestrated opaque plate, a suitable viewing element closing said fenestrum, parallel arms upon and between which said plate is longitudinally adjustable, supporting members the ends whereof are pivotally connected to the ends of said arms, and means for locking said members and arms in diverse adjusted positions.

- 1,313,909. JACK. JOSEPH H. FORA, Hamilton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 2, 1916. Serial No. 75,800. 11 Claims. (Cl. 12—126.)



1. A jack comprising a post, a last bed piece mounted to swing thereon about an axis outside the last, an arm extending rigidly from the bed piece, and locking means constructed and arranged to act upon the arm at a point remote from the axis of the bed piece.

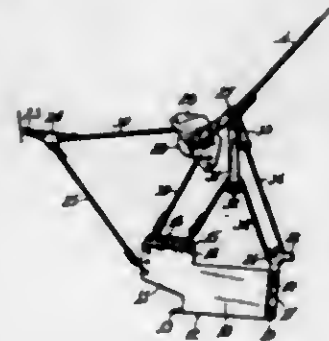
- 1,313,910. NON-REFILLABLE BOTTLE. GEORGE A. PORTER, Boston, Mass., assignor to Invincible Stopper Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1915. Serial No. 54,848. 1 Claim. (Cl. 215—62.)



A device for rendering bottles non-refillable, comprising a chambered member secured in the neck of the bottle

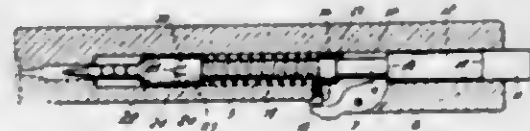
for which it is designed and having a central opening communicating with the bottle, a gravity valve for closing said opening, a member spaced from said chambered member nearer the mouth of the bottle and having a central opening, the roof of said chambered member being centrally flat and transverse to the axis of the bottle neck, an annular space about said flat space approximating a frustum of a cone, and a plurality of holes passing through said annular space parallel with axis of the bottle neck into the space within the chambered member, said annular space being slightly prolonged beyond the circle of said holes, whereby a wire is hindered from entering said holes from the central opening above.

- 1,313,911. EXCAVATING APPARATUS. JOSEPH LEWIS POTTEN and JOSEPH LE ROY POTTEN, Indianapolis, Ind. Filed Dec. 24, 1917. Serial No. 208,683. 3 Claims. (Cl. 37—54.)



1. In an excavating apparatus, the combination of a drag bucket, an arm pivoted to the bucket, a bearing sheave mounted on the arm, a hoisting cable, a yoke carried by the cable, a carrying sheave carried by the yoke, and a carrying cable connected to the bucket and to the hoisting cable and extending over the carrying sheave and under the bearing sheave.

- 1,313,912. FIRING-PIN FOR FIREARMS. EUGENE G. REAUME, East Hartford, Conn., assignor to The Hartford Machine Gun Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 2, 1917. Serial No. 140,174. 3 Claims. (Cl. 42—16.)

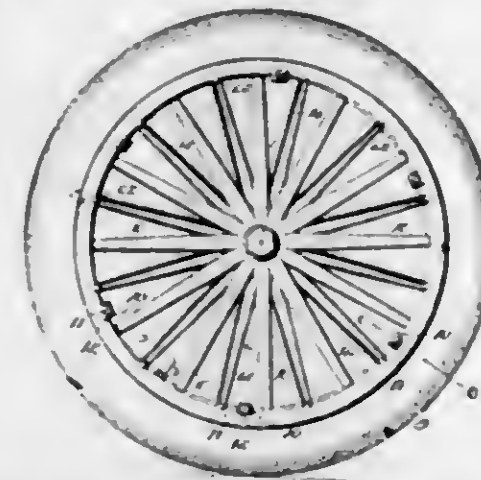


1. A firing pin comprising a body having a threaded end with a flange on said pin and a slot in said flange, a firing tip fitting said screw threaded end, a lock mounted on the body, and a member to unite the lock and firing tip, said member extending through the slot in said flange.

- 1,313,913. VEHICLE-WHEEL. HANAI D. RAY, Avarua, Island of Rarotonga, Cook Islands. Filed July 1, 1918. Serial No. 242,784. 10 Claims. (Cl. 21—69.)

1. A wheel comprising a hub and a rim, and a body portion connecting the hub and the rim, the hub having at one end a radial flange, the flange having lugs extending toward the hub, the body of the wheel being composed of inner and outer faces dished in opposite directions, the faces having central openings for the hub and the inner faces having openings for the lugs, stop collars threaded on to the hub at the inner sides of the wheel faces, a nut threaded on to the hub outside of the outer face, each face consisting of a single hub portion and radiating spokes, the spokes of each series being curved trans-

versely in the same direction and arranged with their concave faces inward, and the spokes of the series crossing near their outer ends and being alternately arranged, the



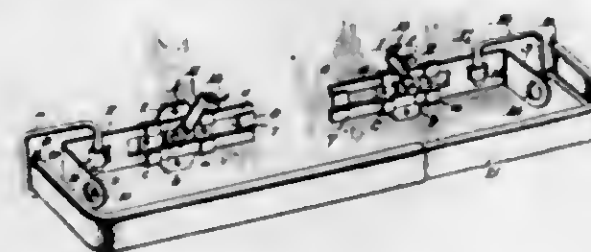
rim having at each side edge a series of inwardly extending radial lugs engaged by the ends of the spokes of the opposite series, the rim being sectional, and means between the spokes for clamping the sections together.

- 1,313,914. FLUSH-TANK BULB. FRED THOMAS ROBERTS, Cleveland, Ohio. Filed Aug. 21, 1918. Serial No. 250,781. 19 Claims. (Cl. 4—5.)



1. In an article of the character described, the combination of a flexible lower section and a less flexible upper section having its end seated within the lower section and making a lapped seam therewith, which extends across substantially the entire end of the less flexible section.

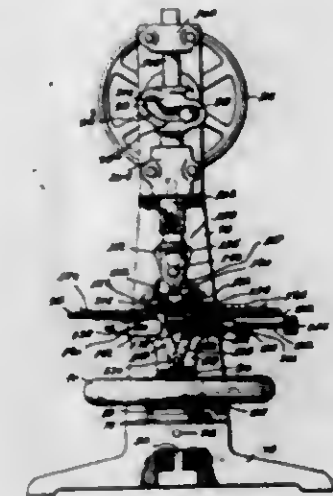
- 1,313,915. SHADE AND CURTAIN BRACKET. CALVIN A. ROBINETTE, Bowling Green, Ohio. Filed Sept. 7, 1917. Serial No. 190,125. 6 Claims. (Cl. 156—24.)



1. A window shade fixture comprising a slide holder provided with spaced upper and lower guiding members located at opposite sides of the holder, the latter being also provided with a fixed projecting support located between the side guiding members, and a slide mounted in the guiding members and having a horizontal slot receiving and fitting the support.

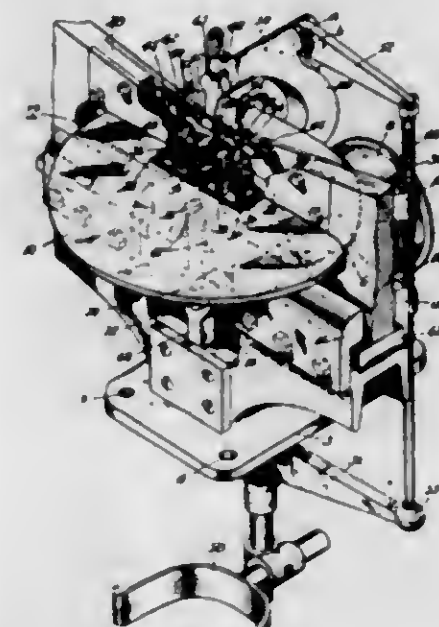
6. A window shade fixture comprising a slide holder provided with guiding members, a slide mounted in the guiding members and provided at the outer end with a projecting arm and having a vertical socket located between the arm and the guiding members, and a supporting device composed of an outer supporting portion, an inner socket engaging portion fitted in the said socket, and a connecting portion extending over the arm of the slide.

- 1,313,916. METHOD OF CONFORMING EXTENSIBLE MATERIAL. ARTHUR L. RUSSELL, Boston, and CHARLES E. ORUSH, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 2, 1917. Serial No. 194,895. 11 Claims. (Cl. 12—146.)



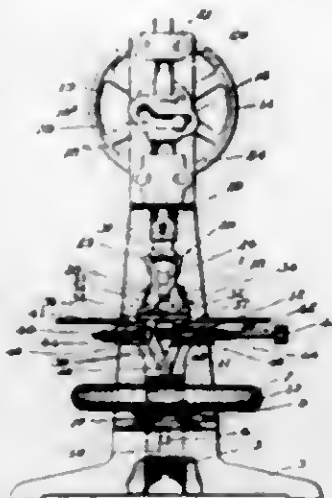
1. The method of conforming extensible material which consists in subjecting said material to successive stretchings, the aggregate tension applied being greatest over a predetermined interior portion located at a substantial distance from the edge portions, thereby producing fullness of such interior portion.

- 1,313,917. STRETCHING-MACHINE. ARTHUR L. RUSSELL, Boston, and CHARLES E. ORUSH, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 27, 1914. Serial No. 827,609. 63 Claims. (Cl. 12—51.)



1. A machine of the class described having, in combination, means for supporting stock, and continuously operating means constructed and arranged to grip a sheet of leather over two small areas located wholly within and remote from the edges of the sheet and while maintaining a fixed engagement with the sheet to move apart in a plane parallel with the surface of the sheet for applying local stretching to an interior portion of the stock by repeated operations of the machine.

1,313,918. UPPER-STRETCHING MACHINE. ARTHUR L. ROWELL, Boston, and CHARLES E. GAUSS, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 17, 1916. Serial No. 109,664. Renewed July 6, 1918. Serial No. 243,708. 25 Claims. (Cl. 12—51.)



1. A machine of the class described having, in combination, a work support, pliers arranged for engaging an interior portion of stock, and mechanism to cause said pliers to seize the stock, to move relatively for stretching it, to cease the stretching movement and hold the stock under tension, and to release the stock.

3. In a machine of the class described, the combination with a work support, of pliers for engaging stock at separated points located within and removed from the edges of the stock, means for imparting positive movements to the pliers to seize the stock and stretch it, and yielding means to cause the pliers to release the stock and return to initial position.

10. In a machine of the class described, the combination with a work support, of pliers for seizing and stretching stock thereon and comprising jaws sustained above said support, cooperating jaws carried by the work support, and means for adjusting said jaws and work support with relation to the plane of the faces of the first-mentioned jaws.

15. In a machine of the class described, the combination with a work support, of pliers having jaws for engaging stock thereon, links supporting the plier jaws on one side of the stock, and adjusting devices for said jaws comprising a rod having right and left hand threads thereon, nuts engaging said threads, sleeves engaging opposite sides of said links, and springs located between said nuts and sleeves.

16. In a machine of the class described, the combination with a work support, of pliers having jaws arranged to engage opposite sides of stock, and actuating means for the pliers, including toggles arranged to cause the pliers to seize the stock, to move apart and stretch it, and to move reversely and release it.

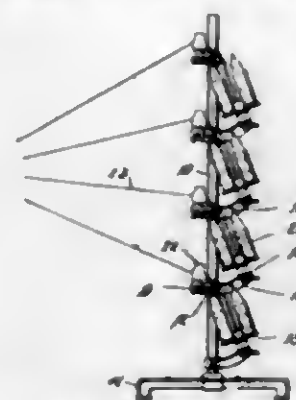
1,313,919. THREAD-CONTROLLER DEVICE. ALBERT H. SAWTELL, Providence, R. I. Filed Dec. 1, 1917. Serial No. 204,943. 6 Claims. (Cl. 242—131.)

1. The combination in a textile frame, of bars in the frame, supports on the bars, controller bodies comprising bases resting on the supports and end walls, swivels in the supports engaging the bases, and rollers in the bodies engaging the walls.

2. In a device of the character described, the combination of a support, a horizontally rotatable body pivotally mounted on the support to serve as a controller, an abutment in the body, and a roller resting on the abutment.

3. In a device of the character described, the combination of a support, a horizontally rotatable body mounted on the support to serve as a controller, a stationary abutment in the body provided with a convex

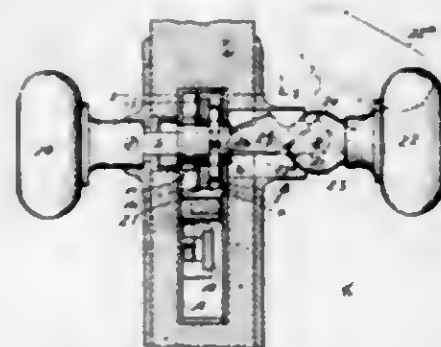
operating face, a roller resting upon the abutment and supported solely by the abutment, and upright guide plates upon the body disposed at opposite sides of the abutment and roller provided with series of guide holes.



4. In a device of the character described, the combination of a support, a horizontally rotatable body comprising a base mounted on the support to serve as a controller, upright end walls on the base provided with vertical guide slots, a non-rotatable abutment upon the base in the slots provided with a convex operating face, and a roller in the slots supported solely by the abutment.

3. In a device of the character described, the combination of a support, and a body comprising a base, pivotally engaging the support, walls on the ends of the base provided with vertical guide slots, and with upwardly directed grooves at each side of the slots, an abutment in the slots, a roller loose in slots resting on the abutment, and guide plates slidably mounted in the grooves provided with guide holes.

1,313,920. DOOR-LOCK. WALTER R. SCHLAGE, Berkeley, Calif. Filed Mar. 29, 1917. Serial No. 158,169. 15 Claims. (Cl. 70—29.)



1. The combination with the latch in a lock and the spindle whereby it is actuated of a knob pivotally mounted on the spindle and means operated by swinging movement of the knob about its pivot for locking the latch against movement.

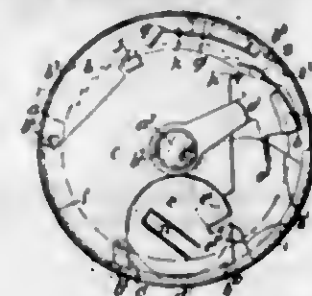
1,313,921. HARNESS FOR AGRICULTURAL IMPLEMENTS. WILLIAM PETER SIMPSON, Hapapai, New Zealand. Filed Feb. 28, 1919. Serial No. 279,790. 2 Claims. (Cl. 34—1.)



1. Harness for agricultural implements comprising semicircular tubes, traces passing through and slidable

in the tubes, means for supporting the tubes and traces and means adjustably mounted on the tubes for attaching the supporting means, substantially as set forth.

1,313,922. MONEY-BOX. ORONOK SMITH, London, England, assignor of one-half to Berthold Kittel, London, England. Filed Mar. 26, 1919. Serial No. 285,336. 2 Claims. (Cl. 235—100.)



1. In a circular money box, a substantially circular coin carrier, means for pivotally anchoring the coin carrier at about its center to the box body, means for rotating the coin carrier relatively to the lid, a counting disk, a pawl adapted to engage with the said disk, a pawl attached to the lid adapted to act as a detent for preventing backward movement of the disk, a catch connected with the last named pawl, and means on the body of the box for engaging the catch so as to cooperate with the anchoring means of the coin carrier to retain the lid on the box.

1,313,923. GARTER. WILLIAM H. STEVENS, New York, N. Y. Original application filed July 17, 1917, Serial No. 180,990. Divided and this application filed Sept. 20, 1918. Serial No. 253,780. 2 Claims. (Cl. 241—6.)



1. In a device of the kind described, a pad having a downward extension, a loop upon the pad above the end of the downward extension and an attaching member comprising a closed frame slidable in the loop and having a cut-out portion diminishing into a recurved slot, substantially as and for the purpose set forth.

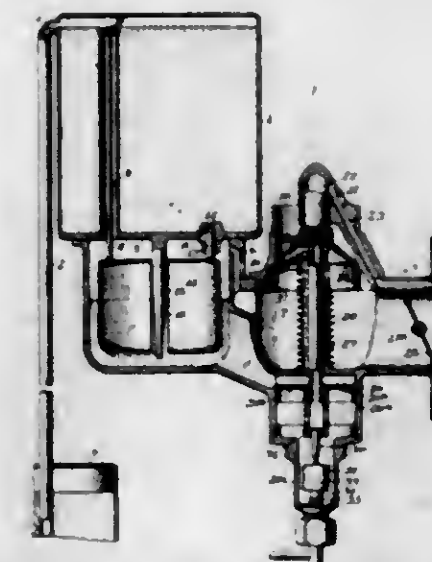
1,313,924. PNEUMATIC ARCH AND HEEL SUPPORT. BENJAMIN STEWART, Erie, Pa. Filed Oct. 16, 1918. Serial No. 258,385. 1 Claim. (Cl. 36—71.)



A pneumatic arch and heel support consisting substantially of an air-tight flexible chamber extending from the heel to the ball of the foot, and adapted to fit and conform to the inside of the shoe, a threaded valve-stem secured in the lower wall of said chamber and extending down through the shoe-sole adjacent to the front of the heel, a screw threaded collar on said valve-stem engaging the lower surface of the shoe-sole whereby said

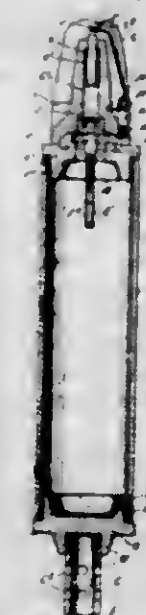
chamber is clamped to the shoe and thereby secured from movement, and a valve in said valve-stem whereby the inflation of said chamber may be varied, substantially as set forth.

1,313,925. FUEL-SUPPLY SYSTEM FOR INTERNAL-COMBUSTION ENGINES. REID T. STEWART, Pittsburgh, Pa. Continuation in part of application Serial No. 72,384, filed Jan. 17, 1916. This application filed May 29, 1916. Serial No. 100,436. 13 Claims. (Cl. 158—36.)



1. In a fuel supply system for internal combustion engines, a main supply tank, a supplemental tank, a carburetor having a float chamber supplied from the supplemental tank, float means in the float chamber, a valve actuated by said float means and controlling the supplemental fuel supply from the supplemental tank, there being suction passages connecting the upper portion of the float chamber with the upper portion of the supplemental tank and with the carbureting chamber of the carburetor, one of said suction passages also forming the main fuel supply passage from the supplemental tank to the float chamber, and a valve controlling the main fuel supply passage and controlled by said float means, substantially as described.

1,313,926. PROJECTILE. FREDERICK WILFRID SCOTT STOKES, London, England, assignor to William S. Peirce, trustee, acting chief of ordnance, U. S. Army. Filed May 13, 1916. Serial No. 97,389. 3 Claims. (Cl. 102—29.)



1. A projectile having a cylindrical body and a base having a receptacle for a propelling charge, said recep-

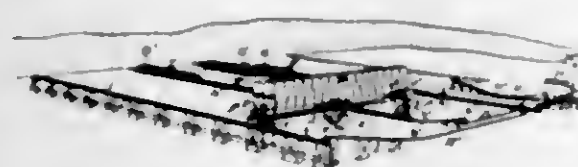
tacle being rigid with the base, of less diameter than the projectile, and extending rearwardly therefrom and having its outer end open to receive a propelling charge and its lateral wall perforated to permit of the escape of the propelling gases into the space surrounding the receptacle in rear of the projectile.

1,313,927. FASTENER FOR STORM-SASHES. WIN-DOW-SCREENS, &C. DAVID A. STRAUSS, Milwaukee, Wis. Filed Mar. 8, 1918. Serial No. 221,275. 2 Claims. (Cl. 16-22.)



1. The combination with a stationary member and a swinging member movable toward and away from the stationary member, of a bracket secured to the swinging member and having outstanding ears, a bar having one end portion pivoted between said ears, a keeper on the stationary member adapted to be positioned between the bar and the swinging member, a finger on the pivoted end portion of the bar extending laterally therefrom toward the bracket, and a leaf spring carried by the bracket and bowed toward said lateral finger and engageable by said finger for holding the bar in position with the keeper confined between said bar and the swinging member.

1,313,928. APPARATUS FOR LOADING AND UNLOADING. FRANCIS LEE STUART, Baltimore, Md. Filed May 29, 1916. Serial No. 100,632. 4 Claims. (Cl. 214-14.)

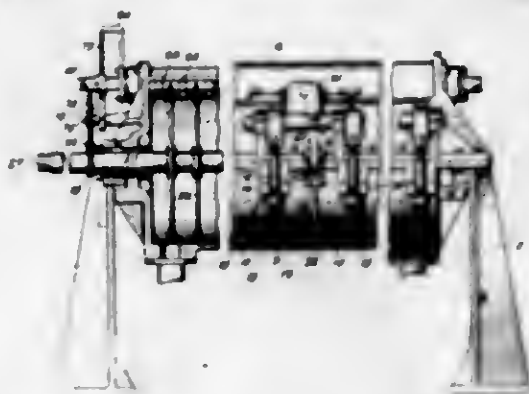


1. In a system for loading and unloading, a plurality of docks, loading apparatus at each of said docks, a main source of supply, means for conveying material from the main source of supply to the loading apparatus at one of said docks, a second source of supply, means for conveying material from the main source of supply to the second source, and means for conveying material from the second source of supply to the loading apparatus at each of the docks.

1,313,929. FILTER. ERNEST J. SWEETLAND, Montclair, N. J., assignor, by mesne assignments, to United Filters Corporation, a Corporation of Delaware. Filed Feb. 2, 1917. Serial No. 146,056. 12 Claims. (Cl. 116-31.)

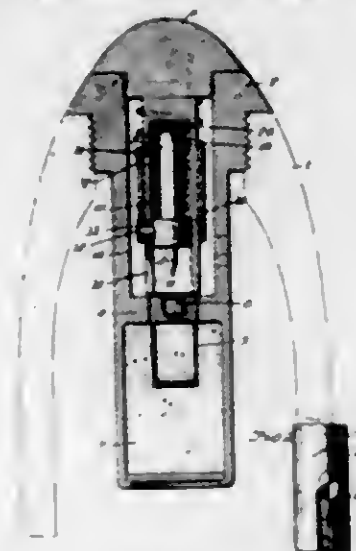
1. In a filter, a casing, a filter element movably mounted therein, and means for testing the thickness of filter cake

forming upon said filter element including a device capable of oscillation about an axis, and a member adapted



to engage the surface of a cake being formed and thereby to cause the oscillation of said device.

1,313,930. AUTOSELECTIVE FUSE. JOHN WALLACE TAYLOR, Philadelphia, Pa. Filed Sept. 11, 1918. Serial No. 253,532. 8 Claims. (Cl. 102-39.)



5. The combination of a shock pad with an auto selective delay fuse to absorb the recoil impulse of target impact and prevent the neutralizing of the inertia forces of the mechanism components.

1,313,931. PROCESS OF MAKING POROUS CONCRETE. ERNEST WALTER, Montclair, N. J. Filed Oct. 31, 1918. Serial No. 260,442. 14 Claims. (Cl. 25-155.)

1. The process of making porous concrete which consists in incorporating with the ingredients thereof particles of material which is insoluble in water and which melts at a temperature which will not injure the concrete, permitting the concrete to set, and treating the concrete for extraction of such extractable material.

1,313,932. SHIRT. ALEXANDER WARSHAUER, Cambridge, Mass. Filed Sept. 27, 1918. Serial No. 255,899. 1 Claim. (Cl. 2-41.)



A shirt comprising a neck-band the ends of which meet and overlap at the front of the shirt, one of said ends hav-

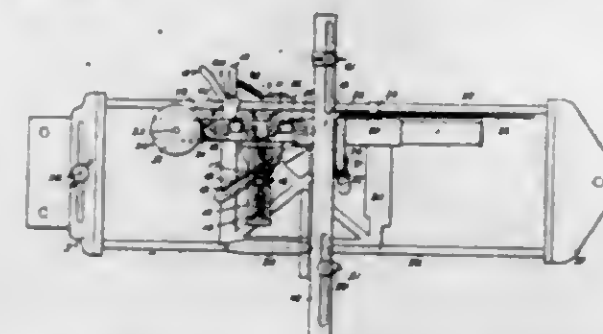
ing a bottom hole adapted to engage a front collar-button on the other end, a flexible flap permanently attached at one edge only to the upper edge of the neck-band and adapted to be turned down over the outer side of the neck-band, said flap and neck-band constituting an attached turn-down collar formed to permit the engagement of the front collar-button with the ends of a detachable collar, and a tab attached to the lower edge of the neck-band at the back thereof and provided with a button-hole to engage a rear collar-button, said tab being adapted to be turned upward between the neck-band and flap and covered by the latter and to be turned upward outside the flap to hold a rear collar-button in position to engage the rear button-hole of a detachable collar, the tab and a button held thereby being located wholly outside the flap.

1,313,933. LOOSE-SHEET DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Filed May 7, 1917. Serial No. 167,009. 30 Claims. (Cl. 129-1.)



27. In a structure of the class described, the combination of a holder comprising bottom members associated so that they may be adjusted to a horizontal position or to an oppositely inclined relation, and slide members cooperating with said bottom members to provide a pair of opposed sheet holders.

1,313,934. DIRECTOR APPARATUS FOR USE ON AIRCRAFT. HARRY EGBERTON WIMPERIS, Goring, England. Filed Feb. 10, 1919. Serial No. 278,065. 8 Claims. (Cl. 33-46.)

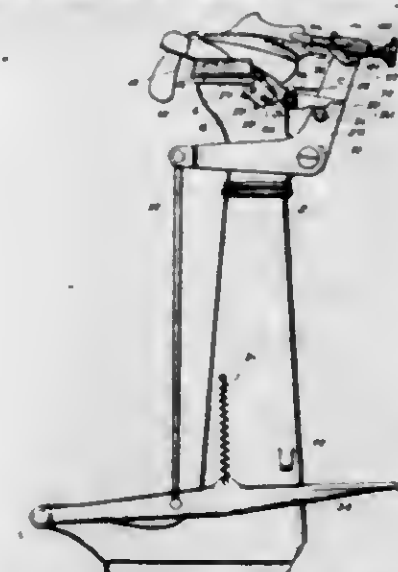


1. In apparatus for use on aircraft, the combination of a frame, a member longitudinally adjustable thereon according to air speed, a vertical pivot carried by the frame, a land flow bar movable about the pivot, a fore sight, a back sight capable of longitudinal movement on the air speed member, and means whereby the setting of the bar parallel to the land flow moves the back sight.

1,313,935. RELASTING-MACHINE. ORRELL ARMITON, deceased, Swampscott, Mass., by Hannah Ashton, executrix, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 15, 1916. Serial No. 78,519. 56 Claims. (Cl. 12-15.)

1. A machine of the class described having, in combination, shoe engaging means comprising a support for the bottom of a shoe in the shank, means constructed to engage a last at the rear of the heel portion in any selected location between the bottom and the top of the last, and mechanism for relatively moving said shoe engaging means

and last engaging means to cause the last to be inserted in the toe portion of the shoe.



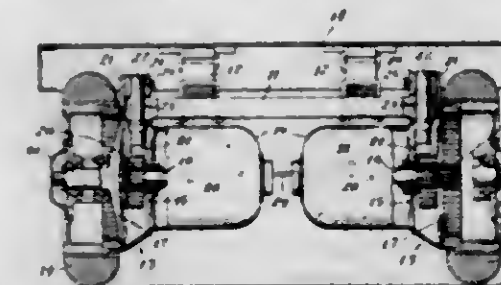
21. A machine of the class described having, in combination, means for gripping the rear portion of the sole of a shoe to restrain the shoe from forward movement, means for forcing a last forwardly in the shoe, and means arranged to be operated by said last forcing means for rendering the gripping means operative to hold the shoe.

1,313,936. LIFE-PRESERVER. ANNA DEANE BAILEY, New York, N. Y., assignor, by direct and mesne assignments, to The G. H. Masten Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1919. Serial No. 270,376. 3 Claims. (Cl. 9-29.)



1. A reversible jacket life preserver comprising a jacket part having arm holes and shoulder portions, securing tapes connected to said body part, a collar portion connected to the shoulder part and extending around the neck opening, securing tapes connected to said collar part, and a hood connected to the upper edge of the collar part and adapted to extend forwardly over the head of the wearer, said hood being reversible with the jacket.

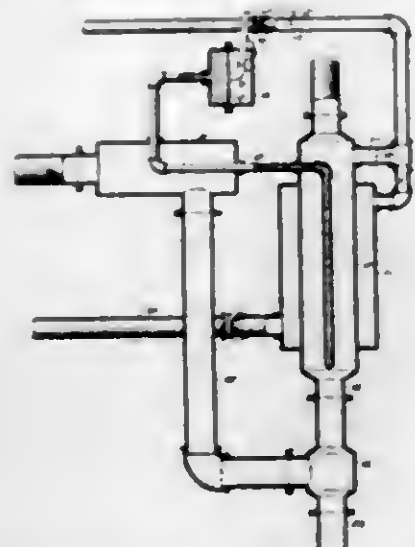
1,313,937. MOTOR-VEHICLE. WILLARD C. BRINTON, New York, N. Y. Filed Aug. 26, 1916. Serial No. 117,082. 4 Claims. (Cl. 180-43.)



1. In a vehicle, the combination of a wheel motor comprising a substantially horizontal motor shaft and a frame having a single trunnion projection at the top, and a rigid shaft projection coaxial with the motor shaft con-

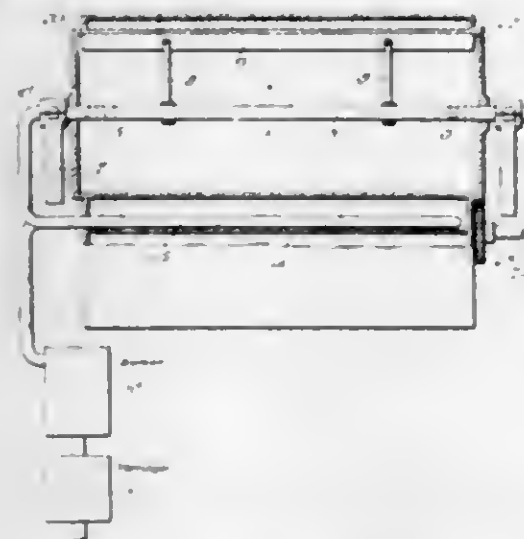
attaching a wheel axle, a wheel mounted on the axle and geared to the motor shaft and a single axle bar pivotally connected to said trunnion projection and adapted to support the vehicle body whereby the motor frame may be large relative to the size of the wheel.

1,313,938. TEMPERATURE-REGULATOR. HOWARD HOOKER, El Paso, Tex. Filed Aug. 28, 1918. Serial No. 251,834. 4 Claims. (Cl. 236-6.)



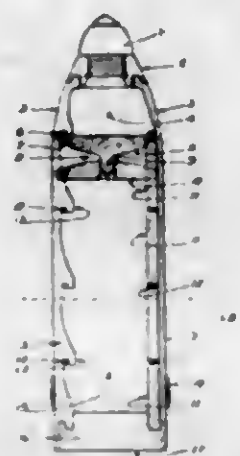
1. A temperature regulator for fluids, including separate passages for the flow of the fluid to be regulated, and a common discharge therefor; together with means for modifying the temperature of one of the passages and a heat-responsive device subject to the individual temperatures of the separate passages and controlling said means.

1,313,939. CASEIN-DRYING APPARATUS. JULIUS FERDINAND DIETRICH, Kennewick, Wash. Filed Aug. 6, 1918. Serial No. 248,662. 3 Claims. (Cl. 127-9.)



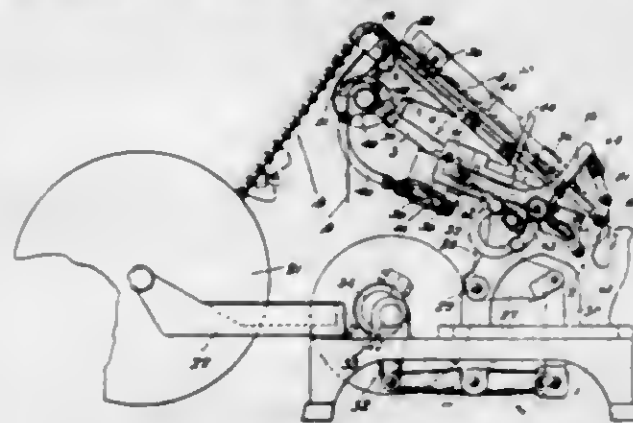
3. A casein drying apparatus comprising a rotatable cylindrical drum, means for rotating the drum about its central axis, a stationary pipe extending through the drum, a water vat disposed underneath the drum, means for heating the water vat, a coil disposed within the water vat, a sterilizer, a blower connected with the sterilizer at one side and with one end of the coil on the other, the opposite end of the coil being connected with the central shaft or pipe, said shaft communicating with the drum near the end thereof and having a closure between the communicating points, a scraper carried by said stationary pipe, the edge of said scraper being in close proximity to the inner wall of the drum, and a roller carried by the pipe and arranged to engage the inner wall of the drum.

1,313,940. FOLIATING SHELL. EDMOND G. F. R. DU MAZUEL, Washington, D. C. Filed Apr. 2, 1918. Serial No. 226,155. 2 Claims. (Cl. 102-29.)



1. A shell comprising segmental walls, inner rings engaging the segmental walls, posts engaged by said inner rings, a base interlocked with said segmental walls and an interlocking ogive or cap.

1,313,941. MACHINE FOR APPLYING FASTENERS. WILLIAM E. ELLIOTT, Grand Rapids, Mich., assignor to American Button & Fastener Company, a Corporation of Maine. Filed Oct. 30, 1916. Serial No. 128,018. 33 Claims. (Cl. 218-8.)



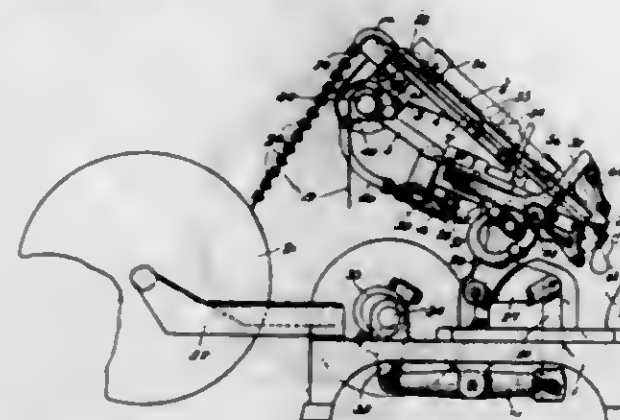
1. In a machine for applying fasteners, means for independently and temporarily supporting each one of a plurality of fasteners arranged in a series, means for stripping said fasteners from the supporting means and presenting them one at a time for attachment to the work, and means for applying an attaching device to each fastener to secure it to the work.

14. In a machine for attaching buttons, a readily removable, detachable button raceway provided at its delivery end with spaced apart button supporting surfaces, a movable former anvil adapted to be positioned adjacent to said supporting surfaces and arranged to form a three-point support therewith for a button, and means for clamping a button in position so that it is supported upon the spaced apart extensions of the button raceway and upon said former anvil.

1,313,942. FEEDING MECHANISM FOR BUTTON-ATTACHING MACHINES. WILLIAM E. ELLIOTT, Grand Rapids, Mich., assignor to American Button & Fastener Company, a Corporation of Maine. Original application filed Oct. 30, 1916, Serial No. 128,618. Divided and this application filed Mar. 31, 1917. Serial No. 158,990. 31 Claims. (Cl. 218-12.)

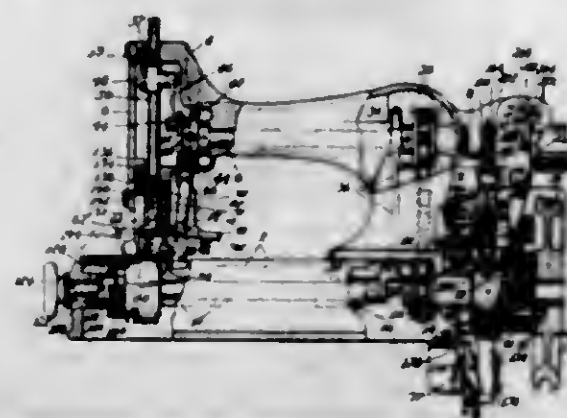
1. In a machine of the character described, an article raceway having an open upper end, a collar mounted below said upper end of the raceway, means to rotate said roller, a second roller yieldingly pressed against the first

roller, and a guideway adapted to lead a mount on which articles are consecutively placed to and between the rollers, and therefore under the end of the raceway whereby, on rotation of the roller, the mount is drawn between the rollers and the heads of the articles are engaged by the raceway, stripping the articles from the mount and delivering them to the raceway.



6. In a machine of the character described, an article transfer tube having an open upper end and provided with a longitudinal slot in its upper side, means for delivering articles into said tube at said upper end, a bar provided on its under side with a series of consecutive scallops formed to engage with the upper sides of the heads of articles in the tube, pivoted supporting means, said bar being pivotally supported intermediate between its ends on said means directly above the slot in said tube, means tending to rotate said bar around its pivot, and means for periodically actuating said supporting means to lower said bar into engagement with said articles to right the same for free movement down the tube.

1,313,943. METHOD OF AND MACHINE FOR MARKING SHOE-UPPERS. HERBERT E. ENALIN, Malden, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 26, 1915. Serial No. 68,994. 79 Claims. (Cl. 32-120.)

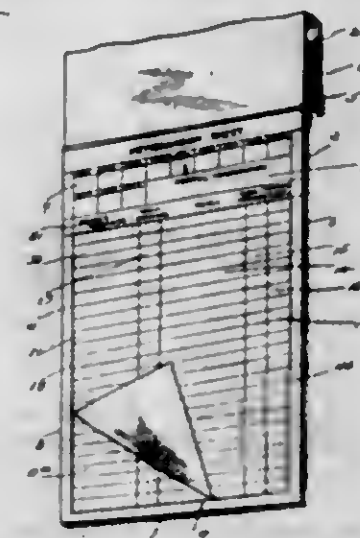


3. A buttonhole location marking machine having, in combination, a buttonhole location marking member, stock feeding means in cooperative relation to said member, and power operated mechanism for intermittently actuating said member to mark and for operating said feeding means to feed stock to said marking member intermittently and between successive marking operations, said mechanism being organized to actuate said marking member and feeding means for a selectively predetermined number of marking operations.

1,313,944. WRITING-PAD. GEORGE JOHN FRANKS, Alameda, Calif. Filed Sept. 21, 1917. Serial No. 192,554. 3 Claims. (Cl. 231-43.)

1. As a new article of manufacture, a writing pad comprising a plurality of superimposed letter sheets and a

plurality of superimposed memorandum sheets arranged under the letter sheets; all of the said sheets corresponding in outline and all being joined together at one end of the pad, and each of the memorandum sheets being made



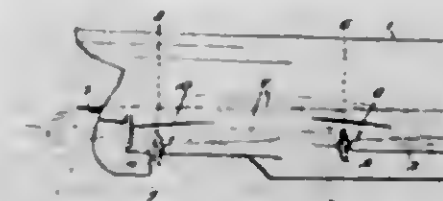
up of a rectangular border portion extending along the four edges of the sheet and increased in area at the top of the sheet to receive data and a removable major central portion joined to the border portion by weakened lines that describe a rectangle.

1,313,945. WAR VESSEL. WALTER P. JENNEY, Washington, D. C. Filed Nov. 3, 1913. Serial No. 798,989. Renewed Jan. 5, 1917. Serial No. 140,842. 6 Claims. (Cl. 114-56.)



1. A vessel having different coefficients of fineness in its forebody and in its afterbody, and having its midship section located abaft the mid-length of the hull, substantially as described.

1,313,946. FIN-GUARD FOR VESSELS. WALTER P. JENNEY, Washington, D. C. Filed Nov. 8, 1913. Serial No. 799,008. Renewed Jan. 9, 1917. Serial No. 141,495. 3 Claims. (Cl. 114-57.)

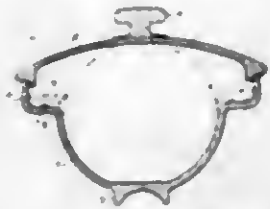


1. A vessel having a plurality of propellers, fins rigidly attached to said vessel, located above said propellers, between said propellers and the load water line, and inclined to the plane of the load water line, substantially as described.

1,313,947. COOKING AND SERVING DEVICE FOR FRUITS. ROBERT C. LAFRANCY, New York, N. Y. Filed Mar. 24, 1916. Serial No. 66,843. 1 Claim. (Cl. 53-6.)

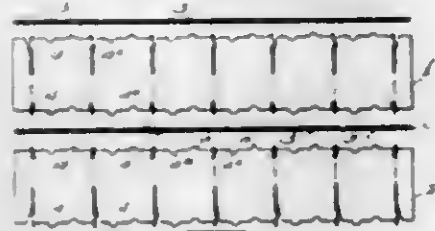
A cooking and serving device for fruits, having a fruit conforming receiving member adapted to hold the fruit in its original form while being cooked and served; an out-

warily extending projection provided with an upwardly projecting member so arranged as to form a separate sauce or liquid containing compartment around the fruit for the purposes set forth, and a cover therefor provided.



having a member overlapping said upwardly projecting member of the cooking device, and a flange attached to engage with the inner side of said upwardly projecting member of the cooking device.

1,313,945. CELLED CARTON. FREDERICK C. MAEGLY, Chicago, Ill. Filed Aug. 8, 1918. Serial No. 248,880. 2 Claims. (Cl. 229-42.)



1. A celled carton and the like, comprising superimposed cell frames, each consisting of two sets of interlocking interlocking partition strips, and flats at the top and bottom of the frames forming the tops and bottoms of the cell, each strip having for each cell a projection from each edge at a point intermediate the middle and the corner of the cell, and the flats having apertures in two sets of rows transverse to each other for receiving said projection.

1,313,949. SEAMLESS CHAIN AND METHOD OF CONSTRUCTING THE SAME. CLARENCE E. MONTFORD, Brooklyn, N. Y., assignor of one-half to Louis Malaner, New York, N. Y. Filed Dec. 21, 1917. Serial No. 208,239. Renewed Nov. 22, 1918. Serial No. 263,778. 6 Claims. (Cl. 59-35.)



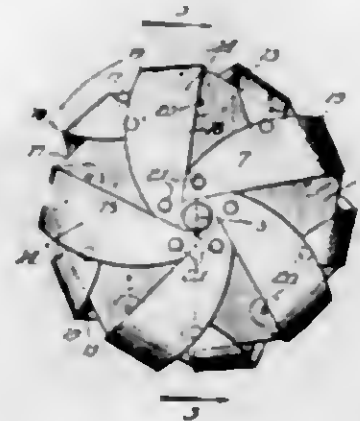
1. A method of forming a link of a chain which consists in stamping eyes at the ends of a blank, the said eyes being flattened to substantially half the thickness of the shank left between them so as to form shoulders of substantially half the thickness of the said shank, the said shoulders being of like contour and located on opposite sides of the said shank, and then bending the said shank in a plane parallel to the said eyes until the said eyes are superposed.

6. A chain link comprising a bent shank having an eye at each end, said eyes being superposed, the combined thickness of the said superposed eyes being substantially equal to that of the shank, and the combined curvature of the superposed eyes being substantially the same as the curvature of the said shank.

1,313,950. WOODWORKING-MACHINE. CARL A. DYKSON, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed Nov. 25, 1918. Serial No. 264,000. 6 Claims. (Cl. 144-235.)

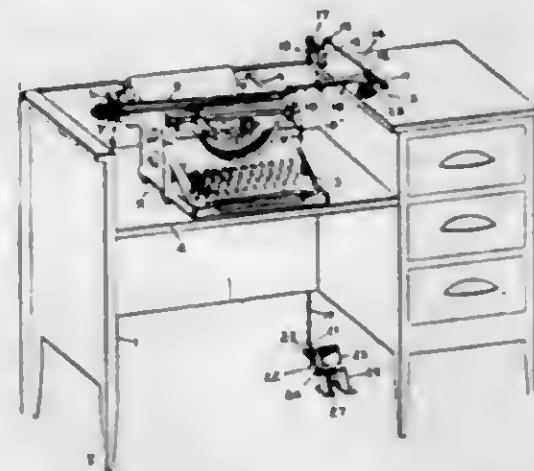
1. A rotary cutter having a cutting edge which inclines from its portion nearest the axis of the cutter toward its

outer portion in a rearward direction relative to the direction of rotation of the cutter, the portion of the cutting edge nearest the axis of the cutter extending in a plane crosswise of the axis of the cutter and in a position in advance of said axis and the outer portion of the cutting edge extending in a plane substantially parallel with said



axis, whereby the cutting edge is adapted to operate on the work by a progressive shearing action from the portion thereof nearest the axis of the cutter laterally against the work and toward the outer end of the cutter where the work is cut substantially circumferentially, and the work is cut by this shearing action from the outer surface thereof toward the center of the work.

1,313,951. TYPE-WRITER CARRIAGE AND PLATEN ACTUATOR. EDWARD A. PFEFFERLE, Murley, Idaho. Filed Aug. 29, 1917. Serial No. 188,739. 1 Claim. (Cl. 197-120.)



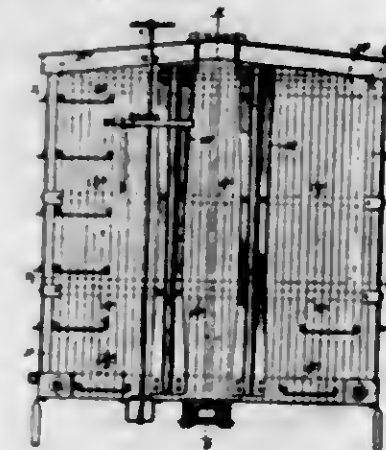
A typewriter having a movable carriage, a platen rotatably mounted in said carriage, a carriage carried member operable in a common direction to rotate the platen and move the carriage and having a forwardly extending rockable portion, and an actuator for the member including a treadle, a first link extending rearwardly therefrom, a first angle lever to which the first link extends, a second upwardly extending link from the first angle lever, a second angle lever from the second link, a third link extending forwardly from the second angle lever, a third angle lever to which the third link extends, fulcrum mounting means providing parallel horizontal axis bearings for the treadle, first and second angle levers and a vertical axis bearing for the third angle lever, and a fourth link extending from the third angle lever to the rockable portion of the member transversely of the typewriter and forwardly thereof for treadle actuation of the member, there being means permitting longitudinal adjustment of the linkage lever mechanism between its connection to the carriage and the third lever fulcrum mounting, said linkage lever mechanism comprising the single link between each pair of levers.

1,313,952. TESTING-LAMP. FERDINAND PROESCH, Vienna, Austria. Filed Mar. 28, 1910, Serial No. 87,279. Renewed July 9, 1919. Serial No. 309,779. 6 Claims. (Cl. 175-183.)



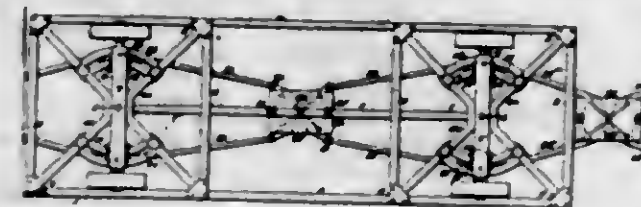
6. A testing lamp comprising a socket of insulating material, current translating devices insertible in said socket and a cap or screen detachably mounted on the socket, said cap being provided with a U-shaped spring the legs of which are bent outwardly near the socket to form extensions which pass through holes in the side walls of the cap so that the legs of the spring can be drawn out of the holes in the socket when the extensions are pressed inwardly.

1,313,953. CAR END CONSTRUCTION. THOMAS NATHAN RUBASLL, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1915. Serial No. 63,378. 10 Claims. (Cl. 105-411.)



1. In a car end construction, the combination with an end post and sheathing, of a substantially vertical strengthening member externally arranged opposite to and overlapping said end post laterally in both directions and a rib substantially centrally formed in said member of less width than said end post, said rib increasing in height from its ends toward a point below the mid-point of said member, whereby both the sheathing on each side of the end posts and the end post itself are supported by means of said member.

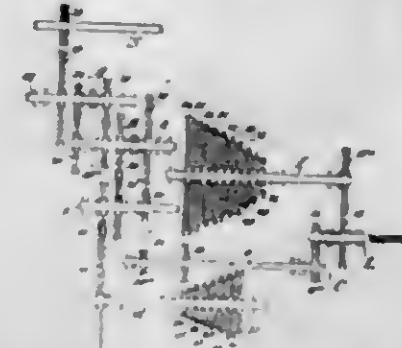
1,313,954. SHORT-TURN-GEAR MECHANISM. THORNDOR SANDSTROM, Indianapolis, Ind. Filed Sept. 20, 1918. Serial No. 254,901. 12 Claims. (Cl. 280-100.)



12. In a short turn gear mechanism, a fifth wheel structure comprising in combination with a vehicle body supporting frame including a bolster; of a pair of wheeled axles each having a king bolt connection that joins the said axles with their bolsters, the bolsters each having a horizontal bearing casting at each end, each of said cast-

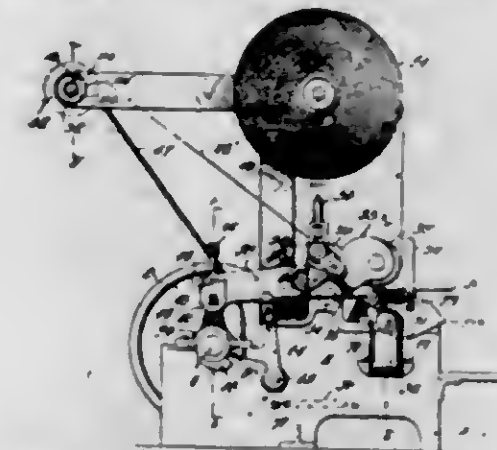
ings having a guide slot concentric with the king bolt, a coupling block attached to each end of the axles, and movable over the said slotted bearing castings, each of the coupling blocks having a portion that projects within the slot of their respective bearing castings, and means pivotally connecting the coupling blocks of one axle with the coupling blocks on the other axle for the purposes described.

1,313,955. LATHE-GEARING. ALWIN SCHNEIDER, Lenzburg, Switzerland. Filed Dec. 8, 1910. Serial No. 135,767. 1 Claim. (Cl. 74-58.)



In the gearing, the combination of a driving shaft and a first intermediate shaft, means for imparting the rotary motion of the driving shaft to said first intermediate shaft, a pair of gear wheels mounted loosely on said first intermediate shaft, means for selectively coupling either of said gear wheels to its shaft, a second intermediate shaft adapted to be driven from said first intermediate shaft by means of the gear wheels thereon, a pair of gear wheels mounted loosely on said second intermediate shaft, means for selectively coupling either of said last mentioned gear wheels to its shaft, a third intermediate shaft adapted to be driven from said second intermediate shaft by the gear wheels on the latter, a fourth intermediate shaft and a series of graduated gear wheels mounted on the latter, gearing adapted to connect said third and fourth intermediate shafts to each other, a counter shaft and a lead screw, gearing adapted to connect said counter shaft to said lead screw, a Norton tumbler gear adapted to connect said third intermediate shaft to said counter shaft, a second counter shaft and a series of graduated gear wheels carried thereby, gearing adapted to connect said second counter shaft with said lead screw, and a second Norton tumbler gear adapted to connect said first counter shaft with said second counter shaft, whereby when said first mentioned Norton gear is in inoperative position said second mentioned Norton gear will connect the first counter shaft with the first gear on the fourth intermediate shaft.

1,313,956. SHOE-TIP PERFORATOR. ROBERT SCHWALBACH, Milwaukee, Wis., assignor of one-half to Robert W. Bladedell, Milwaukee, Wis. Filed May 21, 1918. Serial No. 235,872. 17 Claims. (Cl. 164-19.)



1. A machine of the class described comprising a cutting die, a plate carrying member disposed over the die, a die engaging plate on said member, means for causing the

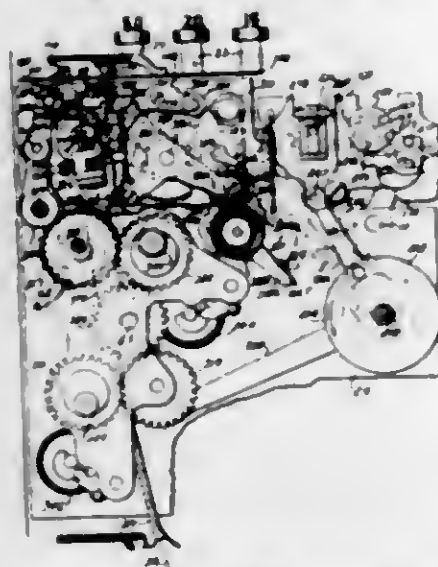
die and plate to engage, a backing sheet roll disposed over said member, the backing sheet being extended downwardly and between the die and plate, means for moving the backing sheet between said die and plate, and a substantially vertical guard plate engaging said backing sheet to force the same toward the plate carrying member.

1,313,957. ELECTROTHERAPEUTICAL APPARATUS. HORACE M. SHEER and FRED W. STEIN, Atchison, Kans. Filed Mar. 23, 1917. Serial No. 157,013. 6 Claims. (Cl. 171-97.)



4. An electrotherapeutical device including an insulating body block, a main circuit including a screw plug contact at one end of said block, a lamp receptacle at the other end, a lamp therein, an electrical resistance-conductor between said plug contact and lamp receptacle adapted to give a considerable voltage drop, and a shunt circuit including a metallic casing member carried by the body block and insulated from the lamp receptacle, applicator cord terminals respectively carried by and in electrical contact with the casing and lamp receptacle, and a shiftable contact element between said resistance-conductor and the metallic casing member for controlling the variation and voltage in said shunt circuit.

1,313,958. TICKET-MACHINE. FRANCESCO SERRI, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio. Filed Nov. 29, 1915. Serial No. 64,067. 21 Claims. (Cl. 211-33.)

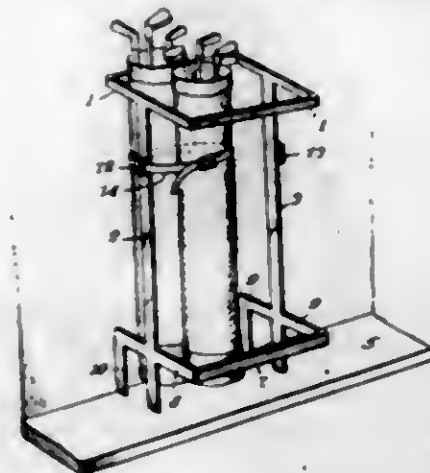


12. In a machine of the class described, the combination with a main operating mechanism, adapted to be given a variable number of cycles of operation upon different operations of the machine, of means for feeding a ticket strip, means for severing a ticket from the strip upon each cycle of operation of the machine, cooperating ejecting members adapted to be moved out of and into co-operative relation upon each cycle of operation, and means for operating said members when in co-operative relation during the last cycle of operation to eject the severed tickets together.

1,313,959. GOLF-BAG HOLDER. ARTHUR E. SMITH, New York, N. Y. Filed Apr. 23, 1918. Serial No. 230,219. 1 Claim. (Cl. 224-29.)

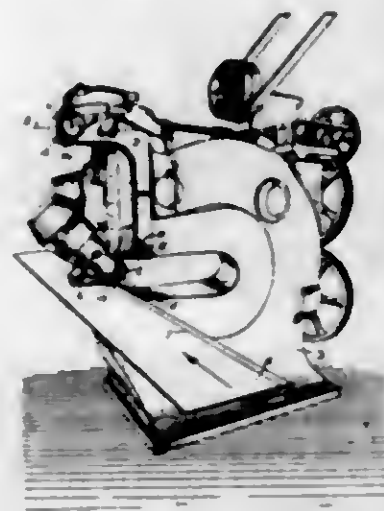
In a holder, a frame, vertical rods attached to said frame, and provided with screw-threaded extensions

adapted to pass through holes in the running-board of an automobile, a strap or belt for securely fastening the contents of the holder, an eye on one of said vertical rods for carrying said strap or belt, a three-sided supporting frame attached to said vertical rods, vertical rods at-



tached to said supporting frame and provided with screw-threaded extensions adapted to pass through holes in said running-board and nuts adapted to engage the extensions of said first-named vertical rods and the extensions of the vertical rods of said supporting frame for detachably holding the device in position on the running-board.

1,313,960. SHEAR. HENRY COLLIER SMITH, St. Marys, Ohio. Filed Jan. 27, 1919. Serial No. 273,299. 15 Claims. (Cl. 164-60.)

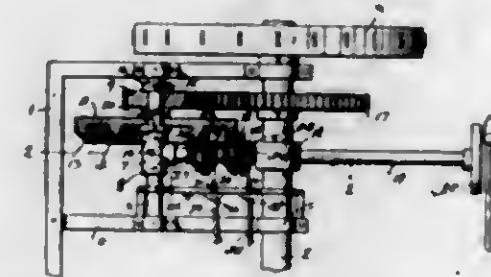


1. In combination with a machine tool adapted to operate along a predetermined line on material passing the tool, a pointer shiftable transversely of said line, and indicating means responsive to the movement of said pointer and visible to a workman who manipulates the material.

1,313,961. DUAL-POWER TRANSMISSION FOR CYCLE-BARS OF MOWING-MACHINES. HANNAH C. SNIDER, Jr., Edinburg, Kans. Filed May 21, 1919. Serial No. 298,611. 2 Claims. (Cl. 74-59.)

1. In a mechanism as set forth, the combination with a frame, of a revoluble drive axle mounted in bearings thereof, a revoluble driven member mounted in bearings of the frame at right angles to the drive axle, a fixed shaft in bearings of the frame, a gear and disk fixed to each other and rotatably mounted upon the fixed shaft and having gear connections with the drive axle, said disk having a plurality of sets of beveled teeth, each set being of a different diameter, a plurality of beveled gears loosely mounted on the revoluble member, one in mesh with one set of beveled teeth and the other in mesh with the other

set of beveled teeth, collars fixed on the revoluble member adjacent the opposite faces of the respective beveled gears, to hold the beveled gears at all times in mesh with the teeth, a bearing suspended upon the revoluble drive axle, and in which the revoluble driven member is



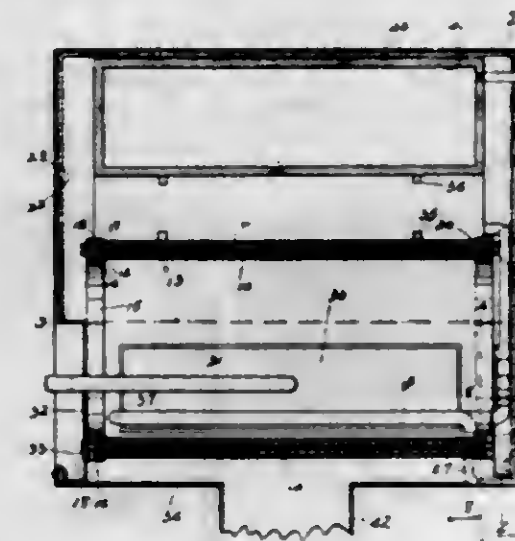
mounted, said revoluble driven member being inclined downwardly from the fixed shaft under said axle, and corresponding means mounted upon the revoluble member to rotate therewith but shiftable thereon and being singularly shifted into clutch with the faces of the respective beveled gears, whereby the revoluble driven member may be operated at different speeds.

1,313,962. HEMACYTOMETER. FERDINAND GUSTAVE SPINDLER, New York, N. Y., assignor to E. Letta, Inc., New York, N. Y., a Corporation of New York. Filed May 27, 1918. Serial No. 230,817. 6 Claims. (Cl. 88-40.)



1. A hemacytometer comprising a slide of uniform thickness having a scale slip mounted thereon and projecting slightly above the level of the top surface of the slide, two cover plate supports, integral with said slide and parallel with said scale slip and projecting materially above the level of the top surface of said scale slip.

1,313,963. STEAM-GENERATOR. MAURICE L. STANARD, Kansas City, Mo., assignor to W. O. Krueger, E. H. Mills, F. H. Stanard, Maurice L. Stanard, Thomas H. Helrose, James F. Farrell, and H. L. Richardson, trustees, of Stanard Steam Motor Company. Filed Feb. 19, 1917. Serial No. 149,394. 2 Claims. (Cl. 122-136.)



1. In a steam generator, a tubular structure open at both ends thereof, means to circulate fluid in a circuitous direction through the walls of said structure, means to apply a heating medium to the interior of said structure, a casing inclosing said structure, and means by which the

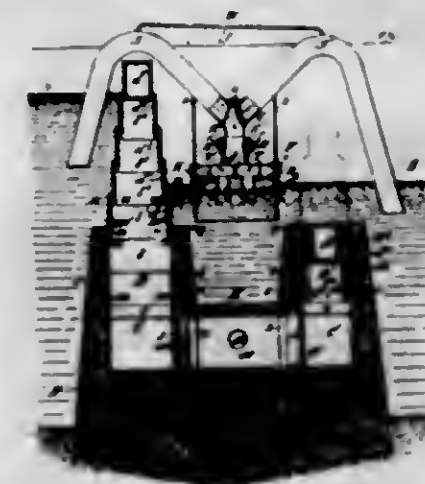
heating medium must pass outward from both ends of said structure and upward, and means by which the heating medium will pass downward around the outside of said structure.

1,313,964. TRACTION-BELT. HUGH C. STEELE, Minneapolis, Minn. Filed Apr. 12, 1917. Serial No. 161,508. 10 Claims. (Cl. 21-150.)



7. A traction belt composed of a series of links, each comprising inner and outer plates having projecting longitudinal edges provided with interlocking lips and means between said inner and outer plates and bridging the joints between the links for holding them together.

1,313,965. TIDAL-POWER PLANT. CHARLES HERBERT TALMAGE, New Bedford, Mass. Filed Oct. 5, 1917. Serial No. 104,888. 18 Claims. (Cl. 138-21.)



1. In a tidal-power plant, the combination with two adjacent collapsible dams, of a water-motor supported between the dams, and siphon-pipes leading from opposite sides of the dams to induce a current through the motor.

1,313,966. COLLAPSIBLE UMBRELLA. WILLIAM TANERDALEY, Denver, Colo. Filed Apr. 5, 1919. Serial No. 287,733. 9 Claims. (Cl. 135-26.)

1. In a collapsible umbrella, the combination with an extendible stick comprising rib and stay supporting sections telescopically united, the stay supporting sections having a slot, of a spring device carried by the rib supporting section to engage the slot, to hold the rib supporting section extended, ribs connected to the rib supporting section, stays connected to the stay supporting section, connections between the stays and the ribs, and means connecting the rib and stay supporting sections for guiding and reinforcing the stays in their spaced relations, when opening or closing the umbrella.

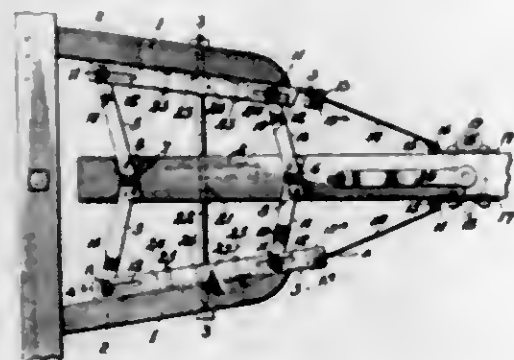
9. In a collapsible umbrella, the combination with an extendible stick, of ribs connected to the stick, stays connected to the ribs, means on the stick to which the stays are connected, whereby the stays may be operated for collapsing the ribs, said stick having a hollow handle, a tube fixed in the hollow handle and having an end projecting beyond the handle, said projecting end having diametrically opposite slots, a flanged button having an extension fitting into the projecting end of the tube, a pin extending trans-

versely of the extension of the button and engaging said slots, a second pin extending through the handle and through the tube, and a spring connecting the two pins to



tension the button, whereby the flange of the button may overlie the ends of the ribs, when collapsed and when the stick is collapsed.

1,313,967. ADJUSTABLE WAGON-TONGUE BOUNDS. ALVIN TEGELER, Nashua, Iowa. Filed Nov. 4, 1918. Serial No. 264,101. 1 Claim. (Cl. 21-36.)



A device of the class described comprising a pair of spaced angle iron tongue bounds arranged one on either side of a wagon-tongue adjacent to its rear end, drag links pivotally connecting the forward ends of said bounds to the sides of said tongue, said bounds having horizontal slots located intermediate their ends for the reception of the queen bolt traversing the wagon-tongue and tongue, and also having longitudinally disposed slots near their respective front and rear ends, front and rear pairs of transverse spreader bars pivotally mounted at their inner ends and overlapping upon the wagon-tongue for horizontal swinging movement and arranged respectively in front and in rear of the queen bolt, and having their outer ends each provided with a perforation adapted to register with a respective longitudinal slot in the spaced tongue bounds, and vertical bolts traversing the said slots and perforations, whereby when the said spreader bars are swung about their pivots upon the wagon-tongue, the adjacent ends of said tongue-bounds are moved transversely thereof to adjust the same to the wagon-bounds.

1,313,968. AUTOMOBILE WARDROBE-TRUNK HOLDER. GEORGE HENRY WHEATY, Racine, Wis. Filed Feb. 12, 1917. Serial No. 148,022. 11 Claims. (Cl. 224-29.)

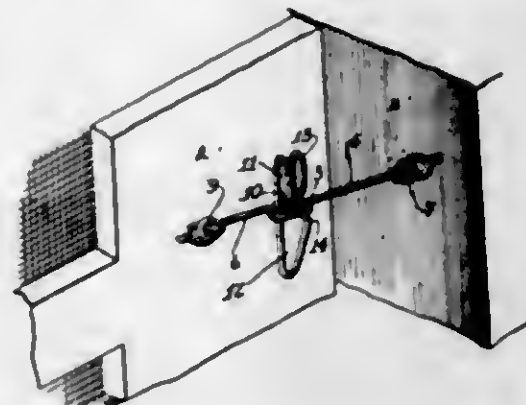
1. An automobile trunk holder, comprising a base member, upright trunk engaging members yieldingly engaging the base member, means for hingedly connecting one por-

tion of the base member to the running board of an automobile to permit said member being tilted longitudinally



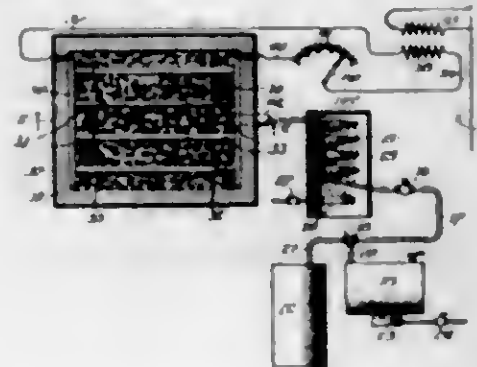
with relation thereto, and a locking means controlled by one of the upright members for preventing the tilting of the base member.

1,313,969. SCREEN-DOOR HOOK. OSCAR C. WILLIAMSON, Mountain View, Calif. Filed Feb. 14, 1919. Serial No. 276,999. 1 Claim. (Cl. 70-83.)



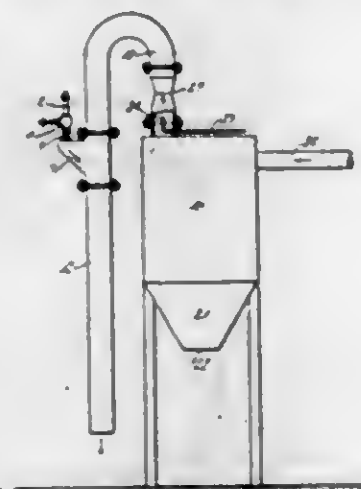
In a fastener, a member formed from a single length of wire bent to provide an eye terminal adapted for the pivotal mounting of the member upon a part, the opposite end portion being bent laterally and turned on itself to provide a finger grip and a substantially U-shaped jaw having one of its limbs lying crosswise of the laterally bent portion and at right angles to the length of the member, the other limb being formed with a locking shoulder, and a finger engaging grip at the free extremity of said other limb.

1,313,970. PROCESS FOR THE TREATMENT OF ORES AND MINERALS. GEORGE M. WILLIS, Chicago, Ill. Filed Jan. 21, 1915. Serial No. 3,429. 10 Claims. (Cl. 204-64.)



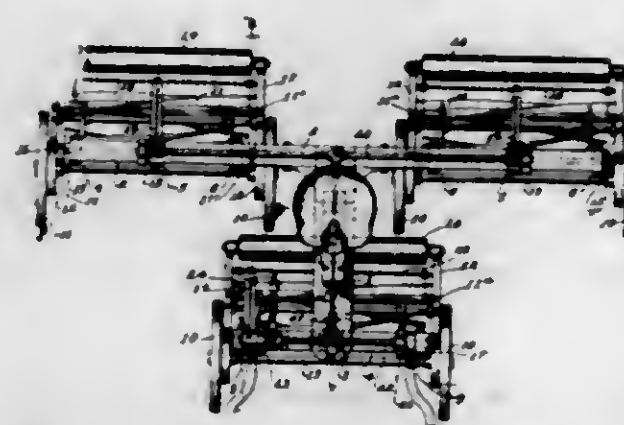
1. The process of treating ores and minerals, which consists in subjecting them to the action of alternating current flow and alternately passing through the ore or mineral the gases of dissociated steam and air.

1,313,971. SILENCER. WILLIE G. WILSON, Elizabeth, N. J., assignor, by mesne assignments, to Everlasting Valve Co., a Corporation of New Jersey. Filed Nov. 1, 1917. Serial No. 199,636. 1 Claim. (Cl. 261-118.)



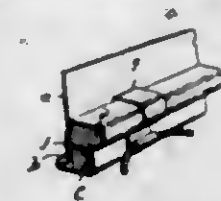
In apparatus for silencing the noise of escaping steam from apparatus for pneumatic conveyance of ashes and other comminuted solid material, the combination of a vacuum tank for reception of ashes or other comminuted solids; for such solids a conveyer pipe the discharge end of which communicates with an upper portion of the tank whereby the conveyed solids gravitate on their discharge into the tank chamber, such tank chamber being open to the atmosphere through said conveyer pipe; a steam and air escape pipe communicating with the upper portion of the tank and having its discharge end positioned to effect discharge of contained water, vapor, air or dust without substantial back pressure in such pipe; a steam supply pipe communicating with a steam-jet-creating device located in the path of air escaping from the tank into the steam escape pipe, the steam jet operating to create a partial vacuum in the tank for effecting a movement of air through the conveyer pipe into the tank and from the tank into and through the steam-escape pipe; and for the steam-escape pipe a device constructed and operating to introduce a steam-condensing volume of water into the path of the steam flowing through said steam-escape pipe whereby the escaping steam is partially condensed and escapes without practically objectionable noise.

1,313,972. LAWN-MOWER. CHARLES C. WORTHINGTON, Dundelf, N. J., assignor to Shawnee Mower Company, New York, N. Y., a Corporation of Pennsylvania. Filed Dec. 21, 1915. Serial No. 67,960. 13 Claims. (Cl. 56-19.)



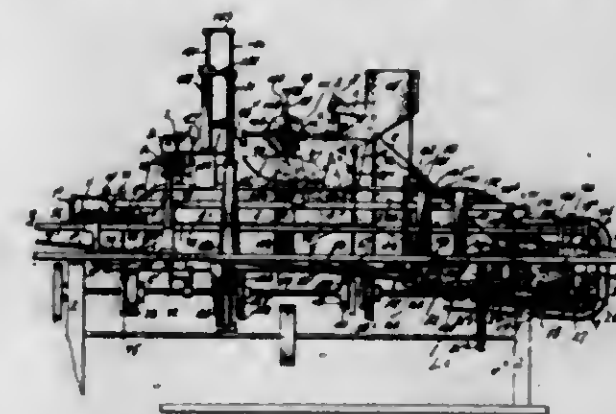
3. A lawn mower comprising a framework uniting a gang of mower units, the cutter mechanism of one or more of said units being carried in a frame and held to the ground by the weight of said uniting framework upon said frame, and means on said framework for elevating the cutter mechanism of said unit.

1,313,973. RIM-STRIP. LEONARD A. YORNO, Highland Park, Mich., assignor to L. A. Young Industries, Inc., Detroit, Mich., a Corporation of Michigan. Filed Nov. 29, 1918. Serial No. 264,531. 5 Claims. (Cl. 155-25.)



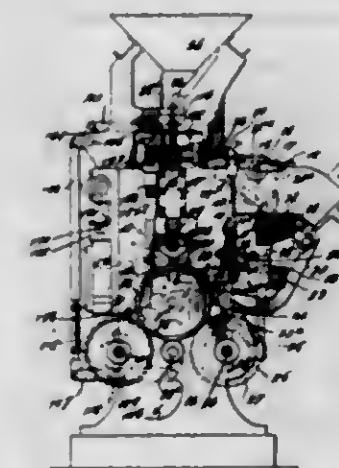
1. A rim strip, comprising a metal channel bar, a tucking strip contained within the channel strip and a spring supporting clip substantially conforming to and gripping the exterior of the channel strip.

1,313,974. MACHINE FOR PACKING ARTICLES. ERNEST D. ANDERSON, New York, N. Y. Filed Mar. 21, 1917. Serial No. 156,297. 42 Claims. (Cl. 93-0.)



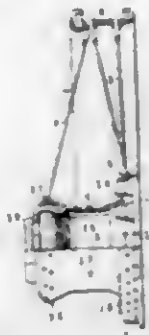
1. A machine of the class described comprising means to supply and open receptacles successively, means to supply articles in bulk, means to feed said receptacles successively in position to receive said articles, and means to enter said articles in bulk and scoop therefrom definite charges of said articles and deliver them successively into said receptacles.

1,313,975. MULTIPLE-CARTONING MACHINE. ERNEST D. ANDERSON, New York, N. Y. Filed Dec. 29, 1917. Serial No. 209,481. 20 Claims. (Cl. 93-0.)



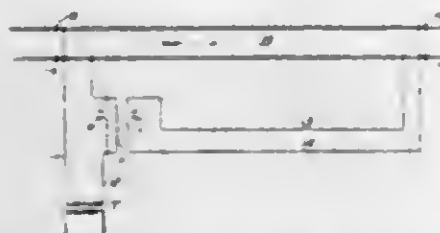
1. A machine of the class described comprising a plurality of spaced supplies for receptacles, a plurality of blades corresponding to said supplies, a plurality of receivers opposing and corresponding to said blades, means to simultaneously operate said blades for simultaneous removal of receptacles from said supplies, means to simultaneously close flaps of said receptacles while retained by said blades, said blade operating means being operative to place the receptacles in the receivers, and means to simultaneously charge said receptacles while in said receivers.

1,313,976. DETACHABLE WHEEL FOR AUTOMOBILES. CHARLES S. ASH, Buffalo, N. Y., assignor, by means assignments, to Wire Wheel Corporation of America. Filed July 14, 1916. Serial No. 109,275. 2 Claims. (Cl. 21-31.)



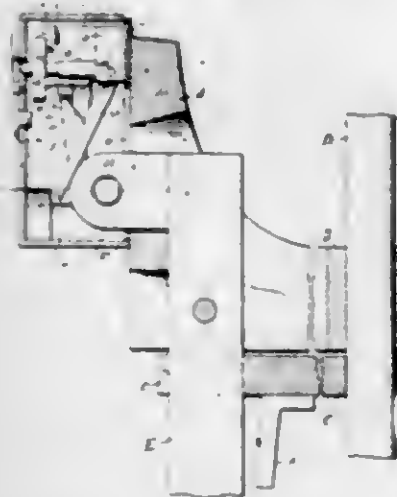
1. A detachable wheel comprising in combination an inner hub, a hub shell mounted thereon and having spokes secured thereto, certain of said spokes having heads projecting within said shell, a cap nut carried by the inner hub and locking means mounted on and carried by said nut to engage the inwardly projecting spoke heads, and prevent reverse rotation of the cap nut.

1,313,977. RAILWAY-TRAFFIC-CONTROLLING APPARATUS. WILLIAM S. GRAFF BAKER, London, England, assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 18, 1917. Serial No. 187,021. 6 Claims. (Cl. 240-40.)



2. A railway signaling system comprising a section of railway track, and a track circuit therefor including a source of current, a pair of lamps and the track rails of said section, said track rails being interposed between and connecting said lamps in series with said source of current.

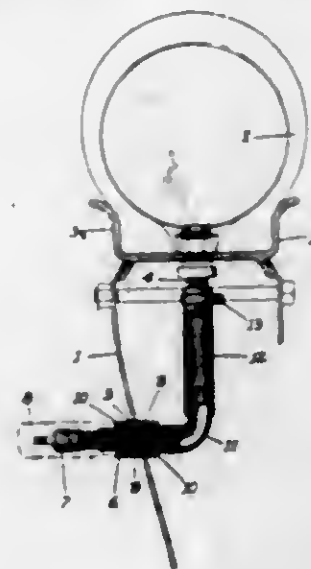
1,313,978. SAFETY SWITCH-LOCK. NOAH J. BECKNER, Yakima, Wash., assignor to Safety Patent Co., Yakima, Wash., a Corporation of Washington. Filed May 7, 1919. Serial No. 295,271. 17 Claims. (Cl. 240-414.)



1. A switch stand lock including a pivoted arm, a bolt extending at an angle to the arm and rigid therewith, the

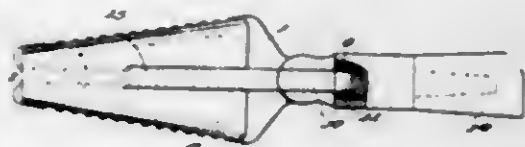
bolt and arm being yieldingly urged to a locking position, key actuated means for shifting the bolt to a retracted position and operatively engaged with said arm and moving therewith, and means for preventing the removal of the key until the bolt and arm have been returned to their locking position.

1,313,979. AIR-VALVE ATTACHMENT FOR DISK WHEELS. FRANK BRANNARD, Stockton, Calif. Filed Apr. 10, 1919. Serial No. 288,599. 1 Claim. (Cl. 152-12.)



An air valve attachment for disk wheels comprising in combination with a pneumatic tire a valve secured to the outer disk and projecting therethrough, an L secured to the inner end of the valve and projecting in horizontal alignment with the valve stem of the tire, and a flexible hose secured at one end to the L and removably clamped about the valve stem of the tire at the other end, the said valve stem having its spring-held valve removed therefrom.

1,313,980. SAFETY-RAZOR. HARRY BLOM, Johnstown, Pa. Filed Jan. 22, 1918. Serial No. 213,148. 1 Claim. (Cl. 30-12.)

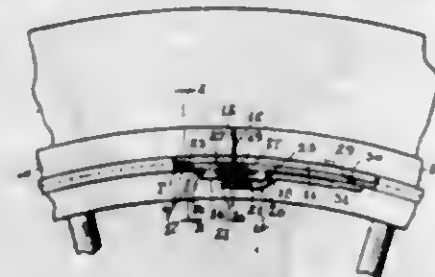


In a safety razor the combination with a blade formed with a longitudinally extending slot, a guard plate having a corresponding slot, one end of said plate being externally threaded and longitudinally grooved, a holder having a projecting portion on one end thereof slidably mounted in the slot, said end of the holder being adapted to clamp the blade to the plate, and a handle engageable with the externally threaded end of the holder plate and adapted to clamp the holder in locked position to securely hold the blade to the plate.

1,313,981. RIM FOR VEHICLE-WHEELS. RICHARD S. BRYANT, Cleveland, Ohio, assignor, by means assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Apr. 23, 1912. Serial No. 893,978. Divided and this application filed July 9, 1914. Serial No. 849,865. 6 Claims. (Cl. 152-21.)

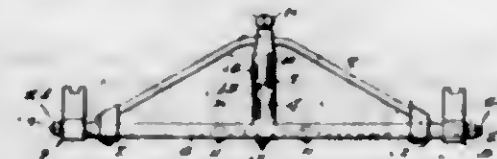
1. In a vehicle rim, in combination, an annular member adapted to be secured about the felly of a wheel and hav-

ing a pair of slots therethrough separated by a transverse web, a split ring adapted to surround said member and having adjacent to each of its ends a projection adapted to enter one of said slots, each of said projections having a notch in its forward end, and latch means pivoted to said web between said slots for engaging said notches and holding said projections in their respective slots.



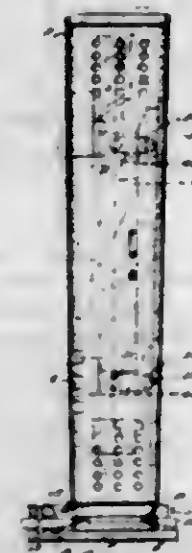
tions having a notch in its forward end, and latch means pivoted to said web between said slots for engaging said notches and holding said projections in their respective slots.

1,313,982. BRAKE-BEAM. WILLARD R. CHANDLER, Sumter, S. C. Filed Dec. 21, 1918. Serial No. 207,786. 2 Claims. (Cl. 188-22.)



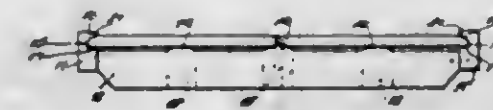
1. A brake beam comprising a compression member and a tension member having its ends fixed to the compression member and adapted to support brake heads, and a strut rigidly connecting the compression member and tension member and fashioned with means to accommodate either a right hand lever or a left hand lever, said strut having a slot in one end to receive said tension member and having a flat base secured to the compression member.

1,313,983. COLLAPSIBLE CORE FOR INGOT-MOLDS. RAY G. COATNA, Pasadena, Calif., assignor to Valley Mould and Iron Corporation, Sharpville, Pa., a Corporation of New York. Filed Apr. 4, 1919. Serial No. 287,463. 45 Claims. (Cl. 22-173.)



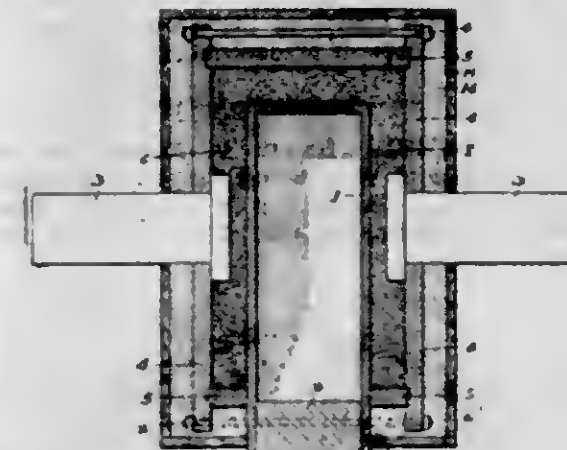
1. A collapsible core for ingot molds and the like comprising a core body; a front piece pivoted to the said body; a side piece pivoted to said body; said body, front, and side pieces being adapted to be covered with sand; and a controlling member for normally maintaining the parts in rigid relation when expanded, said control member being adapted to be operated to reduce the cross-section of the said core whereby the same may be withdrawn from a casting.

1,313,984. COMBINED SILL AND GRATE FOR JIGS. ALFRED N. FANNING, Joplin, Mo. Filed Dec. 13, 1916. Serial No. 266,624. 3 Claims. (Cl. 83-58.)



1. In apparatus of the character described, the combination with a sill adapted to be connected with the frame of a jig, said sill being provided at its ends with members having notches, a pair of grate sections to be arranged upon the sill with their outer ends projecting into the notches, and expanding means connecting the inner ends of the grate sections with the sill and serving to move the grate sections outwardly.

1,313,985. ELECTRIC FURNACE. JOHN FITZPATRICK and LEVI THURSTON STEPHENS, Niagara Falls, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Mar. 21, 1919. Serial No. 284,023. 4 Claims. (Cl. 204-64.)



1. An electric resistance furnace comprising a silicon carbide muffle and current conducting resistance material around the muffle; substantially as described.

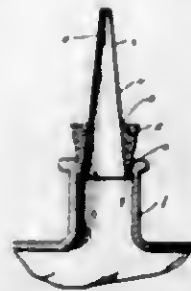
1,313,986. INSECT-TRAP. ANDREW J. HARDIN, Chhattahoochee, Fla. Filed Dec. 9, 1916. Serial No. 135,980. 2 Claims. (Cl. 43-22.)



1. In a device of the character described, a lower member provided at its upper end with a reinforcing ring having a vertically disposed flange and a horizontally disposed flange, an upper member provided at its lower end with a reinforcing ring adapted to fit snugly about the vertical flange of the ring carried by the lower member, a handle member rockably mounted on the top of said upper member and disposed diametrically thereof, and depending arms carried by said handle at each end thereof and extending the full length of the top member at opposite sides of the same, said arms being provided at their lower

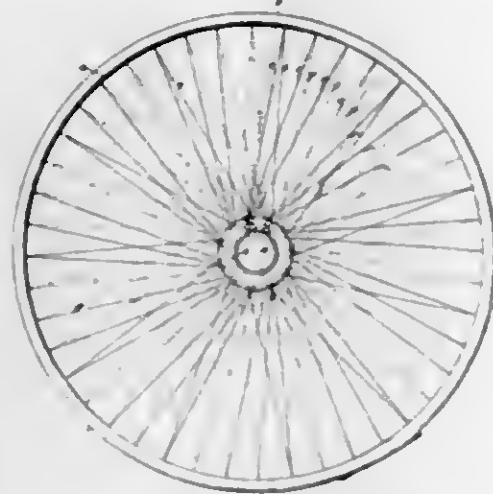
ends with interned portions adapted to engage beneath the horizontal flange of the ring carried by the lower member for detachably securing both of said members together.

1,313,987. DROPPING STOPPER FOR MEDICINE-BOTTLES. VIRGINIA B. HENAR, Montgomery, Ala. Filed May 26, 1916. Serial No. 100,110. 4 Claims. (Cl. 213-16.)



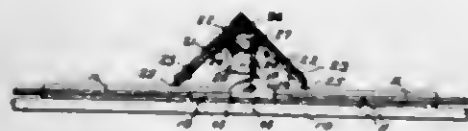
1. A medicine dropper comprising a tube open at both ends and provided adjacent its outlet end with openings for permitting entry of air into the interior of the tube above the outlet end thereof for causing separation from a column of liquid contained therein of portions of said column to form drops of predetermined size.

1,313,988. WHEEL. HENRY A. HOUAR, JR., Buffalo, N. Y., assignor to Wire Wheel Corporation of America, Buffalo, N. Y., a Corporation of New York. Filed Nov. 6, 1918. Serial No. 261,425. 7 Claims. (Cl. 21-69.)



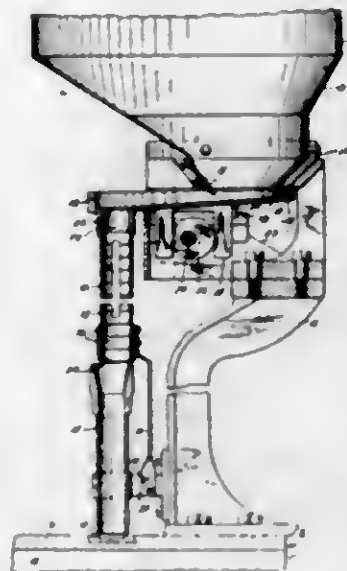
1. A wheel having in combination a hub, two rims, spokes extending from one side of each rim to the adjacent side of the hub and spokes extending from the other side of each rim to both ends of the hub.

1,313,989. ROOF STRUCTURE. MARK A. JACKSON, Andover, N. J. Filed Dec. 6, 1918. Serial No. 265,482. 8 Claims. (Cl. 108-24.)



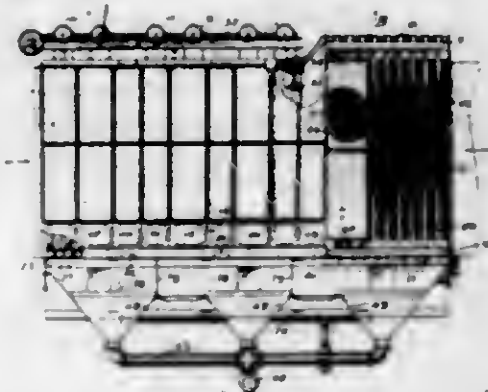
1. A military covering for the ridges and bays of roofs, having angularly disposed strips secured together; and means for sealing the parting between said strips; substantially as described.

1,313,990. FEEDING ATTACHMENT FOR CROWN-CORK-MAKING MACHINES. WILLIAM JACKSON, New York, N. Y., assignor to International Cork Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 17, 1918. Serial No. 250,319. 8 Claims. (Cl. 113-114.)



1. In a device for stacking disks, the combination with a receptacle having a discharge opening, of a downwardly extending tube connected with said receptacle and into which the latter is adapted to discharge through said opening, the inner face of said tube being constituted by a plurality of superimposed inverted frusta of a cone, and means for shaking said receptacle and tube.

1,313,991. STEAM-BOILER ECONOMIZER. DAVID S. JACOBUS, Jersey City, N. J., and WILLIAM A. JONES, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 8, 1914. Serial No. 376,013. 5 Claims. (Cl. 122-420.)



1. A steam boiler economizer comprising a plurality of sections each section having a single upper and a single lower cross box connected by vertically extending upflow tubes, each upper box having depending downflow tubes spaced along the length of the box and connecting it to the lower box of the next section, the cross sectional area of these down flow tubes being less than the cross sectional area of the up flow tubes to the upper box, and the down flow tubes forming part of the heating surface.

1,313,992. MILK-STRAINER. GEORGE RAYMOND JAMES, Hickman Mills, Mo. Filed Feb. 9, 1919. Serial No. 275,320. 7 Claims. (Cl. 210-16.)



1. A strainer consisting of a shallow receptacle having an outlet, and two straining cloths laid over the bottom

of said receptacle and spaced apart at their rear portions to permit a fluid to enter between said cloths, for the purposes described.

1,313,993. MINING-MACHINE. ROBERT H. JEFFREY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 1, 1914. Serial No. 835,758. Renewed Dec. 28, 1918. Serial No. 268,703. 9 Claims. (Cl. 262-20.)



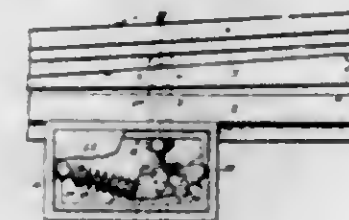
1. In a mining machine, the combination of narrow kerf cutters arranged parallel and in multiple, a chain cutter arranged as an undercutter below said kerf cutters, and a shaft carrying all of said cutters whereby the said chain cutter drives the said kerf cutters; substantially as set forth.

1,313,994. TOY. JOSEPH KOZTATEK, New Kensington, Pa. Filed Mar. 13, 1919. Serial No. 282,336. 2 Claims. (Cl. 46-45.)



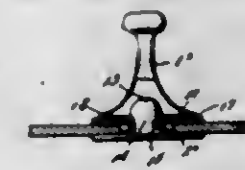
1. In a toy, the combination with a platform having a pair of wheels at the front and rear respectively, a fifth wheel mounted on a transverse axis below said platform, a disk rotatable on a vertical axis, means for actuating said disk by said fifth wheel, a projection on the surface of said disk, an object on said platform having a pivoted arm, a spring strip secured at one end on said platform its free end being contractible with said projection, and flexible connections between the free end of said strip and the arm of said object whereby it is raised to rise and fall when said disk makes one complete revolution.

1,313,995. SWITCH-THROW. CLARENCE C. KOENIG, Johnstown, Pa. Filed Dec. 5, 1918. Serial No. 265,335. 6 Claims. (Cl. 246-435.)



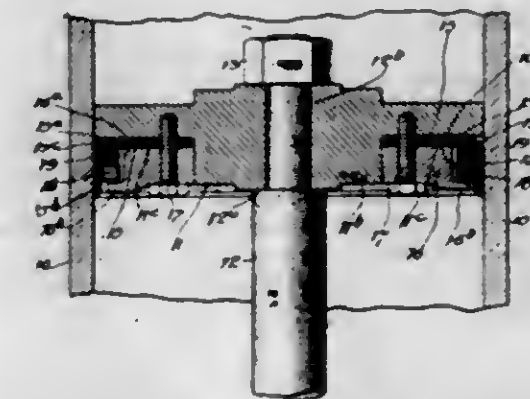
1. The combination with a laterally movable switch tongue, of an actuating connection therefor, a spring toggle device, and a lost motion connection between the toggle device and the actuating connection, substantially as described.

1,313,996. COLLAR-BUTTON. WILLIAM J. KRAMB, Rochester, N. Y. Filed Apr. 23, 1917. Serial No. 163,969. Renewed Nov. 14, 1918. Serial No. 262,603. 2 Claims. (Cl. 24-108.)



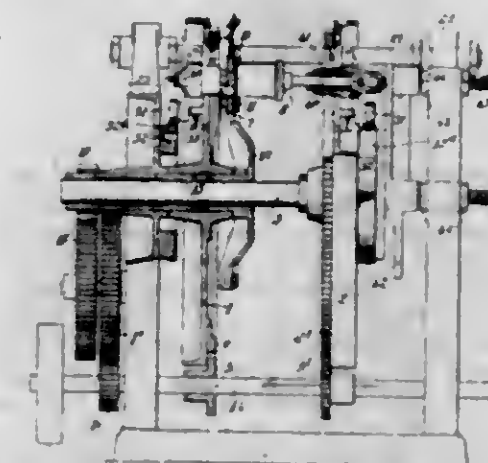
1. A collar button comprising a base and a shank, a second member comprising a base and a hollow shank, a disk having a central opening therein secured in said hollow shank, and a spring secured to said disk and having its ends bridge opposite sides of the opening in the disk.

1,313,997. CUP-LEATHER PACKING. WILLIAM P. KRAMB, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1915. Serial No. 19,284. 2 Claims. (Cl. 121-108.)



1. In a device of the class described, a piston, a packing member carried thereby, said packing member being provided with angularly disposed portions, means to maintain one of said portions in contact with a cylinder wall or the like, said means comprising an expansible ring having a rounded surface arranged to contact with the juncture of said angularly disposed portions of said packing member, and a second expansible ring located adjacent said first named ring and also constructed and arranged to operate independently of said first-named ring to maintain a portion of said packing member in contact with a cylinder wall or the like.

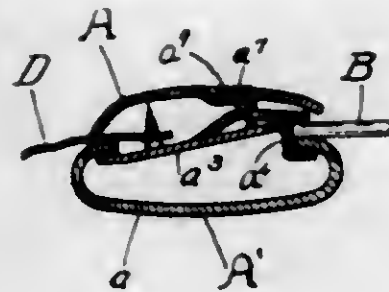
1,313,998. MACHINE FOR SEAMING HEADS OR ENDS ON CANS. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Apr. 11, 1918. Serial No. 227,007. 14 Claims. (Cl. 113-17.)



1. A seaming machine comprising a seamer having a corrugure of large radius, a resilient support for said

seamer, said seamer comprising a strip of hardened metal, a backing strip to which the hardened strip is fastened, and means forcing said hardened strip to assume a true form.

1,313,999. VEHICLE-CURTAIN LIGHT. FRANK J. LAIRLE, Augusta, Ky., assignor to The F. A. Neider Company, Augusta, Ky., a Corporation of Kentucky. Filed Mar. 10, 1919. Serial No. 281,686. 2 Claims. (Cl. 296—145.)



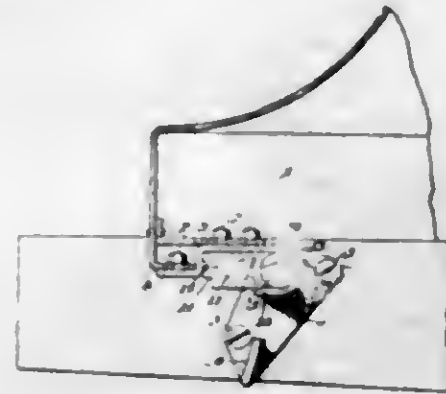
1. In a vehicle curtain light the combination of two frame members one of which consists of a frame having in it a series of slots and the other of which comprises a lug plate and a housing for the lug plate, the housing having turned edges overlapping the edges of the lug plate, said lug plate having a series of lugs adapted to engage a pane of glass and a series of lugs adapted to engage the other frame member and a pane of glass located between the frame members.

1,314,000. ANTISLIPPING ATTACHMENT FOR CRUTCHES AND CANES. ANTHONY LARRET, Jr., Brooklyn, N. Y. Filed Mar. 18, 1919. Serial No. 283,288. 3 Claims. (Cl. 135—53.)



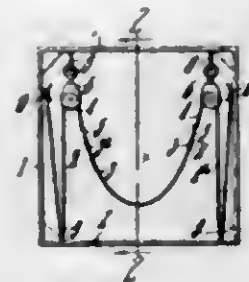
2. An antislipping attachment for crutches or canes, comprising supporting means adapted to be secured at the end of the crutch or cane, an antislipping member having a ground gripping end and a non-ground engaging end, attachment means on said supporting member spaced from the end of said crutch or cane, and cooperating attachment means on said antislipping member spaced from said ground gripping end thereof a greater distance than the distance between said attachment means of said supporting member and the end of the cane, said attachment means adapted to permit the securing of said antislipping member to said supporting member with the ground gripping end projected beyond the end of said crutch or cane and reversible with said ground gripping end removed from the end of said crutch or cane.

1,314,001. ANTIRATTILING DEVICE. WILLIAM B. LE BOUANGROIS, New Orleans, La. Filed Feb. 24, 1919. Serial No. 278,843. 6 Claims. (Cl. 64—10.)



1. The combination with a bearing having a trunnion member and a member coating therewith and movable relatively thereto, of a bearing-block interposed between said trunnion member and said relatively movable member to prevent relative movement therebetween.

1,314,002. THERAPEUTIC APPARATUS. JENNETTE LEE, Northampton, Mass. Filed Feb. 24, 1919. Serial No. 278,863. 2 Claims. (Cl. 128—75.)



1. In a device of the character indicated, a frame of a size suitable to receive the head and having a substantially flat base adapted to be placed upon a bed, a sling within the frame adapted to support the back of the head of a patient lying upon the bed, cords engaging the ends of the sling and passing over guides on the frame and arranged to support the sling at such an elevation as to hold the head of the patient slightly above the plane of the bed, and an extension of one of the cords passing from its respective guide and attached to the lower part of the frame and being located in a position readily reached by the patient, whereby the patient may himself move the cord to cause vertical movement of the sling.

1,314,003. FLUID-REGULATING VALVE. THADDEUS S. LERSE, Avalon, Pa., assignor of one-half to Harvey L. Holmes, Geneva, N. Y. Filed Nov. 21, 1918. Serial No. 263,498. 8 Claims. (Cl. 158—119.)



1. A fluid regulating valve consisting of a casing having a front inwardly sloping face terminating in a thin

edge surrounding a central circular outlet opening and a rear supply opening and a valve therein having a plurality of ports each of smaller diameter than and adapted to be located in central registering position with the front outlet opening of the casing.

1,314,004. COOKING VESSEL FOR EXHAUST-PIPES OF INTERNAL-COMBUSTION ENGINES. JAMES F. LOCKHART, Kansas City, Mo., assignor to S. L. Lockhart, Kansas City, Mo. Filed Mar. 31, 1917. Serial No. 138,971. 1 Claim. (Cl. 126—20.)



In combination with an internal combustion engine and an exhaust manifold pipe arranged longitudinally thereof, a cooking vessel arranged longitudinally of said exhaust manifold pipe, the bottom of said vessel provided with a downwardly facing transversely disposed concave face from end to end of the vessel, said concave face conforming to the upper side of the exhaust manifold pipe and resting thereon and in close proximity thereto, the side wall of one side of said vessel extending upward from the side of said exhaust manifold and then laterally over the cylinder heads of the engine resting on said cylinder heads, a spout in one end of said vessel, and a handle on the opposite end of said vessel.

1,314,005. AUTOMATIC BALANCING MEANS FOR HIGH-SPEED ROTORS. EDGAR WEIMER LOUDEN, Philadelphia, Pa. Filed Aug. 17, 1918. Serial No. 250,368. 8 Claims. (Cl. 74—6.)

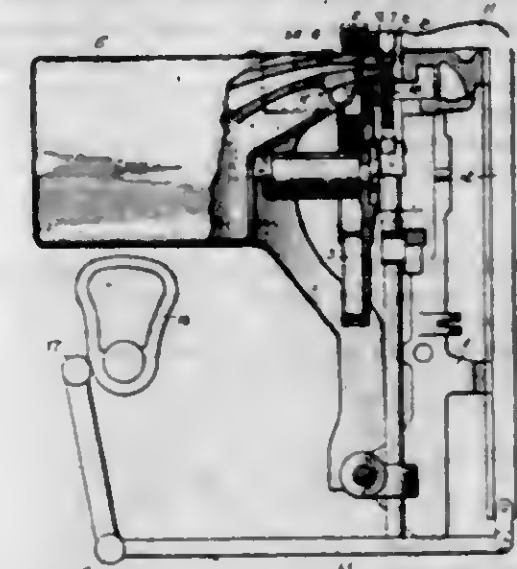


1. A rotor provided with an annular duct and a plurality of non-miscible substances within the said duct of different specific gravities, the lighter substance being suspended in the heavier substance.

1,314,006. LINOTYPE-MACHINE. ARTHUR C. McGRATH, Sioux City, Iowa. Filed July 21, 1917. Serial No. 182,033. 10 Claims. (Cl. 22—2.)

1. The combination with a linotype metal pot, of a linotype elevator, a matrix-holder for said elevator, and a

molten metal container independent of the linotype mold for receiving a stereotype mat supported by said elevator



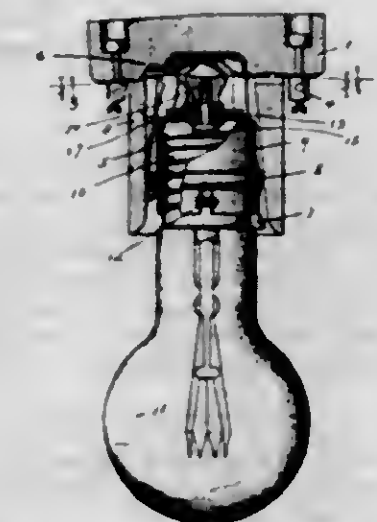
and arranged to be moved into a position to receive the molten metal from said metal pot.

1,314,007. HOLLOW SPAR, WOODEN TUBE, AND THE LIKE. EWING MCGUERR, Lambeth, London, England. Filed Mar. 26, 1918. Serial No. 224,861. 2 Claims. (Cl. 144—309.)



2. The process herewith described of forming a hollow body, which consists in bending a board to form said hollow body, securing the ends of said board to an interposed grooved wooden strip which projects within and also outside of said body and then removing the outwardly projecting portion of said strip.

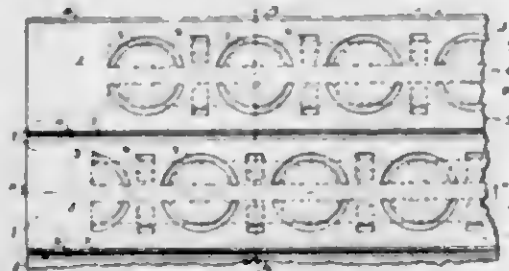
1,314,008. FILM-SOCKET FOR SERIES LAMPS. ARTHUR C. McWILLIAMS, Chicago, Ill., assignor to George Cutter Company, South Bend, Ind., a Corporation of Indiana. Filed July 11, 1917. Serial No. 179,815. 10 Claims. (Cl. 173—344.)



13. For use on a series circuit, a terminal carrier, a circuit-connecting appliance therefor equipped with means

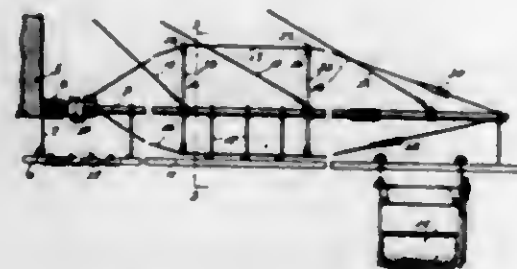
for simultaneously gripping the carrier, making the circuit connections thereto and opening a shunt around said connections; the said means including a stem secured to the carrier and a shunting switch member engaged by the stem to open the switch; and auxiliary means for shunting the said connections, the said auxiliary means comprising a conducting element concentric with the stem, a resilient element rotatably mounted on the stem, and a dielectric clamped between the said elements.

1,314,009. GRATE-BAR. ALLAN M. MARRAS, Chicago, Ill., assignor to Combustion Service Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1917. Serial No. 169,931. 4 Claims. (Cl. 126-167.)



1. In a grate adapted for preheating the air and efficiently distributing same in connection with forced draft, a plurality of apertured grate bars disposed closely together in draft-tight relation, the apertures in each bar being in the form of perforations disposed in definite group arrangements, each bar having uniformly spaced alternating group forms, the adjacent bars having different group forms disposed adjacently.

1,314,010. CARRIER-BOOM. WILLIAM MITCHELL, Milwaukee, Wis., assignor to Mitchell Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 13, 1918. Serial No. 239,725. 5 Claims. (Cl. 104-92.)

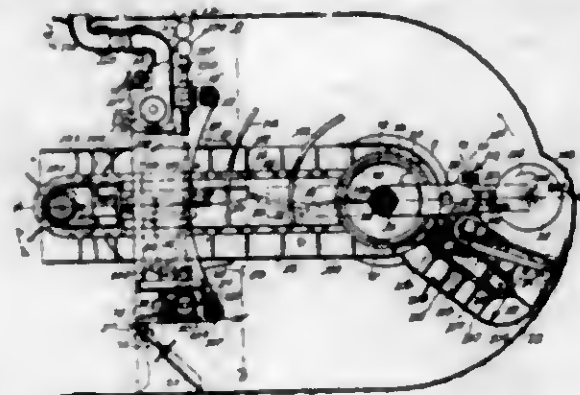


1. In a supporting boom for carriers, the combination of a boom, truss frame connected to the boom, each truss frame comprising a vertically disposed frame member and approximately equi-angularly disposed side frame members extending radially from the boom, a track suspended below the boom and between the downwardly disposed side frame members, and truss members connecting the outer portions of the side frame members to the boom.

1,314,011. MINING-MACHINE. EDMOND C. MORAN, Chicago, Ill. Filed Apr. 30, 1913. Serial No. 764,487. 161 Claims. (Cl. 262-5.)

22. The combination of a mining machine including two relatively movable interconnected frames, anchoring means for the forward frame forming a pivot about which the

other frame may be rotated, means for advancing the rear frame while the forward frame is anchored, and means



operating in conjunction with said advancing means for rotating the said other frame about said pivot.

1,314,012. VALVE-GRINDING TOOL. WILLIAM E. MOWERS, York, Pa. Filed Mar. 11, 1919. Serial No. 281,926. 12 Claims. (Cl. 51-4.)



1. In a tool of the class described, a rotatable member, valve engaging elements rotatably adjustably mounted upon the said member at opposite sides of the axis of rotation thereof and having engaging portions offset with relation to their portions which are connected with the said member, and means for holding said elements in positions of adjustment.

1,314,013. CARTRIDGE-FEEDING DEVICE. BERNARD B. MULVRY, New Haven, Conn. Filed Jan. 4, 1919. Serial No. 269,680. 9 Claims. (Cl. 42-19.)



1. In a device for feeding cartridges to a fire-arm, a cartridge containing receptacle, a conduit secured in the

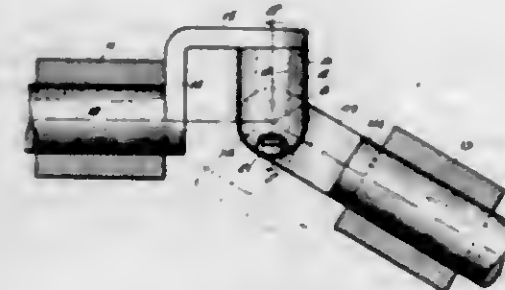
upper end of said receptacle for delivering cartridges to the barrel of said fire-arm, a spring-operated conveyor within said receptacle for delivering cartridges to the lower end of said conduit whereby each cartridge is moved upwardly within said conduit by the cartridge immediately below it, and a plunger operated by said conveyor for feeding the last cartridge upwardly through said conduit after the same has been moved out of engagement with said conveyor, said plunger constructed to be retained in its inoperative position by the cartridges in engagement with said conveyor.

1,314,014. ANTIFRICTION-BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 22, 1918. Serial No. 263,664. 6 Claims. (Cl. 64-65.)



1. In an anti-friction bearing, the combination with a housing, of an anti-friction element disposed within the housing and adapted for rolling movement, and means for insuring return of said element to normal position after each actuation thereof, said means including a member pivotally mounted on the housing, said member being eccentrically weighted and having a sliding connection with said element.

1,314,015. UNIVERSAL JOINT FOR SHAFTING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Apr. 3, 1919. Serial No. 287,169. 5 Claims. (Cl. 64-91.)

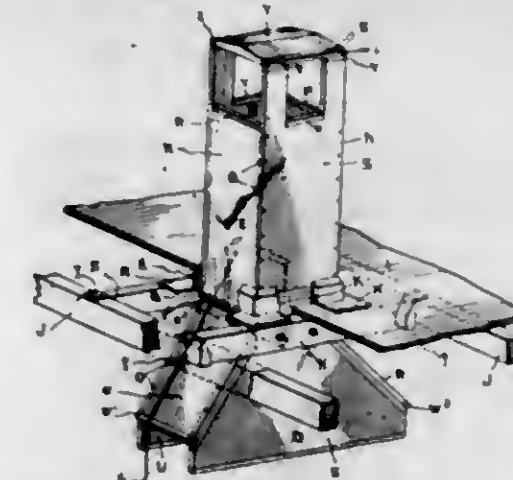


1. As an article of manufacture, a single-piece universal joint for transmitting power between shafts having an angular relation, said joint having two arms at right angles to each other, each arm being provided with a portion adapted to provide a swivel connection with its respective shaft, the axes of the swivel connections extending at right angles to the axes of the respective shafts and the projected intersection of the axes of said swiveled connections coinciding with the projected intersection of the axes of the shafts.

1,314,016. SMOKE-JACK. JOHN W. ORROCK, Montreal, Quebec, Canada, assignor to John Morrill Roger Fairbairn, Westmount, Quebec, Canada, for himself, and in trust for Robert W. McKillop, Montreal, Canada, and said Orrock. Filed Apr. 24, 1919. Serial No. 292,419. 13 Claims. (Cl. 104-52.)

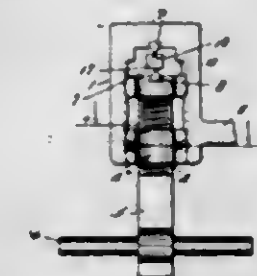
1. The combination with the roof of a building, such roof having an opening; of a knock-down smoke-jack, comprising members fashioned to present two pairs of opposite sides forming a straight flue of rectangular cross-

section and a hood at the lower end of the said flue and consisting of members fashioned to present a pair of vertical downwardly expanded sides and two oblique sides forming the tops of the said expanded portion, means secur-



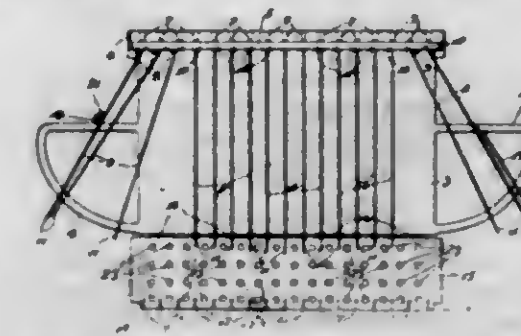
ing the jack to the roof with the flue projecting through the opening in the latter; and the said smoke-jack having vent holes effecting communication between the interior of the flue and the space beneath and in the vicinity of the roof.

1,314,017. NUT-VICE. PEDER PEDERSEN, Port Oxford, Oreg. Filed July 12, 1917. Serial No. 180,116. 1 Claim. (Cl. 164-47.)



In a nut vise, a hollow frame open at one end, a fixed jaw carried at the closed end of said frame, the sides of said frame being formed with a plurality of oppositely disposed grooves, a core movably arranged in said frame and formed with lateral sockets and with slots opening into said sockets, spring-pressed lugs disposed in said sockets for yielding engagement with the grooved portions of said frame whereby said core is supported in adjusted position in said frame, handles for said lugs, extending through said core-slots, whereby said lugs may be moved relatively, and a movable jaw operatively carried by said core within said frame for cooperation with said fixed jaw.

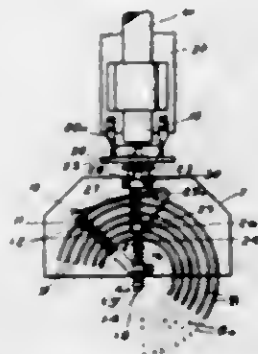
1,314,018. FORM FOR BUILDING-BLOCKS. EDWARD H. PIPE, St. Louis, Mo., assignor to Acme Cement Plaster Company, St. Louis, Mo., a Corporation of Illinois. Filed Apr. 12, 1919. Serial No. 289,728. 10 Claims. (Cl. 25-121.)



2. A form for use in making blocks of cementitious material comprising a bottom member, a plurality of ver-

tical partition and side members mounted on the bottom member to swing about a vertical axis located at the front ends and to one side of the partition and side members, said members being spaced apart and parallel to each other in normal operative position, and means for closing the spaces between the front and rear ends of said partition and side members of the form, substantially as described.

1,314,019. MACHINE FOR CUTTING ROUND TEES OR HOELS. ROBERT A. ROWLAND, Westview, Ohio. Filed Nov. 12, 1918. Serial No. 262,148. 2 Claims. (Cl. 125-20.)



1. The combination of a rotary head, an arcuate blade carried thereby, having its cutting edge at one end, a lever pivoted on the head and connected to the other end of the blade and movable to feed the blade in the line of its curvature, a screw carried by the head, a travelling nut on the screw, connected to the lever to swing the same as the nut travels, and means to automatically turn the screw as the head is rotated.

1,314,020. CARBURETER. CHARLES S. RYERSON, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 7, 1917. Serial No. 166,809. 5 Claims. (Cl. 261-79.)



3. In a carburer having an air passage, in combination with a fuel nozzle and a rotatable flared tube arranged in line in said passage, and means for rotating said tube by the flow of air through said passage.

1,314,021. LEAF-SPRING. BENJAMIN C. SEATON, Nashville, Tenn. Filed Nov. 19, 1917. Serial No. 202,773. 2 Claims. (Cl. 267-33.)

2. A spring composed of a plurality of leaves secured together at one point, the extremities of the intermediate leaves having metallic contacting projections for engage-

ment with the next adjacent longer leaf, whereby said intermediate leaves are spaced apart between their points



of end contact and the point where said leaves are secured together, said end contacting surfaces being provided with recesses or passages for lubricating purposes.

1,314,022. CARBON-CHROME-NICKEL STEEL. JAMES RAMSEY SPENCER, Trappe, Md. Filed June 15, 1918. Serial No. 240,211. Renewed Apr. 20, 1919. Serial No. 292,982. 3 Claims. (Cl. 75-1.)

1. An alloy of steel characterized by great hardness and toughness, variable by heat treatment, wherein steel of .50% to 1.25% carbon forms 97.50 to 99.50 parts, chromium forms .25 to 1.25 parts, and nickel forms from .25 to 1.25 parts.

2. An alloy of steel characterized by great hardness and toughness, variable by heat treatment, wherein steel of .50% to 1.25% carbon forms 97.50 to 99.50 parts, and chromium and nickel together form from .50 to 2.50 parts, the chromium being not less than the nickel.

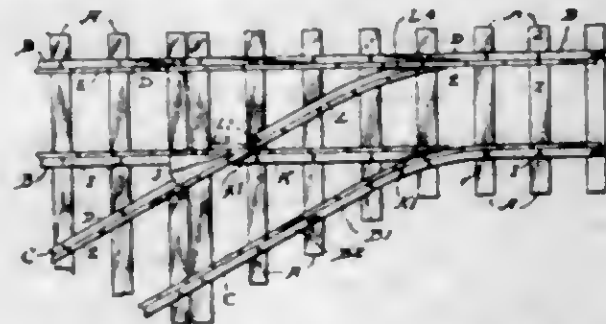
3. A hardened worked alloy of steel product characterized by great hardness and toughness, variable by heat treatment, wherein steel of .50% to 1.25% carbon forms 97.50 to 99.50 parts, and chromium and nickel together form from .50 to 2.50 parts, the chromium being not less than the nickel.

1,314,023. CASEMENT-WINDOW ADJUSTER. CHARLES E. SPENCER, Chicago, and ROBERT C. SPENCER, JR., River Forest, Ill. Filed Jan. 8, 1917. Serial No. 141,138. 4 Claims. (Cl. 268-13.)



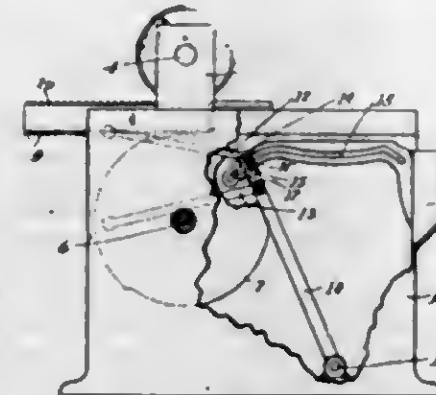
1. In a casement window adjuster the combination of an operating lever, means for pivoting the said lever to the frame of a casement window so that the lever may swing horizontally and rock vertically, and a tubular guide adapted to be attached to the sash of a casement window and arranged to receive the outer end of said operating lever, said guide being arranged to cooperate with the operating lever to lock the same against horizontal movement about the said pivot.

1,314,024. RAILWAY-TRACK. HERBERT E. SPYER, Knoxville, Tenn., assignor to Economy Rail Company, a Corporation of Tennessee. Filed Oct. 6, 1917. Serial No. 195,179. Renewed Jan. 18, 1919. Serial No. 271,885. 6 Claims. (Cl. 238-131.)



1. In the art herein described, a rail comprising a wood member and a reversible metal angle member, said mem-

bers being of equal length and the wood member having upright and horizontal longitudinal faces and the angle member having flanges either of which is suited to be placed on the upper face of said rail for use as a tread for wheels, and the angle member being applied lengthwise of the wood member with one flange resting on the



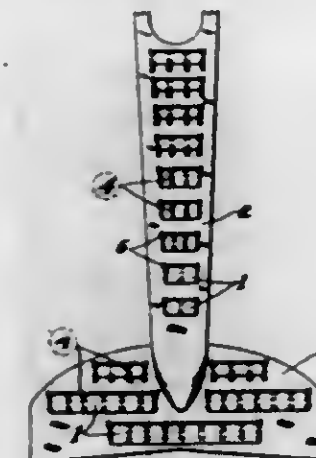
upper horizontal face of the wood member and with the other flange resting against one of the side upright faces of the wood member, and means extending through said flanges and into the wood member for securing the angle member and the wood member to each other, substantially as described.

1,314,025. PRINTING-PRESS. SWAN SMITH, St. Paul, Minn. Filed Apr. 9, 1917. Serial No. 160,598. 7 Claims. (Cl. 74-98.)



1. A type printing press of the class described comprising a framework and type bed supported thereby, a driving shaft and wheel supported upon said shaft, an arm having fulcrum support in the frame, a lever arm connecting the free end of said power arm with said type bed, a lever arm connecting said power arm with the rim of said wheel and means permitting a compensating movement between the lever arm connected with said wheel and a lever arm connected with said type bed.

1,314,026. SOAP-FLAKER. HENRY A. STAAB, Milwaukee, Wis. Filed Nov. 30, 1918. Serial No. 264,829. 2 Claims. (Cl. 146-7.)

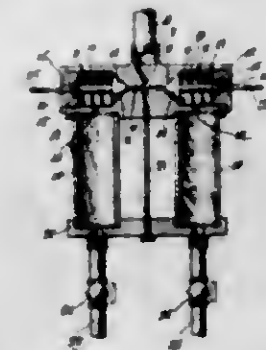


1. A cutting device including a body blank provided with inwardly extending slits adjacent one end, the side portions of the blank outwardly of the slits being bent back upon the blank to form a reinforced tongue, said

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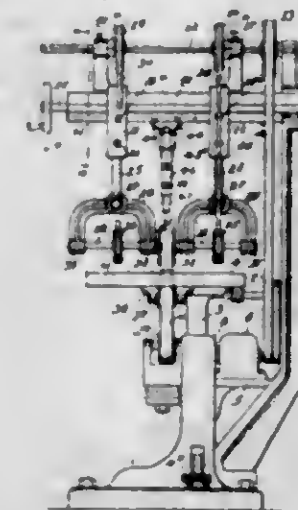
reinforced tongue being bent to provide a channel for receiving the edge of a support, and knife members carried by the body blank.

1,314,027. AEROPLANE-STABILIZER. SANFORD O. STEWART, St. Louis, Mo. Filed Oct. 24, 1918. Serial No. 239,503. 5 Claims. (Cl. 244-21.)



2. In combination with an aeroplane, a stabilizer for the same, comprising a plurality of collapsible wind resistance members, so hinged to the aeroplane body as to normally offer no air resistance, and to open out against the air on the occurrence of abnormal motion in the aeroplane; and means for reinforcing and supporting said members against wind and air pressure.

1,314,028. OIL-LEVEL TESTER FOR ENGINE CRANK-CASES. HAROLD C. SUCKERT, New York, N. Y. Filed Dec. 23, 1915. Serial No. 68,332. 8 Claims. (Cl. 116-31.)



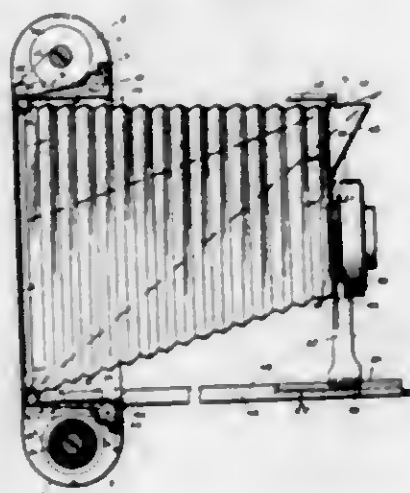
8. An oil level testing device comprising a plurality of test tubes extending to different levels, a sight glass for each tube, an exhausting means, and manually operable valve means interposed between the sight glasses and the exhausting means adapted to place either of said sight glasses and its associated test tube in communication with the exhausting means.

1,314,029. MACHINE FOR TRIMMING AND FINISHING RUBBER GASKETS AND SIMILAR ARTICLES. CHARLES L. TOWNSEND, Norwood, Ohio. Filed Mar. 21, 1919. Serial No. 284,147. 4 Claims. (Cl. 164-61.)

1. A machine for trimming gaskets and similar articles, comprising a base member, a table mounted in said member and vertically movable therein, a cutter-member operably supported by said base member above said table, a belt arranged to operate through a groove in said table for rotating an article to be trimmed upon said table so as to present the edges thereof to said cutter-member to

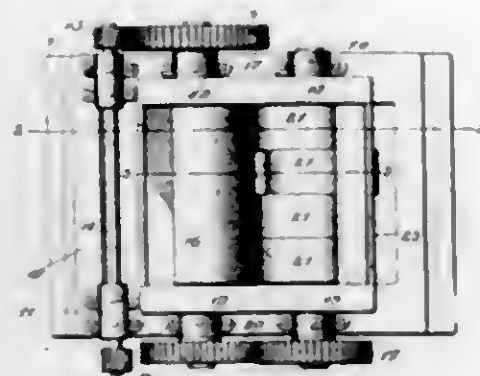
be acted upon thereby, means for moving said table toward and away from said cutter-member, means for driving said belt and arranged to be brought into actuating relation therewith by the raising of said table, and means for the operation of said cutter-member.

1,314,030. FOCUSING ATTACHMENT FOR CAMERAS. STAFFORD P. WALSH, San Francisco, Calif. Filed May 15, 1918. Serial No. 234,765. 3 Claims. (Cl. 95—42.)



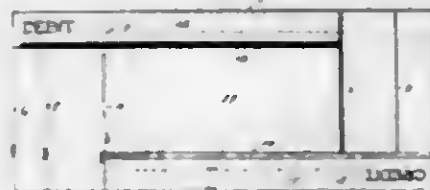
1. A focusing device for cameras comprising a camera having a focusing opening in its front, a lens, a screen adapted to be moved to a plane in front of the sensitized surface on which the photograph is to be taken, means to focus the lens on the screen, a cover for the focusing opening in the front part of the camera through which the picture may be viewed, and means operated by said cover to move the lens forward a distance corresponding to the distance of the screen surface from the sensitized surface when the picture on the screen is examined.

1,314,031. DOUBLE-ROLL CRUSHER. CHARLES T. WESTLAND, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed Nov. 30, 1917. Serial No. 204,689. 1 Claim. (Cl. 83—12.)



In a machine of the class described, a frame, a solid roll journaled for operation in said frame, a shaft journaled in the frame adjacent to said roll, driving gears connecting said shaft and solid roll, a series of separately formed and independently operating rings disposed around the shaft, which rings are uniform in size and cooperate to form a sectional roll, a plurality of springs arranged between each ring and the shaft whereby movement of any ring in all directions radially with respect to said shaft is resisted, and a hopper secured to the frame, the walls of which project above the solid and sectional rolls.

1,314,032. DEBIT AND CREDIT SLIP. EDWIN W. WIRSK, Thiensville, Wis. Filed May 29, 1919. Serial No. 300,096. 2 Claims. (Cl. 283—1.)



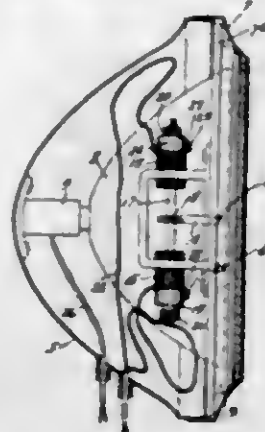
1. A debit and credit slip comprising a sheet of paper subdivided by black and red lines into column spaces for debit and credit entries, and also into longitudinally extending debit and credit title spaces, containing appropriate lettering indicative of debit and credit accounts respectively; the red lines and lettering being inversely printed on the opposite side of the sheet, from that occupied by the black lines and lettering, and so arranged that the title will be at the left and the entry columns at the right, whenever either the debit or the credit side of the slip is adjusted in position for use.

1,314,033. POULTRY-FOUNTAIN. HENRY J. WILLEMS, Kenosha, Wis. Filed May 22, 1918. Serial No. 235,955. 2 Claims. (Cl. 119—77.)



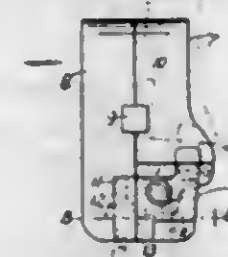
1. In a stock watering device, a tank having a base formed with an upturned front end, a partition starting flush with the front end of the tank and extending inwardly and downwardly therefrom, said partition being formed with an extension sloping rearwardly and downwardly, the end thereof being disposed adjacent the rear wall of the tank, said extension end being disposed below the plane of the end of the upturned base portion, the side walls of said extension being spaced away from the sides of the tank and perforated, and a handle for the tank.

1,314,034. HEADLIGHT. OVERTON WINSTON, Minneapolis, Minn. Original application filed Sept. 13, 1915. Serial No. 50,290. Divided and this application filed Nov. 18, 1916. Serial No. 132,039. 1 Claim. (Cl. 240—44.)



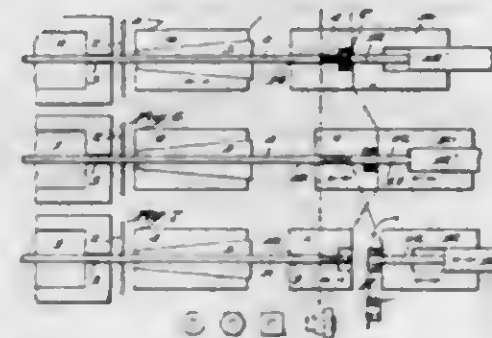
In a headlight, the combination with a casing having a rotatively adjustable annular support, of a reflector connected to said annular support by diametrically opposite pivots, and a light bulb within said reflector, fixed in respect to said casing the said reflector being shiftable on its pivot to vary its axis in respect to said light bulb.

1,314,035. TRUNK. JOHN WOLF, Topeka, Kans. Filed Apr. 21, 1919. Serial No. 291,572. 3 Claims. (Cl. 190—13.)



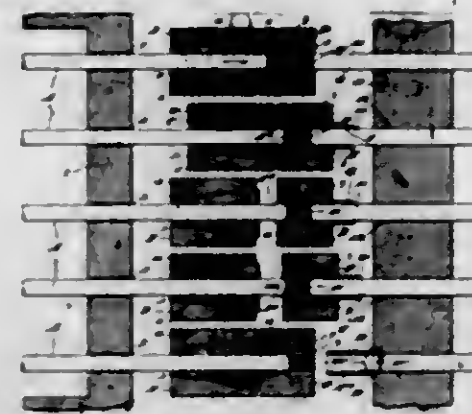
1. In a wardrobe trunk, a body portion, a wardrobe section hinged thereto, a lid hinged to the wardrobe section, a pivoted latch on the wardrobe section, a fitting on the body portion having a chamber for receiving the locking end of the latch, a keeper adjacent said chamber, and a lug on the lid for tripping the latch into locking engagement with the keeper with a closing movement of the lid against the wardrobe section, when the latter section has been swung to closed position against the body portion.

1,314,036. NUT-MAKING PROCESS. WALTER E. AMBERG, Chicago, Ill., assignor to Amberg Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1918. Serial No. 214,869. 3 Claims. (Cl. 10—86.)



3. The improvement in the art of making metal nuts, which consists in advancing a metal rod and upsetting the end thereof to form the body of the nut, and then stripping off the nut by moving the nut portion longitudinally of the rod, leaving as the extreme end of the rod the portion of metal which previously formed a portion of the upset end thereof.

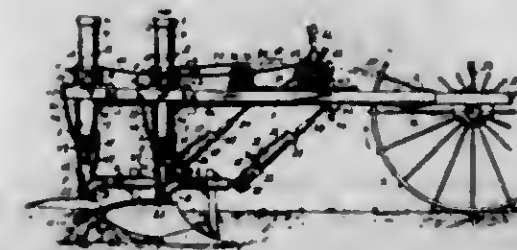
1,314,037. TUBE-MAKING PROCESS AND MACHINE. WALTER E. AMBERG, Chicago, Ill., assignor to Amberg Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1918. Serial No. 215,549. 2 Claims. (Cl. 207—10.)



1. The improvement in the art of making metal tubes and the like, without waste of metal, which consists in simultaneously upsetting and piercing the end of a rod to

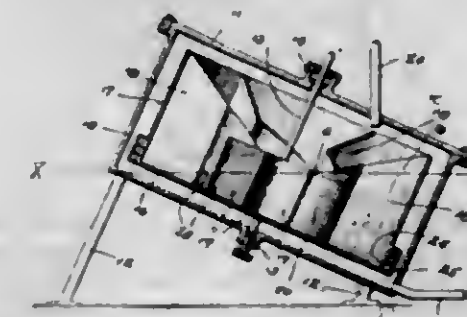
form the body of the article, while leaving the later integrally connected with the parent rod, then shearing that connection from the end of the rod, leaving as the extreme end of said rod the portion of metal which previously formed the corresponding portion of the upset body.

1,314,038. PLOW ATTACHMENT FOR MOTOR-TRACTORS. WILLIAM ATKINS, Auburn, N. Y. Filed Apr. 26, 1916. Serial No. 93,649. 17 Claims. (Cl. 97—69.)



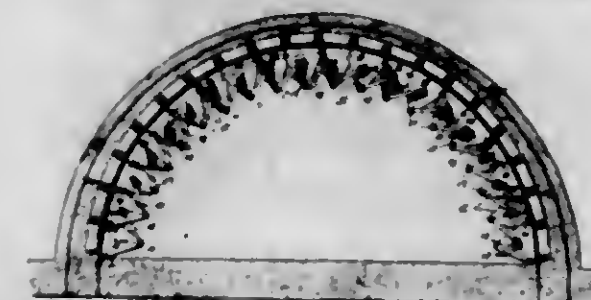
5. In a plow attachment for tractors, the combination of a frame, a plow support mounted on the frame for vertical movement, a plow mounted on the support and having a forwardly projecting beam, and a draft device having one end pivotally connected to the plow beam and its other end adjustably connected to the frame to compensate for vertical adjustment of the plow support.

1,314,039. STEAM-CONDENSATION METER. THEODORE S. AYERS, St. Louis, Mo. Filed Feb. 20, 1919. Serial No. 278,116. 12 Claims. (Cl. 253—35.)



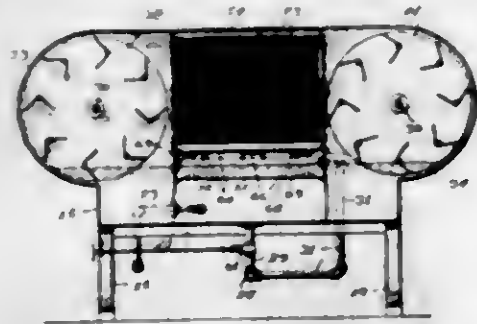
1. In a meter of the class described, a receptacle mounted to rotate in an inclined plane, partitions arranged within said receptacle for dividing the space therein into a plurality of compartments, each of which comprises an inner chamber and an outer chamber, and which chambers are offset with respect to each other.

1,314,040. CENTERING. WILLIAM M. BELT and HENRIET C. SMITH, Bloomington, Ill., assignors, by means assignments, to American Concrete Forms Company, Bloomington, Ill., a Corporation of Illinois. Filed Feb. 17, 1917. Serial No. 149,162. 20 Claims. (Cl. 25—131.5.)



2. A centering for an arch rib comprising a plurality of connected mold sections having bottoms and sides adapted to be set up to form a rigid arch rib ring, and means to effect the partial collapse of said arch rib ring.

1,314,041. WASHING-MACHINE. GEORGE S. BLAKESLEE, Chicago, Ill. Filed Aug. 24, 1916. Serial No. 116,508. 7 Claims. (Cl. 141-7.)



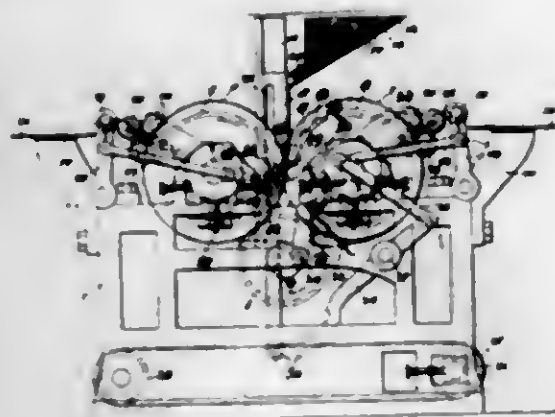
1. A washing machine comprising a tank adapted to contain water, means for supporting the articles to be washed, and paddle wheels opposite each other at opposite sides of said tank for throwing water from said tank upon the articles to be washed, one of said paddle wheels being arranged to throw water upward and across the articles, and the other to throw it downward and across said articles.

1,314,042. MILK-STRAINER. CLAUDE L. BRAINARD, Mount Vernon, S. D. Filed Feb. 1, 1918. Serial No. 214,973. Renewed Dec. 18, 1918. Serial No. 267,403. 3 Claims. (Cl. 210-16.)



1. A milk strainer comprising a tray adapted to set over the top of the milk pail and having a straining medium in its bottom and a part detachably connected with the bottom of said tray and having a sediment chamber located to one side of said straining medium.

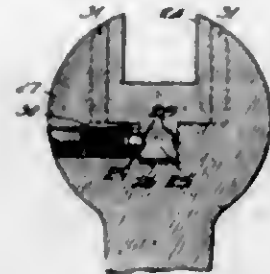
1,314,043. PRINTING-MACHINE. HARRY W. BREWER, St. Louis, Mo. Filed Dec. 11, 1917. Serial No. 206,588. 24 Claims. (Cl. 101-38.)



1. In a printing machine, a frame, printing cylinders supported in said frame for rotation in parallel planes, printing dies on said cylinders arranged to imprint successively on the work supported between the cylinders, mechanism for applying ink to the printing dies on said cylinders, feeding mechanism for advancing and supporting work between said cylinders to receive printing impressions from the printing dies, a lever supported by the

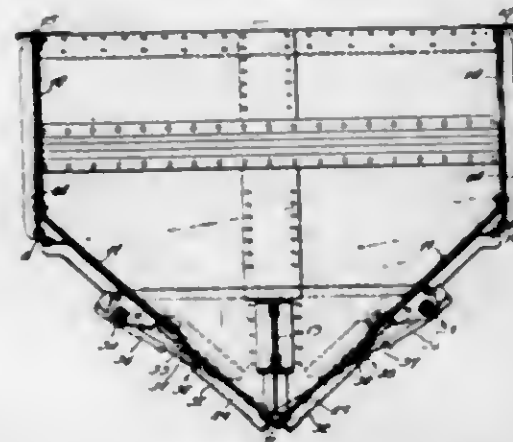
frame independently of the feeding mechanism and normally disengaged from the work on the feeding mechanism, and means for operating said lever to engage the work to remove the work from the feeding mechanism after printing has been completed.

1,314,044. WRENCH. JOSEPH E. BUKAR, Chicago, Ill. Filed Dec. 14, 1918. Serial No. 266,799. 7 Claims. (Cl. 81-185.)



1. A wrench comprising, in combination, a stock having an integral jaw portion at one end, a U-shaped supplemental jaw member adapted to fit into the aforesaid jaw, the outer sides of the legs of said U-shaped supplemental jaw member and the inner faces of the sides of said integral jaw having interlocking portions adapted to retain said jaws in the same plane, and a spring pressed locking device to hold said supplemental member in place.

1,314,045. HOPPER-CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill. Filed Dec. 16, 1918. Serial No. 267,000. 9 Claims. (Cl. 105-250.)

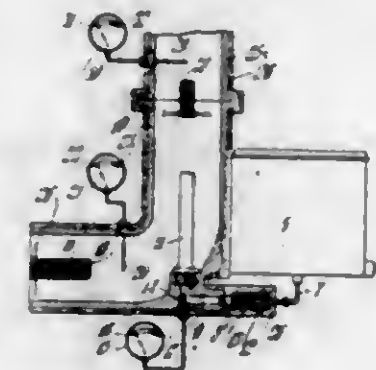


1. In a car of the character described having a hopper provided with a discharge opening, the combination with opposed center dumping doors having meeting free edges and together adapted to close said discharge opening, of an operating shaft on each side of the car, and connections from each shaft to the center dumping door on the opposite side of the center of the car, all of said connections being disposed entirely outside of the hopper.

1,314,046. CARBURETING APPARATUS. GEORGE W. CHASTOT, Warehouse Point, Conn. Filed Jan. 31, 1917. Serial No. 145,819. 1 Claim. (Cl. 267-30.)

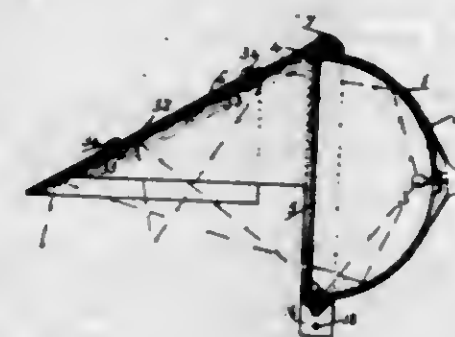
The combination with an engine, of an intake pipe therefor provided with an air inlet, means to supply fuel to said pipe, whereby fuel and air may mix to form an explosive mixture, means to heat the air to a predetermined temperature prior to its admixture with the fuel, means to heat the fuel to a predetermined temperature prior to its admixture with the air, whereby each constituent of the fuel mixture may be separately heated to that temperature best calculated to effect a proper mixture, means to independently control each heating means to maintain the

respective mediums heated by the latter at substantially such predetermined temperatures, each of the heating means being capable of performing its function at all



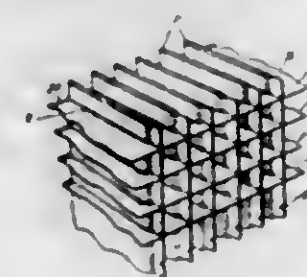
times, and means to maintain the mixture at a substantially constant temperature until it is delivered to the engine.

1,314,047. DETACHABLE REFLECTOR FOR VEHICLE LAMPS. FRED R. COATS, Springfield, Ill. Filed May 23, 1918. Serial No. 236,500. 3 Claims. (Cl. 240-48.4.)



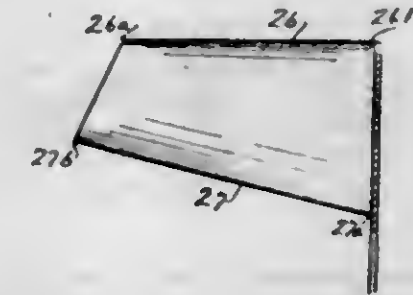
1. In an appliance of the class described, the combination of a lamp body equipped with a permanent reflector; a supplemental reflector in cooperative relation to the permanent reflector of the lamp body; and an extension adjustable on the supplemental reflector, to vary the scope of the supplemental reflector.

1,314,048. RADIATOR. THOMAS N. CORFELDER, Edgewood, Pa., assignor to Liberty Radiator Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 1, 1918. Serial No. 242,744. 3 Claims. (Cl. 257-130.)



1. In a radiator, a core comprising flat tubes provided with straight smooth inner and outer surfaces and being of a width to extend substantially from the front to the rear of the core and having one edge provided with notches at intervals, in combination with fins provided with slots to receive the tubes and having unbroken front and rear edges, one of said edges being engaged in the notches in the tubes and the other edge folded against the tubes to hold the first named edge in said notches.

1,314,049. CENTRIFUGAL FAN. ALBERT A. CRIQUI, Buffalo, N. Y. Filed June 12, 1917. Serial No. 174,394. 2 Claims. (Cl. 230-11.)



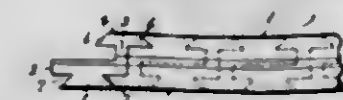
1. A centrifugal fan having a wheel provided with a plurality of blades, the entire surface of each of said blades being formed from a portion of the surfaces of two solids having curved surfaces and a plane connecting the surfaces of the solids.

1,314,050. CONNECTOR-SWITCH. HARRY A. DOUGLAS, Bronson, Mich., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich., a Corporation of Michigan. Filed Oct. 24, 1917. Serial No. 198,338. 1 Claim. (Cl. 173-355.)



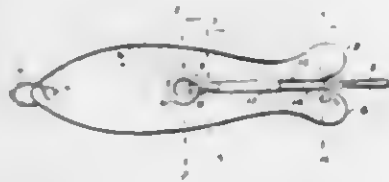
A connector switch including a shell formed at its forward end for engagement with a circuit continuing element; a circuit continuing element coupled with the forward end of the shell and carrying a contact upon its rear end; a contact carrier coupled with the shell rearwardly of said circuit continuing element; a contact upon the forward end of the contact carrier engageable with the contact upon the rear end of said circuit continuing element; a rearwardly spring pressed contact carried by said contact carrier at its rear end and electrically connected with the contact at the forward end of the contact carrier; a switch member carried by the structure and which is inclusive of a movable contact carrier; a contact upon the latter contact carrier; and a circuit continuing conductor mechanically and electrically coupled with the latter contact which is engageable with and formed to be held by the aforesaid rearwardly spring pressed contact to close circuit, the latter contact carrier having a formation at one side of the contact carrier thereby that is engageable by said rearwardly spring pressed contact to maintain the circuit open.

1,314,051. METHOD OF MAKING COMMUTATOR SEGMENTS. ALBERT E. DOMAN, Syracuse, N. Y. Filed Dec. 18, 1918. Serial No. 267,366. 5 Claims. (Cl. 29-148.)



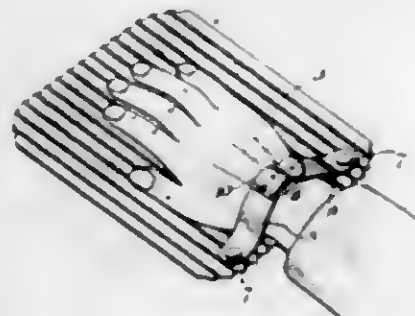
1. The herein described method of making a commutator segment consisting in forming winged-heads on both edges of the segment and then compressing the wings of the outer head toward each other.

1,314,052. ARTIFICIAL FISH-BAIT. FREDRICK WILLIAM DRANOW, Sausalito, Calif. Filed Jan. 4, 1919. Serial No. 260,723. 3 Claims. (Cl. 43—30.)



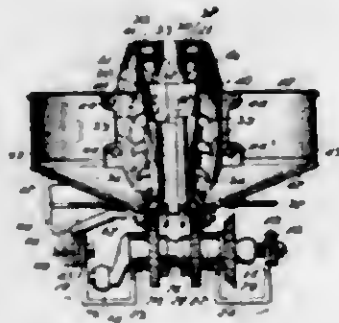
3. In combination with a hook of which the shank has an eye, a concavo-convex spoon, having holes therethrough, of which one is in front of the other and through both of which the shank of the hook extends, the portion of the spoon between said holes being curved to lie on the opposite side of said shank from the remainder of the spoon.

1,314,053. HAND-SHIELD. HOWARD L. EISLES, Philadelphia, Pa. Filed Jan. 18, 1919. Serial No. 271,773. 3 Claims. (Cl. 2—104.)



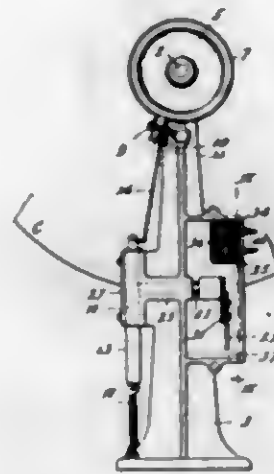
3. A hand shield comprising a flap of flexible material adapted to be mounted on the front of the hand of the user and a wrist strap adapted to pass over the back of the hand, each end of said wrist strap being connected to said flap by means of a separable snap fastener whereby one or both ends of said strap will automatically become detached when more than normal strain comes thereon, said strap being made in two parts connected by a buckle to enable said strap to be varied in length.

1,314,054. PLANTER. ERNST E. ENGELUND, Moline, Ill., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 2, 1919. Serial No. 286,832. 18 Claims. (Cl. 221—122.)



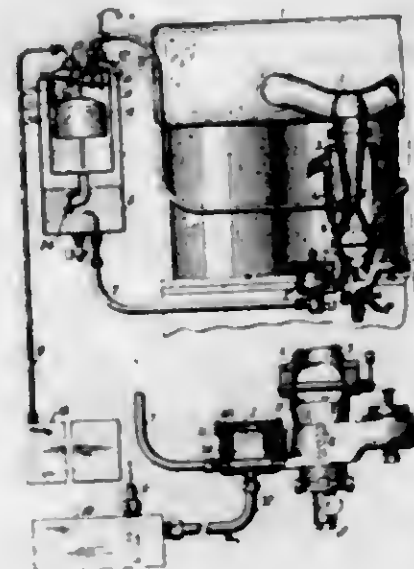
1. In a planter, the combination of two seed-hoppers arranged side by side, a rotating member in each hopper for successively raising seeds in the hopper to and discharging them through an opening in the wall and near the top of the hopper, a chute into which seeds from both hoppers are discharged, and means for rotating said seed raising members.

1,314,055. AUTOMATIC CUT-OUT FOR FILM-REWINDERS. EARL H. FRANCIS, Kansas City, Mo. Filed Nov. 20, 1917. Serial No. 202,922. 3 Claims. (Cl. 242—55.)



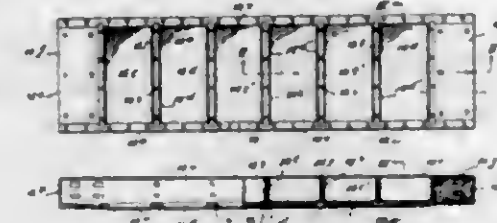
1. The combination with a rewind reel, a second reel from which a film is to be taken by said rewind reel, and a motor and its circuit for driving the rewind reel, of a switch for controlling the motor circuit, a rockable member upon which said switch is fixed, a pinion fixed to said rockable member, mechanism controlled by one of the reels to rotate said pinion in a direction to close the switch, and means to cause said mechanism to open the switch after the film has been unwound from the second reel.

1,314,056. FUEL-CHARGE-SUPPLY APPARATUS. JOHN GOOD, Brooklyn, N. Y., assignor to Good Inventions Co., Brooklyn, N. Y., a Corporation of New York. Original application filed June 1, 1916. Serial No. 101,017. Divided and this application filed May 23, 1917. Serial No. 170,413. 3 Claims. (Cl. 158—36.)



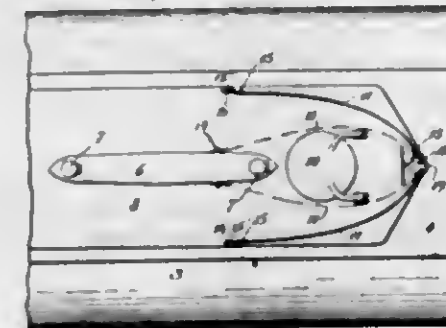
1. The combination with an internal combustion engine, of means for supplying combustible thereto comprising a local service tank, a charge-forming device supplied thereby, a Venturi tube interposed between and connecting said device with the engine, and a suction pipe connected to the throat of said Venturi tube and adapted to communicate the suction effect therein to said tank to fill the same with fuel.

1,314,057. BRICK-MOLD. HENRY W. B. GRAHAM, New London, Ohio; Margaret Graham executrix of said Henry W. B. Graham, deceased; said inventor assignor to The Arnold-Creager Company, New London, Ohio, a Corporation of Ohio. Original application filed Mar. 1, 1916. Serial No. 81,425. Divided and this application filed Oct. 27, 1916. Serial No. 127,981. 9 Claims. (Cl. 25—119.)



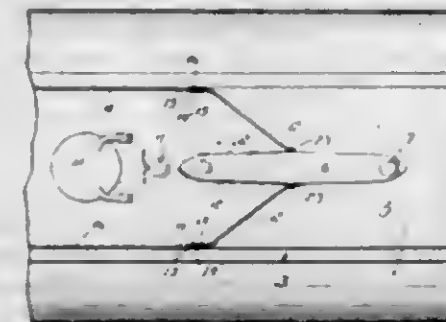
1. A brick machine mold having at its opposite ends laterally extending members, one surface of each of said members being relatively wide and flat from end to end and adapted to serve as a bearing or supporting surface for the mold.

1,314,058. SPRAY-SHIELD FOR SUBMARINE BOATS. HUGO E. GRISHAMER, Groton, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Oct. 8, 1917. Serial No. 195,267. 11 Claims. (Cl. 114—16.)



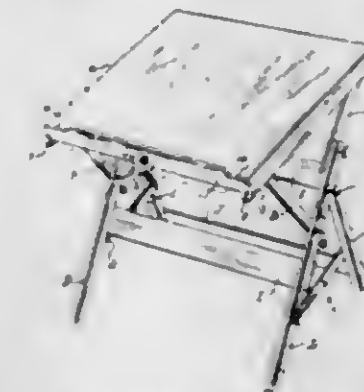
1. In a submarine boat, in combination, an exterior navigating station, an upstanding structure comprising a pair of movable sections each of which is pivoted about a vertical axis for movement toward and away from the other, and means for securing the sections to the boat in a plurality of different positions in one of which the structure forms a spray shield for said station during surface propulsion; substantially as described.

1,314,059. SPRAY-SHIELD FOR SUBMARINE BOATS. HUGO E. GRISHAMER, Groton, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Oct. 8, 1917. Serial No. 195,268. 6 Claims. (Cl. 114—16.)



1. In a submarine boat, in combination, an exterior navigating station, and a collapsible spray-shield for protecting the station comprising fixed sheers and a plurality of wall members substantially conforming in contour to the sheers and movably connected to the boat on opposite sides of the sheers and adapted to be swung in to conform substantially to the contour of the sheers; substantially as described.

1,314,060. DISAPPEARING EDGE STRIP FOR DRAFTING-TABLES AND THE LIKE. JOHN A. HACKETT, Scranton, Pa., assignor to Technical Supply Company, Scranton, Pa., a Corporation of New Jersey. Filed July 12, 1918. Serial No. 244,574. 10 Claims. (Cl. 45—131.)



1. A guard for the edge of a work surface, consisting of a strip arranged to follow said edge and to project thereabove in one position, a substantially central pivot for said strip holding the same so that it can be inverted end for end to clear said work surface when reversed, and means adapted to maintain the strip in either of its adjusted positions.

1,314,061. ABRASIVE MATERIAL AND METHOD OF MAKING SAME. NATHAN C. HARRISON, Newtonville, Mass. Filed Apr. 5, 1919. Serial No. 288,377. 10 Claims. (Cl. 204—64.)

1. An abrasive material composed of diaspore, particles of iron, and ground coke.
7. The process of making abrasive material which consists in grinding coke and particles of iron, mixing said ground coke and iron with diaspore, and then fusing the mixture in an electric furnace.

1,314,062. CONNECTION FOR TRACK APPLIANCES. STANLEY W. HAYES, Richmond, Ind. Filed June 3, 1918. Serial No. 237,870. 1 Claim. (Cl. 246—163.)

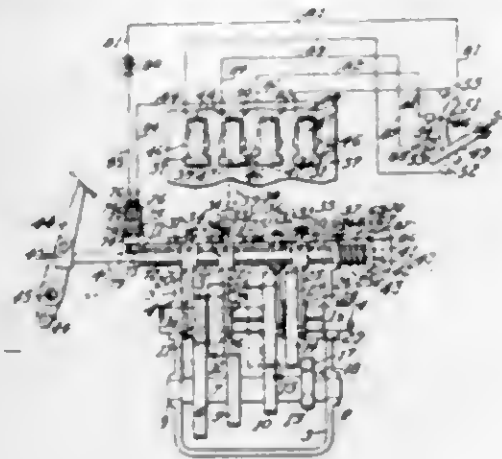


The combination with the movable member of a track appliance, of a connection lug thereon provided with a bore and with a cross-slot intersecting the same, said bore being adapted to receive an operating rod, and a fastener engaging said rod and occupying the cross-slot, said slot being of relatively narrow width with reference to the diameter of the bore and of greater radial dimension than the fastener.

1,314,063. SPEED-CONTROLLING MECHANISM FOR AUTOMOBILES. MERRION J. HUGGINS, New York, N. Y., assignor to Automotive Development Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 30, 1915. Serial No. 48,021. 52 Claims. (Cl. 74—58.)

1. In an automobile, the combination with a drive gear, and a transmission gear of a shifting device for said gears,

a spring for actuating said shifting device, mechanical means for compressing said spring, and means to operate said mechanical means to release said spring to permit it



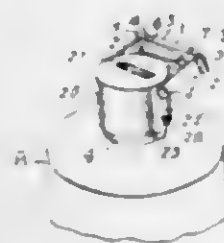
to actuate said device to mesh said gears by a free and independent action of the spring independent of movement or control of the mechanical means for compressing said spring.

1,314,064. RADIATOR. JOHN A. IRWIN, Detroit, Mich., assignor to American Pressweld Radiator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1918. Serial No. 211,733. 7 Claims. (Cl. 237-139.)



3. A radiator comprising a tubular member notched transversely in its upper side, a thin wide sheet metal radiator section including a pair of sides joined to each other along their margins except at their lowest points where they are spaced apart to form an opening which registers with the notch, the sides being welded to the walls of the notch in the tubular member.

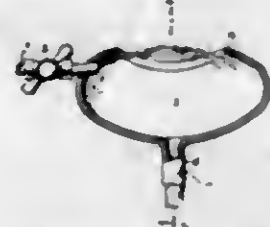
1,314,065. CLOSURE FOR TUBES. CLARENCE S. JACKSON, Brooklyn, N. Y. Filed May 22, 1918. Serial No. 235,906. 8 Claims. (Cl. 221-60.)



1. A closure for collapsible tubes including a substantially U-shaped closure frame member, said frame member

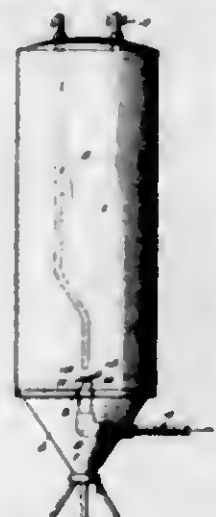
comprising a body portion and a plurality of arms projecting at an angle from said body portion, the said frame member being provided at the junction of the arms and body portion with inwardly facing opposed and laterally extending grooves opening through one edge of each of the arms, and a closure member provided with outwardly projecting flanges mounted in said frame member, the said flanges of the closure member being slidable into and frictionally held within the said grooves in the frame member.

1,314,066. SANITARY DRINKING FOUNTAIN. WILLIAM G. JACKSON, Richmond, Calif. Filed Mar. 15, 1919. Serial No. 282,862. 1 Claim. (Cl. 137-109.)



In a sanitary drinking fountain, in combination with a supply pipe discharging water obliquely upward, a bowl into one end of which the discharge pipe enters, the portion of the bowl opposite the discharge pipe being sufficiently inclosed to retain the water issuing from the discharge pipe and impinging thereagainst, the portions of the walls of the bowl between which is the highest point of the stream of water issuing from said discharge pipe being recessed from the upper edge downward to facilitate drinking from said stream, said recessed portions being sufficiently remote from said discharge pipe to prevent saliva from the mouth of a drinker dropping on to a part of said pipe accessible to the issuing stream of water.

1,314,067. AUTOMATIC SHUT-OFF FOR STAND-BOILERS. CHARLES O. LARSON, Sioux Falls, S. D. Filed Apr. 11, 1919. Serial No. 289,340. 5 Claims. (Cl. 126-362.)

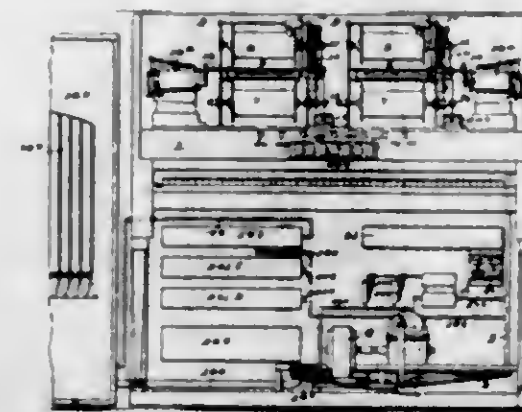


3. In a stand boiler, an inflow pipe, a draw-off pipe, and an outflow pipe to a heating area, said inflow pipe terminating over the outflow pipe and said outflow pipe having its upper edge cut on a bias to form a valve seat, a pivoted valve mounted to engage the seat for partially closing the outflow pipe, and means carried by the valve normally holding the valve open.

1,314,068. DOUBLE-TRACKER MUSICAL INSTRUMENT. LOUIS S. LOCKWOOD, Buffalo, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed Jan. 20, 1916. Serial No. 73,150. 17 Claims. (Cl. 84-166.)

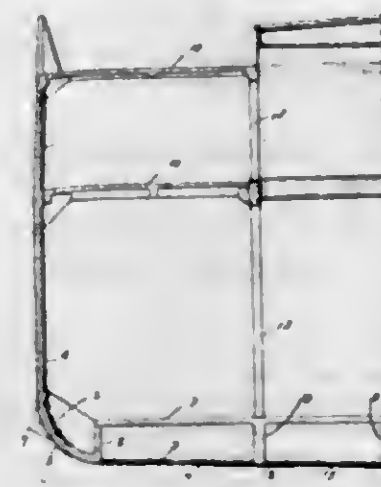
1. In an instrument of the character described, the combination of a wind chest, a plurality of tracker mecha-

nisms each including a tracker board and music and take-up rolls associated therewith, driving mechanism including shiftable members for alternately rotating the rolls of each tracker in opposite directions, playing pneumatics for moving said shiftable members into playing position, a pneumatic cut-off for each tracker to disconnect the same from the wind chest, the playing pneumatic and the cut



off of each tracker being connected together to act in unison, valve mechanism for controlling said playing pneumatics and cut-offs, rewind pneumatics for moving said shiftable members into rewind position, valve mechanism for controlling said rewind pneumatics, and pneumatic actions controlled by the trackers for actuating said valve mechanisms.

1,314,069. SHIP CONSTRUCTION. JUSTIN McGRATH, San Francisco, Calif. Filed Apr. 16, 1918. Serial No. 228,941. 6 Claims. (Cl. 114-65.)



1. A ship having a steel frame, a bottom plating of steel, spaced inner and outer knuckle plates at sides of the bilge forming pockets and reinforced concrete sides extending into said pockets.

1,314,070. DRAINAGE-VALVE FOR DEEP-WELL PUMPS. WILLIAM H. MCKINNAICK, Tulsa, Okla. Filed Dec. 7, 1918. Serial No. 265,762. 9 Claims. (Cl. 103-60.)

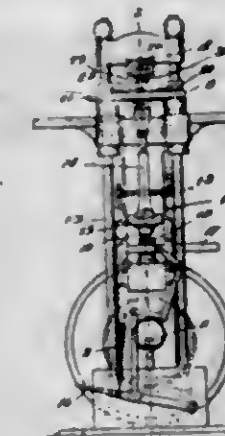
9. The combination with a pump tube, of an annular hollow member mounted upon the pump tube and communicating therewith and having a longitudinally extending bore disposed exteriorly to the pump tube but in communication with the interior of the member, a sleeve mounted in the upper end of the bore, a tubular valve mounted to and longer than the sleeve and longitudinally shiftable therethrough, the inner end of the valve being open, a spring urging the valve upward to thereby cause the lower perforations to be closed by the sleeve, and a member slidably mounted upon the pump tube and having means for

frictionally engaging the wall of a well casing, said member when the pump tube is raised relative to the member engaging the valve to open it, the pump tube being pro-



vided with means for causing the coincident downward movement of said slidable member but permitting the independent upward movement of the pump tube and valve.

1,314,071. HEELING-MACHINE. FREDERICK A. EMERY, Haverhill, Mass. Filed Nov. 4, 1915. Serial No. 59,530. Renewed Jan. 6, 1919. Serial No. 269,970. 20 Claims. (Cl. 1-36.)



1. A heeling-machine comprising a nail-plate having two sets of passages therethrough, one arranged for the attaching nails of a base heel-section and the other for the nails of a top-heel-section, and a head having two gangs of drivers thereon, arranged to be passed through the corresponding passages of said plate, the driver gang for the top-section passages being arranged to extend beyond the engaging face of the nail-plate, and the driver gang for the base-section to extend approximately flush with said face, at the ends of their respective nail-driving operations.

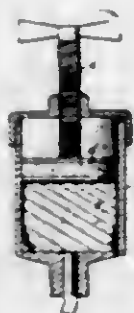
1,314,072. TOOL. ALBERT J. ENSTENESA, Terry, Mont., assignor of one-half to Sydney W. Loomis, Sioux Falls, S. D. Filed Jan. 23, 1918. Serial No. 213,382. 3 Claims. (Cl. 24-134.)



3. A tool, comprising in combination, a pair of tubular telescopic correlatively extensible members, a tubular stem carried by the end of one of the members for fixing the members in operative position, a clamp head upon

the end of the other member, a hand grip slidable on the members, and means connecting the hand grip to the clamp head, movement of the hand grip closing the jaws of the clamp head and continued movement of the hand grip causing the relative movement of the members.

1,314,073. GREASE-CUP. FRANK FORSHER, Flint, Mich., assignor, by mesne assignments, to Copeman Development Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 8, 1918. Serial No. 227,189. 2 Claims. (Cl. 184—38.)



1. A grease cup, having in combination, a barrel provided with a cap, a plunger and screw stem passing through the cap, and a frusto-conical collapsible grease capsule whose base is substantially the diameter of the barrel, whereby clearance is allowed for the insertion of the smaller end in the barrel and the larger end fits tightly in the barrel to act as a packing to prevent the escape of the grease behind the capsule.

1,314,074. SHOE. JOHN B. GENTILE, Manchester, N. H., assignor, by mesne assignments, of two-fifths to Carl Gust Davidson and two-fifths to Joseph Barile, Manchester, N. H. Filed Mar. 19, 1917. Serial No. 155,055. 1 Claim. (Cl. 36—48.)

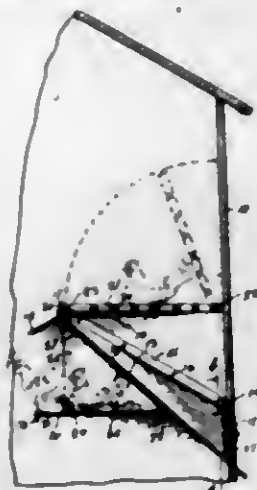


A shoe comprising a single piece of leather cut in the general shape of a capital letter J, the edge of the upper extremity of the stem of the same and the edge of the hook-portion facing the stem being of like curvature, and such line of curvature being a double-reverse curve, the edge of the stem portion facing the hook portion having its intermediate portion deeply concave, both this concave edge and the opposite edge of the stem being substantially concentric, said concave edge forming the shoe-opening when this piece of leather has been stitched together and attached to a sole.

1,314,075. COMBINED ROOST AND NEST. CALVIN L. GILMORE, Dallas, Tex. Filed Apr. 2, 1919. Serial No. 286,880. 3 Claims. (Cl. 119—22.)

1. In combination with a supporting structure having an opening provided with a removable closure, of a combined roost and nest consisting of an inclined chute, said chute having slanting end walls provided with flanges secured to said supporting structure, said chute extending through said opening, the upper forward portion of said chute being doubled upon itself to provide a reinforcing rib having a forwardly extending hook, a rectangular frame carried by said supporting structure and having inwardly turned ends fixed upon said rib, a roost con-

sisting of end bars pivotally mounted upon said frame and having notched forward ends for engaging said inwardly turned ends of said frame, parallel roost bars carried by



said end bars, a base positioned below said chute, vertical partitions carried by said base and supported by said chute, thus forming independent nests, and said hood extending in front of said nests for protecting the same.

1,314,076. MEDICATED SALT BRICK. LAVIN N. GLOVER, Bailey, N. C. Filed Dec. 1, 1910. Serial No. 134,467. 2 Claims. (Cl. 167—10.)

2. A medicated salt brick composed of gentian, ten grains, aux vomica, ten grains, rhubarb ten grains, saltpeter nine grains, sulfur twenty-one grains, copperas fifteen grains, lime two ounces, and dairy salt two and seven twelfths pounds, substantially in the proportions set forth.

1,314,077. TRACTOR-DRIVE. CHARLES L. GREEN, San Bernardino, Calif. Filed Aug. 21, 1918. Serial No. 250,750. 2 Claims. (Cl. 21—150.)



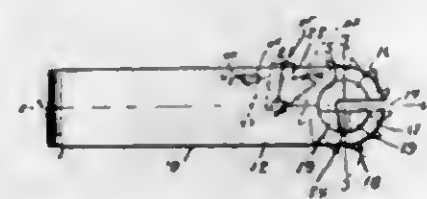
1. In a tractor drive, a traction tread belt comprising a plurality of endless cables; bearing plates mounted upon the cables edge to edge; each bearing plate comprising an inner section; an outer section wider than the inner section; there being grooves in the meeting faces of the sections to receive the cables; bolts inserted through the inner and outer sections for clamping the sections together upon the cables; and there being sprocket openings through the centers of the bearing plates.

1,314,078. SHANK AND HANDLE. MERRILL WILKINS, Iliac, Flint, Mich., assignor, by mesne assignments, to Copeman Development Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 22, 1918. Serial No. 229,948. 8 Claims. (Cl. 74—33.)



1. A handle and shank, comprising a shank provided with projecting portions and a handle in the form of a V shaped metal piece folded upon the projections in the shank to embed the same in the handle.

1,314,079. WIRE-SPlicing TOOL. HARRY H. HENNINGER, Sheffield, Iowa. Filed Nov. 14, 1917. Serial No. 202,032. 2 Claims. (Cl. 140—122.)



2. A wire splicing tool comprising a plate having longitudinal slots formed through its end portions, one of the slots being inwardly enlarged and constituting a bearing, the plate having a lip struck therefrom and ranging longitudinally of the plate in the direction of the bearing, the plate being bent upon itself with resultant spaced side members and a connecting bight and with the slots in registration, a ratchet wheel having a cylindrical hub projecting from one side face and rotatably fitted in the bearing, the side faces of the ratchet wheel being in rotatable contact with the spaced side members of the plate, a bolt for holding the side members of the plate against separation and engaged through them between said bearing and lip, a pawl pivoted upon the bolt between the side members of the plate, and a spring encircling the bolt and having its end portions engaged respectively with the pawl and the lip to hold the pawl yieldably in engagement with the ratchet wheel.

1,314,080. CORN-HEADING MACHINE. MARION E. KIRKPATRICK, Apache, Okla. Filed Apr. 5, 1916. Serial No. 89,207. 1 Claim. (Cl. 56—131.)

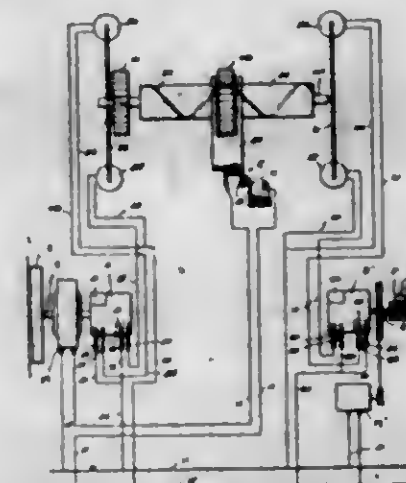


In a device of the class described, the combination of a supporting machine, a supporting frame carried by said machine and consisting of a base, drive shafts extending vertically from said base, means for rotating said shafts, a division plate having vertical bearings directly secured upon its ends and engaging the said shafts for steadying said shafts, said division plate being carried by said base, whereby the plate and shafts will reinforce each other, said division plate having cut away portions at its ends communicating with said base and directly below said bearings, a recess portion extending inwardly beyond one of the cut away portions, a knife carried upon one shaft and extending into the recessed portion, sprockets carried by said shaft and extending above said plate and also into said cut away portion, conveyor chains passing around said sprockets, a supporting plate extending parallel to said first mentioned plate, blocks secured to the first mentioned plate and to the second mentioned plate for properly supporting the second mentioned plate from the first mentioned plate and a guide plate fixed upon said base and extending parallel to said second mentioned plate thus forming a restricted passage between the second mentioned plate and the guide plate to prevent stalks being conveyed from falling over and clogging the device.

1,314,081. SYNCHRONIZING APPARATUS. LADISLAV O. KORA, Middletown, Pa. Filed Apr. 9, 1915. Serial No. 20,237. 10 Claims. (Cl. 172—293.)

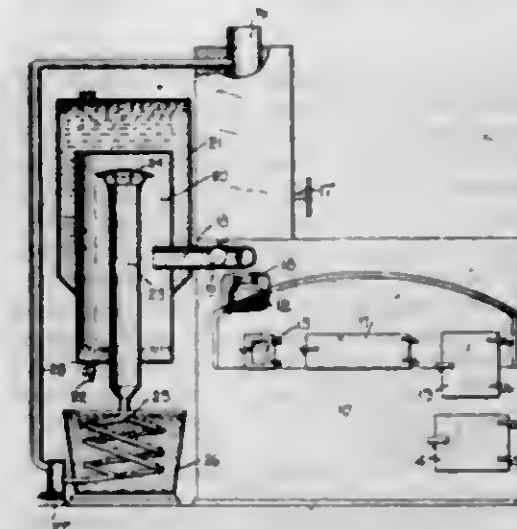
1. In an apparatus of the class described, the combination of two moving elements, a device rotated intermittently in one direction by one of said elements, a second

device adapted to be intermittently rotated in the same direction by the other element, means for effecting relative longitudinal movement between the devices when one of



said elements moves faster than the other, and means actuated by such relative movement for controlling movement of one of said elements.

1,314,082. APPARATUS FOR SECURING ALCOHOL FROM BAKING BREAD. JOSEPH KATZAK, Gallup, N. Mex., assignor of one-third to Peter Kitchen and one-third to Joseph Ivor Plasek, McKinley county, N. Mex. Filed Apr. 6, 1918. Serial No. 227,052. 1 Claim. (Cl. 195—6.)

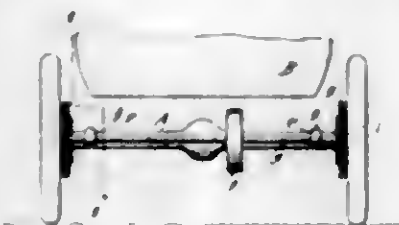


An apparatus of the character described comprising a bake oven, a flue leading from the upper portion thereof and provided with a damper, a drum into which said flue discharges having a tap at its bottom and closed ends, a water filled drum disposed around the first named drum and acting as a water jacket, a third drum disposed within the first drum and open at its top and extending through the bottom of the first named drum, a worm into which the third named drum discharges and disposed within a water container, a container into which the worm discharges having a tap whereby the contents thereof may be withdrawn, and a vent pipe leading therefrom.

1,314,083. POWER ATTACHMENT. GEORGE W. LANG, Litchfield, Nebr. Filed Oct. 17, 1918. Serial No. 258,535. 1 Claim. (Cl. 180—53.)

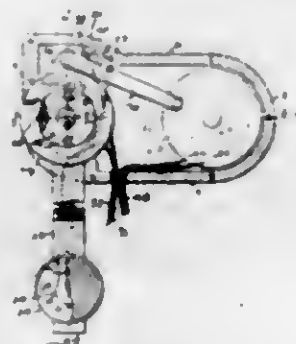
In a power attachment for automobiles the combination with a pair of ring gears, and means for clamping them to the brake drums of the rear axle; of a power shaft having pinions at its ends and a pulley keyed thereon intermediate its ends, shaft hangers comprising elongated bodies having cylindrical bearings at their outer ends through which said shaft extends the inner ends of said bodies being

arched to fit upon the rear axle casing, and means carried by said arched portions for releasably holding the same upon the axle casing, whereby said pinions are releasably



held in engagement with said ring gears, thus allowing rotary motion to be imparted through said gears and pinion to said shaft and said pulley.

1,314,084. DIRECTION-INDICATOR. WILLIAM GEORGE McMILLAN, Los Angeles, Calif. Filed Mar. 14, 1917. Serial No. 154,840. 1 Claim. (Cl. 177—329.)



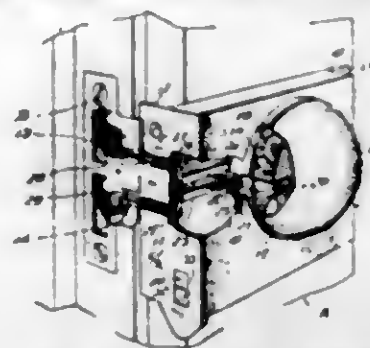
In an automobile signal, a housing, a shaft mounted in the housing, a bearing loosely mounted upon the shaft, an arm extending radially from the bearing, a semaphore head keyed upon the shaft, a second arm extending outwardly from the head and extending into the plane of the outer end of the first arm, a lug extending from the housing to engage the outer end of the first arm and limit the swing in an outward direction, and a spring connecting the first arm to the housing the tension of the spring being exerted to hold the arm against the lug, so that when the semaphore head swings one way the second arm will swing away from the first arm, and when the semaphore head swings the other way the two arms will come into contact.

1,314,085. TAILOR'S RULE. FRANK MASTRANGELO, Fitchburg, Mass. Filed Mar. 5, 1919. Serial No. 280,802. 4 Claims. (Cl. 33—11.)



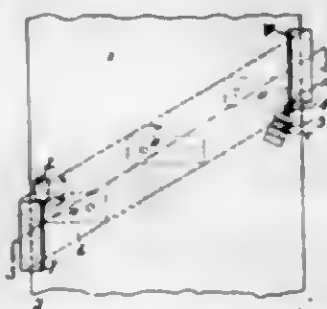
1. A tailor's rule, comprising an elongated body, one end thereof having a gradual compound curved portion, whereby markings on trouser legs may be indicated to form a scoop in the front portion of the trousers leg by drawing a tailor's chalk adjacent the opposite edges of the compound curved portion, and the opposite edges of the body having scales of graduations arranged in opposite directions, the extremity of the compound curved end portion of the rule upon each face thereof being provided with graduations extending radially from the lower corner of the compound curved portion, whereby the angular disposition of the rule may be changed relative to the forward edge of the leg of the trousers, thereby governing the height of the scoop.

1,314,086. BURGLAR-ALARM AND LOCK. ALBERT MATTA and JAMES F. LESKO, Chicago, Ill. Filed Nov. 1, 1917. Serial No. 199,640. 10 Claims. (Cl. 116—61.)



1. A device of the class described, comprising a spring-actuated element adapted to extend into the path of the latching member of a lock and in yielding relation therewith so as to follow the direction of travel of said latching member, means whereby said spring-actuated element is controlled, an automatic alarm mechanism, means intermediate of the alarm mechanism and said spring-actuated element whereby operation of the alarm mechanism is controlled, and an auxiliary locking member adapted to be actuated when said spring-actuated element is permitted to move by the withdrawal of the latching member of the lock from latching position.

1,314,087. MUD-LUG. BERTON M. MATHIAS, Minneapolis, Minn. Filed May 16, 1918. Serial No. 235,214. 3 Claims. (Cl. 21—215.)



1. In a device of the class shown the combination with a wheel rim, of a bar formed to be positioned diagonally across the face of said rim and having its ends formed backwardly so as to engage below said rim when positioned thereon, an anchor clip on said rim to engage one end of said bar, and an adjustable anchor means carried by said rim to position the other end of said bar.

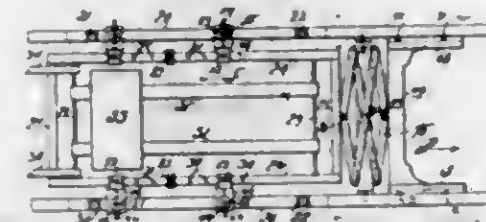
1,314,088. DANGER-SIGNAL. WILLIAM H. MATTHEW, Zanesville, Ohio. Filed July 8, 1918. Serial No. 243,747. 2 Claims. (Cl. 116—31.)



1. A hand operated signal for vehicles comprising a clamp, a bolt engaged through the clamp for actuation of

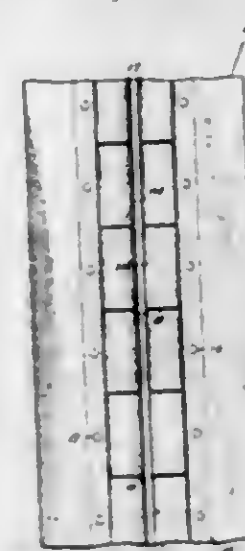
the jaws thereof, an eye carried by the bolt, a plate provided with a longitudinal series of openings, a bolt engaged in one of said openings and removably engaged in the eye, said bolt being engageable in any of the openings of the plate, a sleeve carried by the plate, a crank engaged in the sleeve for rocking movement, an arm carried by the crank, and a signal carried by the arm.

1,314,089. FOOTREST FOR ROCKING-CHAIRS. JOSEPH MELNICK, Bayonne, N. J. Filed Jan. 26, 1918. Serial No. 213,500. 5 Claims. (Cl. 155—9.)



1. In a foot rest the combination of a movable frame, a foot plate for the frame, means to move the frame, a counterweight coacting with the frame and a lany-tong interposed between the counterweight and frame.

1,314,090. INSULATION FOR REFRIGERATOR-CARS AND THE LIKE. JOHN R. MITCHELL, Evanston, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Mar. 4, 1918. Serial No. 220,321. 2 Claims. (Cl. 20—69.)



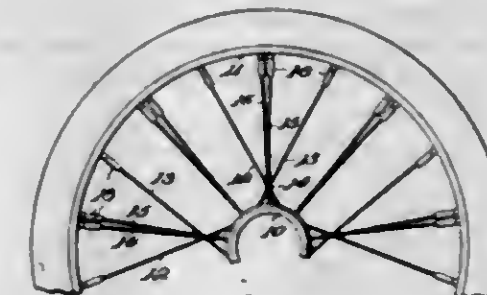
2. In a packing for refrigerator car doors and the like, the combination of a structural element formed with a recess extending along the line of closing, and a compressible packing extending along said recess and adapted to be engaged and compressed by an opposing structural element, one of said structural elements being a door, said packing comprising a flexible covering arranged over said recess and attached to the said recessed structural element, and a sheet metal spring attached along the side of said recess, and extending over the same along the inner side of the covering approximately in contact therewith from the edge of the recess to the free edge of the spring, and subdivided into a plurality of independently bendable sections.

1,314,091. MANIFOLD FOR INTERNAL-COMBUSTION ENGINES. HENRY H. MORETON, Stony Point, N. Y., assignor to Moreton Accessories Company, a Corporation of Delaware. Filed Dec. 11, 1917. Serial No. 200,611. 6 Claims. (Cl. 237—241.)



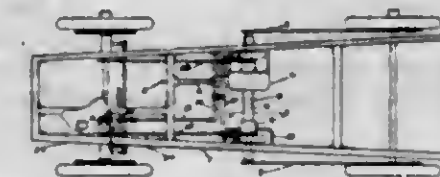
1. An improved manifold for internal combustion engines comprising an intake conduit having a plurality of spaced apart partitions therein forming vacuum pockets, and means for heating said conduit.

1,314,092. VEHICLE-WHEEL. HENRY H. MORETON, Stony Point, N. Y., assignor to Moreton Company, Inc., a Corporation of Delaware. Filed Apr. 11, 1918. Serial No. 227,989. 8 Claims. (Cl. 21—69.)



1. An improved wheel comprising a hub, a rim, driving and braking spokes connecting the hub and rim, and a plurality of sets of truss spokes connecting the hub and rim, each set consisting of a pair of spokes converging from the ends of the hub to the rim and a pair of spokes diverging from the hub to the rim.

1,314,093. FOUR-WHEEL-DRIVE TRUCK. JOHN H. PIPER, Larimore, N. D. Filed Jan. 28, 1918. Serial No. 214,224. 3 Claims. (Cl. 180—44.)

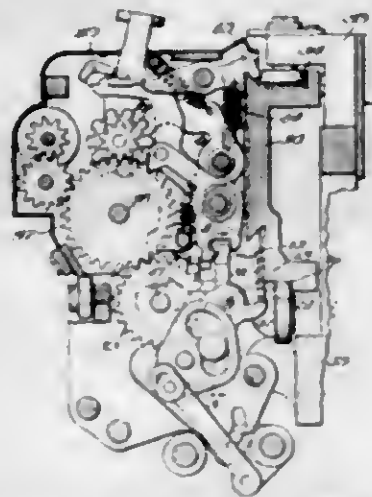


1. In a truck the combination of a frame, a differential gear housing, a jack shaft housing extending from each side of said differential gear housing, a jack shaft carried by each of said jack shaft housings, two sprockets carried by each of said jack shafts, mechanism actuated by a sprocket on one of said jack shafts for driving a front wheel; mechanism actuated by the other of the sprockets on the same jack shaft for driving a rear wheel, and a journaled mounting for one of said jack shaft housings positioned between the inner of said sprockets and said differential gear housing, said journaled mounting being carried by a frame member.

1,314,094. CALCULATING-MACHINE. ARTHUR F. POOLE, Kenilworth, Ill., assignor to Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed May 9, 1917. Serial No. 167,464. 21 Claims. (Cl. 235—69.)

2. In a calculating machine, the combination of a decimal carriage, an escapement for said carriage, a set of

keys operative on said escapement, and means to lock said carriage in position during the depression of any of said



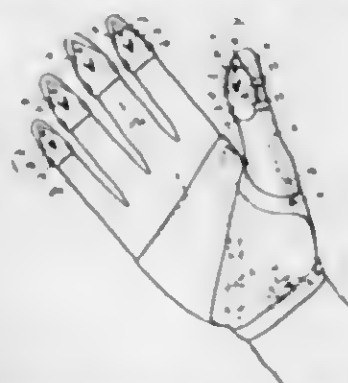
keys, said locking means floating in the framework to allow for inaccuracies in said escapement rack.

1,314,095. ANTENNA ARRANGEMENT FOR WIRELESS SIGNALING OR THE LIKE. GUSTAV RUTHA, Sayville, N. Y. Filed May 25, 1916. Serial No. 99,792. 2 Claims. (Cl. 250-33.)



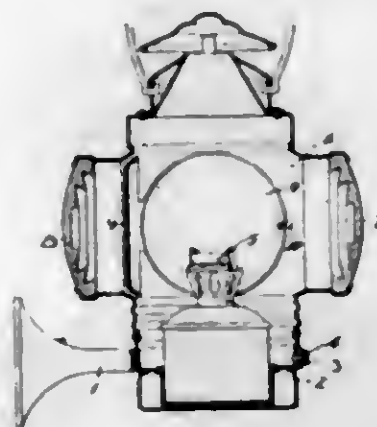
1. The combination in a wireless signaling system of an antenna circuit, a frequency changer located therein and means for changing the natural frequency of said antenna circuit to locate the potential node of said circuit into said frequency changer comprising a plurality of inductances and a capacity distributed over said circuit and proportioned relatively to each other substantially as described.

1,314,096. COTTON-PICKER. AMOS A. ROSA, Haskell, Okla. Filed Mar. 13, 1918, Serial No. 222,136. Renewed Feb. 5, 1919. Serial No. 275,249. 3 Claims. (Cl. 56-6.)



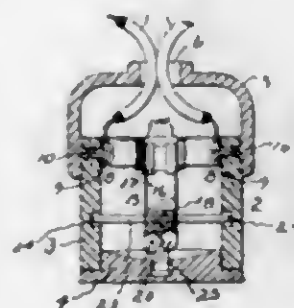
1. In a manual cotton picker of the class described, a finger piece comprising a pair of transversely curved plates, bent stamped up from one of said plates, and a finger strap for connecting said plates.

1,314,097. SIGNAL-LAMP. FURMAN D. SPEAR, New York, N. Y., assignor to Armspear Manufacturing Co., New York, N. Y., a Corporation of New York. Filed June 27, 1918. Serial No. 242,150. 5 Claims. (Cl. 240-24.)



1. In a lamp, a body having two sets of oppositely arranged light openings with glasses of corresponding color in one set and glasses of another color in the other set, both glasses of one set being arranged adjacent to each other, means for supporting the lamp for angular adjustment to present the desired set of glasses in the desired position, a source of light within the body, with means mounted within the lamp body and movable therein for cutting off the rays of light from the source of light to one or the other set of glasses at will.

1,314,098. ELECTRIC SWITCH. CLARENCE C. STIRLING, Hartford, Conn., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 14, 1918. Serial No. 249,759. 15 Claims. (Cl. 175-293.)

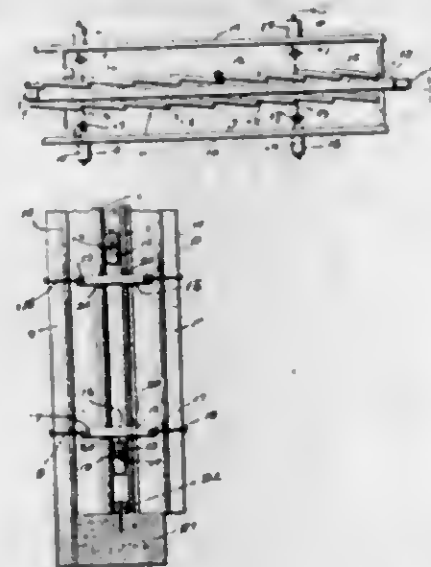


12. An electric switch comprising an actuator, a bodily movable switching member having resilient side branches, the actuator being connected with the switching member and the said branches having in turn overlapping feet provided with faces which converge at the outer ends of the feet, and a fixed stud, the actuator being adapted to cause said faces to engage the stud and thus separate said side branches and subsequently to free the same from the stud, the branches when freed reacting to cause a snap movement of the switching member.

1,314,099. FORM FOR HOLLOW MOLDED WALLS. JOE A. STUCKJARR and HARRY L. RAFFY, Columbus, Mont. Filed Jan. 9, 1919. Serial No. 270,349. 3 Claims. (Cl. 25-131.)

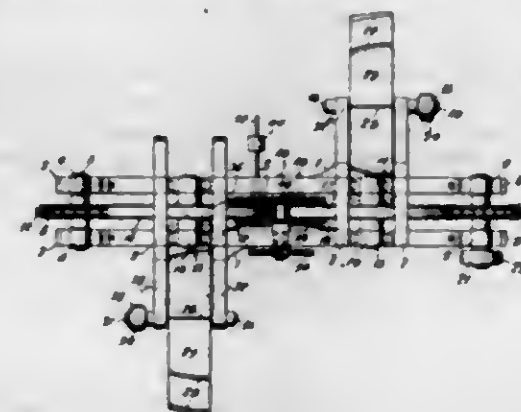
2. A form for hollow molded walls including outer sections, inner sections spaced therefrom and from each other, means extending through the inner sections to tie the

wall together and to be embedded in the wall, beveled abutting strips disposed horizontally between the inner sec-



tions, and clips embracing the ends of the pairs of strips to hold them in proper position between the mold sections.

1,314,100. MACHINE FOR SCRAPING VEGETABLE STALKS. TIMOTEO VILLAMOR, Merida, Mexico. Filed Aug. 6, 1918. Serial No. 248,532. 1 Claim. (Cl. 13-18.)

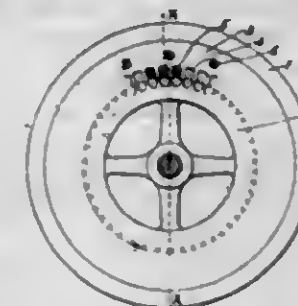


The combination in a machine for scraping vegetable fibrous material of a carrying mechanism for the material; a plurality of scraping mechanisms; and a mechanism for shifting the material endwise during its travel and after it has been scraped by one scraping mechanism, into another position in the carrying mechanism to have its unscraped portion wholly scraped by a succeeding scraping mechanism; the carrying mechanism comprising three aligned under chain-engaging wheels, an endless chain, and a pair of aligned upper chain-engaging wheels located to cooperate with said chain; and said succeeding scraping mechanism comprising a revoluble wheel having an axis at an angle to the aligned chain-engaging wheels and positioned at one side of such wheels; and the mechanism for shifting the material endwise comprising a shifter wheel and gripper finger concaved to conform to the curvature of the periphery of the shifting wheel.

1,314,101. HIGH-FREQUENCY GENERATOR FOR TELEGRAPHY AND TELEPHONY. GEORG VON ARCO and ALEXANDER MEISNER, Berlin, Germany. Original application filed Mar. 6, 1914, Serial No. 822,901. Divided and this application filed Mar. 23, 1917. Serial No. 156,895. 1 Claim. (Cl. 172-237.)

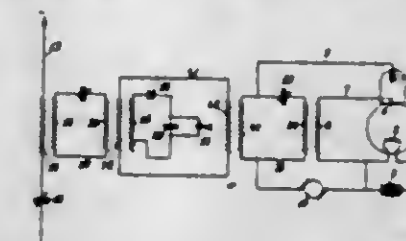
In a radio transmission station of the character described, a high frequency generator of the inductor type having an air gap the longitudinal axis of which has the direction of the axis of the rotor, and having a plurality

of stators and windings thereon, each stator winding being divided into a plurality of equal sections, the corresponding sections of all stators being joined into groups and



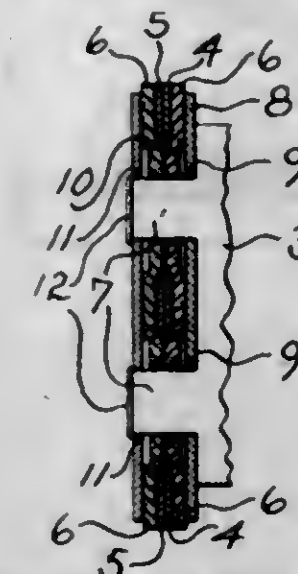
being arranged within each group electrically in parallel to each other, all of said groups being electrically arranged in series, and condensers disposed between said groups, and a common rotor for said stators.

1,314,102. CONNECTION FOR ELECTRIC RELAYS WORKING WITH IONIZED GAS-GAP. GEORG VON ARCO and ALEXANDER MEISNER, Berlin, Germany. Filed Jan. 10, 1914, Serial No. 811,366. Renewed July 1, 1918. Serial No. 242,891. 8 Claims. (Cl. 250-8.)



1. In an arrangement for amplifying high frequency alternating current impulses, the combination with an aperiodic amplifying relay having a primary and a secondary path, means for conducting the weak high frequency impulses through the primary path thereof, a receiving circuit and means for conducting the amplified high frequency impulses received at the secondary path to said receiving circuit, means associated with said receiving circuit for converting said high frequency impulses into and indicating them as low frequency impulses; of means for returning the amplified high frequency impulses to said primary path before they are conducted to said converting and indicating means.

1,314,103. INSULATING-WASHER. HENRY VORLES, Hartford, Conn., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 13, 1917. Serial No. 148,405. 3 Claims. (Cl. 175-282.)



1. The combination of a movable member of conducting material having projecting means, insulating washers

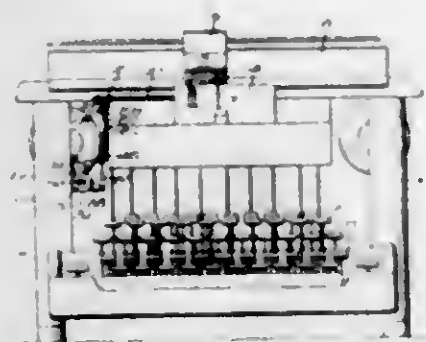
slotted to receive the projecting means and having in turn projecting means thereon and which abut against each other, metallic plates hinged between the washers, the first mentioned projecting means being furnished with instrumentalities to hold the parts in assembled relation with said movable member.

1,314,104. PEN-CLIP. JOHN C. WAHL, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 3, 1918. Serial No. 210,510. 3 Claims. (Cl. 24-11.)



1. In a fountain pen, the combination of a cap, a plug frictionally mounted in said cap, said plug having a flattened portion, a clip having an attaching portion, a spring portion having a part thereof adapted to register with the flattened portion of said plug and a right-angled portion adapted to be jammed in the interior of the pen cap by said plug.

1,314,105. CALCULATING-MACHINE. JOHN C. WAHL, Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 20, 1911. Serial No. 650,350. 29 Claims. (Cl. 235-59.)



1. In a calculating machine, the combination of a reversing device adapted to place the machine in either adding or subtracting condition; mechanism tending to return the machine to adding condition if displaced therefrom; mechanism to operate the machine; and manually operable detent means to retain the reversing mechanism in its displaced condition, and thus keep the machine in subtracting condition if so desired, said detent means being adapted to be manually operated independent of the action of any other part of said machine.

1,314,106. EXPANDED WOOD LATH. JOHN AUGUST WALLER, Highland Park, Ill., assignor to Expanded Wood Lath Corporation, Cook county, Ill., a Corporation. Filed Mar. 28, 1918. Serial No. 225,169. 3 Claims. (Cl. 20-13.)



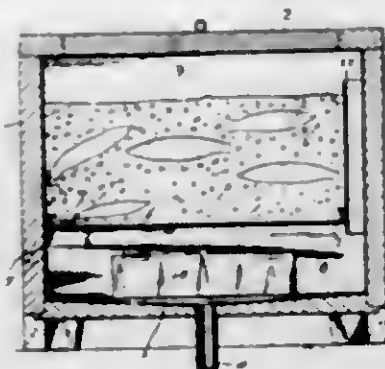
1. A wood lath consisting of a board cut by a series of parallel saw cuts into lath strips and extended apart leaving connecting ribs, which extend diagonally from strip to strip, said saw cuts being arranged in a row and each cut terminating at the middle and near an adjacent saw cut.

1,314,107. EXPANDED BOARD LATH. JOHN AUGUST WALLER, Chicago, Ill., assignor to Expanded Wood Lath Corporation, Cook county, Ill., a Corporation. Filed Aug. 26, 1918. Serial No. 231,406. 4 Claims. (Cl. 20-13.)



1. A wood lath that consists of a board with a plurality of series of cuts therethrough and expanded into spaced-apart strips of lath with connective ribs therebetween and spacers between said strips that are also a part of said board.

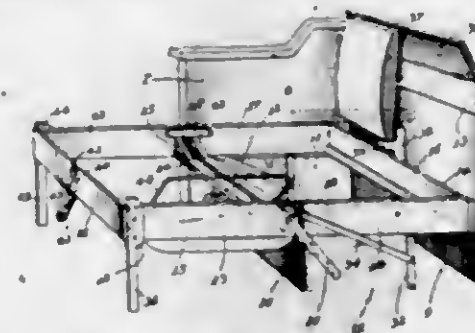
1,314,108. ICE-BOX. ARTHUR R. WATTS, New York, N. Y. Filed Jan. 4, 1919. Serial No. 209,600. 2 Claims. (Cl. 45-71.)



1. A refrigerator comprising a chest having a top lid and a drain at the bottom and the interior of which forms a food and ice chamber, a false bottom whereon the contents of said chamber rest, and beneath said false bottom a cleaning and drainage chamber, and a low horizontally elongated door in the lower part of the otherwise solid wall of the chest at the front of said cleaning and drainage chamber.

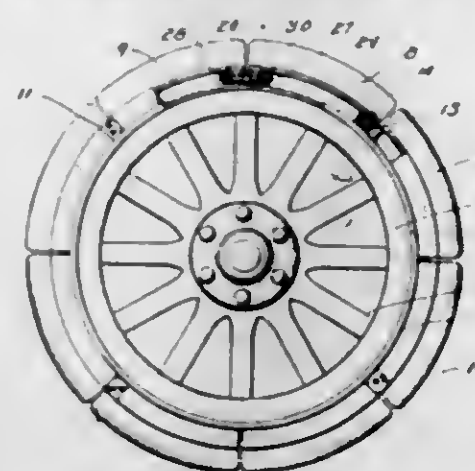
chamber, whereby the refrigerator can be kept in sanitary condition by flushing through the top opening and removing deposits through the basal doorway, without removing the contents of the food and ice chamber.

1,314,109. DAVENPORT-BED. FRANK R. WERREL, Jr., Cincinnati, Ohio. Filed Dec. 20, 1917. Serial No. 209,390. 2 Claims. (Cl. 5-51.)



1. A davenport consisting of a frame of which the rear member is a spring board, a series of sections within the frame and adapted either to occupy an unfolded or bed position or a folded or settee position, a back pivotally connected to the frame and adapted to be raised to permit the sections to be moved to bed position or to be lowered into engagement with the sections, when in settee position, and means adapted to support the back when in raised position and to lock the sections in closed position, consisting of a strut secured to the spring board and having a lug thereon adapted to support the back when in raised position, an extension on the uppermost of said sections, adapted to move the lug therefrom against the tension of the spring board when the sections are being moved to settee position and to engage the under surface of the lug when moved to settee position, the spring board moving the lug to locking position when released, and means adapted simultaneously to facilitate movement of the sections to bed position and to release the lock.

1,314,110. SECTIONAL DEMOUNTABLE RIM. JOSEPH C. YOUNGBLOOD, Atwood, Kans. Filed Feb. 11, 1919. Serial No. 276,300. 5 Claims. (Cl. 152-9.)



4. A sectional tire for wheels comprising segments, each having longitudinal rib-engaging grooves along the respective side edges of its inner curved face, a recessed perforate wall carried by one end of the segment, and a hinge member carried by the other end of the segment.

1,314,111. VEGETABLE-PARING ATTACHMENT. SIMON L. ABRAHAMSON, Seattle, Wash., assignor, by direct and mesne assignments, of sixty-two per cent. to E. Michael Mallette and sixteen per cent. to William Stern, Seattle, Wash. Filed Mar. 21, 1916. Serial No. 85,585. Renewed Apr. 29, 1919. Serial No. 293,550. 1 Claim. (Cl. 30-20.)

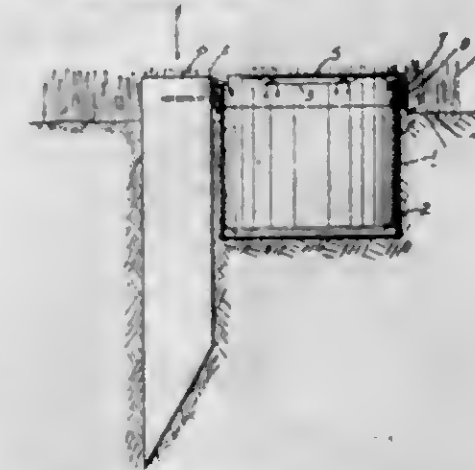
A knife guard comprising a plate that is bent double to adapt it to be slipped over the blade of a knife, and a guard 265 O. G.-34

cut from said plate and formed to extend rearwardly of the knife edge, said guard being of arcuate cross-section and the top surface of said guard being substantially in a plane



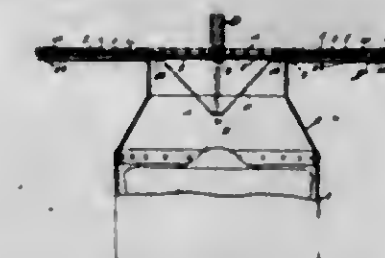
perpendicular to the plane of said knife-blade and tangent to the cutting edge of said knife-blade to permit said knife-blade to be used for scraping.

1,314,112. ANT-TRAP. LEIGHTON R. ALDERMAN and ARBURY G. SMITH, Pasadena, Calif. Filed Apr. 21, 1919. Serial No. 291,735. 2 Claims. (Cl. 43-22.)



1. An ant trap comprising a can adapted to be set in the ground and baited with ant poison, said can comprising a bottom and a wall extending upwardly from the bottom; and a cover adapted to be loosely mounted to rest upon the can, said cover comprising a top and an annular wall extending from the edge of the top, the wall of the cover being spaced from the wall of the can; and there being notches in the upper edge of the can; so that there will be passages for ants to pass upwardly between the wall of the cover and the wall of the can and through the notches to the interior of the can.

1,314,113. HEATER. ALBERT C. ALTHOUSE, Dublin, Pa. Filed Apr. 27, 1918. Serial No. 231,248. 1 Claim. (Cl. 126-09.)



The combination with a floor structure having an opening therein, a partition having a door extending across the center of the opening, an air heater, and a flue extending from the air heater and into said opening, of a grating extending over the opening and having oppositely extending tongues seated in and flush with the floor structure, said tongues being grooved, dampers extending under the grating and normally depending therefrom and adapted, when raised, to close communication between the heater and the respective sides of the partition and door, flexible elements connected to the respective dampers, and means for adjustably connecting said elements to the tongues, said means and flexible elements being housed in the grooves.

1,314,114. MUD-CHAIN COUPLING. JOHN ANDERSON, Garfield township, Clay county, Kans. Filed June 5, 1919. Serial No. 301,903. 1 Claim. (Cl. 24-73.)

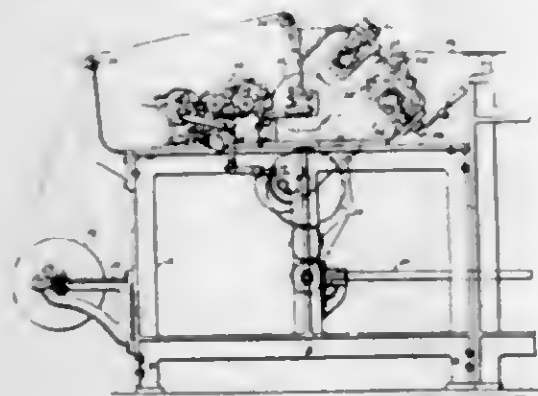
An article of the class described, comprising a stem, a hook at one end of said stem to engage one end of a chain,

and jaws at the opposite end thereof, one of which jaws is pivoted in position to close over the other jaw, a notch in one jaw to engage the opposite end of said chain, threads



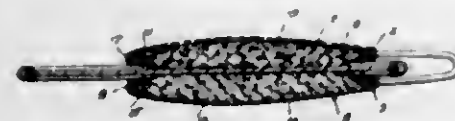
on said stem and pivoted jaw and a nut engaging said threads for the purpose of closing over said jaws and holding them in closed position.

1,314,115. MACHINE FOR FORMING CORRUGATED CARTONS. JAMES M. ANDREWS, Brooklyn, N. Y., assignor to Robert Gale Company, Brooklyn, N. Y., a Corporation of New York. Filed May 1, 1918. Serial No. 231,828. 51 Claims. (Cl. 93-8.)



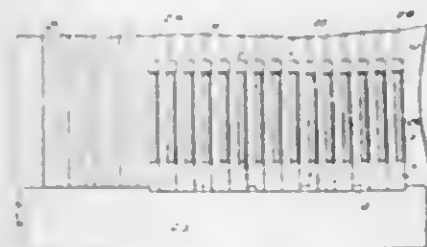
2. In a corrugating machine, the combination of a main frame, a series of pairs of hollow corrugating rolls rotatably mounted on said main frame, means for previously wetting a strip being acted on by said rolls, and means for heating the interior of said rolls for heating the strip simultaneously with forming the corrugations.

1,314,116. LENS-CLEANER. GEORGE BAILLIE, Los Angeles, Calif. Filed Jan. 31, 1919. Serial No. 274,204. 2 Claims. (Cl. 15-68.)



1. A lens cleaner comprising a wire bent to form a U-shaped central portion and circular loops extending from the ends of the U-shaped central portion; and cleaning elements applied to the circular loops; so that the lens may be placed between the cleaning elements and the cleaning elements pressed against the lens.

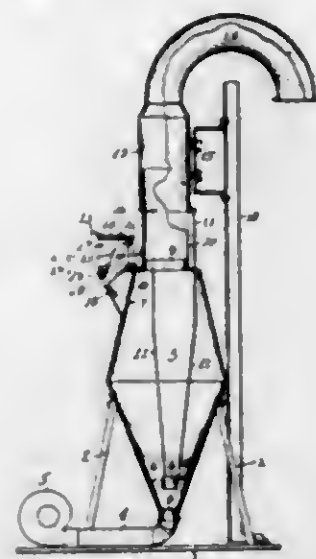
1,314,117. PLAYING ATTACHMENT FOR ZITHERS. HARRIE A. BALLARD, Boston, Mass., assignor to The Phonograph Company, East Boston, Mass., a Corporation of Maine. Filed Nov. 27, 1917. Serial No. 204,153. 10 Claims. (Cl. 84-116.)



1. A playing attachment for zithers, comprising a plurality of spring hammers, and a plurality of relatively mov-

able stops associated with and underlying the hammers and normally holding the free ends of said hammers from vibrating.

1,314,118. NESTED-PAPER-CUP SEPARATOR. BENJAMIN J. BAUM and CLARENCE W. ODERMATT, San Francisco, Calif. Filed Mar. 10, 1919. Serial No. 281,806. 3 Claims. (Cl. 83-54.)



1. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; an outlet pipe from the other end of the receptacle; and an open-ended tubular member disposed wholly within the air receiving end of the receptacle in alignment with the air opening, said member being spaced from said opening and from the adjacent walls of the receptacle.

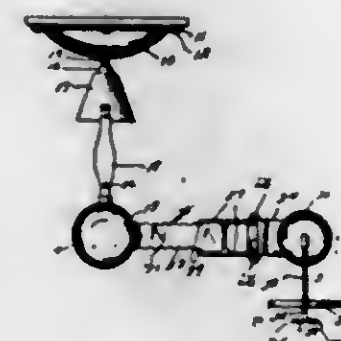
1,314,119. APPARATUS FOR RAISING SHIPS. HARRY J. BENNETT, Phoenix, Ariz., assignor of one-half to Selim J. Michelson, Phoenix, Ariz. Filed Apr. 8, 1919. Serial No. 288,511. 2 Claims. (Cl. 114-51.)



1. In an apparatus for raising ships, a clutch adapted to be attached to a ship, said clutch comprising a supporting bracket having a vertical attaching plate and a horizontal turntable extending outwardly from the top of the attaching plate; a base fitting rotatably upon the turntable; a bolt connecting the base to the turntable; a neck extending upwardly and outwardly from the base; a head upon the upper end of the neck and projecting outwardly; an eye extending upwardly from the head, there being a bifurcation extending upwardly from the lower part of the head; a bearing fitting in the bifurcation; a pin extending through the head and through the bearing; a horn extending downwardly from the bearing; a spring pawl mounted in the bifurcation; a tooth extending from the bearing to

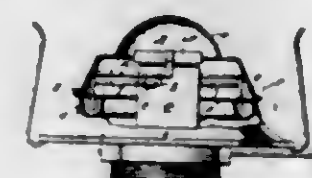
engage the pawl; an arm extending inwardly from the bearing at right angles to the horn and at the upper end of the horn; and a coil spring in the bifurcation between the head and the arm.

1,314,120. LIGHT-SUPPORT. THEODORE BERMAN, Sioux City, Iowa. Filed Dec. 24, 1918. Serial No. 268,208. 3 Claims. (Cl. 248-20.)



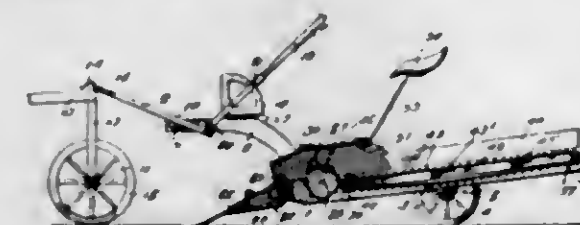
3. An electric light support including a wall member, a depending conical member engaged therewith, a second conical member rotatable on the first conical member, resilient legs depending from the second conical member, a member adjustable and rotatable between the legs, an arm carried by the adjustable member, a member slidably adjustable on said arm, and means on the other end of the last-named member for supporting a lamp.

1,314,121. LAMP-EXTINGUISHER. CHARLES E. BRANNEN, Iroquois Falls, Ontario, Canada. Filed Mar. 31, 1919. Serial No. 286,505. 2 Claims. (Cl. 67-79.)



1. A lamp burner including a wick tube, a gallery and a perforated base plate, an annular trough depending from said base plate, partitions dividing said trough into sections and having seats therein, balls normally mounted in said seats, extinguishers pivoted to said wick tube, and having arms depending into said trough in the path of said balls whereby the engagement of said arms by said balls will operate to actuate the extinguisher.

1,314,122. QUACK-GRASS ROOTER. HENRY BRUTLER, Drake, N. D. Filed July 20, 1918. Serial No. 245,880. 3 Claims. (Cl. 55-137.)



1. In a machine of the class described the combination of a supporting frame, a plow carried upon the forward portions of said frame, a depositing roller carried upon said frame behind said plow, an apron carried by said frame behind said roller to a point adjacent the rear end of said

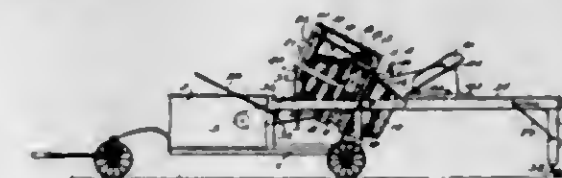
frame, means for operating said apron and said roller whereby quack grass and soil may be uprooted by said plow and then engaged by said roller and deposited upon said apron whereby the soil and quack grass may be moved toward the rear portions of said frame, and oscillating means for shaking said apron whereby the soil will be shaken from the roots of the grass, thereby causing the grass to be ejected from the machine adjacent the rear end of said frame while the soil will fall through said apron to the ground.

1,314,123. CAP FOR TRUSS-PADS. MORTIMER L. BRADLEY, Johnson City, Tenn. Filed Mar. 15, 1919. Serial No. 282,888. 4 Claims. (Cl. 128-112.)



1. A device of the character described including a closed hollow cap comprising a base plate and cap body freely separable from the plate, the base plate being provided with an opening adapted to receive a truss pad projecting into the cap body.

1,314,124. CONCRETE-MIXER. EUGENE BROWN, Colfax, Wash. Filed Mar. 24, 1916. Serial No. 86,485. 1 Claim. (Cl. 88-73.)



A concrete mixer including a support, a tiltable frame carried by the support, a drum rotatable in the support, said drum being open at one end, means for rotating the drum, parallel rails mounted on the support and extending close to the path of movement of the open end of the drum, a carriage movably mounted on said rails for reciprocation, rods pivotally connected to the carriage and to the drum close to the open end thereof, means for tilting the drum to move the carriage toward the drum when the open end is lowered into filling position and to move the carriage away from the drum when the said end of the drum is raised, and a chute upon the carriage, movable into and out of the open end of the drum.

1,314,125. DENTAL ABRASIVE OR GRINDING DISK. GILBERT O. BURLIN, Newark, N. J. Filed Oct. 30, 1917. Serial No. 199,224. 1 Claim. (Cl. 32-13.)



A grinding disk provided with a central opening having recesses formed therein and a soft yieldable center core provided with a central hub having projections formed upon its central hub to engage with said recesses for securing said center core to said disk.

1,314,126. CHUCK. ALBERT E. CHURCH, New Britain, Conn. Filed June 20, 1918. Serial No. 241,013. 6 Claims. (Cl. 279-112.)



1. A chuck comprising a head, radially movable jaws carried by said head and having work grips at their outer ends, means at the inner ends of said jaws for adjusting the same to grip the work, and auxiliary adjusting means for said jaws located between said first named jaw adjusting means and said work grips and having a point of reaction independent of said first named jaw operating means.

1,314,127. SOUND-BOX. FRANCESCO CIRIELLI, Philadelphia, Pa. Filed Aug. 6, 1918. Serial No. 248,557. 1 Claim. (Cl. 274-25.)



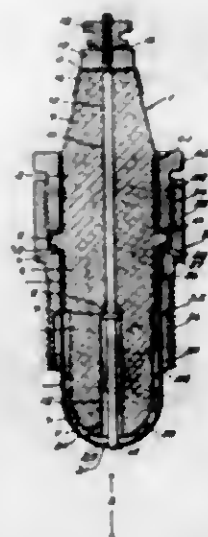
A sound box including a needle holding portion having needle retaining ducts extending at an incline to each other in opposite directions whereby a needle can be secured at an incline in either of said ducts so as to permit the engagement of the needle with the reproducing portion of a record at opposite sides of the center of rotation of said record during the rotation of said record in the same direction, substantially as described.

1,314,128. FIELD-MAGNET. ALBERT J. CROLL, Rochester, N. Y., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed July 26, 1918. Serial No. 246,930. 2 Claims. (Cl. 171-252.)



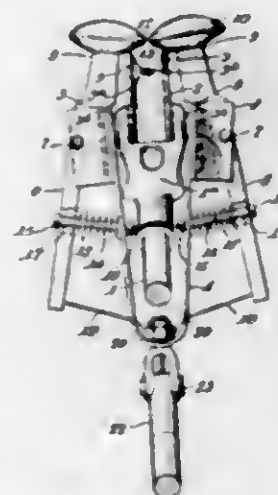
1. A field-magnet consisting of a plurality of sections, each section comprising a neck adapted to receive a coil; horns projecting from the inner end of the neck; an elongated body-portion extending from one side only of the neck, into engagement with the neck of another section; and rolls on the necks.

1,314,129. SPARK-PLUG. HENRY M. CROWTHER, Kingman, Ariz. Filed July 15, 1918. Serial No. 245,034. 10 Claims. (Cl. 123-169.)



1. The combination with a spark plug, of means entirely inclosing the exposed end of the insulating core for breaking the continuity of the lamp black deposit on the insulating core.

1,314,130. TROLLEY-GUARD. ROBERT C. DICKENSON, Akron, Ohio, assignor of one-fourth to William E. Winston and one-fourth to James M. Butler, Akron, Ohio. Filed Mar. 26, 1918. Serial No. 224,757. 4 Claims. (Cl. 191-80.)

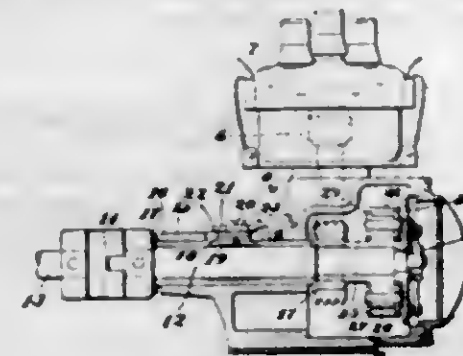


1. The combination with a trolley wheel having flanges and a bearing therefor, of a pair of rotatable rollers mounted at opposite sides of said wheel and having semi-spherical upper portions and frusto-conical lower portions overlying and engaging the flanges of said wheel.

1,314,131. IGNITION APPARATUS. FARNUM F. DORSEY, Winchester, Mass., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 10, 1917. Serial No. 153,027. 6 Claims. (Cl. 123-117.)

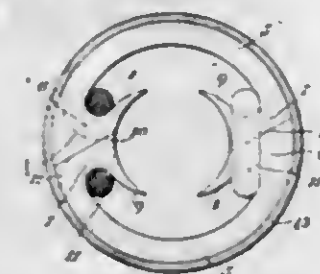
1. Ignition-apparatus having, in combination, a driven shaft; a circuit-controller actuated thereby; a driving-shaft; helical gears connecting said shafts, one of said gears being loose on the corresponding shaft; an automatic timing device connecting the loose gear with its shaft and arranged to move the gear relatively to the shaft to vary the time of operation of the circuit-controller in

accordance with the speed of rotation of the shafts; and means for moving the drive-shaft, and the gear carried



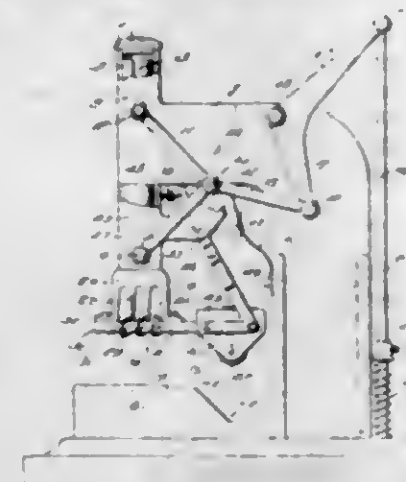
thereby, axially, independently of but during rotation of the parts, to change the time of operation of the circuit-controller independently of the automatic timing-device.

1,314,132. FIELD-MAGNET. FARNUM F. DORSEY, Rochester, N. Y., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed July 31, 1918. Serial No. 247,611. 1 Claim. (Cl. 171-252.)



A field-magnet comprising an annular body and inwardly directed polar projections, each projection having a neck and horns at the inner end of the neck; the magnet being characterized by the fact that it is divided, on parallel planes passing obliquely through opposite polar projections, into a plurality of sections, each section comprising a yoke or body-portion and, at each end, approximately half of a polar projection.

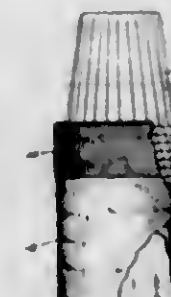
1,314,133. PRINTING-MACHINE. WILLIAM EARLE ELAM, Greenville, Miss. Filed Apr. 11, 1919. Serial No. 280,262. 4 Claims. (Cl. 101-320.)



1. In a printing machine, a printing head provided with an elongated plunger adapted to receive a plurality of type retained in proper relation as a single unit, a barrel adapted to receive said plunger, said plunger being free to reciprocate within said barrel but restrained from rotating therein, a pair of arms pivotally connected to said barrel, a second pair of arms pivotally connected to said head, means connected with the other ends of said arms for moving said head to a printing position, resilient means

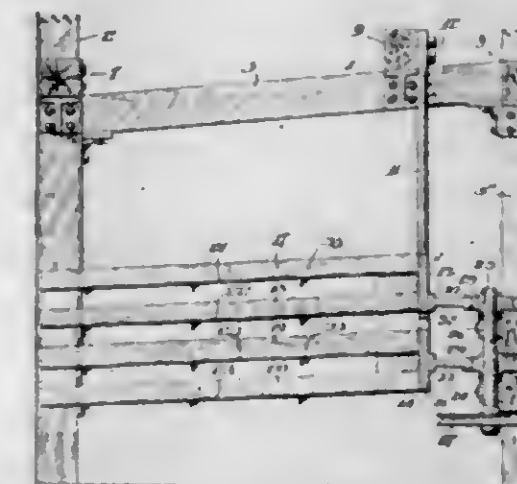
for returning said printing head to a normal position, an linking mechanism for supplying ink to the printing type, said linking mechanism being automatically operated upon the return movement of the printing head to a normal position subsequent to a printing operation, and automatic means for returning said linking mechanism to a normal position.

1,314,134. PACKAGE. CHARLES ERNETT, New York, N. Y., assignor to Public Service Cup Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 31, 1916. Serial No. 87,970. 9 Claims. (Cl. 206-56.)



1. A package of merchandise comprising a series of nested, flanged cups and a sanitary covering therefor composed of a fragile, flexible material and a band circumferentially attached to said material and surrounding the package whereby the withdrawal of more than one cup at a time is prevented after the package has been opened.

1,314,135. GYRATORY SCREENING DEVICE. HENRY WILLIAM FALKNER, Ashland, Pa. Filed Mar. 10, 1918. Serial No. 222,818. 2 Claims. (Cl. 83-50.)

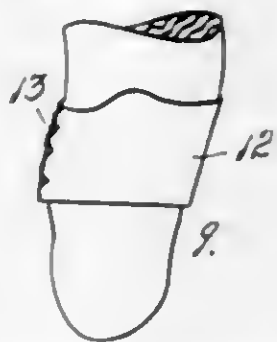


1. A screening device including a screen; comparatively wide means for suspending one end of the screen and yieldable practically entirely in the direction of the length of the screen; means for suspending the opposite end of the screen, said latter means being readily flexible in all horizontal directions; and means for gyrating said latter mentioned end portion of the screen, substantially as described.

1,314,136. ARTIFICIAL LEG. ARTHUR E. GAINES and ARTHUR A. EBB, Denver, Colo. Filed Feb. 9, 1915. Serial No. 7,009. 8 Claims. (Cl. 2-3.)

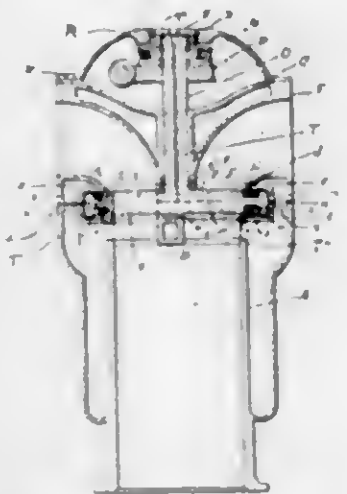
1. An artificial leg comprising a lower wood portion, a leather socket molded to fit a stump, said socket being

mounted upon the upper edge of the wood portion and positioned wholly above said portion, and a firm covering



about said socket and said wood portion permanently uniting the two.

1,314,137. EXPLOSION-ENGINE. BEATCH DOWTHETT GAMBLE, Pittsburgh, Pa. Filed Oct. 27, 1914. Serial No. 868,838. 12 Claims. (Cl. 123-177.)

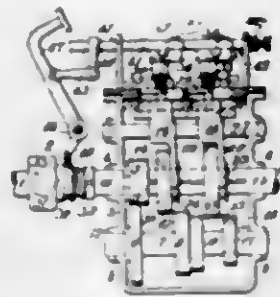


6. In an explosion engine, the combination comprising a cylinder having an integral head, said head having inner and outer recesses therein, a rotary disk valve located in said recesses, and said disk valve being slightly thicker at its peripheral bearing portion than at any other part thereof.

1,314,138. PROCESS OF MAKING RESORCINOL. NATHAN GOODMAN and BENJAMIN GRUBMAN, New York, N. Y. Filed July 18, 1918. Serial No. 245,445. 2 Claims. (23-24.)

1. In a process of making resorcinol, the step of extracting the resorcinol with a mixture of ether and benzol.

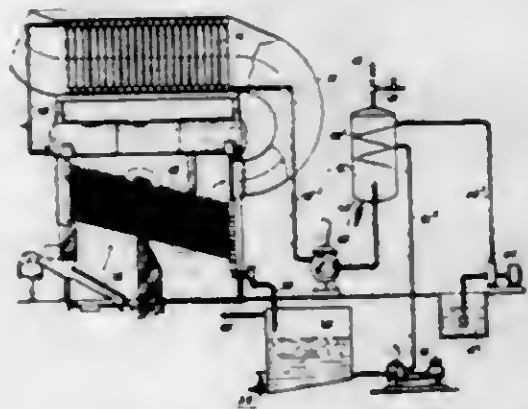
1,314,139. GEAR-SHIFTING MECHANISM FOR AUTOMOBILES. Merton J. Huggins, New York, N. Y., assignor to Automotive Development Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,514. 35 Claims. (Cl. 74-58.)



1. In an automobile, the combination with speed changing gears, of a pivoted member for each of said gears,

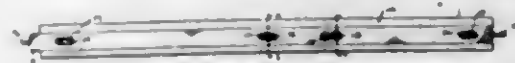
means to actuate said members about their pivots, and means to lock any one of said gears to its member at either side of its pivot for moving the gear to positions in opposite directions from a neutral position.

1,314,140. STEAM-BOILER ECONOMIZER AND METHOD OF OPERATING THE SAME. DAVID S. JACOBSON, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 8, 1914. Serial No. 876,010. 7 Claims. (Cl. 210-1.)



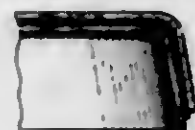
1. In the operation of a boiler and economizer the process which consists in maintaining a corrosion-preventing water in the boiler, withdrawing a portion of such water from the boiler, admixing feed water therewith, maintaining a body of such mingled waters and permitting the air and gases to escape therefrom, and feeding said mingled waters through an economizer and thence into the boiler.

1,314,141. SPINDLE. ADOLF KLEIN, New York, N. Y., assignor to The Beck Duplicator Company, a Corporation of New York. Filed Mar. 21, 1919. Serial No. 284,004. 7 Claims. (Cl. 242-68.)



1. In a spindle, the combination with a tube; of a shaft adapted to extend longitudinally through said tube and slidable therein, the ends of said shaft being angular in cross section whereby they are adapted to form chuck-engaging members and each of said ends being provided with a longitudinally projecting stud adapted to form a bearing pin, whereby said spindle is adapted to be interchangeably reversed end for end.

1,314,142. PROCESS FOR MAKING PISTON-PACKING. HARRY C. LOUDENBECK, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1917. Serial No. 192,455. 3 Claims. (Cl. 154-2.)



1. The process of forming cupped piston packing which consists in coating disks of ground cork with glue, superimposing said disks, and then pressing the superimposed disks from a flat condition into the cup form while the glue remains unset.

1,314,143. BRAKE-CYLINDER PISTON-PACKING. HARRY C. LOUDENBECK, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1917. Serial No. 192,510. 1 Claim. (Cl. 154-45.5.)



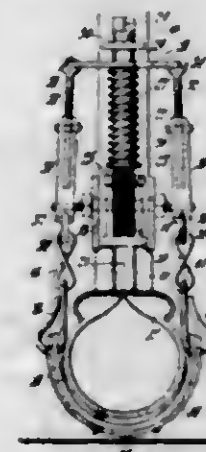
A cup shaped piston packing formed from pressed disks composed of ground cork with an intermediate layer of duck fabric.

1,314,144. GUARD DEVICE. FRANK C. MASON, Los Angeles, Calif. Filed Aug. 29, 1917. Serial No. 188,861. 5 Claims. (Cl. 200-30.)



2. A guard device for protecting a door lock, comprising a hollow cover adapted to extend over the lock and having a rim adapted to engage the door, a member movably mounted on said cover for detachably engaging a part of said lock to hold the cover in place, and a circuit controlling means on said rim adapted to be controlled by the pressure of the rim on the face of the door.

1,314,145. NON-SKID AND ARMOR DEVICE FOR AUTOMOBILE TIRES. CHARLES MOSS, New York, N. Y. Filed June 7, 1916. Serial No. 102,118. 2 Claims. (Cl. 152-14.)

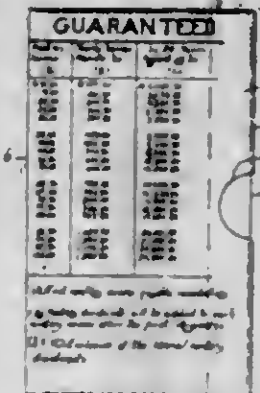


1. An improved non-skid and armor device for tires, comprising tread means adapted to engage the tire, a support on the rim, a longitudinally adjustable post on said support provided at one end with a shoulder, a plate slidable on said post, an expansive spring encircling said post and disposed between said plate and said shoulder, and adapted to exert a thrust on said plate away from said tread means, connecting means disposed between said plate and said tread, said spring adapted to tension said connecting means to yieldingly retain said tread on said tire, longitudinal adjustment of said post adapted to relieve the tension on said spring to permit ready disengagement of said tread from said tire.

2. An improved non-skid and armor device for tires, comprising a tread means adapted to engage the tire, a supporting means on the rim comprising a socket member, a shaft having right and left threads engaging said socket member at one end and a post engaging the other

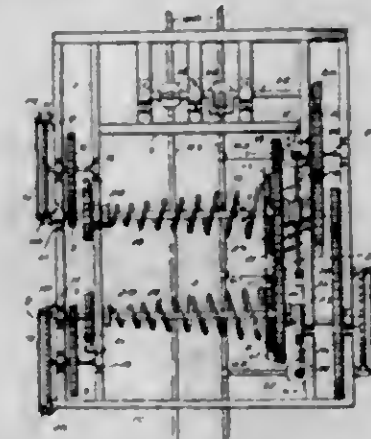
end of said shaft, a shoulder on said post, a plate slidable on said post, an expansive spring encircling said post, and disposed between said shoulder and said plate, connecting means disposed between said plate and said tread means, and means for enabling the rotation of said shaft, rotation of said shaft adapted to reduce the tension of said spring to permit ready disengagement of said tread means from said tire.

1,314,146. LIFE-INSURANCE-COMPUTING PACKET. GILBERT A. NEWKIRK, Denver, Colo. Filed June 19, 1916. Serial No. 104,450. 4 Claims. (Cl. 283-54.)



1. A computation device for an insurance policy including an envelop open on one edge and having tabulated data pertaining to incomes to be derived from the policy on its opposite faces, and a sheet slidable in the envelop and having tabulated premiums on its opposite faces, the corresponding incomes and premiums of the envelop and sheet being in transverse alignment as the sheet is moved out of the envelop to expose its tabulations, the sheet having a projection on its front edge and provided with data indicating the nature of the policy, the combined width of the projection and sheet being less than the width of the envelop so that the envelop protects the projection, and a notch at the folded edge of the envelop.

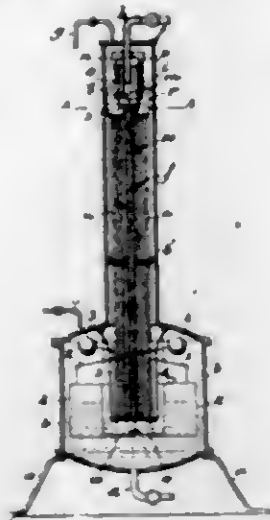
1,314,147. WAVE-MOTOR. E. LEMUEL OSBORN, Seattle, Wash. Filed Oct. 18, 1918. Serial No. 255,700. 1 Claim. (Cl. 103-67.)



In a device of the class described the combination of a frame work, a float positioned beneath the said frame work, a plurality of parallel shafts arranged upon the said frame work, power transmission means intermediate the said float and said shafts, whereby the reciprocating motion of the float is converted into rotary motion of the shafts, ratchet wheels loosely mounted upon the said shafts, gear wheels loosely mounted upon the said shafts adjacent the said ratchet wheels and geared one with the other, pawls secured to the said gear wheels and cooperating with the said ratchet wheels, whereby the ratchet wheels may move in one direction independent of

the said gear wheels, coil spring means upon each of the said shafts and secured at one end to the said shafts and at the other ends to the said ratchet wheels, whereby power transmitted to the shafts is stored in the spring and transmitted through the ratchet wheel to the said coils, brakes mounted upon the said shafts and secured to the said gear wheels, brake cylinders connected to the said brakes, pumps geared to the first mentioned gear wheels, pipes connecting the pumps to the brake cylinders, whereby when the pressure of the pumped water drops below a predetermined pressure the brakes are released.

1,314,148. APPARATUS FOR IMPREGNATING LIQUIDS WITH CARBONIC-ACID OR OTHER GASES. ANDERS ANDERSEN LINDSTOFT, Frederiksberg, near Copenhagen, Denmark. Filed Mar. 29, 1917. Serial No. 158,482. 2 Claims. (Cl. 261-70.)



1. In apparatus for impregnating liquids with carbonic acid or other gases, the combination with a closed impregnating chamber provided at its top with a liquid supply pipe and at its lower part with a gas supply pipe and a discharge pipe for the impregnated liquid, of a sliding valve on said liquid supply pipe, ports in said liquid supply pipe controlled by said sliding valve, a plurality of passages leading from said valve, a plurality of compartments each communicating with one of said passages, a series of perforations in the bottom of each compartment, wires extending from said perforations to the lower part of the chamber, a regulator immersed in the impregnated liquid within the chamber and connected with the sliding valve, and counterweights acting on said regulator; substantially as described and for the purposes set forth.

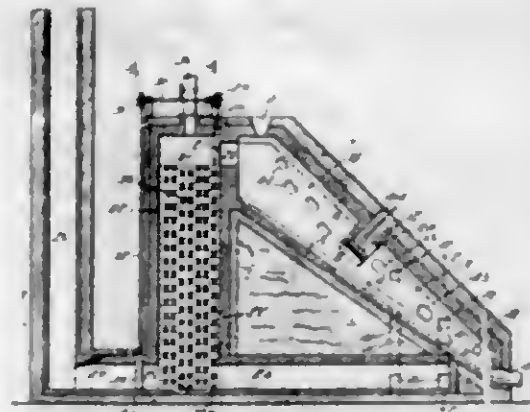
1,314,149. LOOM ATTACHMENT. ALFONSO S. POOLE, Danville, Va. Filed Mar. 11, 1918. Serial No. 221,705. 1 Claim. (Cl. 139-21.)



In a loom the combination with a picker, of a picker stick projecting therethrough, wear members upon opposed faces of the picker stick and extending through the picker to engage the same, a bolt extending through the picker stick below the picker and through the opposed wear members and having its head bearing against the outer face of one of the wear members, an elongated spring plate loosely engaged by the bolt and bearing at its ends against the outer surface of the other wear member, said spring plate having a short arm extending toward the picker and a long arm extending close to the

end of the wear member engaged by said arm, and means adjustably engaging the bolt for regulating the tension of the spring plate to compress the picker stick between the wear members and take up wear upon the stick.

1,314,150. LIQUID-FUEL SMELTER. EDWIN E. ROBERTSON, Los Angeles, Calif., assignor to Emilie Hand, Los Angeles, Calif. Filed July 15, 1918. Serial No. 244,873. 11 Claims. (Cl. 266-10.)



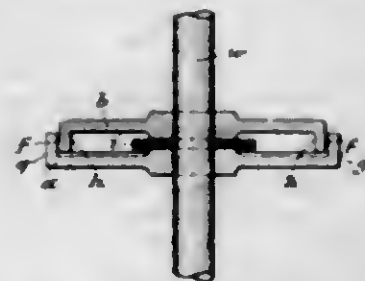
1. In smelting furnaces, a structure having an elongated chamber in a sloping position and having a sloping roof forming the upper side of the chamber, means for feeding in ore at the upper end of the chamber, and heating means at the lower end of the chamber, said chamber contracting in size toward the lower end and having a transverse baffle wall extending downwardly from its sloping roof across the central portion of the chamber.

1,314,151. RAIL-JOINT. LOUIS MARTIN SARTAIN, Coal-mont, Tenn., assignor of three-tenths to W. R. Curtis, one-tenth to G. P. Dykes, one-tenth to J. J. Givens, one-tenth to J. A. Goforth, and one-tenth to T. M. Lockhart, Coal-mont, Tenn. Filed Feb. 5, 1919. Serial No. 275,144. 1 Claim. (Cl. 238-166.)



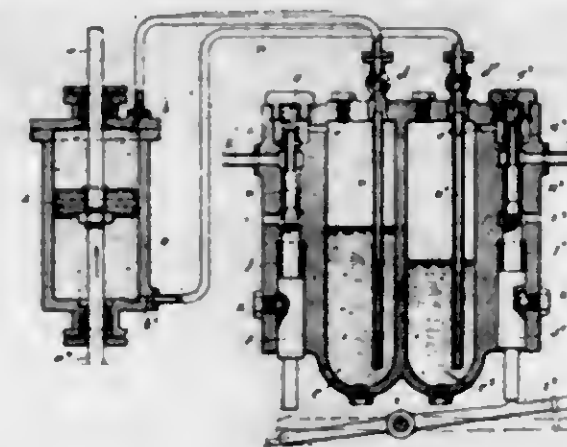
The combination with a tie plate having spaced up-standing shoulders provided with recesses, there being recesses in the plate and adjacent the shoulders, of pivotally connected chair members having projecting means thereon for insertion into the respective recesses when the members are moved onto the tie plate, rail gripping jaws upon the members, and rail engaging dowels insertible at their ends into the opposed jaws, those portions of the members between the jaws constituting rail supports.

1,314,152. SPARK-GAP APPARATUS. KARL SCHMIDT, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1918. Serial No. 230,840. 4 Claims. (Cl. 250-35.)



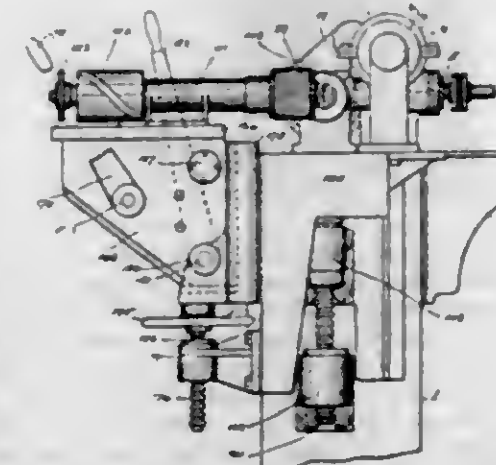
1. In spark gap apparatus, a support, two disks mounted on the support and having telescoped peripheral flanges providing a gap therebetween, and means for insulating said disks from each other.

1,314,153. LIQUID TRANSMISSION. EUGENE SCHNEIDER, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Aug. 21, 1918. Serial No. 250,871. 2 Claims. (Cl. 138-2.)



1. In combination with a cylinder and piston, liquid-containing chambers, ducts constituting means of communication between the compartments in the cylinder on either side of the piston and the respective chambers, said ducts and compartments being constantly full of liquid, fluid passages in continuous communication with said chambers above the surface of the liquid therein, valves controlling the admission of fluid under pressure to said passages, passages extending axially through said valves and in continuous communication with said first-named passages, exhaust outlets normally in communication with said axial passages, and controlling means for opening either of said valves and simultaneously closing the axial passage therethrough.

1,314,154. GRINDING-MACHINE. ARTHUR SCRIVENOR, Richmond, Va. Filed Nov. 13, 1917. Serial No. 202,621. 8 Claims. (Cl. 51-7.)

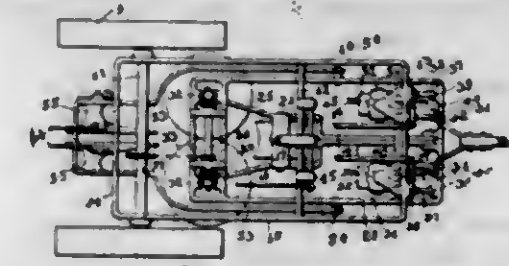


1. The combination of a spindle rotatably mounted in bearings, means for securing the work to the spindle, a cylindrical cam rotatably mounted on and concentric with the spindle, a fixed roller adapted to engage a path on the cam, a worm mounted on the cam body, and a worm wheel mounted axially and rigidly on the spindle and engaging the worm.

1,314,155. REET TOPPING AND HARVESTING MACHINE. RUMATSI SERA, Indian Wells, Calif. Filed June 13, 1918. Serial No. 239,813. 5 Claims. (Cl. 55-9.)

1. In a device of the class described, a main frame, a swingable frame having means for vertical and horizontal

swinging movement in relation to the main frame, and beet topping mechanism mounted on the swingable frame



for swinging movement in such vertical and horizontal plane in relation to the main frame.

1,314,156. OIL-CAN SPOUT. GEORGE SJOOGREN, Toronto, Ontario, Canada, assignor to Harvey Obee and Duncan Alexander McPherson, Toronto, Ontario, Canada. Filed Apr. 19, 1919. Serial No. 291,340. 5 Claims. (Cl. 221-25.)



1. In an oil can spout, the combination with a flexible tubular member having a nozzle at one end, and a ductile member arranged within said tubular member and extending into the nozzle.

1,314,157. ELECTRICAL AND GYROSCOPIC APPARATUS FOR TORPEDOES. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, a Corporation of New York. Filed Nov. 23, 1916. Serial No. 132,995. 30 Claims. (Cl. 114-24.)



1. In a torpedo, a stabilizing means for stabilizing about a horizontal axis thereof comprising a gyroscope mounted therein and means for spinning up said gyroscope at the time of launching.

1,314,158. FOUNTAIN-COMB. ARTHUR SPIELREAGER, Atlanta, Ga. Filed Sept. 12, 1918. Serial No. 253,717. 5 Claims. (Cl. 132-3.)

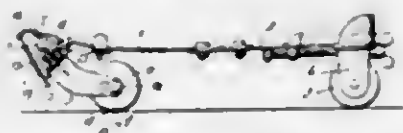
2. In a fountain comb, the combination of a collapsible dispensing tube having a long frusto-conical neck and an externally threaded end element on said neck, a combing and dispensing member provided with a passage having an inlet and outlets, said member being formed with a long frusto-conical cavity, and with a threaded seat in

open communication with said cavity and inlet, said combining and dispensing member being adapted to snugly and securely engage with the frusto-conical and threaded end portion of said collapsible dispensing tube, a hollow handle



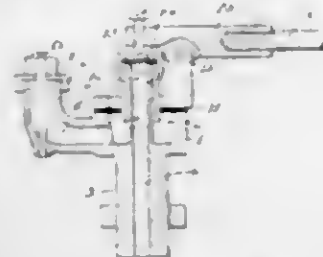
die associated with said member and adapted to receive the body of a tube thus engaged with said dispensing member, and means carried by said handle for forcing the contents of the tube through said inlet.

1,314,159. ROLLER-SKATE. JAKOB STRIGER, Ebnet-Kappel, Switzerland. Filed June 25, 1918. Serial No. 241,885. 8 Claims. (Cl. 46—51.)



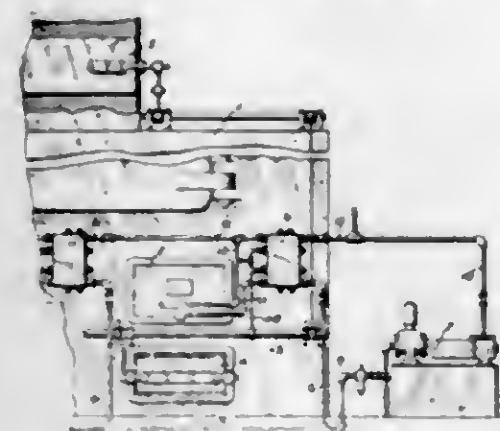
3. In a roller skate, a single front roller mounted to swivel on an axis inclined to the plate of the skate and means to adjust the inclination of the axis.

1,314,160. HALL-LOCK. CHARLES STENGEL, Hamilton, Ohio. Filed Mar. 15, 1919. Serial No. 282,791. 6 Claims. (Cl. 137—194.)



1. A hall-lock comprising, a body having a chamber provided with an outlet and with an inlet extending above the top of the chamber, an apertured pivot-bearing secured to the top of the body, a perforated gasket disposed between the pivot-bearing and the body, an inlet valve seating on the upper end of the inlet and loosely surrounding the same and projecting down through the perforation in the gasket and having a flange engaging over the gasket, and a float lever pivoted to the pivot-bearing and having its inner end arranged to act downwardly upon the valve, combined substantially as set forth.

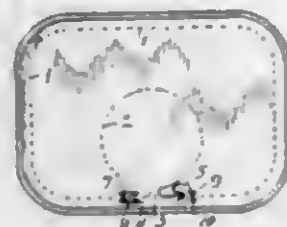
1,314,161. FUEL-OIL-REGULATING SYSTEM. CARLTON D. STEWART, Berkeley, Calif., assignor to Associated Engineering and Supply Company, San Francisco, Calif., a Corporation of California. Filed Sept. 11, 1918. Serial No. 253,539. 3 Claims. (Cl. 138—36.)



1. In a fuel oil regulating system, the combination with a damper operating mechanism, of different sets of valves

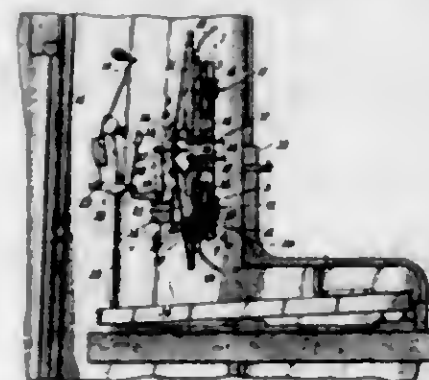
for supplying fuel oil and atomizing medium and means operated by said damper controlling mechanism upon a predetermined movement thereof for actuating one set of valves and upon a further predetermined movement for actuating another set of valves.

1,314,162. OPENING MECHANISM FOR HERMETIC BOXES AND THE LIKE. THORLEIF STOKKE and ADOLF LARSEN, Hillevaag, near Stravanger, Norway, assignors of one-third to Johannes Maeland, Hillevaag, near Stravanger, Norway. Filed June 11, 1919. Serial No. 303,380. 1 Claim. (Cl. 220—53.)



In an arrangement for opening hermetic boxes and the like a weakened opening line in the cover of the box, said opening line having the form of a double closed curve, the exterior part of which runs along the edge of the cover while the interior part of the curve is formed by an inwardly projecting hoop or bow, said two parts of the curve forming at one or both of their connections an opening lip or tongue which may be utilized for opening the box by piercing the weakened line and bending up the tongue or lip in the usual manner.

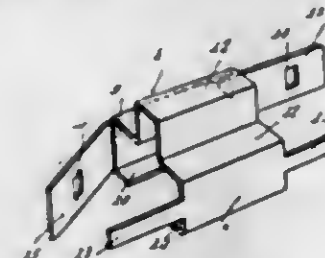
1,314,163. PNEUMATIC ACTION FOR AUTOMATIC MUSICAL INSTRUMENTS. SELVYON A. SWANSON, North Tonawanda, N. Y. Filed Jan. 31, 1917. Serial No. 145,623. 1 Claim. (Cl. 84—233.)



In a player piano, a pair of action chests having main chambers, said chests being arranged the one above the other and having a duct establishing communication between the one of said chambers and the other at the ends thereof and provided with passages and chambers, the passages being arranged for communication with the main chamber by means of openings therebetween, a pouch interposed between the main chamber and the second named chamber, a tube communicating with the second named chamber for admitting atmospheric pressure therein to influence the movement of said pouch, a valve normally seated upon said opening and arranged to be actuated by said pouch whereby communication is established between said passage and main chamber, a plurality of pneumatics carried by each of said action chests and communicating with said passage, the pneumatics of one chest being arranged in staggered relation with respect to those of the other chest, all of said pneumatics being located above the key board and in front of the strings of the piano, an arm carried by each of the pneumatics, a transversely arranged supporting bar, a bell-crank lever pivotally connected with said supporting bar, an adjustable screw connecting one of said bell-crank levers with said arm, said screw being arranged for varying the distance of one end of said lever from the pneumatic, a striking

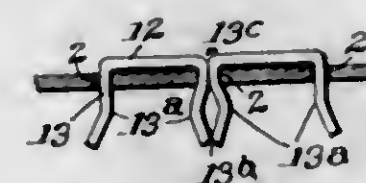
hammer, means associated with said hammer to be actuated upon by said bell-crank lever, and an adjustable screw adapted for longitudinal adjustment to vary the collapsing movement of the pneumatics.

1,314,164. NUT-LOCK. CHARLES H. SWEET, Elkhart, Ind. Filed Nov. 29, 1918. Serial No. 264,648. 3 Claims. (Cl. 151—29.)



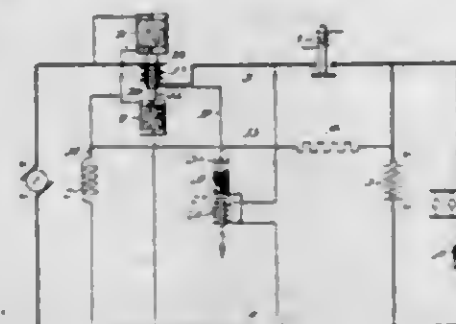
3. A nut lock comprising side members having flanges adapted to engage a face of a nut, a cover connecting said side members and bent to provide a cap adapted to receive the end of a bolt whereby said side members are retained against rotation with respect to said bolt, a pair of tongues connected to one of said side members, and a pair of wings connected to the other of said side members, said wings being provided with apertures adapted to receive said tongues.

1,314,165. CHANGEABLE SIGN. JOHN W. THORAC, Geddes, S. D. Filed Oct. 8, 1918. Serial No. 257,368. 4 Claims. (Cl. 40—143.)



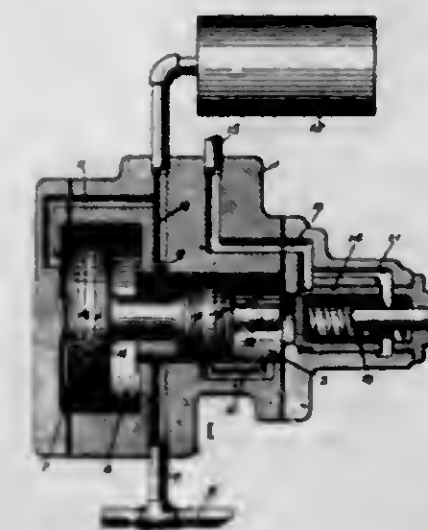
1. A sign, comprising a mount with suitably arranged slots, letter plates, and tongs carried by the letter plates, adjacent tangs of companion letter plates being inserted into a single slot, to hold the letter plates in place by the mutual binding of one tang on the other, said tangs including means formed thereon for increasing the tension between them.

1,314,166. AUTOMATIC REGULATOR. WILLIAM A. TURNER, Niagara Falls, N. Y., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Dec. 31, 1912. Serial No. 739,434. Renewed Sept. 13, 1918. Serial No. 253,983. 13 Claims. (Cl. 171—313.)



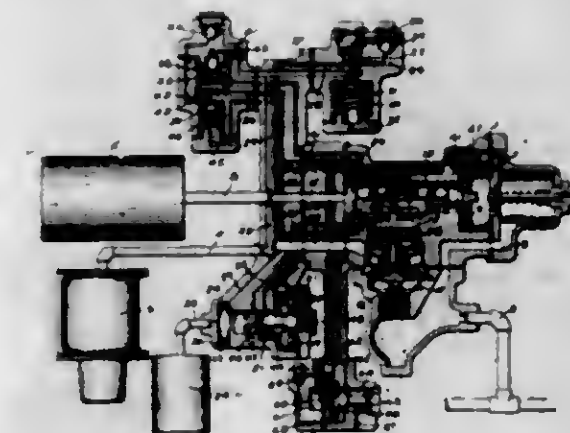
1. In combination, a generator provided with a shunt field winding, a resistance in shunt to said field winding, a second resistance in series with said first mentioned resistance and said field winding, and means responsive at a varying rate to voltage changes across said generator for controlling said resistances.

1,314,167. TEMPERATURE-CONTROL LOCOMOTIVE-CYLINDER. WALTER V. TURNER, Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa., a Corporation of Pennsylvania. Filed May 12, 1916. Serial No. 96,996. 1 Claim. (Cl. 121—14.)



A drifting device for locomotives, comprising a rasing, a differential piston therein having the space between the piston heads in communication with the locomotive cylinder steam supply pipe, a reservoir connected to the space at the outer face of the larger piston head and communicating with the locomotive steam supply pipe through a restricted port, and a valve operated by said differential piston when the steam supply to the locomotive cylinders is cut off for supplying steam in a limited quantity to the cylinders.

1,314,168. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1918. Serial No. 227,178. 5 Claims. (Cl. 188—1.)

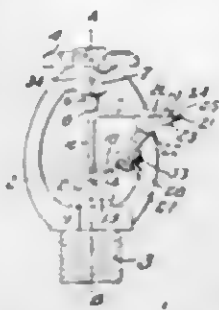


1. In a fluid pressure brake, the combination with a brake pipe, a timing reservoir, and a valve device operated upon a predetermined reduction in pressure in the timing reservoir for effecting an application of the brakes, of means operated according to the rate of reduction in brake pipe pressure for effecting a more rapid reduction in pressure in the timing reservoir.

1,314,169. SPRINKLER-HEAD. WILLIAM J. TURNER, San Francisco, Calif. Filed Dec. 20, 1917. Serial No. 208,000. 7 Claims. (Cl. 160—5.)

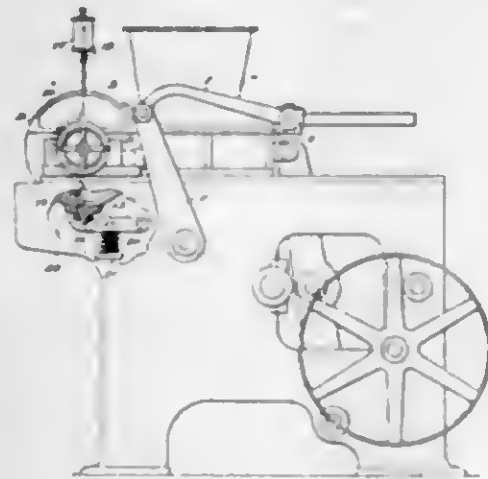
1. In an automatic sprinkler, a valve cap, a lever bearing on said cap, a post supported at one of its ends on the axial line of the sprinkler and bearing at its other end on the said lever in one side of the axial line, an arm extend-

ing from said post into engagement with said lever, a latch lever interposed between the ends of said arm and said first-named lever, said levers and said arm being of



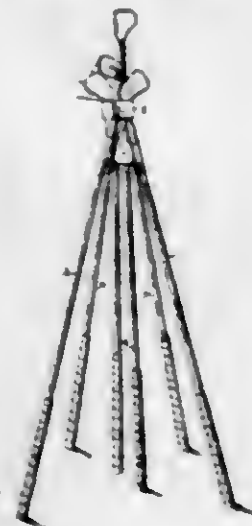
apartulate form at their contacting ends, and a fusible solder forming a cohesive and mechanical lock between said levers.

1,314,170. OILER FOR DOUGH-DIVIDER CYLINDERS. FRANK H. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed Aug. 24, 1918, Serial No. 251,200. Renewed July 11, 1919. Serial No. 310,210. 5 Claims. (Cl. 107—9.)



1. In a dough divider, a cylinder, a scraper member having an oil groove, parallel with the axis of said cylinder, and means for resiliently holding the member in contact with the cylinder.

1,314,171. GOLF-CLUB HOLDER. EDWARD J. VOGL, San Francisco, Calif. Filed Feb. 25, 1918. Serial No. 219,163. 1 Claim. (Cl. 224—45.)



A golf club holder, comprising individual tubes for golf clubs rigidly secured together so as to extend in

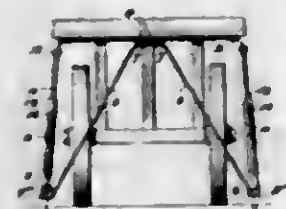
parallelism and each of sufficient width in proportion to their lengths to permit the club shafts therein to extend downwardly and outwardly in oblique positions to form a tripod, but being sufficiently long to prevent the club shafts from extending outwardly too far to form a practical tripod.

1,314,172. WATCH. LOUIS E. F. WACHTER, New York, N. Y. Filed May 13, 1919. Serial No. 296,774. 5 Claims. (Cl. 58—06.)



4. As a new article of manufacture, a watch bow having its ends extending at an angle to the plane of the body portion thereof.

1,314,173. SAFETY APPARATUS FOR TRUCKS, &c. OEN F. WALLER, Aberdeen, S. D., assignor to E. L. Grantham and William G. Porter, Aberdeen, S. D. Filed July 27, 1918. Serial No. 247,076. 2 Claims. (Cl. 280—8.)

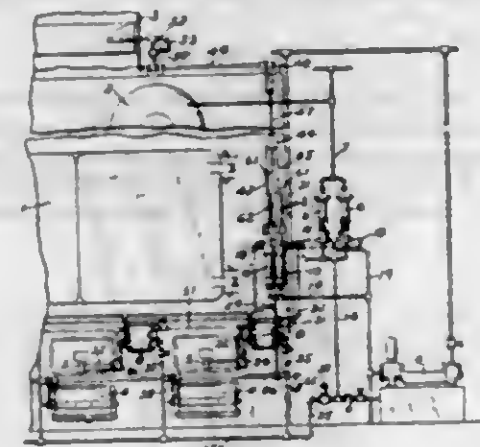


1. In an apparatus of the class described, the combination with a truck provided with a platform and a rear and a front truck, of a pair of transverse bracing frames secured to the under face of the platform, each frame being formed from a single piece of material and comprising a flat truck-engaging portion, depending outwardly-extending legs, feet formed integral with the lower ends of said legs, upwardly and inwardly-extending bracing portions integral with the inner ends of said feet, each bracing portion terminating in an apertured lug resting against the under face of said truck-engaging portion of the frame, means extending through said apertured legs and the truck-engaging portion and securing said frame to said platform, runners fastened to the feet of said frames, and braces secured to the runners near their middle and to the legs of the frames near their upper ends.

1,314,174. FURNACE DRAFT-REGULATOR. SHIRLEY S. WEEKS, Oakland, and CARLTON D. STEWART, Berkeley, Calif., assignors to Associated Engineering and Supply Company, San Francisco, Calif., a Corporation of California. Filed Dec. 18, 1916. Serial No. 137,543. 12 Claims. (Cl. 110—64.)

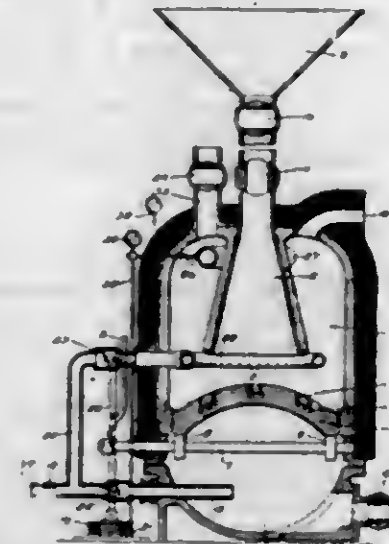
1. In a liquid fuel burning apparatus, the combination with a furnace and a mechanism for regulating the flow of fuel to the furnace, of a device for regulating the

furnace draft and means operated by said device after the furnace draft has been opened for effecting the



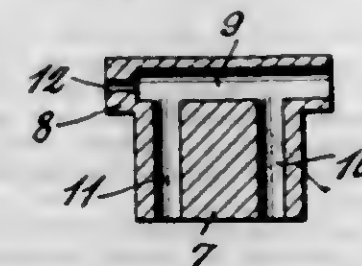
operation of said mechanism to increase the supply of fuel to the furnace.

1,314,175. FURNACE FOR CONVERTING ENERGY OF FUEL INTO FORCE. WILLET C. WELLS and FRANK E. WELLS, Columbus, Ohio. Filed Nov. 15, 1915. Serial No. 61,700. 3 Claims. (Cl. 60—44.)



1. A furnace having means for supplying fuel thereto, means for admitting compressed air to support combustion therein, and means for admitting compressed air to be expanded therein by heat in bringing the gases of combustion to a serviceable temperature, said temperature automatically controlling both said means of admitting said air.

1,314,176. POURING-STOPPER FOR LIQUID-CONTAINERS. RAY D. WHITING and ALONZO A. WHITING, Chicago, Ill. Filed Apr. 5, 1915. Serial No. 19,228. 1 Claim. (Cl. 215—54.)



A bottle stopper comprising a single unit composed of a plug having a body portion which is enlarged at its outer end to form an integral head, the body portion

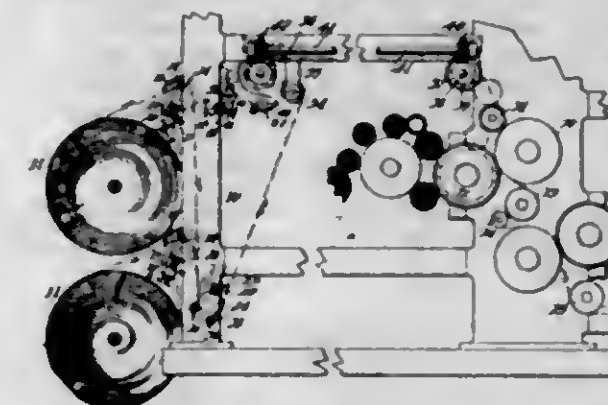
fitting removably in the neck of the bottle, and the head being on the outside thereof and having a smooth, unobstructed side surface to seat a cap, said head being provided with a transverse outlet duct opening through its side, and the body portion having longitudinal pouring and air ducts extending from its inner end and communicating with the aforesaid outlet duct, the head also having an air inlet port in its side and communicating with the outlet duct, the effective area of the air inlet port being less than that of the outlet duct.

1,314,177. FARMER'S TRUCK AND PLOW. VALENTY WOUTEN, New Kensington, Pa. Filed Feb. 20, 1919. Serial No. 278,127. 3 Claims. (Cl. 97—36.)



1. A plow truck comprising a platform having longitudinal openings and relatively narrow longitudinal slots positioned between said openings, a plurality of plows adapted to travel beneath the platform, an upright and a rearwardly squared inclined post carried by each plow freely positioned through said slots adapted for preventing lateral shifting movement of the plows, a forwardly projecting tongue for each plow carried by the posts thereof and attaching means for the tongues adjacent the forward end of the platform whereby the plows are adapted for forward movement with the tongues of said plows in substantially the same horizontal plane during the forward travel of the vehicle.

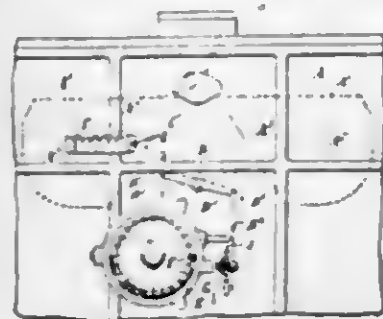
1,314,178. WEB CONTROLLING AND TENSION DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 16, 1913. Serial No. 773,917. 9 Claims. (Cl. 242—75.)



9. The combination with a printing machine, and means for supporting a web roll, of a freely suspended web guide and tension roll for the web, and a second web guide and tension roll for the web in position to receive the web directly from said first guide roll.

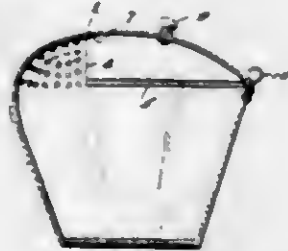
1,314,179. RECORDING INSTRUMENT. PETER M. ANDERSON, Washington, D. C., assignor to Joseph S. Lovering Wharton, William S. Hallowell, and John C. Jones, Philadelphia, Pa., doing business under the name of Harrison Safety Boiler Works. Filed Jan. 16, 1917. Serial No. 142,614. 1 Claim. (Cl. 234—34.)

recording instrument adapted to graphically record such movements and to show the relative time and speed of each such periodic movement with respect to the others, said recording instrument comprising a clock driven traveling record surface, a machine element held in constant contact with said surface so as to mark thereon its relative movements, a rotating cam connected to move the marking element to and fro over the record surface and actuating means whereby the



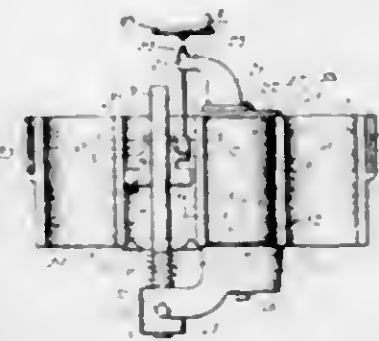
periodically moving elements aforesaid impart rotative movement to the cam, said actuating means and the throw of the cam being such as to cause the marking element to traverse the record surface by separate step by step movements, each of sufficient magnitude as to be clearly depicted on the record surface and to form thereon a zigzag record clearly showing each movement of the periodically moving elements.

1,314,180. KETTLE. MARTHA O. AYERS, Rio Blanco, Colo. Filed Dec. 20, 1918. Serial No. 267,670. 4 Claims. (Cl. 53-8.)



1. A kettle of the character described including a perforated top and imperforate cover positioned upon said kettle and brought into locking engagement with the top thereof, and a spring catch on the wall of the kettle releasably engaging the cover for holding the same in the above mentioned locking engagement with said top.

1,314,181. BORING-MACHINE. POMERIN BOSCH, Elgin, Ill. Filed Feb. 15, 1919. Serial No. 277,165. 8 Claims. (Cl. 77-2.)



1. In a machine for boring cylinder castings, the combination with a tool carrier shaft adapted to be positioned centrally within the cylinder to be bored, of devices for centering said shaft, comprising a lower frame member in which the shaft is rigidly carried, said frame

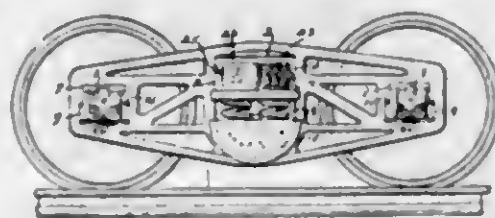
member having an upper surface defining a plane at right angles to the axis of the shaft, and a disk mounted on the shaft and having a conical surface of sufficient diameter to contact with the lower edge of the cylinder to be bored.

1,314,182. BRUSH-HOLDER AND CONDUCTOR-TERMINAL. WALTER BAOWN, Racine, Wis., assignor, by means assignments, to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 19, 1918. Serial No. 212,580. 5 Claims. (Cl. 200-24.)



1. A combined brush holder and terminal clip comprising a single piece of sheet metal consisting of an initially substantially rectangular body portion conformed to provide a cylindrical brush holder, and a comparatively narrow strip extending from one end of the body portion, said narrow strip turned at right angles to the axis of the cylindrical brush holder formed by said body portion and constituting an end closure for said cylindrical brush holder, said narrow strip being turned upon itself to constitute the body portion and spring arm of a terminal clip of the sheet metal type.

1,314,183. CAR-TRUCK. HENRY J. BUDENHEIM, Pittsburgh, Pa. Filed Nov. 13, 1915. Serial No. 61,219. 21 Claims. (Cl. 105-198.)



1. In a car truck, a side frame provided with a centrally disposed and unobstructed space having parallel vertical sides and a semi-circular bottom portion of an approximate dovetail formation in cross section, both end sections of the frame being apertured to house journal boxes.

2. In a car truck, a side frame provided with a centrally disposed and unobstructed space having parallel vertical sides and semi-circular bottom portions, both ends of the frame being apertured to house journal boxes, said latter apertures having a widened out lower section forming overhanging and aligning shoulders.

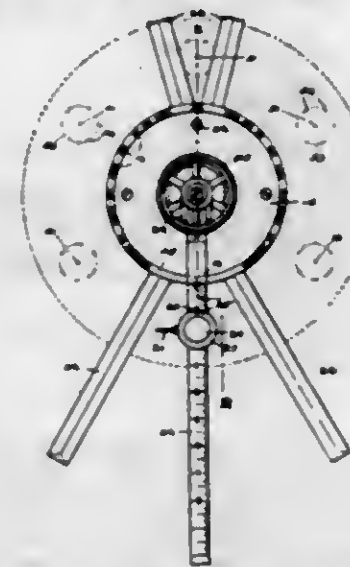
3. In a car truck, a side frame provided with a centrally disposed and unobstructed space having parallel vertical sides and a semi-circular bottom portion, the latter part being of a dovetail formation, both end sections of the frame being apertured in order to house journal boxes, said latter apertures having a widened out lower section forming overhanging and aligning shoulders which are convex in cross section.

4. In a car truck, the combination with the apertured side frame, of a journal box having exteriorly arranged semi-circular and aligning side bearing portions, together with a transversely arranged convex raised section central of the top portion, the box housing apertures, formed in the end sections of the frame, having suitable bearings

whereby the journal box will have a pivotal function within the frame.

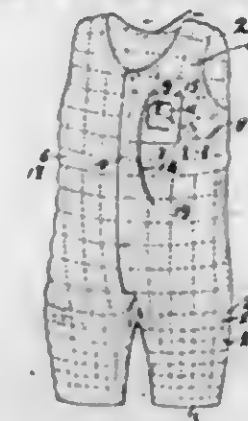
5. In a car truck, the combination with the side frame having apertured end sections, which apertures are provided with aligning and rounded off shoulders, of a journal box adjustable within the aperture, said box having exteriorly arranged semi-circular and aligning side bearing portions for engagement with the said shoulders, together with a transverse convex raised section central of the top portion, which convex part seats in a concavity formed in the frame, whereby a pivotal union is provided between the frame and box.

1,314,184. DEVICE FOR LAYING OUT PIPE-FLANGES. MAHON EDWIN CLARK, Seattle, Wash. Filed May 27, 1918. Serial No. 236,749. 9 Claims. (Cl. 33-189.)



1. A device of the class described comprising a shank, means associated with said shank for centering it within a cylindrical opening, a graduated arm pivoted for tilting movement and for movement around the axis of said shank, an annular notched flange supported by said shank for determining the angular position of said arm and a marking device carried by said arm.

1,314,185. BATHING-SUIT OR LIFE-PRESERVER. JAMES M. COMBS, Akron, Ohio. Filed Dec. 5, 1918. Serial No. 265,368. 4 Claims. (Cl. 9-20.)



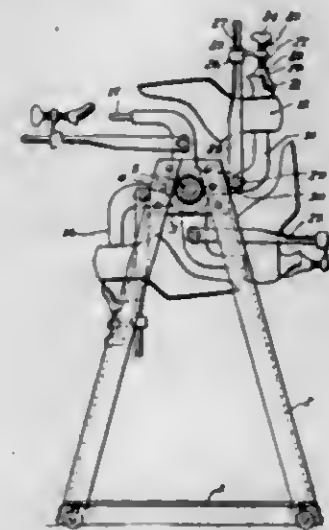
1. A bathing suit or life preserver comprising a garment having inner and outer walls formed of approximately air proof material, said walls united by rows of stitching, said rows of stitching extending in spaced relation longitudinally and in spaced relation circumferentially of the garment to divide said garment into compartments the boundaries of which are formed by said stitching, the intersections of the stitching between the walls being interrupted to permit the flow of an insulating fluid between the various compartments whereby the introduction of a buoyancy fluid into a selected compartment is enabled to pass to all portions of said garment.

1,314,186. FIRE-EXTINGUISHER BRACKET. BENJAMIN DOWNHOLM, Bristol, R. I. Filed Mar. 26, 1919. Serial No. 285,272. 5 Claims. (Cl. 169-8.)



1. A bracket for supporting and automatically putting into operation a fire extinguisher, comprising a wall-attaching support adapted to be secured at its ends to a wall and formed at its upper end with a cylindrical socket closed at its outer end, a spring retracted pin operable in the socket and projecting through its closed end, said outer end of the pin having a transverse opening therethrough, a frame including a vertical arm provided with a pivot pin projected rearwardly therefrom between its ends and journaled in a bearing provided in the support, an extinguisher supporting base secured at the lower end of the arm, an extinguisher embracing spring clamp carried by the upper end of the arm, said arm having a perforation in which the spring retracted pin is engageable, means for turning the frame on its pivot when said spring retracted pin is withdrawn from the arm aperture and a fusible member normally holding the pin engaged in the arm aperture.

1,314,187. HORN-ATTACHING APPARATUS. JAMES F. EATON, Rochester, N. Y. Filed Feb. 7, 1918. Serial No. 215,850. 22 Claims. (Cl. 12-125.)

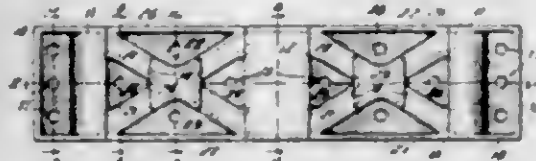


1. A horn attaching apparatus comprising a stand, a shaft normally stationary but rotatably adjustable about a horizontal axis, a member rotatable on said shaft having a plurality of posts thereon, the axes of said posts extending in lines arranged transversely of the axis of the shaft, and means for holding said member in different positions with reference to the shaft.

1,314,188. STOP-CASTING. WILLIAM A. GEIGER, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Jan. 20, 1919. Serial No. 271,950. 2 Claims. (Cl. 213-42.)

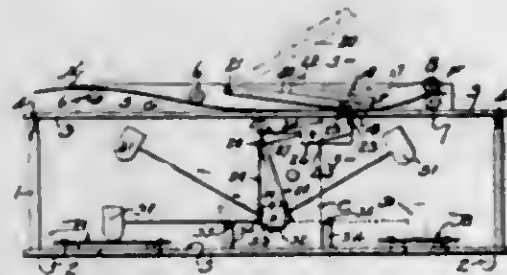
1. As an article of manufacture, a stop casting for railway draft riggings comprising a plate having the main

portion thereof in the outer plane adapted to fit against a draft sill, said plate having formed therein a plurality of vertically arranged, longitudinally spaced, convolutions extending inwardly and forming the main stop shoulders, said plate having also hollow ribs of X formation



between the stop shoulders, said ribs extending inwardly from the main portion of the plate but to a lesser extent than the stop shoulders, the point of intersection of the X-ribs being substantially midway between the stop shoulders and the ends of the ribs extending to the upper and lower corners of the stop shoulders.

1,314,189. TOY AUTOMATIC PLAYER-PIANO. FRED E. GOODMAN, Binghamton, N. Y., assignor to Eva S. Goodman, Syracuse, N. Y. Filed Sept. 13, 1917. Serial No. 191,228. 1 Claim. (Cl. 84-199.)



A hammer connection for toy automatic player pianos including a block having a central axis, a hammer carried thereby and disposed at right angles to said axis, a note sheet engaging lever including a block having the fulcrum of the lever therein and provided with note sheet engaging means at one end, and a flexible connection between the other end of said lever and the block associated with the hammer, said flexible connection passing around two sides of the hammer block and being connected therewith.

1,314,190. PULLEY. CLYDE C. HAYDEN, Okmulgee, Okla. Filed Mar. 15, 1919. Serial No. 282,913. 3 Claims. (Cl. 64-17.)

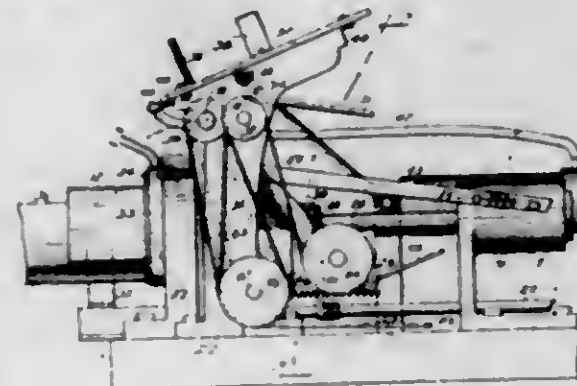


1. In combination, a fan belt pulley including a hub and a rim provided with openings extending through the rim and hub and with a recess in the inner surface of the rim in diametrical alignment with said openings, and a ratchet-crank pin extending through said openings and having one end seated in said recess and the other end seated in said opening.

1,314,191. COMPOSITION OF MATTER FOR PREVENTING STATIC ELECTRICAL EFFECTS IN PRINTING. WILLIAM HICKINGSBOTTOM, Toronto, Ontario, Canada. Filed Jan. 29, 1919. Serial No. 273,860. 6 Claims. (Cl. 134-1.)

6. A composition of matter for preventing static-electrical effects in printing comprising substantially 4 fluid ounces of oil of mirbane, 5 fluid ounces of lard oil, 6 fluid ounces of kerosene oil, 1 1/2 fluid ounces of glycerin, and 1/2 fl. ounce of oil of citronella.

1,314,192. PAPER-VESSEL-MAKING MACHINERY. HARRIET HILL, New York, N. Y., assignor to Paper Utilities Corporation, a Corporation of New York. Filed Nov. 11, 1918. Serial No. 261,967. 5 Claims. (Cl. 93-60.)



1. In a machine of the class described, a plunger, an expander mounted on said plunger, a fixed die adapted to receive said plunger, a shoulder in said die adapted to engage an edge of a vessel formed between the die and plunger and prevent the vessel from returning with the plunger when the same is withdrawn from the die, and means for removing a blank from a pile and feeding it between the die and plunger.

1,314,193. CRUTCH. GEORGE HIRWOOD, New York, N. Y. Filed Jan. 17, 1919. Serial No. 271,595. 2 Claims. (Cl. 135-53.)

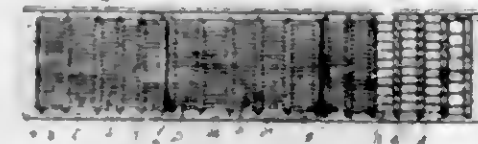


1. In a crutch, the combination with a crutch leg having a ball-receiving recess in its lower end, of a casing into which the lower end of said leg is telescopically received, a spring in said casing on which the crutch leg is supported, a washer interposed between said crutch leg and spring and provided with a ball-receiving recess, and a ball contained partly in the recess in the crutch leg and partly in the recess in said washer.

1,314,194. SCREEN FOR STONE, SLAG, OR THE LIKE. DAVID H. HOOVER, Pottstown, Pa. Filed May 12, 1919. Serial No. 266,330. 4 Claims. (Cl. 83-56.)

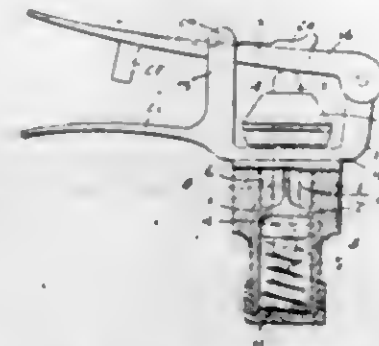
1. A section of a screen for stone, slag, or the like, comprising series of longitudinal screening bars down-

turned at their ends to form retaining hooks, a series of transverse supporting tie-rods engaged in said hooked



ends, the two end ones having spacing washers between the engaged screening bars, and nuts on said tie-rods to integrally unite each section.

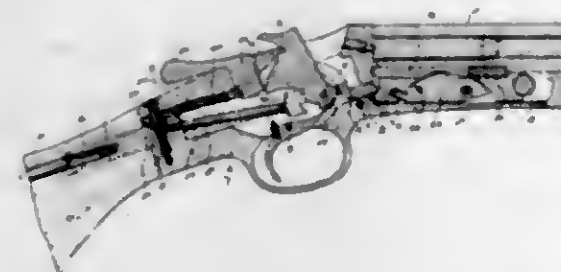
1,314,195. SELF-CLOSING TAP. HAROLD JARVIS, Toronto, Ontario, Canada. Filed Aug. 31, 1917. Serial No. 189,062. 3 Claims. (Cl. 251-134.)



2. In a self-closing valve, a body portion open at the top and having a valve seat, a grooved valve stem extending through said valve seat and having a valve at the inner end adapted to be pressure closed against said seat, a cap secured to the top of said body portion, an arm extending upwardly from said cap, a lever pivotally secured to the upper end of said arm and adapted to engage the upper end of said valve stem, a slotted lug projecting upwardly from said cap on the side opposite to the lever supporting arm, said lug forming a guide for limiting the movement of said lever, and a rigid arm projecting from said cap and arranged below said lever.

3. In a self-closing valve, a pressure closed valve, a lever pivotally supported from the valve body for opening the valve, a slotted arm extending each side of said lever and having a cross bar at the top, and a member slidably arranged on said lever adapted to engage the underside of said cross bar for holding the valve open.

1,314,196. BREAKDOWN SHOTGUN. THOMAS C. JOHNSON and CHARLES E. BLIZARD, New Haven, Conn., assignors to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Mar. 5, 1919. Serial No. 280,814. 4 Claims. (Cl. 42-44.)

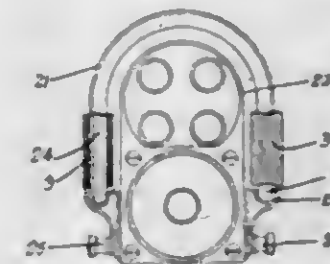


1. In a breakdown shot gun, the combination with the receiver and pivotal barrel thereof, of a sliding barrel-locking bolt mounted in the receiver and extending rearwardly therein, and a hammer pivoted forward of the rear end of the said bolt the forward end of which is extended downward in front of the heel of the hammer, the said forward end of the bolt and the heel of the hammer being proportioned so that when the hammer is in

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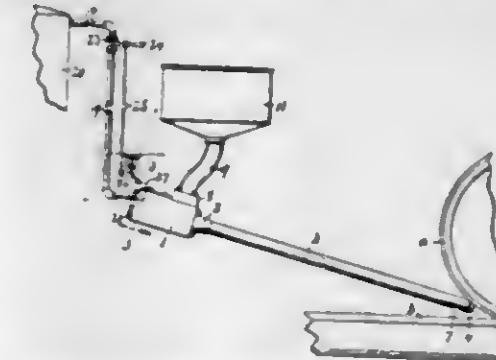
its fully cocked position, its heel will engage with the forward portion of the bolt for holding the same in its locked position.

1,314,197. MAGNETO. LAWRENCE LANGRISH, New York, N. Y., assignor to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Original application filed Sept. 22, 1913, Serial No. 790,868. Divided and this application filed Sept. 21, 1917. Serial No. 192,506. 2 Claims. (Cl. 171-209.)



1. In combination, a magneto including permanent magnets, with an attachment for increasing the intensity of magnetic flux of the magneto, said attachment being a unitary structure comprising a core, a winding for said core, and means for detachably securing said attachment to the magneto.

1,314,198. TRACK-SANDING DEVICE. FREDERICK D. MCGINLEY and THOMAS J. COCOHLIN, Syracuse, N. Y. Filed June 26, 1918. Serial No. 242,005. 3 Claims. (Cl. 291-24.)



1. In a track-sanding device, a conduit having an inlet and an outlet, means for supplying sand to the inlet, a gate for controlling said supply, and means movable within the conduit for positively feeding the sand from the inlet to the outlet, in combination with driving means for the last named means including an air operated impeller and a valve for controlling said air, means for operating said valve, and connections between said valve operating means and gate for opening the gate when the valve is opened and vice versa.

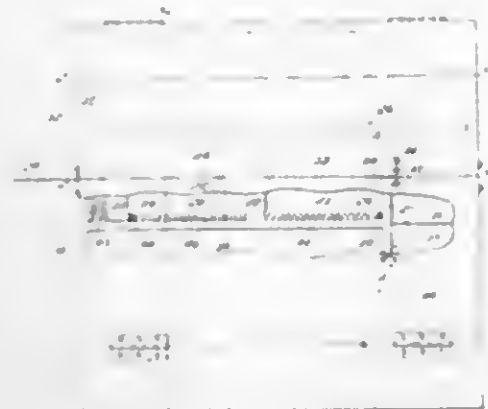
1,314,199. PROTECTING DEVICE FOR AMMUNITION. EUGENE MARTIN, Toulouse, France. Filed May 14, 1918. Serial No. 234,566. 5 Claims. (Cl. 102-26.)



1. In a protecting device for bodies, a girth member extending around the body, a band including the said

member, hoops extending around the said girth member on each side of said band, means for securing the ends of said hoops together, and the wires connecting the hoops on each side of said band.

1,314,200. MOUSETRAP. NICK B. MILLER, Fairford, Manitoba, Canada. Filed June 10, 1919. Serial No. 303,910. 7 Claims. (Cl. 43-24.)



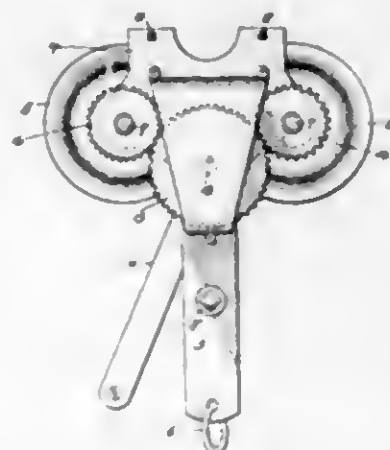
1. A trap comprising a casing having an imprisoning compartment and adjacently positioned killing and discharge chambers, the killing chamber communicating with said compartment and the discharge chamber having an open bottom, a reciprocating killing block within the killing chamber and means for effecting communication between the killing and discharge chambers.

1,314,201. FOLDING LADDER. LAYTON E. MOORE, Palo Alto, Calif. Filed Nov. 20, 1915. Serial No. 62,571. Renewed Jan. 9, 1919. Serial No. 279,458. 2 Claims. (Cl. 228-36.)



1. A folding ladder comprising spaced side rails and rungs hinged to the side rails to permit the same to collapse or fold laterally, inclined braces hinged at their upper ends to the side rails at the outer face of the same and extending downwardly beyond the lower end of the ladder, and horizontally disposed connecting bars arranged in parallelism and pivotally connected at their outer ends to the inclined braces intermediate of the ends thereof and connected between their ends with the lower end of the ladder, said last-mentioned bars being extended downwardly between the parallel connecting bars so as to be braced by the same, said connecting bars and inclined braces being arranged to fold flat against the ladder when the same is folded.

1,314,202. AERIAL CONVEYER. RICHARD S. MOORE, Rockdale, Tex. Filed Jan. 30, 1919. Serial No. 273,990. 1 Claim. (Cl. 105-150.)



An apparatus of the character described comprising spaced plates having grooved wheels mounted therein and journaled in the plates, shafts extending through the wheels and through the plates and equipped with gears on their ends, a centrally located drive shaft provided with a gear adapted to mesh with the gears on the said wheel shaft, a handle element secured to the drive shaft and adapted to be actuated for rotating the drive shaft, said handle being extended from one side of one of the plates, and a hand grip extending from the opposite side of the opposite plate and adapted to be grasped by the operator to hold the plates from swaying while rotary movement is being imparted to the handle element.

1,314,203. PROCESS OF MAKING SUGAR. RUSSELL WILLIAM MUMFORD, New York, N. Y., assignor to Refining Products Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 29, 1917. Serial No. 177,820. 10 Claims. (Cl. 127-15.)

3. In the purification of sugar solutions to remove dissolved and suspended impurities, the process which comprises vigorously agitating such solutions with a relatively coarse grained vegetable carbon having open pores corresponding substantially to the original texture of the material from which such carbon was made, such carbon having pores substantially unobstructed by secondary carbon and adapted to take up and retain fine insoluble suspended matter.

1,314,204. PROCESS OF MAKING PURIFYING PREPARATIONS. RUSSELL WILLIAM MUMFORD, New York, N. Y., assignor to Refining Products Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 27, 1918. Serial No. 225,067. 6 Claims. (Cl. 127-2.)

5. In the manufacture of purifying agents, the process which comprises working kieselguhr and powdered carbonaceous matter together into a dough with a tarry matter and slowly carbonizing through a range of temperatures ending above 600° C., the circumstances of charring being such as to facilitate ready escape of vapors produced in charring.

1,314,205. TOY. WILLIAM OSECHUK, Allentown, Pa. Filed Feb. 14, 1919. Serial No. 277,017. 2 Claims. (Cl. 46-40.)

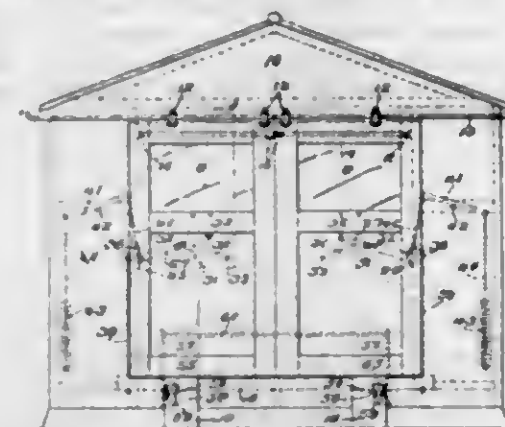
1. A toy comprising side bars, a looped cord adapted to assume rectangular shape connected between the ends of the bars at one end of the device, a doll figure comprising a body having pivoted legs and arms with the arms freely positioned upon the loop, a substantially centrally positioned brace between said bars having swinging connection with each of the bars and a shield portion adja-

cent one end, a brace at the opposite end of the device from said cord pivoted to the bar and slidably positioned with a shoulder adjacent the same through the opposite



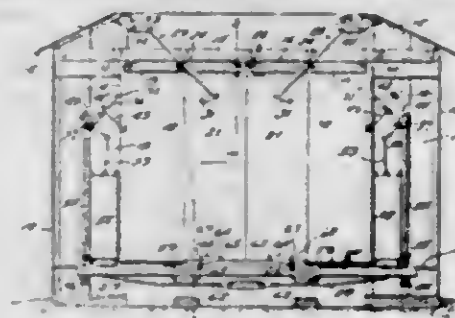
bar and resilient means upon said braces between said shoulders and bars adapted for normally maintaining the bars parallel.

1,314,206. DOOR AND GATE OPERATING MECHANISM. MATTHEW C. OSTER, Denton, Mont. Filed Nov. 19, 1917. Serial No. 202,777. 6 Claims. (Cl. 268-8.)



2. In combination with a building having a door opening, and a door for moving into and out of the opening, of an operating mechanism for said door including an arm pivoted on the building and adapted to extend alongside said door, means for swinging said arm back and forth, and a rigid link pivoted to the arm and door operating between said arm and the adjacent side of the door and adapted to swing to opposite sides of the arm pivotal point when the door is moved into and out of the door opening, the arm pivot and the pivot between the link and door arranged to lie substantially in the same horizontal plane.

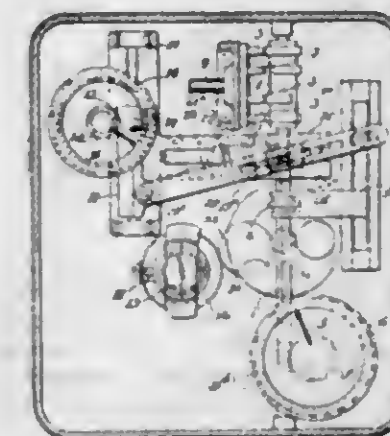
1,314,207. DOOR AND OPERATING MEANS THEREFOR. MATTHEW C. OSTER, Roy, Mont. Filed May 3, 1918. Serial No. 232,286. 6 Claims. (Cl. 268-8.)



1. In a mechanism as described, the combination of a slidable door section, means for supporting the section on

a wall, a second door section slidable and supported upon the first door section independently of the supporting means therefor, and a connection between both of said door sections for advancing the second section upon the first section.

1,314,208. ELECTRIC FIRE CONTROL FOR GUNS. ARTHUR H. POLLEN, London, and HAROLD ISHERWOOD, York, England. Filed Apr. 3, 1919. Serial No. 287,328. 3 Claims. (Cl. 177-351.)



2. In a mechanism of the type described, the combination of a movable transmitter pointer, a rotary shaft for moving the pointer, a variable speed gear cooperating with the shaft and including a rotary disk and a wheel movable with the shaft and in frictional engagement with the disk and movable bodily radially of the disk, an indicator movable to indicate the rate of change of range, a member operatively connecting the indicator with the wheel and acting, when the indicator is moved, to move the wheel radially of the disk, a "follow the pointer receiver" comprising a movable receiver pointer and an associated scale which does not follow a straight line law, means whereby said receiver pointer is moved by the shaft, and a device operated by the shaft and controlling the radial movements of the wheel, for automatically varying the velocity transmitted by the shaft in order to compensate, in the movements of the receiver pointer, for the variations in the scale of the "follow the pointer receiver."

1,314,209. TATTING-SHUTTLE. MAZEL L. POSTER, Rochester, N. Y. Filed July 3, 1918. Serial No. 243,180. 1 Claim. (Cl. 66-10.)

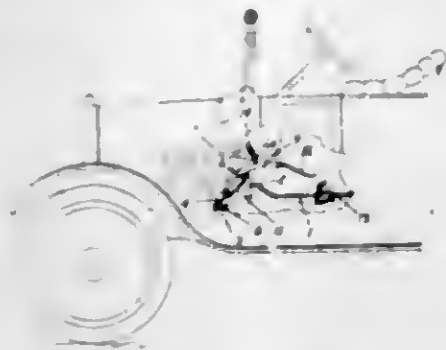


A tating shuttle comprising a mounting block, side plates carried by said block, one of said plates having an integral extension at one end projecting longitudinally beyond the adjacent end of the other plate and tapering to a slender point, said point being slightly curved outward, the adjacent end of the opposed side plate contacting closely with the base of said pointed end and lying substantially flush with the inner face thereof to form a smooth unobstructed surface to facilitate the passage of the shuttle through the work, said shuttle having thread passages at each end.

1,314,210. PEDAL CONTROL FOR MOTOR VEHICLES. THOMAS C. PEACOCK, Chinese Camp, Calif., assignor of one-half to Saul Morris, Chinese Camp, Calif. Filed Mar. 26, 1919. Serial No. 285,239. 1 Claim. (Cl. 74-81.)

In combination with a motor vehicle having a change speed transmission operable by the clutch pedal, a spring pressed quadrant pivotally mounted to the frame of the

vehicle and adapted to straddle the shank of the pedal, a pawl on the pedal adapted to engage low or neutral position notches cut in the quadrant, the latter being normally in contact with the pawl whereby the pedal is held in locked position relative to the quadrant and means where-



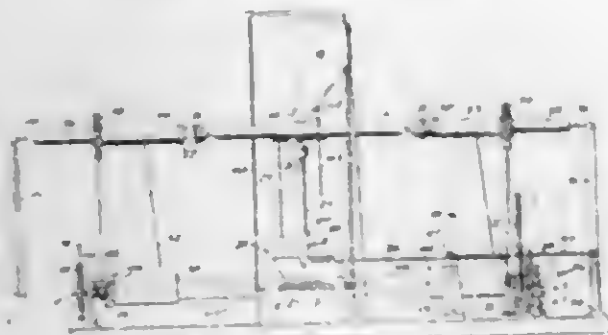
by the quadrant may be released from contact with the pawl and so held, such means including a spring pulled dog mounted to the floor of the vehicle, and a foot plate on the quadrant, the edge of the plate being adapted to catch under the dog when the quadrant is pressed down away from contact with the pawl on the pedal.

1,314,211. METHOD OF MAKING PRINTED IMPRESSIONS. FRANK A. PUTNAM, Melrose, Mass., assignor to Markem Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 6, 1917. Serial No. 141,011. 4 Claims. (Cl. 101—426.)



1. The steps in the process of making a printed impression on sheet material which consist in subjecting the impression-receiving portion of said sheet to the action of heat and to a smoothing pressure which densifies the material in said portion and renders said portion of the sheet thinner than other portions not so treated and then printing the impression on said prepared densified portion.

1,314,212. APPARATUS FOR BUILDING UP OBJECTS OF QUARTZ GLASS. WALKER S. QUIMBY and FREDERIC W. ROBINSON, Newark, N. J., assignors to Hanovia Chemical & Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 23, 1918. Serial No. 263,820. 17 Claims. (Cl. 49—1.)



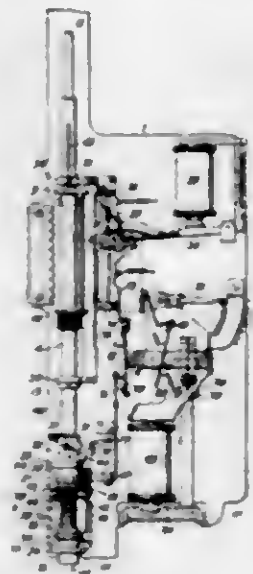
1. An apparatus for building up an object of quartz glass, comprising means for heating a nucleus of quartz glass to a plastic state, means for separating said nucleus from said heating means, means for applying to the surface of said heated nucleus an accretion of powdered quartz, and means for again subjecting said nucleus to said heating means to fuse and vitrify said accretion and incorporate the same in said nucleus.

1,314,213. EMBROIDERY. JULIA M. REIS, New York, N. Y. Filed Mar. 30, 1917. Serial No. 158,536. 4 Claims. (Cl. 2—147.)



1. A cloth article of commerce adapted to be hand embroidered, having machine embroidery on its upper surface to serve as a pattern for hand embroidery in the desired design and forming a component part of the cloth article, said embroidered pattern having relatively long stitches on the upper surface of the cloth article and relatively short stitches on the lower surface thereof, and with the upper relatively long stitches running longitudinally of the design elements, whereby the machine embroidery threads serve both as a pattern for hand embroidery thereof and as a filler for the hand embroidery.

1,314,214. TELEPHONE SWITCHING APPARATUS. JOHN NEWBERRY REYNOLDS, Greenwich, Conn., and JOHN F. HEARN, Passaic, N. J., assignors to Western Electric Company Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1918. Serial No. 210,862. 22 Claims. (Cl. 179—27.5.)



1. The combination in a switch, of a contact bank arranged in sections and groups, a brush shaft, an auxiliary shaft, said shafts being arranged to be advanced simultaneously in two separate selective movements to select first a section and then a group of contacts in said section, said auxiliary shaft being arranged for further movement to select a set of contacts in the group, and means for operating said shafts.

1,314,215. RIVET-SET. GEORGE R. RICH, Battle Creek, Mich., assignor to Rich Steel Products Company, Battle Creek, Mich., a Corporation of Michigan. Filed Dec. 13, 1918. Serial No. 269,554. 2 Claims. (Cl. 78—46.)

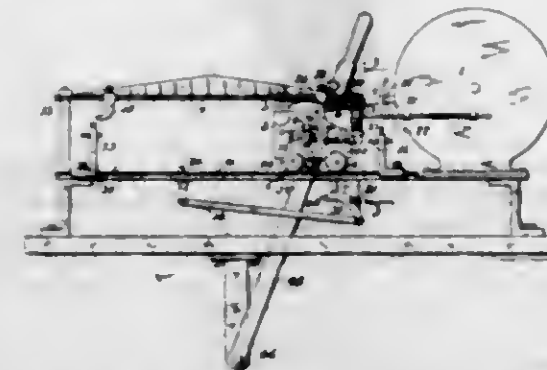
1. As a new article of manufacture, a tool comprising a shank, and a head of greater diameter than the shank and formed integral therewith and having reentrant sur-

faces extending to places approximately in line with the face of the shank, whereby the core of the head



may receive substantially the same degree of hardness as that of the shank in the process of hardening the tool.

1,314,216. STRIP-SERVING DEVICE. ARTHUR E. RINGOUT, Chicago, Ill., assignor to National Binding Machine Company, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1914. Serial No. 834,809. Renewed Dec. 17, 1918. Serial No. 267,213. 15 Claims. (Cl. 91—14.5.)



1. A strip serving device, comprising in combination a holder for a supply of tape, a platen, means for drawing a strip of tape from the supply, and oscillating means adapted to cooperate with the platen and the strip to render the latter adhesive.

2. A strip serving device comprising in combination a holder for a supply of tape, means for drawing a strip of tape from the supply, and means adapted to be moved across the strip to render the same adhesive.

3. A strip serving device comprising in combination a holder for a supply of tape, a rigid platen, means for drawing a strip from the tape supply to a position adjacent to the platen, an oscillating member adapted to traverse the platen and to press the strip of tape against the latter, and means mounted on the oscillating member to render the strip adhesive.

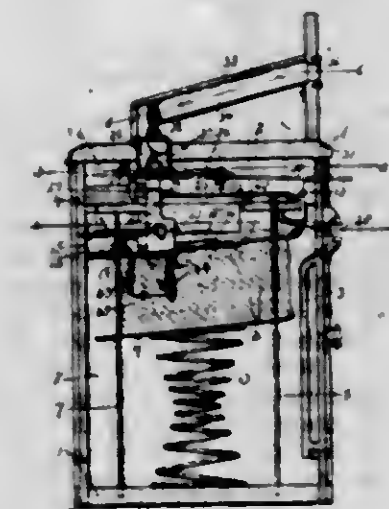
4. A strip serving device comprising in combination a holder for a supply of tape, and an oscillating member having means for drawing out a strip of tape and means for rendering the strip adhesive.

5. A strip serving device comprising in combination a holder for a supply of tape and an oscillating member having means for drawing out a strip of tape, when moving away from the supply, and means for rendering adhesive the strip thus drawn when returning toward the supply.

1,314,217. COIN-CONTROLLED NEWSPAPER-VENDING MACHINE. JOHN H. ROBERTS, Syracuse, N. Y., assignor of one-half to Charles W. Salisbury, Cortland, N. Y. Filed June 8, 1917. Serial No. 173,541. 4 Claims. (Cl. 194—75.)

1. In a coin controlled vending machine, the combination of the case having a delivery passage, means

spring pressed upwardly for supporting a stack of articles to be vended so that the upper one will register with the delivery passage, a stop plate for engaging the uppermost article and slidable back and forth in its own plane, yielding means for holding the plate in a normal position, means on the under side of the plate for engaging one edge of the uppermost article and displacing the same from a stack as said plate is moved from its normal position; a coin receiver movable in the direction of the movement of the plate, a coin chute for delivering a coin into the receiver, means for operating said receiver, an abutment on said plate projecting into the path of the movement of the coin in the receiver for operating said plate to displace the uppermost article from the stack, said receiver and abutment being movable in diverging paths from their normal position to cause the coin to disengage from the abutment when the parts are moved to a certain position.

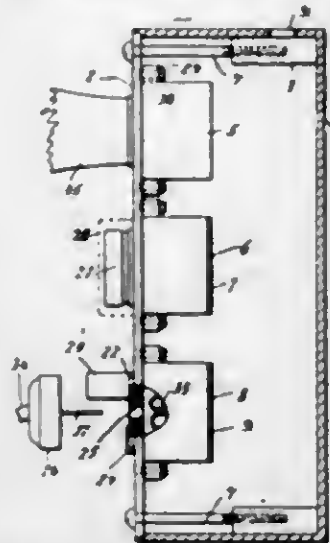


2. In a coin controlled vending machine the combination with an ejector plate and means for feeding the articles to be vended, one by one, against the underside of said plate to be ejected thereby, of a coin-chute, a horizontally swinging arm having means for receiving a coin from said chute when in one position and for releasing said coin when in another position, an abutment on the ejector plate in the path of movement of the coin in the receiver and means for rocking said arm to cause the coin to engage said abutment and thereby operate the ejector plate to eject the article engaged therewith.

3. In a coin controlled vending machine, the combination of a horizontally swinging arm having a coin receiver, an operating lever therefor movable about an axis parallel with that of said arm, a slidable ejector for the articles to be vended having an abutment in the path of movement of a coin in said receiver whereby the ejector is operated to eject one of said articles as the receiver is moved from its normal position, said coin receiver and abutment being movable in diverging paths from their normal position to cause disengagement of the coin from said abutment when moved to a certain position.

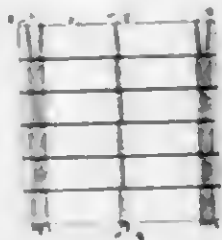
4. In a coin controlled vending machine the combination of a slidable ejector plate having adjustable means for engaging one edge of an article to be vended for expelling said article when the plate is moved in one direction from its normal position, a horizontally movable rock arm above the ejector plate and provided with a slot to receive a coin, a coin chute for conducting a coin into said slot, an abutment on the ejector plate projecting into the path of movement of the coin in the slot whereby the movement of the rock arm from its normal position will operate the ejector plate, and a horizontally movable hand lever also above the plate and connected to said arm for rocking the same.

1,314,218. ELECTRIC RECEPTACLE. MANUEL R. RODRIGUES, Brooklyn, N. Y. Filed Nov. 14, 1918. Serial No. 262,520. 2 Claims. (Cl. 247-5.)



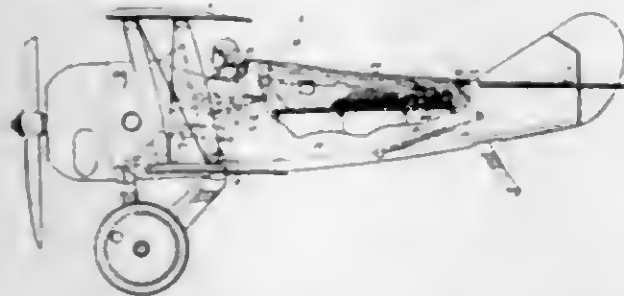
1. A receptacle of the class described, comprising a body portion having an inlet for electric conductors, and closure attaching means, a cover forming a closure for the receptacle, sockets for an indicator, for at least one fuse, and for an appliance plug, a switch attached to the interior face of the closure, the latter being provided with openings for the switch buttons and the closure being also provided with orifices in line axially respectively with the indicator, fuse and plug sockets, to allow the indicator, plug and fuse to be placed in operative position in their sockets and removed without having access to the interior of the receptacle, means for securing the closure to the said attaching means to hold the former in protective position to prevent any tampering with the said sockets without removing the closure, and connections so arranged that when the switch is in an on position and the indicator is inserted in its socket, the said indicator will be in circuit whether the appliance plug is attached to its socket or not.

1,314,219. SCREEN. CURTIS J. ROTHERMEL, Philadelphia, Pa., assignor to the Barrett Company, a Corporation of West Virginia. Filed Mar. 12, 1918. Serial No. 221,006. 3 Claims. (Cl. 156-16.)



3. As an article of manufacture, a shade made of strips of congoleum having air passages therethrough.

1,314,220. AEROPLANE SAFETY DEVICE. FRANK P. SARGENT, San Francisco, Calif. Filed Feb. 12, 1919. Serial No. 276,526. 4 Claims. (Cl. 244-21.)



1. A safety device for aeroplanes, comprising a parachute mounted on the body of the plane with its top fore-

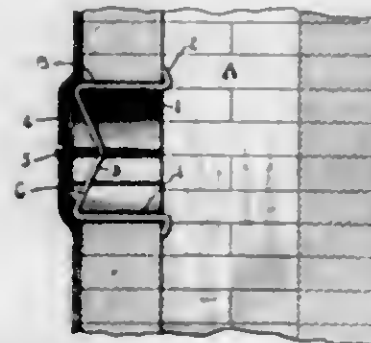
most to drive it, a container for said parachute fixed to the aeroplane and having distensible walls, pivoting means whereby said container may be swung outwardly from the machine, means for distending the walls of said container when the same reaches its outward position, whereby the parachute will be exposed in an unrestricted condition to allow it to be opened by the wind pressure.

1,314,221. DISAPPEARING WINDOW-SCREEN. JAMES K. SCHENCK, Seattle, Wash. Filed July 27, 1917. Serial No. 183,091. Renewed Dec. 27, 1918. Serial No. 268,497. 5 Claims. (Cl. 156-39.)



5. The combination with a window frame having a vertically movable sash, of a spring roller rotatably secured to said frame, a screen having one end secured to said roller and adapted to wind thereon, a cross bar on the opposite end of said screen, said cross bar being formed of a plurality of overlapping sections of sheet metal that are crimped securely to the end of said screen, one of said overlapping sections being slightly spaced from said screen, plates adapted to be secured to the edge of said sash, said plates having downwardly directed studs, and L shaped members having keyhole shaped slots in one portion thereof that are adapted to fit over and be secured on said studs, the other portions of said plates being adapted to be inserted under the spaced portions of said cross bar section, and having elongated slots whereby the metal of said cross bar section may be punched into said slots to secure said L shaped members to said cross bar and admit of a limited movement lengthwise thereof.

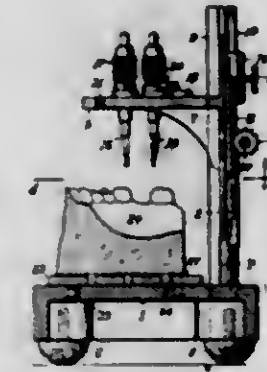
1,314,222. FLUE-STOP. RALPH SHUTTLEFF, St. Louis, Mo. Filed Oct. 21, 1914. Serial No. 867,770. Renewed Jan. 29, 1919. Serial No. 273,889. 2 Claims. (Cl. 126-319.)



1. The combination with a stove pipe opening closure, of a flexible anchor back of said closure adapted to extend through said opening to a flue, the said anchor comprising a pair of parallel gripping legs adapted to contact with the wall of the opening and having feet at their inner ends adapted to bear against the flue wall, and a yield-

able V-shaped spreader connection uniting the outer ends of said gripping legs and having its apex farthest from and opposite the center of said closure, and a pull connection between the center of said closure and the apex of said yieldable spreader connection, said pull connection being operable to bend said yieldable V-shaped spreader connection, thereby firmly forcing the connected gripping legs into frictional engagement with the wall of said opening.

1,314,223. DENTAL PARALLELOMETER. EMIL SØRENSEN, New York, N. Y., assignor to Certus Parallelometer Company, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1918. Serial No. 267,577. 9 Claims. (Cl. 32-10.)



1. A parallelometer comprising a support for a dental model, a vertically movable table, a plurality of horizontally disposed plates mounted on such table to overhang the edge of such table, means on such table for securing said plates to such table in a manner to permit a linear and arcuate adjustment of such plates on such table and longitudinally adjustable bridge-socket holders carried by said plates.

1,314,224. ANCHOR FOR REMOVABLE BRIDGES FOR TEETH. EMIL SØRENSEN, New York, N. Y., assignor to Certus Parallelometer Company, Inc., a Corporation of New York. Filed Feb. 17, 1919. Serial No. 277,386. 3 Claims. (Cl. 32-12.)



1. A bridge anchoring device comprising a recessed member and an anchor adapted to engage the same, said anchor being formed of a web and flanges arranged in T-shape, and a spring member attached to the flanges, said spring member and flanges together forming a wedge substantially as and for the purpose described.

1,314,225. SHIELD FOR TRACTORS. LOUISA SOUCHER, Holyrood, Kans. Filed Mar. 22, 1919. Serial No. 284,254. 2 Claims. (Cl. 296-102.)



1. A shield for a tractor, comprising two similar uprights having clamping devices on their lower ends, a top or canopy secured to the tops of the uprights, a frame or

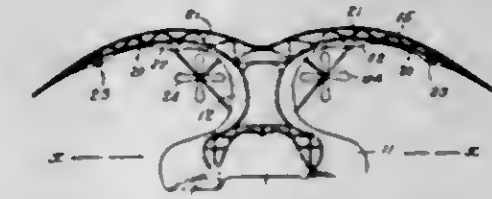
brace attached to the front end of the top or canopy, and two ground wheel guards formed of curved plates adapted to extend over the wheels and segment-shaped flat plates secured to the curved plates and having their middle parts fastened against the lower portions of the uprights.

1,314,226. CAN-OPENER. JAMES P. SWERNY, Saugerties, N. Y. Filed June 14, 1917. Serial No. 174,728. 1 Claim. (Cl. 30-3.)



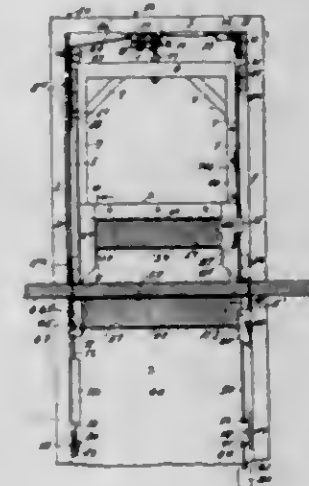
A can opener including a can piercing shank, and a cutting and guiding member longitudinally slidable on the shank, said member being formed from a single piece of material and including a body portion formed with lateral members embracing the said shank, a knife portion in the form of a scalene triangle, and a member bent to form a transversely recessed portion for guiding reception of the edge of a can to be opened, said last named member having upturned wings engaging the sides of the shank.

1,314,227. HYDROAEROPLANE. SCOTT H. TOLMAN, Boston, Mass. Filed July 10, 1917. Serial No. 179,633. 11 Claims. (Cl. 244-2.)



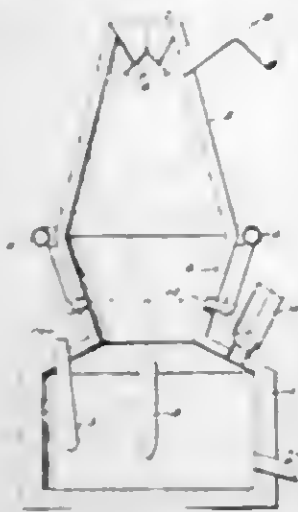
4. A hydroaeroplane comprising a hollow hydroplane portion, a hollow fore-and-aft web portion extending upwardly therefrom, said portions conjointly forming a single sheathed hollow structure, and an aeroplane portion adjoining the upper part of and constituting lateral portions from said web portion.

1,314,228. SAFETY APPLIANCE FOR ELEVATORS. EDWARD TURGEON, Thompsonville, Conn. Filed Nov. 20, 1918. Serial No. 263,408. 33 Claims. (Cl. 157-40.)



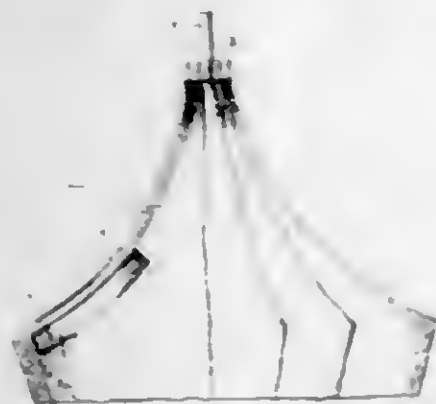
1. In a safety appliance for elevators, a yielding guard comprising a horizontal flexible member adapted when deflected to exert an end pull, supporting means back of said member, and a plurality of movable members between said first-named member and said means.

1,314,229. METHOD OF AND APPARATUS FOR PRODUCING PHOSPHORIC ACID AND COMPOUNDS OF THE SAME. FRANK S. WASHBAURN, Rye, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Apr. 21, 1919. Serial No. 291,529. 7 Claims. (Cl. 204-63.)



1. The process of producing phosphoric acid, which consists in charging a portion of a mixture of mineral phosphate and silicious material into a furnace; charging a second portion of said mixture into said furnace above said first mentioned portion; adding carbon to said first mentioned portion only; raising said first mentioned portion to a temperature sufficient to liberate carbon monoxide gas and a substantial percentage of the phosphorus present while permitting the evolved gases to rise through the interstices of said second portion of the charge, adding air to said gases, and igniting the carbon monoxide present to preheat the down coming charge substantially as described.

1,314,230. UMBRELLA AND PARASOL. ISAAC H. WEINBERG, New York, N. Y. Filed June 26, 1918. Serial No. 242,197. 2 Claims. (Cl. 135-44.)



1. An umbrella or parasol including a cover having spaced half members of two fasteners permanently secured to the cover at its outer edge and a tie having spaced complementary members of said fasteners whereby the tie may be detachably secured at one or both ends to the cover.

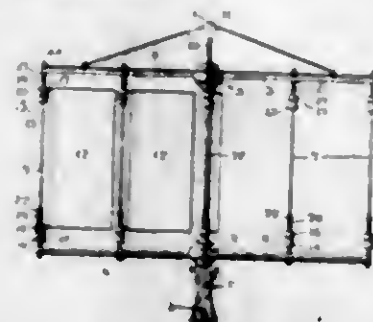
1,314,231. PROCESS OF AND MEANS FOR FIXING ATMOSPHERIC NITROGEN. ROGEE WILLIAMS, Providence, R. I., assignor to Nitrogen Products Company, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 26, 1917. Serial No. 198,711. 10 Claims. (Cl. 23-13.)

1. In a process for fixing nitrogen in the form of a metal cyanogen compound, in which free nitrogen is caused to react upon briquets comprising catalytic material in finely divided condition, carbon and a substance which constitutes both the source of the metallic base of

said cyanogen compound and a binder for said briquets,—the improvement which consists in incorporating directly into the binder of and during the operation of forming said briquets, as a source of carbon for the nitrogen-fixing reaction, carbonaceous material which comprises substantially pure flocculent carbon as produced in and deposited from gaseous material.

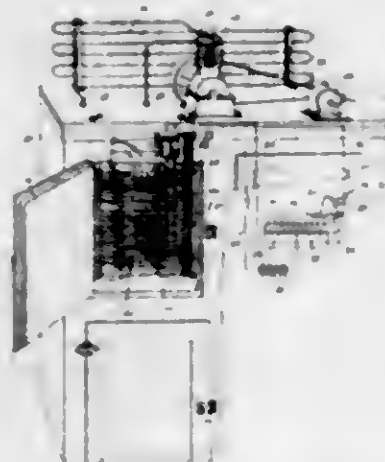
13. An improved briquet for nitrogen fixation purposes, which comprises petroleum coke, finely divided iron and sodium carbonate, the pores of said petroleum coke being substantially open and relatively free from said carbonate.

1,314,232. WINDMILL. GERTLOF WÖMA, New York, N. Y. Filed Dec. 10, 1918. Serial No. 266,116. 4 Claims. (Cl. 170-23.)



4. In a windmill, a horizontally rotating wind wheel having vertical bars, cams fixed thereto, rams rotatably and vertically movable on said bars, sails carried by said last named cams, said fixed and movable cams coacting to limit the swinging movement of the sails except under undue wind pressure, and means to adjust the amount of the resistance of the sails to said swinging movement under undue wind pressure.

1,314,233. REFRIGERATING APPARATUS. FRED W. WOLF, Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 3, 1916. Serial No. 129,349. 5 Claims. (Cl. 62-116.)



2. The combination with a refrigerating machine having an expansion coil formed with a substantially vertical air passage therethrough, of a thermostat arranged in said air passage and connected to control the operation of said machine.

1,314,234. EXPANSION-VALVE. FRED W. WOLF, Chicago, Ill., assignor, by mesne assignments, to The Isko Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 11, 1914. Serial No. 861,194. 2 Claims. (Cl. 50-21.)

1. In a refrigerating apparatus, an expansion valve for use between the condenser and the expansion coil, said expansion valve comprising a casing containing a chamber, a boss on said casing having a vertically and a horizontally arranged aperture, a flexible diaphragm attached to said casing forming one wall of said chamber and comprising a differential pressure member exposed on one side to the pressure in the expansion coil and on the other

side to atmospheric pressure, the vertical aperture to said boss providing communication between the condenser and said chamber and having a valve seat formed therein, a valve adapted to close on said seat attached to said diaphragm, said valve being exposed to the pressure in the condenser and being of substantially smaller cross sectional area as compared to the differential pressure



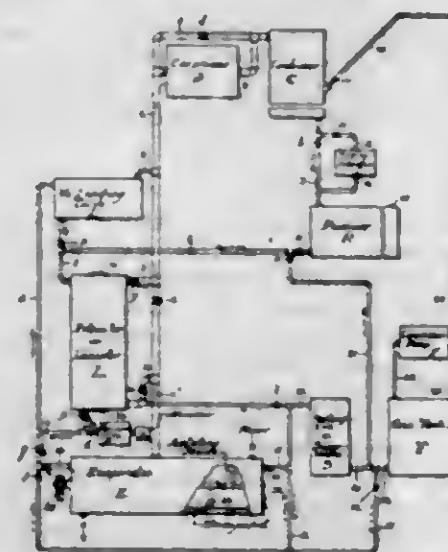
area of said diaphragm, said horizontal aperture in said boss having a valve seat formed therein, said aperture constituting a by-pass connecting the condenser and expansion coils, a second valve member adapted to close upon said seat, and resilient means retaining said valve on said seat against the normal pressure in the condenser.

1,314,235. HOSE-NIPPLE FOR AIR-HAMMERS. FRANK ADKINS, Wheeling, W. Va. Filed May 3, 1919. Serial No. 294,554. 2 Claims. (Cl. 285-84.)



1. A hose nipple for air hammers, comprising a body having a hollow threaded shank at one side thereof for coupling to an air hammer and having at the opposite side thereof a hose-receiving nipple, said shank and said nipple being axially aligned, said nipple having an annular groove therein adjacent to its outer end, and a plurality of fingers extending rearward from said body approximately parallel to and at a spaced distance from said nipple, said fingers being terminated by inwardly directed spurs and being adapted to be bent down upon the hose for depressing portions of the latter into said groove.

1,314,236. SYSTEM FOR RECOVERING CYANIDS AND THE LIKE FROM CYANID-BEARING MATERIAL. EDWARD E. ARNOLD, Greene, Coventry, R. I., assignor to Nitrogen Products Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 16, 1918. Serial No. 217,484. 11 Claims. (Cl. 23-13.)



1. A system for recovering alkali cyanid from material bearing the same, which comprises a lixiviator in which

said material is leached, an evaporator to receive the cyanid-containing solution produced in said lixiviator, means to impart heat to said solution to volatilize the solvent thereof, and connections co-acting with said lixiviator to conduct warm gas from said evaporator through the leached material, to volatilize the occluded solvent in the pores of the latter.

1,314,237. PROCESS FOR RECOVERING CYANIDS AND THE LIKE FROM CYANID-BEARING MATERIAL. EDWARD E. ARNOLD, Greene, Coventry, R. I., assignor to Nitrogen Products Company, Providence, R. I., a Corporation of Rhode Island. Original application filed Feb. 16, 1918, Serial No. 217,484. Divided and this application filed Dec. 2, 1918. Serial No. 264,924. 10 Claims. (Cl. 23-13.)

1. The process of recovering alkali metal cyanid from a porous mass containing said cyanid intimately mixed with material from which said cyanid is to be separated, which comprises, leaching said mass with a selectively acting solvent capable of extracting said cyanid from said mass, separating the bulk of said solvent from said mass, evaporating the separated solvent by the application of heat thereto, and passing a portion at least of the evaporated solvent, while at a temperature above that at which said solvent copiously volatilizes, through the pores of the leached mass to volatilize the residual solvent occluded in said pores.

1,314,238. TOY. BENJAMIN F. BAIN, Pittsburgh, Pa. Filed Mar. 28, 1916. Serial No. 225,203. 7 Claims. (Cl. 46-37.)



1. A mechanical toy comprising in combination, a base, a pair of inverted substantially U-shaped supporting guideways having their upper ends bent laterally, a cross-head provided with slotted, terminal portions adapted to be sprung over the laterally bent ends of the supporting guideways, the cross-head having a revoluble member mounted thereon, a flexible driving member for the revoluble member, and devices connected with said driving member movable in the supporting guideways.

1,314,239. METHOD OF MAKING SHOES. ALBERT F. BANCROFT, Haverhill, Mass. Filed May 3, 1919. Serial No. 294,406. 1 Claim. (Cl. 12-145.)

The method of making McKay sewed shoes which consists in lasting on, and in securing the upper in position at, and adjacent the ball portion of the shoe by driving tacks into the wood of the last, lacing together the oppo-

site edge portions of the upper held by said tacks, so that the upper is held in the position in which it was lasted.



independently of said tacks, and in then withdrawing said tacks and completing the operation of making the shoe.

1,314,240. FOLDING TABLE AND BENCH. HARVEY M. BEAVER and MORRIS TRACH, Minneapolis, Minn. Filed Oct. 10, 1918. Serial No. 257,557. 6 Claims. (Cl. 45-31.)



1. The combination with a table having folding leaves and folding supplemental side legs for supporting said leaves in operative positions, of rails to which said table is attached, and benches mounted to slide on said rails to and from interlapping positions in respect to said table, the outer portions of said rails being foldable against the backs of the benches when the latter are moved to folded positions.

1,314,241. WINDOW-SASH ATTACHMENT. RICHARD REMOKE, Chicago, Ill. Filed Feb. 3, 1919. Serial No. 274,718. 2 Claims. (Cl. 16-19.)

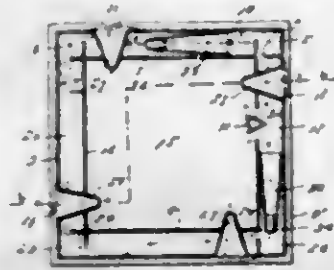


2. An anti-rattling appliance comprising a socket sleeve adapted for attachment to a sash or the like and provided with an obliquely disposed receiving orifice and a curved flange adjacent to the entry end of said orifice, a spring member formed of a flat rectangular strip of spring metal one squared end of which has a slip fit in the receiving orifice of the socket sleeve aforesaid, a clip member having a slip fit with the other squared end of said spring member, and a bearing roller journaled in said clip member, substantially as set forth.

1,314,242. COCKROACH TRAP. CHRISTEN E. BJORCK and HOWARD E. BJORCK, Detroit, Minn. Filed Mar. 6, 1919. Serial No. 281,041. 4 Claims. (Cl. 43-22.)

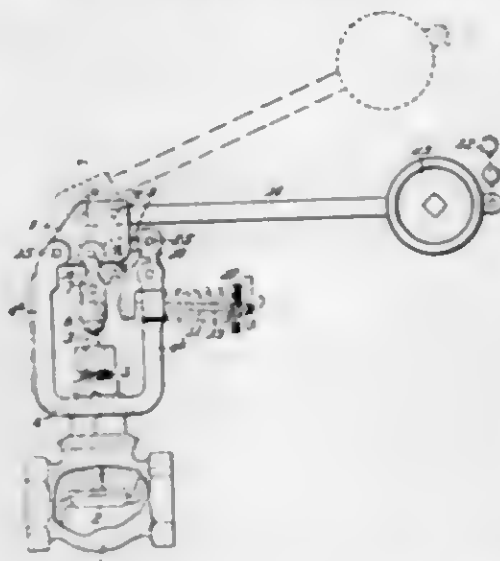
1. A cockroach trap including a collecting compartment, a trapping compartment, an opening between said two

compartments, and a trapping partition in the trapping compartment at each side of said opening, one of said par-



titions being in the form of an inclined runway having its upper end located within the trapping compartment and above the bottom thereof.

1,314,243. SNAP-MOVEMENT-VALVE MECHANISM. CHARLES F. BRAND, Wheeling, W. Va. Filed Dec. 28, 1918. Serial No. 268,605. 7 Claims. (Cl. 137-139.)

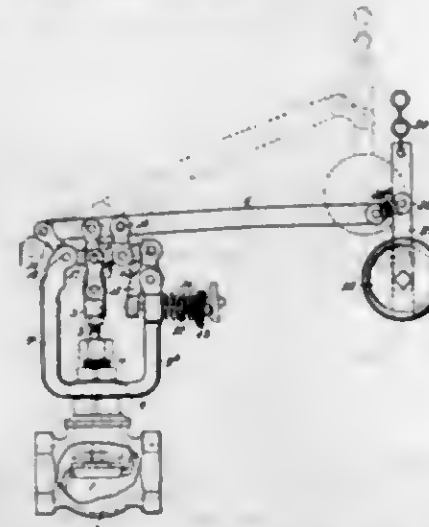


4. A snap movement valve mechanism comprising a valve having a vertically movable stem, a yoke mounted on said valve, a rocker member pivoted upon one arm of said yoke, a plate having pivotal connection with said valve stem and having pivotal connection at its front and rear ends, respectively, with said rocker and the other of the arms of said yoke, said plate in one position having rocking movement on its pivotal connection with said valve stem and in another position having rocking movement on its pivotal connection with the rear yoke arm, a lever carried by said plate and projecting forward therefrom, and means adapted to yieldingly resist initial movement of said plate from either of its opposite limits of movement and to accelerate movement of said plate following initial movement thereof.

1,314,244. SNAP-MOVEMENT-VALVE MECHANISM. CHARLES F. BRAND, Wheeling, W. Va. Filed June 11, 1918. Serial No. 239,405. Renewed June 19, 1919. Serial No. 305,397. 9 Claims. (Cl. 137-139.)

1. A snap movement valve mechanism comprising a valve having a vertically movable stem, a yoke mounted on said valve, a rocker member pivoted upon one arm of said yoke, a lever having flexible link connection with said rocker member, a flexible link connection between the rear end of said lever and the other arm of said yoke, a flexible link connection between said valve stem and said lever at a point intermediate the first two above-mentioned link connections, and means exerting a yielding force upon said rocker member whereby said lever is adapted to be held against movement from either of its opposite limits for maintaining said valve seated at said opposite limits.

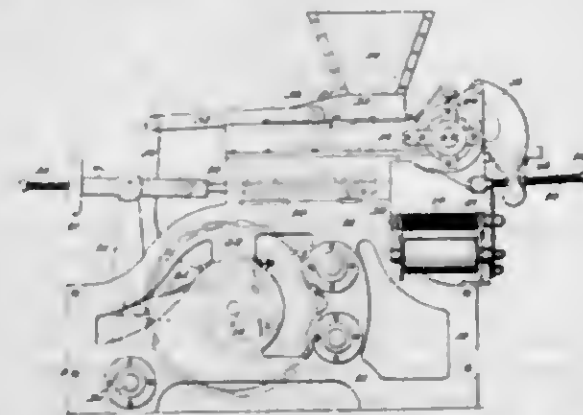
2. A snap movement valve mechanism comprising a valve having a vertically movable stem, a yoke mounted on said valve, a rocker member pivoted upon one arm of said yoke, a lever having flexible link connection at a point intermediate its ends with said rocker member, a flexible link connection between the rear end of said lever and the other arm of said yoke, a flexible link connection between said valve stem and said lever at a point located rearward with respect to the first mentioned connection, and yieldable means resisting movement of said lever from both of its opposite limits of movement.



3. A snap movement valve mechanism comprising a valve having a vertically movable stem, a yoke mounted on said valve, a rocker member pivoted upon one arm of said yoke, a lever having flexible link connection at a point intermediate its ends with said rocker member, a flexible link connection between the rear end of said lever and the other arm of said yoke, a flexible link connection between said valve stem and said lever at a point located rearward with respect to the first mentioned connection, and yieldable means resisting initial movement of said lever from both of its limits of movement and accelerating final movement of said lever in both directions.

9. In a snap movement valve mechanism, a valve, a stem carried by said valve, a pivoted lever having pivoted connection at a point intermediate its ends with said stem, means connected to said lever tending to resist movement of the latter from both of its extreme positions and to facilitate the final part of such movement, a vertically movable counterbalance weight, and a link having pivotal connection at one end with the free end of said lever and at the other with said weight, said link having a portion adapted to engage and coast with an adjacent portion of said weight whereby the range of swinging movement of the link with respect to the latter is limited.

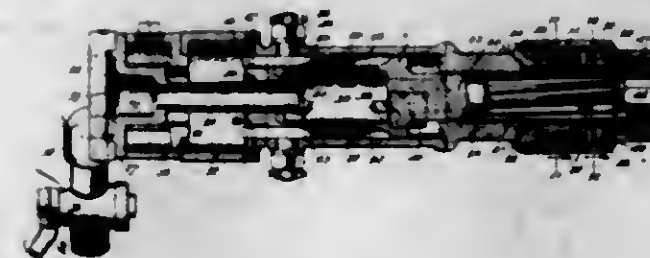
1,314,245. DOUGH-DIVIDING MACHINE. ELMER A. CLARK, Joliet, Ill. Filed June 8, 1918. Serial No. 283,822. 8 Claims. (Cl. 107-15.)



1. In combination with the frame of a dough divider having a trough, a hollow piston slidably positioned in

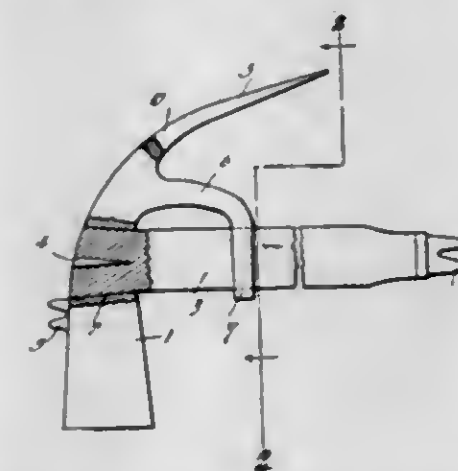
the trough having spaced ears, a slide carried by the frame, an angular arm upon said slide, a finger at the free end of said arm freely positioned between the said ears whereby the piston is detachable from the machine at the rear extremity of its movements, depending lugs at the ends of the slide, an operating rod slidably positioned through said lugs, spring connections between said rod and one of said lugs, and reciprocating means for the rod.

1,314,246. ROCK-DRILL. OMAR E. CLARK, Denver, Colo., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo., a Corporation of Delaware. Filed Dec. 4, 1914. Serial No. 875,465. 20 Claims. (Cl. 121-21.)



4. In apparatus of the character set forth, the combination with a cylinder member and a reciprocating hammer piston operating therein and comprising a head having a reduced extension, said extension having a continuous set of spiral grooves and ribs around its periphery, the ribs being generally of the cross sectional shape and size of the grooves of a chuck, chuck rotating means including a ring surrounding the extension and having a continuous internal set of corresponding grooves and ribs coacting with the grooves and ribs of the extension, and a feather carried by the cylinder member, said piston having a groove that receives the feather to hold said piston to a fixed path, the said piston groove terminating short of one end of the piston and said end having a smooth unobstructed fit in the cylinder.

1,314,247. HAMMER. BENNETT J. CLENDENEN, Miami, W. Va. Filed Feb. 15, 1919. Serial No. 277,201. 1 Claim. (Cl. 254-26.)



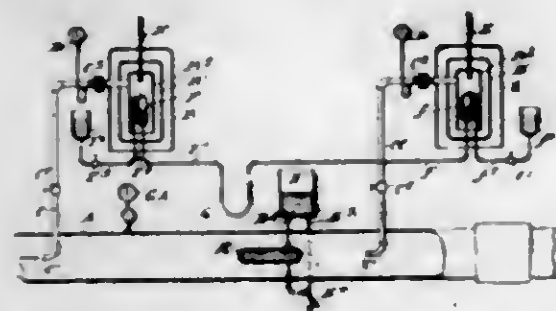
A hammer comprising a head provided intermediate its ends with an eye, and a handle having one end mounted in the eye, one extremity of the head terminating in a free-ended lifting prong curved to project in the general direction of the other end of the handle and having a nail-receiving notch, there being a curved brace projecting from the prong between the eye and the base of the notch and independent of the notch, the brace terminating in a ring inclosing the intermediate portion of the handle and independent of the prong.

1,314,243. VEHICLE-SPRING. WILLIAM H. CROSSLEY, Klamath Falls, Oreg. Filed Aug. 2, 1918. Serial No. 217,924. 9 Claims. (Cl. 267-33.)



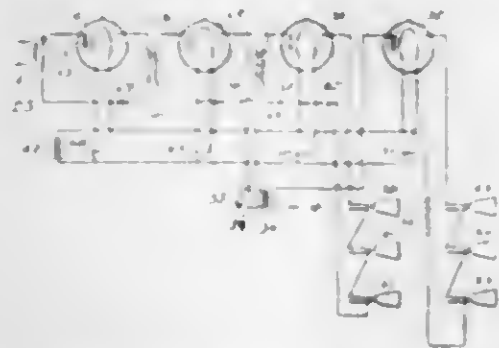
2. A vehicle spring comprising a series of leaves placed one upon the other, the adjacent leaves having sockets in their opposing faces and balls fitting within said sockets, the alternate balls being in staggered relation between the leaves.

1,314,249. CALORIMETRIC METHOD OF AND APPARATUS FOR MEASURING STEAM-FLOW. WILLIAM J. CROWELL, JR., Wyncote, Pa. Filed Sept. 24, 1918. Serial No. 255,450. 3 Claims. (Cl. 73-167.)



3. The method of measuring the rate of steam flow through a conduit by means of a pair of throttling calorimeters connected to the conduit at separated points along the length of the latter so as to be heated to a temperature corresponding to the quality of the steam in the conduit at the point to which each calorimeter is connected which consists in subjecting the steam flowing between said points to a measured steam quality changing effect, utilizing the temperature of each calorimeter to create a vapor pressure which is a function of that temperature and measuring the differential of the vapor pressures thus created.

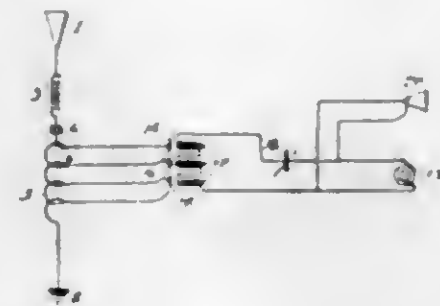
1,314,250. METHOD OF AND MEANS FOR REPRODUCING AND AMPLIFYING WEAK PULSATING CURRENTS. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to De Forest Radio Telephone and Telegraph Company, a Corporation of Delaware. Original application filed June 24, 1913. Serial No. 775,520. Divided and this application filed Sept. 8, 1914. Serial No. 860,713. 12 Claims. (Cl. 179-171.)



1. In an amplifying device for electric currents, a source of weak pulsating currents, an amplifying device associated therewith, a plurality of amplifying devices associated with said first named amplifying device, and means to prevent interaction between said plurality of amplifying devices.

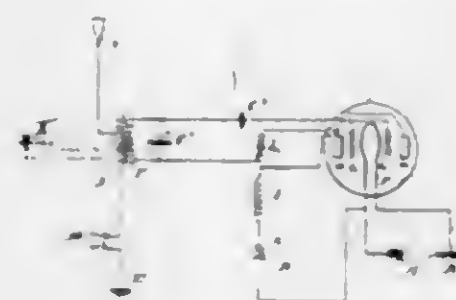
4. The combination with a source of pulsating current, of an audion, an electro-responsive device controlled thereby, and a transformer to associate said audion with said source, said transformer having its secondary open-circuited.

1,314,251. RADIOTELEPHONE. LEE DE FOREST, New York, N. Y., assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1915. Serial No. 13,573. 5 Claims. (Cl. 250-6.)



5. In a radio telephone transmitting system, an inductance and a plurality of resistance varying devices, each connected in shunt around a relatively small portion of said inductance and means including a source of alternating current having a frequency above that of the more essential frequencies of the human voice, for maintaining said resistance varying devices in continuous vibration and means for controlling the amplitude of said alternating current by sound waves.

1,314,252. OSCILLATION-GENERATOR. LEE DE FOREST, New York, N. Y., assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed May 13, 1915. Serial No. 27,771. 4 Claims. (Cl. 250-36.)

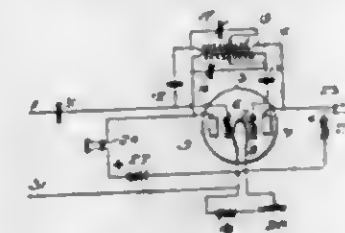


1. In a system for generating oscillations, a work circuit and means for generating and transmitting the generated oscillations to said work circuit including a device having a hot and two cold electrodes, an oscillatory circuit connecting the cold electrodes, and a second circuit connecting one of said cold electrodes and said hot electrode and inductively associated with said oscillatory circuit.

1,314,253. APPARATUS FOR USE IN WIRE OR RADIO COMMUNICATIONS. LEE DE FOREST, New York, N. Y., assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 9, 1915. Serial No. 20,172. Patent No. 1,221,035, dated Apr. 3, 1917. Divided and this application filed Oct. 12, 1916. Serial No. 125,186. 18 Claims. (Cl. 250-8.)

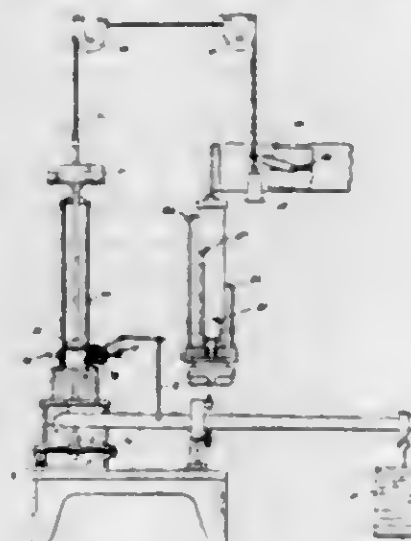
1. The combination with a vessel containing a hot electrode and a plurality of sets of cold electrodes, each

set of electrodes comprising a plurality of electrodes of similar form, of a separate circuit connecting each cold



electrode of each set with one cold electrode of another set.

1,314,254. MOTOR FOR DAMPER-REGULATORS. MERLE WOODWARD EASTMAN, Cambridge, Mass. Filed Oct. 1, 1917. Serial No. 194,232. 5 Claims. (Cl. 138-2.)



1. The combination of a motor cylinder and piston, said piston being operated by accumulative pressure and having multiple exhaust valves for venting the cylinder at various points and means for actuating said exhaust valves, to cause the piston to travel in successive stages with a well defined period of rest between each stage.

1,314,255. SAW. ALBERT EDWARD EDMONDSON, Ottawa, Ontario, Canada. Filed Feb. 24, 1919. Serial No. 279,018. 1 Claim. (Cl. 7-13.)

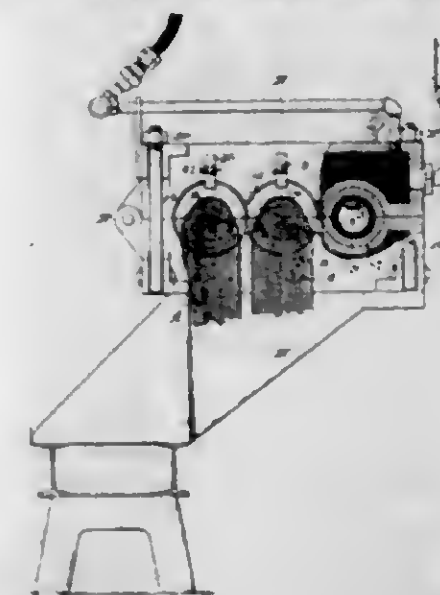


A saw provided with the usual handle and having a straight back, a notch cut in said back near said handle, one side of said notch being straight and at right angles to the said back, a slot paneled out of said saw near the toothed side of same, said slot having one straight side, and said side being in line with the straight side of said notch.

1,314,256. TUBE CONNECTING AND VULCANIZING MEANS. WILLIAM C. EISENFELD, Flemington, N. J. Filed Feb. 17, 1919. Serial No. 277,467. 14 Claims. (Cl. 18-18.)

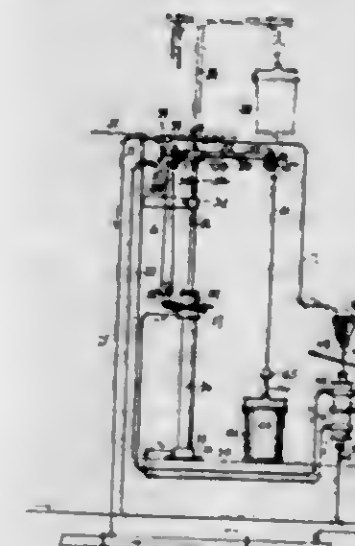
1. In a device for joining the ends of a tubular section, the combination of a sectional heating structure having a pair of registering recesses, an expansible tubular mandrel adapted to receive the ends of a tube and with the same occupy the space formed by said

registering recesses; the ends of the tube to be joined being stretched over said mandrel and the latter having a tapered slot, and a wedge adapted to said slot for spreading said mandrel to confine the meeting ends of



the tube within the registering recesses; the surface of said wedge being continuous with the surface of the mandrel whereby a completely cylindrical wall is provided for contact with the tube.

1,314,257. HYDRAULIC HOIST FOR ASH-CANS AND THE LIKE. CHARLES H. FAY, Newark, N. J. Filed June 13, 1918. Serial No. 239,701. 1 Claim. (Cl. 212-34.)



A hoist for ash cans and the like, adapted for use below the level of the sidewalk, comprising a vertically disposed cylinder, a piston in the cylinder, a plunger projecting from the piston and adapted to support suitable hoisting apparatus, a pipe for conducting fluid to the top of the cylinder, a pipe to conduct fluid to the bottom of the cylinder, a valve, a pipe leading to the valve from a source of fluid under pressure, an outlet pipe leading from the valve, said valve being operable to alternately permit the entrance and discharge of fluid from each end of the cylinder, whereby the piston is positively driven in the desired direction, and operative connections with the valve, whereby the valve can be operated from separated points.

1,314,258. INCLINATION-INDICATOR. PAOLO FISCHER, Chicago, Ill. Filed Aug. 15, 1917. Serial No. 186,273. 2 Claims. (Cl. 33-215.)

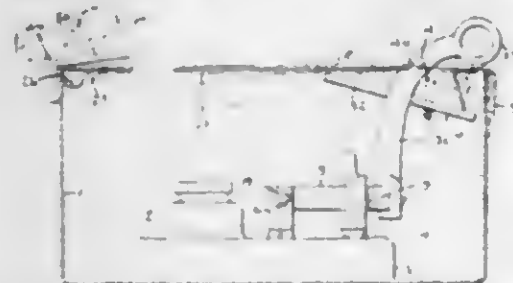
1. In an inclination indicator, a support, two relatively transverse shafts pivoted thereon, two visual indicating means associated respectively with the two shafts, a

pair of pendulous bodies fast respectively upon the ends of one shaft, a worm fast upon the last named shaft and



between said bodies, and a gear segment meshing with said worm and fast upon the other shaft.

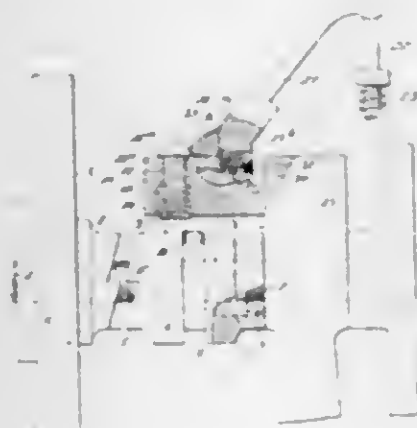
1,314,259. ELECTRIC SWITCH-BOX. MARTIN FLATLAND, San Francisco, Calif. Filed Mar. 20, 1917. Serial No. 150,176. 12 Claims. (Cl. 175-282.)



1. A device of the character described comprising a box; a circuit closer in said box; a cover on said box provided with a slot; said cover being adapted to open when the circuit closer is in open position; a handle for actuating said circuit closer adapted to project through said slot when the circuit is closed; means for locking the cover closed on the box when the switch is closed and for closing said slot when the circuit is closed.

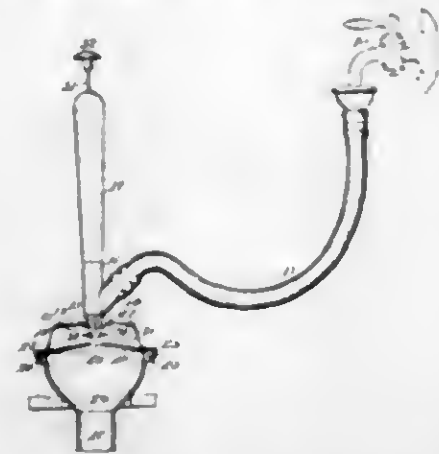
11. A safety switch comprising a box, a cover for said box provided with a slot, a circuit closer in said box, an operating handle projecting through said slot, a pin on said handle and an embossment on said cover for engaging said pin to hold the switch closed.

1,314,260. CLUTCH. LOUIS R. GENDRAT, Baltimore, Md. Filed Apr. 21, 1915, Serial No. 22,876. Renewed Feb. 8, 1918. Serial No. 216,139. 9 Claims. (Cl. 192-9.)



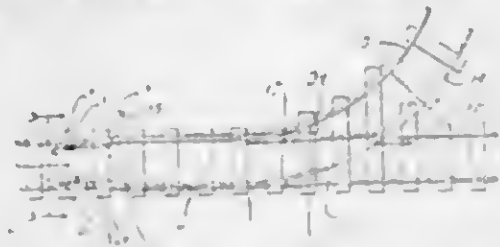
2. The combination with a clutch and a tripping pin normally engaging one member thereof, said pin having a conical head, of a rocker pivoted adjacent the pin, and a latch sliding in the rocker and adapted to engage the head of the pin.

1,314,261. FLUSHING DEVICE FOR DRAINS. GUSTAV GUTSCHNIG, Berkeley, Calif. Filed Feb. 19, 1919. Serial No. 278,045. 8 Claims. (Cl. 4-1.)



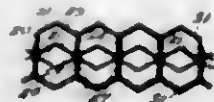
1. A drain flushing device comprising a circular cup, an annular flange formed around the mouth thereof and having an inturned lip, a bell-shaped member having a discharge orifice in the bottom thereof and a ring formed exteriorly about its rim and said ring being provided with a circumferential groove within which the inturned lip of said cup member projects, a handle fitting extending through the head of said cup and formed with a pair of spaced shoulders, an annular flange disposed around the opening in the cup head and adapted to seat between said shoulders, an obliquely inclined tubular hose connection formed as a part of said handle fitting and communicating with the interior of the cup, a ferrule formed as a part of the handle fitting and extending along the central vertical axis of the cup, a handle mounted within the ferrule, a hose mounted upon the tubular hose connection, and a perforated diaphragm disposed across the mouth of the cup.

1,314,262. RAILROAD-SWITCH. ANTHONY GAIGAS, Worcester, Mass. Filed Apr. 30, 1919. Serial No. 293,742. 3 Claims. (Cl. 246-339.)



1. In a track switch operating device, the combination with a pair of vertical levers, rollers carried at the upper ends of said levers, a bar pivotally connected between said levers, said bar being operable upon a vertical axis, cable connections on each of said levers engaging the switch points, guide pulleys over which said cable is trained, and means carried by the locomotive for depressing either of said rollers.

1,314,263. RADIATOR CONSTRUCTION. HENRY CHAMPTON HARRISON, Lockport, N. Y. Original application filed Dec. 11, 1914, Serial No. 876,687. Divided and this application filed Oct. 20, 1915. Serial No. 56,915. 7 Claims. (Cl. 257-130.)



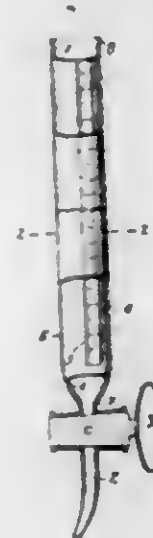
1. A radiator unit comprising a pair of sheet metal outer plates having on one side thereof a set of opposed projections constituting cell walls; and division means having centering projections adapted to separate said first named projections, one of said sets of projections having associated therewith inclined guiding surfaces, substantially as described.

1,314,264. VALVE-CAGE-LIFTING TOOL. ELI M. HEMP-HILL, Moundville, W. Va., assignor of one-half to G. W. McCracken, Moundville, W. Va. Filed Feb. 7, 1919. Serial No. 275,578. 5 Claims. (Cl. 29-87.1.)



1. A valve-cage lifting tool comprising a lever provided adjacent to one end with a longitudinal slideway, and a lifting yoke carried in said slideway, said yoke consisting of a horizontal stem and a pair of divergent downwardly extending arms, said arms being provided with inwardly directed hook terminals, said stem being slidably disposed in said slideway and having pivotal relation to said lever whereby said yoke occupies vertical position irrespective of the position assumed by said lever.

1,314,265. BURETTE. FREDERICK HIRGESSELL, New York, N. Y. Filed Sept. 25, 1918. Serial No. 255,720. 3 Claims. (Cl. 73-166.)



1. A burette comprising a glass tube open at one end and having a cock-controlled nozzle at the other end, a scale and a glass casing surrounding said tube and inclosing said scale, said casing having its opposite ends flush with the open end of said tube and with the inner end of said nozzle respectively and being fused to said tube only at these points.

1,314,266. SHOCK-ABSORBER. ERNEST W. HOFSTATTER, Nyack, N. Y. Filed July 29, 1918. Serial No. 247,259. 3 Claims. (Cl. 74-69.)

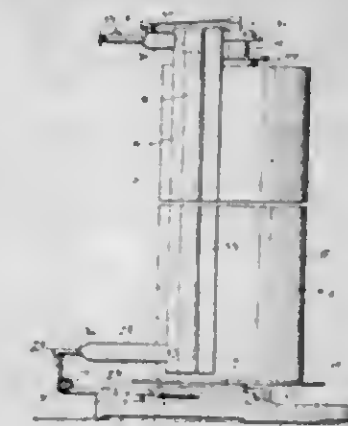
3. A shock absorber comprising a main air chamber, a subsidiary air chamber, a partition separating said main and subsidiary chambers and provided with an intermediary port and end ports which establish a communication between said air chambers, a piston in said main air chamber, tubular members each formed with a valve seat and being removably secured in one end of said subsidiary chamber, between the said end ports, and valve closing

members each movably secured in one of said tubular members and normally seated in the adjacent valve seat and



adapted to open the valve by its movement away from the adjacent one of said end ports and toward one another.

1,314,267. PAPER-ROLL HOLDER. THOMAS M. HOUSE, Richmond, Va., assignor to House Hardware Company, Richmond, Va., a Corporation of Virginia. Filed Jan. 29, 1919. Serial No. 273,519. 10 Claims. (Cl. 211-32.)



2. A paper roll support including a spindle, a blade normally extending parallel to the spindle and hingedly supported at one end whereby the blade may be shifted into or out of parallel relation to the spindle, and means acting when the blade is parallel to the spindle to urge the blade bodily in a direction toward the spindle.

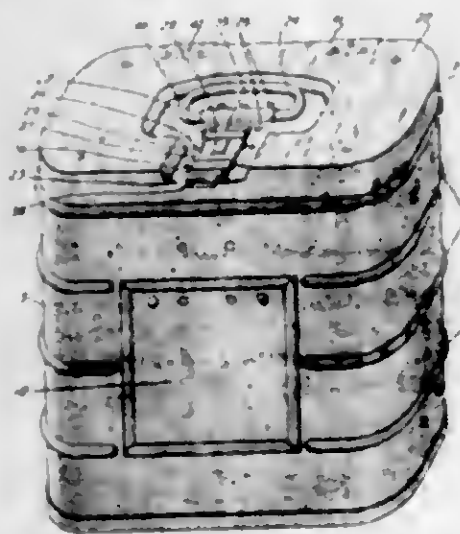
1,314,268. DOOR-LATCH. ALEXANDER GRAY LAWIN and WILLIAM GEORGE LAWIN, Winnipeg, Manitoba, Canada. Filed Nov. 21, 1917. Serial No. 203,170. 1 Claim. (Cl. 70-44.)



The combination with a door having a vertically disposed cross slot therein, a door latch pivoted to the door and with the free end crossing the slot and a pair of han-

dies permanently secured to the door and provided with slots registering with the door slot, of a thumb latch provided on the underside with a downwardly extending pivot lug socketed in the upper part of one of the handles and with a horizontally disposed extension extending within the slot in the door and a second thumb latch provided on the underside with a downwardly extending pivot lug socketed in the upper end of the other of the handles and fitted with a horizontally disposed extension passing into and through the door and handle slots and positioned between the door latch and the former extension.

1,314,269. SHIPPING-CASE FOR FILMS AND THE LIKE. PHILIP KEMPTER, Milwaukee, Wis., assignor to Gouder, Paeschke & Frey Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 1, 1919. Serial No. 286,650. 7 Claims. (Cl. 220-37.)



1. A sheet metal cover for a receptacle having a portion thereof depressed to receive a hinge member and another portion thereof depressed to receive a handle and a retaining device, said depressed portions extending completely to the edge of the cover.

1,314,270. POTATO-HARVESTER. EDWARD P. KENDALL, Bowdoinham, Me. Original application filed Sept. 27, 1912, Serial No. 722,732. Divided and this application filed June 26, 1916. Serial No. 105,950. 4 Claims. (Cl. 130-32.)

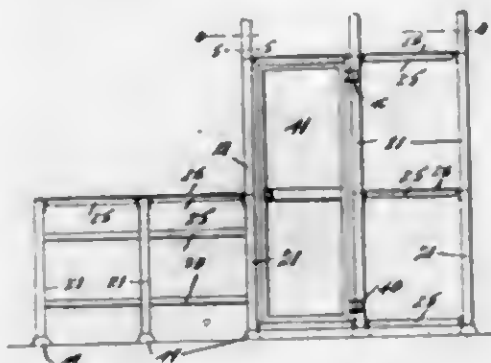


1. In a potato harvester, the combination of a conveying mechanism arranged to receive dug potatoes and their associated materials and comprising a series of transverse rods, a U-shaped spring having its free end disposed in the path of movement of said rods and arranged to be deflected and released by each of said rods, whereby said spring strikes each succeeding rod a blow to agitate the conveying mechanism, and means for moving said conveying mechanism relatively to said spring.

1,314,271. COMBINATION KNOWN STRUCTURE. WILLIAM KERR, Richmond Hill, N. Y. Filed Mar. 24, 1919. Serial No. 284,805. 6 Claims. (Cl. 45-78.)

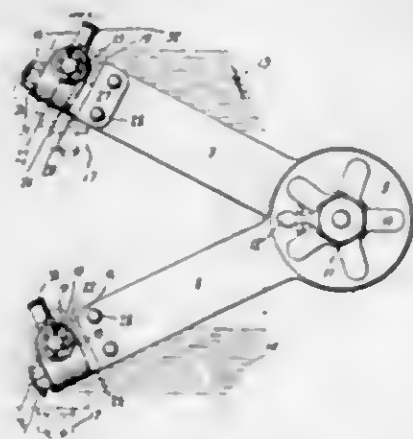
1. The combination of a plurality of relatively short tubular posts, a block arranged to be removably inserted in

the end of one post to enter the adjacent end of a superimposed post, whereby said posts are held together, braces



removably connected at the ends thereof to said posts, and locking means connecting said posts.

1,314,272. ATTACHING DEVICE FOR SHOCK-ABSORBERS AND THE LIKE. ALBERT J. H. KOHANEK, Richmond Hill, N. Y., assignor to Edward V. Hartford, Inc., a Corporation of New York. Filed Mar. 20, 1917. Serial No. 156,114. 5 Claims. (Cl. 21-105.)



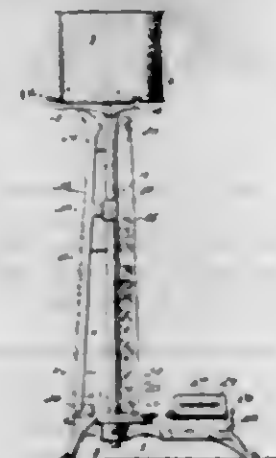
1. The combination with a shock absorbing device for motor vehicles having relatively movable members, of means for attaching said members to relatively movable parts of the vehicle, said means comprising a single member having superposed bearings extending therethrough in planes at right angles to each other, a stud fixed to one of said shock absorbing members and provided with a shoulder, a similarly formed stud rigidly secured to a part of the vehicle, said studs being adapted to be connected by said attaching member and rotating within the respective bearings formed therein, bushings disposed within said bearings and surrounding said studs, a lock washer and a securing nut for threaded engagement with each of said studs whereby said attaching member is held in functioning position on the studs between the respective shoulders and the washers carried by the studs.

1,314,273. ELECTRODE FOR ELECTRIC-ARC WELDING. EMILE LANGUEPIN, Paris, France. Filed June 29, 1918. Serial No. 242,569. 2 Claims. (Cl. 219-8.)

1. An electrode for electric arc welding composed of a steel rod and a cover surrounding said steel rod, said cover being composed of a mixture of aluminum powder and a powdered oxide of an auxiliary metal.

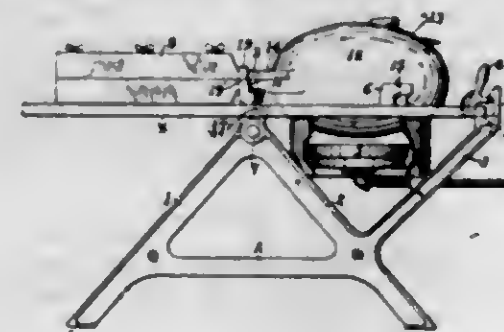
2. An electrode for electric arc welding comprising a steel rod, a cover surrounding said steel rod, said cover being formed of aluminum powder, a powdered oxide of an auxiliary metal and a resin varnish, and an outer coating of a fireproof paint.

1,314,274. HOG-OILER. CHARLES J. LARKIN, Cherokee, and EDWARD F. FOX and EBBIE M. FOX, Des Moines, Iowa; said Larkin assignor to The Fox Chemical Company, Des Moines, Iowa, a Corporation of Iowa. Filed May 7, 1917. Serial No. 167,028. 6 Claims. (Cl. 119-157.)



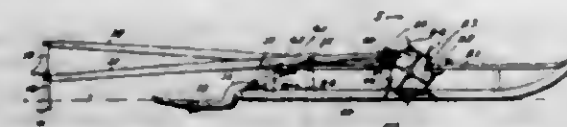
6. In apparatus of the character set forth, the combination with an upstanding support, of a reservoir mounted thereon, an upstanding animal operated lever fulcrumed on and located alongside the support, a delivering device having a cup at one end that dips into the reservoir and having a direct pivotal connection between its other end and the lever, a bearing element on which the delivering device has a sliding bearing to permit the cup element to dip into the reservoir when the lever moves in one direction and to cause its elevation and discharge when the lever moves in an opposite direction; and means for directing the material discharged on to the lever.

1,314,275. APPARATUS FOR MAKING STEREOTYPES. BYRON K. LE CROIX, Eppingham, Ill. Filed Apr. 7, 1919. Serial No. 288,147. 7 Claims. (Cl. 22-2.)



1. An apparatus of the character described, comprising a tiltable support, a melting pot arranged on said support, said melting pot having a mouthpiece, and a casting box having a mouthpiece, one of said parts having hook arms and the other having elements for engagement with said hook arms whereby the parts are connected to each other to hold said mouthpieces in mating relation.

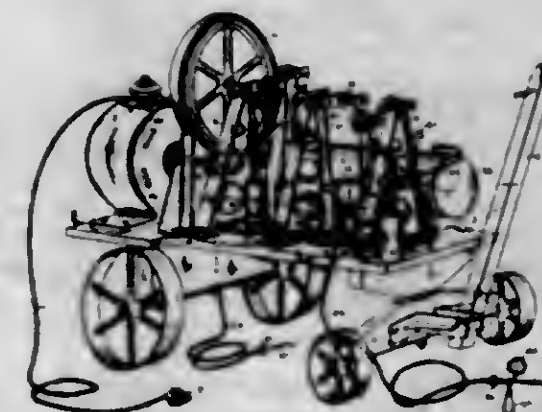
1,314,276. STAMP FOR SIMULATING ANIMAL TRACKS. RAGUVALD LELAND, Birch Hills, Saskatchewan, Canada. Filed Aug. 15, 1917. Serial No. 180,846. 2 Claims. (Cl. 43-2.)



1. A device of the character described, comprising in combination with a hand drawn sled, a pair of levers

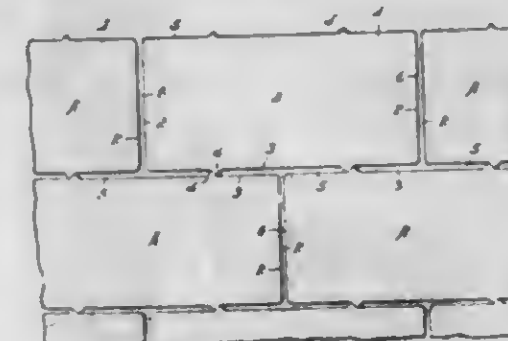
pivoted at the rear of the sled, means for transmitting the forward motion of the sled to said levers, a pair of stamps simulative of an animal's foot attached to the outer end of said levers beyond the rear end of said sled, means for obliterating the tracks of the sled and its operator, and means for actuating said obliterating means.

1,314,277. AIR-PUMP AND CLEANING DEVICE. ALBERT LOFFACKER, Bloomfield, N. J., assignor to Eureka Air Compressor Co., Bloomfield, N. J., a Corporation of New Jersey. Filed Jan. 2, 1915. Serial No. 67. 6 Claims. (Cl. 137-63.)



4. A device of the kind described comprising a constant air supply, a tire inflating hose, and a liquid spraying element and optional means for supplying either the hose or the spraying element with a constant working pressure from the air supply.

1,314,278. PAVING-BRICK. WILLIAM J. MCCLAIN, JR., Bellaire, Ohio. Filed Feb. 10, 1919. Serial No. 276,028. 4 Claims. (Cl. 94-11.)

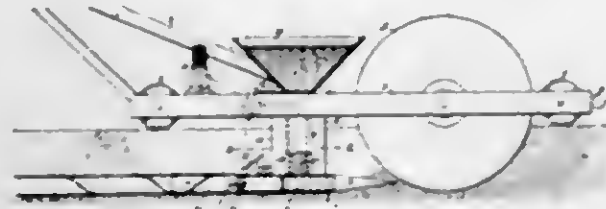


1. A paving brick designed to be laid flatwise having a generally rectangular form, each of the opposite lateral edges of said brick having two vertically disposed V-shaped lugs thereon, each of said lugs being spaced from the adjacent end of the brick a distance equal to one-fourth the length of the brick plus one-half the width of the joint to be formed between the ends of adjacent bricks, the lugs at each side being adapted to space the brick from laterally-adjacent bricks for forming open filler-receiving side joints, and being also adapted to interlock with the lugs of two laterally-adjacent bricks disposed to break joints therewith for maintaining the last-mentioned bricks in endwise spaced relation to form an intermediate filler-receiving end joint.

1,314,279. PROCESS OF MAKING DRAIN-TILES. PIERCE R. MCCARTY, Lakeland, Fla., assignor of one-half to Christopher H. R. Woodward, Portsmouth, N. H. Filed Dec. 11, 1918. Serial No. 266,269. 8 Claims. (Cl. 111-5.)

1. The process herein described of making tubular tiles, said process consisting in first forming a ditch in the

ground and simultaneously forcing a former through the ground near the bottom of the ditch and admitting to the former a mixture of cement and water, allowing the cement and water to mix with the sand through which the former is forced so as to produce a shell of cement which, when hardened, forms a tube below the surface of the ground.

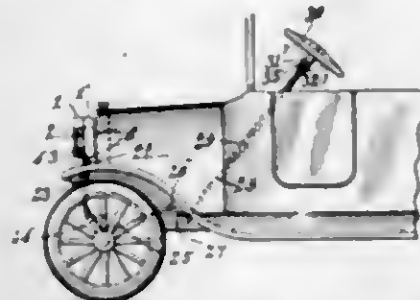


4. The combination in apparatus for forming tiles underground, of a frame; a disk wheel for cutting a ditch in the ground; a former on a line with the base of the wheel; a connection between the former and the frame; a hopper for a mixture of cement and water; means for feeding the mixture to the former, said former being perforated to allow the cement and water to escape and mix with the surrounding sand.

1,314,280. CONTACT PROCESS FOR MAKING SULFURIC ACID. HENRY HENRY MEYER, Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed June 20, 1918. Serial No. 242,004. 9 Claims. (Cl. 23-1.)

1. The process of making sulfur trioxide by the contact method and simultaneously producing a water soluble double sulfate of potassium and aluminum which comprises bringing a gaseous mixture containing sulfur dioxide and oxygen into contact with mineral aluminate at a temperature appropriate to the catalytic oxidation; substantially as described.

1,314,281. AUTOMOBILE LAMP CONTROL MECHANISM. JULIUS MISKEY, Dayton, Ohio. Filed Jan. 4, 1919. Serial No. 269,367. 1 Claim. (Cl. 116-31.)



In a lamp control mechanism, a casing having double tracks extended from the outer end thereof and a single track at the inner end, a lazy-tongs within said casing, a carriage mounted on said double track and connected to the outer end of the said lazy-tongs, a housing mounted on said carriage, a slide connected to the inner end of said lazy-tongs and movable on the single track, a chain connected to said slide for actuating the lazy-tongs to extend the same, and leaf springs mounted on said lazy-tongs for retracting the same.

1,314,282. LEAF SPRING. CHARLES P. MURPHY, Cleveland, Ohio. Filed May 13, 1916. Serial No. 97,260. Renewed Dec. 23, 1918. Serial No. 268,089. 4 Claims. (Cl. 267-27.)

2. A leaf spring comprising a master spring leaf having a curved middle part and two substantially straight ends, and a plurality of supplemental flat concavo-convex spring leaves which are of progressively increasing length

and are arranged with their concave sides facing the master leaf and with the shortest leaf next the master leaf, the middle parts of said master leaf and supplemental leaves being clamped together, and said supple-



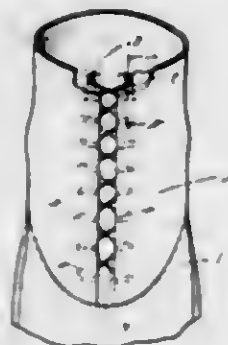
mental leaves being shaped substantially as shown whereby all their ends are in contact with the master leaf but that said supplemental leaves are out of contact with one another except at their middle points where they are clamped to the master leaf.

1,314,283. COMBINED UNCOUPLING-LEVER AND COUPLING-POSITIONING DEVICE. WALTER P. MURPHY, Chicago, Ill. Original application filed Dec. 7, 1916, Serial No. 135,626. Divided and this application filed June 18, 1917. Serial No. 175,414. 19 Claims. (Cl. 213-59.)



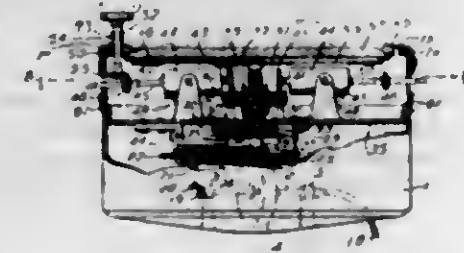
2. In a device of the character described, the combination with a car coupler laterally movable at its outer end with respect to the car, of a rod revolvably mounted on the car and operatively connected at its inner end to said coupler, a common bearing and fulcrum in which the outer end of said rod is operatively mounted, and an operating handle pivotally mounted on the outer end of said rod, whereby said rod may be revolved in and fulcrumed on said outer bracket to operate the coupler and to position the coupler in alignment with the coupler on an adjacent car.

1,314,284. SHOE-CLOSURE. HENRY M. RENNER, Junction City, Kans. Filed Jan. 23, 1919. Serial No. 272,735. 5 Claims. (Cl. 24-140.)



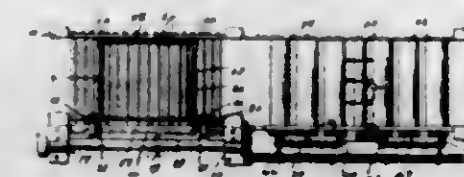
1. The combination with a shoe upper including closure flaps, of strips of material secured to the inner faces of the closure flaps adjacent their edges, books secured to said strips for receiving a shoe string to secure the flaps together, and means formed upon said books for engaging the edges of the strips to prevent fraying thereof.

1,314,285. METER. MARVIN SMITH, Lawrenceville, Va. Filed June 16, 1916. Serial No. 104,047. 13 Claims. (Cl. 235-144.)



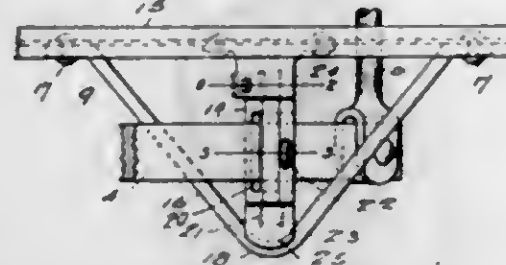
1. In a meter, the combination with a casing, a plurality of odometers disposed within the casing, a driving means common to all of said odometers, and means carried by said casing and shiftable thereon to any odometer position for disengaging any of said odometers individually from said common driving mechanism.

1,314,286. SHEET-METAL-CUTTING MACHINE. HAROLD H. SPANO, Leechburg, Pa. Filed July 5, 1918. Serial No. 243,412. 5 Claims. (Cl. 164-42.)



1. A cutting machine comprising a frame structure including spaced side members, spaced slats supported by the side members, a relatively stationary knife arranged between the slats, a shaft journaled in the frame structure, a crank pin carried by said shaft, a reciprocable shaft, means connecting the crank pin of the first mentioned shaft with the reciprocable shaft, a pivoted blade adapted to cooperate with the relatively stationary blade, and means connecting the reciprocable shaft with said pivoted blade.

1,314,287. RAILWAY BRAKE-BEAM. DAVID O. STALL-SMITH, Logan, Ohio. Filed Mar. 10, 1919. Serial No. 281,684. 2 Claims. (Cl. 188-22.)

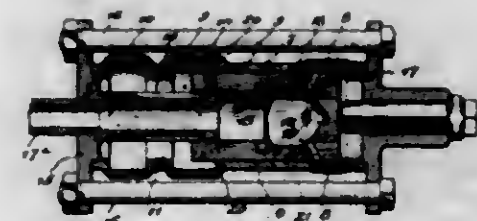


1. The combination with the compression member and the truss rod, of a socket member riveted to the compression member and a grooved socket member engaging the truss rod and a fulcrum block forming the strut, said fulcrum block having bosses at its ends engaging the socket members one of which is grooved, one of the bosses having a pair of grooves adapting the fulcrum block for interchange of position, a locking latch having a tongue to engage one of the boss-grooves, and a cotter pin for said latch.

1,314,288. MOTOR. DANIEL S. WAUGH, Denver, Colo., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo., a Corporation of Delaware. Filed Nov. 24, 1914. Serial No. 873,799. 14 Claims. (Cl. 121-20.)

1. In apparatus of the character set forth the combination with a cylinder member, of a reciprocating piston

operating therein and having an internal constant pressure chamber the front wall of which is formed by a face of the piston, means for maintaining fluid under pressure in said chamber during the operation of the piston, and



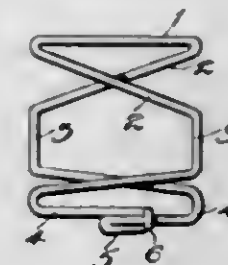
means for delivering motive fluid from the chamber to opposite external faces of the piston, to reciprocate the said piston, said means permitting the piston to have a rectilinear non-rotary movement throughout such reciprocation.

1,314,289. SIGNALING DEVICE FOR VEHICLES. GEORGE A. WILLIAMS, Salt Lake City, Utah. Filed May 15, 1916. Serial No. 97,581. 3 Claims. (Cl. 116-31.)



1. A signal device for vehicles comprising an attaching bracket, a casing carried thereby, a lazy-tongs having one end secured in the casing, a signal carried by the other end of the lazy-tongs, and including a translucent portion exposed at both sides of the signal and a lamp carried on the casing and adapted to direct its rays in a path intersecting and illuminating the translucent member in the extended position of the lazy-tongs.

1,314,290. BUCKLE. HARRY JAMES WILTON, Seattle, Wash. Filed Jan. 4, 1919. Serial No. 260,620. 2 Claims. (Cl. 24-264.)



1. A buckle comprising a resilient member consisting of a body and arms extending laterally from the body, each arm having at the end remote from the body an open loop, each loop extending transversely of the plane of the buckle and opening inwardly, said loops having their innermost arms arranged in crossed relation and their outermost arms slidably connected, and means in connection with the said slidable connection for limiting the movement of the loops toward and from each other.

1,314,291. SAWING APPLIANCE. JOHN D. WALLACE, Chicago, Ill., assignor to J. D. Wallace & Co., Chicago, Ill., a Corporation of Illinois. Filed July 12, 1918. Serial No. 244,539. 23 Claims. (Cl. 143-36.)

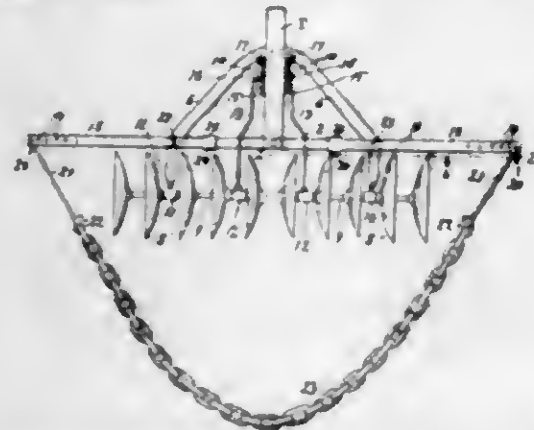
1. A saw-table, a circular saw, driving means for rotating the same, a guard normally disposed for guarding the exposed portion of the saw; a unitary mounting for

the saw, driving means and the guard; and means for adjusting the nuttary mounting with respect to the saw-



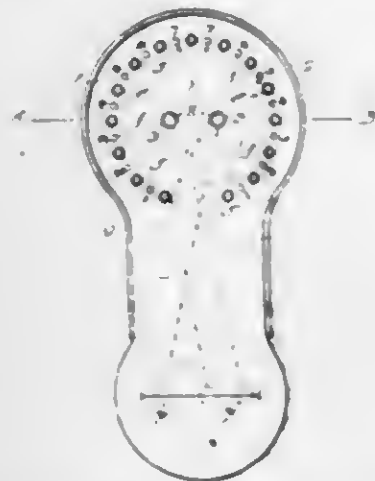
table without disturbing the operative relation of the driving means and the guard to the saw.

1,314,292. HARROW ATTACHMENT. CARL WALLS-
HEAD, Hersey, Wis. Filed Feb. 8, 1919. Serial No.
275,828. 3 Claims. (Cl. 55-22.)



1. The combination with the frame of a harrow, of two opposite transverse laterally extending bars secured to the harrow frame and having their outer ends provided with apertures, a slack chain dragged in segmental form in rear of the harrow and having its ends attached one to each of the apertured bars, said bars having several apertures each, and the ends of the chain being provided with hooks adapted to engage in either of the apertures.

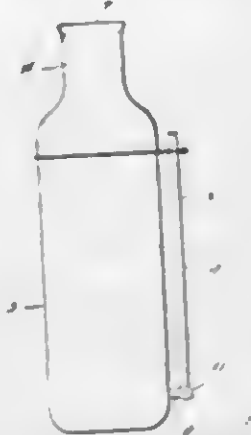
1,314,293. INDOOR GAME OF SKILL. JAMES STUART
WEARN, Ilwaco, Christchurch, New Zealand. Filed
Apr. 20, 1918. Serial No. 229,600. 4 Claims. (Cl.
46-62.)



1. In combination, a game board, said studs upstand-
ing from said board, an arcuate series of fixed pins
partially surrounding said studs, and movable pins be-
tween said pins.

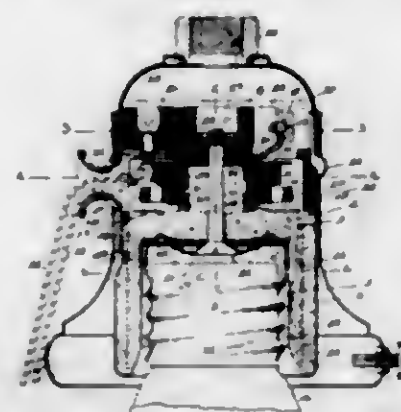
1,314,294. BOTTLE ATTACHMENT. WILLIAM H.
WILKINSON, JR., Washington, D. C. Filed Oct. 10,
1916. Serial No. 124,934. 1 Claim. (Cl. 221-26.)
The combination with a bottle having a nipple carried
thereby adjacent its bottom and projecting laterally

from its side, of a pair of hollow circular shaped cou-
pling heads one of which connects with the nipple and
has a socket formed in one side, the other of said coupling
heads being reduced in diameter adjacent one side wall
to form a boss for seating in said socket, a bolt passing
through both coupling heads and concentrically disposed
with reference to the two and serving to hold them
together with the boss firmly seated in the socket, each
of the coupling heads being formed with an eccentrically
disposed aperture, the one in the bottom wall of the
socket and the other in the front wall of the boss, where-



by the two apertures may be brought into registration
or thrown out of registration by the turning of one
coupling head with respect to the other, and a drinking
tube fitted in the coupling head having the boss, whereby
the drinking tube may be moved to a position in sub-
stantial parallelism with the bottle when communication
between the coupling heads is cut off or moved to the
position at substantially right angles to the bottle when
communication between the coupling heads is effected
by the bringing into registration the apertures in the
coupling heads.

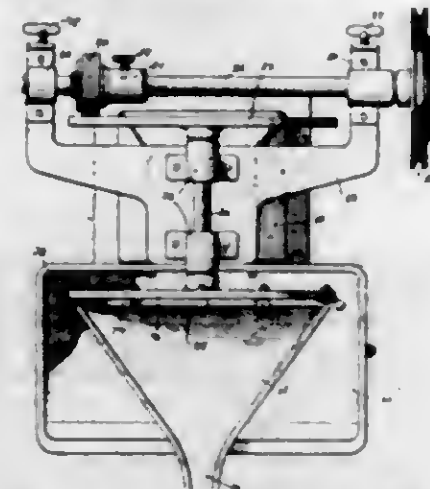
1,314,295. ELECTRIC-LIGHTING APPARATUS.
CHARLES WIRT, Philadelphia, Pa. Filed Jan. 3, 1917,
Serial No. 140,355. Renewed Jan. 16, 1919. Serial No.
271,512. 19 Claims. (Cl. 219-49.)



15. A lamp socket comprising a shell for engagement
with the base of a lamp, a hollow resistance element
surrounding the shell and immovable in relation thereto,
said resistance element having a resistance conductor
electrically connected with the shell, a plurality of con-
tact members electrically connected with different parts
of the resistance conductor, a block, a standard electri-
cally insulated from the shell and adapted to electrically
contact with the other terminal of the lamp, said
standard mechanically connecting the resistance element
in immovable relation to the block, a rotary switch
member surrounding the standard and electrically in-
sulated therefrom and with a contact element adapted
to engage with different contact members as it is rotated,
means for rotating the switch member, means for limit-

ing the movement of the rotary switch member, a lead-
ing-in terminal in electrical connection with the standard,
and a stationary leading-in terminal in electrical con-
nection with the stationary switch member.

1,314,296. OIL AND ACID FEEDING DEVICE FOR
FLOTATION PROCESSES. WILLIAM W. WOLCOTT,
Georgetown, Colo. Filed Feb. 5, 1919. Serial No.
275,165. 2 Claims. (Cl. 193-6.)



1. In a device of the character described the combi-
nation of a frame, a fluid receptacle carried by the
frame, a bracket mounted on the frame, and having
extensions projecting away from the said receptacle,
adjustable bearings carried by the extensions of said
bracket, a shaft mounted in said bearings, a friction
disk adjustably secured upon the shaft, a second shaft
journalled on the bracket at right angles to the first
shaft, a friction wheel at one end of said second shaft
normally engaged by the said friction disk, a bucket
wheel mounted upon the other end of the second shaft
and extending into the fluid receptacle, a series of
buckets carried by said wheel and projecting laterally
therefrom, and a drip pan mounted contiguous to the
bucket wheel and onto which the buckets discharge as
described.

1,314,297. WASHBOARD. ERVIN L. YUNCKER, Dodge
City, Kans. Filed Jan. 4, 1919. Serial No. 269,614.
1 Claim. (Cl. 68-29.)



A wash-board comprising side bars having channels
in their inner faces, a back plate having transverse
grooves in its front face near its upper and lower ends,
each oblique to the plane of said face so as to provide
an overhanging lip, the face being flat throughout most
of its area and receding into and merging with the rear
walls of said grooves, and a mat made up of a canvas
backing and a superposed yieldable body having plain
margins and a projecting roughened rubbing surface
over the remainder of its area, its upper and lower mar-
gins seated in said grooves with the endmost projec-
tions against said lips, and its side margins together
with the edges of the back plate seated in said channels
with the extreme lateral projections against the inner
faces of the side bars.

1,314,298. PROCESS OF DEODORIZING AND DECOL-
ORING BEAN-FLOUR. YOSHITARO YAMAMOTO, Kobe,
Japan, assignor of one-fourth to Isome Mizunawa,
Hyogo Ken, Japan, and one-fourth to Tatsuzo Kano,
Kobe, Japan. Filed May 21, 1919. Serial No. 298,792.
1 Claim. (Cl. 99-5.)

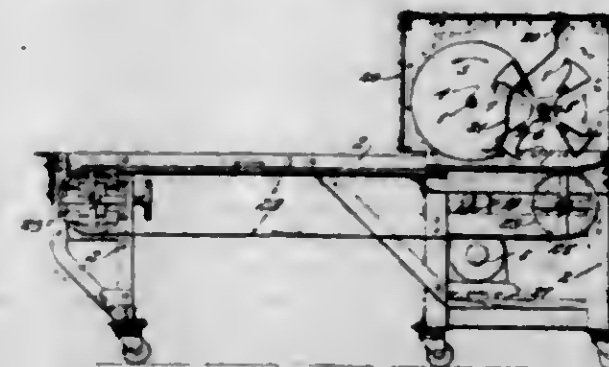
The process of deodorizing and decolorizing bean flour,
which comprises breaking the bean into a coarse powder
and removing the bran therefrom, steeping this powder
in a solution of one to two liters of vinegar in 100 liters
of water, heating the mixture to a temperature not
exceeding 60° C., removing the powder from said solu-
tion and washing it with water, then steeping the
powder in a solution of 140-200 grams of bicarbonate of
soda to 100 liters of water, removing the powder and
again washing it in water, and drying said powder in
a low temperature.

1,314,299. LIFE-SAVING APPAREL. FELIX ZACCARD
and THOMAS P. McDONOUGH, Chicago, Ill. Filed June
17, 1918. Serial No. 240,413. 1 Claim. (Cl. 9-20.)



Life saving apparel comprising a close fitting water-
proof union suit open down the front of its neck and
body, fastenings along the edges of said opening, an
outer ply of waterproof fabric secured around its edges
to said suit and shaped to form two sacks extending
from the hips, upward along and spaced from said fas-
tenings, over the shoulders, behind the neck, under the
arms, and connected across the back to constitute a
floatation pouch whose inner wall is the union suit within
the bounds of said edges, and means for inflating said
pouch.

1,314,300. MACHINE FOR CUTTING MACARONI,
SPAGHETTI, AND SIMILAR ARTICLES. JOHN A.
ALVEY, St. Louis, Mo., assignor to Alvey Manufac-
turing Company, St. Louis, Mo., a Corporation of
Missouri. Filed Dec. 11, 1917. Serial No. 200,570.
4 Claims. (Cl. 107-22.)



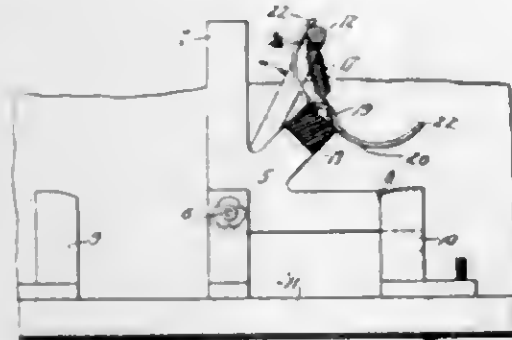
1. A machine for cutting macaroni and the like com-
prising a shaft provided with circular cutters, a counter-

shaft provided with spiders whose arms have their end portions curved in the direction of movement, said spiders being positioned to overlap the margins of said cutters and constitute a feeding cradle therefor, yielding guides located between said shafts in position to cooperate with said cradle, and means for simultaneously actuating said shaft at a high speed and said cradle at a low speed.

1,314,301. PAINT COMPOSITION. ANDREW HUGO APFLEGGSEN, Seattle, Wash. Filed Nov. 12, 1918. Serial No. 262,227. 3 Claims. (Cl. 134-46.)

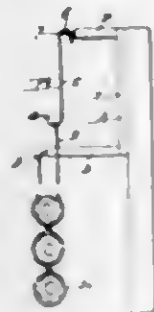
3. The herein described process of mixing paint consisting in thoroughly soaking a mixture of wood pulp and lime in water, then grinding the mass, then commingling a vehicle of oil with the mixture, then again grinding the resultant mass, and then adding a quantity of rosin for producing a gloss and finally adding a solvent for the rosin.

1,314,302. QUICK-BREAK SWITCH. HARRY M. BROADWELL, Plainville, Conn., assignor to Trumbull Electric Mfg. Co., Plainville, Conn., a Corporation of Connecticut. Filed Aug. 22, 1918. Serial No. 250,911. 4 Claims. (Cl. 175-25.)



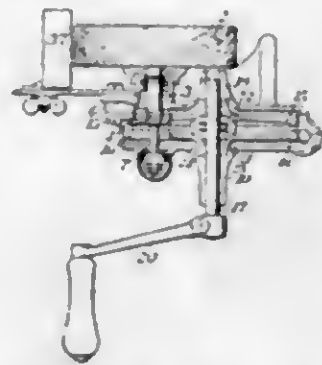
2. In a quick break switch, substantially parallel switch blades, a cross bar connecting the free ends of the same, a switch operating arm overlying said cross bar, a bracket secured to said cross bar and relatively inclined helical switch-throwing springs extending from said bracket to the switch operating arm.

1,314,303. SEED CORN HANGER. EDGAR F. BROWN, Derby, Iowa. Filed Mar. 13, 1919. Serial No. 282,434. (Cl. 139-32.)



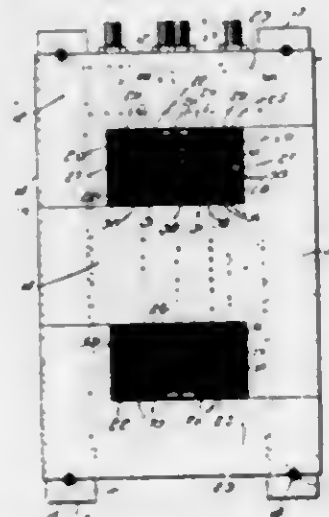
A device of the character described, a frame formed with a vertical member and two horizontal members connected therewith, eyes mounted in the edge of one horizontal member, a swinging wire element formed with a loop bill and with hooks engaged in said eyes, hooks mounted on the other horizontal members of the frame, and a cord strung over the last said hooks and over the loop bill of the swinging wire element, to form two depending loops whereby the said element may be rocked for the purpose of blinding together a plurality of ears of seed corn in the manner for the useful purpose herein specified.

1,314,304. GRINDING-MACHINE. BENNETT F. CLARK, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Feb. 15, 1916. Serial No. 78,396. 4 Claims. (Cl. 51-7.)



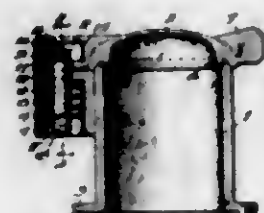
1. A grinding machine, comprising two grinding wheels and their shafts having their axes extending in different directions, pinions on the grinding wheel shafts, a main drive shaft, two drive gears rotatably mounted on said shaft for driving said pinions, and means for operatively connecting said shaft to either gear, substantially as described.

1,314,305. TRANSFORMER. ROBERT A. CONNOR, Chicago, Ill., assignor to Thordarson Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed June 28, 1915. Serial No. 36,655. 14 Claims. (Cl. 175-356.)



7. A shell type transformer comprising a magnetic circuit formed with windows to receive the windings and a central core, grouped, sidewise disposed, disk-like windings surrounding said core and extending through said windows, insulating members between the tops and bottoms of said windows and said windings, from which said windings are spaced to constitute cooling medium conduits, and insulating disks surrounding the core between the windings, with their side faces formed to constitute cooling medium conduits at the flat sides of said windings.

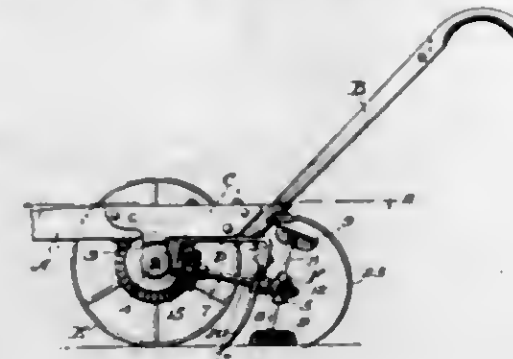
1,314,306. FILLER-COVER. ELASHA D. CULLISON, Chicago, Ill. Filed Feb. 23, 1918. Serial No. 218,854. 13 Claims. (Cl. 220-86.)



1. In combination, an annular collar member having a conical seat on its outer end, a recessed lug formed inte-

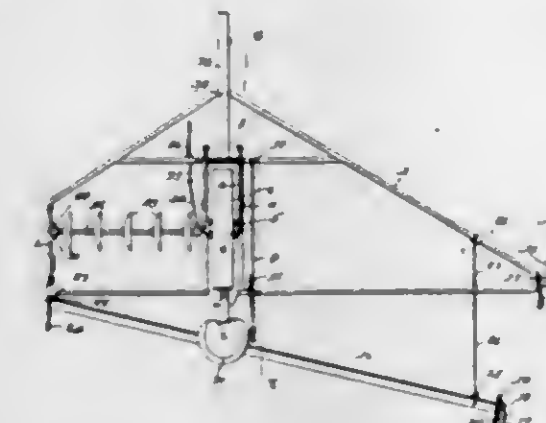
gral with the collar, a cover member having a conical surface adapted to co-act with the conical seat, a shaft mounted in the lug and means locking it secured to the cover, said shaft lying parallel to the axis of the cover and a spring in said lug for holding the cover upon the seat.

1,314,307. COTTON-CHOPPER. JOHN R. DAVIDSON, Monticello, Ga., assignor of one-half to H. E. McElheney, Monticello, Ga. Filed Aug. 24, 1918. Serial No. 251,304. 5 Claims. (Cl. 97-46.)



1. The combination of a single ordinary plow beam with a rotary supporting shaft extending transversely of said beam and provided with wheels and with a driving gear between said wheels, detachable means connecting said shaft to said beam, a longitudinally extending rotary shaft beneath said beam to the rear of said transverse shaft provided with a gear on its forward end engaging the gear on said transverse shaft and a chopper wheel on its rear end and detachable means provided with bearings for said longitudinal shaft secured to said beam and cultivator teeth adjustably secured to said detachable means in advance of said chopper wheel.

1,314,308. GRADER. JACOB F. DELONG, Lambertson, Minn. Filed July 2, 1918. Serial No. 243,000. 2 Claims. (Cl. 37-7.)

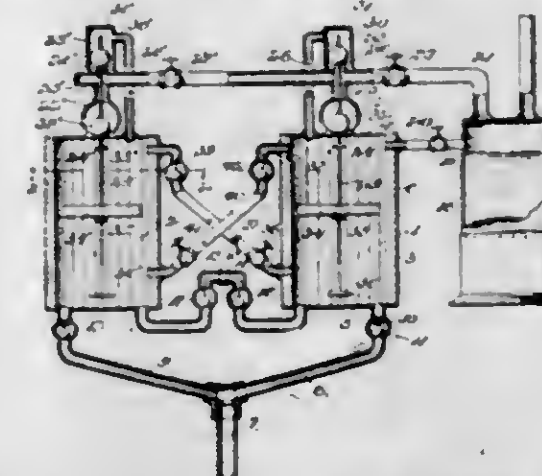


1. In a grader, a frame, a wheel for supporting the central portion of the frame, grooved guide pieces on the frame, guide plates vertically adjustable in said grooved guide pieces, a shaft, carried by said guide plates for supporting the wheel, levers for adjusting said guide plates vertically, means for holding the guide plates in their positions of adjustment, and road grading means carried by the frame.

1,314,309. APPARATUS FOR ELEVATING WATER. JAMES K. DE VOAK, Atlanta, Ga. Filed July 17, 1918. Serial No. 245,366. 6 Claims. (Cl. 160-1.)

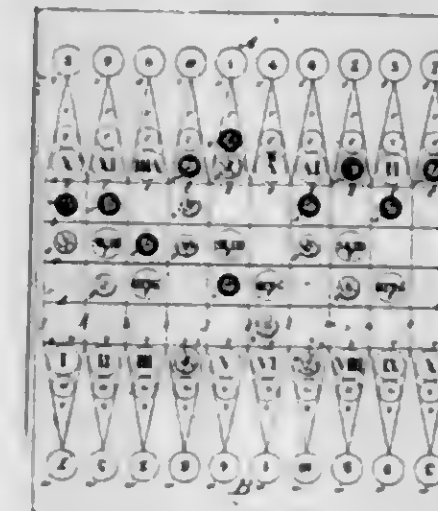
1. In water elevating apparatus, condensation chambers, means for admitting water to each of said chambers from a source of water supply, a steam supply main communicating with each of said chambers, a valve rod working

in each chamber, a valve carried by each rod and controlling the passage of steam from the steam main into the respective chamber, a float freely movable with relation to each valve rod, spaced shutments upon each valve rod in the path of movement of the respective float, a water out-



let from each chamber, means for condensing the steam after admission to each chamber, and valved means independent of the main for admitting steam from the source of steam supply directly into one of said condensation chambers.

1,314,310. GAME. EMMA K. DORR, New York, N. Y. Filed Mar. 19, 1917. Serial No. 155,880. Renewed June 16, 1919. Serial No. 304,724. 10 Claims. (Cl. 46-64.)



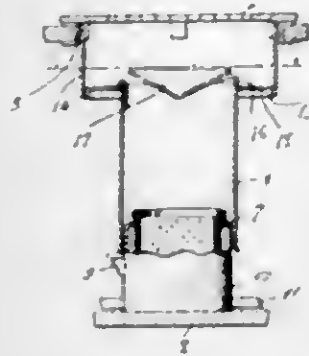
10. A game appliance comprising a board and game-pieces for playing thereon, said board having a subdivided field across which the game-pieces of opposing players are moved, and having a designated portion for the game pieces to start from in playing the game; said field having certain of its subdivisions designated by the word "Skid" with the signification of "return," and a circle inclosing said word.

1,314,311. ELECTRIC-WAVE TRANSMISSION. CONNELLIA D. EHART, Philadelphia, Pa. Filed Feb. 1, 1918. Serial No. 214,794. 21 Claims. (Cl. 178-44.)



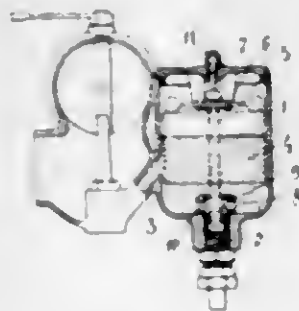
1. The method of transmitting signals over a line upward of 100 miles in length, which consists in impressing signal energy in the form of high frequency current upon a line conductor having a resistance of more than 25 ohms per mile, and amplifying the energy at a point distant a plurality of wave lengths from the transmitting station.

1,314,312. OIL-STOVE. WILLIAM A. EMMERSON, Chattanooga, Okla. Filed Nov. 21, 1917. Serial No. 203,218. 1 Claim. (Cl. 126-45.)



An oil stove including a base carrying a burner and a top having an opening closed by a grate, brackets on said burner, a chimney carried by said brackets and terminating short of the top, a cylindrical wind break secured to the grate and extending to a point below the upper end of the chimney and of a diameter greater than that of said chimney, a circular protector having an opening secured to the upper end of said chimney and having its periphery bent downwardly to define an annular flange, said flange having contact with the inner face of the wind break, to permit the chimney to have upward and downward movement within said wind break, and a conical deflector secured to the protector and disposed over the chimney in spaced relation to the upper end thereof.

1,314,313. CARBURETER FOR EXPLOSION ENGINES. ENRICO FEROLDI, Turin, Italy. Filed Feb. 28, 1918. Serial No. 219,556. 1 Claim. (Cl. 158-38.)



In fuel feeding devices for carbureters for explosion engines, a constant level tank in which the fuel is fed, a valve controlling the supply of fuel in said tank, a float operating said valve, means in the tank on which rests the float when it comes out of operation and means on said valve intended to engage said float when it rests on said means to limit the lifting of said valve to the extent corresponding to the fuel supply required for the normal running of the engine.

1,314,314. HAND-FAN. GEORGE FISCHBEIN, New York, and LOUIS NEWMAN, Bronx, N. Y. Filed Sept. 24, 1915. Serial No. 255,327. 1 Claim. (Cl. 230-33.)

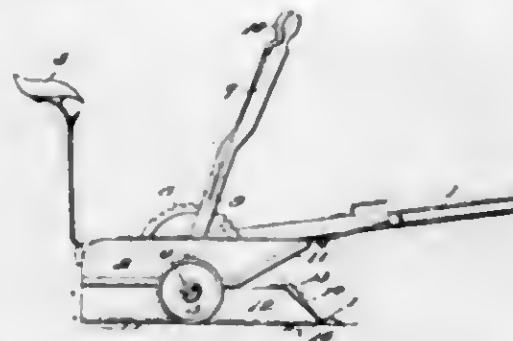
2. In a fan, the combination with a casing, of a tubular arbor rotatably mounted therein, one end of said arbor extending through said casing and being provided with a flange having outwardly extending equidistantly spaced projections at its peripheral portion, a spindle shiftably disposed in said tubular arbor having a reduced end in proximity of said flange, fan blades pivoted to the reduced end of said spindle, the inner ends of said blades being seated between the projections on said flange, a spring upon said spindle tending to hold said fan blades in engagement with said projections, said blades being adapted to be folded around said spindle

into parallel relation to the longitudinal axis of said casing by disengaging the same from said projections, a



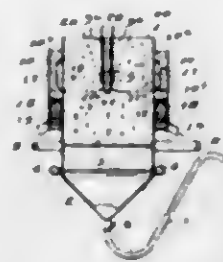
bell-crank lever pivoted to said casing and extending therethrough, and a driving connection between said bell-crank lever and said tubular arbor.

1,314,315. CORRUGATOR. FRANCIS W. FISHER, Buhl, Idaho, and JAMES C. OLSEN, Salt Lake City, Utah. Filed Mar. 28, 1919. Serial No. 285,844. 1 Claim. (Cl. 97-12.)



In an implement as described, the combination with the wheels, crank axle, and adjustable platform having a declining front board, of an adjustable furrow forming device carried by the platform comprising a runner having a wear shoe, a shovel and a shovel point, a fastening cleat on top of the platform, and bolts passed through the runner platform and cleat for securing the furrow forming device in position.

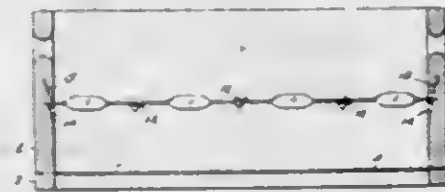
1,314,316. APPARATUS FOR SEPARATING ORE MATERIALS FROM EACH OTHER. FREDERICK B. FLINN, Orange, N. J., assignor, by mesne assignments, to Pneumatic Process Flotation Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1915. Serial No. 15,550. 5 Claims. (Cl. 83-85.)



3. The combination of a pulp receptacle, means for supplying air to the receptacle near the bottom thereof to form bubbles uniformly distributed over the horizontal cross area, means at the bottom of the receptacle for the discharge of barren pulp, means at the top of the receptacle for the reception of metal-carrying bubbles, a pulp feed trough extending through the center of the receptacle adapted to supply pulp to the receptacle, pulp supply reservoirs at the ends of the receptacle and communicating with the feed trough, and deflectors posi-

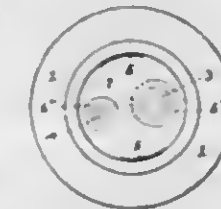
tioned at the sides of the feed trough for deflecting the bubbles outward toward the sides of the tank, the said deflectors being adjustable to vary the angles of outward inclination thereof.

1,314,317. BOTTLE-CRATE. AMOS L. FOREMAN, Baltimore, Md., assignor to Foremana Systems, Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Mar. 10, 1917. Serial No. 153,907. 1 Claim. (Cl. 217-22.)



A bottle crate having end walls each with a recess in its inner side and a notch communicating with said recess, a flat metal strip constituting a longitudinal partition member, said strip having each end let into the recess in the corresponding end wall and being provided with a perforation in that portion within the recess but exposed by the notch, and a single securing nail driven diagonally into the end wall substantially in line with the base of the notch, said nail passing through the perforation in the strip and having its head contained within the notch and bearing upon that face of the strip which is exposed by the notch.

1,314,318. BOTTLE-CAP. AMOS L. FOREMAN, York, Pa. Filed Jan. 15, 1919. Serial No. 271,236. 2 Claims. (Cl. 215-14.)



1. A milk bottle cap having an opening therein for the reception of a suction tube through which the contents of the bottle can be withdrawn, said opening being surrounded by a band of non-frangible adhesive material, and said cap being provided with a sealing cover normally held in place thereon by said non-frangible adhesive material so as to seal the opening therein but which can be freed from connection with the cap when it is desired to uncover said opening.

1,314,319. SHOE-HEEL. JOSEPH A. FORMANACK, St. Louis, Mo. Filed May 5, 1919. Serial No. 294,771. 7 Claims. (Cl. 36-40.)



1. A metallic heel for shoes having in the face of its tread a groove, a wire in said groove spaced away from a side and the roof thereof, means whereby said wire is held in place, a lift engaging the face of the tread, and nails driven through said lift against the roof of said groove, said groove having its cross-sectional contour so shaped as to cause said driven nails to be bent and hooked over said wire.

1,314,320. FLEXIBLE SHAFT-COUPLING. WILLIAM R. FOX, Jackson, Mich. Original application filed Feb. 20, 1917, Serial No. 149,795. Renewed Apr. 2, 1919, Serial No. 287,070. Divided and this application filed May 16, 1919. Serial No. 297,571. 1 Claim. (Cl. 64-102.)



A universal joint comprising a grooved ball, a pair of coupling heads, each having a fork to engage the ball, one of said heads having a gateway at the base of its fork communicating with the opening within the fork, the fork of said gated head being reinforced at one face by integral portions curved on their inner faces to conform to the ball and reaching up to a plane above the bottom of said gateway, and reinforced on the other side by a portion reaching up to a plane above the bottom of the gateway and having a partly spherical recess conforming to the spherical face of the ball, the rim of said portion extending from one fork arm to the other, substantially as described.

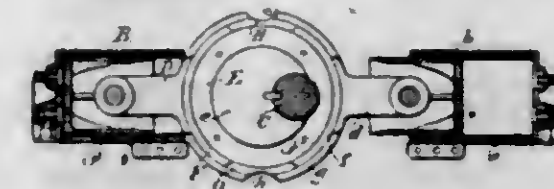
1,314,321. HORMONES AND PHOSPHATIDES AND PROCESS OF OBTAINING SAME. SIGMUND FAERENKEL and EDMUND HERMANN, Vienna, Austria, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 30, 1914. Serial No. 854,200. 21 Claims. (Cl. 167-7.)

1. The herein described physiologically active hormones, containing carbon, hydrogen, and oxygen in the following amounts:

Carbon	81.33 to 81.62%
Hydrogen	11.32 to 11.49%
Oxygen	6.89 to 7.35%

said compounds at ordinary room temperature being a thickly flowing oily liquid, which distills under a vacuum of 0.06 mm. of mercury at a temperature of 193° C. (uncorrected), and which bodies show cholesterol reactions, said substances being isolated from the animal tissue of which they form normal constituents, such products having the property of stimulating the activity of the female reproductive organs and associated parts.

1,314,322. ECCENTRIC-DRIVEN PUMP. CHARLES H. FREEMAN, Bloomington, Ill. Filed June 20, 1917. Serial No. 175,797. Renewed Jan. 23, 1919. Serial No. 272,778. 3 Claims. (Cl. 74-1.)

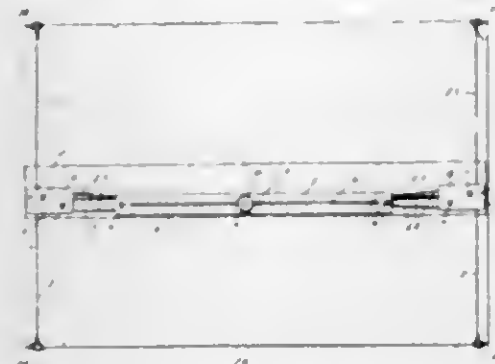


1. The combination with a shaft, of an eccentric upon the shaft, the said eccentric having a hub projecting at the side thereof, a pitman, the said pitman having a curved sliding termination fitting the said eccentric externally, a retaining cover plate having an annular flange arranged exteriorly with respect to the said curved sliding termination of the pitman, the said plate having a

central opening fitting the said hub of the eccentric, and means for securing the cover plate and the said eccentric together.

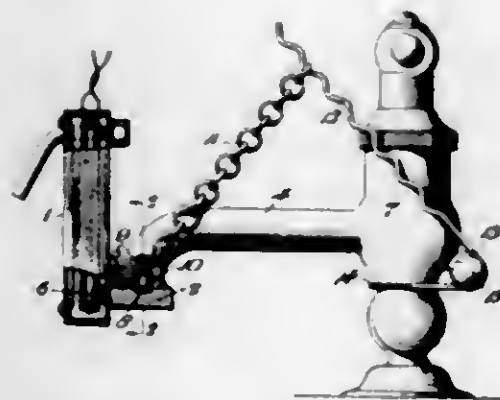
3. The combination with a shaft, of an eccentric upon the shaft, the said eccentric having a hub projecting on both sides thereof, oppositely disposed pitmen, the said pitmen having curved sliding terminations fitting the eccentric peripherally, retaining cover plates each having an annular flange arranged exteriorly with respect to the said curved sliding terminations of the pitmen, the said plates having central openings fitting the projecting portions of the said hub of the eccentric, and means for securing the cover plates and the said eccentric together.

1,314,323. DRAFTING APPARATUS. ERNEST LOUIS FULLER, Malden, Mass., assignor to Technical Supply Company, Scranton, Pa., a Corporation of New Jersey. Filed Oct. 13, 1917. Serial No. 196,456. 22 Claims. (Cl. 33-50.)



1. In a drafting apparatus, adapted to be secured on a support having a base line, a straight-edge, wheels attached thereto, cords passing around the said wheels, and means independent of the cords for locking and holding the said straight-edge at a fixed angle to said base line.

1,314,324. ATTACHMENT FOR WATER OR FLUID HEATERS WITH FAUCETS. NIKOLAUS GRASON, Philadelphia, Pa., assignor to A. Mecky Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1919. Serial No. 283,096. 5 Claims. (Cl. 214-39.)

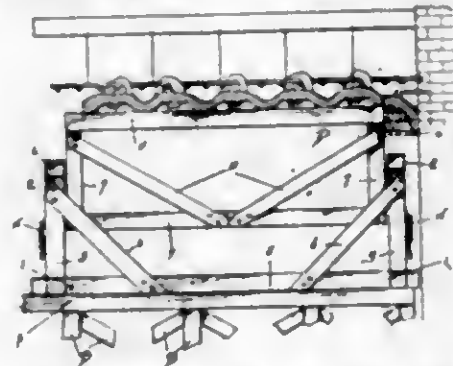


1. An attachment for a fluid heater with a fluid supply device therefor consisting of a resilient arm which is provided with means for connection with said device, and a member which is adapted to extend from said arm to a portion of the body of said heater and engage therewith.

1,314,325. ORNAMENTAL CEILING SETTING APPARATUS. JOHN M. GAIRA, Salt Lake City, Utah. Filed Jan. 23, 1918. Serial No. 213,428. 3 Claims. (Cl. 254-148.)

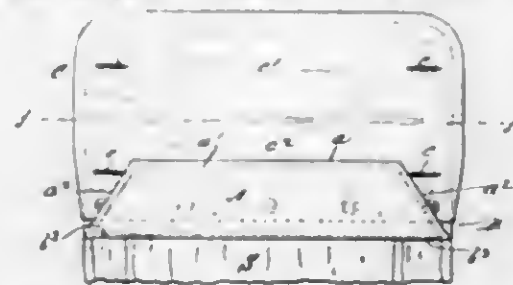
1. In an apparatus of the class described the combination with a scaffold, of a rack mounted thereon having detachable slides and ends; a platform operable within

said rack and spaced on all sides from the frames composing said rack; and blocks and tackle on each end of



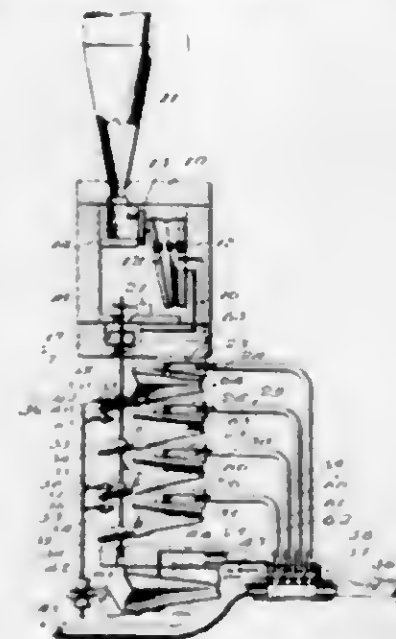
said platform and rack to raise and lower said platform within said rack.

1,314,326. DETACHABLE REVERSIBLE CUFF. RICHARD L. HERREN, Brooklyn, N. Y. Filed May 19, 1919. Serial No. 297,990. 2 Claims. (Cl. 2-79.)



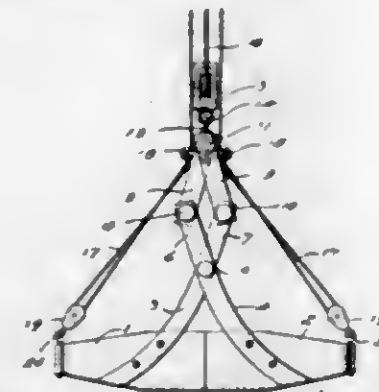
2. In combination, a sleeve the wrist band of which is formed with a plurality of fastening means, a detachable foldable and reversible cuff, a plurality of coincidental fastening means thereon adapted to engage from either side of the cuff with the said fastening means on the sleeve wrist band, and a flap attached to the sleeve and adapted to fold over and conceal said sleeve and cuff securing means, said concealing flap being formed with sloping centrally convergent end edges for the purpose described.

1,314,327. PIPE-ORGAN. MAXIMUS HESS, Nashville, Tenn., assignor of one-half to Frank A. Leatherman, Nashville, Tenn. Filed July 11, 1917. Serial No. 179,840. 20 Claims. (Cl. 84-20.)



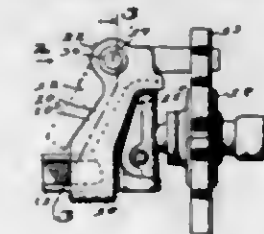
1. A pipe organ including a wind chest, a series of sound producing devices connected therewith, valves controlling the speaking of said devices individually, the valves being provided with valve rods, pneumatics having arms engaging said rods, the pneumatics being arranged in groups and certain of the rods engaged by one group being common to another group, and stop means each normally engaging all of the arms of a group of pneumatics.

1,314,328. HOISTING-BUCKET. JOHN F. HICKEY, Port Henry, N. Y., assignor of thirty per cent. to Thomas I. Hickey and thirty per cent. to Lee W. Burhans, Port Henry, N. Y. Filed May 2, 1919. Serial No. 294,138. 2 Claims. (Cl. 57-13.)



2. The combination with the jaws of a bucket having fixed, crossed, pivoted levers, a hanger bar and hoisting attachment, of links pivoted on the hanger bar and pivotally connected with the free ends of the levers, and opening cables, including tackles for opening the jaws of the bucket.

1,314,329. LOCK FOR AUTOMOBILES. JOE HESMAN HILL, Oklahoma, Okla., assignor of one-third to John S. Inlow, Oklahoma, Okla. Filed May 12, 1919. Serial No. 296,298. 3 Claims. (Cl. 70-90.)



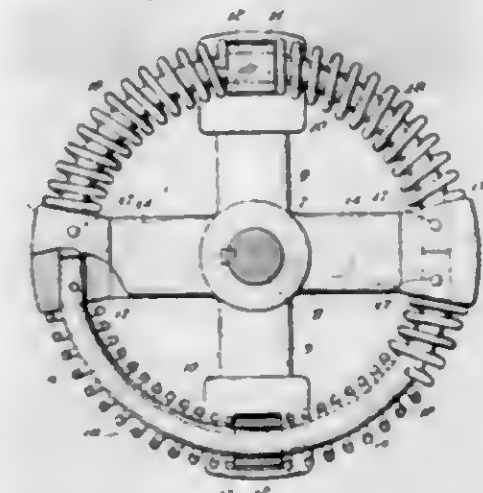
1. An arm adapted to be attached to a vehicle axle, said arm comprising two separable portions adapted to embrace the axle, a locking-arm interposed between the two portions of the arm and pivoted to said portions, and means whereby said locking-arm binds the two portions of said arm together when moved pivotally between them.

1,314,330. RAIL-CLEANING DEVICE. JAMES G. HUNNICUTT, Atlanta, Ga. Filed July 11, 1918. Serial No. 244,396. 8 Claims. (Cl. 291-43.)



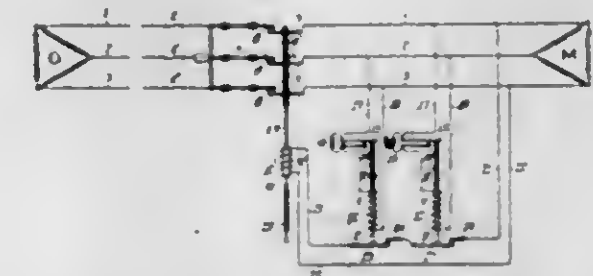
1. In a locomotive, the combination with rail sanding means and control means therefor, of rail cleaning means automatically operative as an incident to the operation of the sand control means.

1,314,331. FLEXIBLE COUPLING. IRVIN HUPP, Chicago, Ill., assignor to Hupp, Incorporated, a Corporation of Illinois. Filed Oct. 8, 1917. Serial No. 193,269. 16 Claims. (Cl. 64-96.)



1. A coupling of the class described, comprising a pair of members provided with radially disposed arms, one member being adapted to be fixedly secured to a rotatable driving element or shaft, while the other is adapted to be fixedly secured to a rotatable driven element or shaft, the arms of one member being provided with portions adapted to extend into the circumferential plane to be described by the arms of the other member, said portions being adapted to have transverse and lateral movements relative to the arms of said member, and flexible means disposed between said movable portions and the arms of the other member, whereby rotative movement of the driving element will be yieldingly transmitted to the driven element.

1,314,332. ELECTRICAL SAFETY DEVICE. ORA OTIS JONES, Chicago, Ill., assignor of one-third to John Burkhardt and one-third to Augustus G. de Clercq, Chicago, Ill. Filed Jan. 12, 1918. Serial No. 211,527. 5 Claims. (Cl. 175-294.)



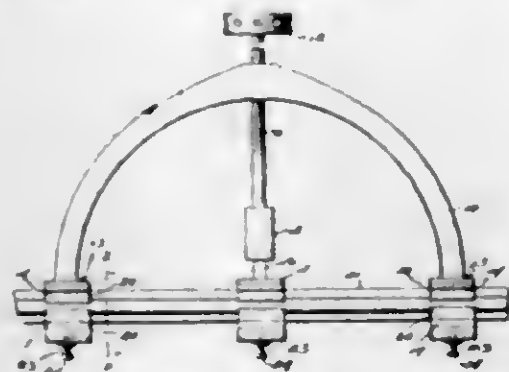
2. A three-phase device, comprising a three-phase generator, a three-phase motor, an operating circuit connecting same, a circuit breaker in said circuit, a pair of relays connected across two of the phases of said circuit respectively for normal energization thereby, and a circuit breaker controller having an energizing coil connected across one of the phases of said circuit, the connecting circuit of said coil including a pair of switches connected in series and arranged for actuation by said relays respectively for opening said connecting circuit upon the opening of any lead of the said operating circuit back of said relays and controller and consequent relay de-energization.

1,314,332. STEAM-HOSE. JULIUS KAHN, New York, N. Y., assignor to United Metal Hose Company, Inc., New York, N. Y., a Corporation of New York. Filed June 14, 1919. Serial No. 304,306. 8 Claims. (Cl. 137-90.)



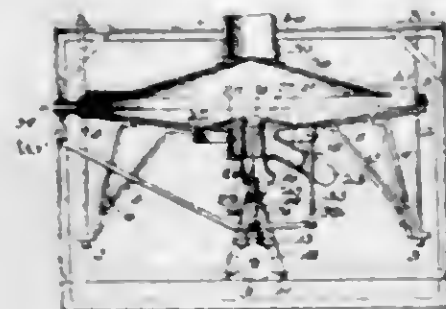
1. A flexible pipe for resisting high internal pressures, comprising a seamless corrugated metal tube having inner and outer tubes of braided metal fabric associated therewith.

1,314,334. RAIL-BENDER. JAN KALEMBA, Sud, W. Va. Filed Apr. 19, 1917. Serial No. 163,174. 1 Claim. (Cl. 153-38.)



A rail bender comprising a yoke, a substantially U-shaped clamp lock frame at each end of said yoke, a jack-screw mounted centrally of said yoke, a U-shaped clamp lock frame swiveled to the inner end of said jack-screw, the terminals of the frames bent inwardly to the direction of each other to form retainers, pairs of spaced clamping blocks mounted in said frames and held against outward movement by said retainers, the confronting faces of said blocks having spaced longitudinally extending grooves to embrace and receive the opposite longitudinal edges of the tread and base of a rail, and means centrally of the faces of said blocks to engage the opposite sides of the web of the rail, so that an equal strain will be applied to all parts of said rail during the bending action thereof.

1,314,335. ORE-CONCENTRATOR. JOHN F. KELLOGG, Guthrie, Okla. Filed Mar. 13, 1918. Serial No. 222,180. 7 Claims. (Cl. 83-88.)



1. In an ore concentrator, a concentrating pan, means for imparting panning motion thereto, the said pan having a concave upper surface and being formed at the low point in its surface with a discharge opening, a discharge pipe extending up through the opening and having an open upper end, and a gate surrounding the upper end of

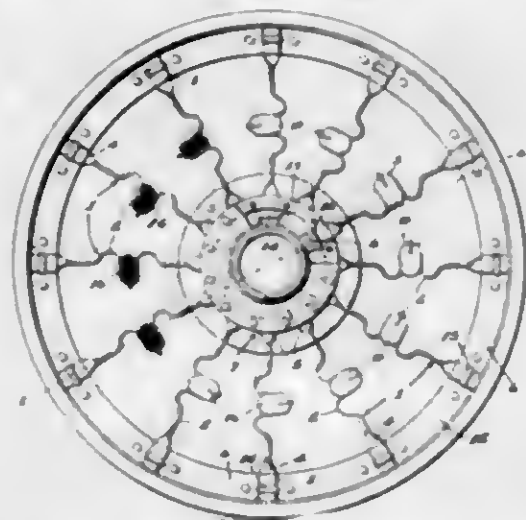
the said pipe extending laterally therefrom and having its outer edge spaced above the said surface of the pan and surrounding the opening therein.

1,314,336. DOOR-JAMB-LOCK STAPLE-FIXTURE. CHARLES KEMP, New York, N. Y. Filed Apr. 28, 1919. Serial No. 293,262. 3 Claims. (Cl. 70-15.)



1. A door jamb lock fixture of the character designated formed with an anchor stud adapted to be driven into the jamb and having a staple extended at an angle to the length of the stud, for the purpose described.

1,314,337. RESILIENT WHEEL. EUGENE I. KIMMET, Syracuse, N. Y. Filed Sept. 20, 1917. Serial No. 192,339. 3 Claims. (Cl. 152-50.)



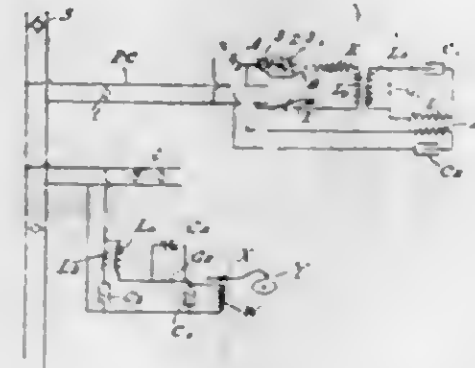
1. A resilient wheel comprising a felly, a hub, spaced radially arranged staggered spokes, laterally separable clamping means for securing the outer ends of the spokes in alignment to the felly, and additional laterally separable clamping means for securing the inner ends of the spokes in staggered relation, said additional means consisting of separate sets of coating rings arranged in a transverse series on the hub and having opposing sockets, the walls of the sockets and the spokes having interlocking complementary grooves and ribs.

1,314,338. BINDER. CHARLES H. KOSS, Philadelphia, Pa. Filed Nov. 4, 1918. Serial No. 260,928. 5 Claims. (Cl. 24-23.)



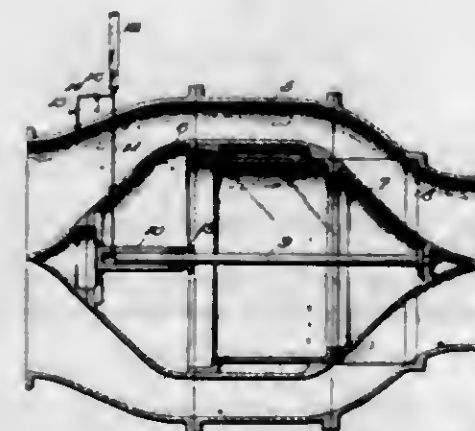
3. A fastening device consisting of a plate having elongated securing means at one end and three approximately parallel slits adjacent to the other end, the slit nearest said other end opening on one side and the other slits opening on the other side of said plate, said securing means lying in a line intersecting each of said slits at approximately a right angle and passing approximately through the center of said plate.

1,314,339. ELECTRIC SIGNAL SYSTEM. WILLIAM E. LAIDLAY, Cleveland, Ohio, assignor to Carl F. Mend, Cleveland, Ohio. Filed June 2, 1916. Serial No. 101,321. 4 Claims. (Cl. 177-339.)



1. A signaling method, consisting in producing high frequency alternating current and superimposing the same upon and causing it to flow in a circuit connected to a source of power and to a signaling device in such manner as to complete a path for the flow of said alternating current, and utilizing said alternating current to complete a path for the flow of power from said power circuit to actuate said signaling device.

1,314,340. POSITION-INDICATOR FOR PLUNGER-VALVES. CHESTER W. LARNER, Cleveland, Ohio. Filed Dec. 6, 1917. Serial No. 208,724. 3 Claims. (Cl. 251-151.)

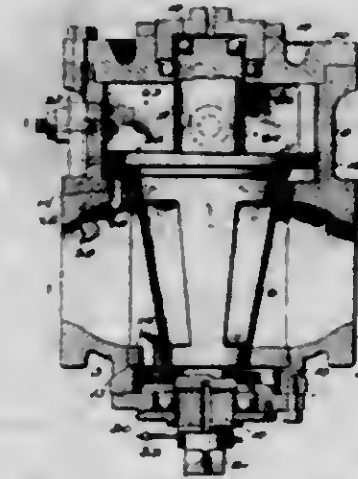


1. In apparatus of the type recited, the combination of a fluid way or conduit having an enlargement or chamber for a valve, a valve in said chamber comprising a fixed element and a plunger element, and means for indicating the position of the plunger element, comprising a glass tube or gage externally of the conduit, a fluid containing cylinder mounted on the fixed element and in communication with said gage, and a fluid displacing piston movable with the plunger element.

1,314,341. TAPER-PLUG VALVE. CHESTER W. LARNER, Philadelphia, Pa. Filed Jan. 22, 1918. Serial No. 213,172. 2 Claims. (Cl. 137-139.)

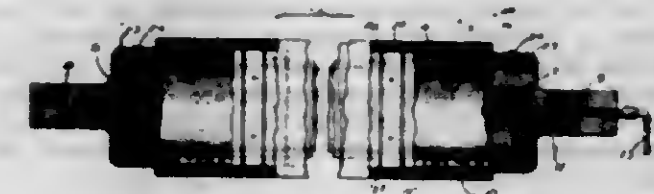
1. In a taper plug valve, the combination of a casing having bearings disposed at the ends of a taper bore provided in the casing, a taper plug having endwise projecting journals freely slidable and turnable in said bear-

ings for centering the plug when freed from the taper bore, and means independent of the bearings for freeing



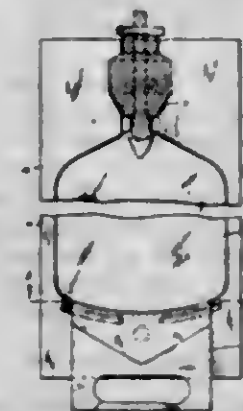
the plug from the bore and for turning it, substantially as described.

1,314,342. PNEUMATIC ROLL. GEORGE A. LAWRENCE, Woburn, Mass., assignor to The Turner Tanning Machinery Company, Peabody, Mass., a Corporation of Maine. Filed June 20, 1917. Serial No. 175,760. 5 Claims. (Cl. 149-12.)



5. A pneumatic roll comprising a rigid tubular member closed at its ends and having a series of spaced rows of spaced holes or sockets, radial pins slidably located in said holes or sockets and extending radially outwardly from said member, an inflatable cushion confined within said member and exerting outward pressure against said pins, and an outer yielding member spaced from but encircling said rigid member and secured to the projecting ends of said pins.

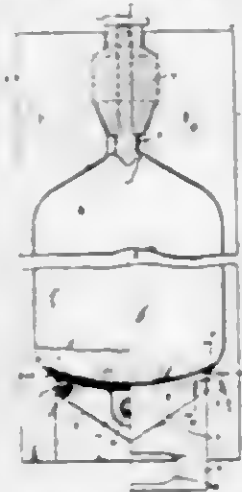
1,314,343. JOINTURE FOR VULCANIZED-RUBBER PARTS. JEREMIAH L. MAHONEY, New Haven, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, a Corporation of Connecticut. Original application filed Jan. 15, 1918. Serial No. 211,904. Divided and this application filed June 29, 1918. Serial No. 242,646. 2 Claims. (Cl. 150-1.)



1. A water bottle comprising oppositely disposed rubber walls vulcanized together about the major portion of their edges simultaneously with the vulcanization of the said

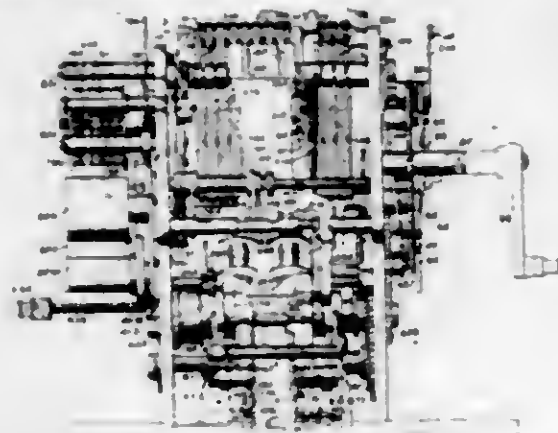
walls and an elongated strip of rubber V-shaped at its ends disposed between another portion of said edges and vulcanized thereto simultaneously with the vulcanization of said strip.

- 1,314,344. MOLD FOR VULCANIZING RUBBER ARTICLES. JEREMIAH L. MAHONEY, New Haven, Conn., assignor to The Goodyear's India Rubber Glove M'fg. Co., a Corporation of Connecticut. Original application filed May 21, 1917, Serial No. 160,818. Divided and this application filed Sept. 4, 1918. Serial No. 232,549. 5 Claims. (Cl. 18—35.)



1. A mold for rubber water bottles and the like comprising a core having a projection adapted to form an opening in the wall of the bottle spaced from the neck thereof, and outer mold members having cavities therein adapted to form the walls of the bottle, said cavities being deepened at points adjacent the opening producing projection of the core for the purposes as described.

- 1,314,345. TICKET-ISSUING MACHINE. HARMON A. MARTIN, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio. Filed June 13, 1916. Serial No. 103,804. Renewed May 29, 1919. Serial No. 300,774. 35 Claims. (Cl. 235—3.)

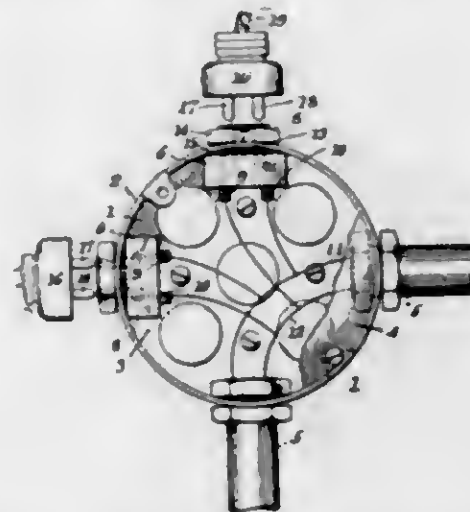


1. In a machine of the class described, the combination with a main operating mechanism, of a plurality of destination devices separately movable into controlling position, an accounting mechanism, differential means under the control of the destination devices when the same are in controlling position for actuating the accounting mechanism during the operation of the machine, and means preventing operation of said differential means when no destination device is in controlling position.

- 1,314,346. OUTLET-BOX FITTING. WILLIAM F. MESCHENMOSER, New Dorp, N. Y. Filed July 8, 1915. Serial No. 38,759. 3 Claims. (Cl. 173—330.)

1. An outlet box fitting comprising a relatively shallow insulating body fitting against a side wall of the outlet

box and having a boss projecting through an aperture in said side wall, means engaging said boss exterior to the box to hold the fitting in position, jack-receiving terminals



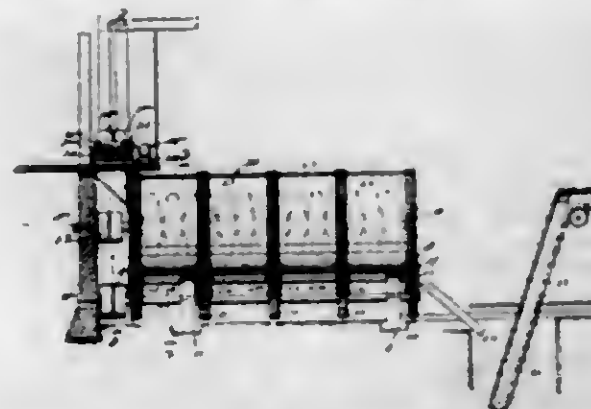
arranged in said boss and accessible to the jacks of a co-operating attachment plug exterior to the box, and wire terminals on the body of the fitting within the box and electrically connected to said jack-receiving terminals.

- 1,314,347. CUE-TIP. JAMES G. MIKULA, Birchwood, Wis. Filed Mar. 13, 1919. Serial No. 282,436. 2 Claims. (Cl. 40—9.)



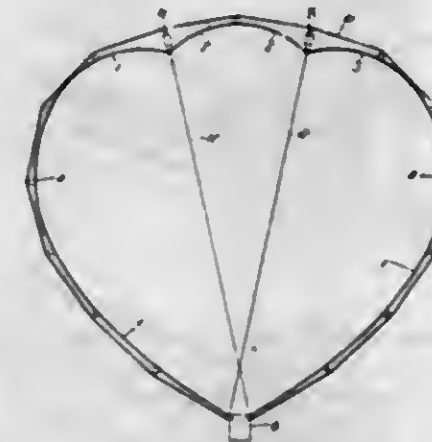
1. A cue tip comprising a disklike body portion formed with a globular protuberance on one side, and a flexible covering spread over said protuberance, said covering being of a material having a high coefficient of friction.

- 1,314,348. CONVERTER AND SMELTER. THEODORE MILLER, Waco, Tex. Filed Mar. 22, 1918. Serial No. 224,026. 8 Claims. (Cl. 263—33.)



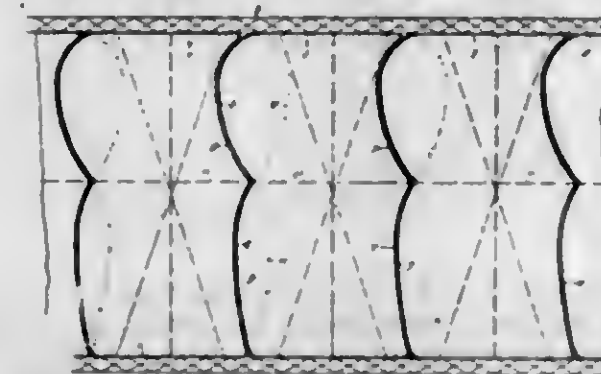
3. A converter having a revoluble cylinder containing a series of axially arranged hollow refractory agitators provided with interior burner vents, and means for supplying fuel continuously to said vents.

- 1,314,349. AIRSHIP OF RIGID TYPE. EWEN HENDERSON MITCHELL, Bedford, England, assignor of one-third to Albert Eustace Short and one-third to Hugh Oswald Short, Bedford, England. Filed Apr. 23, 1919. Serial No. 292,073. 3 Claims. (Cl. 244—3.)



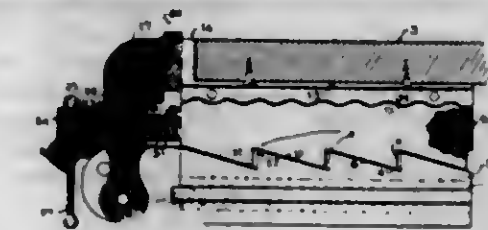
1. A rigid airship comprising a gas container of approximately pear-shaped figure in transverse section, the radius of curvature being inversely proportional to the pressure, and in which the breadth and depth are nearly equal, the upper part of said container having one or more reentering angles which extend longitudinally of the container and are located at equal distances on opposite sides of the vertical central plane of the said container, in combination with an outer rigid framework composed of longitudinal and transverse frame members conforming to the general contour of said gas container and having one or more of said longitudinal frames of sufficiently deep section to preserve the form of the said reentering angles of the said container.

- 1,314,350. AIRSHIP OF RIGID TYPE. EWEN HENDERSON MITCHELL, Bedford, England, assignor of one-third to Albert Eustace Short and one-third to Hugh Oswald Short, Bedford, England. Filed Apr. 23, 1919. Serial No. 292,074. 2 Claims. (Cl. 244—3.)



1. In airships or the like of rigid type; the combination with an outer rigid framework; of flexible gas containers located in the interior of same end to end, the ends of each gas container being of somewhat spherical formation with an approximately central depression such as of the configuration of the lower end of a pear, the convex end of one gas container fitting into the adjacent concave end of the next gas container, and a number of supporting wires extending in planes transversely of the longitudinal axis of the airship and having their ends secured to the rigid framework and passing between the curved ends of adjacent gas containers, said supporting wires being of sufficient length to permit them to conform to the curves of the ends of the inflated gas containers between which they pass, and whereby when a gas container becomes deflated the adjacent end of the next container which was concave will assume a convex form and be supported by said transverse wires.

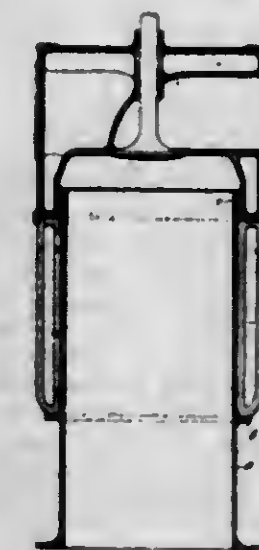
- 1,314,351. VISE. GEORGE MOORE, Erie, Pa. Filed Feb. 21, 1919. Serial No. 278,332. 4 Claims. (Cl. 81—31.)



1. A vise for quick adjustment comprising a slidable bar provided at its upper face with recesses forming shoulders and inclined faces, means for guiding the slidable bar, a fixed locking member located above and in spaced relation with the slidable bar and provided at its lower face with notches, a movable jaw carried by the slidable member, a movable locking member operating between the slidable bar and the fixed locking member and provided at its lower face with recesses corresponding with the recesses of the slidable bar, said movable locking member being also provided at its upper face with notches corresponding with the notches of the fixed locking member, the inclined faces formed by the recesses permitting the movable locking member to engage with and disengage from the fixed locking member when the said movable locking member is moved longitudinally of the slidable member and adjusting means connecting the said jaw with the movable locking member and adapted to successively operate the said movable locking member and also the movable jaw.

2. A vise for quick adjustment, comprising guide-ways; a slidable guide bar mounted therein carrying a plurality of comparatively large, right-angled notches on its upper side, said notches sloping upwardly and forwardly; a screw bar carrying a plurality of notches on its lower side complementary to and meshing with the notches on the guide-bar, and carrying on its upper side a plurality of relatively small lock notches, and having a screw-thread cut at its outer end; a lock-plate carrying on its under side a plurality of lock notches complementary to and meshing with the lock notches on the screw-bar, and having a rigidly mounted inner jaw at its outer end; an outer jaw pivotally mounted from the outer end of the guide bar and having a central hole for the end of the screw-bar; and a screw-lever rotatively mounted on the threaded end of the screw-bar.

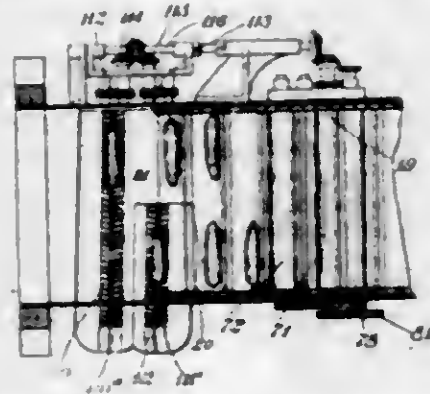
- 1,314,352. CONSTRUCTION OF LIGHT-WEIGHT ENGINES. ALBERT MOGIN, Asnières, France. Filed Apr. 9, 1917. Serial No. 160,853. 3 Claims. (Cl. 123—173.)



1. In an internal combustion engine, the combination of a head piece, comprising a combustion chamber and the usual associated parts, for each cylinder, a screw threaded portion at the lower part of the said head piece for each combustion chamber, a cylinder provided with a screw

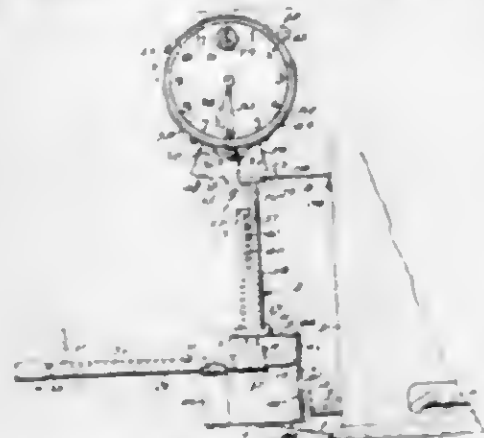
thread and adapted to be screwed to such screw threaded portion, a projecting portion of the head piece coming on the outside of each cylinder when in position, a jacket adapted to surround each cylinder with a certain amount of clearance, and having a part at one end adapted to contact with the projecting portion of the head piece and a step upon each of the cylinders adapted to come into contact with and grip the other end of the jacket when the cylinder is in position, all substantially as described.

1,314,353. CORN-HUSKING MACHINE. SAMUEL E. MORRAL and WILLIAM W. MORRAL, Morral, Ohio. Filed Nov. 2, 1916. Serial No. 129,090. 2 Claims. (Cl. 130-5.)



1. In a machine for husking and silking ears of corn, the combination with a table and means for feeding a plurality of parallel files of ears transversely of their lengths over the table, of a plurality of sets of husking and silking devices located below the table to receive the ears, said table provided with distinct passages to said husking and silking devices, one of said passages being located in advance of the other, substantially as described.

1,314,354. TIME-CONTROLLED STOVE-LIGHTER. JOHN J. NARCHITON, Pockskill, N. Y. Filed May 12, 1917. Serial No. 168,219. 7 Claims. (Cl. 161-14.)

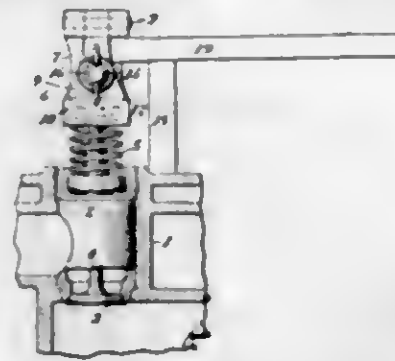


1. A device of the kind described including horizontally disposed and vertically slidable receiving means, horizontally slidable match supporting and projecting means, resiliently mounted in the receiving means, a match scratching plate rigidly mounted in advance of the receiving means and having an opening therein, spring actuated means for releasably holding the match supporting and projecting means in a raised position so that the said supporting and projecting means will yieldingly engage the plate above the opening therein, and time controlled mechanism controlling the actuation of the releasing means.

1,314,355. VALVE-REMOVER. CHARLES H. NEWTON, Plainville, Conn. Filed Apr. 3, 1919. Serial No. 297,887. 2 Claims. (Cl. 29-87.1.)

1. In a valve unit remover the combination of a pair of pivoted arms, one thereof being provided with a trans-

verse lever-receiving opening, a lever seat formed between the arms directly below the pivot, the lower ends of said



arms being provided with concave jaws having transverse ribs therein, and means, consisting of a bolt and nut for clamping said arms toward each other.

1,314,356. HOSIERY. ERNST NORDSLAD, South Bend, Ind. Filed Feb. 25, 1918. Serial No. 219,030. 2 Claims. (Cl. 2-23.)



1. As an article of manufacture, a stocking having individual toe pockets, the toe pockets being formed to normally overlap each other in regular order.

1,314,357. DERRICK. JOHN J. OLSON, Belview, Minn. Filed Jan. 11, 1918. Serial No. 211,405. 2 Claims. (Cl. 254-127.)



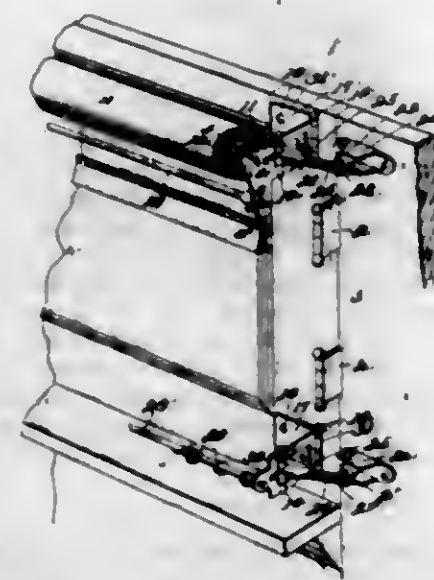
1. In a device as set forth, a hoisting apparatus, and a vehicle supporting frame, the latter comprising a plate, legs pivotally connected to the plate, the legs being formed with curved ends whose extremities lie substantially in planes at right angles to the legs, the legs diverging from the plate, a jointed brace interconnecting the legs adjacent their diverging ends, and vehicle axle engaging members carried by the legs at intermediate points for the useful purpose specified.

1,314,358. SHADE-BRACKET. BENJAMIN FRANKLIN OVERMAN, San Antonio, Tex. Filed Apr. 5, 1919. Serial No. 287,815. 6 Claims. (Cl. 156-19.)

1. The combination with the hinged window and frame, of curtain or shade brackets, hinges on the window and intermediate leaves pivoted between the brackets and hinges, and means pivoted to the bracket and to the window frame for swinging back the hinges on the window as the window is swung around parallel with the frame.

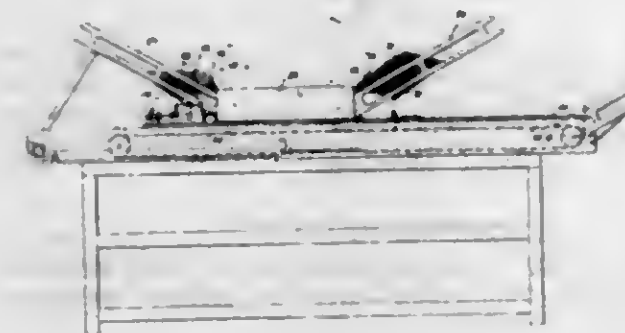
6. The combination with the frame and hinged window, of a pair of hinges attached to the window and a pair of shade roller brackets pivoted at the free ends of the free

leaves of said hinges, a bracket on the frame, a slotted lever pivoted in said bracket and pivotally connected at the pivot joint of one of the shade roller brackets, lugs on



said lever, and a spring interposed between the lugs and the bracket on the frame for holding the free leaves of the hinges and the pivoted brackets in normal position.

1,314,359. SHEET-FEEDING MECHANISM. HAROLD D. PENNEY, Pelham, N. Y., and GEORGE F. RUSS, Jersey City, N. J., assignors to Automatic Inserting Machine Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1918. Serial No. 220,421. 27 Claims. (Cl. 271-41.)

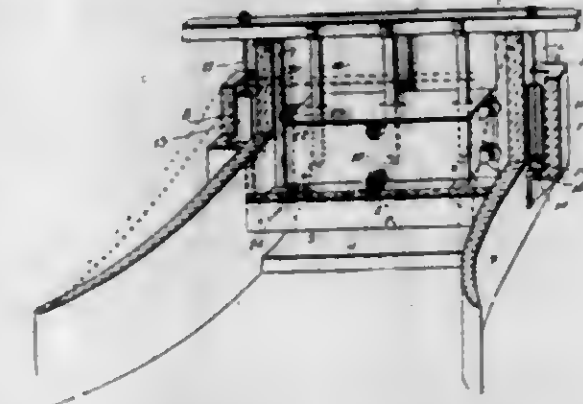


4. In a machine of the character described, a magazine for holding flat articles by edge engagement at an inclination with their edges in stepped relation to one another, means for successively extracting the articles from the magazine and disposed to operate medially of the articles being extracted, and means for deflecting the advance edges of the advance articles at the middle to facilitate the exclusive engagement of the advance articles by said extracting means.

1,314,360. AIR-COMPRESSOR. GORDON PHILLIPS, Cobalt, Ontario, Canada. Filed Apr. 16, 1918. Serial No. 228,859. 3 Claims. (Cl. 253-10.)

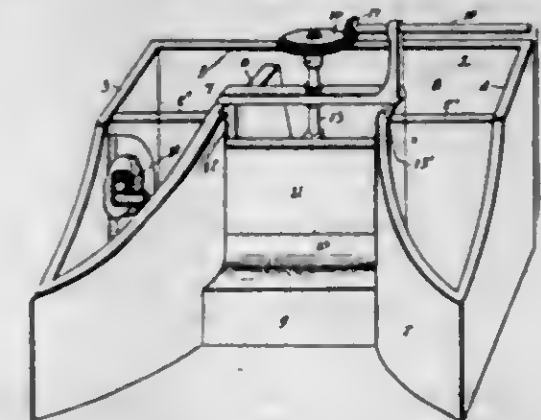
1. An air compressor comprising a chamber located within and in proximity to the edge of a body of water and extending above the water level, a partial wall front extending from the top of the chamber to a point below the water level and intermediate of the height of the chamber, diverging walls extending toward the deep water from each end of the chamber so as to direct the water into the chamber below the front wall and against the front wall to

increase the height of the head of water adjacent the chamber, a float weight located within the chamber against which the inflowing water is carried to rise to the height



of the head formed outside the chamber, and air compressing means operated by the downward fall of the float weight as the head recedes.

1,314,361. WATER-HEAD-PRODUCING DEVICE. GORDON PHILLIPS, Cobalt, Ontario, Canada. Filed Apr. 16, 1918. Serial No. 228,860. 3 Claims. (Cl. 61-20.)



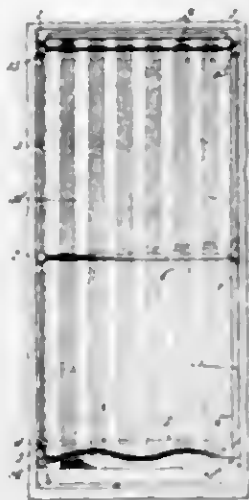
1. In a water head producing device, a pair of opposing sea walls extending outwardly into the water and converging together at their inner ends, a cross wall extending between the inner ends of the converging wall, a chamber designed to receive the water passing over the cross wall, an overflow wall extending across such water receiving chamber, and means for adjusting the height of the cross wall.

1,314,362. WINDOW-AWNING. JOSEPH POKORSKY, St. Louis, Mo., assignor to May Department Stores Company, St. Louis, Mo., a Corporation of New York. Filed Feb. 21, 1919. Serial No. 278,326. 10 Claims. (Cl. 156-44.)

1. A window awning, comprising a strip of fabric, a roller to which the upper end of said fabric is connected, means for holding the lower end portion of said strip of fabric extended when the awning is in use, a transversely-disposed bar or member under which the fabric passes, guide rods on which said member can slide vertically, and means for enabling said member to assume a slightly angular position without binding on said guide rods.

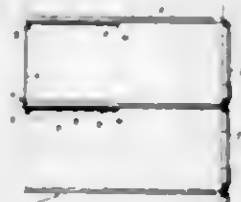
10. A window awning, comprising a strip of fabric, a roller to which the upper end of said strip is connected, guide rods arranged at the sides of the window opening, a vertically shiftable, transversely-disposed member carried by said guide rods and arranged so that it holds the upper portion of the fabric in a substantially vertical

position when the awning is in use, a substantially U-shaped extension frame whose cross piece is connected to the lower end of the fabric, sleeves on said guide rods



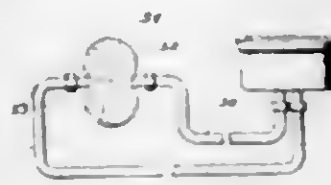
to which the inner ends of the side arms of said frame are pivotally connected, and notches in the cross piece of said frame for preventing the fabric from moving transversely with relation to said cross piece.

1,314,363. POST-OFFICE BOX. MILTON J. PORTER, Wayne, Pa., assignor of one-half to Joseph M. Fronefeld, Wayne, Pa. Filed Feb. 6, 1919. Serial No. 275,379. 8 Claims. (Cl. 211-36.)



5. The combination, with a post office box, of slideways in the upper portion of the same, a closing plate for the open end of said box, lugs carried at one end of said plate and arranged to move in said slideways, and an upturned flange at the opposite end of said plate; said flange affording a grasping projection when the plate is in the closing position and lying against the upper edge of the box when the plate is in the raised position.

1,314,364. SPEED-INDICATING DEVICE. THEODORE C. PROUTY, Aurora, Ill., assignor, by mesne assignments, to The Van Stieken Company, a Corporation of Illinois. Filed Jan. 16, 1914. Serial No. 812,519. Renewed Jan. 10, 1919. Serial No. 270,385. 2 Claims. (Cl. 264-14.)



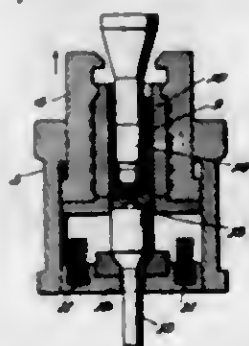
1. A fluid actuated speed indicator comprising in combination, a casing, a rotatable indicating member, a vane operatively attached to said member and mounted in said casing, said casing being provided with an inlet and an outlet, and a calibrating member carried at the bottom of said casing and having a calibrated edge beneath said vane to provide at all positions of said vane a calibrated passage for actuating fluid between said inlet and outlet passages.

1,314,365. GAGE-WHEEL FOR GARDEN-RAKES. JAMES C. RANCK, Elmira, N. Y. Filed Nov. 27, 1917. Serial No. 204,221. 1 Claim. (Cl. 97-14.)



The combination with a slotted standard, of a wheel having a tapering opening through the center thereof, the outer end of the opening being countersunk, a hub member which tapers longitudinally disposed in said opening, the smaller end of the hub being provided with a reduced threaded portion engaged in the slotted member, a nut for holding the threaded portion in the slotted member, the larger end of the hub being formed with a circumferential flange seated in said countersunk end of the wheel opening, and an outwardly extending and flattened finger-grip formed on the larger end of the hub to hold the hub against rotation when the nut is turned.

1,314,366. APPARATUS FOR FORMING HOLLOW ARTICLES. CHAUNCEY REIGAST, Easton, Pa., assignor to Taylor-Wharton Iron and Steel Company, High Bridge, N. J., a Corporation of New Jersey. Filed Dec. 4, 1918. Serial No. 265,233. 5 Claims. (Cl. 207-6.)



1. In apparatus of the type recited, the combination of billet compressing and displacing means, a fixed die-pot, a billet-holding die susceptible of relative movement in response to a metal-displacing operation, and shock-absorbing provisions for the die.

1,314,367. INSECT-DESTROYER. JOHN SCHULZ, Cleveland, Ohio. Filed Nov. 27, 1918. Serial No. 264,307. 3 Claims. (Cl. 43-22.)

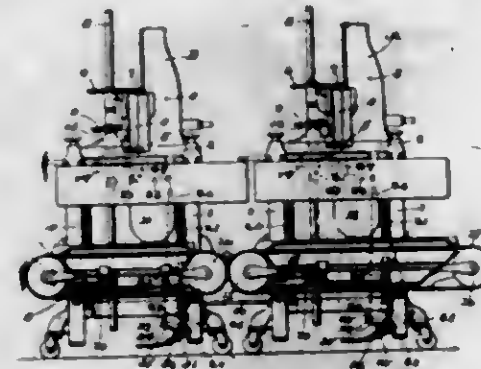


1. An insect destroyer comprising a shallow pan, a ball of porous non-combustible material thereon, adapted to be soaked in oil or the like, and a cage confining the member on the pan, said cage consisting of crossed straps curved over the ball and fastened at their ends to the pan, most of the upper surface of the pan being unoccupied and exposed for insects to alight thereon.

1,314,368. CONTROLLING DEVICE FOR FILLED-BAG-SEWING APPARATUS. DUDLEY B. SKYMOCK, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1917. Serial No. 204,658. 10 Claims. (Cl. 112-24.)

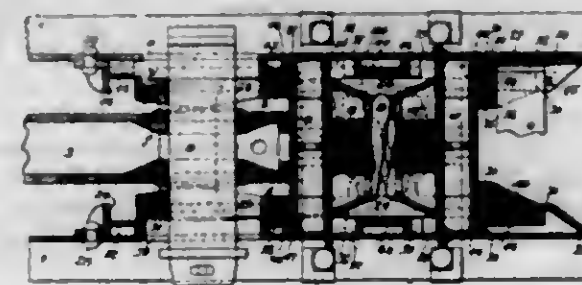
1. The combination of filled bag closing machines each including a sewing head and a conveyer for the filled bags,

said conveyers being positioned so that the filled bag is delivered from one conveyer to the other, and devices for



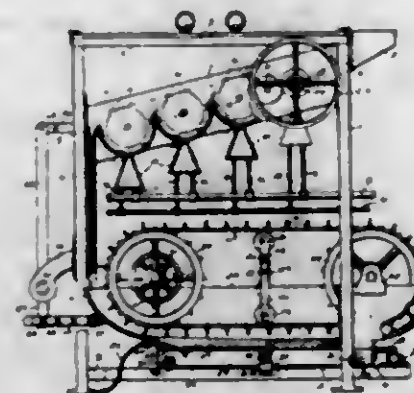
controlling the operation of both conveyers from the sewing position at either machine.

1,314,369. DRAFT-RIGGING. CLIFTON W. SHERMAN, Buffalo, N. Y. Filed Aug. 21, 1914. Serial No. 857,859. 18 Claims. (Cl. 213-42.)



1. A draft rigging, comprising two cheek plates provided with longitudinal slots having downwardly-opening passages which are shorter than the slots so as to form upwardly facing seats at the ends of said slots, and a follower arranged between said plates and having laterally-projecting arms which are adapted to pass vertically through said passages and to move horizontally in said slots.

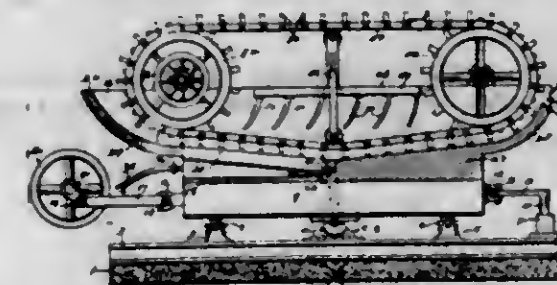
1,314,370. ORE-CONCENTRATING MACHINE. FREDERICK E. SMALL, Kansas City, Mo. Filed Aug. 14, 1918. Serial No. 249,886. 1 Claim. (Cl. 83-81.)



In an ore concentrating machine, the combination of a supporting frame, a tank inclined on said frame and having a bottom section provided with a series of transversely extending semi-cylindrical receptacles and with a spill-way communicating with the lowermost of said receptacles, cells associated with the lower sides of said receptacles and communicating therewith, said cells being provided with longitudinally inclined bottom sections having out-

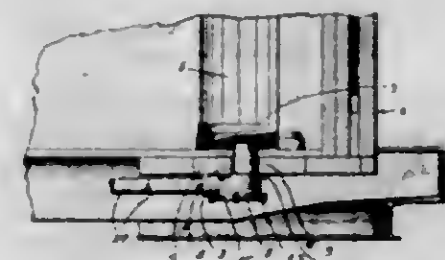
lets in their lower end portions, a water supply having lateral ducts communicating with said cells, a compressed air supply having lateral ducts communicating with said cells, a hopper associated with said tank and having a chute communicating with the uppermost of said receptacles, cylinders revolvably arranged in said receptacles and provided circumferentially at intervals with longitudinally extending radially projecting paddles, power receiving and power transmitting devices operating between said cylinders, and means for actuating said power receiving and power transmitting devices.

1,314,371. ORE-CONCENTRATING MACHINE. FREDERICK E. SMALL, Kansas City, Mo. Filed Jan. 27, 1919. Serial No. 273,253. 2 Claims. (Cl. 83-88.)



1. In an ore concentrator, the combination of a wedge-shaped table forming substantially one half of the floor thereof and having V-shaped valleys extending longitudinally of the concentrator and inverted V-shaped non communicating chamber separating the valleys and adapted for venting compressed air across the latter, down spouts arranged in the floor of the concentrator at the inner ends of the valleys in said table and adapted for receiving the flow of concentrates from the valleys, and a gate rotatably mounted in the floor of the concentrator and arranged to simultaneously dam the valleys in said table and prevent the flow of concentrates from said table to said down spouts.

1,314,372. CONDUIT OUTLET-BOX. ELDA G. SMITH, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed July 13, 1917. Serial No. 180,308. 1 Claim. (Cl. 247-12.)



An electrical conduit box comprising a body having a flat upper bearing face, means on one of the lateral sides thereof for connection with a plurality of conduits, an upwardly extending tubular projection extending from the flat upper face at a point farthest remote from said conduit connection means and having its passage greater than the combined cross sectional area of the passages of said conduit connection means, the body having its lower side open, and a closure for the open side, substantially as and for the purpose described.

1,314,373. REACTANCE-COIL. SARVEN D. SPRONG, Brooklyn, N. Y. Filed Mar. 22, 1918. Serial No. 223,906. 2 Claims. (Cl. 175-294.)

1. In combination with a polyphase circuit, a reactance in each phase, the said reactances being disposed in

mutually inductive relation and under normal conditions being substantially balanced to neutralize one another



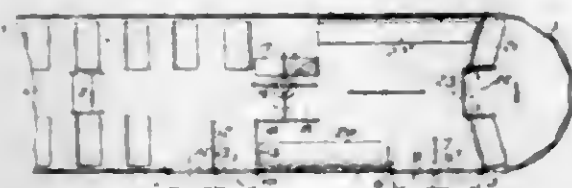
and under abnormal conditions due to short circuit of one phase becoming unbalanced and operating to limit the extent of disturbance due to said short circuit.

1,314,374. DRINKING DEVICE. BLAINE A. STAIR, Los Angeles, Calif. Filed July 6, 1917. Serial No. 179,022. 4 Claims. (Cl. 210-17.)



1. In a drinking device, a flexible tubular member provided at its lower end with a cup-shaped portion adapted to receive filtering material; said cup-shaped portion being provided with a tube which extends into the same, and said tube having ducts therethrough.

1,314,375. CAR. FRED STEFFENS, St. Joseph, Mo., assignor of one-half to Saint Joseph Railway, Light, Heat and Power Company, St. Joseph, Mo., a Corporation of Missouri. Original application filed Mar. 12, 1917. Serial No. 154,198. Divided and this application filed June 3, 1918. Serial No. 237,946. 1 Claim. (Cl. 105-341.)



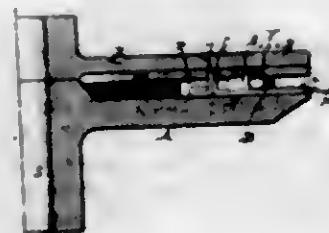
In a car, a car body having transverse divisional means dividing the body into two compartments respectively provided at one side of the car with an entrance and an exit, said transverse divisional means including a passage connecting said compartments, a conductor's station at the side of the car opposite the side having the entrance and the exit and at a substantial distance from the entrance, and a registering turnstile in the passage between the conductor's station and the exit.

1,314,376. EXPANSION-MOTOR. JOHN H. SWAN, Chicago, Ill. Filed Jan. 5, 1917. Serial No. 140,005. 4 Claims. (Cl. 236-68.)



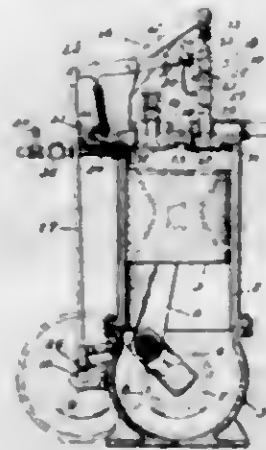
1. A valve operating mechanism, comprising a hermetically sealed expansion motor having connections for operating a valve, an expansible fluid in said motor, a pair of electrodes in contact with said fluid, an electric circuit having connections to said electrodes, a switch in said circuit, and thermostatic means for controlling said switch.

1,314,377. KNITTING-MACHINE NEEDLE-DIAL. HARRY SWINGLEHURST, Grange, N. J., assignor to Scott and Williams Inc., Boston, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1918. Serial No. 211,025. 4 Claims. (Cl. 66-22.)



1. A knitting machine dial carrying knitting implements and provided with an inclined shoulder and a spring band in combination with said shoulder to apply elastic pressure to the knitting implements.

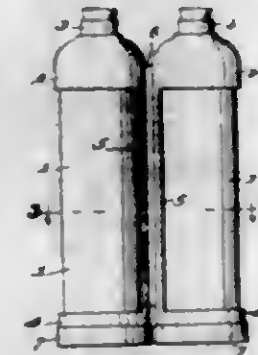
1,314,378. VALVE. PAUL G. TIERNEY, New York, N. Y. Filed Apr. 23, 1914. Serial No. 833,928. 12 Claims. (Cl. 123-188.)



1. In an engine, a valve seat and a puppet valve having a flat seating surface and rotatable about an axis

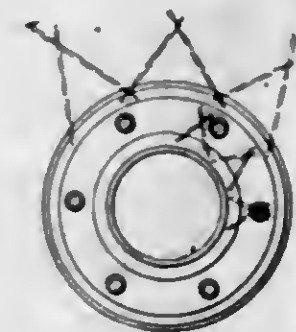
spaced unequally from points around the inner edge of said valve seat, said puppet valve being adapted by rotation to scrape its contact surface laterally across said valve seat.

1,314,379. TWIN BOTTLE-HOLDER. MAUD C. TRAVIS, Dora, Ala. Filed Feb. 17, 1919. Serial No. 277,514. 1 Claim. (Cl. 215-3.)



As a new article of manufacture, a bottle holder comprising a plural number of bottle holding sections each formed with an upper portion conforming to the shape of the upper portion of a bottle to be placed therein, each upper portion having an opening through which may project the neck of the bottle, each section being further formed with an annular band portion and with a body portion uniting this band portion in the upper portion, the band portion being designed to surround a bottle adjacent its bottom, and removable caps engaging the said band portions for the useful purpose specified.

1,314,380. WHEEL-HUB. CHARLES S. ASH, Geneva, N. Y. Filed Aug. 10, 1918. Serial No. 249,275. 3 Claims. (Cl. 21-31.)

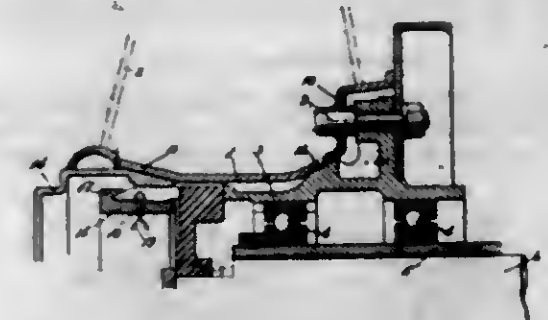


1. In a device of the character described, in combination, a wheel hub having spaced axial apertures therein to receive driving pins, the side walls about said apertures being beveled, bushings disposed through said apertures and having beveled heads to fit against corresponding portions of said walls, and clamping nuts threaded on the opposite ends of said bushings and provided with beveled ends to fit against the corresponding portions of said walls whereby said bushings may be wedged firmly in position to afford elongated bearings for the driving pins.

1,314,381. WIRE WHEEL. CHARLES S. ASH, Geneva, N. Y. Filed Aug. 10, 1918. Serial No. 249,277. 6 Claims. (Cl. 21-31.)

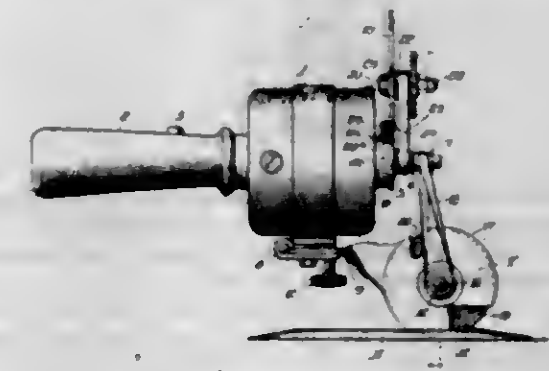
1. In a quick-detachable wheel, in combination, an inner hub having its outer end furnished with provide teeth between which complementary driving arms may

be received, said teeth having external threads to receive a cap nut, and means engaging the inner surface of



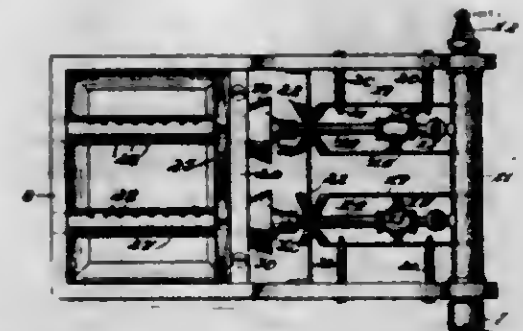
said teeth to maintain concentricity thereof and reinforce the same.

1,314,382. ROTARY CLOTH-CUTTER. CHESTER H. BEACH, Racine, Wis. Filed July 31, 1918. Serial No. 247,470. 16 Claims. (Cl. 164-76.)



1. A cloth cutter comprising an electric motor, a rotary cutting blade mounted on an axis at right angles to the axis of the motor, a driving belt for driving said blade directly from the motor armature shaft, a pivotally mounted supporting arm, a grinding wheel mounted on said arm to rotate in a plane at right angles to said blade, and means for driving said grinding wheel from said armature shaft.

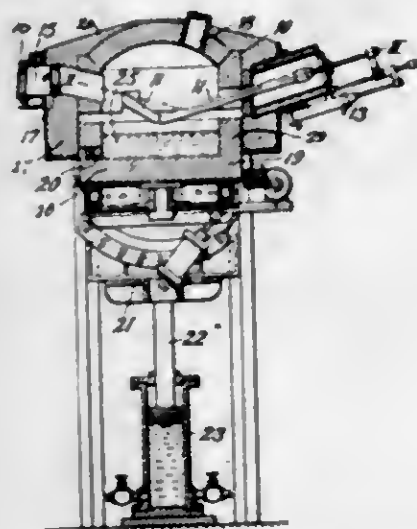
1,314,383. SOLDERING-IRON FURNACE. VICTOR BENEDEK, Chicago, Ill. Filed Aug. 28, 1917. Serial No. 188,564. 2 Claims. (Cl. 126-238.)



1. A soldering iron furnace comprising a frame; a gas supply pipe traversing one end of said frame; a nipple at one end of said gas supply pipe and a closing cap at the other, said nipple and cap being interchangeable; two supplemental gas supply pipes leading from said gas supply pipe; a manually operable valve in each of said supplemental pipes; a rotary automatic valve in each of said supplemental pipes, said valve being provided with a minute and a large gas passage there-through; an oscillatory operating frame secured to each of said automatic valves and provided with a soldering iron rest; a flaring adjustable discharge member at the

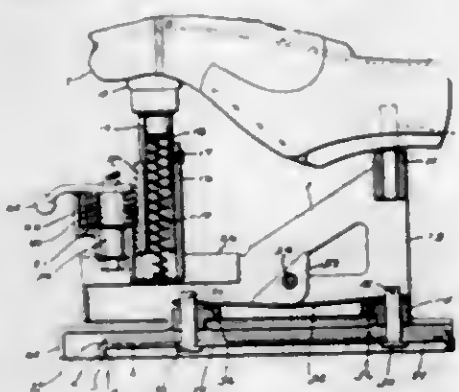
end of each of said supplemental gas pipes; and a burner for each of said supplemental gas pipes having a flaring intake provided with an abrupt shoulder surrounding the entrance to each burner, substantially as described.

1,314,384. ART OF MANUFACTURING STEEL. GEORGE HILLARD BENJAMIN, New York, N. Y. Filed Dec. 5, 1914. Serial No. 875,711. 8 Claims. (Cl. 204-64.)



1. In an electric furnace, the combination of a body portion, means for generating electric heat of constant thermic value, a hearth portion, means for rotating the hearth portion, means for producing relative movement between the means for producing electric heat and the hearth portion and for holding said specified parts in certain defined relations at different intervals during the operation of the furnace, and without exposing any portion of the furnace, except the lining, to the temperature effects of the electric heat.

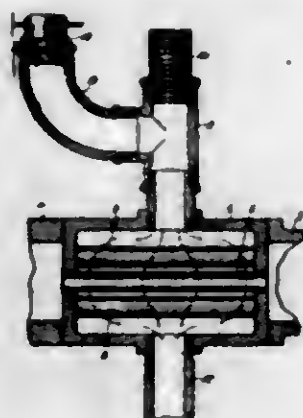
1,314,385. WORK-SUPPORT. CHARLES C. BLAKE, Brookline, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Nov. 4, 1915. Serial No. 59,654. 4 Claims. (Cl. 12-127.)



1. A work support, having, in combination, a support for a last, and a leader connected to the support provided with a guiding flange which is so arranged relatively to the last on the support that the projections of the edge of the last at the sides thereof upon the plane of the leader coincide with the guiding flange and the projections of the edge of the last at the toe thereof upon the plane of the leader fall within the guiding flange, substantially as described.

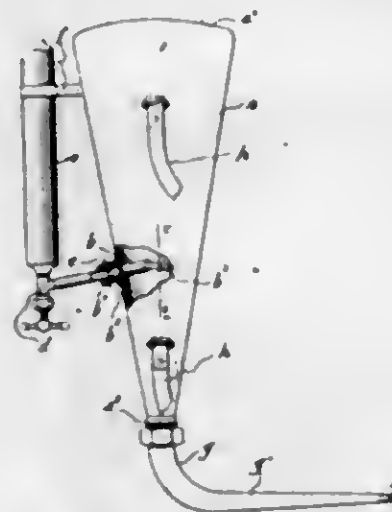
1,314,386. VAPORIZER. JOHN W. BUTLER, Bethel, Conn., assignor by direct and mesne assignments, of one-half to Frank G. Metcalf, Bethel, Conn. Filed Feb. 18, 1918. Serial No. 217,784. 1 Claim. (Cl. 237-241.) The combination with an explosive engine, of a heating chamber separate from the exhaust manifold and located

in the line of the intake passage, and comprising a casing having integral ends, a series of tubes mounted in said ends, said tubes being arranged within the diame-



ter of the intake passage so as to form a constriction of the intake passage, through which tubes all of the vapor in the intake passage flows, and means for conducting a heating medium through the heating chamber.

1,314,387. APPARATUS INTENDED TO PROJECT POWDER. CHARLES CHOFFEL, Paris, France, assignor to Lucien Foucaud, Paris, France. Filed Apr. 13, 1915. Serial No. 21,113. 2 Claims. (Cl. 169-12.)

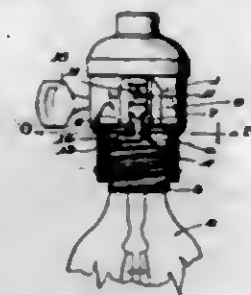


2. An apparatus of the class described, comprising a vertical container of the regular conical form which continuously decreases in cross-sectional area from its upper to its lower end and which has a discharge opening at said lower end; and a pair of injecting nozzles in the body of said container above the lower end thereof, said nozzles projecting slightly downwardly and arranged to eject jets of fluid in a direction substantially transverse to the container and substantially perpendicular to a plane tangent to the opposite wall of said container at a point substantially midway between the points toward which said nozzles extend.

1,314,388. LOCKING MEANS FOR INCANDESCENT LAMPS. LUTHER F. COLE, Sacramento, Calif., assignor of one-half to Earl H. Cochell, Sacramento, Calif. Filed June 24, 1918. Serial No. 241,606. 8 Claims. (Cl. 173-356.)

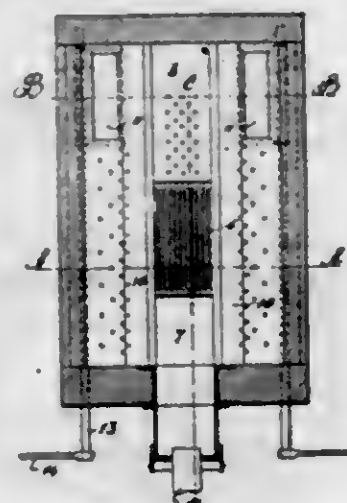
6. The combination with an electric incandescent lamp and socket therefor, of a contact and locking arm car-

ried by the socket and provided with a notch, a spring contact tongue carried by the bulb and adapted to seating



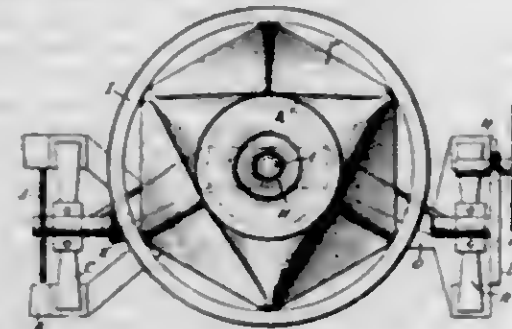
in said notch whereby the contact arm will be broken from the bulb upon disconnection of the bulb and socket.

1,314,389. FURNACE. ANNE JACOBUS MATHIJZ AUGUST RIDDER VAN DER DOEN DE BIJL, The Hague, Netherlands. Filed June 6, 1918. Serial No. 238,590. 4 Claims. (Cl. 110-32.)



1. A furnace grate having a raised longitudinally extending mid portion, depressed portions on opposite sides thereof, the mid area of said raised portion having a large draft capacity and the area to the rear thereof having a much lower draft capacity, an underfeed device adapted to advance the fire bed on the central portion of the grate and thus sweep the same, together with means for supplying supplementary air to the combustion chamber above the fire bed.

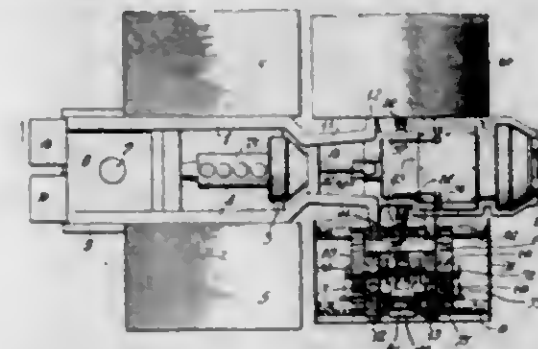
1,314,390. MIXING-MACHINE. JAMES C. FRENCH, Kenosha, Wis., assignor to Frederick C. Austin, Chicago, Ill. Filed Apr. 5, 1915. Serial No. 19,131. 6 Claims. (Cl. 83-73.)



2. A mixer comprising a receptacle having a closed bottom and a receiving and discharge opening at the top thereof, a support upon which said receptacle is mounted to rotate about an axis extending through said base and opening, which axis is vertical when the open top is level, and means to tilt said support about a horizontally disposed axis at one side of said vertically disposed axis of rotation, said horizontal axis and said vertical axis being in different vertical planes in order that the receptacle when in horizontal position and when its

axis is vertical shall have a tendency to tilt in one direction only, and so that said receptacle will be lowered to receive the charge when tilted in said one direction from its upright position, and will be raised when tilted in the opposite direction to discharge the batch.

1,314,391. TRACTOR. FRANK L. GLADISH, Detroit, Mich. Filed Aug. 27, 1917. Serial No. 168,476. 8 Claims. (Cl. 180-10.)



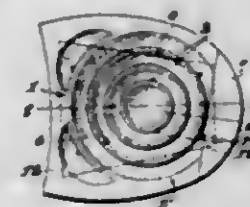
1. In a tractor, traction wheels, longitudinal rock shafts in said wheels yieldably supported by said tractor and supporting said traction wheels for a limited lateral tilting movement relative to said tractor, rails in said wheels, driven wheels in said traction wheels engaging said rails and imparting movement to said traction wheels, means common to said traction wheels adapted for operating said driven wheels during the tilting action of said traction wheels, and other wheels movable to and from said rails and maintaining a driving relation between said driven wheels and said traction wheels.

1,314,392. BATHER'S PURSE. PAUL GLAMZO, Brooklyn, N. Y. Filed Mar. 31, 1919. Serial No. 286,305. 1 Claim. (Cl. 220-46.)



A water tight case, comprising in combination; a pair of metal case members hinged together, a ring sealing gland fitted into each case member, ears integrally formed with the packing glands and lying in position against one another between the abutting edges of the hinged case members, and metal binder rings inserted within the case members for securing the packing glands in position.

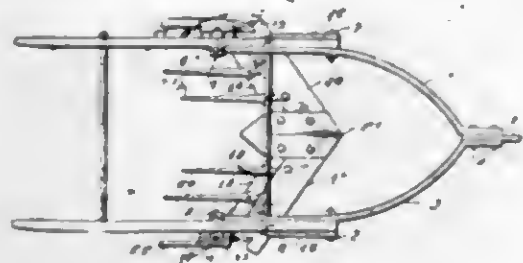
1,314,393. RUBBER HEEL. DANIEL D. GRANGER, New London, Ohio. Filed Feb. 4, 1919. Serial No. 274,894. 4 Claims. (Cl. 36-35.)



1. A rubber heel having a tread portion provided with suction elements that consist of a series of annular con-

cavities and a ring-like tread portion between each pair of cavities, the outer peripheral walls of the said ring-like portions being undercut or inclined inwardly.

1,314,394. PLOW. WILLIAM B. GRIMES, Opa, Ala. Filed Nov. 1, 1918. Serial No. 260,511. 3 Claims. (Cl. 35-139.)



1. In plow, a plow beam, forwardly converging frog plates suspended therefrom and rigidly connected at their forward ends, a plowpoint secured to said plates at the apex thereof and projecting forwardly and rearwardly of the plates, the point being inclined in opposite directions throughout its whole length from its transverse center, wings secured on the frog plates in substantial parallelism therewith extending from the sides of said point, and upwardly and rearwardly inclined spaced separating members projecting from said frog plates to rear of the wings and acting to separate the penults plowed from the soil.

1,314,395. STABILIZER FOR AIRPLANES. ALBERT OSWALD HAGEN, Detroit, Mich., assignor of one-half to Clark Bennett, Detroit, Mich. Filed Nov. 12, 1917. Serial No. 201,443. 8 Claims. (Cl. 244-29.)

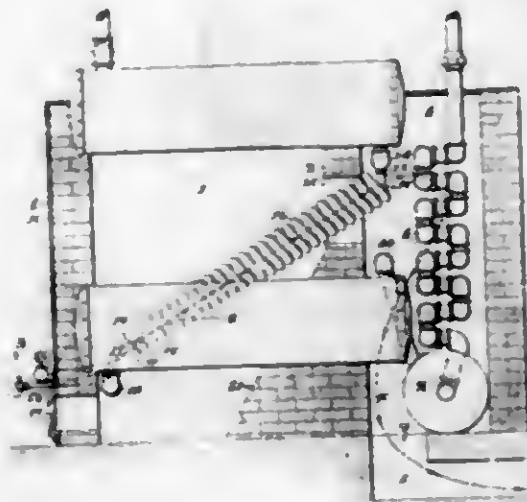


2. In an airplane, the combination of a stabilizing plane, means for actuating said stabilizing plane, and a spring acting to return said actuating means to its intermediate position, a motor adapted to displace said stabilizing plane from its intermediate position, and means for deenergizing said motor at a predetermined displacement of the plane.

1,314,396. HEATING APPARATUS. FREDERICK HALDEMAN, Portland, Ore. Filed July 27, 1918. Serial No. 247,083. 9 Claims. (Cl. 122-259.)

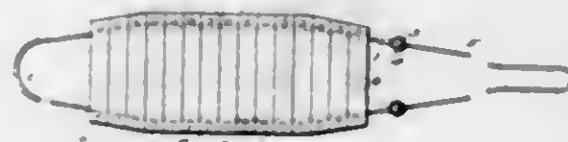
1. In a heating apparatus of the character stated, the combination of an upper tank and a lower tank, a front wall supporting said tanks, a rear wall supporting said tanks and through which rear wall said tanks project, a down draft flue, a pipe coil vertically inclined, the lower end of which communicates with the lower tank and the upper end of which communicates with the upper tank, said fire wall having an opening through which said coil projects adjacent to the upper tank whereby the interior passage of the coil as a whole communicates with said flue, a burner directed into the lower end of said coil,

and a lower off-take from the flue, all being arranged whereby the burner flame will pass along and around



said coil into the upper region of said flue, an outflow pipe connected with the upper reservoir and a return flow pipe communicating with the lower reservoir.

1,314,397. CARGO-SLING. ISAAC HEPFON, Galveston, Tex. Filed Apr. 2, 1918. Serial No. 226,265. 2 Claims. (Cl. 57-11.)



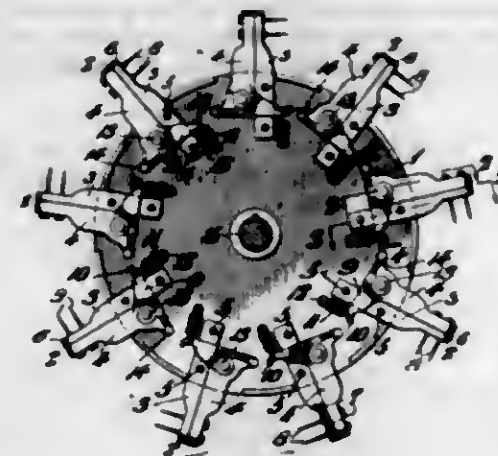
1. A cargo sling, comprising a looped cable with eyelets at the free ends and means for preventing chafing of the cable at the looped end; a rope loop attached to said eyelets and adapted to be drawn through the cable loop in hoisting the load; a flexible load supporting base carried by said cable, comprising slats having rounded adjacent edges to facilitate relative movement and provided with slotted ends to receive and house the side members of the cable; and means extending through said slotted ends forming keepers for said cable members.

2. A cargo sling, comprising longitudinal flexible supports consisting of a looped cable with a bight at one end having protecting means at one end and eyelets at the other, a slatted base spanning the flexible supports, the slats of said base having slotted ends with retaining means for receiving and keeping the support in a protected position, the ends of said slotted base being tapered to gradually lead said supports to the regions of the bight and eyelets; and a rope loop attached to said eyelets, adapted to be drawn through the cable loop in lifting a load.

1,314,398. POTATO-PICKER MECHANISM FOR POTATO-PLANTERS. WILLIAM A. HANDBRICKSON, Riverton, N. J., assignor to McWhorter Manufacturing Company, Riverton, N. J., a Corporation of New Jersey. Filed July 2, 1919. Serial No. 308,303. 2 Claims. (Cl. 221-127.)

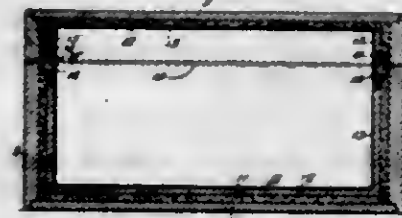
1. In a potato planter, a rotary head, a stationary arm having a shank secured fast to said head and having a hole in the outer end thereof, a movable arm pivoted directly to said head and carrying an impelling pin on its outer extremity, said pivoted arm having at its inner end an offset arm having a portion extending transversely across said shank, the latter serving as a

guide for said pivotal arm, a hook located on said offset portion, a log on said pivoted arm located oppositely to



said hook, and a spring having one end attached to said hook and its other end attached to said head.

1,314,399. CONTAINER. RICHARD WENTWORTH HICKS, Bronxville, N. Y., assignor to Benson & Hedges, Inc., New York, N. Y., a Corporation of New York. Filed July 5, 1918. Serial No. 248,425. 5 Claims. (Cl. 217-3.)



1. A container comprising an outer structure and an inner structure detachably united, said inner structure embodying wood walls and an inner continuous metal lining therefor, said lining being arranged to form meeting edges providing cooperatively disposed tongue and groove members, and a packing member disposed in said groove member for engagement by said tongue member to hermetically seal the container.

2. A container comprising a body portion, a cover therefor, means pivotally connecting said body portion and cover, an inner structure embodying linings for said body portion and for said cover said linings having meeting rails extending about the opening edge of said body portion and cover said rails having cooperating continuous tongue and groove formations, a water proof coating for the inner surface of said linings and for the exposed surfaces of said groove and tongue, a pneumatic cushion permanently disposed in said groove for engagement by said tongue to be spread thereby for hermetically sealing the joint between the cover and body portion of said container.

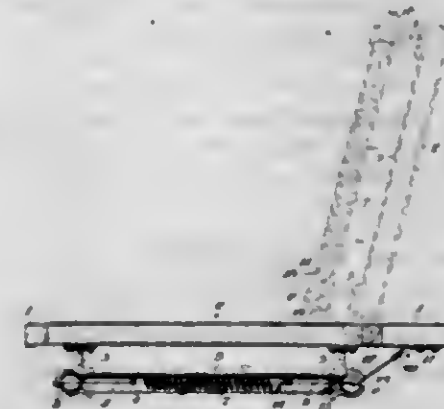
3. A container comprising a body portion, a cover therefor, means pivotally connecting said body portion and cover, an inner structure embodying linings for said body portion and for said cover, said linings having meeting rails extending about the opening edge of said body portion and cover said rails having cooperating continuous tongue and groove formations, a continuous metal facing for the exposed surface of said lining and said rails said facing extending into said groove and over said tongue, and a continuous pneumatic tube packing permanently disposed in said groove for engagement by said tongue to be spread thereby for hermetically sealing the joint therebetween.

4. A container comprising a plurality of meeting rails, one of said rails having a continuous groove and the other a corresponding continuous tongue adapted for insertion within said groove; a plurality of sheet metal seamless lining members, the edges whereof are pressed over and

about said rails to conform to the shape thereof; and means retained in the bottom of said groove adapted for compression by said tongue when said rails are pressed toward each other.

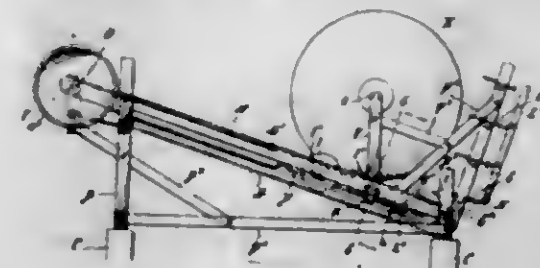
5. A container comprising an outer casing, a cork lining arranged in said outer casing extending to near the upper edge thereof, a lining of cedar arranged interiorly of the cork lining, and a lining of metal arranged interiorly of the cedar lining, a lid for the container constructed identically with the container, and a pneumatic member arranged between the lid and the container for making an air-tight joint.

1,314,400. AUTOMOBILE-DOOR HANDLE. GEORGE H. HOLTEMAN, Wichita, Kans., assignor of one-fourth to James J. Bulger, Wichita, Kans. Filed Apr. 17, 1919. Serial No. 290,810. 5 Claims. (Cl. 10-9.)



4. A handle for automobile doors comprising a tubular member for attachment to the door to serve as a hand grip, a spring within the tubular member, a cable connected to the spring and to a fixed support at one side of the door, and a sheave carried by the door and over which the cable passes.

1,314,401. WAVE-MOTOR. CLAUDE M. JOHNSON, New York, N. Y. Filed Dec. 7, 1918. Serial No. 205,812. 11 Claims. (Cl. 253-12.)

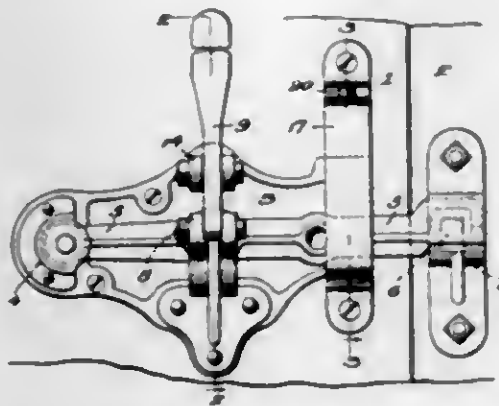


1. A wave motor apparatus comprising an inclined track, a carriage mounted to reciprocate on said track, a float carried by said carriage, a shutter frame and shutters carried by said carriage and mounted transversely thereon, and means for automatically closing said shutters as said carriage moves upward, a power shaft, and means controlled by the movement of said carriage to rotate said power shaft, substantially as described.

1,314,402. FASTENER. RICHARD E. JONES, Hagerstown, Md. Filed Apr. 14, 1919. Serial No. 289,972. 1 Claim. (Cl. 70-44.)

A fastener of the kind described comprising a casting secured to the outer face of a door, a latch pivotally mounted thereon, a roller in the free end of the latch, a keeper adapted to be engaged by the roller, a vertically arranged bracket spanning the latch, a pin carried by the latch and working upwardly through the bracket, a spring encircling said pin and bearing respectively on the bracket and the latch, a vertically mounted lever pivoted adjacent

its lower end, the lower end of the lever terminating in a nose engaging the latch, and a push rod working through



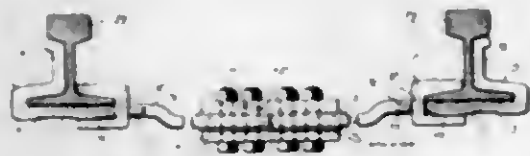
the face of the door and pivotally connected to the lever, above the pivotal point of the latter.

1,314,403. ENGINE-STARTER. GOTTLIEB L. KAHLER, Bohemia, N. Y. Filed Feb. 26, 1919. Serial No. 279,335. 7 Claims. (Cl. 74-7.)



1. A starter for internal combustion engines comprising a gear wheel connected to the crank shaft of the engine, a second gear wheel arranged adjacent the first mentioned gear wheel, an arm for rotating the second mentioned gear wheel, and means for causing the lateral movement of said second mentioned gear wheel to mesh with the first mentioned gear wheel after it has moved for a certain distance and remain in mesh for a predetermined travel whereby the engine is turned over.

1,314,404. RAIL-BRACE. THOMAS KELLER, Paris, Ky. Filed Mar. 19, 1919. Serial No. 283,516. 5 Claims. (Cl. 238-51.)



3. A device of the character described embodying a bar having a concaved portion to be disposed below a rail and having a brace to fit one side of the rail, and a clip to engage over the base flange and under said concaved portion for clamping them together.

1,314,405. DUMPING-VEHICLE. JOHN KLEIN, Washington, D. C. Filed July 5, 1918. Serial No. 243,476. 1 Claim. (Cl. 298-19.)



The combination with chassis, of a body tiltably mounted thereon, a rock shaft mounted on said body adjacent

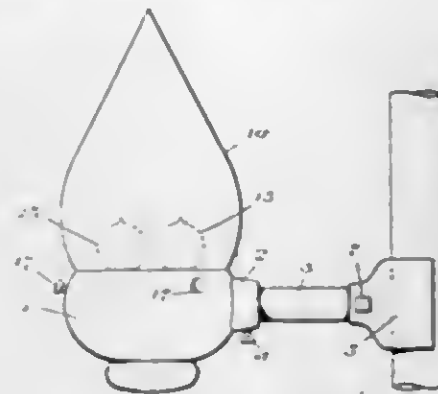
one end thereof, a rock shaft secured to said chassis, a lever pivotally secured to said chassis, a lever secured to the rock shaft on the chassis, a link connecting said levers, a link secured to the rock shaft on the body and pivotally connected to the lever carried by the chassis, and means for oscillating the rock shaft secured to the chassis.

1,314,406. SPARK-PLUG. JOSEPH ERWINE KUSHNE, Newark, N. J. Filed June 20, 1918. Serial No. 240,965. 2 Claims. (Cl. 123-169.)



1. A spark plug, comprising a shell provided with an electrode, a conical plug screwing into the shell and having at its lower end a seat, a conical removable head of insulating material mounted on the upper end of the plug so that its exterior surface is flush with the exterior surface of the plug, an insulator, the insulator being wholly within the shell, plug and head, and a central electrode extending through the insulator and the insulating head of the plug and binding means carried by the central electrode to hold the plug, insulating head, and insulator in juxtaposition provided with a binding nut.

1,314,407. VEHICLE-SIGNAL. CHRISTOPHER JAMES LEDWIGS, Hot Springs, Ark. Filed Feb. 6, 1919. Serial No. 275,481. 1 Claim. (Cl. 240-11.)



A vehicle signal comprising a bowl, having a boss at one side, a tubular bracket arm having means for attaching it to a support and secured within said boss, said bowl having an annular inwardly extending flange above the bottom thereof, a lamp base of insulating material secured on said flange and having an opening therethrough, a plurality of lamp sockets secured on the base, lamp bulbs fitted in the sockets and extending upwardly out of the bowl, a lamp shade inclosing and disposed over all of said bulbs and having its lower edge fitted within said bowl flange for engaging the shade to retain it within the bowl, and electrical conductors extending through said bracket arm and boss under said flange and base and up through said opening for connection with said sockets.

1,314,408. BINDING-STRIP FOR SEAT-COVERS. BARNETT LEWIS, New York, N. Y. Filed Mar. 23, 1918. Serial No. 224,244. 3 Claims. (Cl. 155-43.)

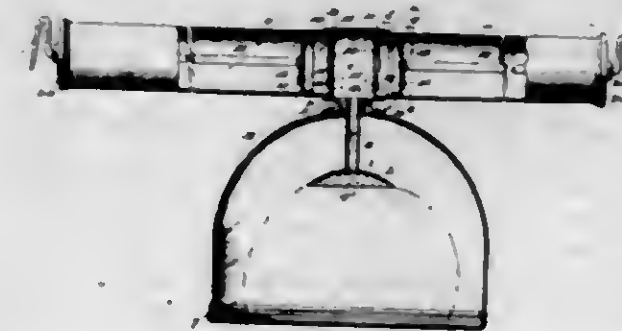
3. In a binding strip for reversible slip-on covers, the combination with two pieces of fabric having certain of their edge portions positioned in parallel relation, of a

binder comprising a piping or cord and a strip of fabric folded upon itself and surrounding said piping, said strip of fabric having the portions thereof which project beyond the piping lying in facial abutment and positioned between and attached to said parallel edge portions, said cord and a portion of said fabric strip engaging the same being po-



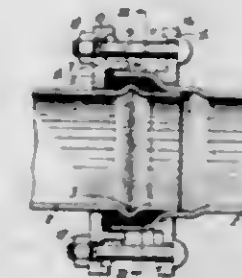
sitioned beyond the inner edges of said parallel portions, and a second binder attached to the outer surfaces of said parallel portions and extending over the opposite sides of the same, said second named binder being U-shaped in cross section and having side members folded inwardly, said binding strips being positioned on opposite sides of the cover for presenting two finished sides.

1,314,409. VACUUM APPARATUS. THOMAS MCCONNELL, New Kensington, Pa. Filed Mar. 21, 1919. Serial No. 284,169. 7 Claims. (Cl. 128-300.)



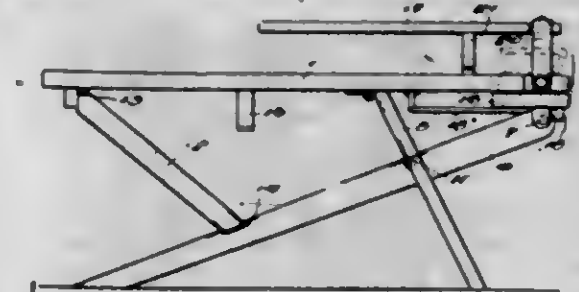
1. A vacuum apparatus comprising a helmet and a pump apparatus supported by the helmet and in communication therewith and adapted to be operated by the user, for the purpose described.

1,314,410. PIPE-JOINT. JOHN A. MCCULLOCH, Bear McKeesport, Pa., assignor to National Tube Company, Pittsburgh, Pa., a Corporation of New Jersey. Original application filed Feb. 26, 1913, Serial No. 750,856. Divided and this application filed Nov. 19, 1917. Serial No. 202,749. 8 Claims. (Cl. 285-132.)



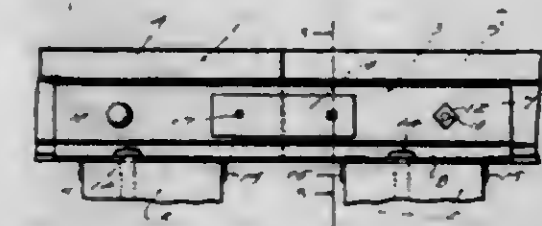
1. A pipe joint comprising in combination adjoining pipes having telescoped bell and spigot ends arranged to form an annular packing recess therebetween, said spigot end having an integral bead thereon, a compressible packing within said recess arranged to cover said annular bead, and means whereby the connected pipe ends are fastened together, said means being adapted to compress the packing within said recess and around the annular bead to thereby form a yielding, fluid tight joint.

1,314,411. IRONING-BOARD. THOMAS MCCULLOUGH, Medicine Lodge, Kans. Filed Mar. 18, 1918. Serial No. 222,889. 1 Claim. (Cl. 68-10.)



The combination with an ironing board, of a support having its upper ends pivotally connected with the end portion of the board, a second support having legs pivotally mounted intermediate the length of the board and extending in cross relation to the first support when in a set up position, a cross bar connecting the legs and engaging the first support when the second support is in a set up position, the second support when in a folded position resting flat against the ironing board, a brace pivotally connected with one end of the ironing board and engaging the first support when in a set up position and engaging the cross bar when in a folded position to retain the second support in a folded position, and a clip carried by the ironing board for engaging the brace to retain the brace in a folded position, the first support when in a folded position engaging the brace and being engaged by the clip.

1,314,412. RAIL-JOINT. BERNARD B. MCGOVERAN, Frenchville, Pa. Filed Feb. 16, 1918. Serial No. 217,595. 1 Claim. (Cl. 238-243.)

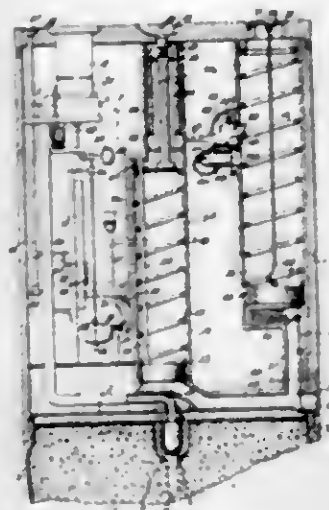


In a rail joint, the combination with the meeting ends of a pair of rail sections, of a pair of companion clamping angle bars each including an angular rail web and base engaging portion, a plurality of spaced tongues struck out from the longitudinal edge of the rail base engaging portion for engagement with the railroad supporting ties, and bracing plates secured to the rail web engaging portion at the meeting terminals of the rail sections, as and for the purpose specified.

1,314,413. BOMB OR SHELL. JOSEPH MARTINA, New York, N. Y. Filed July 13, 1918. Serial No. 244,801. 9 Claims. (Cl. 102-3.)

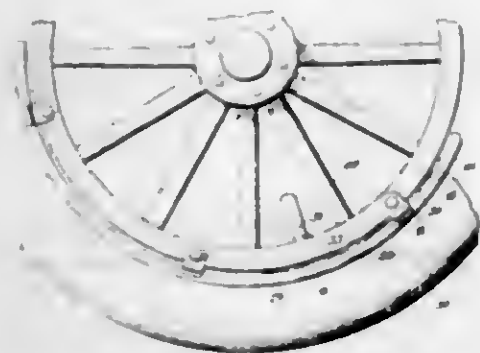
1. A device of the character described comprising a shell, a casing at one end for receiving an explosive substance, a fuse for causing said explosive substance to explode, means for igniting said fuse, said means including a chemical capable of igniting the fuse when supplied with a quantity of water, said chemical being arranged adjacent said fuse, a tubular member for directing water from the exterior of said shell to said chemical, a double shutter mechanism for shutting off the water normally from said chemical, a contact member connected with said shutter mechanism for moving the same to an open position, a second contact member engaging the first contact mechanism for operating the same, a tubular member in communication with the water on the exterior of the shell, a piston

arranged in said tubular member connected with said second mentioned contact member, and a spring for resiliently resisting the movement of said piston whereby when the



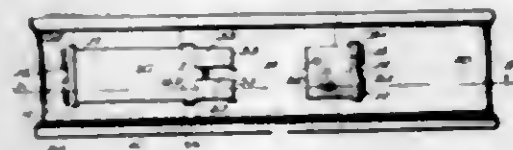
pressure of water against said piston overcomes said spring said contact members will be operated for causing the water to be supplied to said chemical.

1,314,414. EXPANSIBLE WHEEL-RIM. JOSEPH H. M. MICHON, Washington, D. C. Filed Apr. 4, 1917. Serial No. 159,708. 8 Claims. (Cl. 152-21.)



1. A device of the character described including a split rim body, a rim section hingedly connected at one end to one end of the rim body, means hingedly connecting the other end of the said rim section to the opposite end of the rim body, the said rim section being movable to spread the ends of the body of the rim and fit between said ends, and means carried by the rim body and engageable with said first mentioned means for locking the said first mentioned means to hold the said rim section against displacement, the said last mentioned means being adapted to receive a wire stem projecting from the outer side of the rim through and through the said first mentioned means.

1,314,415. COLLAPSIBLE WHEEL-RIM. JOSEPH H. M. MICHON, Washington, D. C. Filed Jan. 24, 1918. Serial No. 213,574. 6 Claims. (Cl. 152-21.)



2. A device of the character described including a split rim body, a rim section pivoted adjacent one end to one end portion of the rim body, a link plate swingingly connecting the opposite end portion of the rim section with the other end portion of the rim body and

adapted to cooperate with the rim section for spreading the extremities of the body of the rim and shifting the rim section to active position fitting between the ends of the rim body, and a stop lug projecting from the free extremity of the link plate and adapted to engage the inner side of the rim section for limiting the said section in its movement to active position.

1,314,416. COLLAPSIBLE WHEEL-RIM. JOSEPH H. M. MICHON, Washington, D. C. Filed Apr. 2, 1918. Serial No. 226,236. 6 Claims. (Cl. 152-21.)

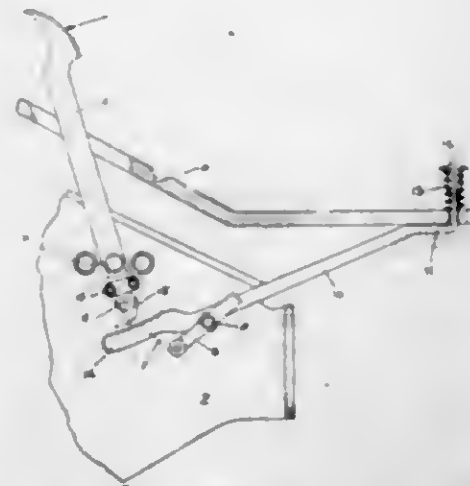


3. A device of the character described including a split rim having slots formed therein adjacent its ends, lugs projecting from the rim body adjacent said slots, a rim section having a hinge plate projecting through one of said slots and provided with an opening having a wall thereof engaged by the adjacent lug of the rim body for pivotally connecting the rim section with the rim body, a link plate projecting through the other of said slots and provided with an opening having a wall thereof engaged by the other of the lugs of the rim body for pivotally connecting the link plate with the rim body, the link plate and rim section being movable with respect to the rim body for shifting the said walls of the said slots out of engagement with the said lugs to free the rim section and link plate, and a pivotal connection between the link plate and rim section, the said link plate and rim section being movable for spreading the body of the rim and shifting the rim section to a position fitting between the ends thereof.

1,314,417. ALLOY. FOSTER MILLIKEN, Lawrence, N. Y. Filed Aug. 29, 1918. Serial No. 251,941. 1 Claim. (Cl. 75-1.)

An alloy consisting of the following ingredients in substantially the following proportions, copper 40-48 per cent., nickel 8-12 per cent., zinc 38-48 per cent., iron 1-6 per cent., manganese 1-3 per cent.

1,314,418. CONTROL MEANS FOR AUTOMOBILE LOW-SPEED LEVERS. ARNOLD MUELLER, Denver, Colo. Filed June 21, 1918. Serial No. 241,187. 4 Claims. (Cl. 74-81.)



1. A lever lock, for an automobile gear-set, comprising, in combination with the usual low speed lever, a pawl im-

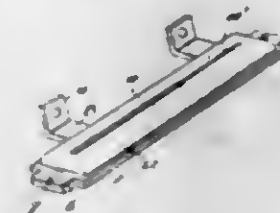
movably fixed thereon, and a normally disengaged locking device for interlocking with the pawl to hold the lever thrown in low-speed position.

1,314,419. IGNITING DEVICE. JEAN PIERRE MULLER, Le Havre, France. Filed Jan. 18, 1919. Serial No. 271,911. 6 Claims. (Cl. 67-7.1.)



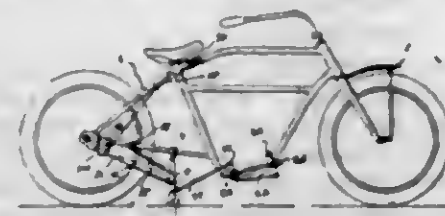
1. In an igniting device, a torch, having a wick, handle-forming means for holding inflammable substance and in which the torch is removably disposed when not in use, a resilient holder for clamping the torch when the same is in use, and means for supplying a spark to the wick of the torch to ignite the wick; the latter means being disposed in close proximity to the wick.

1,314,420. DEVICE FOR OILING HANDSAWS. ROY RANKIN MYERS, Chicago, Ill. Filed Nov. 27, 1918. Serial No. 264,363. 2 Claims. (Cl. 184-1.)



2. A device of the character described comprising a pair of superposed complementary plates having their adjacent faces formed with opposed longitudinally extending and registering recesses providing a chamber and having their recessed portions provided with registering longitudinal slots positioned medially of the sides of the recessed portions and terminating short of the ends thereof, ears projecting from the ends of the plates and registerable with each other, lubricating pads arranged in the chamber and having their adjacent edges positioned in closely spaced relation and in registration with the slots, means engageable with the ears for removably clamping the plates together, and supporting and attaching brackets extending from one of the plates.

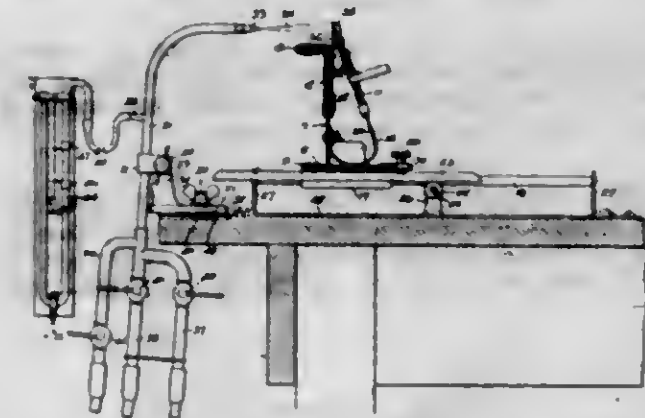
1,314,421. MOTOR-CYCLE STAND. HAROLD C. NIMICK, Everett, Wash. Filed Jan. 21, 1919. Serial No. 272,386. 1 Claim. (Cl. 208-78.)



A motorcycle stand including rear forks, legs pivoted to said forks, rods pivoted to said legs, brackets secured

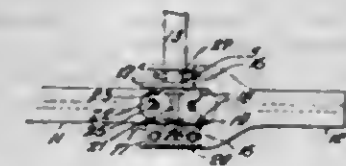
to said forks, and having slots therein to receive the rods, shoulders formed on said rods and adapted to engage the brackets to hold the legs in supporting position, means disengaging the shoulders from the brackets, rods pivoted to said legs, a rod connecting the second named rods, a pivotally mounted lever connected to said rod, and a foot pedal pivotally mounted and connected to said lever for moving the legs into supporting position, and means returning the legs to non-supporting position.

1,314,422. APPARATUS FOR ASCERTAINING THE FUSING TEMPERATURE OF MATERIALS. ZACHARIAS OLSSON, Brooklyn, N. Y. Filed Oct. 19, 1918. Serial No. 258,778. 4 Claims. (Cl. 73-51.)



1. An apparatus as characterized comprising a gas burner having a contracted jet-forming nipple; a stand pipe; a flaming gas supply apparatus operatively connected with said stand pipe and embodying a controlling valve; an oxygen supply apparatus operatively connected with said stand pipe and embodying a controlling valve; means for registering the pressures of said gas and oxygen supplies; a movable carriage for holding a specimen; and means for indicating the proximation of said carriage to said burner.

1,314,423. TRACK-SCALE. JAMES D. O'NEILL, Montreal, Quebec, Canada. Filed July 3, 1915. No. 38,024. 11 Claims. (Cl. 265-71.)

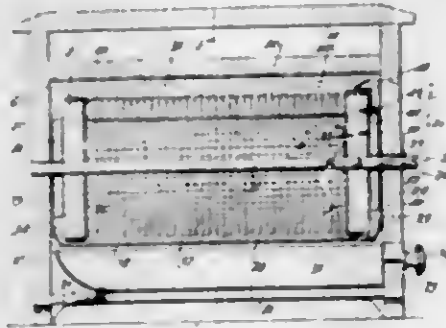


1. In a device of the character described, the combination with a fifth lever of a pair of secondary levers overlapping side by side at their ends, independently operable connecting means between the secondary levers and the fifth lever, and pivots disposed on the overlapping ends of said secondary levers in the central plane of the fifth lever for supporting said connecting means.

1,314,424. PORTABLE ASH-SIFTER. JAMES I. ORMARY, Jersey City, N. J. Filed Apr. 6, 1918. Serial No. 227,040. 1 Claim. (Cl. 83-60.)

An ash sifter, comprising a casing having bearings in two opposing walls below the upper edges of the same, a revoluble sifting drum in the said casing, a drum shaft provided with an aperture and removably mounted in the said casing and on which shaft the said drum is loosely and removably mounted, the shaft being removable through either bearing and having one end extending to the outside of the casing for the application of means for turning the shaft, and a radially disposed locking pin slidable on a head of the drum, the inner end of the pin en-

gaging the aperture of the shaft to lock the drum to the said shaft to rotate the drum on turning the shaft and to allow of removing the shaft from the drum and the casing and subsequent removal of the drum from the casing,



filing means on the shaft between the drum and casing and means on the outer end of the shaft for engaging the outer wall of the casing to prevent inward movement of the shaft and to hold the parts in position.

1,314,425. INDEX EQUIPMENT. JOHN T. QUIGLEY, Boston, Mass., assignor to Costmeter Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 3, 1918. Serial No. 252,311. 24 Claims. (Cl. 129-18.)



1. A filing and indexing equipment comprising, in combination, a plurality of overlapping sheet-supports pivoted to swing about parallel axes, and a plurality of series of overlapping sheets, one series being carried by each sheet-support, each series being secured to its respective sheet-support along the margins of such sheets parallel with said axes, and being free along their overlapping margins.

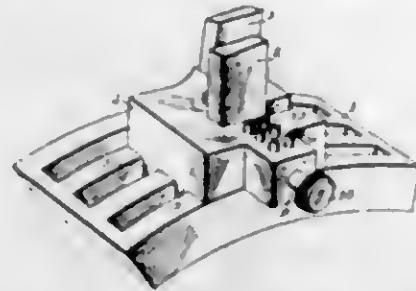
17. An index equipment comprising, in combination, a support presenting a plurality of bearings, and a plurality of index elements removably and hingedly supported by said bearings and adapted to swing from a generally horizontal position to a generally vertical position, said support and said index elements having means interlocking to prevent removal of said index elements except in a generally upright position.

21. An index equipment comprising, in combination, a plurality of overlapping index elements pivoted to swing about generally parallel axes, the overlapping marginal portions of said elements being bent to provide label-holders each having two generally parallel apertured walls forming between them a label-receiving chamber, and means providing two oppositely facing identification labels received in said chamber and exposed to view through said apertures.

1,314,426. LOCK FOR MOTOR VEHICLES. THEODORA A. FRANKS, Toledo, Ohio. Filed June 26, 1919. Serial No. 306,863. 2 Claims. (Cl. 70-131.)

1. In a motor vehicle, the combination with the M plate and the transmission controlling lever, of means

for locking said lever in neutral position, said means comprising a plate having lugs depending into the slots of the M plate and having a notch registering with the neutral passage of the M plate when the lugs are engaged with the slots and adapted to receive the lever, said plate having a bore for a locking bolt extending transversely of the notch, and the lever having an opening



registering with the bore when the lever is in the notch, a locking bolt movable in the bore, and a series of locking pins for locking the bolt in place, said pins being journaled in the plate and extending into the bore and having recesses registering with the bore when the pins are in certain positions, the locking bolt having recesses registering with the pins.

1,314,427. RECORDING TIME-LOCK. EDWIN SANFORD PHILPS, Elizabeth, N. J. Filed June 9, 1915. Serial No. 33,074. 12 Claims. (Cl. 234-1.5.)



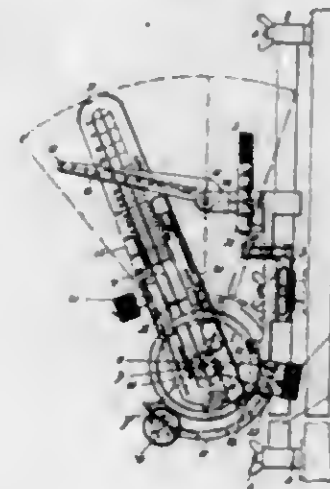
3. In a time-lock, a lock-bolt mounted upon a door, a record-receiving member and stylus mounted upon a support independent of the door, an electro-magnet operatively connected with the stylus, an electric-circuit in which the magnet is included, and a controlling switch for the circuit operatively connected with the lock-bolt for making a record of the change of position of the lock-bolt.

10. In a time-lock, a lock-bolt, a recording mechanism including a record-receiving member and stylus, means operatively connecting the recording mechanism with the lock-bolt for recording a change of position of the bolt, and an oscillating dog for engagement with a part of the lock-bolt to prevent its retrogression in one direction when moved in an opposite direction until it has reached a predetermined position.

1,314,428. BOMB-DROPPING SIGHT FOR AIRCRAFT. ARTHUR H. POLLEN, London, and HALVOR F. LANDSTAD, York, England. Filed Apr. 3, 1919. Serial No. 287,329. 12 Claims. (Cl. 33-46.)

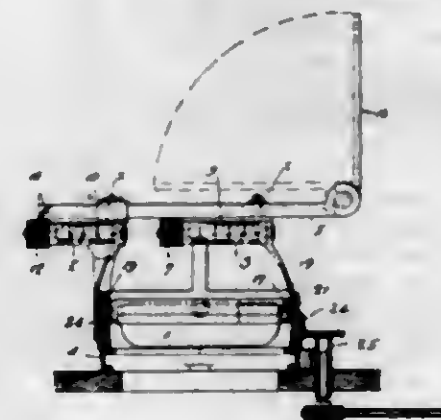
1. In a sighting device for aircraft, the combination of a supporting frame, a sighting arm pivoted to said frame and having graduations for use at a certain height to indicate different speeds overland, a slide movable to and from the axis of the arm to indicate the speed

through the air, and a second arm pivoted to the slide and adapted to be set at the graduation on the sighting arm representing the particular overland speed, said



second arm being provided with graduations adapted to be read in connection with those on the sighting arm and representing the speed of the wind.

1,314,429. APPARATUS FOR DETERMINING AND CORRECTING THE COURSE OF AIRCRAFT. ARTHUR H. POLLEN, London, and HALVOR F. LANDSTAD, York, England. Filed Apr. 3, 1919. Serial No. 287,330. 6 Claims. (Cl. 33-46.)

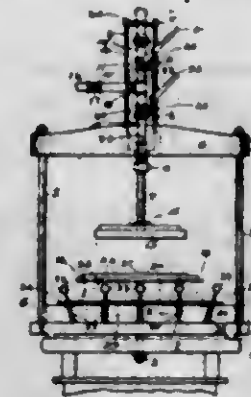


1. In combination with an aircraft, means thereon for determining the compass course to be steered with reference to a given object, said means including a movable member adapted to be adjusted according to the known constant "speed through the air", a second movable member adapted to be adjusted according to the known constants "speed of wind" and "compass direction of wind", a sighting device pivotally and slidably connected with said members and movable to sight on the object, and means controlled by the movements of the sighting device for indicating said compass course.

1,314,430. MACHINE FOR UPHOLSTERING CHAIR-SEATS. JOHN POTTER, JAY DE LONG, and FLOYD PIKE, Grand Ledge, Mich. Filed Dec. 9, 1918. Serial No. 265,884. 8 Claims. (Cl. 155-43.)

1. In an apparatus of the class described, a matrix including a cavity conforming to the seat cover, a plurality of sockets inclined outwardly adjacent to the matrix cavity, a pin for each socket adapted to be in-

serted therein passing through the cover material, and a tension producing member adapted to be disposed between



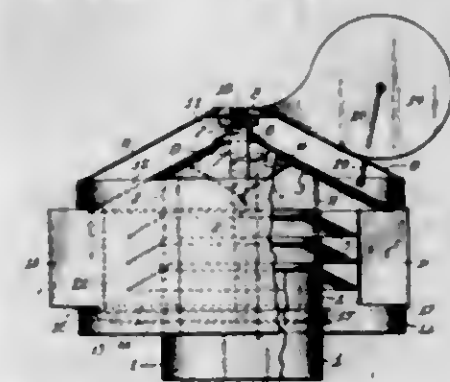
the pin and the adjacent edge of the matrix cavity and over which the seat covering material is adapted to be drawn.

1,314,431. COMBINATION-PADLOCK. SAUL SHALES, New York, N. Y., assignor of one-half to Abraham Shaler, New York, N. Y. Filed Apr. 8, 1919. Serial No. 288,592. 4 Claims. (Cl. 70-113.)



1. The herein described combination padlock comprising a body, a shackle having a shank projecting into the body, said shank having one or more notches formed therein providing shoulders, one or more tumblers journaled in the body in alignment with said notches and movable around axes perpendicular to the axis of the shank, each tumbler having a trunnion projecting into a notch and having a kerf adapted to register with the notched portion of the shackle shank whereby when the tumblers are turned to a predetermined position with respect to the body of the shackle the shoulders aforesaid will not engage the trunnions.

1,314,432. ROTARY VENTILATOR. LORD B. SHARP-NACK, Detroit, Mich. Filed May 26, 1919. Serial No. 209,847. 10 Claims. (Cl. 98-3.)



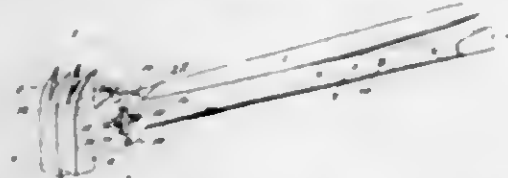
9. A ventilator comprising an outlet connection, uprights carried thereby, a hood supported by said uprights, a fulcrum bearing on said hood, a spider supported from said bearing, a cowl carried by said spider surrounding the upper end of said outlet connection, said cowl having air intake and exhaust openings, a shell supported in said cowl and cooperating therewith in providing a conduit open at its middle portion at the air intake opening of said cowl and having its ends open at the exhaust opening of said cowl, and means bracing the lower end of said cowl relative to said outlet connection.

1,314,433. NUT-LOCK. FRED M. SHRETS, Kansas City, Mo. Filed Aug. 14, 1917. Serial No. 189,153. 1 Claim. (Cl. 151—3.)



In combination with plates, bolts passing therethrough to connect the same, locking nuts on said bolts having their sides depressed, of a locking washer on each of the bolts between the plates and nuts for the bolts, each of said washers comprising a substantially square body portion having its edges formed with bendable fingers, said fingers designed to be bent at a substantially right angle with respect to the body of the washer to enter the depressions in the sides of the nut, one of said fingers having a lateral bendable extension, the finger diametrically opposite said last mentioned finger being of a greater length than the remainder and being further bent and extended outward of the nut in a plane substantially parallel to the body of the washer, the extensions of the fingers of the oppositely disposed washers on the nuts being directed toward each other and the ends of the said extensions being hooked and designed to re-engage one with the other.

1,314,434. WIRE FENCE TOOL. DAVID M. SHOWN and DANIEL H. SHOWN, Mountain City, Tenn. Filed Mar. 23, 1918. Serial No. 224,370. 1 Claim. (Cl. 7—8.)



In a tool of the class described, a pair of members each having a hand lever, one of said members having a circular opening and the other having a somewhat larger circular opening and slots which open into said last-named opening, and a pivot bolt to detachably connect said members together, said bolt having a shank provided with a smaller portion to fit in the opening of the first named member and a larger portion to fit in the opening of the last named member, and also having laterally projecting studs to pass through the slots of the last-named member, and means to secure the bolt in place.

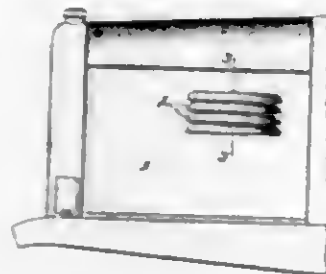
1,314,435. GAGE. HUGH McNEILLY SHAW, Louisville, Ky. Filed Apr. 10, 1919. Serial No. 290,161. 4 Claims. (Cl. 152—11.5.)



4. A gage of the character described comprising a hollow expandable member, an indicator operated by the ex-

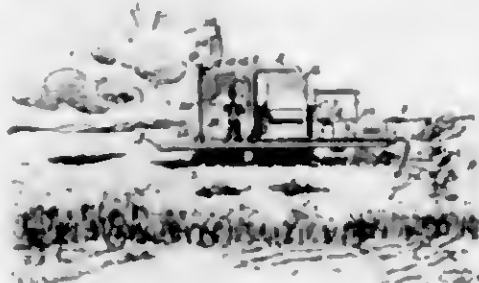
posable member, a tubular member formed with a passageway connecting the interior of the tubular member with the hollow expandable member, and a centrifugally actuated valve positioned to close said passageway when the gage is rotated.

1,314,436. AUTOMOBILE HOOD. CONOVER T. SILVER, New York, N. Y. Filed Feb. 18, 1918. Serial No. 217,901. Renewed Apr. 14, 1919. Serial No. 290,091. 2 Claims. (Cl. 74—56.)



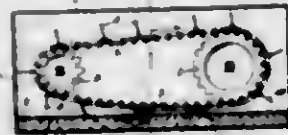
1. An automobile hood having a top and a side with a horizontal opening adjacent the upper portion of the said side and a horizontal louver extending over the opening.

1,314,437. PORTABLE COMBINED COTTON PICKING, GINNING, CONDENSING, AND COMPRESSING MACHINE. MARY W. SILVESTHORNE, Martins, S. C. Filed July 8, 1918. Serial No. 244,000. 5 Claims. (Cl. 56—12.)



1. The combination, of a fan, suction pipes with picker heads branching from the fan, and a plurality of devices for subsequently treating the suction picked cotton, including a ginner, condenser and baler, all in air communication with said fan and operated by a common drive shaft.

1,314,438. OILING DEVICE FOR SILENT CHAINS. JOSEPH EMORY SIKKINK, Greenville, S. C. Filed May 8, 1919. Serial No. 295,812. 4 Claims. (Cl. 184—2.)



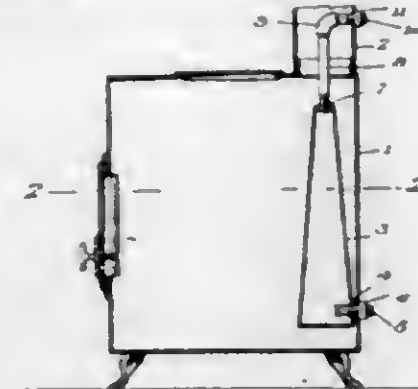
4. In combination with a casing having a closed top, sprockets in said casing, an endless chain moving over said sprockets, and a body of lubricant in the lower part of said casing, the surface level of the lubricant being below the lower part of said chain, of a trailer carried by said chain, and adapted to be brought into contact with the liquid body of the lubricant, said trailer being brought under the influence of centrifugal force as that portion of the chain carrying said trailer passes over the sprocket wheels, such centrifugal action, adapted to cause the liquid lubricant acquired by the trailer to be thrown onto the top of said casing where it may drop onto said chain, substantially as described.

1,314,439. TRAIN-CONTROL SYSTEM. FRED ARTHUR SKETCHLEY, East Saugus, Mass. Filed Aug. 30, 1918. Serial No. 252,082. 2 Claims. (Cl. 246—202.)



1. A train control system comprising a series of casings, a track obstruction located adjacent each casing, electric means controlling said obstructions, magnets in each casing, a switch plate in said casing controlling said electrical means and operated by the magnets, an electric circuit connecting the magnets in each casing to contacts in the adjoining casing and a rod adapted to be operated by the train and connected with the switch plate for forcing said plate into engagement with said contacts.

1,314,440. STOVE. CHARLIE R. SMITH, Kokomo, Ind. Filed Mar. 29, 1919. Serial No. 286,017. 2 Claims. (Cl. 129—67.)



1. The combination with a stove and outlet pipe, of a vertically elongated air heating chamber within the stove below said pipe, an air inlet nipple extending through the wall of the stove and engaging said chamber near the lower end thereof, and an air outlet pipe extending upwardly through the upper end of said chamber into the first named pipe and discharging through the wall thereof.

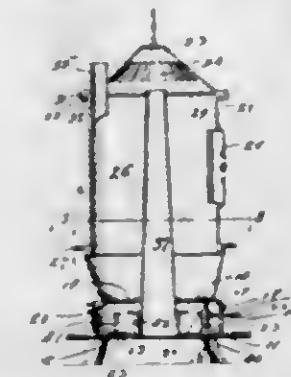
1,314,441. BRUSH. REERT STENHAUD, Philadelphia, Pa., assignor to Ludvik M. Petterson, Philadelphia, Pa. Filed May 7, 1918. Serial No. 233,114. 2 Claims. (Cl. 15—51.)



1. A brush comprising a tubular body, a conduit arranged within the body and in open communication with
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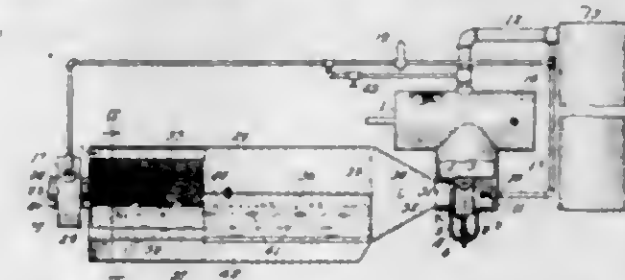
the source of supply, said body being formed with ducts, and the conduit being formed with openings adapted to register with said ducts in certain position of the conduit and body, a discharge nozzle arranged in one end of the conduit and opening through an end of the body, a valve operable in the conduit and adapted to close said discharge nozzle, and means mounted on the body and connected with said valve whereby the valve may be operated at will.

1,314,442. HEATING-STOVE. JOSIAH C. SUTTON, Mount Pleasant, Mich. Filed Aug. 15, 1918. Serial No. 250,037. 1 Claim. (Cl. 126—71.)



In combination with a heater including a vertically extending air flue and an ash pit provided with a side opening and an ash discharge opening in the bottom thereof; of a rotary scraper resting upon the bottom of said ash pit and consisting of an annular band having openings therein an inner annulus spaced from said band and surrounding the base of said air flue, and plate like radial arms connected to said annulus and said band, whereby an implement may be inserted through the side opening of said ash pit to engage one of the openings of said annular band, thus allowing the scraper to be revolved, as and for the purposes set forth.

1,314,443. AIR CLEANING ATTACHMENT FOR AIR-COMPRESSORS. THOMAS E. TAYLOR, Kansas City, Mo., assignor of one-half to Lloyd T. Cunningham, Kansas City, Mo. Filed May 9, 1919. Serial No. 290,039. 7 Claims. (Cl. 183—30.)

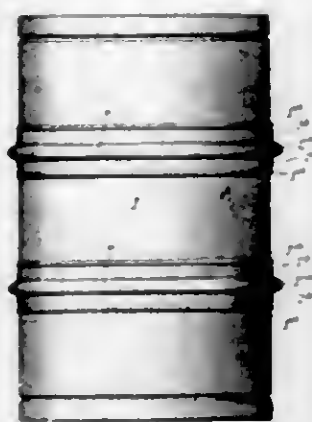


1. The combination of an air compressor having an air-intake port and a discharge pipe, a compressed-air tank connected to said pipe, means for closing said port, a pipe through which air when it attains a predetermined pressure in the tank, shall cause said means to close said port, an air strainer for cleaning the air supplied to said intake port, and means whereby said screen is automatically brushed when said closing means is caused to close said intake port.

1,314,444. OINTMENT AND PROCESS OF PREPARING SAME. FILIPPO TOLENTINI, Woodlawn, Pa., assignor to Pasquale W. Como, Woodlawn, Pa. Filed May 8, 1919. Serial No. 295,693. 2 Claims. (Cl. 167—9.)

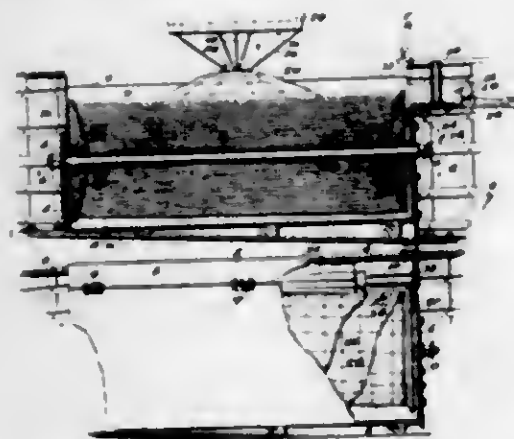
1. An ointment suitable for the treatment of skin affections by local application, such ointment consisting essentially of a pasty mass containing light magnesia usta, olive oil and such constituents of peppermint leaves as are soluble in olive oil.

1,314,445. METALLIC RECEPTACLE. FREDERICK G. WACKER, Chicago, Ill. Filed July 26, 1916. Serial No. 111,359. 14 Claims. (Cl. 220-71.)



2. A metallic barrel including a body, and a rolling hoop having an outwardly directed bead, the body of the barrel having a circumferential bead extending partially into said hoop bead and bearing against the inner corners of the hoop bead with pressure.

1,314,446. PARACHUTE ATTACHMENT FOR FLYING-MACHINES. JEAN F. WERN, Sr., New York, N. Y. Filed July 2, 1917. Serial No. 178,230. Renewed Oct. 23, 1918. Serial No. 259,458. 14 Claims. (Cl. 244-21.)



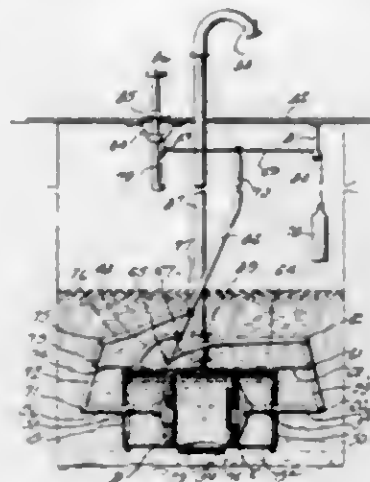
1. The combination with an aeroplane having a fuselage, of a box built into the fuselage, a self-opening cover for said box, means for releasing said cover, a reel in said box, a parachute device having a cable wound on said reel and connected to sustain the machine when the parachute is released, an air anchor connected to said parachute device and normally located in said box, and means for releasing said air anchor when said cover is opened.

1,314,447. KEROSENE-VAPORIZER FOR MOTOR-CARS. L. R. WEARS, Milford, Mo. Filed Feb. 12, 1918. Serial No. 217,271. 5 Claims. (Cl. 210-38.)



2. A vaporizer, a heating coil inclosing the same and having a perforated inner wall in contact with the vaporizer, a series of external contacts in electrical connection with said coil at different points along the length thereof, and an adjustable arm for making electrical connection with any of said contacts.

1,314,448. PUMP. JOHN H. WHITAKER, Dennistown, N. J. Filed May 9, 1918. Serial No. 233,507. 4 Claims. (Cl. 103-77.)



1. A pump, which comprises a cylindrical body having a valve in one wall thereof, the ends of said body being screened, a plurality of valved pistons and rods operable within the body, and levers connected to the rods for moving the pistons in the body, said body being provided with an outlet.

1,314,449. PROCESS OF RESHARPENING FILES. SAMUEL WHITE, Redhill, England. Filed Apr. 16, 1919. Serial No. 290,575. 2 Claims. (Cl. 76-24.)

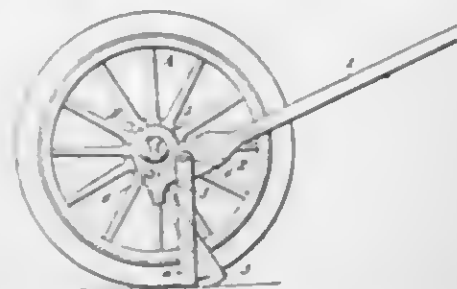
2. A process of renovating files and the like consisting in etching the cleaned worn files by immersion in a bath composed essentially of substantially equal parts of hydrochloric acid, nitric acid and water, maintained at about 100° F., and thereafter washing, such washing operation including washing with an alkaline solution.

1,314,450. PROCESS OF RESHARPENING FILES. SAMUEL WHITE, Redhill, England. Filed Apr. 16, 1919. Serial No. 290,576. 5 Claims. (Cl. 204-1.)



3. A process which comprises cleaning worn files, substantially filling the grooves with a relatively inert material, coating the tops of the teeth by treatment with a solution of a copper salt, removing said inert material from the grooves, pickling the files in an acid bath and accelerating action of said bath by electrolysis.

1,314,451. LIFTING-JACK. LLOYD E. WILCOX, Green, Kans. Filed Mar. 5, 1919. Serial No. 280,709. 2 Claims. (Cl. 254-131.)



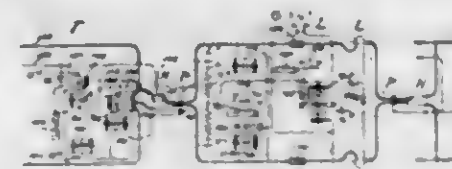
1. A lifting jack comprising a lever having a notch near its end to receive the object to be lifted, and a pair of standards of substantially the same length pivoted at one end to opposite sides of the lever adjacent and at substantially equal distances from said notch.

1,314,452. IMPRESSION-CYLINDER FOR PRINTING-MACHINES. CARL WINKLER, Berne, Switzerland. Filed June 26, 1918. Serial No. 242,063. 2 Claims. (Cl. 101-407.)



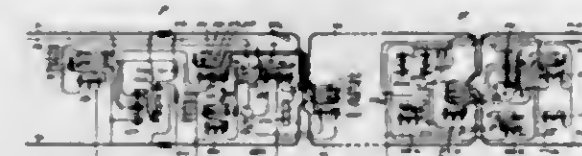
1. An impression cylinder for printing machines comprising an axis, end walls and radially disposed internal longitudinal ribs, merging integrally with said axis, said ribs integral with the cylinder and end walls and extending uninterruptedly from end wall to end wall.

1,314,453. TELEPHONE SYSTEM. GEORGE A. YANOWSKI, Chicago, Ill., and HARRY E. HERBERT, White Water, Kans., assignors to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed Dec. 5, 1913. Serial No. 804,894. Patent No. 1,278,282, dated Sept. 10, 1918. Divided and this application filed Aug. 21, 1918. Serial No. 250,858. 5 Claims. (Cl. 170-27.)



1. In a telephone system, a plurality of normally disconnected subscribers' lines, automatic switches for establishing a talking circuit between said lines, said talking circuit including a pair of talking conductors, means controlled by the response of the called subscriber for closing a circuit including the two sides of said talking circuit in parallel and a signal controlled over said circuit.

1,314,454. REPEATER FOR AUTOMATIC TELEPHONE SYSTEMS. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1910. Serial No. 77,247. 70 Claims. (Cl. 170-18.)

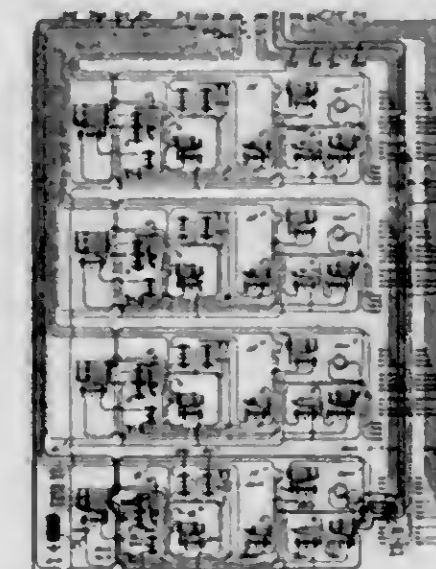


1. In a telephone system, a trunk line, a repeater in said trunk for repeating impulses over the same, a bridge for said repeater consisting of a relay and means for automatically adding another relay in series with said first relay to increase the impedance of said bridge.

1,314,455. AUTOMATIC TELEPHONE SYSTEM. JOHN WICKA, Columbus, Ohio, assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1916. Serial No. 80,042. 53 Claims. (Cl. 170-27.)

1. In a telephone trunking system, a central exchange, a plurality of branch exchanges, a toll line connecting each branch exchange with the central exchange, a selector switch at the central exchange for each toll line, multiple contacts for each toll line in the bank of each se-

lector switch, multiple jacks at said exchanges for their connecting toll lines, manual connecting apparatus associated with said jacks for setting up connections between ex-



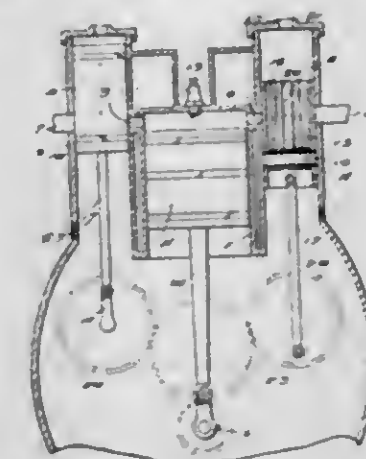
changes, and means whereby upon the establishment of a manual connection over any toll line the selector switch associated therewith is disconnected.

1,314,456. EJECTOR FOR CIGARETTE AND CIGAR HOLDERS. JOSHUA A. YOUNG, Baldwin Harbor, N. Y. Filed June 21, 1918. Serial No. 241,235. 1 Claim. (Cl. 131-10.)



A cigarette holder having a band around its outer end, said band having diametrically arranged slots in its inner periphery, a second band slidably engaging the outer part of the holder and normally spaced from the first band, U shaped members carried by said sliding band and normally embracing the walls of the cigarette receiving opening and the outer legs of said member engaging the slots in the other band, and the inner legs engaging the inner walls of the holder and inwardly projecting lugs on the ends of said inner legs and extending at right angles thereto.

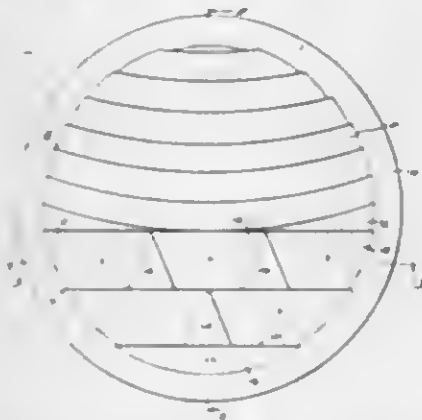
1,314,457. INTERNAL-COMBUSTION-ENGINE VALVE. ALBIN ANDERSON, Rockford, Ill., assignor of one-half to Emil Moberg, Rockford, Ill. Filed May 10, 1918. Serial No. 233,094. 1 Claim. (Cl. 123-80.)



In combination with an internal combustion engine having intake and exhaust ports in the cylinder thereof, valve

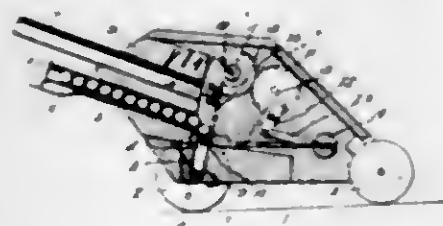
cylinders adjacent said engine cylinder and communicating therewith and having air inlet openings adjacent their lower ends, open ended tubular valves slidable in the valve cylinders and adapted to intermittently establish communication between the valve and engine cylinders, longitudinally extending ribs formed within said valves, and heads for the upper ends of said valve cylinders having air outlet openings formed therein whereby a conduit for communicating with a charge forming device may have communication with the valve cylinders.

1,314,458. LENS FOR HEADLIGHTS. LOUIS BENZER and HENRY BENZER, Brooklyn, N. Y., assignors to The Benzer Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 5, 1919. Serial No. 280,728. 2 Claims. (Cl. 240—48.4.)



1. A lens for headlights having its upper portion divided into a plurality of transversely extending arcuate prismatic surfaces, the ends of which lie in a plane above the intermediate portions thereof, a plurality of transversely concave parallel prismatic surfaces in the lower portion of said lens, and triangular plane surfaces interposed between said transversely concave prismatic surfaces.

1,314,459. TOY GUN. ROBERT C. BLACK, DUNDON, Fla. Filed Oct. 30, 1918. Serial No. 260,231. 2 Claims. (Cl. 124—13.)

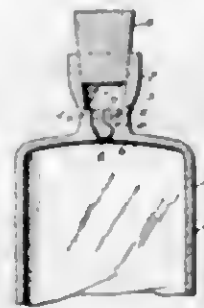


1. A device of the class described comprising a casing, a barrel carried thereby, an inclined magazine tube below the barrel, a vertically movable member located adjacent the inner ends of the barrel and tube and having a pocket therein for receiving a shot from the magazine tube, a vertical spring plate in rear of the elevator, a hammer on the upper end thereof, a crank handle and means operated thereby for moving the said member and actuating the spring plate to cause the hammer to strike the shot in the pocket.

1,314,460. ANTIREFILLABLE BOTTLE. HAROLD T. REUM, Amherst, Ohio. Filed Mar. 9, 1915. Serial No. 13,179. 1 Claim. (Cl. 215—65.)

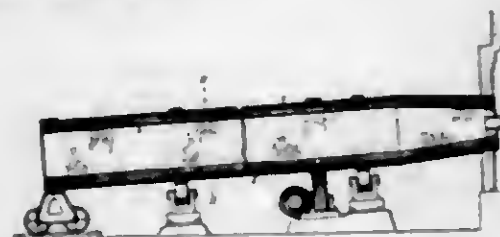
A bottle of the character described comprising a body and a neck, said neck being formed with a valve seat on its lower extremity and having a shoulder intermediate the ends to limit the downward movement of the bottle stopper when placed in the neck, a spherical valve arranged on the valve seat, said bottle neck provided with grooves

on the exterior thereof below the shoulder, a plurality of guard pins having horizontal portions embedded in the neck below the shoulder, the inner ends of said guard pins turned downwardly and limiting the movement of the



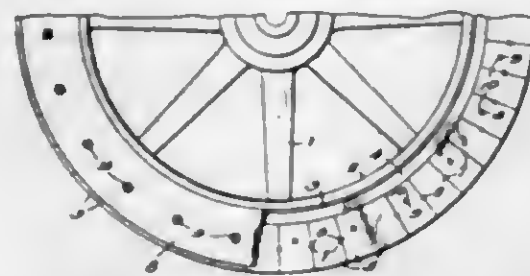
spherical valve, the outer ends of said pins bent upwardly into the grooves thus preventing the pins from being removed without indicating to the user an attempt to remove the pins.

1,314,461. ROTARY KILN. FRANK A. BOECK, New York, N. Y. Filed Apr. 28, 1917. Serial No. 165,295. 2 Claims. (Cl. 222—7.)



2. A rotary kiln comprising a shell, a refractory lining therein, and kieselguhr bricks between the lining and shell extending from the highest temperature zone of the kiln to and including the lowest temperature zone.

1,314,462. WHEEL. HERBERT J. HERRICK, Portland, Oreg. Filed May 13, 1918. Serial No. 234,253. 1 Claim. (Cl. 152—9.)

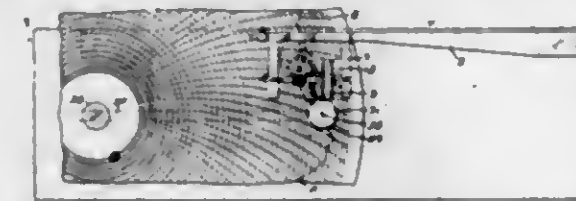


A tire construction in which the tread is formed entirely of wooden units, comprising an annular side plate provided with a series of transversely extending keys arranged at intervals, a second annular side plate that abuts against the free end of each of the keys of the first named plate, wooden tread units of different sizes arranged in transverse pairs of large and small units, some of said units having apertures extending through, a series of transversely positioned bolts extending through said apertures and both side plates, and transversely positioned seats formed in each side of the tread units adapted to receive the keys carried by the first named plate.

1,314,463. PLANIMETER. EDGAR H. BATAFOL, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed July 26, 1915. Serial No. 41,854. 15 Claims. (Cl. 33—122.)

1. An instrument of the class described comprising in combination, a record sheet support, a tracer secured in

fixed position relatively thereto, and means for measuring relative movement between a sheet and said tracer, said elements being formed and relatively placed to



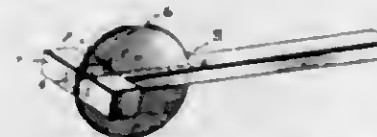
permit combined rotative and translative movement of a sheet on the face of said support and beneath said tracer.

1,314,464. HARNESS. JOHN HADDA, Detroit, Mich. Filed Nov. 25, 1918. Serial No. 264,010. 1 Claim. (Cl. 54—1.)



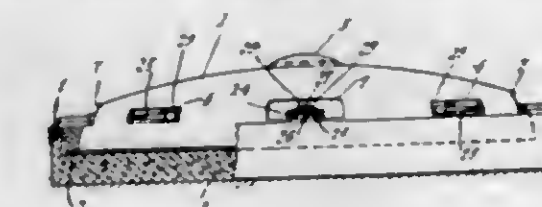
A harness comprising breeches, backing straps connected thereto and adapted to extend along the sides of a horse and be connected to a tongue, a breast piece supporting said backing straps adjacent the outer end of said tongue, traces connected to said breast piece and extending under said backing straps and adapted to be connected to a whiffle tree, and a neck band connected to said breast piece and to said breeches.

1,314,465. HAMMER. NORBERT HUBAS, Boothville, La. Filed Jan. 16, 1919. Serial No. 271,373. 3 Claims. (Cl. 17—31.)



2. In a device of the character set forth, the combination of a disk having an opening therein, a hammer head having a channel therein and a handle having a channel in one end thereof for the reception of the disk.

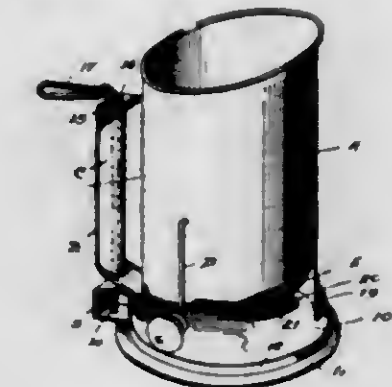
1,314,466. GUN EMPLACEMENT OR FORT. JESSE THOMAS CAMPBELL, Elbridge, Tenn. Filed Nov. 12, 1918. Serial No. 262,209. 2 Claims. (Cl. 89—37.)



1. The combination with a stationary dome-like shell having elongated gun ports therein, there being a central space within the shell constituting a control station, of a pedestal within the shell and back of each port, a gun mount arranged for rotation on each pedestal, guns on the mounts and projecting into the ports, means extend-

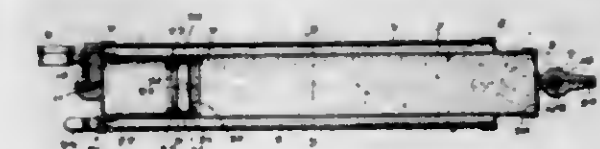
ing into the control station from all the mounts for independently rotating the mounts, means extending into the control station for independently elevating the guns on their mounts, and means extending into the central control station for separately or simultaneously firing the guns.

1,314,467. FLOUR-SIFTER ATTACHMENT. HARRY P. DACHSEL, Mountain View, Ark. Filed Mar. 31, 1917. Serial No. 158,997. 7 Claims. (Cl. 83—60.)



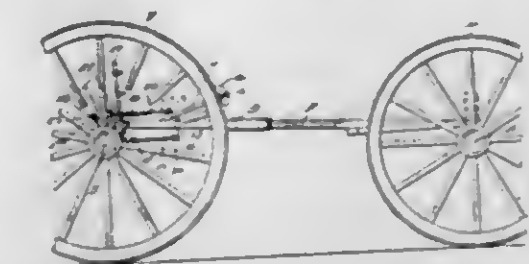
1. An attachment for a flour sifter having the usual handle at one side thereof, comprising a base hinged upon the handle and adapted to be swung beneath the sifter for closing the lower end thereof, said base having a relatively small opening therethrough restricting the flow of material from the sifter, and means upon the handle adapted for engagement with the hand for moving the base into and out of position beneath the sifter.

1,314,468. FIRE-EXTINGUISHER. MAHLON L. DUNBAR, Norwalk, Ohio, assignor to The Fire Extinguisher Company, Inc., Akron, Ohio, a Corporation of Ohio. Filed Sept. 18, 1918. Serial No. 254,612. 5 Claims. (Cl. 169—12.)



1. A fire extinguisher comprising a container for a fire extinguishing agent; said container having a valved eduction orifice, a follower movable in said container and a container for fluid under pressure surrounding the extinguishing agent container and connected with the latter container at one side of the follower therein.

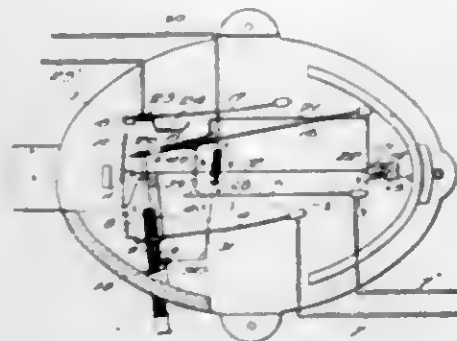
1,314,469. WAGON-BRAKE. RALEIGH THOMAS EASLEY, Tiptonville, Miss. Filed July 18, 1917. Serial No. 181,356. 3 Claims. (Cl. 21—8.)



2. A vehicle brake embodying a brake hanger mounted for horizontal rocking movement, brake shoes carried by the hanger, means for manually operating the brake shoes in one direction, a brake setting lever, a spring connected with the brake setting lever and the brake

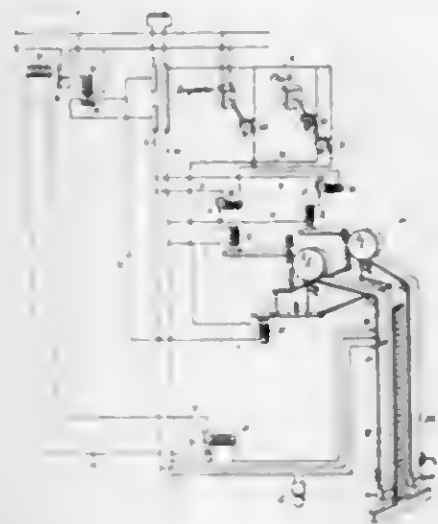
hanger, and means connected with the brake setting means to permit of the brakes being thrown into locked position by the engagement of the vehicle wheels therewith.

1,314,470. AUTOMATIC CUT-OUT SWITCH. ANGEL FERNANDEZ, Washington, D. C. Filed Mar. 2, 1918. Serial No. 220,085. 5 Claims. (Cl. 175-273.)



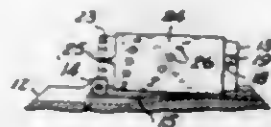
1. In an automatic cut-out switch, a base, contact elements arranged on said base, other contact elements arranged on the base and engageable with said first contact elements, spring latch means for maintaining the second mentioned contact elements in engagement with said first contact elements, adjustable thermal means connected to said latching means for releasing the latching means and retaining the same in an adjusted position, a handle rotatably and slidably arranged on the base adapted to be engaged with one of said second mentioned contact elements, and means connected with said handle and one of the first mentioned contact elements for causing disengagement of the same from said second mentioned contact element, at times.

1,314,471. MAXIMUM-DEMAND CONTROLLER AND LOAD-INDICATOR FOR ELECTRIC-POWER INSTALLATIONS. COLIN C. GOW, London, England. Filed Nov. 30, 1918. Serial No. 264,856. 8 Claims. (Cl. 171-34.)



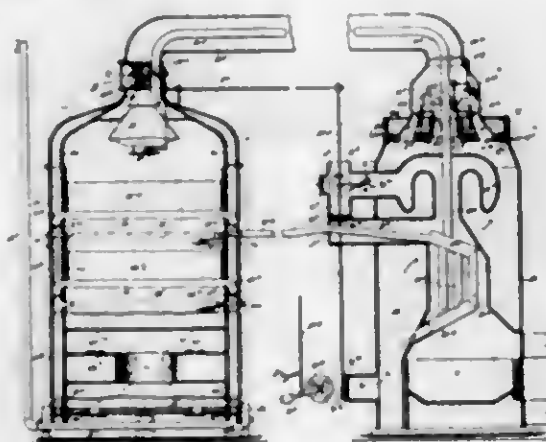
1. A maximum demand controller and load indicator for an electric power installation comprising, in combination, a clock, an ergometer, and two indicators, one operated by the clock at a constant rate, and the other by the ergometer at a rate proportional to the energy supplied to the installation throughout the given time interval over which the maximum demand is averaged, and means for automatically re-setting the indicators at the termination of each of the said intervals.

1,314,472. SIGHT FOR FIREARMS AND THE LIKE. JOHN W. HARKUM, Melbourne, Quebec, Canada. Filed May 21, 1918. Serial No. 235,801. Renewed July 17, 1919. Serial No. 311,083. 13 Claims. (Cl. 33-54.)



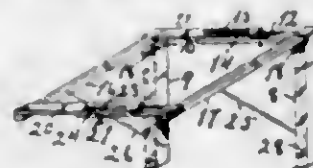
1. In a rear sight, a cylindrical body having diametrically disposed sight openings therethrough, a revoluble sleeve thereon having two series of diametrically opposite sighting apertures arranged to coincide with the openings of said body.

1,314,473. INCUBATOR. CHARLES M. HECK, Raleigh, N. C. Filed Jan. 10, 1915. Serial No. 2,008. 46 Claims. (Cl. 119-30.)



1. In an incubator, the combination with an incubating chamber, of a warm air supply, a hot air supply, means for conducting air from said supplies to said chamber and discharging it above eggs or like producers of animal heat in said chamber, a thermostat positioned near said eggs, means for shielding said thermostat from the direct discharge of air from said supplies, and means operated by said thermostat to cut off one of said supplies and control the volume of air supplied by the other supply.

1,314,474. WINDOW-TENT. EVERETT W. JONES, Los Angeles, Calif. Filed Jan. 17, 1918. Serial No. 212,357. 1 Claim. (Cl. 98-31.)

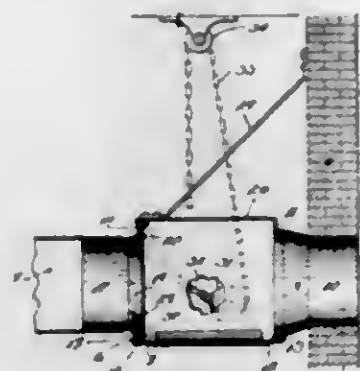


A window tent frame composed of two body members; two side members hingedly connected to the body members at the top when positioned for use; adjustably connected crossbars hingedly connected to said body members; adjustably connected crossbars detachably connected to the inner ends of said side members; and detachably connected brace rods secured to said body and end members.

1,314,475. FURNACE-FLUE-CLOSING DEVICE. ARTHUR C. LUDWIG, Milwaukee, Wis. Filed Apr. 8, 1919. Serial No. 288,629. 1 Claim. (Cl. 126-285.)

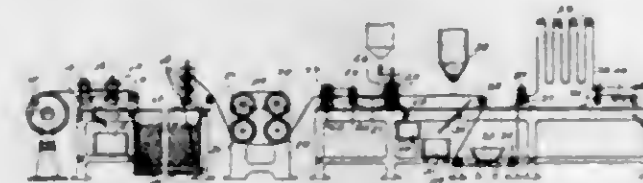
A furnace flue closing device including a valve box having a flat end wall provided with an opening, a cylindrical section having one end portion out-turned to form a flange engaging the wall about the opening, a ring

cured within the cylindrical section and extended through the opening of the end plate and having its inner end portion out-turned to form a flange engaging the inner face of the end wall and to form a valve seat, securing members passed through the ring and said cylindrical



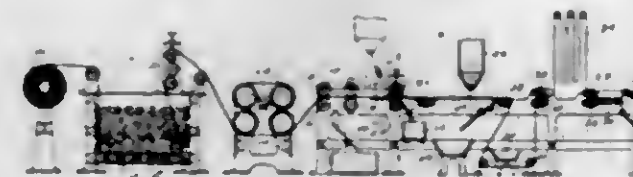
section to hold the flange in engagement with the end wall of the valve box, a valve plate pivoted in the box and adapted to engage against said seat, and an annular flange on the valve plate adapted to engage the said end wall of the box in spaced concentric relation to the first mentioned seat forming flange.

1,314,476. METHOD AND APPARATUS FOR MAKING PREPARED ROOFING ELEMENTS. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1917. Serial No. 209,228. 9 Claims. (Cl. 91-79.)



1. The method of making shingle strips, which includes first forming slots in a sheet of felt, then saturating the felt with a hydrocarbon compound, and subsequently cutting the sheet in such relation to the slots as to form shingle strips with slots or projections.

1,314,477. METHOD AND MEANS FOR MAKING PREPARED ROOFING ELEMENTS. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1917. Serial No. 209,229. 6 Claims. (Cl. 91-79.)



1. A method of making shingle strips, which consists in saturating a sheet of felt with a hydrocarbon compound, then forming slots in said saturated sheet, then applying the plastic coating upon the slotted sheet, and severing said sheet in lines transverse to the slots to form shingle strips.

1,314,478. OPTICAL INSTRUMENT. HARRY H. PECK, deceased, Cambridge, Mass., by Arthur K. Peck, executor, Boston, Mass., assignor, by direct and mesne assignments, of one-half to Fore River Shipbuilding Corporation, Quincy, Mass., three-eighths to Arthur K. Peck, Boston, Mass., and one-eighth to Newell A. Thompson, Jr. Original application filed Oct. 23, 1916. Serial No. 127,084. Divided and this application filed Nov. 14, 1918. Serial No. 262,462. 9 Claims. (Cl. 88-32.)



9. An optical instrument having, in combination, a telescope objective, a telescope eye-piece, a housing therefor, said housing extending beyond said telescope objective up to and including the nodal point of said telescope objective and a substantial distance beyond said nodal point and having an opening for the rays of light in its objective end adjacent to said nodal point of substantially smaller diameter than the diameter of said telescope objective.

1,314,479. OPTICAL INSTRUMENT. HARRY H. PECK, deceased, Cambridge, Mass., by Arthur K. Peck, executor, Boston, Mass., assignor, by direct and mesne assignments, of one-half to Fore River Shipbuilding Corporation, Quincy, Mass., three-eighths to Arthur K. Peck, Boston, Mass., and one-eighth to Newell A. Thompson, Jr. Original application filed Oct. 23, 1916. Serial No. 127,084. Divided and this application filed Nov. 14, 1918. Serial No. 262,463. 14 Claims. (Cl. 88-32.)



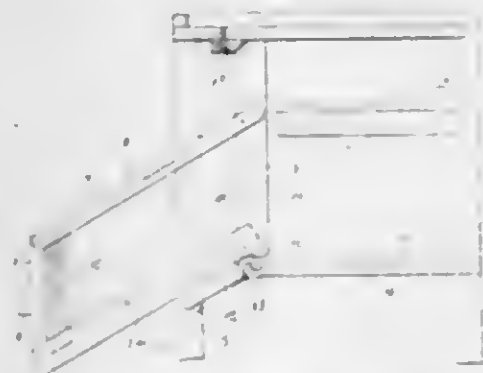
1. An optical instrument having, in combination, a telescope objective, a telescope eye-piece, a housing therefor, said housing extending beyond said telescope objective in the form of a cone up to the nodal point of said telescope objective and beyond said nodal point in the form of a reverse cone.

1,314,480. OPTICAL INSTRUMENT. HARRY H. PECK, deceased, Cambridge, Mass., by Arthur K. Peck, executor, Boston, Mass., assignor, by direct and mesne assignments, of one-half to Fore River Shipbuilding Corporation, Quincy, Mass., three-eighths to Arthur K. Peck, Boston, Mass., and one-eighth to Newell A. Thompson, Jr., Original application filed Oct. 23, 1916, Serial No. 127,084. Divided and this application filed Nov. 14, 1918. Serial No. 202,404. 7 Claims. (Cl. 88—32.)



2. An optical instrument having, in combination, a telescope objective, a telescope eyepiece, a housing therefor, said housing extending beyond said telescope objective toward the nodal point of said objective, said extension comprising a plurality of tubes of different interior diameters and one of said tubes inclosing therein said nodal point.

1,314,481. RECORD-CABINET. EDWIN SCOTT VOTRY, Summit, N. J., assignor to The Acollan Company, a Corporation of Connecticut. Filed Aug. 23, 1916. Serial No. 116,489. 17 Claims. (Cl. 45—96.)



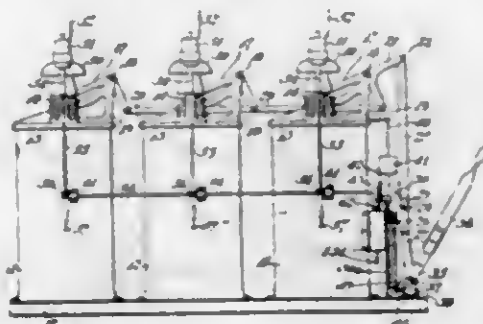
4. A record cabinet having a sliding drawer comprising front and back members and a bottom member pivotally connected thereto and adapted to automatically assume an inclined position when the drawer is moved outwardly, and means operative to maintain said front and back members substantially upright and parallel throughout the movements of said drawer, said means including a top member pivotally connecting said front and back members.

1,314,482. CLEANING AND POLISHING COMPOSITION. CHARLES WALLACE, Los Angeles, Calif. Filed Mar. 8, 1918. Serial No. 221,194. 2 Claims. (Cl. 134—24.)

2. The herein described polishing, cleaning and burnishing compound which consists of distilled water fourteen ounces, acetic acid of thirty-six per cent. strength

half an ounce, denatured alcohol five ounces, paraffin oil four ounces, trichloride of antimony one dram, oil of mirbane and a coloring agent.

1,314,483. DEFINITE-TIME-LIMIT DELAY. REGINALD J. C. WOOD and GEORGE E. ARMSTRONG, Los Angeles, Calif. Filed Mar. 5, 1918. Serial No. 220,503. 7 Claims. (Cl. 175—270.)



1. In combination with a circuit breaker having a restraining means, a closing means, and a tripping means, a relay comprising a hammer so placed that it can strike and actuate said tripping means; a spring so formed and placed as to tend to cause said hammer to actuate said tripping means; a latch engaging and restraining said hammer in its set position; means for releasing said latch; and means by which said closing means resets said hammer.

1,314,484. TWO-PRONG COMPOUND FISHING-TOOL. LAWRENCE F. BAASIE, Whittier, Calif. Filed Jan. 6, 1919. Serial No. 269,889. 3 Claims. (Cl. 57—9.)



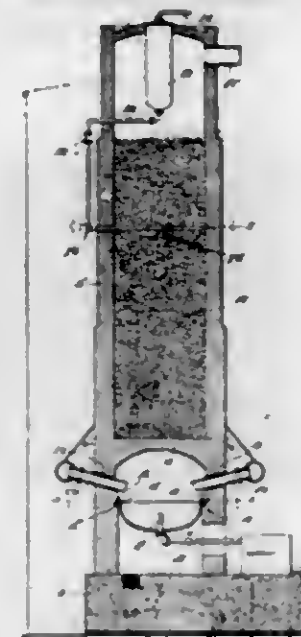
2. In a two prong compound fishing tool, a main stem; a frame slidably mounted on the stem; oppositely inclined guide means carried by the stem; fishing jaws engaging the guide means; presser means engaging the fishing jaws; and a spring for operating the presser means.

1,314,485. PROCESS OF CONCENTRATING NITRIC ACID AND APPARATUS THEREFOR. JOSEPH D. DAVIS, Washington, D. C. Filed Aug. 8, 1918. Serial No. 248,880. 8 Claims. (Cl. 23—1.) (Filed under the act of Mar. 3, 1883, 22 Stat. 1, 625.)

6. An apparatus for concentrating nitric acid which prises causing it to flow in fine streams in contact with hot nitrous gases, said gases being initially at a temperature exceeding 300° C.

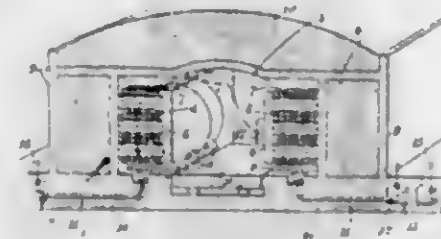
6. An apparatus for concentrating nitric acid which comprises a shaft, an acid-proof filling material therefor, a preheating tank in the top of said shaft, means for leading dilute nitric acid into said tank, means for introducing hot nitrous gases into the bottom of said shaft,

means for leading dilute nitric acid from said preheating tank onto said filling material at the upper portion



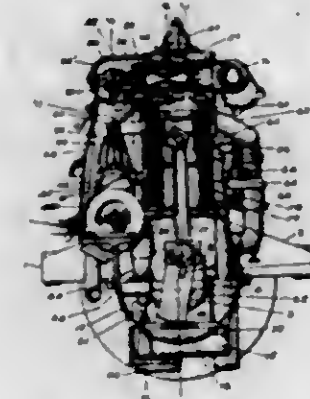
thereof, and means for collecting nitric acid after its descent through said shaft.

1,314,486. FURNACE, KILN, OVEN, AND THE LIKE. HENRI FAUCART, Harne Hill, London, England. Filed Mar. 26, 1919. Serial No. 285,851. 2 Claims. (Cl. 25—145.)



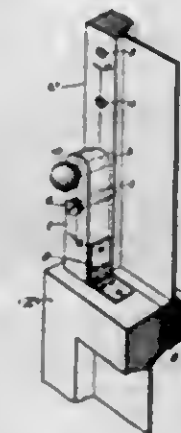
1. A furnace, kiln, oven and the like, comprising an outer shell having a longitudinal treatment chamber embodying side walls which extend upwardly for connection in the top of the treatment chamber, said side walls being provided at their top and bottoms with pairs of openings, said side walls being spaced from the outer shell, transverse walls disposed between the side walls and outer shell and forming a plurality of separate furnaces, each furnace having communication with a pair of upper and lower openings, means for supplying a gaseous fuel to each furnace, and a stack communicating with one end of the treatment chamber.

1,314,487. INTERNAL-COMBUSTION ENGINE. LUCIAN C. JACKSON, Buffalo, N. Y. Filed Nov. 9, 1914. Serial No. 871,042. 22 Claims. (Cl. 123—75.)



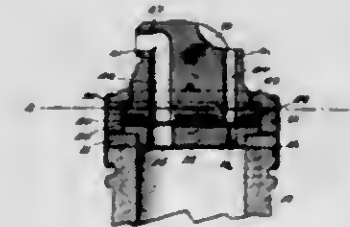
5. In an internal combustion engine, in combination, a piston valve, a sleeve valve inclosing said piston valve, and means to reciprocate each of said valves, said piston valve having a greater travel than said sleeve valve.

1,314,488. WINDOW-FASTENER. JOHN W. McMAHON, Winthrop, Mass. Filed Dec. 15, 1917. Serial No. 207,222. 1 Claim. (Cl. 16—143.)



A device for locking the upper and lower sashes of a double window against relative movement comprising a post projecting from the top of the lower sash along the upper sash, means for detachably securing the post to the upper sash, a hinge secured to the lower sash and to the side of said post to permit the post to swing downwardly along the upper edge of the lower sash in the plane of the lower sash, and a bolt extending through said post and threading into said upper sash, whereby said sashes are drawn tightly together when said bolt is threaded into the upper sash and said post does not project inwardly from the lower sash when swung downwardly.

1,314,489. INK-BOTTLE STOPPER. FRANK H. SILVERTHORN, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,154. 17 Claims. (Cl. 215—57.)



1. A closure for a bottle including a retaining ring provided with an internal peripheral shoulder, a ferrule for fastening said ring to the bottle, a rotary valvular construction for controlling the flow from the bottle, said construction including a nozzle seat held in place by said ring and provided with a fluid outlet opening and an air inlet opening extending therethrough, a pouring nozzle rotatably mounted within the inner periphery of said ring and held in place by said shoulder, said nozzle provided with a pour-out passageway having a discharge portion positioned above the retaining ring.

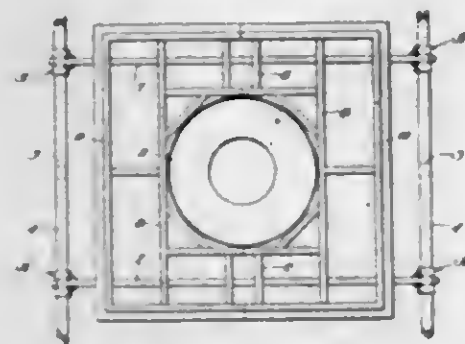
1,314,490. IGNITION-PLUG. OGLESBY ALLEN, Jr., Chicago, Ill. Filed Jan. 6, 1919. Serial No. 269,766. 1 Claim. (Cl. 123—160.)



An ignition plug for explosive engines comprising a metallic shell formed with an upper enlarged and a lower reduced bore and with a shoulder between them, a one-piece insulating core formed with a part of larger di-

ameter to fit within the enlarged diameter of the shell, with a part of reduced diameter to fit within the reduced diameter of the shell, and with a shoulder therebetween to oppose the shell shoulder, said core extending at its inner end beyond the inner end of the shell and freely withdrawable through the outer end of the shell, a live terminal extending axially through the core and beyond the inner end thereof, and a ring clamped between the shell and core shoulders and provided with angularly spaced arms which are confined and braced between the core and shell and in contact with the shell and extending beyond the core, said arms being turned at their free ends toward each other and the live terminal and spaced from the live terminal to constitute the grounded terminals of the plug.

1,314,491. FORMWORK HANGER FOR CONCRETE BUILDING CONSTRUCTION. STEVEN ROSS BERKOWITZ, (now by judicial change of name Steven Ross Berke,) Brookline, Mass. Filed May 28, 1919. Serial No. 300,250. 9 Claims. (Cl. 25-131.5.)



3. A hanger comprising a U-shaped member in combination with two angle arms hinged respectively to the upper ends of the legs of said U-shaped member.

REISSUES.

14,719. TANNING PROCESS. SIMMOND SAXE, New York, N. Y. Filed June 19, 1919. Serial No. 305,440. Original patent a continuation in part of application Serial No. 48,879, filed Sept. 3, 1915. Original No. 1,297,255, dated Mar. 11, 1919. Serial No. 220,287, filed Mar. 4, 1918. 6 Claims. (Cl. 149-4.)

1. The process of tanning which comprises treating hide or skin with a tanning liquor comprising an extract of osage orange wood.

DESIGNS.

53,725. ARTICLE OF MANUFACTURE. LOUIA V. ARONSON, Newark, N. J. Filed Jan. 10, 1919. Serial No. 270,592. Term of patent 3½ years.



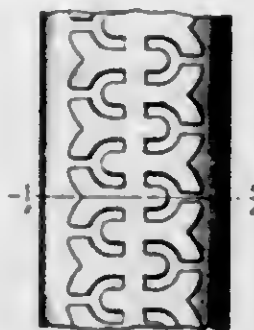
The ornamental design for an article of manufacture, as shown.

53,726. ODOMETER FACE-PLATE. JOSEPH BRACE, Flint, Mich., assignor to Champion Ignition Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 14, 1919. Serial No. 290,094. Term of patent 14 years.



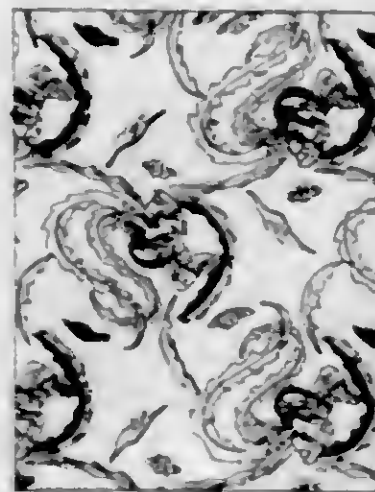
The ornamental design for an odometer face plate, as shown.

53,727. TIRE-CASING. ARTHUR BREITENSTEIN, Akron, Ohio, assignor to Richard J. Birch, Cleveland, Ohio. Filed May 1, 1919. Serial No. 294,093. Term of patent 14 years.



The ornamental design for a tire-casing, as shown.

53,728. TEXTILE FABRIC. JAMES H. BENTING, New York, N. Y., assignor to Sasquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed June 6, 1919. Serial No. 302,347. Term of patent 3½ years.



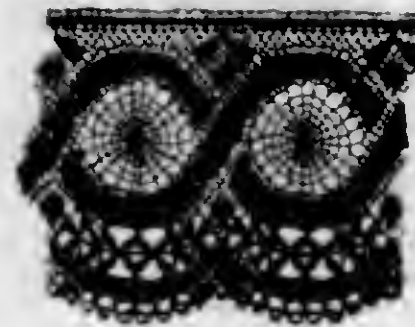
The ornamental design for a textile fabric, as shown.

53,729. LACE. MARC H. DAUDY, Philadelphia, Pa., assignor to North American Lace Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 27, 1919. Serial No. 300,206. Term of patent 3½ years.



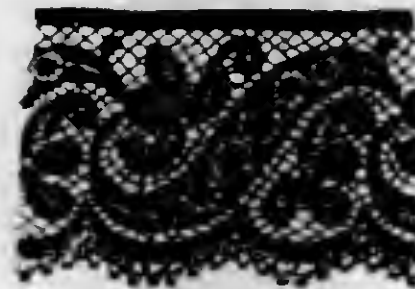
The ornamental design for a lace, substantially as shown.

53,730. LACE. MARC H. DAUDY, Philadelphia, Pa., assignor to North American Lace Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 27, 1919. Serial No. 300,207. Term of patent 3½ years.



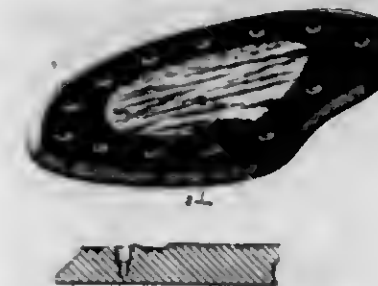
The ornamental design for a lace, substantially as shown.

53,731. LACE. MARC H. DAUDY, Philadelphia, Pa., assignor to North American Lace Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 27, 1919. Serial No. 300,208. Term of patent 3½ years.



The ornamental design for a lace, substantially as shown.

53,732. TAP FOR BOOTS, SHOES, OR SIMILAR ARTICLES. ELIAS J. EMERY, Malden, Mass. Filed May 9, 1919. Serial No. 296,000. Term of patent 14 years.



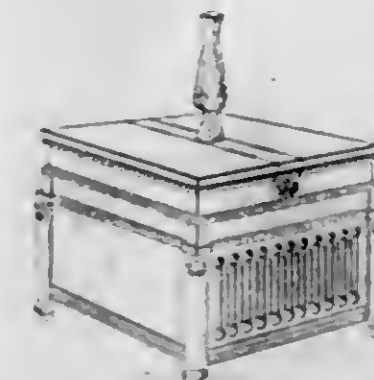
The ornamental design for a tap for boots, shoes, or similar articles, as shown.

53,733. BADGE, EMBLEM, OR SIMILAR ARTICLE OF MANUFACTURE. GEORGE E. FRATER, Upper Sandusky, Ohio. Filed Jan. 30, 1919. Serial No. 274,148. Term of patent 3½ years.



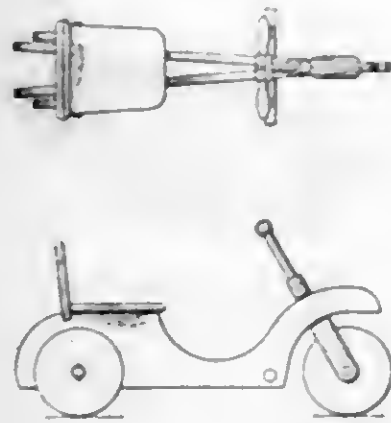
The new, original and ornamental design for a badge, emblem, or similar article of manufacture, substantially as shown.

53,734. GRAPHOPHONE-CASE. WILLIAM H. FRIEDLINE, Meyersdale, Pa., assignor to Modernola Co., Johnstown, Pa., a Corporation of Pennsylvania. Filed May 13, 1919. Serial No. 296,937. Term of patent 14 years.



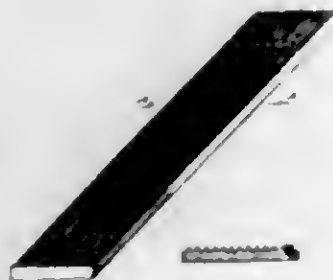
The ornamental design for graphophone case, as shown.

53,735. CHILD'S VEHICLE. CHARLES F. HATHAWAY, Rochester, N. Y. Filed Apr. 10, 1919. Serial No. 289,144. Term of patent 3½ years.



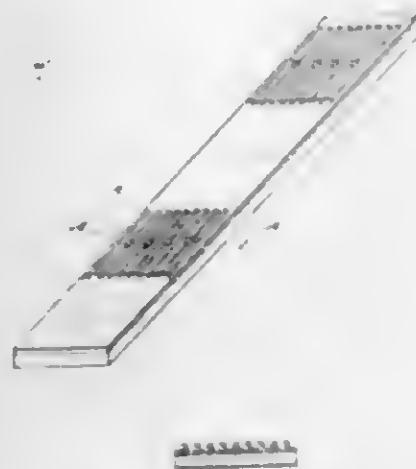
The original design for a child's vehicle as shown.

53,736. RUNNING-BOARD FOR AUTOMOBILES. JOHN T. HAYNE, Detroit, Mich. Filed Mar. 31, 1919. Serial No. 286,575. Term of patent 14 years.



The ornamental design for a running board for automobiles, as shown.

53,737. MAT FOR AUTOMOBILE RUNNING-BOARDS. JOHN T. HAYNE, Detroit, Mich. Filed Mar. 31, 1919. Serial No. 286,576. Term of patent 14 years.



The ornamental design for a mat for automobile running boards, as shown.

53,738. FOB, PENDANT, BROOCH, PIN, OR SIMILAR ARTICLE. CARL F. HOFFRACER, Montclair, N. J. Filed July 31, 1918. Serial No. 247,681. Term of patent 7 years.



The ornamental design for a fob, pendant, brooch, pin, or similar article as shown.

53,739. BADGE, EMBLEM, BUTTON, PIN, RING-TOP, WATCH-CHARM, OR SIMILAR ARTICLE. FRED B. HOLLENBECK, Tacoma, Wash. Filed Feb. 20, 1919. Serial No. 279,450. Term of patent 3½ years.



The ornamental design for a badge, emblem, button, pin, ring top, watch charm, or similar article, as shown.

53,740. EDGING. CHARLES S. KING, New Rochelle, N. Y., assignor to Sanford Narrow Fabric Co., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1919. Serial No. 276,659. Term of patent 14 years.



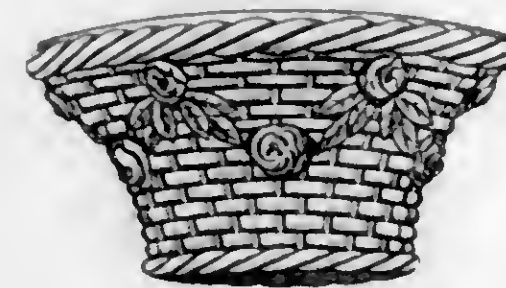
The ornamental design for an edging, as shown.

53,741. GLASS FLYTRAP. FREDERICK KLOTZ, Reading, Pa. Filed Apr. 4, 1919. Serial No. 257,621. Term of patent 14 years.



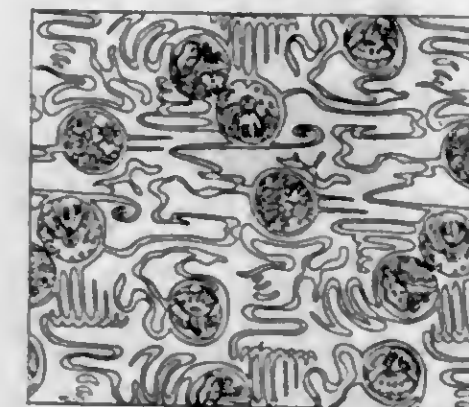
The ornamental design for a glass fly trap, as shown.

53,742. GLASS SHADE OR BOWL FOR LIGHTING-FIXTURES. NICHOLAS KOPP, Pittsburgh, Pa. Filed Apr. 22, 1919. Serial No. 291,990. Term of patent 7 years.



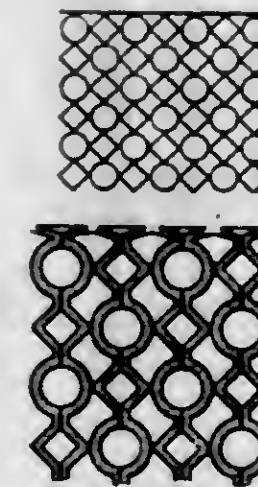
The ornamental design for a glass shade or bowl for lighting fixtures, as shown.

53,743. TEXTILE FABRIC. ELLA KRUPICKA, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed June 6, 1919. Serial No. 302,346. Term of patent 3½ years.



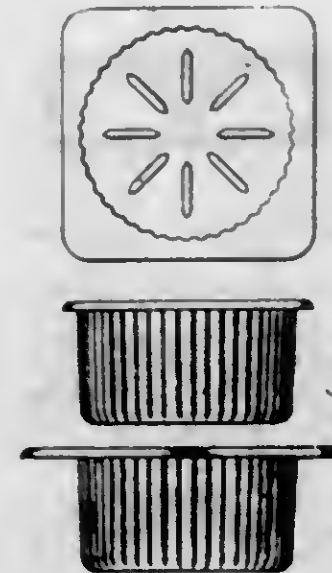
The ornamental design for a textile-fabric, as shown.

53,744. RADIATOR-CORE. MAX LITMAN, Springfield, Mass. Filed Apr. 22, 1919. Serial No. 291,991. Term of patent 14 years.



The ornamental design for a radiator core, as shown.

53,745. WASHING-MACHINE TUB. WILLIAM S. MILLER, Meyersdale, Pa. Filed July 6, 1916. Serial No. 107,859. Term of patent 3½ years.



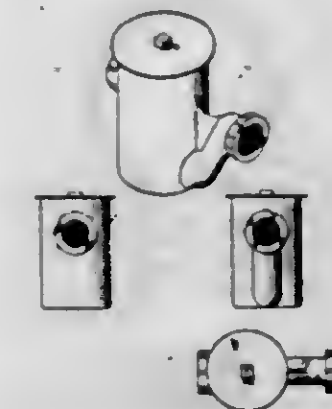
The ornamental design for a washing machine tub, as shown.

53,746. BOTTLE-STOPPER. THOMAS M. MOORE, New York, N. Y. Filed Feb. 27, 1917. Serial No. 151,374. Term of patent 7 years.



The ornamental design for a bottle stopper, as shown.

53,747. WASTE-WATER TRAP. HARVEY C. OGENKIRK, Cleveland, Ohio. Filed Mar. 8, 1917. Serial No. 153,515. Term of patent 14 years.



The ornamental design for a waste water trap, substantially as shown in the drawings.

53,748. PIN, BRASSARD, OR BADGE. HAROLD I. PRATT, Glen Cove, N. Y., assignor to The International Committee of the Young Men's Christian Association, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1919. Serial No. 273,181. Term of patent 14 years.



The ornamental design for a pin, brassard, or badge, as shown.

53,749. TIRE-CASING. ELMER A. REID, Trenton, N. J., assignor to Ajax Rubber Company, Inc., Millbrook, N. Y., a Corporation of New York. Filed May 13, 1919. Serial No. 299,941. Term of patent 7 years.



The ornamental design for a tire casing substantially as shown.

53,750. TIRE-CASING. ELMER A. REID, Trenton, N. J., assignor to Ajax Rubber Company, Inc., Millbrook, N. Y., a Corporation of New York. Filed May 13, 1919. Serial No. 299,942. Term of patent 7 years.



The ornamental design for a tire casing substantially as shown.

53,751. SHOE ORNAMENT. SAMUEL HIVELEA, Philadelphia, Pa. Filed Aug. 17, 1918. Serial No. 250,403. Term of patent 14 years.



The ornamental design for a shoe-ornament as shown.

53,752. PIN. WENATHA J. RULAND, Lawton, Okla. Filed Feb. 28, 1918. Serial No. 219,701. Term of patent 14 years.



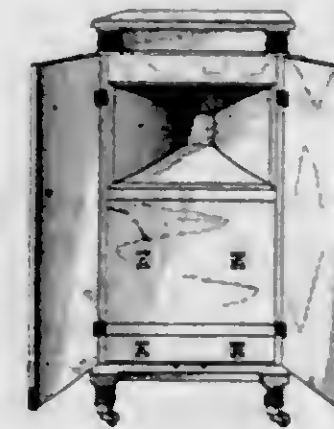
The ornamental design for a pin, as shown.

53,753. PHONOGRAPH-CABINET. JOSEPH N. VASEY, Brookfield, Ill. Filed Feb. 20, 1919. Serial No. 278,308. Term of patent 3 1/2 years.



The ornamental design for a phonograph cabinet as shown.

53,754. PHONOGRAPH-CABINET. JOSEPH N. VASEY, Brookfield, Ill. Filed Feb. 20, 1919. Serial No. 278,309. Term of patent 3 1/2 years.



The ornamental design for a phonograph cabinet as shown.

53,755. EMBLEM, AN ARTICLE OF MANUFACTURE. FRED. G. VOGLER, New York, N. Y., assignor to Harry Bamforth, New York, N. Y. Filed Dec. 30, 1918. Serial No. 268,989. Term of patent 3 1/2 years.



The herein shown ornamental design for an emblem, as article of manufacture.

53,756. DOLL, STATUETTE, SCULPTURE, OR OTHER ARTICLE OF SIMILAR NATURE. ISAAC N. WEBER and JESSE KASKEL, New York, N. Y. Filed Mar. 21, 1919. Serial No. 284,219. Term of patent 3 1/2 years.



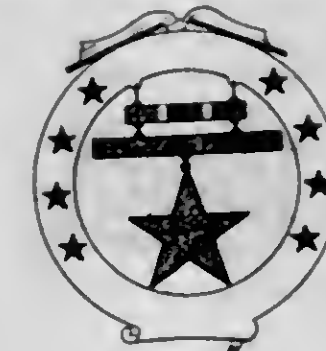
The ornamental design for a doll, statuette, sculpture, or other article of similar nature, as shown.

53,757. DOLL, STATUETTE, SCULPTURE, OR OTHER ARTICLE OF SIMILAR NATURE. ISAAC N. WEBER and JESSE KASKEL, New York, N. Y. Filed Mar. 21, 1919. Serial No. 284,220. Term of patent 3 1/2 years.



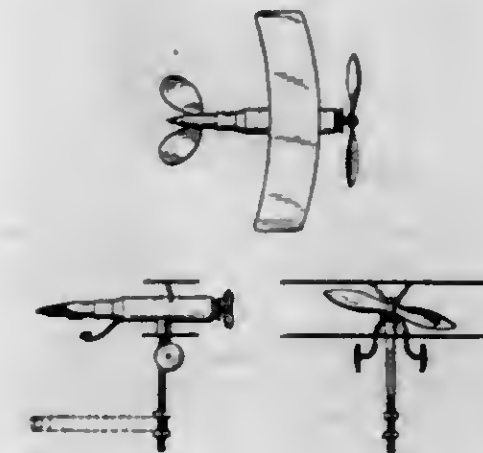
The ornamental design for a doll, statuette, sculpture, or other article of similar nature, as shown.

53,758. PIN. LAWRENCE L. WHITAKER and CHARLES C. ISHMAN, Windber, Pa. Filed Mar. 22, 1919. Serial No. 284,508. Term of patent 14 years.



The ornamental design for a pin, substantially as shown.

53,759. AUTOMOBILE-RADIATOR ORNAMENT. ANTON E. WOLTER, Everett, Wash. Filed May 3, 1919. Serial No. 294,587. Term of patent 3 1/2 years.



The ornamental design for an automobile radiator ornament, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 26, 1919.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 89,063. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS NOT INCLUDING ELECTRICAL APPARATUS.) THE T. E. HENRY FURNACE COMPANY, Cleveland, Ohio. Filed Sept. 7, 1915.



No claim is made to the word "Moncrief" apart from the mark shown in the drawing.

Particular description of goods.—Furnaces.
Claims use since Mar. 20, 1913.

Ser. No. 93,118. (CLASS 32. FURNITURE AND UP-
HOLSTERY. CONTINENTAL BEDDING MANUFACTURING
COMPANY, San Francisco, Calif. Filed Feb. 26, 1916.



No claim being made to the representation of a mat-
tress except as associated with the other features of the
mark.

Particular description of goods.—Mattresses.
Claims use since Nov. 1, 1914.

Ser. No. 94,836. (CLASS 48. MALT BEVERAGES, EX-
TRACTS AND LIQUORS.) UNITED BREWERS COM-
PANY, Chicago, Ill. Filed May 1, 1916. Under ten-year
proviso.



The lining shown in the drawing being intended to rep-
resent shading only.

Particular description of goods.—Beer.
Claims use since early in the year 1890.

265 O. G.—39

Ser. No. 99,332. (CLASS 44. DENTAL, MEDICAL, AND
SURGICAL APPLIANCES.) ALEXANDER E. BLOCK, St.
Louis, Mo. Filed Nov. 17, 1916.

ARCH BUILDER

Particular description of goods.—Flexible Non-Metallic
Supports for the Longitudinal Arch of the Foot.
Claims use since Dec. 1, 1910.

Ser. No. 100,808. (CLASS 30. CLOTHING.) MADELETHE
COMPANY, Saugas, Mass. Filed Jan. 22, 1917.



Particular description of goods.—Solen made of Ar-
tificial Leather.
Claims use since Aug. 15, 1916.

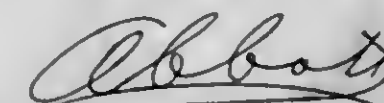
Ser. No. 103,082. (CLASS 46. FOODS AND INGREDI-
ENTS OF FOODS.) THE IVEY COMPANY, Minneapolis,
Minn. Filed Apr. 18, 1917.



Chocolates—

No claim being made to the word "Chocolates."
Particular description of goods.—Candy.
Claims use since Jan. 1, 1910.

Ser. No. 104,017. (CLASS 6. CHEMICALS, MEDI-
CINES, AND PHARMACEUTICAL PREPARATIONS.)
THE ABBOTT LABORATORIES, Chicago, Ill. Filed May 23,
1917.



Particular description of goods.—Pharmaceutical and
Biological Preparations in the Form of Granules, Pills,
Compressed Tablets, Tablet Triturates, and Hypodermic

[Vol. 265. No. 4.]

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Tablets Used in the Treatment of Practically All Pathological Conditions; Ointments and Salves Used in the Treatment of Abrasions, Wounds, Skin Diseases, Nasal Catarrh, Hemorrhoids, and All other Diseases in Which the Indicated Remedy Can Best be Applied in the Form of an Unguent; Bougies and Suppositories Used for the Treatment of Diseases of the Rectum and Genito-Urinary Organs; Biologic Products for the Treatment of Diphtheria, Typhoid, Variola, Tetanus, Pneumonia, Scarlatina, and other Diseases of Bacterial Origin; Creams and Lotions for the Treatment of Wounds, Abrasions, and Skin Diseases; Oils and Emulsions for the Treatment of Constipation, General Debility, Malnutrition; Powders for the External Treatment of Parasitic Diseases, Wounds, Dermatoses, Vaginitis, &c.; and Pharmaceutical and Medicinal Chemicals in Liquid Form, Such as Tinctures, Fluid Extracts, Colloids, True Solutions and Emulsions, for the Treatment of Practically All Pathological Conditions; Drugs and Medicinal Chemicals in Liquid Preparations—Namely, the Elixir of Buchu, Used as a Diuretic; the Emulsion of Cod-Liver Oil with Wild Cherry, Used as an Alterative; Fluid Extract of Asclepias, Used as a Diaphoretic, Emetic, and Cathartic; Compound Oil of Hyoscyamus, Used as an Anodyne; Liniment of Ammonium Iodid, Used as an External Disinfectant Application; Lotion of Lead and Opium, Used as an Astringent and Sedative for External Application; Zinc Paste, Used as an Antiseptic and Protectant in Skin Diseases; Solution of Ammonium Citrate, Used as a Refrigerant and Diuretic; Eucalyptol Spray, Used as an Inhaler in the Form of a Nebulant; Syrup of Ammonium Hypophosphite, Used as a Tonic; Tincture of Aloes and Myrrh, Used as a Purgative and Emmenagogue.

Claims use since Jan. 1, 1894.

Ser. No. 104,139. (CLASS 45. BEVERAGES, NON-ALCOHOLIC. LIQUID CARBONIC COMPANY, Chicago, Ill. Filed May 29, 1917.

RED DIAMOND

The trade-mark consists of the words "Red Diamond." Particular description of goods.—Beverages, Non-Alcoholic—Namely, Root-Beer, Ginger Ale, and the Following Flavoring-Syrups: Lemon Syrup, Orange Syrup, Cherry Syrup, Loganberry Syrup, Grape Syrup.

Claims use since June 25, 1916.

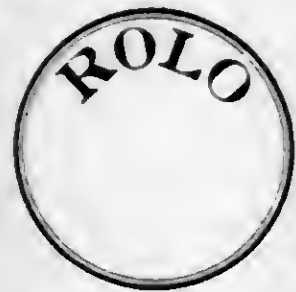
Ser. No. 104,538. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ALBAUGH-DORAN CO., Chicago, Ill., assignor to Square Turn Tractor Co., Norfolk, Nebr., a Corporation of Delaware. Filed June 20, 1917.

SQUARETURN

Particular description of goods.—Tractors.

Claims use since February, 1914.

Ser. No. 104,741. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) SAMUEL HUGHES, Berkeley, Calif. Filed June 29, 1917.



Particular description of goods.—Whirligigs.

Claims use since June, 1916.

Ser. No. 105,370. (CLASS 12. CONSTRUCTION MATERIALS.) JOSEPH E. WARD, Long Beach, Calif. Filed July 30, 1917.

WARDAMITE

Particular description of goods.—A Blinder for the Formation and Treatment of Road-Surfaces.

Claims use since the 15th day of May, 1916.

Ser. No. 107,908. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Dec. 12, 1917.

Si-E-DA

Particular description of goods.—Canned Fruits, Canned Vegetables, and Canned Fish.

Claims use since Sept. 21, 1917.

Ser. No. 108,027. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WITTENBERG-KING COMPANY, Portland, Oreg. Filed Dec. 17, 1917.



Particular description of goods.—Evaporated Fruits and Vegetables.

Claims use since Oct. 14, 1916.

Ser. No. 108,147. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HOSKINS MANUFACTURING COMPANY, Detroit, Mich. Filed Dec. 26, 1917.

Chromon

Particular description of goods.—Alloys Containing Iron and Chromium.

Claims use since Oct. 1, 1917.

Ser. No. 108,148. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HOSKINS MANUFACTURING COMPANY, Detroit, Mich. Filed Dec. 26, 1917.

Ferrel

Particular description of goods.—Alloys Containing Iron and Nickel.

Claims use since Oct. 1, 1917.

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Ser. No. 108,149. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HOSKINS MANUFACTURING COMPANY, Detroit, Mich. Filed Dec. 26, 1917.

Mangel

Particular description of goods.—Alloys Containing Nickel and Manganese.

Claims use since Oct. 1, 1917.

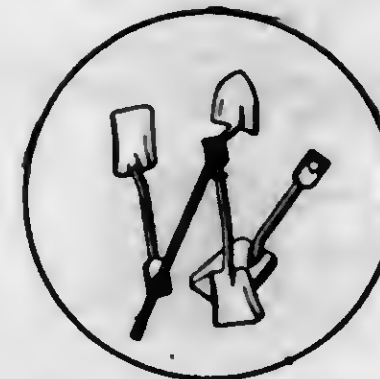
Ser. No. 108,978. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) LILLIAN V. DONAVAN, Lexington, N. C. Filed Feb. 13, 1918.



Particular description of goods.—Coffee-Percolators.

Claims use since Feb. 8, 1918.

Ser. No. 109,185. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE WYOMING SHOVEL WORKS, Wyoming, Pa. Filed Feb. 23, 1918.



Particular description of goods.—Agricultural and Earth-working Implements Comprising Shovels, Spades, and Scoops.

Claims use since May, 1896.

Ser. No. 109,244. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOSEPH F. JONES, La Grange, Ill. Filed Feb. 27, 1918.

AERO-BIKE

Particular description of goods.—Children's Coasters.

Claims use since Oct. 1, 1917.

Ser. No. 109,790. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ANDERSON ELECTRIC SPECIALTY CO., Chicago, Ill. Filed Mar. 26, 1918.

AUTOREELITE

Particular description of goods.—Electric Head-Lamps and Electric Spot-Lamps for Automobiles.

Claims use since Apr. 8, 1916.

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Ser. No. 110,118. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) GOODLASS WALL & COMPANY LIMITED, Liverpool, England. Filed Apr. 11, 1918.



Under ten-year proviso.

Particular description of goods.—Paste Paint, Ready-Mixed Paints, Enamel Paints, and Varnishes.

Claims use since the 14th day of June, 1876.

Ser. No. 110,306. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SUPERIOR LAMP MFG. CO., New York, N. Y. Filed Apr. 18, 1918.

L'ÉCLAIREUR

Particular description of goods.—Electric Lamps.

Claims use since April, 1915.

Ser. No. 110,369. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) AUGUSTUS LEON CUTLER, Wakefield, Mass. Filed Apr. 22, 1918.

KRAFFELT

Particular description of goods.—Paper Felt.

Claims use since on or about Aug. 9, 1911.

Ser. No. 110,372. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) FAIRMONT MINING MACHINERY COMPANY, Fairmont, W. Va. Filed Apr. 22, 1918.

**TURTLE
FAIRMONT
BACK**

No claim is made to the word "Fairmont" apart from the mark shown.

Particular description of goods.—Strainers Used in Water Distribution.

Claims use since Mar. 1, 1918.

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Ser. No. 110,439. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RED-OINT-A CHEMICAL CO. INC., Boston, Mass. Filed Apr. 25, 1918.

RED-OINTA

Particular description of goods.—An Ointment for Eczema, Psoriasis, and Kindred Eruptions and Irritations of the Skin.

Claims use since Feb. 27, 1918.

Ser. No. 110,482. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.

SKALEX

Particular description of goods.—A Compound for Removing Deposit from Automobile Radiators.

Claims use since July, 1914.

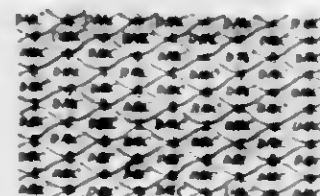
Ser. No. 110,490. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NORTHWESTERN CHEMICAL CO., Marietta, Ohio. Filed Apr. 27, 1918.



Particular description of goods.—Compound for Removing Deposit from Automobile Radiators; Compound for Removing Carbon Deposit from Cylinders of Internal-Combustion Engines; Fire-Extinguishers; Antifreezing Compound for Automobile Radiators; Soldering-Paste; Automobile Radiator Cement, (a Material for Introducing into the Cooling-Water to Seal Fractures in the Radiator.)

Claims use since February, 1914.

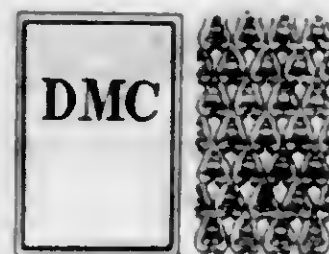
Ser. No. 110,732. (CLASS 43. THREAD AND YARN.) DOLLFUS MIEG & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed May 7, 1918.



Particular description of goods.—Threads, Yarns Made of Artificial Silk and Spun Silk.

Claims use since July 27, 1903.

Ser. No. 110,734. (CLASS 43. THREAD AND YARN.) DOLLFUS MIEG & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed May 7, 1918.



Particular description of goods.—Threads, Yarns Made of Artificial Silk and Spun Silk.

Claims use since July 27, 1903.

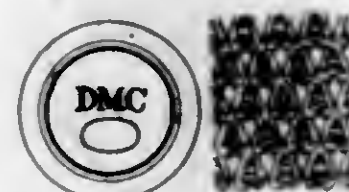
Ser. No. 110,735. (CLASS 43. THREAD AND YARN.) DOLLFUS MIEG & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed May 7, 1918.



Particular description of goods.—Threads, Yarns Made of Artificial Silk and Spun Silk.

Claims use since July 27, 1903.

Ser. No. 110,736. (CLASS 43. THREAD AND YARN.) DOLLFUS MIEG & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed May 7, 1918.



Particular description of goods.—Threads, Yarns Made of Artificial Silk and Spun Silk.

Claims use since July 27, 1903.

Ser. No. 110,805. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CROWN CORK AND SEAL COMPANY OF BALTIMORE CITY, Baltimore, Md. Filed May 10, 1918.

LIBERTY

Particular description of goods.—Bottle-Capping Machines.

Claims use since about the month of May, 1917.

Ser. No. 110,806. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CROWN CORK AND SEAL COMPANY OF BALTIMORE CITY, Baltimore, Md. Filed May 10, 1918.

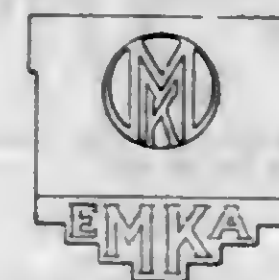
DIXIE

Particular description of goods.—Bottle-Capping Machines, Bottle-Filling Machines, and Bottle Filling and Capping Machines.

Claims use since about the month of December, 1917.

[Vol. 265. No. 4.]

Ser. No. 110,812. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MAX KLAAS, New York, N. Y. Filed May 10, 1918.



Particular description of goods.—Cutlery—Namely, Scissors, Pocket-Knives, and Table-Knives of Base Metal.

Claims use since about Mar. 1, 1918.

Ser. No. 110,882. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CHEMICAL COMPANY OF AMERICA, INC., New York, N. Y. Filed May 14, 1918.

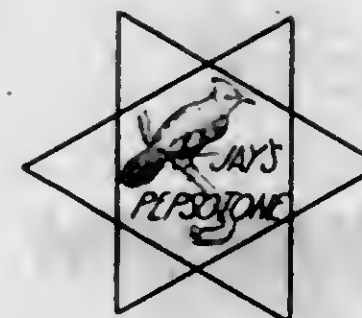


The lines upon the drawing indicate shading-lines upon the trade-mark.

Particular description of goods.—Chemical Compounds for Waterproofing Textile Fabrics.

Claims use since Sept. 7, 1917.

Ser. No. 110,908. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE PERSOTONE COMPANY, Huntington, W. Va. Filed May 15, 1918.



The triangular points of the border being printed in solid red.

Particular description of goods.—Tonic and Laxative Tablets and Medicines for Certain Disorders of the Stomach and Liver.

Claims use since Mar. 2, 1918.

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Ser. No. 110,928. (CLASS 39. CLOTHING.) FRANKLIN L. LANDENBERGER, Philadelphia, Pa. Filed May 16, 1918.



The words "Old Sol" being used for red.

Particular description of goods.—Hosiery.

Claims use since Apr. 26, 1913.

Ser. No. 110,968. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) STANDARD ASPHALT & REFINING CO., Chicago, Ill. Filed May 17, 1918.



The inclosing circle being immaterial.

Particular description of goods.—Asphaltic Paints.

Claims use since January, 1908.

Ser. No. 111,156. (CLASS 9. EXPLOSIVES, FIRE-ARMS, EQUIPMENTS, AND PROJECTILES.) JOHN T. HUNTER, INC., New York, N. Y. Filed May 23, 1918.

LIBERTY

The trade-mark comprising the word "Liberty."

Particular description of goods.—Matches.

Claims use since Apr. 25, 1918.

Ser. No. 111,216. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) CHARLES H. KEMPER, Westport, Conn. Filed May 27, 1918.

KEMPKE

The word "Kempke."

Particular description of goods.—Artificial Leather.

Claims use since January, 1917.

Ser. No. 111,437. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEORGE R. GIBSON COMPANY, New York, N. Y. Filed June 8, 1918.

DENTO-SEPTIC

Particular description of goods.—Toilet-Brushes—Namely, Hair, Nail, Tooth Brushes.
Claims use since Jan. 2, 1914.

Ser. No. 111,476. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) YA OLDE CHESHIRE CHEESE, LIMITED, London, England. Filed June 10, 1918.



Particular description of goods.—Wines.
Claims use since Feb. 10, 1908.

Ser. No. 111,493. (CLASS 39. CLOTHING.) JOHN M. GIVEN, INC., New York, N. Y.; Chicago, Ill., and Pittsburgh, Pa. Filed June 11, 1918.



Particular description of goods.—Children's Hosiery.
Claims use since Oct. 19, 1917.

Ser. No. 111,556. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VOIGT & CO., Chattanooga, Tenn. Filed June 13, 1918.

GADINOL

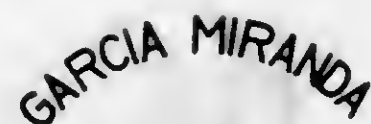
Particular description of goods.—A Pharmaceutical Preparation for Use as a General Reconstructive Tonic.
Claims use since May 29, 1918.

Ser. No. 111,633. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y. Filed June 17, 1918.

Western Electric

Particular description of goods.—Bar-Solder and Resin-Core Solder.
Claims use since January, 1910.

Ser. No. 111,990. (CLASS 17. TOBACCO PRODUCTS.) GARCIA MIRANDA CIGAR CO., INC., New York, N. Y. Filed July 8, 1918.



Particular description of goods.—Cigars.
Claims use since Feb. 28, 1917.

Ser. No. 112,206. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) SHERER GILBERT CO., Chicago, Ill. Filed July 18, 1918.

Sherer's Question Savers

No claim is made to the word "Sherer's" apart from the mark as shown.

Particular description of goods.—Removable Price and Article Tag Holders Known as Sherer Question Savers, Adapted to be Secured to Shelves.
Claims use since May 7, 1918.

Ser. No. 112,899. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GUSTAVE WENZEL-MANN, Galesburg, Ill. Filed Aug. 27, 1918.



This trade-mark consists of the colored word "Ezite."
Particular description of goods.—A Powdered Substance for Cleaning Purposes.
Claims use since Aug. 20, 1918.

Ser. No. 112,940. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) C. A. DUNHAM COMPANY, Marshalltown, Iowa. Filed Aug. 30, 1918.



No claim being made to "Heating Service" except in the association shown.

Particular description of goods.—Steam-Heating Apparatus Comprising Traps, Valves, Strainers, Separators, Regulating Devices, and Pumps Used in Connection with and Forming Part of Steam-Heating Systems.
Claims use since Aug. 12, 1918.

Ser. No. 113,123. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DEER & COMPANY, Moline, Ill. Filed Sept. 11, 1918.



Particular description of goods.—Cultivators and Parts Thereof.
Claims use since Aug. 10, 1918.

Ser. No. 113,245. (CLASS 12. CONSTRUCTION MATERIALS.) THE GARLAND CO., Cleveland, Ohio. Filed Sept. 19, 1918.



The right to the exclusive use of the sprayer except in connection with the other features of the mark shown is hereby disclaimed.

Particular description of goods.—Glazing Compounds and Cements Composed of Asbestos Fiber and Weather-Resisting Non-Drying Oils, and Used for Holding Glass, Repairing Glass, Repairing Worn-Out Gutters, Sealing Greenhouse Roofs and Sides, and Mending Leaks in Any Kind of a Surface.
Claims use since February, 1915.

Ser. No. 113,367. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE MARATHON TIRE & RUBBER CO., Cuyahoga Falls, Ohio. Filed Sept. 25, 1918.

MARATHON

The word "Marathon."
Particular description of goods.—Leather, Fabric, or Rubber Belts for Supporting Outer Garments.
Claims use since about July 1, 1917.

Ser. No. 113,517. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) VESUVIUS CRUCIBLE COMPANY, Swisnvaile, Pa. Filed Oct. 1, 1918.



Particular description of goods.—Crucibles.
Claims use since July 20, 1918.

Ser. No. 113,557. (CLASS 12. CONSTRUCTION MATERIALS.) THE CLEARFIELD CLAY WORKING COMPANY, Clearfield, Pa. Filed Oct. 3, 1918.

LIBERTY

Particular description of goods.—Brick and Tile Manufactured from Fire-Clay.
Claims use since April, 1918.

Ser. No. 113,615. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) UNION TOOL COMPANY, Torrance, Calif. Filed Oct. 7, 1918.



Particular description of goods.—Tractors, Steam-Engines, and Gas-Engines.
Claims use since May 1, 1908.

Ser. No. 113,620. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) R. GERBER & CO., Chicago, Ill. Filed Oct. 8, 1918.



The lining being for shading only.
Particular description of goods.—Salad and Cooking Oil.
Claims use since Apr. 27, 1918.

Ser. No. 113,796. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) FERDINAND STRAUSS, INC., New York, N. Y. Filed Oct. 18, 1918.



The words "Strause" and "Toys" are not claimed as a part of the technical trade-mark.
Particular description of goods.—Toys—Namely, the Following Goods in Toy Form, to wit: a Ball Shooting

and Receiving Basket Called the Kan-U-Katch, Balking Mule, Dancing Figures, Coon Jigger, Champion Prize-Fighters, Dancing Sailor; Movable Figure Indicating Mechanical Porter; Climbing Monkey, Funny Clown, Traveling Seesaw, Traveling Acrobat, Repeating Cannon, Miniature Ranges, Kitchen Utensils, Tea Sets, Sand-Molds, Sand-Buckets, Sand-Shovels, Tool Sets, Tool-Chests; Clown and Ball, Clapper-Horns, Tin Horns, Bird-Whistles, Flags, Musical Bouquets, Horn Pipes, Blow-Horns, Display Flag-Stand, Miniature Armored Motor-Car, Wheeled Horse and Rider, Hocking Toy, and Papier-Mâché Toys.

Claims use since Sept. 10, 1918.

Ser. No. 112,950. (CLASS 17. TOBACCO PRODUCTS.) THE UNITED KINGDOM TOBACCO COMPANY, LIMITED, London, England. Filed Oct. 30, 1918.

BEN-GAR

Particular description of goods.—Cigarettes.
Claims use since 1892.

Ser. No. 114,231. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) JAMES G. TRUMBLY, Chicago, Ill. Filed Nov. 18, 1918.

OVER THE
TOP

Particular description of goods.—Automobile-Tops.
Claims use since Dec. 18, 1918.

Ser. No. 114,278. (CLASS 37. PAPER AND STATIONERY.) LOUIS SAINBERG, New York, N. Y. Filed Nov. 21, 1918.

ELSANE

Particular description of goods.—Desk Pads, Adjustable Desk and Corners, Board-Clips, Sandpaper Pencil-Pointers, Ordinary Paper Index-Guides, and Shoestring, Loose-Leaf Binders Provided with Holes Punched for Shoe Strings or Fasteners.

Claims use since about Dec. 10, 1917.

Ser. No. 114,488. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) R. C. WADE CO., Chicago, Ill. Filed Dec. 4, 1918.

Jonofone

Particular description of goods.—Needles for Phonographs.
Claims use since Nov. 15, 1918.

Ser. No. 114,340. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN H. GARDELLA, Milford, Mass. Filed Dec. 7, 1918.

GARD-O-LAX

Particular description of goods.—A Laxative.
Claims use since Sept. 1, 1918.

Ser. No. 114,601. (CLASS 12. CONSTRUCTION MATERIALS.) THE STRUCTURAL SLATE COMPANY, Pen Argyl, Pa. Filed Dec. 11, 1918.



Particular description of goods.—Structural Slate.
Claims use since May 1, 1918.

Ser. No. 114,703. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY W. MCCHESENEY, St. Louis, Mo. Filed Dec. 18, 1918.

TARTHOL

Particular description of goods.—A Medicinal Preparation for Use as a Nasal Inhalant for Cold in the Head, Catarrh, Asthma, Bronchitis, and Influenza.
Claims use since Jan. 1, 1917.

Ser. No. 114,904. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM CHARLES OAGNON, Horton, S. D. Filed Dec. 31, 1918.

Sweetie

Particular description of goods.—A Wrapped Candy Commonly Known as a Kiss.
Claims use since Dec. 16, 1918.

Ser. No. 114,968. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE CHANEY MANUFACTURING COMPANY, Springfield, Ohio. Filed Jan. 3, 1919.

"JUMBO"

Particular description of goods.—Thermometers, Barometers, and Rain-Gages.
Claims use since about the 1st day of March, 1905.

[Vol. 265. No. 4.]

Ser. No. 114,972. (CLASS 37. PAPER AND STATIONERY.) F. A. FLINN, INC., New York, N. Y. Filed Jan. 3, 1919.

LIBERTY

Particular description of goods.—Writing and Printing Paper.

Claims use since July, 1904.

Ser. No. 115,136. (CLASS 20. LINOLEUM AND OILED CLOTH.) GEORGE W. BLABON COMPANY, Philadelphia, Pa. Filed Jan. 13, 1919.

FELTEX

Particular description of goods.—Imitation Linoleum Made by Printing on Felt.
Claims use since some time in October, 1915.

Ser. No. 115,229. (CLASS 10. PAINTS AND PAINTERS' MATERIALS.) KURT R. STRANDBERG, Springfield, Mass. Filed Jan. 16, 1919.



Particular description of goods.—Dry, Paste, and Ready-Mixed Paints, and Varnishes.
Claims use since Aug. 23, 1918.

Ser. No. 115,230. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) LESLIE M. THORNTON, Kansas City, Mo. Filed Jan. 16, 1919.

CACTUS

Particular description of goods.—Polish for the Finish on Pianos, Furniture, Automobiles, Polished Floors.
Claims use since about Feb. 1, 1915.

Ser. No. 115,237. (CLASS 12. CONSTRUCTION MATERIALS.) DAVID BERNSTEIN, Cleveland, Ohio. Filed Jan. 17, 1919.

Wondersseal

No exclusive right is claimed in the word "Seal" apart from the mark herein claimed.

Particular description of goods.—Plastic Roofing-Cement.
Claims use since February, 1916.

[Vol. 265. No. 4.]

Ser. No. 115,393. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK C. SLAGLE, Phoenix, Ariz. Filed Jan. 23, 1919.

EX-KRE-NOL

Particular description of goods.—A Preparation for the Treatment of Catarrh.

Claims use since Dec. 14, 1918.

Ser. No. 115,574. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) MONTON ERNEST NEWTON, Portland, Oreg. Filed Feb. 1, 1919.



Particular description of goods.—Silica Product in Powdered Form in Its Natural State Called Diatomaceous Earth.

Claims use since June 1, 1918.

Ser. No. 115,598. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NULOMOLINE COMPANY, New York, N. Y. Filed Feb. 3, 1919.

NULOMOLINE

Particular description of goods.—A Table-Syrup, the Product of Pure Cane-Sugar.
Claims use since Nov. 1, 1910.

Ser. No. 115,610. (CLASS 28. JEWELRY AND PRECIOUS METAL WARE.) EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo. Filed Feb. 4, 1919.

Madonna

Particular description of goods.—Wrist-Rosaries.
Claims use since Dec. 18, 1918.

Ser. No. 115,644. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE MOORE OIL COMPANY, Cincinnati, Ohio. Filed Feb. 5, 1919.

NEATSTEAD
OIL

No claim is made to exclusive use of the word "Oil."
Particular description of goods.—A Soluble Oil Used for the Treatment of Silk.
Claims use since Mar. 1, 1918.

Ser. No. 115,654. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) BECKHUIS LUMBER COMPANY, Pittsfield, Mass. Filed Feb. 6, 1919.

ARTCRAFT

Particular description of goods.—Buildings, Both Ready Cut and Portable, Made of Dressed Lumber.
Claims use since July 1, 1916.

Ser. No. 115,659. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LOCKHART CONSUM-DUM & LENS CORPORATION, Southbridge, Mass. Filed Feb. 6, 1919.

NOMAR

Particular description of goods.—Special Brands of Emery and Corundum in Powdered Form and Used for Abrasive and Polishing Purposes.
Claims use since Jan. 1, 1919.

Ser. No. 115,677. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) EMMA T. MITTELSTADT, New York, N. Y. Filed Feb. 7, 1919.



The picture being fanciful.
Particular description of goods.—Hair-Pads.
Claims use since Jan. 29, 1919.

Ser. No. 115,699. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) STANDARD CHEMICAL CO., Emeryville, Calif. Filed Feb. 8, 1919.



Particular description of goods.—Insecticides and Fungicides and Disinfectants.
Claims use since Jan. 22, 1919.

Ser. No. 115,706. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM O. FRAILBY & SON, Lancaster, Pa. Filed Feb. 8, 1919.



Particular description of goods.—A Tonic and Digestive System-Cleaner.
Claims use since about Sept. 15, 1917.

Ser. No. 115,847. (CLASS 33. GLASSWARE.) TIP-PANT FURNACES, New York, N. Y. Filed Feb. 13, 1919.



Particular description of goods.—Glassware—viz, Fruit-Bowls, Berry-Bowls, Nut-Bowls, Sandwich and Cake Plates, Finger-Bowls, Ice-Plates, Bonbons, Salts, Liqueurs, Sherries, Claretts, Champagnes, Tumblers, Goblets, Decanters, Tankards, Loving-Cups, Sugars and Creams, Comportiers, Flower Bowls and Vases, Glass Shades for Table and Desk Lamps, Special Wine-Glasses, Soda-Tumblers, and Cocktail-Glasses.
Claims use since October, 1902.

Ser. No. 115,853. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WARREN W. DICKSON, Philadelphia, Pa. Filed Feb. 14, 1919.



Particular description of goods.—A Remedy for Nausea.
Claims use since September, 1908.

Ser. No. 115,909. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Feb. 17, 1919.

The Phonograph with a Soul

The trade-mark consists of the phrase "The Phonograph With a Soul," no claim being made to the word "Phonograph" apart from the mark shown in the drawing.
Particular description of goods.—Phonographs.
Claims use since Mar. 16, 1918.

[Vol. 285. No. 4.]

Ser. No. 115,910. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE FORGED PRODUCTS CO., Chicago, Ill. Filed Feb. 17, 1919.



Particular description of goods.—Mechanics' Tools—viz, Hammers, Wrenches, and Pliers.
Claims use since Feb. 1, 1919.

Ser. No. 115,935. (CLASS 38. PRINTS AND PUBLICATIONS.) TREAT 'EM ROUGH PUBLISHING CO., INC., New York, N. Y. Filed Feb. 17, 1919.

TREAT 'EM ROUGH

The trade-mark consists of the words "Treat 'Em Rough."
Particular description of goods.—A Monthly Periodical.
Claims use since Nov. 15, 1918.

Ser. No. 115,942. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) WISCONSIN TEXTILE BY-PRODUCTS CO., Sheboygan, Wis. Filed Feb. 17, 1919.



Particular description of goods.—Wiping-Waste Made of Cotton Thread and Shredded Textile Clippings.
Claims use since Dec. 4, 1918.

Ser. No. 115,952. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) HELMER E. ERICKSON, Chicago, Ill. Filed Feb. 18, 1919.



Particular description of goods.—Rubber Patches for Repairing Rubber or Fabric Articles.
Claims use since April, 1915.

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Ser. No. 115,956. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OLIVETH ALVERSON CO., Mason City, Iowa. Filed Feb. 18, 1919.



We disclaim a cross colored red and a white cross on a red background.
Particular description of goods.—A Medicinal Compound for Treating Sore Throat, Earsache, Headache, Hay-Fever, Catarrh, Rheumatism, Cold-Sores, Bruises; Chapped Hands, Face, and Lips; Sunburn, Corns, Eczema, Burns, Sores, Sore Eyes, Pneumonia, Scalp Diseases, Skin Diseases; Inflammation of the Skin, Tissues, and Muscles; Insect-Bites, Chills, Croup, Neuralgia, Piles.
Claims use since May 1, 1901.

Ser. No. 115,961. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ALFRED PASSERO, Rochester, N. Y. Filed Feb. 18, 1919.



No claim is made to the representation of a square apart from the trade mark shown in the drawing.
Particular description of goods.—Dyes for Dyeing Leather.
Claims use since Dec. 26, 1918.

Ser. No. 115,971. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CENTRAL STAMPING COMPANY, New York, N. Y. Filed Feb. 19, 1919.

PRIMO

Particular description of goods.—Enamelled Ware—Namely, Oval Foot-Baths, Coffee-Biggin, Seamless Bowls, Washbowls, Kettle-Bottoms, Chambers, Chamber-Covers, Seamless Colanders, Seamed Colanders, Straight Cups, Flaring Drinking-Cups, Seamed Cups, Children's Cups, Cups and Sangers, Cuspidors, Covers for General Use, Soda-Dippers, Britannia Shaped Dippers, (Hollow Handles;) Half-Cocoa-Shape Dippers, (Hollow Handles;) Cup-Dippers, (Solid Hooked Handles;) Windsor Dippers, (Hollow Handles;) Hanging Soap-Dishes, Fruit-Jar Fillers, Funnels; Fish-Kettles, (Seamless, with Retained Seamless Covers and Wire Racks;) Fish-Kettles, (Seam-

less, with Enameled Seamless Covers and Retained Wire Racks;) Sauce-Kettles, (with Covers;) Tea-Kettles; Preserve-Kettles, (Lipped;) Solid Ladles, Pierced Ladles; Soup-Ladles, (Metal Handles;) Soup-Ladles, (Wood Handles;) Blane-Mange Molds; Pails, (Tin Covers;) Chamber-Pails; Water-Pails, (Seamed;) Water-Pails, (Seamless;) Deep Bake-Pans, Turk's-Head Cake-Pans, Lipped Fry-Pans, Dish-Pans, Rinsing-Pans, Pudding-Pans, Milk-Pans; Lipped Saucepans, (Seamless;) Lipped Saucepans, Shallow Stew-Pans, Deep Stew-Pans; Saucepans, (Seamless, with Tinned Covers;) Straight Saucepans, (Seamless, with Tinned Covers;) Covered Saucepans, (Seamed, with Tinned Covers;) Muffin-Pans on Frame, Lemon-Cake Pans on Frame, Oblong Stove-Pans or Dripping-Pans, (with Handles;) Oblong Stove-Pans or Dripping-Pans, (without Handles;) Oblong Pans; Oblong Pans, (with Handles;) Deep Bread-Pans, Sponge-Cake Pans, Shallow Jelly-Cake Pans, Deep Jelly-Cake Pans, Mountain-Cake Pans, Shallow Pie-Plates, Deep Pie-Plates; Sauce-Pots, (Seamless, with Tinned Covers;) Covered Sauce-Pots, (Seamed;) Soup-Stock Pots, (Seamless, with Tinned Covers;) Stove-Pots, Teapots, Coffee-Pots, Roasters, Flat Skimmers, Cake-Turners, Round Trays, Oval Trays, Kitchen Companions, (Nine Articles in One—Pie-Plate, Roaster, Pudding-Pan, Stew-Pan, Warming-Pan, Closed or Open Warmer, Cereal-Cooker, Sauce-Pot and Hot Water Vegetable-Dish Made by Using Alone or in Different Combinations a Stew-Pan, Pie-Plate, and Pudding-Pan.)

Claims use since 1898.

Ser. No. 116,089. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LIBERTY CHEMICAL WORKS, Chicago, Ill. Filed Feb. 24, 1919.

LIBERTY

Particular description of goods.—A Chemical Carbon-Remover, a Chemical Automobile-Top Dressing, a Chemical Pneumatic-Tire Dressing, and a Chemical Antifreezing Solution.

Claims use since on or about Jan. 15, 1919.

Ser. No. 116,118. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) J. J. WITTEK & Co., Seattle, Wash. Filed Feb. 24, 1919.

SEA SHELL GLOSS

No claim is made to the word "Gloss" apart from the mark shown in the drawing.

Particular description of goods.—A Flager-Nail Polish.

Claims use since Nov. 27, 1917.

Ser. No. 116,291. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) STEWART BROS. & COMPANY, Glasgow, Scotland. Filed Mar. 4, 1919.

STEBRO

Particular description of goods.—Trousersings, Saxones, and Piece Goods of Wool, Worsted, Cheviots, Serges, Worsted, and Hair or Combinations Thereof.

Claims use since the 28th day of September, 1909.

Ser. No. 116,339. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ADA K. HARNED, New York, N. Y. Filed Mar. 6, 1919.



The representation of the soldier being strictly fanciful. Particular description of goods.—A Card-Rack for Solitaire Lay-Outs.

Claims use since Feb. 20, 1919.

Ser. No. 116,354. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CONNIE H. WILSON and ROBERT F. HOLLAND, Asheville, N. C. Filed Mar. 6, 1919.



No claim is made for the exclusive right to the phrase "Take It With Confidence."

Particular description of goods.—A Preparation for Use in the Treatment of Headache.

Claims use since Jan. 1, 1919.

Ser. No. 116,387. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHARLES WILLIAM MATTHEWS, Cowes, Isle of Wight, England. Filed Mar. 7, 1919.

MATMAH

Particular description of goods.—Roller and Condenser Tube Cleaners Having a Cutting Edge.

Claims use since Sept. 17, 1918.

Ser. No. 116,438. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DORHLER DIE-CASTING COMPANY, Brooklyn, N. Y. Filed Mar. 10, 1919.

DO-LITE

Particular description of goods.—Babbitt-Lined Metal Bearings.

Claims use since Feb. 27, 1919.

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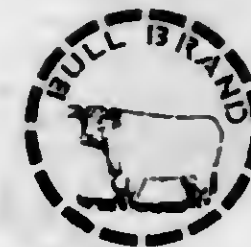
Ser. No. 116,586. (CLASS 38. PRINTS AND PUBLICATIONS.) SOUTHERN RURALIST CO., Atlanta, Ga. Filed Mar. 14, 1919.



The figure of the boy being fanciful. Particular description of goods.—A Semimonthly Publication.

Claims use since about Feb. 16, 1919.

Ser. No. 116,607. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. A. NOLTEMEIER CO., INC., New York, N. Y. Filed Mar. 15, 1919.



No claim being made to the exclusive use of the word "Brand" apart from the mark shown in the drawing. Particular description of goods.—Fresh Vegetables.

Claims use since Feb. 15, 1919.

Ser. No. 116,662. (CLASS 39. CLOTHING.) ROBERT E. MILLER, INC., New York, N. Y. Filed Mar. 17, 1919.



The outline representation of a heel shown in the drawing is not claimed as a part of the present trade-mark.

Particular description of goods.—Rubber Heels.

Claims use since Feb. 26, 1919.

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Ser. No. 116,683. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE FISK RUBBER COMPANY, Chicopee Falls, Mass. Filed Mar. 18, 1919.

FISK

Particular description of goods.—Rubber Tires. Claims use since the year 1898.

Ser. No. 116,697. (CLASS 37. PAPER AND STATIONERY.) THE ALLING & CORY COMPANY, Rochester, N. Y. Filed Mar. 19, 1919.

UNCLE SAM BOND

The word "Bond" being disclaimed separate and apart from the mark shown in the drawing.

Particular description of goods.—Printing and Writing Paper.

Claims use since Jan. 18, 1915.

Ser. No. 116,740. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) HUGO GOTTSCHALK, Reedsville, Pa. Filed Mar. 20, 1919.

"KILLAGLARE"

Particular description of goods.—Eyeglasses and Goggles.

Claims use since on or about Feb. 19, 1919.

Ser. No. 116,756. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAMS CHOCOLATE CO., Scranton, Pa. Filed Mar. 20, 1919.

Coronation

Particular description of goods.—Candy. Claims use since October, 1911.

Ser. No. 116,764. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BROOKGATE REMEDIES CO., Evansville, Ind. Filed Mar. 21, 1919.



The words "Brookgate Remedies Co., Incorporated" printed upon the trade-mark are disclaimed as a part of said trade-mark.

Particular description of goods.—Medicinal Salves as a Preventive of Local Infection in Wounds.

Claims use since Aug. 1, 1918.

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Ser. No. 116,799. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) RAINIER MOTOR CORPORATION, Flushing, N. Y. Filed Mar. 21, 1919.

Rainier

The same appearing in the handwriting of John T. Rainier, president of the applicant corporation.
Particular description of goods.—Motor-Trucks.
Claims use since 1906.

Ser. No. 116,850. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) REPUBLIC ELECTRIC CO., INCORPORATED, Orange, N. J. Filed Mar. 24, 1919.



The use of the illustration of the incandescent lamp apart from the mark is not claimed.
Particular description of goods.—Electric Incandescent Lamps.
Claims use since Jan. 1, 1919.

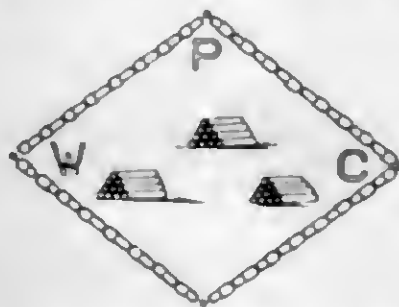
Ser. No. 116,886. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) CHARLES WILLIS LARSEN, New York, N. Y. Filed Mar. 25, 1919.

DUTCH MAID



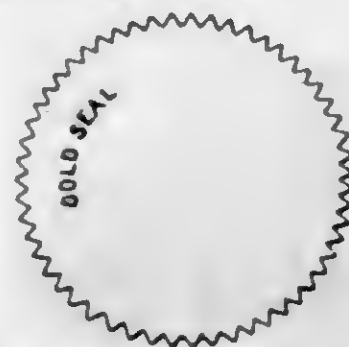
Particular description of goods.—Snap-Fasteners.
Claims use since about Feb. 15, 1919.

Ser. No. 116,937. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN W. WINFIELD, Wylam, Ala. Filed Mar. 26, 1919.



Particular description of goods.—A Preparation for the Treatment of Piles.
Claims use since Jan. 1, 1919.

Ser. No. 116,987. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) ABE CROOKS, Toledo, Ohio. Filed Mar. 28, 1919.



Particular description of goods.—Transparent Coating Preparations to be Used on Smooth Surfaces, as Glass, to Prevent Clouding from Fog or Steam.
Claims use since Mar. 5, 1919.

Ser. No. 117,009. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) N. GOODMAN, WISE & COMPANY, Chicago, Ill. Filed Mar. 29, 1919.



Particular description of goods.—Cotton-Seed and Soy-Bean Oil.
Claims use since Dec. 2, 1918.

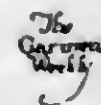
Ser. No. 117,138. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HANDLER CREAMERY CO., Baltimore, Md. Filed Apr. 2, 1919.

Country Club

Particular description of goods.—Ice-Cream, Frozen Custards, and Ices.
Claims use since Apr. 1, 1919.

Ser. No. 117,171. (CLASS 38. PRINTS AND PUBLICATIONS.) THE ALLEN-NUGENT CO., New York, N. Y. Filed Apr. 5, 1919.

Nugent's



No claim being made to the exclusive use of the words "The Garment Weekly" apart from the mark as shown in the drawing.
Particular description of goods.—A Weekly Publication.
Claims use since 1902.

Ser. No. 117,204. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) M. E. SMITH & CO., INC., Omaha, Nebr. Filed Apr. 5, 1919.



Particular description of goods.—Snap-Fasteners.
Claims use since May 1, 1918.

Ser. No. 117,208. (CLASS 12. CONSTRUCTION MATERIALS.) HENRY WEIS MANUFACTURING COMPANY, Kansas City, Mo., and Atchison, Kans. Filed Apr. 5, 1919.

WEI STEEL

Particular description of goods.—Metal Partitions Constituting Permanent Constituent Elements of a Building.
Claims use since about Oct. 1, 1915.

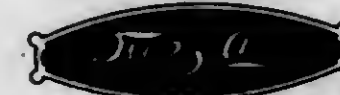
Ser. No. 117,226. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE GENERAL TIRE & RUBBER COMPANY, Akron, Ohio. Filed Apr. 7, 1919.



In the trade-mark as applied to the tire-casings the shield is colored a terra-cotta red, while the design thereon is colored black.

Particular description of goods.—Rubber-Tire Casings.
Claims use since Oct. 1, 1918.

Ser. No. 117,285. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) UNIVERSAL APPLIANCE CORPORATION, Kansas City, Mo. Filed Apr. 8, 1919.



Particular description of goods.—Electric Motors and Electric-Motor Parts.
Claims use since about Mar. 22, 1919.

Ser. No. 117,321. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE DAYTON TOY & SPECIALTY CO., Dayton, Ohio. Filed Apr. 10, 1919.

DATON

Particular description of goods.—Toy Wagons, Toy Wheelbarrows, Toy Carts.
Claims use since Apr. 1, 1919.

Ser. No. 117,347. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE MATCHLESS METAL POLISH CO., Chicago, Ill., and Glen Ridge, N. J. Filed Apr. 10, 1919.



The word "Lime" is disclaimed apart from the mark shown in the drawing.

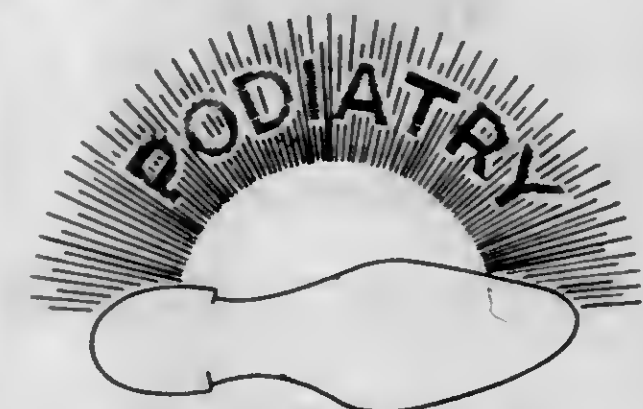
Particular description of goods.—A Buffing or Polishing Composition to be Applied on Buffing or Polishing Wheels in the Buffing or Polishing of Metals or Wood.
Claims use since Mar. 31, 1919.

Ser. No. 117,393. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THOMSON ELECTRIC WELDING CO., Boston, Mass. Filed Apr. 11, 1919.

THOMSON

Particular description of goods.—Electric Metal-Working Apparatus—Namely, Machines and Devices for Electric Welding, Heating, Forging, Riveting, Brazing, Soldering, and Shaping of Metals and Transformers, Reactive Coils, Switches, and Parts for Such Apparatus.
Claims use since Apr. 18, 1888.

Ser. No. 117,413. (CLASS 39. CLOTHING.) THE PODIATRY SHOE COMPANY, INC., New York, N. Y. Filed Apr. 12, 1919.



No claim is made to the exclusive right to the use of the word "Podiatry" apart from the mark shown in the drawing.

Particular description of goods.—Orthopedic Shoes and Shoes of Special Design in Connection with Podiatry Work.
Claims use since on or about the 15th day of October, 1918.

Ser. No. 117,453. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GRIFFIN MANUFACTURING Co. Inc., New York, N. Y. Filed Apr. 14, 1919.



Particular description of goods.—Shoe-Polishes, Shoe-Blackings, Shoe-Cleaners, Leather Dressings, Leather-Preservatives, and Metal-Polish.
Claims use since Apr. 4, 1904.

Ser. No. 117,502. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) PARKER SUPPLY COMPANY, INC., New York, N. Y. Filed Apr. 15, 1919.



No claim being made to the rectangular part of the design not included in the triangle apart from the mark shown in the drawing.

Particular description of goods.—Expansion-Bolts, Metal Screws, Screw-Anchors, and Sash-Chains.
Claims use since about April, 1916.

Ser. No. 117,527. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE HARTMAN COMPANY, Chicago, Ill. Filed Apr. 16, 1919.



Particular description of goods.—Poultry-Fountains and Brood-Coops.
Claims use since June, 1918.

Ser. No. 117,506. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) JEROME H. REIMERS, Washington, D. C. Filed Apr. 18, 1919.

Amphiol A

Particular description of goods.—Talking-Machines and Talking-Machine Supplies.—Namely, Records, Reproducers, Reproducing-Needles, and Tone-Arms.
Claims use since Jan. 9, 1919.

Ser. No. 117,611. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. P. BOWMAN, Leeds, England. Filed Apr. 19, 1919.

YORKSHIRE RELISH

Particular description of goods.—A Sauce for Use on Fish, Game, Chops, Steaks, Soups, Stews, Gravies, and Meats.

Claims use since the year 1864.

Ser. No. 117,612. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) C. W. BEGG, SONS & COMPANY, Chicago, Ill. Filed Apr. 19, 1919.

Marcelle

Particular description of goods.—Cosmetics.—Namely, Talcum Powders, Face-Powders, Face-Creams, Dental Creams, Complexion-Lotions, Dandruff-Preventer, Shampoos, Perfumes, and Toilet Waters.

Claims use since about Oct. 10, 1917.

Ser. No. 117,638. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BOOTH FISHERIES COMPANY, Chicago, Ill. Filed Apr. 21, 1919.

ZAPORA

Particular description of goods.—Canned Sardines, Canned Salmon.

Claims use since Feb. 15, 1919.

Ser. No. 117,671. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL HARVESTER COMPANY OF AMERICA, Chicago, Ill. Filed Apr. 21, 1919.

THE HARVESTER WORLD

Particular description of goods.—A Monthly Periodical.
Claims use since October, 1909.

Ser. No. 117,675. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL HARVESTER COMPANY OF AMERICA, Chicago, Ill. Filed Apr. 21, 1919.

Globules

Particular description of goods.—A Monthly Periodical.
Claims use since Jan. 27, 1919.

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Ser. No. 117,697. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) PELICAN WELL TOOL & SUPPLY Co., Shreveport, La., and Vivian, La. Filed Apr. 21, 1919.

PELCO

Which consists of the word "Pelco."

Particular description of goods.—Bits and Rotary Fish-Tail Bits Used in the Drilling or Sinking of Oil, Gas, Water, and Other Wells.

Claims use since about July 17, 1917.

Ser. No. 117,698. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) REPUBLIC RUBBER TIRE & SHOE CO. INC., New York, N. Y. Filed Apr. 21, 1919.



No claim is being made to the words "Service—Quality—Reliability—Value" apart from the trade-mark shown in the drawing.

Particular description of goods.—Rubber Tires.
Claims use since Jan. 1, 1919.

Ser. No. 117,707. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) TEMPERANCE BEVERAGE Co., Chicago, Ill. Filed Apr. 21, 1919.

BULL

Particular description of goods.—Non-Intoxicating Non-Alcoholic Maltless Cereal Beverage Containing Less Than One-half of One Per Cent. Alcohol Sold as a Soft Drink.
Claims use since May 26, 1918.

Ser. No. 117,713. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) VALVE MOTORS CORPORATION, Moline, Ill. Filed Apr. 21, 1919.



Particular description of goods.—Automobile and Motor Trucks.

Claims use since Nov. 16, 1902.

265 O. G.—40

[Vol. 265. No. 4.]

Ser. No. 117,715. (CLASS 43. THREAD AND YARN.) WILLIAM J. WEINENMATER, Philadelphia, Pa. Filed Apr. 21, 1919.



Particular description of goods.—Knitting-Yarns.
Claims use since Feb. 1, 1919.

Ser. No. 117,752. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS W. SIMMONS & Co., San Francisco, Calif. Filed Apr. 22, 1919.



Particular description of goods.—Dyes.
Claims use since Sept. 11, 1918.

Ser. No. 117,785. (CLASS 17. TOBACCO PRODUCTS.) SHERIDAN & DESSAUR, New York, N. Y. Filed Apr. 23, 1919.

SINN FEIN

Consisting of the words "Sinn Fein."
Particular description of goods.—Cigars.
Claims use since Mar. 1, 1919.

Ser. No. 117,795. (CLASS 38. PRINTS AND PUBLICATIONS.) EUGENE BYRNES, New York, N. Y. Filed Apr. 24, 1919.

REGLAR FELLERS

Particular description of goods.—A Series of Cartoons.
Claims use since the fall of 1916.

Ser. No. 117,796. (CLASS 38. PRINTS AND PUBLICATIONS.) EUGENE BYRNES, New York, N. Y. Filed Apr. 24, 1919.

It's a Great Life if You Don't Weaken

Particular description of goods.—A Series of Cartoons.
Claims use since the fall of 1916.

Ser. No. 117,840. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAS. E. G. KIDD, INC., Richmond, Va. Filed Apr. 25, 1919.

Pink Money

Particular description of goods.—Canned Fruit and Canned Vegetables, Dried Fruits, Dried Vegetables, Canned Sauer-Kraut; Canned Fish, (Tuna, Salmon, Herring-Roe, and Sardines); Canned Pork and Beans, Mince-Meat, Canned Soup, Evaporated and Condensed Milk, Malted Milk, Coffee, Cocoa, Instantaneous Chocolate, Tea, Grated Coconut, Olives, Olive-Oil, Cotton-Seed Salad-Oil, Salad-Dressing, Macaroni, Rice, Tapioca, Spaghetti, Canned Spaghetti with Tomato and Cheese, Cream-Cheese, Mustard, Pepper, Cloves, Horse-Radish, Mexican Tamales, Tomato Catsup, Worcestershire Sauce, Flavoring Extracts for Foods, Chewing-Gum, Shelled Nuts, Salted Peanuts, Crystallized Ginger, Crystallized Pineapple, Honey, Fruit Preserves, Fruit Jams and Jellies, Apple-Butter, Peanut-Butter, Gelatin, Raisins, Corn-Syrup, Cane-Syrup, Maple-Syrup, Cornmeal, Pickles, Pancake-Flour, Self-Raising Flour, Buckwheat-Flour, and Plum-Pudding.

Claims use on pickles since the year 1889 and on the other goods recited in the application since Mar. 20, 1919.

Ser. No. 117,842. (CLASS 17. TOBACCO PRODUCTS.) R. J. LEA, LIMITED, Manchester, England. Filed Apr. 25, 1919.

VICE-CHAIR

Particular description of goods.—Cigarettes.
Claims use since Mar. 20, 1910.

Ser. No. 117,843. (CLASS 17. TOBACCO PRODUCTS.) R. J. LEA, LIMITED, Manchester, England. Filed Apr. 25, 1919.

TOURNAMENT

Particular description of goods.—Cigarettes.
Claims use since Oct. 20, 1903.

Ser. No. 117,849. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THOMAS F. NEVINS, New York, N. Y., and Merritt, Fla. Filed Apr. 25, 1919.

INRIV

Particular description of goods.—Fresh Fruit.
Claims use since Feb. 28, 1915.

Ser. No. 117,862. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) D. AUERBACH & SONS, New York, N. Y. Filed Apr. 26, 1919.

Union League Chocolates

No claim is made to the word "Chocolates."
Particular description of goods.—Candy.
Claims use since Jan. 1, 1915.

Ser. No. 117,880. (CLASS 17. TOBACCO PRODUCTS.) MRS. OLGA KOHLER, El Paso, Tex. Filed Apr. 26, 1919.



Particular description of goods.—Cigars and Cigarettes.
Claims use since Jan. 1, 1887.

Ser. No. 117,881. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE J. ORO LEYNE ENGINEERING WORKS COMPANY, Littleton, Colo. Filed Apr. 26, 1919.

LITTLE TUGGER

Particular description of goods.—Pneumatic Motor-Holsts.
Claims use since the 5th day of September, 1914.

Ser. No. 117,882. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE LEWIN METALS CORPORATION, St. Louis, Mo. Filed Apr. 26, 1919.



No claim being made for words "The Lewin Metals Corporation, St. Louis, Mo.," nor "Marine Nickel" apart from the mark shown in the drawing.

Particular description of goods.—Marine-Nickel Bearing Metal.
Claims use since the 24th day of March, 1919.

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Ser. No. 117,883. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES W. LEWIS, Baltimore, Md. Filed Apr. 26, 1919.

MEXOL

Particular description of goods.—A Preparation for Use in the Treatment of Rheumatism, Neuralgia, and All Rheumatic or Neuralgic Pain, also for Piles, Lumbago, Pain in the Head, Side, or Stomach, Lamé Back, Sore Throat, Toothache, Cuts, Sprains, or Bruises, Chills, and Internally for Diarrhea, Cramps, and Indigestion.
Claims use since Apr. 1, 1919.

Ser. No. 117,892. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OLIVER-FINNIE CO., Memphis, Tenn. Filed Apr. 26, 1919.

RAYZIT



The picture being fanciful.
Particular description of goods.—Baking-Powder.
Claims use since Feb. 29, 1919.

Ser. No. 117,911. (CLASS 35. BELTINO, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed Apr. 26, 1919.

WINNER

Particular description of goods.—Rubber and Canvas Bicycle-Tires and Inner Tubes.
Claims use since May 18, 1897.

Ser. No. 117,913. (CLASS 27. HOROLOGICAL INSTRUMENTS.) LOUIS P. WHITE, Philadelphia, Pa. Filed Apr. 26, 1919.

LE BLANC

Particular description of goods.—Clocks and Watches.
Claims use since about June 1, 1915.

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Ser. No. 117,936. (CLASS 39. CLOTHING.) ISRAEL UNDERWEAR CO., Worcester, Mass. Filed Apr. 28, 1919.



The lining on said drawing represents shading and not color.

Particular description of goods.—Ladies', Misses', and Children's One-Piece Textile Underwear.
Claims use since about Apr. 1, 1919.

Ser. No. 117,940. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MONROE S. PACK, Erie, Pa. Filed Apr. 28, 1919.



The trade-mark consists in a portrait of Dr. E. B. Smith, deceased.

Particular description of goods.—Medicinal Preparations Used as a Tissue-Tonic, Blood and Nerve Builder; Medicinal Preparations for Indigestion, Constipation, Worms, Acute Cold, Piles, Aid of Digestion, Neuralgia, Rheumatism, Headache, Influenza and La Grippe, Sore Throat and Tonsillitis, and Warts.
Claims use since Apr. 1, 1919.

Ser. No. 117,957. (CLASS 37. PAPER AND STATIONERY.) UNITED DRUG COMPANY, Boston, Mass. Filed Apr. 28, 1919.

Preferred Stock

Particular description of goods.—Writing-Tablets.
Claims use since Mar. 10, 1907.

Ser. No. 118,069. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ISAAC FELD, Baltimore, Md. Filed Apr. 30, 1919.



Particular description of goods.—Manchettes, Toys Known as Talking Boards, Croquet Sets, Dominoes, Checkers, Toy Soldiers, Toy Wagons and Carts, Base-Ball Bats, Toy Animals, Toy Houses, Toy Furniture, Toy Cars, and Automatic Mechanical Toys.

Claims use since December, 1904.

Ser. No. 118,067. (CLASS 39. CLOTHING.) MORRIS RABINER, INC., New York, N. Y. Filed May 1, 1919.



No claim being made to the words "The Curve Does It" nor to the representation of the puttee apart from the mark shown in the drawing.

Particular description of goods.—Fabric Puttees.

Claims use since about February, 1918.

Ser. No. 118,075. (CLASS 39. CLOTHING.) BOLAN O. BAUMAY, Marietta, Ga. Filed May 2, 1919.



No claim is made to the exclusive use of the word "Hosiery" or the words "Trade Mark" apart from the marks shown in the drawing.

Particular description of goods.—Hosiery for Men, Women, and Children.

Claims use since the 23d day of April, 1919.

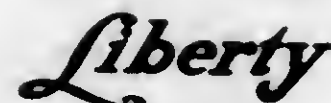
Ser. No. 118,087. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL HARVESTER COMPANY OF AMERICA, Chicago, Ill. Filed May 2, 1919.



Particular description of goods.—A Monthly Periodical.

Claims use since Oct. 25, 1918.

Ser. No. 118,088. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE LIBERTY TOOL COMPANY, Baltimore and Hagerstown, Md. Filed May 2, 1919.



Particular description of goods.—Stay-Bolt-Heading Attachment for Pneumatic Hammers, Machines for Holding Rivets, Power Drilling Apparatus for Drilling Holes in Metal Parts.

Claims use since Apr. 17, 1919.

Ser. No. 118,132. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE BRYANT ELECTRIC COMPANY, Bridgeport, Conn. Filed May 5, 1919.



Particular description of goods.—Electric-Lamp Sockets and Electric-Lamp Receptacles and Plug-Receptacles.

Claims use since Apr. 15, 1919.

Ser. No. 118,140. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ECKENHORN COMPANY, Jersey City, N. J. Filed May 5, 1919.



Particular description of goods.—Oleomargarin.

Claims use since Aug. 1, 1918.

Ser. No. 118,144. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ENNIS-HANLY-BLACKBURN COPPER CO., Kansas City, Mo. Filed May 5, 1919.



Particular description of goods.—Baking-Powder.

Claims use since the 10th day of April, 1909.

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Ser. No. 118,159. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE H. T. LANGE COMPANY, Eau Claire, Wis. Filed May 5, 1919.



The picture being fanciful.

Particular description of goods.—Rolled Oats, Molasses, Codfish, Canned Pork and Beans, Canned Fruits, Coffee, Tea, Catsup, Canned Salmon, and Corn-Syrup.

Claims use since Jan. 7, 1919.

Ser. No. 118,175. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) OXIDE COMMUNITY, LIMITED, Onondaga, N. Y. Filed May 5, 1919.



Particular description of goods.—Game-Traps.

Claims use since Mar. 7, 1919.

Ser. No. 118,176. (CLASS 11. INKS AND INKING MATERIALS.) POMEROY INK MANUFACTURING CO., Newark, N. J. Filed May 5, 1919.



Particular description of goods.—Inks for Stamp-Inking Pads to be Used by Rubber and Metal Stamps; Opaque Inks Used for Marking on Tracing-Cloth, Tin, Celluloid, and Glass; Metal-Stamp Inks for Numbering-Machines and the Like; Indelible Ink, and Stamp-Pads.

Claims use since Sept. 21, 1918.

Ser. No. 118,205. (CLASS 4. ABRAISIVE, DETERGENT, AND POLISHING MATERIALS.) EASTMAN FRY COMPANY, Winchester, Mass. Filed May 6, 1919.



Particular description of goods.—Felt Polishing-Wheels.

Claims use since Apr. 12, 1918.

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Ser. No. 118,225. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE GENERAL ORDNANCE COMPANY, Derby, Conn. Filed May 7, 1919.



No claim being made to the word "Tractor" apart from the mark shown in the drawing.

Particular description of goods.—Tractors and Parts Thereof.

Claims use since Apr. 1, 1919.

Ser. No. 118,250. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ECLIPSE MANUFACTURING CO., Hope, Ark. Filed May 8, 1919.



The trade-mark consists of a white square background having irregular red lines extending thereacross and red triangular projections at the centers of the sides of the square background. The word "Eclipse" is extended along the two diagonals of the background and intersect at the center.

Particular description of goods.—Harrow.

Claims use since Feb. 10, 1919.

Ser. No. 118,264. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) HARVEY MOTOR TRUCK COMPANY, Chicago and Harvey, Ill. Filed May 8, 1919.



Particular description of goods.—Motor-Trucks.

Claims use since Nov. 1, 1918.

Ser. No. 118,303. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FEDERAL SYSTEM OF BAKERS OF AMERICA, INC., Chicago, Ill. Filed May 9, 1919.



The trade-mark "Federal" shown in the accompanying drawing.

Particular description of goods.—Rollins.

Claims use since on or about Feb. 8, 1919.

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Ser. No. 118,336. (CLASS 39. CLOTHING.) BETTY WAY, Washington, D. C. Filed May 9, 1919.

Betty Way

The mark as shown is a facsimile signature of a member of the firm.

Particular description of goods.—Garments for Women's Wear—viz., Corsets, Girdles, Brassières Made of Knitted or Textile Materials, Camisoles, Underwear, Pajamas, Pantaloons, Slip-Ons, Bloomers, Petticoaters.

Claims use since May 1, 1918.

Ser. No. 118,346. (CLASS 16. PAINTS AND PAINTER'S MATERIALS.) MICHAEL F. CASTIRE, Lackawanna, N. Y. Filed May 10, 1919.

POLI--CEDAR

Particular description of goods.—Polish for Automobiles, Furniture, and Floors.

Claims use since May 5, 1919.

Ser. No. 118,347. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) WILL J. CAMERON, Chicago, Ill. Filed May 10, 1919.

DIAGNOSTOLITE

Particular description of goods.—Electric-Light Outfits for Dentists, Surgeons, and the Like for Making Examinations.

Claims use since Oct. 1, 1915.

Ser. No. 118,359. (CLASS 37. PAPER AND STATIONERY.) JESSIE VOORNANGER, Chicago, Ill. Filed May 10, 1919. Under two-year proviso.

IRIDIUM

Particular description of goods.—Steel Pens.

Claims use since the year of 1869.

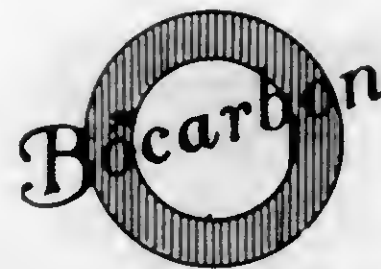
Ser. No. 118,363. (CLASS 5. ADHESIVES.) AUTOMOTIVE SUPPLY COMPANY, Dallas, Tex. Filed May 12, 1919.

CACTUS

Particular description of goods.—Patching-Cement for General Use in Repairing and Uniting Rubber Goods and Rubber and Fabric Goods, Such as Inner Tubes and Patches Therefor, Rubber Boots and Shoes, Water-Bags, Rain-Coats, &c.

Claims use since about May 1, 1919.

Ser. No. 118,367. (CLASS 6. CHEMICALS, MEDICINES AND PHARMACEUTICAL PREPARATIONS.) BOCARBON CO., Wilmington, Del. Filed May 12, 1919.



The circle in the trade-mark being lined for red.

Particular description of goods.—A Salve Used in the Treatment of Bolls, Bone-Felons, Bunions, Stubborn Sores, and Allments of a Like Nature.

Claims use since Apr. 8, 1919.

Ser. No. 118,368. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY BERNEKER, New York, N. Y. Filed May 12, 1919.

LIFE SAVER

Particular description of goods.—Storage-Battery-Charging Compound.

Claims use since Apr. 20, 1919.

Ser. No. 118,369. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) CHARLES BOTDEN, Los Angeles, Calif. Filed May 12, 1919.



Particular description of goods.—Percentage-Calculating Instruments.

Claims use since Jan. 6, 1919.

Ser. No. 118,382. (CLASS 37. PAPER AND STATIONERY.) THE JOHN HOBBS CO., Green Bay, Wis. Filed May 12, 1919.

SYDKUT

Particular description of goods.—Toilet-Paper, Paper Towelling.

Claims use since May 6, 1912.

Ser. No. 118,391. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MARTIN HELPS CO., Brooklyn, N. Y. Filed May 12, 1919.

A M Z A R

Particular description of goods.—Cleansing Compound for Removing Soil and Dirt from the Hands, from Clothing, from Metals, from Wood, and from Polished Surfaces, and Metal-Polishes.

Claims use since on or about May 7, 1919.

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Ser. No. 118,404. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE RHEUMACHOL LABORATORIES COMPANY, Idaho Springs, Colo. Filed May 12, 1919.



Particular description of goods.—A Medicinal Preparation for Use Internally in the Treatment of Rheumatism, Gout, Sciatica, Backache, Lumbago, Inflamed and Swollen Joints, Shooting Pains, and Liver and Kidney Disorders Arising from Uric, Lactic, or any other Acid Existing in the Blood.

Claims use since the 1st day of September, 1899.

Ser. No. 118,458. (CLASS 38. PRINTS AND PUBLICATIONS.) ARTHUR REISBANE, Washington, D. C. Filed May 14, 1919.

Today

Particular description of goods.—Newspapers, (Published Daily and Sunday.)

Claims use since July 26, 1917.

Ser. No. 118,469. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) CARMAN J. GRIFFIN, St. Louis, Mo. Filed May 14, 1919.



The trade-mark claimed and sought to be registered consists of an illustration of an oval foot-ball with the word "Kick-o" placed thereon lengthwise. No claim is made for the registration of the word "Drink" and the phrases "The Big Beverage" and "The Drink with a Kick" which appear on the drawing and labels, their use being for descriptive purpose.

Particular description of goods.—A Prepared, Concentrated, Non-Alcoholic, Non-Cereal, Maltless Syrup for the Making of a Soft Drink to be Carbonated at Soda-Fountains, and a Non-Alcoholic, Non-Cereal, Maltless, Carbonated Beverage Made from Said Syrup and Sold in Bottles as a Soft Drink.

Claims use since Apr. 1, 1919.

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Ser. No. 118,486. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed May 14, 1919.

CASTLEN

Particular description of goods.—Shovels and Spades and Scoops.

Claims use since 1894.

Ser. No. 118,487. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SIMMONS HARDWARE COMPANY, St. Louis, Mo. Filed May 14, 1919.

CLAY-BANK

Particular description of goods.—Shovels, Spades, and Scoops.

Claims use since Sept. 17, 1894.

Ser. No. 118,504. (CLASS 37. PAPER AND STATIONERY.) L. L. BROWN PAPER COMPANY, Adams, Mass. Filed May 15, 1919.

ADVANCE

Particular description of goods.—Linen, Ledger, and Record Papers, Bond-Paper for Writing Purposes, and Bank-Note Papers and Parchment Papers, Linen Type-Writer Papers.

Claims use since about Jan. 1, 1876.

Ser. No. 118,518. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KEHLER FLOUR MILLS CO., St. Louis, Mo. Filed May 15, 1919.

PAX

Particular description of goods.—Wheat-Flour.

Claims use since Jan. 1, 1917.

Ser. No. 118,527. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) SIMPSON-WALTHER LENS COMPANY, INCORPORATED, Rochester, N. Y. Filed May 15, 1919.

TINTEX

Particular description of goods.—Ophthalmic-Lens Blanks and Ophthalmic Lenses.

Claims use since Feb. 25, 1919.

Ser. No. 118,530. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) TOKALON, INC., New York, N. Y. Filed May 15, 1919.

TOKALON

Particular description of goods.—Toilet Creams and Skin-Lotions; Talcum, Sachet, and Foot Powders; Face Powders and Rouges, Compact and Liquid; Tonic and Cleansing Preparations for the Hair; Facial Pencils for the Eyebrows, Lips, and Wrinkles; Dentifrices, Dental Creams, and Mouth Washes, and Isodorants and Deplu-tories.

Claims use since the beginning of June, 1907.

Ser. No. 118,547. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FAIRBANKS, MORSE & CO., Chicago, Ill. Filed May 16, 1919.

Y

Particular description of goods.—Vertical and Horizontal, Single and Multi Cylinder, Two-Cycle, Heavy-Duty, Oil Injection Type of Semi-Diesel Oil Engines.

Claims use since Jan. 4, 1913.

Ser. No. 118,548. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FAIRBANKS, MORSE & CO., Chicago, Ill. Filed May 16, 1919.

C-O

Particular description of goods.—Single-Cylinder and Multicylinder, Two-Cycle, Heavy-Duty, Oil-Injection Type, Semi Diesel Marine Engines.

Claims use since about the 6th day of February, 1914.

Ser. No. 118,550. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) GUNDEL-FALK DOLL CORPORATION, New York, N. Y. Filed May 16, 1919.

Gie-Fa

Particular description of goods.—Dolls, Doll-Heads, Doll-Bodies; Doll Hands, Feet, and Limbs; Doll-Eyes, Doll-Wigs, Doll-Clothes, and Doll Outfits Consisting of Envelop-Chemise, Petticoat, Dress, and Bow, and Doll Toys.

Claims use since January, 1919.

Ser. No. 118,556. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JENNING MANUFACTURING COMPANY, Grand Rapids, Mich. Filed May 16, 1919.



The picture being fanciful.
Particular description of goods.—Perfumery, Toilet Water, Face-Powder, Face-Cream, and Talcum Powder.

Claims use since December, 1905.

Ser. No. 118,558. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JENNING MANUFACTURING COMPANY, Grand Rapids, Mich. Filed May 16, 1919.



Particular description of goods.—Perfume, Toilet Water, Face-Cream, Face-Powder, and Talcum Powder.

Claims use since August, 1911.

Ser. No. 118,560. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS F. CHRISTMAN, Jackson, Tenn. Filed May 17, 1919.



The background for the word "Sep-Sol" being lined for red.

Particular description of goods.—A Medicine Used in the Treatment of Coughs and Colds.

Claims use since October, 1914.

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Ser. No. 118,632. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY H. ATKINSON, Boston, Mass. Filed May 19, 1919.



No claim being made to the word "Atkinson's" and the word "American" except in connection with the other features shown on the drawing.

Particular description of goods.—Baller Compounds.

Claims use since on or about Apr. 1, 1919.

Ser. No. 118,640. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA EVAPORATED PRODUCTS CO., Los Angeles, Cal. Filed May 19, 1919.

CEPCO

Particular description of goods.—Canned Tuna Fish, Canned Fruits, Evaporated Fruits, Canned Vegetables for Soup, and Canned Tomatoes.

Claims use since Mar. 15, 1919.

Ser. No. 118,652. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CASHMERE APPLE CO., Cashmere, Wash. Filed May 19, 1919.



Particular description of goods.—Fresh Fruits—Namely, Apples, Pears.

Claims use since Sept. 21, 1915.

Ser. No. 118,665. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SOLOMON GOODMAN, Los Angeles, Calif. Filed May 19, 1919.

SUNGOOD

Particular description of goods.—Canned Vegetables—Namely, Canned Tomatoes with Purée from Trimmings, Canned Tomatoes, Canned Pumpkin, Canned Pork and Beans, Canned Spinach, Canned Spinach & in Crème, Canned Pimientos, Canned Asparagus, Canned Beets, Canned Carrots, Canned Spaghetti, Canned Peas, Canned Corn, Canned Chili Peppers, and Canned String-Beans; Canned Tomato Soup, Canned Hot Sauce, Canned Pickles, Olives; Fruit Jams, Tomato Preserves, Apricot and Tomato Preserves; Canned Fruits—Namely, Canned Apricots, Canned Peaches, Canned Pineapple, Canned Apples, and Canned Strawberries.

Claims use since June 19, 1918.

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Ser. No. 118,685. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) MARTIN-COPELAND COMPANY, Providence, R. I. Filed May 19, 1919.



Particular description of goods.—Spectacles, Spectacle-Frames, and Mountings for Eyeglasses.

Claims use since May 1, 1908.

Ser. No. 118,697. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) HANS M. OLSON, Hurbank, Calif., assignor to Atomite Products Company, Los Angeles, Calif., a Corporation of California. Filed May 19, 1919.

Gi-Lo-cite

Particular description of goods.—Powder for Tires Used to Prevent Friction and Heat.

Claims use since May 1, 1919.

Ser. No. 118,705. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE RUSSELL JOHNSON MILLS, Oklahoma, Okla. Filed May 19, 1919.

RUSDUN

Particular description of goods.—Peanut-Butter, Vinegar, Prepared Mustard, Rice; Food-Flavoring Extracts—Namely, Vanilla and Lemon; Tea, Coffee, Pancake-Flour, Cocoa, Coconut, Salad-Dressing, Olive-Oil, Pearl-Barley, Tapioca, and Spice—Namely, Whole Mixed Pickling-Spice.

Claims use since Aug. 17, 1911.

Ser. No. 118,711. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE STANDARD OPTICAL CO., Geneva, N. Y. Filed May 19, 1919.

SILVALINE

Particular description of goods.—Spectacle and Eyeglass Frames and Mountings and Parts Therefor.

Claims use since May 10, 1911.

Ser. No. 118,715. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TAPO CITRUS ASS'N., Santa Susana, Calif. Filed May 19, 1919.

HUMMING BIRD

Particular description of goods.—Fresh Citrus Fruits—Namely, Oranges and Lemons.

Claims use since Dec. 10, 1918.

Ser. No. 118,732. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE HEEKIN COMPANY, Cincinnati, Ohio. Filed May 20, 1919.

GETZUM

Particular description of goods.—Insect-Powder.
Claims use since Apr. 17, 1919.

Ser. No. 118,768. (CLASS 15. OILS AND GREASES.) THE TEXAS COMPANY, Houston, Tex., and New York, N. Y. Filed May 21, 1919.

TEXLUBE

Particular description of goods.—Petroleum Products—viz., Lubricating-Oils.
Claims use since Apr. 30, 1919.

Ser. No. 118,769. (CLASS 15. OILS AND GREASES.) THE TEXAS COMPANY, Houston, Tex., and New York, N. Y. Filed May 21, 1919.

TEXOL

Particular description of goods.—Petroleum Products—viz., Lubricating-Oils.
Claims use since Apr. 30, 1919.

Ser. No. 118,777. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DORMAND & DIAZ, New York, N. Y. Filed May 22, 1919.

Nips

Particular description of goods.—Perfumery.
Claims use since Apr. 14, 1919.

Ser. No. 118,787. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) LEE BROOM & DUSTERS COMPANY, Lincoln, Nebr. Filed May 22, 1919.

BEXIE

Particular description of goods.—Brooms.
Claims use since about May 7, 1919.

Ser. No. 118,792. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) PABST BEWING COMPANY, Milwaukee, Wis. Filed May 22, 1919.

PERMENTONE

Particular description of goods.—A Specially-Prepared Malt Extract with High Enzymatic Properties Derived from Malt, Which Enzymatic Properties Accelerate Yeast Action.

Claims use since Feb. 27, 1919.

Ser. No. 118,797. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) SWIFT & COMPANY, Chicago, Ill. Filed May 22, 1919.

La Golondrina



Particular description of goods.—Soap.
Claims use since Jan. 28, 1919.

Ser. No. 118,811. (CLASS 15. OILS AND GREASES.) SUN COMPANY, Philadelphia, Pa. Filed May 22, 1919.

SUNOCO

Particular description of goods.—Lubricating-Oils.
Claims use since about the year 1909.

Ser. No. 118,819. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ALAMO FARM LIGHT COMPANY, Chicago, Ill. Filed May 23, 1919.

ALAMO

Particular description of goods.—Unitary Outfits for Generating Electric Current.
Claims use since June 1, 1909.

Ser. No. 118,831. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH A. HADDAD, Toledo, Ohio. Filed May 23, 1919.



Said trade-mark consists of a picture or portrait of the applicant, together with a facsimile of his signature.

Particular description of goods.—Proprietary Medicine—to wit, a Stomach-Elixir.

Claims use since Mar. 15, 1919.

Ser. No. 118,837. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) LEO PALMER, New York, N. Y. Filed May 23, 1919.

Glendinda

Particular description of goods.—Talking-Machines.
Claims use since Apr. 15, 1919.

Ser. No. 118,878. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) BENJAMIN H. DAVIS, Baltimore, Md. Filed May 24, 1919.



The vertical lines being for shading only.
Particular description of goods.—Board Games.
Claims use since May 6, 1918.

Ser. No. 118,880. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BERTHA ELLA ENTERKINE, Birmingham, Ala. Filed May 24, 1919.



The trade-mark comprises a rainbow represented by three bands of color, the upper band being red, the middle band being yellow, and the lower band being blue.

Particular description of goods.—A Preparation for a Medicinal Tonic for the Treatment of Stomach, Bowel, Liver, and Kidney Trouble.

Claims use since May 12, 1919.

Ser. No. 118,881. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) FEDERAL SNAP FASTENER CORPORATION, New York, N. Y. Filed May 24, 1919.

SCIENTIFIC

Particular description of goods.—Snap-Fasteners and Placket-Fasteners.

Claims use since May 13, 1919.

Ser. No. 118,896. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LESTER E. SCOTT, Southington, Conn. Filed May 24, 1919.

Lesco

Particular description of goods.—Cleansing Compound.
Claims use since May 5, 1919.

Ser. No. 118,900. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) FRANK C. VOORHIS, Minneapolis, Minn. Filed May 24, 1919.

BJINKS

Particular description of goods.—Non-Alcoholic Beverages Consisting of Non-Alcoholic Non-Cereal Maltless Beverages Sold as Soft Drinks.
Claims use since Apr. 1, 1919.

Ser. No. 118,902. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) GEORGE W. BONTZ, New York, N. Y. Filed May 20, 1919.

Alphies

Particular description of goods.—Toy Figures.
Claims use since January, 1917.

Ser. No. 118,921. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS LUCAS COMPANY, INC., Jamestown, N. Y. Filed May 26, 1919.

HEARTWOODS

The lining shown is intended merely to represent shading in the form of a heart behind the central portion of the mark.

Particular description of goods.—Aromatic Incense.
Claims use since Mar. 26, 1919.

Ser. No. 118,929. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) HANS M. OLSON, Burbank, Calif., assignor to Atomite Products Company, Los Angeles, Calif., a Corporation of California. Filed May 26, 1919.



Particular description of goods.—Powder for Tires Used to Prevent Friction and Heat.
Claims use since May 1, 1919.

Ser. No. 118,936. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) RUSSELL GRADEN MANUFACTURING COMPANY, Minneapolis, Minn. Filed May 26, 1919.

HI-WAY PATROL

Particular description of goods.—Road-Grading Machines.
Claims use since the 1st day of May, 1918.

Ser. No. 118,946. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WILDER MANUFACTURING COMPANY, St. Louis, Mo. Filed May 26, 1919.

MITCHE

Particular description of goods.—Talking Boards.
Claims use since October, 1916.

Ser. No. 118,975. (CLASS 28. JEWELRY AND PRECIOUS METAL WARE.) JACOB WOLF, New York, N. Y. Filed May 27, 1919.



Particular description of goods.—Imitation Pearls.
Claims use since Mar. 15, 1919.

Ser. No. 118,994. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) McKEUCK, TOWLE & CO., Minneapolis, Minn. Filed May 28, 1919.

BLUE BAND

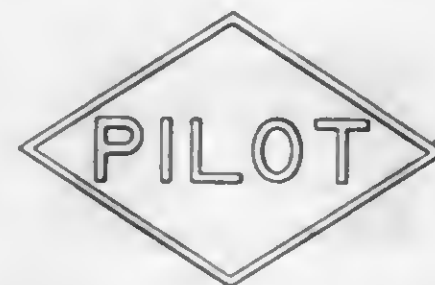
Particular description of goods.—Candy.
Claims use since 1905.

Ser. No. 119,009. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) VICTOR ADDING MACHINE CO., Chicago, Ill. Filed May 28, 1919.

VICTOR

Particular description of goods.—Adding and Calculating Machines.
Claims use since July 15, 1918.

Ser. No. 119,020. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) L. C. BLANCHE CO., INC., New York, N. Y. Filed May 29, 1919.



The trade-mark comprising the word "Pilot" within a diamond-shaped figure.
Particular description of goods.—Finished and unfinished Bar-Steel and Part-Finished Tool-Steel and High-Speed and Carbon Steel.
Claims use since Apr. 4, 1918.

Ser. No. 119,021. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) HENRY C. BREIMYER, St. Louis, Mo. Filed May 29, 1919.



Particular description of goods.—Non-Alcoholic Non-Cereal Maltless Beverages Sold as Soft Drinks and Syrups for the Manufacture of the Same.
Claims use since December, 1916.

Ser. No. 119,024. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CROWN CORPORATION, New Haven, Conn. Filed May 29, 1919.

"The Conqueror Tablets"

Consisting of the words "The Conqueror Tablets," no claim being made to the exclusive use of the word "Tablets" apart from the mark as shown in the drawing.
Particular description of goods.—A Chemical Gasoline-Intensifier and Carbon-Remover.
Claims use since May, 1916.

Ser. No. 119,027. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CONFECTIONERS' SPECIALTY COMPANY, Philadelphia, Pa. Filed May 29, 1919.

CANDOLA

Particular description of goods.—Cocoa, Chocolate, and Candles.
Claims use since Apr. 1, 1919.

Ser. No. 119,039. (CLASS 39. CLOTHING.) H. MALIK'S SONS, Brooklyn, N. Y. Filed May 29, 1919.

"FOOT CULTURE"

The trade-mark consists of the words "Foot Culture."
Particular description of goods.—Leather, Canvas, and Fabric Shoes.
Claims use since Mar. 22, 1919.

Ser. No. 119,046. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE PRISMOLITE COMPANY, Columbus, Ohio. Filed May 29, 1919.

WINDOLATOR

Particular description of goods.—Window-Ventilators.
Claims use since Jan. 4, 1919.

Ser. No. 119,050. (CLASS 13. OILS AND GREASES.) SWAN & FINCH CO., New York, N. Y. Filed May 29, 1919.



Consisting of the word "Gearese."
Particular description of goods.—Transmission and Gear-Case Grease.
Claims use since October, 1917.

Ser. No. 119,051. (CLASS 37. PAPER AND STATIONERY.) SALK BROTHERS, New York, N. Y. Filed May 29, 1919.

"SALBRO"

Particular description of goods.—Fountain-Pens.
Claims use since Mar. 1, 1917.

Ser. No. 119,065. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) TREINO CO., Los Angeles, Calif. Filed May 29, 1919.



Particular description of goods.—A Hair-Dressing.
Claims use since May 1, 1919.

Ser. No. 119,075. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE LEWIN METALS CORPORATION, St. Louis, Mo. Filed May 31, 1919.

GALVANITE

Particular description of goods.—Soldier.
Claims use since the 26th day of April, 1919.

Ser. No. 119,088. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES E. SMITH, Palestine, Tex. Filed May 31, 1919.



The trade-mark is a portrait of Susan G. Smith, of 1005 West Louisiana street, Palestine, Tex.
Particular description of goods.—Hair-Tonic.
Claims use since 1911.

Ser. No. 119,100. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) FRANK H. BROWN, Pottstown, Pa. Filed June 2, 1919.



Particular description of goods.—Enamel Prints, Ready-Mixed Paints, Colors in Oil, Colors in Japan, Varnishes, Japans, Wood-Stains, and Liquid Shellac.
Claims use since May 31, 1919.

Ser. No. 119,126. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ISAAC KUBIE COMPANY, New York, N. Y. Filed June 2, 1919.



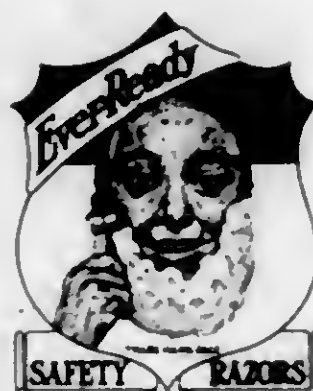
Particular description of goods.—Condensed Milk.
Claims use since Mar. 1, 1919.

Ser. No. 119,131. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LESTER E. PHILLIPS, Detroit, Mich. Filed June 2, 1919.

Emproco

Particular description of goods.—A Medicinal Treatment for Gout.
Claims use since Apr. 5, 1919.

Ser. No. 119,145. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN SAFETY RAZOR CO. INC., Brooklyn, N. Y. Filed June 3, 1919.



No claim being made to the words "Trade Mark Face" and "Safety Razors" apart from the mark shown in the drawing.

Particular description of goods.—Safety Razors, Safety-Razor Blades, Metal Safety-Razor Frames, Mechanical Stoppers for Safety Razor Blades.
Claims use since about 1904.

Ser. No. 119,147. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANHEUSER-BUSCH BREWING ASSOCIATION, St. Louis, Mo. Filed June 3, 1919.

Oh Boy

Particular description of goods.—Animal Feed, Specially Brewers' Dried Grains.
Claims use since May 10, 1919.

Ser. No. 119,164. (CLASS 2. RECEPTACLES.) HAROLD W. RAMSAY, Boston, Mass. Filed June 3, 1919.

RITE-AWAY

The word "Rite-Away."
Particular description of goods.—Pasteboard Cartons for Dispensing Shoe-Laces, Tapes, and Ribbons.
Claims use since Feb. 24, 1919.

Ser. No. 119,172. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) L. SPIEGELBERG & SONS, New York, N. Y. Filed June 3, 1919.

MIROMONT

Particular description of goods.—Sho-Covers.
Claims use since 1887.

Ser. No. 119,174. (CLASS 39. CLOTHING.) LAZAR M. TRAUB, Boston, Mass. Filed June 3, 1919.

ISLA

The word "Isla."
Particular description of goods.—Men's, Women's, and Children's Shoes Made Wholly or in Part of Leather.
Claims use since May 3, 1919.

Ser. No. 119,181. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE BUDA COMPANY, Chicago, Ill. Filed June 4, 1919.

BUDA

Particular description of goods.—Railway Hand-Cars.
Claims use since the 1st day of September, 1881.

Ser. No. 119,213. (CLASS 39. CLOTHING.) SACKMAN BROTHERS COMPANY, New York, N. Y. Filed June 4, 1919.



The representation of a boy's head in the trade-mark is fanciful and is not the likeness of any living person.
Particular description of goods.—Children's One-Piece Outer Suits, Two-Piece Outer Suits, Overalls, and Rompers, and Children's Hats, Caps, and Cloth Leggings.
Claims use since Nov. 30, 1918.

Ser. No. 119,237. (CLASS 39. CLOTHING.) HART, SCHAFFNER & MARX, Chicago, Ill. Filed June 5, 1919.



Particular description of goods.—Coats, Vests, Trousers, Overcoats, and Rain-Coats.
Claims use of Hart, Schaffner & Marx since 1887, of the figure since Feb. 15, 1915, and of the combination since about February, 1915.

Ser. No. 119,242. (CLASS 35. BELTING, ROSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) WORTH L. MITTEN, Davenport, Iowa. Filed June 5, 1919.



Particular description of goods.—Pneumatic Rubber Tires.
Claims use since June 1, 1919.

Ser. No. 119,243. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NIAGARA CHEMICAL WORKS, Utica, N. Y. Filed June 5, 1919.

USILO

Particular description of goods.—Food-Flavorings.
Claims use since Jan. 1, 1919.

Ser. No. 119,274. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) MICHIGAN LUBRICATOR COMPANY, Detroit, Mich. Filed June 6, 1919.



Particular description of goods.—Water-Gages, Oil-Gages, and Crank-Case Oil-Level Indicators.
Claims use since Oct. 8, 1918.

Ser. No. 119,276. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) MICHIGAN LUBRICATOR COMPANY, Detroit, Mich. Filed June 6, 1919.



Particular description of goods.—Water-Gages, Oil-Gages, and Crank-Case Oil-Level Indicators.
Claims use since Oct. 8, 1918.

Ser. No. 119,365. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NATIONAL ANILINE & CHEMICAL COMPANY, INCORPORATED, New York, N. Y. Filed June 9, 1919.

PERIGEE

Particular description of goods.—Food-Colors.
Claims use since May 17, 1919.

Ser. No. 119,385. (CLASS 39. CLOTHING.) BLUESUCK MANUFACTURING CO., Hopkinsville, Ky. Filed June 10, 1919.



ELK

Particular description of goods.—Overalls and Work-Shirts.
Claims use since Jan. 15, 1909.

Ser. No. 119,398. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM CLEFF COMPANY, San Francisco, Calif. Filed June 10, 1919.



Particular description of goods.—Canned Fruits—Namely, Canned Peaches, Canned Sliced Peaches, Dried Raisins, Canned Ripe Olives; Canned Vegetables—Namely, Canned Tomatoes, Canned Peas, Canned Spinach, Canned Hominy, and Canned Asparagus; Canned Fish—Namely, Canned Sardines, Canned Oysters, and Canned Salmon; Tapioca, Powdered Sugar, Vinegar, Tomato Catsup, Olive-Oil, Tea, Coffee, Black Pepper, and Vanilla Extract for Food-Flavoring Purposes.
Claims use since Jan. 2, 1899.

Ser. No. 119,404. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) H. P. COFFEY COMPANY, St. Louis, Mo. Filed June 10, 1919.



Particular description of goods.—Coffee, Spices—Namely, White Pepper, Black Pepper, Mixed Pickling-Spices, Nutmegs, Cinnamon, Cloves, Dry Mustard, Allspice, Ginger, Red Pepper, and Mace—and Food-Flavoring Extracts—Namely, Lemon and Vanilla, Raspberry, Peach, Almond, Orange, Banana, Strawberry, and Pineapple. Claims use since Dec. 10, 1908.

Ser. No. 119,414. (CLASS 39. CLOTHING.) THE GILBLOW COMPANY, Fond du Lac, Wis. Filed June 10, 1919.

"Fondy"

Particular description of goods.—Men's Overalls and Jackets. Claims use since Apr. 22, 1919.

Ser. No. 119,416. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) HOWARD & CASEY CO., Mt. Vernon, Ill. Filed June 10, 1919.

COLONEL

Particular description of goods.—Coffee. Claims use since Jan. 15, 1905.

Ser. No. 119,422. (CLASS 12. CONSTRUCTION MATERIALS.) MORGAN COMPANY, Oakbrook, Wis. Filed June 10, 1919.



Applicant disclaims the representation of the goods. Particular description of goods.—Doors, Sash, and Mill-work. Claims use since Jan. 15, 1911.

Ser. No. 119,436. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) NIELSEN & KITTLE CANNING CO. LTD., East San Pedro, Calif. Filed June 10, 1919.



ALEXANDRIA

Particular description of goods.—Canned Sardines. Claims use since Oct. 15, 1918.

Ser. No. 119,439. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE OMEGA CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1919.



No claim of exclusive right to the use of the word "Oil" being made except as shown in the accompanying drawing. Particular description of goods.—A Preparation for the Treatment of Rheumatism, Sciatica, Lumbago, Sore Throat, Cold in Chest, Asthma, Inflamed Tonsils, Neuralgia, Swellings, Inflammation, Sprains, and Bruises. Claims use since 1899.

Ser. No. 119,440. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) PEERLESS ORANGE JUICE COMPANY, Chicago, Ill. Filed June 10, 1919.

Orange Kiss

No claim is made to the exclusive use of the word "Orange." Particular description of goods.—Orange-Juice Sold as a Non-Intoxicating Non-Alcoholic Maltless Non-Cereal Soft Drink. Claims use since Mar. 1, 1919.

Ser. No. 119,446. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) SEABOARD COMMERCIAL CO., Seattle, Wash. Filed June 10, 1919.

NORWEST

Particular description of goods.—Canned Salmon. Claims use since Apr. 18, 1919.

Ser. No. 119,492. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SOUTH & CENTRAL AMERICAN COMMERCIAL CO. INC., New York, N. Y. Filed June 11, 1919.

Catatumbos

Particular description of goods.—Cotton, Wool, Silk, and Linen Piece Goods and Mixtures of the Same. Claims use since about Jan. 1, 1919.

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Ser. No. 119,533. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LYDA DELILAH G. NEWMAN, New York, N. Y. Filed June 12, 1919.

VIDACABELLO

The trade-mark consisting of the words "Vida Cabello." Particular description of goods.—A Preparation for the Hair and Scalp. Claims use since about August, 1892.

Ser. No. 119,567. (CLASS 40. FOODS AND INGREDIENTS OF FOODS.) LIBERTY BISCUIT COMPANY, Allston, Mass. Filed June 13, 1919.



Particular description of goods.—Ice-Cream Cones. Claims use since Mar. 1, 1919.

Ser. No. 119,581. (CLASS 17. TOBACCO PRODUCTS.) REED TOBACCO COMPANY, Richmond, Va. Filed June 13, 1919.



Particular description of goods.—Cigarettes. Claims use since the year 1912.

Ser. No. 119,635. (CLASS 39. CLOTHING.) CLARK RUBBER MANUFACTURING COMPANY, Portland, Me., and Franklin, Mass. Filed June 16, 1919.



Particular description of goods.—Soles and Heels of Shoes. Claims use since May 31, 1919.

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Ser. No. 119,638. (CLASS 43. THREAD AND YARN.) DOLLFUS-MING & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed June 16, 1919. Under ten-year proviso.



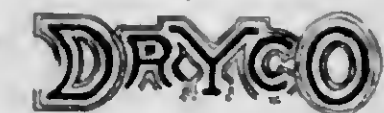
Particular description of goods.—Cotton Yarns. Claims use since 1872.

Ser. No. 119,610. (CLASS 43. THREAD AND YARN.) DOLLFUS-MING & CIE. SOCIETE ANONYME, Mulhouse, Germany. Filed June 16, 1919. Under ten-year proviso.

D.M.C.

Particular description of goods.—Cotton Yarns. Claims use since about the year 1841.

Ser. No. 119,644. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DRY MILK COMPANY, New York, N. Y. Filed June 16, 1919.



Particular description of goods.—Dry Milk. Claims use since Mar. 5, 1919.

Ser. No. 119,650. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HOLLET MILLING COMPANY, Ogden, Utah. Filed June 16, 1919.



Particular description of goods.—Wheat-Flour. Claims use since Apr. 10, 1919.

Ser. No. 119,673. (CLASS 39. CLOTHING.) RELIANCE MANUFACTURING COMPANY, Chicago, Ill. Filed June 16, 1919.

"BIG YANK"

Particular description of goods.—Work-Shirts.
Claims use since May 28, 1919.

Ser. No. 119,680. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y. Filed June 16, 1919.



Particular description of goods.—Canned Sardines.
Claims use since January, 1915.

Ser. No. 119,684. (CLASS 39. CLOTHING.) UNITED STATES RUBBER COMPANY, New Brunswick, N. J., and New York, N. Y. Filed June 16, 1919.

SNUG-LERS

Particular description of goods.—Felt Slippers.
Claims use since June 4, 1919.

Ser. No. 119,701. (CLASS 12. CONSTRUCTION MATERIALS.) MICHAEL COHEN & CO., New York, N. Y. Filed June 17, 1919.

K A T O

Consisting of the word "Kato."
Particular description of goods.—Building-Stone.
Claims use since Jan. 1, 1918.

Ser. No. 119,734. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CROWN CORE AND SEAL COMPANY OF BALTIMORE CITY, Baltimore, Md. Filed June 18, 1919.

CHESAPEAKE

Particular description of goods.—Bottle-Capping Machines.
Claims use since on or about Feb. 8, 1919.

Ser. No. 119,751. (CLASS 12. CONSTRUCTION MATERIALS.) SIMPSON BROS. CORPORATION, Boston, Mass. Filed June 18, 1919.

Simbroco

Particular description of goods.—Artificial Stone.
Claims use since Jan. 1, 1910.

Ser. No. 119,766. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHARLES M. DECKER & BROS., Orange, N. J. Filed June 19, 1919.



Particular description of goods.—Cocoa.
Claims use since Oct. 15, 1918.

Ser. No. 119,789. (CLASS 12. CONSTRUCTION MATERIALS.) ARMSTRONG CORK COMPANY, Pittsburgh, Pa. Filed June 20, 1919.



Particular description of goods.—Floor-Tiling in the Form of Individual Tiles Containing Cork.
Claims use since June 16, 1919.

Ser. No. 119,805. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LOSS & SCHONFELD COMPANY, Wilmington, Del.; Camden, N. J., and New York, N. Y. Filed June 20, 1919.

BEAU BRUMMEL

The trade-mark consists of the words "Beau Brummel."
Particular description of goods.—Handkerchiefs.
Claims use since about February, 1917.

Ser. No. 119,806. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LOSS & SCHONFELD COMPANY, Wilmington, Del.; Camden, N. J., and New York, N. Y. Filed June 20, 1919.

Lady Jane

The trade-mark consists of the words "Lady Jane."
Particular description of goods.—Handkerchiefs.
Claims use since about February, 1917.

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Ser. No. 119,867. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RAINBOW CHOCOLATE COMPANY, Chicago, Ill. Filed June 23, 1919.

MAZARR

Particular description of goods.—Chocolate and Candy.
Claims use since about the 5th day of February, 1919.

Ser. No. 119,877. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) UNIVERSAL FILM MANUFACTURING COMPANY, INC., New York, N. Y. Filed June 23, 1919.



Particular description of goods.—Moving-Picture Films.
Claims use since June 2, 1919.

Ser. No. 119,886. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE GUARANTEX CORPORATION, New York, N. Y. Filed June 24, 1919.

GUARANTEX

Particular description of goods.—Cotton Piece Goods.
Claims use since Apr. 15, 1919.

Ser. No. 119,908. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDWARD E. KUNN, Warsaw, Ind. Filed June 24, 1919.

B.F.B.

Particular description of goods.—A Deodorant Preparation for Excessive Perspiration of the Feet and Armpits.
Claims use since June 1, 1919.

Ser. No. 119,960. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FISCH RUSHWORTH, Fenny Bridge, near Huddersfield, England. Filed June 25, 1919.

ZIB

Particular description of goods.—Cloths and Stuffs of Wool, Worsted, or Hair.
Claims use since Aug. 30, 1911.

Ser. No. 119,966. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed June 25, 1919.

Iridesca

Particular description of goods.—Toilet Creams.
Claims use since Mar. 28, 1919.

Ser. No. 120,000. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FIGALL REMEDY CO., St. Louis, Mo. Filed June 27, 1919.



Particular description of goods.—Laxative, Cathartic, and Bowel-Tonic.
Claims use since about June 19, 1919.

Ser. No. 120,018. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STUTTGART RICE MILL COMPANY, Stuttgart, Ark. Filed June 27, 1919.

ARKRICE

Particular description of goods.—Rice.
Claims use since October, 1914.

Ser. No. 120,018. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WASHBURN-CROSBY CO., Minneapolis, Minn. Filed June 27, 1919.



Particular description of goods.—Bread.
Claims use since May 1, 1919.

Ser. No. 120,028. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE ALDON COMPANY, Chicago, Ill. Filed June 28, 1919.

ALDON

Particular description of goods.—Car-Replacers, also Known as Replacers and Wrecking-Frogs; Rail-Saws; Rail-Benders; Rail-Drills, and Car-Movers.
Claims use since Dec. 24, 1904.

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Ser. No. 120,090. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HURTON MANUFACTURING CO. INC., Brooklyn, N. Y. Filed June 30, 1919.

Cocoalets

Particular description of goods.—Cocoa in Tablet Form. Claims use since about 1917.

Ser. No. 120,163. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH S. FAIRBANKS, Stamford, Conn. Filed July 1, 1919.

FEUMORT

Particular description of goods.—Chemical Fire-Extinguisher. Claims use since November, 1917.

Ser. No. 120,218. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NACO PRODUCTS CO., New York, N. Y. Filed July 2, 1919.

NACO

The trade-mark consists of the word "Naco."
Particular description of goods.—A Preparation for Whitening or Bleaching Clothes and other Articles of Fabric and other Material, for Removing Stains, for Softening Water, for Disinfecting, and for Killing Odors. Claims use since May 12, 1919.

Ser. No. 121,228. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) J. S. TYREE, CHEMIST, INC., Washington, D. C. Filed Aug. 4, 1919.

TYREE'S POWDER

Particular description of goods.—Antiseptic Powders. Claims use since about Jan. 15, 1904.

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TRADE-MARK REGISTRATIONS GRANTED

AUGUST 26, 1919.

126,375. EGG-PRESERVATIVE. ALBANY CHEMICAL CO., Albany, N. Y.
Filed March 19, 1919. Serial No. 116,698. PUBLISHED MAY 6, 1919.

126,376. MERINGUE-POWDER. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y.
Filed February 27, 1919. Serial No. 116,176. PUBLISHED APRIL 15, 1919.

126,377. HONEY. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y.
Filed February 27, 1919. Serial No. 116,177. PUBLISHED APRIL 15, 1919.

126,378. LOOSE-LEAF SHEETS CONTAINING CERTAIN DATA USED IN CONSTRUCTION, DESIGN, AND EQUIPMENT OF BUILDING STRUCTURES. ARCHITECTURAL SERVICE CORPORATION, Philadelphia, Pa.
Filed November 27, 1918. Serial No. 114,388. PUBLISHED FEBRUARY 18, 1919.

126,379. CERTAIN NAMED CLOTHING. THE ASHFORD UNDERWEAR CO., LIMITED, Ashford, England.
Filed December 20, 1918. Serial No. 114,725. PUBLISHED APRIL 15, 1919.

126,380. POWDER-PUFFS. ATTERLEY COMPANY, Chicago, Ill.
Filed February 1, 1919. Serial No. 115,560. PUBLISHED APRIL 1, 1919.

126,381. PREPARATION FOR THE TREATMENT OF CERTAIN NAMED DISEASES AND AILMENTS. MAGGIE L. AUSTIN, Nebo, N. C.
Filed March 8, 1919. Serial No. 110,401. PUBLISHED MAY 6, 1919.

126,382. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HARRIET HUBBARD AYER, New York, N. Y.
Filed February 28, 1918. Serial No. 109,258. PUBLISHED APRIL 20, 1919.

126,383. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HARRIET HUBBARD AYER, New York, N. Y.
Filed February 28, 1918. Serial No. 109,261. PUBLISHED APRIL 20, 1919.

126,384. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HARRIET HUBBARD AYER, New York, N. Y.
Filed August 20, 1918. Serial No. 112,927. PUBLISHED APRIL 22, 1919.

126,385. HAIR-TONIC. J. C. AYER CO., Lowell, Mass.
Filed March 6, 1919. Serial No. 116,319. PUBLISHED MAY 20, 1919.

126,386. PREPARATION FOR TREATING CERTAIN NAMED AFFECTIONS OF THE LUNGS AND THROAT. J. C. AYER CO., Lowell, Mass.
Filed March 6, 1919. Serial No. 116,320. PUBLISHED MAY 20, 1919.

126,387. GENERAL TONIC AND PREPARATION FOR TREATING DISEASES ARISING FROM CERTAIN CONDITIONS OF THE SYSTEM. J. C. AYER CO., Lowell, Mass.
Filed March 6, 1919. Serial No. 116,321. PUBLISHED MAY 20, 1919.

126,388. DISINFECTANT. JAMES J. BONNER, Boston, Mass.
Filed March 27, 1919. Serial No. 116,947. PUBLISHED MAY 20, 1919.

126,389. ANTISEPTIC AND GERMICIDE. CARLOS C. HOOTH, Youngstown, Ohio.
Filed December 16, 1918. Serial No. 114,657. PUBLISHED MAY 20, 1919.

126,390. HARD CANDIES. E. J. BRACH & SONS, Chicago, Ill.
Filed January 22, 1919. Serial No. 115,366. PUBLISHED APRIL 15, 1919.

126,391. HAND-CLEANSING PASTE. MARGARET G. BULLARD, Wheeling, W. Va.
Filed December 21, 1918. Serial No. 114,750. PUBLISHED FEBRUARY 18, 1919.

126,392. NATURAL SPRING TABLE-WATER. AUGUST A. BUSCH, JR., Sappington, Mo.
Filed March 17, 1919. Serial No. 116,641. PUBLISHED MAY 13, 1919.

126,393. DRY BERMUDA ONIONS. CALIFORNIA VEGETABLE UNION, Los Angeles, Calif.
Filed February 16, 1918. Serial No. 109,023. PUBLISHED MAY 6, 1919.

126,394. HAIR-TONIC PREPARATION. CALINIA HAIR RESTORATIVE COMPANY, Albany, N. Y.
Filed March 19, 1919. Serial No. 116,701. PUBLISHED MAY 6, 1919.

126,395. LIQUID NAIL-POLISH. LILLIAN CARTER, St. Louis, Mo.
Filed April 18, 1918. Serial No. 110,292. PUBLISHED MAY 20, 1919.

126,396. WATCHES, CLOCKS, WATCHCASES, CLOCK-CASES, WATCH-DIALS, AND CLOCK-DIALS. THE CELLELOID COMPANY, New York, N. Y.
Filed February 18, 1918. Serial No. 109,062. PUBLISHED APRIL 22, 1919.

126,397. WATCHES, CLOCKS, WATCHCASES, CLOCK-CASES, WATCH-DIALS, AND CLOCK-DIALS. THE CELLELOID COMPANY, New York, N. Y.
Filed February 18, 1918. Serial No. 109,090. PUBLISHED APRIL 22, 1919.

126,398. WATCHES, CLOCKS, WATCHCASES, CLOCK-CASES, WATCH-DIALS, AND CLOCK-DIALS. THE CELLELOID COMPANY, New York, N. Y.
Filed May 6, 1918. Serial No. 110,600. PUBLISHED APRIL 22, 1919.

126,399. THREAD-WAXING COMPOUND. THE CROXTON COMPANY, Boston, Mass.
Filed November 9, 1918. Serial No. 114,110. PUBLISHED MARCH 25, 1919.

126,400. HOSIERY FOR MEN, WOMEN, AND CHILDREN. CHIPMAN KNITTING MILLS, Easton, Pa.
Filed January 25, 1919. Serial No. 115,416. PUBLISHED APRIL 22, 1919.

126,401. TRACTORS AND PARTS THEREOF. THE CLEVELAND TRACTOR COMPANY, Euclid, Ohio.
Filed January 22, 1919. Serial No. 115,370. PUBLISHED MAY 6, 1919.

126,402. NEW FILES AND RECUT FILES. CONTINENTAL FILE CORPORATION, Anderson, Ind.
Filed February 4, 1919. Serial No. 115,609. PUBLISHED APRIL 8, 1919.

126,403. WATERPROOFED FABRICS. THE CRAVENETTE CO., U. S. A., Hoboken, N. J.
Filed June 5, 1918. Serial No. 111,873. PUBLISHED MARCH 25, 1919.

- 126,404. LIQUID PREPARATION FOR RELIEF OF CERTAIN NAMED CONDITIONS OF THE MOUTH AND GUMS. THOMAS F. CRAWFORD, Pleasantville, N. J.
Filed November 13, 1918. Serial No. 114,149. PUBLISHED MAY 13, 1919.
- 126,405. HAIR-TONICS, SHAMPOOING-BALM, AND PRESSING-OIL FOR STRAIGHTENING KINKY AND CURLY HAIR. CARRIE CROCKETT, Topeka, Kan.
Filed May 22, 1918. Serial No. 111,191. PUBLISHED MAY 20, 1919.
- 126,406. PERFUMED SOAPS. THE CROWN PERFUMERY COMPANY, New York, N. Y.
Filed January 3, 1919. Serial No. 114,969. PUBLISHED APRIL 22, 1919.
- 126,407. CERTAIN NAMED MACHINERY APPERTAINING TO THE TEXTILE INDUSTRY. CURTIS & MARBLE MACHINE CO., Worcester, Mass.
Filed November 23, 1918. Serial No. 114,316. PUBLISHED APRIL 15, 1919.
- 126,408. WASHING-TABLETS AND WASHING COMPOUND. DELBAER MANUFACTURING CO., Chicago, Ill.
Filed October 23, 1918. Serial No. 113,859. PUBLISHED MARCH 11, 1919.
- 126,409. INSECTICIDE. THOMAS DELIKAT, Newark, N. J.
Filed January 18, 1919. Serial No. 115,281. PUBLISHED MAY 20, 1919.
- 126,410. MACHINES FOR SPRAYING TREES AND PLANTS AND SPRAYING CERTAIN SUBSTANCES ON BUILDINGS AND GROUNDS. THE DEMING COMPANY, Salem, Ohio.
Filed May 11, 1918. Serial No. 110,834. PUBLISHED AUGUST 20, 1918.
- 126,411. DYE FOR COATING STRAW HATS AND ARTICLES MADE OF STRAW, RATAN, WILLOW, AND LEATHER. DYENE CHEMICAL CO., Baltimore, Md.
Filed January 8, 1919. Serial No. 115,048. PUBLISHED MARCH 25, 1919.
- 126,412. FACE-CREAMS. MABEL F. ELDER, St. Louis, Mo.
Filed February 19, 1919. Serial No. 115,975. PUBLISHED MAY 6, 1919.
- 126,413. CERTAIN NAMED CLOTHING FOR INFANTS, CHILDREN, LADIES, AND MISSES. ELDER MANUFACTURING CO., St. Louis, Mo.
Filed March 22, 1918. Serial No. 109,712. PUBLISHED MAY 6, 1919.
- 126,414. WATERPROOF COMPOUND FOR CLOTH. ERWA CHEMICAL MANUFACTURING COMPANY, Needham, Mass.
Filed November 6, 1918. Serial No. 114,063. PUBLISHED APRIL 29, 1919.
- 126,415. PLAY LEATHER SHOES FOR CHILDREN. L. R. EVANS' SON COMPANY, Wakefield, Mass.
Filed September 25, 1918. Serial No. 113,348. PUBLISHED APRIL 22, 1919.
- 126,416. SNAP-FASTENERS AND PLACKET-FASTENERS. FEDERAL SNAP FASTENER CORPORATION, New York, N. Y.
Filed December 21, 1918. Serial No. 114,764. PUBLISHED APRIL 8, 1919.
- 126,417. SNAP-FASTENERS AND PLACKET-FASTENERS. FEDERAL SNAP FASTENER CORPORATION, New York, N. Y.
Filed December 21, 1918. Serial No. 114,765. PUBLISHED APRIL 22, 1919.
- 126,418. SNAP-FASTENERS AND PLACKET-FASTENERS. FEDERAL SNAP FASTENER CORPORATION, New York, N. Y.
Filed January 17, 1919. Serial No. 115,246. PUBLISHED APRIL 1, 1919.

- 126,419. DYSPEPSIA-TABLETS. ALBERT J. FILER, Detroit, Mich.
Filed February 12, 1919. Serial No. 115,811. PUBLISHED MAY 6, 1919.
- 126,420. MOUTH-WASH. FIVE POINTS DREG CO., Birmingham, Ala.
Filed February 7, 1919. Serial No. 115,874. PUBLISHED APRIL 29, 1919.
- 126,421. CANDY COUGH-DROPS. WILLIAM GATES, Norfolk, Va.
Filed January 23, 1919. Serial No. 115,387. PUBLISHED MAY 6, 1919.
- 126,422. CERTAIN NAMED ATTACHMENTS FOR CONVERTING AUTOMOBILES INTO TRACTORS AND PARTS THEREOF. THE GENEVA TRACTOR COMPANY, Geneva, Ohio.
Filed February 4, 1918. Serial No. 108,794. PUBLISHED APRIL 15, 1919.
- 126,423. SALES-CARDS USED ON SALABLE COMMODITIES TO DENOTE NAME AND PRICE OF ARTICLES DISPLAYED. CHAS. H. GREENST, Bridgeport, Conn.
Filed September 17, 1918. Serial No. 113,210. PUBLISHED APRIL 8, 1919.
- 126,424. LADIES' HATS, TRIMMED AND UNTRIMMED. JOSEPH GITTEB CO., New York, N. Y.
Filed February 11, 1919. Serial No. 115,763. PUBLISHED APRIL 15, 1919.
- 126,425. MEDICINAL PREPARATION IN LIQUID AND PILL FORM USED AS A NERVE-TONIC. FRANK A. GREENE, Boston, Mass.
Filed March 21, 1919. Serial No. 116,770. PUBLISHED MAY 20, 1919.
- 126,426. CHOCOLATE CANDIES. E. GREENFIELD'S SONS, Brooklyn and New York, N. Y.
Filed November 12, 1917. Serial No. 107,305. PUBLISHED FEBRUARY 12, 1918.
- 126,427. SILK PIECE GOODS. HENRI GUTMANN SILK CORPORATION, New York, N. Y.
Filed February 14, 1918. Serial No. 108,991. PUBLISHED MAY 14, 1918.
- 126,428. LIQUID PREPARATION FOR INFLUENZA, COLDS, AND LA GRIFFE AND A TONIC FOR GENERAL DEBILITY. DA. T. J. HAILE & COMPANY, Fitzgerald, Ga.
Filed March 10, 1919. Serial No. 116,442. PUBLISHED MAY 20, 1919.
- 126,429. CERTAIN NAMED KNITTED GARMENTS FOR MEN, WOMEN, AND CHILDREN. WILLIAM HALL, New York, N. Y.
Filed September 19, 1918. Serial No. 113,251. PUBLISHED APRIL 22, 1919.
- 126,430. HAIR-TONIC. HATS MANUFACTURING CO., Rogers, Ark.
Filed February 5, 1919. Serial No. 115,640. PUBLISHED MAY 6, 1919.
- 126,431. CERTAIN NAMED SOUND-RECORDS, TALKING-MACHINES, PHONOGRAPHS, AND PHONOGRAPH PARTS AND ACCESSORIES. OTTO HEINEMAN PHONOGRAPH SUPPLY CO. INC., New York, N. Y.
Filed March 11, 1919. Serial No. 116,453. PUBLISHED APRIL 8, 1919.
- 126,432. TOILET SOAP. AURELIUS S. HINDS, Portland, Me.
Filed July 9, 1918. Serial No. 112,010. PUBLISHED APRIL 8, 1919.
- 126,433. CHEMICAL CARBON-REMOVERS. SAMUEL L. HINES, Madison, N. J.
Filed January 17, 1919. Serial No. 115,247. PUBLISHED APRIL 29, 1919.
- 126,434. FERTILIZERS. THE HUBBARD FERTILIZER COMPANY OF BALTIMORE CITY, Baltimore, Md.
Filed January 11, 1919. Serial No. 115,120. PUBLISHED APRIL 1, 1919.

- 126,435. CERTAIN NAMED CLOTHING FOR WOMEN, MISSES, AND CHILDREN. ISRAEL MILLER & CO., Fall River, Mass., and New York, N. Y.
Filed July 29, 1918. Serial No. 112,391. PUBLISHED APRIL 22, 1919.
- 126,436. POWDERED CLEANER FOR WHITE SHOES. HENRY JOSEPHSON, Elizabeth, N. J.
Filed June 26, 1918. Serial No. 111,812. PUBLISHED APRIL 1, 1919.
- 126,437. MEN'S, WOMEN'S, AND CHILDREN'S HATS MADE OF CLOTH, FELT, OR STRAW. FRANK KATZ HAT CO., INC., New York, N. Y.
Filed July 30, 1918. Serial No. 112,426. PUBLISHED APRIL 8, 1919.
- 126,438. MOUTH-WASH. DR. T. J. KING-CLARENCE W. KING D. D. S. INC., Boston, Mass.
Filed February 27, 1919. Serial No. 116,183. PUBLISHED APRIL 29, 1919.
- 126,439. HEALING-SALVE. STEPHEN KOCH, New Brunswick, N. J.
Filed September 16, 1918. Serial No. 113,195. PUBLISHED MAY 13, 1919.
- 126,440. NON-INTOXICATING NON-ALCOHOLIC MALTLESS BEVERAGE CONTAINING NO CEREALS SOLD AS A SOFT DRINK. JOSEPH KRIZO-FINE CO., INC., Jersey City, N. J.
Filed March 18, 1919. Serial No. 116,541. PUBLISHED MAY 6, 1919.
- 126,441. COUGH REMEDIES AND OINTMENTS HAVING LOCAL COUNTER-IRRITANT AND ANALGESIC PROPERTIES. ANDREW A. KEYGIER, Milwaukee, Wis.
Filed March 12, 1919. Serial No. 116,494. PUBLISHED MAY 20, 1919.
- 126,442. SOAP. THE LAHOD SOAP PRODUCTS COMPANY, INC., New York, N. Y.
Filed November 8, 1918. Serial No. 114,098. PUBLISHED FEBRUARY 25, 1919.
- 126,443. SELF-RISING FLOUR. LAWRENCEBURG ROLLER MILLS CO., Lawrenceburg, Ind.
Filed October 18, 1918. Serial No. 113,792. PUBLISHED APRIL 15, 1919.
- 126,444. PREPARATIONS FOR CERTAIN NAMED AILMENTS OF HORSES, CATTLE, SHEEP, HOGS, AND POULTRY. DA. L. D. LE GEAR MEDICINE CO., St. Louis, Mo.
Filed December 10, 1918. Serial No. 114,582. PUBLISHED APRIL 29, 1919.
- 126,445. FUMIGATING-CANDLES. WILLIAM G. LENTZ, West Hoboken, N. J.
Filed March 18, 1919. Serial No. 116,687. PUBLISHED MAY 20, 1919.
- 126,446. EYE-LOTIONS. MICHAEL L. LEVITT, Philadelphia, Pa.
Filed March 17, 1919. Serial No. 116,660. PUBLISHED MAY 6, 1919.
- 126,447. INTRAVENOUS INJECTIONS USED IN CONNECTION WITH TREATMENT OF CERTAIN NAMED DISEASES. THE LUCAS LABORATORIES, INC., New York, N. Y.
Filed March 14, 1919. Serial No. 116,582. PUBLISHED MAY 20, 1919.
- 126,448. OINTMENT FOR USE IN TREATING DISEASES OF THE SKIN. WILLIAM LUDEN, Boston, Mass.
Filed January 15, 1919. Serial No. 115,210. PUBLISHED APRIL 29, 1919.
- 126,449. THERAPEUTIC SALVE OR OINTMENT FOR CERTAIN NAMED AILMENTS. MARY E. LUNGER, Newark, N. J.
Filed May 16, 1918. Serial No. 110,931. PUBLISHED MAY 6, 1919.
- 126,450. BREAD, CAKES, SANDWICHES, AND PIES. CLARENCE S. MCCORD, Seattle, Wash.
Filed September 25, 1918. Serial No. 113,372. PUBLISHED APRIL 8, 1919.
- 126,451. ABRASIVE PAPER AND ABRASIVE CLOTH. MANNING ABRASIVE COMPANY, INC., Troy, N. Y.
Filed February 10, 1919. Serial No. 115,735. PUBLISHED APRIL 8, 1919.
- 126,452. MAILING-ENVELOPES. MINNESOTA WAX PAPER COMPANY, St. Paul, Minn.
Filed June 24, 1918. Serial No. 111,785. PUBLISHED APRIL 22, 1919.
- 126,453. HAIR-NETS. EMMA T. MITTELSTADT, New York, N. Y.
Filed January 28, 1918. Serial No. 108,675. PUBLISHED APRIL 16, 1918.
- 126,454. SOAPS. CONRAD G. MOLLER, New Canaan township, Fairfield county, Conn.
Filed February 16, 1919. Serial No. 115,960. PUBLISHED MARCH 25, 1919.
- 126,455. CRUDE COLORS FOR COLORING FOODS AND TEXTILES AND DYESTUFFS. NITRATE AGENCIES COMPANY, New York, N. Y.
Filed October 10, 1918. Serial No. 113,661. PUBLISHED MAY 13, 1919.
- 126,456. DRUGS CONSISTING OF EGG-PRESERVATIVES AND INSECTICIDES. NITRATE AGENCIES COMPANY, New York, N. Y.
Filed October 10, 1918. Serial No. 113,664. PUBLISHED MAY 20, 1919.
- 126,457. POWDER FOR DISSOLVING SOOT FROM WALLS OF FURNACES, BOILERS, AND THE LIKE. NORTHERN CHEMICAL WORKS, Chicago, Ill.
Filed November 27, 1918. Serial No. 114,403. PUBLISHED MAY 6, 1919.
- 126,458. CUTICLE-REMOVER IN LIQUID FORM AND LIQUID POLISH FOR THE NAILS. NORTHAM WARREN CORPORATION, New York, N. Y.
Filed January 16, 1919. Serial No. 116,233. PUBLISHED APRIL 29, 1919.
- 126,459. TOILET-PAPER. ORWEOO RIVER PAPER MILLS, Phoenix, N. Y.
Filed February 5, 1918. Serial No. 108,842. PUBLISHED APRIL 8, 1919.
- 126,460. GRAIN-CLEANERS AND GRAIN-SEPARATORS. J. L. OWENS COMPANY, Minneapolis, Minn.
Filed February 21, 1919. Serial No. 116,057. PUBLISHED APRIL 29, 1919.
- 126,461. TOILET AND BATH POWDER. PACIFIC COAST BORAX COMPANY, New York, N. Y.; Chicago, Ill., and Oakland, Calif.
Filed February 24, 1919. Serial No. 116,106. PUBLISHED MAY 6, 1919.
- 126,462. TOILET POWDERS. THE PALMOLIVE COMPANY, Milwaukee, Wis.
Filed March 25, 1919. Serial No. 116,896. PUBLISHED MAY 6, 1919.
- 126,463. FACE-POWDER AND TALCUM POWDER. PENINSULAR CHEMICAL CO., Detroit, Mich.
Filed February 27, 1919. Serial No. 116,189. PUBLISHED MAY 6, 1919.
- 126,464. SILVER-POLISH. PHILADELPHIA SPECIALTY COMPANY, Philadelphia, Pa.
Filed July 21, 1918. Serial No. 96,724. PUBLISHED MARCH 11, 1919.
- 126,465. MOTOR-FUEL IN LIQUID FORM. PITTSBURGH BY-PRODUCT COKE COMPANY, Wilmington, Del., and Pittsburgh, Pa.
Filed December 23, 1918. Serial No. 114,787. PUBLISHED MARCH 4, 1919.

126,466. MEDICINAL PLASTER FOR THE ALLEVIATION OF PNEUMONIA, BRONCHITIS, PLEURISY, PHTHISIS, AND WHOOPING-COUGH. PNEUMOPHTHISINE CHEMICAL COMPANY, Chicago, Ill. Filed March 7, 1919. Serial No. 116,359. PUBLISHED APRIL 29, 1919.

126,467. MENTAL POLISH. PENNO BROTHERS, Philadelphia, Pa. Filed February 15, 1919. Serial No. 115,855. PUBLISHED MARCH 25, 1919.

126,468. HEAD-SUPPORTS AND BAR-SPACERS FOR REINFORCED CONCRETE CONSTRUCTIONS. EARLE P. PRESS, Chicago, Ill. Filed December 14, 1917. Serial No. 107,964. PUBLISHED APRIL 1, 1919.

126,469. DECOLORIZING-CARBON FOR USE IN DECOLORIZING AND CLARIFYING MATERIALS. REFINING PRODUCTS CORPORATION, New York, N. Y. Filed November 23, 1918. Serial No. 114,319. PUBLISHED MAY 20, 1919.

126,470. FELT WHEELS AND COTTON RUFFS. JAMES H. RHODES & COMPANY, Chicago, Ill. Filed February 11, 1918. Serial No. 108,946. PUBLISHED DECEMBER 10, 1918.

126,471. CERTAIN NAMED KNIVES MADE WHOLLY OR PARTLY OF PRECIOUS METALS OR PLATED WITH PRECIOUS METALS. JOHN RUSSELL CUTLERY COMPANY, Turners Falls, Mass. Filed January 25, 1919. Serial No. 115,433. PUBLISHED APRIL 8, 1919.

126,472. CERTAIN NAMED CUTLERY AND TABLE KNIVES AND FORKS OF BASE METAL. JOHN RUSSELL CUTLERY COMPANY, Turners Falls, Mass. Filed January 25, 1919. Serial No. 115,442. PUBLISHED APRIL 15, 1919.

126,473. CERTAIN NAMED TABLEWARE MADE WHOLLY OR PARTLY OF OR PLATED WITH PRECIOUS METALS. JOHN RUSSELL CUTLERY COMPANY, Turners Falls, Mass. Filed January 25, 1919. Serial No. 115,443. PUBLISHED APRIL 8, 1919.

126,474. CREAMERY-BUTTER. HETHERFORD CO. CREAMERY ASSN., Murfreesboro, Tenn. Filed February 6, 1918. Serial No. 108,853. PUBLISHED APRIL 1, 1919.

126,475. LUBRICATING-OILS. THE SCHOFIELD OIL CO., New York, N. Y. Filed February 11, 1919. Serial No. 115,791. PUBLISHED APRIL 15, 1919.

126,476. LUBRICATING-OILS. THE SCHOFIELD OIL CO., New York, N. Y. Filed February 11, 1919. Serial No. 115,792. PUBLISHED APRIL 15, 1919.

126,477. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET USE. OTTO E. SCHROCK, Cleveland, Ohio. Filed February 2, 1919. Serial No. 115,603. PUBLISHED APRIL 29, 1919.

126,478. EVAPORATED MILK AND CONDENSED MILK. SHEPPARD FARM CO., INC., New York, N. Y. Filed March 3, 1919. Serial No. 116,278. PUBLISHED MAY 6, 1919.

126,479. SPARK-PLUGS. ALBERT F. SIEBERT, Dayton, Ohio. Filed October 14, 1918. Serial No. 113,724. PUBLISHED MARCH 18, 1919.

126,480. WATER-SOFTENING COMPOUND. SIERRA CHEMICAL COMPANY, Los Angeles, Calif. Filed March 17, 1919. Serial No. 116,670. PUBLISHED MAY 6, 1919.

126,481. SKIRTS, UNDERSKIRTS, AND DRESSES. SILVERSTEIN BROS., New York, N. Y. Filed July 3, 1917. Serial No. 104,820. PUBLISHED MAY 6, 1919.

126,482. HAIR-GROWER, TEMPLE-HAIR GROWER, AND PRESSING-OIL. JULIA A. SIMA, Canton, Miss. Filed February 5, 1919. Serial No. 115,648. PUBLISHED MAY 6, 1919.

126,483. PERFUMES. FREDERICK K. SMITH, New York, N. Y. Filed January 9, 1919. Serial No. 115,070. PUBLISHED MAY 6, 1919.

126,484. STOCK FERDS. SOUTHERN FEED COMPANY, INC., Newport News, Va. Filed October 30, 1917. Serial No. 107,032. PUBLISHED MARCH 5, 1918.

126,485. BEDDING—NAMES, MATTRESSES AND PILLOWS. THE STANDARD BEDDING CO., Milwaukee, Wis. Filed November 29, 1915. Serial No. 91,021. PUBLISHED APRIL 1, 1919.

126,486. CIGARETTES. STANDARD TOBACCO COMPANY, INC., New York, N. Y. Filed February 1, 1918. Serial No. 108,758. PUBLISHED APRIL 1, 1919.

126,487. NEWSPAPER-SECTION. STAR COMPANY, New York, N. Y. Filed January 29, 1919. Serial No. 115,512. PUBLISHED APRIL 8, 1919.

126,488. PHONOGRAPHS. THE STARR PIANO COMPANY, Richmond, Ind. Filed September 5, 1917. Serial No. 100,080. PUBLISHED APRIL 15, 1919.

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126,490. LEATHER BOOTS AND SHOES FOR MEN, WOMEN, AND CHILDREN. THE STETSON SHOE COMPANY, INC., Weymouth, Mass. Filed February 8, 1919. Serial No. 115,700. PUBLISHED APRIL 22, 1919.

126,491. PUBLICATION ISSUED MONTHLY KNOWN AS BONDS. THE STRAUS BROTHERS COMPANY, Ligooler, Ind. Filed February 17, 1919. Serial No. 115,933. PUBLISHED APRIL 15, 1919.

126,492. OIL FOR SATURATING, FOR SOFTENING PURPOSES, COTTON, WOOL, AND SILK. STANLEY D. SUBERS CHEM. CO., Philadelphia, Pa. Filed March 1, 1919. Serial No. 116,240. PUBLISHED MAY 20, 1919.

126,493. LINIMENT FOR EXTERNAL USE IN THE TREATMENT OF CERTAIN NAMED AILMENTS. JOSEPH THERRIEN, Rumford, Me. Filed March 22, 1919. Serial No. 116,825. PUBLISHED MAY 20, 1919.

126,494. LEATHER BELTING. THE ULMER LEATHER CO., Norwich, Conn. Filed December 20, 1918. Serial No. 114,756. PUBLISHED APRIL 15, 1919.

126,495. PERFUMERY. UNITED DRUG COMPANY, Boston, Mass. Filed February 28, 1919. Serial No. 116,222. PUBLISHED MAY 6, 1919.

126,496. PERFUMERY. UNITED DRUG COMPANY, Boston, Mass. Filed February 28, 1919. Serial No. 116,224. PUBLISHED APRIL 22, 1919.

126,497. LEATHER SHOES FOR MEN. VETERAN SHOE COMPANY, San Diego, Calif. Filed February 12, 1919. Serial No. 115,320. PUBLISHED MAY 6, 1919.

126,498. HOSIERY FOR MEN AND WOMEN. A. V. VICTORIA & CO., INC., New York, N. Y. Filed November 1, 1918. Serial No. 114,019. PUBLISHED APRIL 8, 1919.

126,499. PUBLICATION ISSUED MONTHLY KNOWN AS A HOUSE ORGAN. W. T. WELLS & CO., San Francisco, Calif. Filed February 17, 1919. Serial No. 115,041. PUBLISHED APRIL 15, 1919.

126,500. LATHE AND DRILL CHUCKS. WESTCOTT CHUCK COMPANY, Onelda, N. Y. Filed January 4, 1919. Serial No. 114,998. PUBLISHED MAY 6, 1919.

126,501. WRITING AND PRINTING PAPER. THE WHITAKER PAPER COMPANY, Cincinnati, Ohio. Filed February 28, 1919. Serial No. 116,225. PUBLISHED APRIL 15, 1919.

126,502. OINTMENT FOR CERTAIN NAMED AFFECTIONS AND DISEASES. WILLIAM H. WHITMORE, Cleveland, Ohio. Filed January 22, 1919. Serial No. 115,383. PUBLISHED APRIL 29, 1919.

126,503. PICTORIAL CORRESPONDENCE-CARDS. JAMES MAYNARD WILLIAMSON, Pittsburgh, Pa. Filed July 10, 1918. Serial No. 112,035. PUBLISHED APRIL 22, 1919.

126,504. CERTAIN NAMED ABRASIVE MATERIALS AND TOOLS. THE WONDER STONE CO., Boston, Mass. Filed January 28, 1919. Serial No. 115,405. PUBLISHED APRIL 22, 1919.

126,505. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. J. EARLY WOOD, INC., New York, N. Y. Filed February 15, 1919. Serial No. 115,802. PUBLISHED MAY 6, 1919.

TRADE-MARK REGISTRATIONS RENEWED.

17,406. WATCH-MOVEMENTS. AMERICAN WALTHAM WATCH COMPANY, Waltham, Mass.; Waltham Watch Company, successor.
Registered January 21, 1890. Renewed January 21, 1920.

DECISIONS

OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

BOGART v. RUPPEL.

Decided April 1, 1918.

INTERFERENCE—CONSTRUCTIVE REDUCTION TO PRACTICE—PRIOR APPLICATION FAILING TO DISCLOSE ISSUE.

A prior application which does not contain or suggest the invention in issue, but, on the contrary, was the disclosure from which the invention in issue started and over which it was an improvement, does not constitute a reduction in practice of such invention.

APPEAL from Examiners-in-Chief.

EXPANSION-JOINT.

Mr. William Macomber for Bogart.

Mr. Francis H. Richards and Mr. Gustav Drees for Ruppel.

CLAY, Assistant Commissioner:

Ruppel, the senior party, appeals from the affirmation by the Examiners-in-Chief of the decision of the Examiner of Interferences awarding priority to his opponent, Bogart, on a pipe expansion-joint defined as follows:

1. In combination with two sections of a pipe line, a casing attached to the end of one pipe section, a tubular member on the end of the other pipe section and slidably disposed in said casing, an annular head on said tubular member, and a sleeve secured to said casing and extending over said head to form a protective chamber in which the sliding surface of said tubular member is disposed.

2. A device of the character described comprising a casing, a tubular member slidably mounted in said casing, and a sleeve secured to said casing and extending over the sliding surface of said tubular member to prevent the accumulation or discharge thereon of foreign material.

3. A device of the character described comprising a casing, a tubular member slidably mounted in said casing, an annular head on said tubular member, a sleeve secured to said casing and extending over said head to form a protective member in which the sliding surface of said tubular member is disposed, and a stopplug means formed on the free edge of said sleeve overhanging said head and extending into the path of movement of said head so that the outward movement of said tubular member is limited.

The casing referred to in these claims is the part marked 13 in Bogart's drawing and marked E in Ruppel's. The tubular member 5 of Bogart or 13 of Ruppel slides in this casing and necessarily slides in a packing 9, the setting and adjusting of which packing requires that the bolts 14 be adjusted after the two parts of the pipe-joint are put together. As a means of properly aligning the two sections of pipe and of protecting the friction-surface of the sliding inner pipe there is provided a protecting-chamber sleeve, (marked 12 in Bogart's drawing and A in Ruppel's,) which is supported by bolting it to the annular flange 11 of the casing 7. At the other end it engages the annular head 6 of the tubular member 5, which head also is the

fastening means to attach the short sliding section to the main section of the pipe 1. In claim 2 the sleeve attached to the casing is stated to be for the purpose of protecting the sliding surface of the tubular member. In claim 3, there is specified a stop on the outer or free edge of the protecting-sleeve, and it will be observed that in some of Bogart's constructions, as that in Figure 7, where the stop is integral with the sleeve, the device would not be operative unless the sleeve were separable from the casing to which it is attached. I think for this reason especially it would not do to construe the language of the claims—"sleeve secured to said casing"—to cover an integral construction in which the sleeve was an integral part of the casing.

Ruppel makes a point of the fact that the claims do not specify the packing-gland or bolts 14 of Bogart, and apparently it is in view of this that it is contended that certain incidental or accidental language in the specification of an older application of Ruppel (No. 746,534) in evidence, to the effect that a cage-guide there disclosed might be made without any openings, can be construed to support these claims, and thus give Ruppel a date of constructive reduction to practice of February 6, 1913. I can see nothing in this contention, for it is perfectly obvious that at the time of his earlier application Ruppel had not thought of passing the gland-adjusting bolts through the casing 1, and therefore found it necessary to use a slotted cage to guide the flange-head 10 of the inner tubular member of the joint. Of course if the cage 16 of that structure were replaced by a sleeve forming a protective chamber it would be an impossible construction, because the packing-gland could not be adjusted. As a matter of fact if the drawing of Ruppel's application No. 746,534 be taken literally as it stands no packing-gland could be used at all if the cage 16 were a cylindrical sleeve, for there is not room to withdraw the head 10 from such sleeve and still leave the inner pipe-section within the packing-gland, to say nothing of getting at the nuts 8 to tighten them. In Fig. 3 of his brief Ruppel has shown an imaginary construction which apparently would be quite impossible to put together at all and certainly impossible to tighten the packing-gland, with the inner pipe centered and guided.

Ruppel's application of 1913 does not contain or suggest the invention in issue, but, on the contrary, was the disclosure from which the invention in

issue started and over which it was an improvement. Bogart made his invention by departing from it. Without stopping to analyze the proofs in particular I agree with the tribunals below that Bogart completed his invention prior to Ruppel's filing date of March 10, 1915, and ought to prevail. There is no evidence of Bogart's alleged "repudiation of the paternity of the invention," which of course would be inconsistent with his claiming it or taking any proofs at all. The decision is affirmed.

Court of Appeals of the District of Columbia.

IN RE LINK-BELT COMPANY.

Decided June 2, 1919.

TRADE-MARK—"SERVICE," FOR RUBBER AND FABRIC BELTS—DESCRIPTIVE.

A mark for rubber and fabric belts consisting of the word "Service" surmounting a bar with V-shaped ends held properly refused registration, since this word has a fixed meaning in the trade, indicating that the goods are serviceable and will not only wear well, but are especially adapted to meet the requirements of the user.

Mr. J. S. Barker for the appellant.

Mr. T. A. Hostetter for the Commissioner of Patents.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This appeal is from the decision of the Commissioner of Patents refusing registration of the word "Service," surmounting a bar with V-shaped ends, as a trade-mark for rubber and fabric belts.

We are of opinion that the word "Service" in this instance would be descriptive of the quality of the goods. It has a fixed meaning in trade generally as indicating that goods so described are serviceable, and will not only wear well, but are especially adapted to meet the requirements of the user of the goods to which the mark is applied. It was not error to refuse registration of the mark under the provisions of section 5 of the Trade-Mark Act of February 20, 1905.

The decision of the Commissioner of Patents is affirmed and the clerk is directed to certify these proceedings as by law required.

Affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

RUPPEL v. BOGART.

Decided June 2, 1919.

INTERFERENCE—CONSTRUCTIVE REDUCTION TO PRACTICE—EARLIER APPLICATION FAILING TO DISCLOSE ISSUE. Concerning decisions of the tribunals of the Patent Office holding that a prior application of R. relied upon for a constructive reduction to practice, failed to disclose the invention and awarding priority to B. affirmed. (For Commissioner's decision see 265 O. G., 633.)

Mr. Theo. K. Bryant and Mr. Gustav Dreiss for the appellant.

Mr. George E. Teie and Mr. William Macomber for the appellee.

MEMORANDUM OPINION BY MR. JUSTICE VAN ORSDIEL.

This is an appeal in an interference proceeding between the applications of appellant Ruppel filed March 10, 1915, and appellee Bogart filed September 3, 1915. It is unnecessary to set out the counts of the issue. The invention relates to an improvement in expansion-joints consisting of a casting secured to one section of pipe and a tubular member secured to the other section, in such manner that the one will slide within the other when the pipe contracts or expands.

The junior party Bogart alleges, and has sustained by sufficient proof, conception and disclosure in August, 1913, and reduction to practice in November, 1914. The senior party Ruppel has taken no testimony. In a preliminary statement he referred to an earlier application upon which he relies for constructive reduction to practice. A petition by Bogart for access to the earlier application was allowed by the Commissioner. The tribunals of the Patent Office were unanimous in holding that the earlier application of Ruppel does not disclose the invention here in issue, and that Ruppel must be held, for conception and constructive reduction to practice, to his filing date—March 10, 1915. This holding is fully supported by the record.

The decision of the Commissioner of Patents is, therefore, affirmed.

Affirmed.

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Changes in Classification.

(ORDER NO. 2,505.)

DEPARTMENT OF THE INTERIOR,

UNITED STATES PATENT OFFICE,

Washington, D. C., June 30, 1919.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Class 5, Beds, (Division VIII,) establish subclasses—

70. Stretchers.
72. Vehicle-attached.

The patents contained in these subclasses have been taken for the most part from class 21, Carriages and

80. Ambulances and stretchers.
182. Body-frames and running-gear.
186. Body-leveling devices.
85. Chafe-irons.
12. Children's carriages—
83. Folding.
18. Clips.
19. Drays.
219. Dust-guards.
23. Fenders.
24. Fifth-wheels.
28. Horse-carriages.
29. Hounds.
32. King-bolts.
208. One-wheeled vehicles.
146. Portable tanks and boilers—
147. Leveling devices.
127. Rein-holders—
132. Clamp.
133. Spring—
134. Pivoted.
135. Weighted.
136. Wheel.
128. Rein-supports.
39. Running-gear—
138. Underframes, parallel axes.

- Running-gear—
204. Wheeled tongue-supports—
206. Single wheel, swiveled mount—
- log—
206. Spring-mounted tongue.
98. Short-turning gear—
143. Oppositely-swiveling axes—
145. Axle extensions pivotally and
- slidably connected.
144. Cross-reeches.
139. Stub-axle type—
140. Four wheels steered.
141. Stub-axes—
142. Pivot in wheel-plane.
48. Sleds—
94. Hand.
96. Wheel-runners.
97. Spring-gear.
54. Standards.
102. Steering-gear—
194. Checks—
195. Fluid.
202. Single wheel.
196. Stub-axle type—
137. Angle-arms link-connected—
200. Automatically governed.
198. Rotary shaft and gearing—
199. Interposed transmission—
- link.

Wagons, subclasses 80, Ambulances and stretchers, hereinafter abolished, and subclass 43, Seats, Shifting.

In class 16, Builders' Hardware, (Division XX,) abolish subclass—

- Casters—
166. Leg-elevators—
- Frame.

The patents formerly contained in this subclass have been placed for the most part in class 280, Land-Vehicles, hereinafter established.

In class 21, Carriages and Wagons, (Division X,) abolish subclasses—

- Steering-gear—
201. Swiveling axle.
193. Three or four wheels steered.
35. Stops.
56. Sulkies.
185. Three-wheeled vehicles.
65. Trucks—
121. Barrel.
116. Brick.
122. Drying.
118. Elevating.
115. House-moving.
120. Implement.
117. Piano.
119. Water-barrel.
137. Vehicle-trains—
100. Traction-engine tenders.
184. Vehicles with five or more wheels.
68. Wheelbarrows.
101. Wheeled vehicles, occupant-steered.
129. Whip-sockets—
130. Lock.
131. Whip-sockets and rein-holders combined.

The patents formerly contained in these subclasses have been placed for the most part in class 280, Land-Vehicles, hereinafter established. Some formerly contained in subclass 80 have been placed in class 5, Beds, subclass 70, Stretchers, hereinafter established, and some formerly contained in subclasses 24 and 32 have been placed in class 64, Journal-Boxes, Pulleys, and Shafting, subclass 84, Thrust-bearings, Vehicle center-bearings, and the subclasses indented thereunder, hereinafter established.

(Attention is called to the fact that the subclass title "Children's carriages" still controls one subclass indented thereunder—viz., 84, Stops—and that the subclass title "Sleds" still controls one subclass indented thereunder—viz., 95, Shifting thills.)

In class 21, Carriages and Wagons, (Division X,) abolish subclasses—

7. Bodies.
81. Boots and aprons.
11. Carriage-irons.
14. Close carriages.
15. Dashboards.
125. Doors and windows.
21. End-gates.
74. Hay-racks.
26. Horses.
33. Lumber-wagons.
183. Miscellaneous.
45. Shifting rails.
60. Top-joints.
61. Top-props.
62. Tops—
220. Curtains.
148. Wind-shields.

The patents formerly contained in these subclasses have

been placed for the most part in class 290, Land-Vehicles, Bodies and Tops, hereinafter established.

In class 21, Carriages and Wagons, (Division X,) abolish subclasses—

86. Chute-wagons.
20. Dumping-wagons.

The patents formerly contained in these subclasses have been placed for the most part in class 298, Land-Vehicles, Dumping, hereinafter established.

In class 24, Buckles, Buttons, Clamps, Etc., (Division XXXV,) abolish the following subclasses, with its definition:

- 1.5. Load-binders.

The patents formerly contained in this subclass have been placed for the most part in class 280, Land-Vehicles, subclass 170, Wheeled, Vehicle attachments, Load-binders, and the subclass indented thereunder, hereinafter established.

In class 64, Journal-Boxes, Pulleys, and Shafting, (Division XII,) establish subclasses—

- Thrust-bearings—
84. Vehicle center-bearings—
85. Ball.
86. Cylinder.

The patents contained in these subclasses have been taken for the most part from class 21, Carriages and Wagons, subclasses 24, Fifth-wheels, and 32, King-bolts, hereinafter abolished.

Establish, in Division X, classes 280, Land-Vehicles; 296, Land-Vehicles, Bodies and Tops, and 298, Land-Vehicles, Dumping, with the following subclasses and definitions:

280.—LAND-VEHICLES.

1. Miscellaneous.
2. Dropped bodies.
3. Wheel-propelled.
4. Hose and ladder.
5. Tank or boiler.
6. Body-leveling devices—
7. Tank or boiler.
8. Wheeled and runner—
9. Retracting wheel or
- runner—
10. Wheel-runner type.
11. Pivoted lateral axis.

290.—LAND-VEHICLES—Continued.

12. Runner—
13. Wheel-runner.
14. Hub-runner.
15. Multiple sled—
16. Occupant-steered.
17. Swivel and rocking.
18. Toboggan.
19. Drag.
20. Folding.
21. Occupant-steered—
22. Flexible runner.

296.—LAND-VEHICLES—Continued.

- Runner—
23. Push.
24. With draft attachment.
25. Spring.
26. Hooker-runner.
27. Knees.
28. Runner-bases.
29. Wheeled—
30. Convertible—
31. Cradle or crib.
32. Skids.

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330.—LAND-VEHICLES—Continued.	
Wheeled—	
33.	Articulated—
33.1.	Separable motor-section.
33.2.	Vehicle-train—
33.3.	Traction-engine tenders.
33.4.	Two-wheeled trailers.
33.5.	Trailer-steering connectors—
33.6.	Adjustable tongue.
33.7.	Offset couplings—
33.8.	Adjustable-tongue connectors.
34.	Extensible—
35.	Article-support.
36.	Folding—
37.	Traveling case.
38.	Pivoted wheel-carrier—
39.	Longitudinal axle—
40.	Two-wheel.
41.	Transverse axle.
42.	Lateral.
43.	Vertically adjustable—
44.	Positively actuated—
45.	(Withdrawn)
46.	Tongue.
47.	Hand—
48.	Steering.
49.	Tanks and barrows—
50.	Receptacle—
51.	Two-wheel.
52.	One-wheel.
53.	Two-wheel.
54.	With additional wheel attachment.
55.	Tandem wheels.
56.	Warehouse type—
57.	Movable toe.
58.	One-wheel.
59.	Three-wheel.
60.	Two-wheel.
61.	Article-supports.
62.	Three-wheel.
63.	Two-wheel.
64.	Adjusting wheels.
65.	Spring—
66.	Thill and axle connected—
67.	Interposed spring—
68.	Body thill-mounted.
69.	Body axle-mounted.
70.	Body thill-mounted.
71.	Adjustable.
72.	Body axle-mounted.
73.	Adjustable.
74.	Adjustable.
75.	Thill and body connected—
76.	Adjustable.
77.	Adjustable.
78.	One-wheel.
79.	Spring.
80.	Rear-end gear—
81.	Multiple truck.
82.	Tongue-truck—
83.	Vertically adjustable.

330.—LAND-VEHICLES—Continued.	
Wheeled—	
84.	Running-gear—
85.	Tongue-truck—
86.	One-wheel.
87.	Swinging axle and rocking.
87.5.	Swivel truck.
88.	Occupant-steered—
89.	Coaster-wagons.
90.	Combined brake.
91.	Checked.
92.	Fluid.
93.	Four-wheel controlled.
94.	One-wheel controlled.
95.	Stub axle—
96.	Centering.
97.	Link-connect—
98.	Rotary shaft and gearing.
99.	Mounts—
100.	Springs.
101.	Pivoted wheel-plane.
102.	Swinging axle.
103.	Short toe—
104.	Four-wheel controlled.
105.	Oppositely-acting axles—
106.	Pivoted and sliding reaches.
107.	Crossed reaches.
108.	Stub axle.
109.	Equalized frame.
110.	Roller-bearing frame.
111.	Body-frames—
112.	Spring suspension.
113.	With body or load retainers.
114.	With tongue-antivibrators.
115.	Swinging axle and rocking—
116.	Spring.
117.	Rocking—
118.	Spring.
119.	Swinging axle—
120.	Platform type—
121.	Spring.
122.	With draft attachment.
123.	Offset pivot—
124.	Spring—
125.	Longitudinal leaf.
126.	Spring—
127.	Leaf—
128.	Longitudinal.
129.	Cross.
130.	Spring.
131.	Swinging axle connections—
132.	Rocking—
133.	Platform type—
134.	Spring.
135.	Platform type—
136.	Spring.
137.	With draft attachment.
138.	Offset pivot—
139.	Spring—
140.	Longitudinal leaf.

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330.—LAND-VEHICLES—Continued.	
Wheeled—	
136.	Running-gear—
137.	Swinging axle connections—
138.	Spring—
139.	Longitudinal leaf.
140.	Antivibrators.
141.	Houds.
142.	Reaches—
143.	Swivel.
144.	Extensible.
145.	Bolsters and standards—
146.	Varying-width adjustment.
147.	Pivotal connection.
148.	Vertically adjustable standards.
149.	Readily-removable standards.
150.	Supplemental bolsters.
151.	Iron and clips.
152.	Attachments—
153.	Auxiliary load-starters.
154.	Dust and mud guards—
155.	Body-attached—
156.	Securing device.
157.	Thill or tongue attached.
158.	Wheel-attached.
159.	Asle-attached.
160.	Wheel-scraper.
161.	Dust-guards.
162.	Wheel-guards.
163.	Chafe-irons—
164.	Roller.
165.	Steps—
166.	Combined devices.
167.	Wheel or axle attached.
168.	Shiftable—
169.	Obstacle-actuated.
170.	Detachable.
171.	Treads.
172.	Whip-sockets—
173.	Whip-gripping—
174.	Spring.
175.	Rubber gaskets.
176.	Pivotal connection.
177.	Brackets and clips.
178.	Lock.
179.	Combined reinforcement.
180.	Whip-manipulating devices.
181.	Load-binders—
182.	Hay.
183.	Rein supports and guards.
184.	Rein-holders—
185.	Clamp—
186.	Spring—
187.	Pivoted jaws.
188.	Hitching and controlling devices—
189.	Weight.
190.	Ground-engaging (brake) lever.
191.	Wheel-operated.
192.	Winding-drum—
193.	Shiftable gear.
194.	Clutch.

334.—LAND-VEHICLES, BODIES AND TOPS.	
Bodies—	
1.	Cutter.
2.	Racks—
3.	Barrrel.
4.	Tobacco.
5.	Hay—
6.	Extensible.
7.	Metallie.
8.	Iron.
9.	Convertible box—
10.	Hay and box—
11.	Stock—
12.	Pivoted top boards.
13.	Pivoted side boards.
14.	Grain-tanks.
15.	Hearse—
16.	Combined carriage.
17.	Comin-retaining devices.
18.	Ambulances—
19.	Wheeled stretchers.
20.	Advertising and displaying.
21.	Lunch-wagons.
22.	Camping.
23.	Inclosed compartments.
24.	Dropped bottom.
25.	Extensible.
26.	Collapsible.
27.	Frame structure—
28.	Chairs and joints—
29.	Metallie reinforcement.
30.	Materials.
31.	Top boards—
32.	Baffle.
33.	Sparing devices.
34.	Body-securing devices.
35.	Top and side board securing devices.
36.	Auxiliary package compartments.
37.	Drip-pans.
38.	Linings.
39.	Ties.
40.	Wear-strips.
41.	Stay-irons.
42.	Stakes and sockets.
43.	Doors and windows—
44.	Shiftable side panels.
45.	Laterally-movable link-binged.
46.	Horizontally sliding.
47.	Telescoping sections.
48.	Pivotal connection.
49.	End-gates—
50.	Combined types.
51.	Vertically removable.
52.	Rearwardly removable.
53.	Telescoping sections.

334.—LAND-VEHICLES, DUMPING.	
Continued.	
1.	Miscellaneous.
2.	Hand trucks and barrows—
3.	Single wheel.
4.	Sleds.
5.	Two-wheel—
6.	With cover or end-gate control.
7.	With load-delivering chute.
8.	Plural load units.
9.	Rotating and tilting.
10.	Elevating.
11.	Elevating and tilting.
12.	Sliding and tilting.
13.	Side delivery only.
14.	Operating mechanism—
15.	Vehicle-motion controlled.
16.	Vehicle-motion controlled.

334.—LAND-VEHICLES, BODIES AND TOPS—Continued.	
Bodies—	
54.	Rearwardly removable.
55.	Pivotal connection.
56.	Upwardly swinging.
57.	Downwardly swinging.
58.	Shovel-board type—
59.	Readily removable.
60.	Box-engaging frames or clips.
61.	Combined loading-chute.
62.	Combined steps.
63.	Seats with body modifications.
64.	Seating arrangements.
65.	Shifting seats—
66.	Seat-forming body parts.
67.	Attached side panels.
68.	Door or end-gate operated.
69.	Seats convertible to other devices.
70.	Dashboards—
71.	Rails and handles.
72.	Securing devices—
73.	Pivoted.
74.	Extensions.
75.	Foot-rests.
76.	Boots.
77.	Laprobe holders and locks.
78.	Storm-front shields.
79.	Aprons and robes—
80.	Top-supported windowed panels—
81.	Combined aprons.
82.	Robes.
83.	Aprons.
84.	Curtains.
85.	Wind-shields—
86.	Rear seat.
87.	Connected horizontally-pivoted panels.
88.	Edge to edge.
89.	Link-binged.
90.	Vertically-movable panels.
91.	Single panel.
92.	Deflected protecting air-currents.
93.	Hinges.
94.	Weather-strips.
95.	Ventilators.
96.	Auxiliary protectors—
97.	Pivoted panels.

334.—LAND-VEHICLES, DUMPING.	
Continued.	
17.	Tilting—
18.	Side delivery only.
19.	Operating mechanism—
20.	Vehicle-motion controlled.
21.	Vehicle-motion controlled.
22.	Fluid-pressure operators.
23.	With cover or end-gate control.
24.	Hopper type—
25.	Pivoted sections.
26.	Tilting bottom.
27.	Bottom-opening—
28.	Removable bottom boards.

334.—LAND-VEHICLES, BODIES AND TOPS—Continued.	
Bodies—	
97.	Glare-screens.
98.	Roll-up covers.
99.	Extensions.
100.	Load-covers—
101.	Refuse.
102.	Standing—
103.	Detachable limousine type.
104.	Spaced parallel bows—
105.	Collapsible.
106.	End-gate.
107.	Let-down type—
108.	Pivotal connection.
109.	Collapsible spaced parallel bows.
110.	Plural position.
111.	Single bow group—
112.	Raising and lowering devices—
113.	Spring.
114.	Two bow groups—
115.	Raising and lowering devices.
116.	Outrigger type—
117.	Raising and lowering devices.
118.	Bows and slats—
119.	Iron.
120.	Braces.
121.	Joints and couplings—
122.	Brace and bow pivots.
123.	Shifting rails.
124.	Down-supports—
125.	Prop-block cushions—
126.	Spring.
127.	Bow-spacers.
128.	Aprons.
129.	Clamping—
130.	With bow-spacers.
131.	Strap.
132.	Top-attached.
133.	Body and top attached—
134.	Spring.
135.	Valance.
136.	Dust-covers.
137.	Roof or cover structure.
138.	Curtains—
139.	Door-opened.
140.	Overhead storage—
141.	Roller or folded.
142.	Vertical roller.
143.	Horizontal roller.
144.	Rackstays.
145.	Windowed.

334.—LAND-VEHICLES, DUMPING.	
Continued.	
29.	Hopper type—
30.	Bottom-opening—
31.	Hinged doors—
32.	Transversely binged only.
33.	Longitudinally binged only.
34.	Parallel swinging.
35.	Oppositely swinging.
36.	Inwardly only.
37.	Outwardly only.
38.	Vertically movable.
39.	Closing-equalizers.

[Vol. 265. No. 4.]

J. T. NEWTON, Commissioner.

Changes in Classification.

(ORDER NO. 2,500.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

Washington, D. C., June 30, 1919.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Class 100, Presses, (Division II,) abolish subclass—

Packing—
Articles.

The patents formerly contained in this subclass have been placed in class 226, Filling and Closing Portable Receptacles, hereinafter established.

In class 113, Sheet-Metal Ware, Making, (Division XIV,) abolish the following subclasses, with their definitions:

224.—FILLING AND CLOSING PORTABLE RECEPTACLES.

1. With articles and fluent materials.

2. With articles—
3. Bobbins and cops,
4. Match-books,
5. Cigarettes,
6. Toothpicks,
7. Matches—
8. Filling and closing—
9. Separate fill and cover stations—
10. Measured charge,
11. Filling—
12. Measured charge,
13. Closing,
14. Layers and columns—
15. Cans,
16. Lowered support or raised wall,
17. Facing,
18. Inserted form, guide, or support.

With fluent materials—

19. Special types—
20. Gas,
21. Immersion,
22. Overload,
23. Uniform density—
24. Receding receptacle-support—
25. Rotary packer,
26. Siphon tube,
27. Inverted receptacle—
28. Turnover,
29. Funnel—
30. Frott-jar,
31. With supports,
32. With indicating means,
33. Air displacement—
34. Valved—
35. Float-controlled valve,
36. Valved—
37. Float-controlled valve,
38. Body structure,
39. Special receptacle—
40. Capsule—
41. Closing feature,
42. Conceal,
43. Mattress—
44. Inserted bat-holder,
45. Belt conveyer,
46. Reciprocating follower,
47. Bag—
48. Valved bag,
49. Flat bag,
50. Tube stripping,

Changes in Classification.

(ORDER NO. 2,507.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

Washington, D. C., June 30, 1919.

The following changes are hereby directed in the Manual of Classification, revised to January 1, 1916:

Bottle-capping—

1. Die—
2. Fillers and forcers,
3. Sectional,
4. Rotary tool,
5. Strap-compressor.

The patents formerly contained in these subclasses have been placed in class 226, Filling and Closing Portable Receptacles, subclass 83, With fluent materials, General types, Closing, Closure applying and conforming, and the subclasses indented thereunder, hereinafter established.

In class 226, Packaging Liquids, (Division XIV,) change the title of the class to read *Class 226, Filling and Closing Portable Receptacles*, abolish the existing subclass titles, and establish in lieu thereof the following subclasses and definitions:

226.—FILLING AND CLOSING PORTABLE RECEPTACLES—Con.

With fluent materials—

Special types—

Special receptacle—

Bag—

51. Filling and closing—

52. Heading,

53. Sewing,

54. Tying,

55. Filling and agitating,

56. Closing—

57. Tying,

58. Filling—

59. Spreading bopper or form,

60. Scoop type,

61. Successive bags,

62. Siphon bottle,

63. Fountain pen,

64. Ball-stopper bottle,

65. Pull-stopper bottle,

66. General types—

67. With safety-screen,

68. With means for treatment—

69. Of material—

70. Heating or cooling,

71. Compacting,

72. Agitating,

73. Filling and closing—

74. Rotary closing,

75. Separate fill and close stations—

76. Closure-inserting,

77. Single fill and close station—

78. Closure-inserting—

79. Closure feed,

80. Closing—

81. Special closure applying,

82. Hermetic,

83. Closure applying and conforming—

84. Die—

85. Fillers and forcers,

86. Sectional,

87. Rotary tool,

88. Screw-closure applying,

89. Closure-inserting,

90. Closure-compressing—

91. Closure-feeding,

92. Closure-feeding,

226.—FILLING AND CLOSING PORTABLE RECEPTACLES—Con.

With fluent materials—

Special types—

Filling—

93. Successive receptacles—

94. Positioning-conveyer—

95. Rotary—

96. Feed-controlling movement—

97. Air displacement—

98. Feed-controlling movement—

99. With plural materials—

100. Charge-forming,

101. Predetermined bulk,

102. Travelling measure—

103. Charge-ejecting,

104. Charge-pouring,

105. Stationary measure—

106. Displacer,

107. Charge-ejecting,

108. Double cut-off,

109. Air displacement—

110. Piston-driven positioning means,

111. Pressure-controlled feed-valve,

112. Force-feed,

113. Pressure and overflow—

114. Overflow-check,

115. Pressure—

116. Vacuum,

117. Air-pressure relief-valve—

118. Supply-float controlled,

119. Overflow—

120. Feed-cut-off controlling,

121. Overflow-check,

122. Feed cut-off—

123. Receptacle movement controlled—

124. Parallel,

125. Force-feed,

126. Feed cut-off—

127. Automatic,

128. Receptacle movement controlled,

129. Accessories.

J. T. NEWTON, Commissioner.

On page 10, in the table of Examiners in Charge of Examining Divisions, cancel the names of Sadler, L. A.; Sannett, E. C., and Tullar, C. E., and add the names of Hodges, J. S., Division 26, Room 105, and Jarboe, C. O., Division 7, Room 312.

J. T. NEWTON,
Commissioner.

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TO THE

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AND OF THE UNITED STATES COURTS.

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DIGEST

OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

AUGUST, 1919.

[Decisions of the Court of Appeals of the District of Columbia are indicated by a star (*) and of the United States Circuit Court of Appeals by the letter u.]

APPEAL TO THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

1. INTERFERENCE—SCOPE OF REVIEW.
The question whether or not an application is allowable and one upon which the issuance of a patent can be predicated is primarily for the experts of the Patent Office and will not be inquired into in an interference proceeding except for manifest error. (For Commissioner's decision see 263 O. O., 306.)
[*Bonine v. Bliss, 307.]
2. SAME—JURISDICTION OF THE COURT.
Held that no appeal lies to the court of appeals from a decision of the Commissioner "dissolving the interference on the ground that count 1 is unpatentable and count 2 cannot be made by Parker," since the order is not even the equivalent of a judgment of priority. (For Commissioner's decision see 263 O. O., 306.)
[*Parker v. Craft and Reynolds, 309.]

ASSIGNEE.

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See Appeal to the Court of Appeals of the District of Columbia, 1; Delay in Filing Application, 3; Reduction to Practice, 6.

CONSTRUCTION OF CLAIMS.

See Interference, 1; Right to Make Claims.

1. PATENTABILITY—WELDED POLE-PIECE.
A claim for a permanently-magnetized steel bar and a soft-iron pole-piece welded thereto *Held* not patentable in view of the prior art.
[Parker v. Craft and Reynolds, 306.]
2. SAME—INVENTION—DUST-CAP FOR TIRE-VALVES.
Claims covering the combination, with a tire-valve casing having a mutilated external screw-thread, of a dust-cap having a mutilated internal screw-thread and a resilient washer at the bottom *Held* unpatentable in view of prior patents, one showing a dust-cap screw-threaded onto a tire-valve casing and another for a hose-coupling showing the same arrangement of screw-threads and a washer in the same location, described as "flexible," it being only fair to assume that it is resilient.
[Ex parte Hammond, 457.]
3. SAME—DOUBTS RESOLVED IN FAVOR OF THE APPLICANT.
The question whether two of the appealed claims define an invention over the art *Held*, under all the circumstances, not to be so clear that the patent should be refused, the doubts as to the patentability being resolved in favor of the applicant.
[*In re Wilson, 460.]

CONSTRUCTION OF RULES.

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CONSTRUCTION OF SPECIFICATIONS AND PATENTS.

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CONSTRUCTION OF TRADE-MARK STATUTES.

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See Appeal to the Court of Appeals of the District of Columbia; Delay in Filing Application, 3; Reduction to Practice, 6.

DECLARATION OF INTERFERENCE.

See Interference, 1.

PATENT AND APPLICATION—INFORMALITY.
Where an interference was declared between a patent and an application, the issue being the claims of the application, which were slightly broader than the claims of the patent in that they omitted a certain limitation, but were not patentably different therefrom, *Held* that there was no informality in the declaration of the interference.
[Parker v. Craft and Reynolds, 306.]

DELAY IN FILING APPLICATION.

See Priority of Invention, 2, 3.

1. ADDITIONAL OATH—UNREASONABLE DELAY—DELAY OF FIVE WEEKS.

Five weeks in addition to the time which may naturally be expected to be required in transmitting the papers by mail to the Patent Office will not be considered such an unreasonable time for filing an application after the execution of the oath as to require an additional oath under Rule 46. (*Ex parte Aranza*, 97 O. (I., 2533, modified.) [*Ex parte Helase*, 145.]

2. INTERFERENCE—PRIORITY—DILIGENCE.

Conceding that E. and E. conceived the invention before D. reduced the invention to practice by filing an application on May 13, 1905, they were lacking in diligence where nothing was being done at the time D. entered the field except the tentative making of Patent Office drawings and where the case was put in the hands of first one party and then another and an application was finally prepared without any claims and turned over to the attorneys of record, who prepared and filed the complete application. [*Erickson and Erickson v. Dyson*, 145.]

3. SAME—SAME—SAME—REVIEW OF PATENT OFFICE DECISION.

Where there was a period of inactivity by E. and E. of several months just before and after D. entered the field and the circumstances were such that the court is unable to say that there was error in the ruling of the Patent Office that they were lacking in diligence, the decision will be affirmed. (For Commissioner's decision see 265 O. G., 145.) [*Erickson and Erickson v. Dyson*, 147.]

DELAY IN FILING APPLICATION FOR REISSUE.

See Reissues.

DESCRIPTIVE TERMS.

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DILIGENCE.

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FORMER DECISIONS MODIFIED.

See Delay in Filing Application, 1.

INTERFERENCE.

See Appeal to the Court of Appeals of the District of Columbia; Declaration of Interference; Delay in Filing Application, 2, 3; Priority of Invention; Reduction to Practice; Right to Make Claims.

1. INTERFERENCE IN FACT.

An interference was properly declared between the claim of a patent which specified a "manually operated switch" and the claim of an application for a similar apparatus in which a similar part was referred to by the broader term "switch" where the result of closing the switch was the same in each case—namely, to connect a dynamo-electric machine to a battery, so that it might operate as a motor, and to open an automatic switch. [*Bonine v. Bliss*, 306.]

2. EVIDENCE—ORIGINALITY—REBUTTAL.

Where S. sought to show that R. was not the original inventor, but derived his knowledge from him through one L., testimony offered in rebuttal to show that L. was in the employ of B.'s company *held* properly excluded as improper rebuttal, since it was a part of S.'s case-in-chief. [*Swinglehurst v. Ballard*, 450.]

3. SAME—SAME—SAME.

Evidence that L. was in the employ of B.'s assignee *held* insufficient to establish that L. derived his knowledge of the invention from S., especially as when L. was called by S. as a witness in making out his *prima facie* case he was not asked as to any disclosure to L. [*Id.*]

4. SAME—SAME.

The fact that L. was not called as a witness to testify that he was the inventor is immaterial. He swore that he was in his application, and having filed first he was presumably the first inventor, which presumption remains with him until it has been overcome by proof. [*Id.*]

INVENTION.

See Appeal to the Court of Appeals of the District of Columbia, 2; Construction of Claims; Interference, 3, 4; Particular Patents; Priority of Invention; Reduction to Practice, 2, 5, 6.

PATENTS—CONCEPTION.

In a large majority of cases the conception of a general result wished for may be obvious, and it is the discovery of a way of obtaining the result which calls for the exercise of invention; but it may also be that invention lies in the conception that a new and useful result will be obtained by combining two or more old machines; that as soon as the advantage of the combination is understood the means for bringing it about is within the capacity of any fairly-skilled mechanic. [*Rosemary Mfg. Co. v. Halifax Cotton Mills, Inc.*, 461.]

JUDGMENT ON PRIORITY.

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LABEL.

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LIMIT OF TIME.

See Delay in Filing Application, 1; Reissues.

LIMITATION OF CLAIMS.

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MECHANICAL SKILL.

See Invention.

OATH.

See Delay in Filing Application, 1.

PARTICULAR PATENTS.

PATTERSON—NO. 12,150, (REISSUE)—POWER-LOOM—VALIDITY.

The Patterson reissue patent, No. 12,150, (original No. 722,243,) for power-loom, *held* void as claiming, broadly, a combination of loquard mechanism with a plain power-loom equipped with an automatic well-replenishing device, which was not the patentee's invention. [*Rosemary Mfg. Co. v. Halifax Cotton Mills, Inc.*, 461.]

PATENT AND APPLICATION.

See Declaration of Interference; Interference, 1; Priority of Invention, 4.

PATENTABILITY.

See Appeal to the Court of Appeals of the District of Columbia, 2; Construction of Claims; Declaration of Interference; Invention.

PRESUMPTION.

See Interference, 4; Unfair Competition, 3.

PRIOR APPLICATIONS.

See Reduction to practice, 5, 6.

PRIORITY OF INVENTION.

See Delay in Filing Application, 2, 3; Reduction to Practice, 1, 2, 3, 6.

1. ORIGINALITY—EMPLOYER AND EMPLOYEE.

Upon the issue of originality evidence considered and *held* that only one of the three joint inventors, W., B., and P., gave any instructions to H. and B., the other applicants, who were in the employ of the company of which W. was president, that such instructions were insufficient in detail to enable H. and B. to construct the machine of the issue, and priority awarded to H. and B. [*Hart and Barber v. Wieg, Braden, and Prather*, 117.]

2. FIRST TO CONCEIVE AND REDUCE TO PRACTICE.

Where Bonine conceived the invention not earlier than June, 1910, and filed his application July 7, 1911, and Bliss conceived in April, 1910, and filed his application June 25, 1910, Bliss is entitled to an award of priority as being the first to conceive and the first to reduce the invention to practice. [*Bonine v. Bliss*, 306.]

3. DILIGENCE.

Conceding that a device made by H. in April, 1912, showed a conception of the invention, it was not a reduction to practice, and as he did nothing further toward completing the invention until after the entry of E. into the field in the fall of 1912, but worked on an invention of another, and did not file his application for over a year and a half after the filing of E.'s application, *held* that H. was lacking in diligence and that priority was properly awarded to E. [*Hadley v. Ellis*, 458.]

4. SAME—EVIDENCE.

Evidence reviewed and *held* insufficient to establish that the appellants, who filed their application after the patent had issued to the appellee, were the prior inventors. [*Leonard and Leonard v. Young*, 456.]

5. SAME—DILIGENCE.

Assuming that an early machine made by S. embodied the invention, the tests made thereof did not demonstrate its practicability, and S. was lacking in diligence at the time that H. entered the field, and priority was properly awarded to B. [*Swinglehurst v. Ballard*, 450.]

PROOF.

See Interference, 4.

REBUTTAL TESTIMONY.

See Interference, 2.

REDUCTION TO PRACTICE.

See Delay in Filing Application, 2; Priority of Invention, 2, 3.

1. INTERFERENCE—PRIORITY.

The construction of a device which, while not lacking entirely in utility, fails to overcome the very difficulties for which it was designed does not constitute a reduction to practice. [*Erickson and Erickson v. Dyson*, 145.]

2. SAME—ALLOWABLE APPLICATION.

"The rule of the Patent Office that the filing of an allowable application is constructive reduction to practice is only the expression in another form of the rule that the application of a patented invention, if it sufficiently describes the invention, is conclusive evidence that the invention was made at least as early as that date." (*Automatic Weighing Mach. Co. v. Pneumatic Scale Corp.*, 166 Fed. Rep., 288.) [*Bonine v. Bliss*, 307.]

3. SAME—PRIORITY—SIMPLE DEVICE.

A linked bracelet is not such a simple device that the mere making of it, without some test of its utility, will amount to reduction to practice. [*Hadley v. Ellis*, 458.]

4. SAME—SAME.

Where the machine involved in the issue was made for the purpose of eliminating dog-lines in knitted fabrics, *held* that a machine which did not do this, but only made the dog-lines somewhat less, and which was not put upon the market, though a machine for the purpose indicated was much desired by the trade, was not a reduction to practice. [*Swinglehurst v. Ballard*, 450.]

5. SAME—CONSTRUCTIVE—PRIOR APPLICATION FAILING TO DISCLOSE ISSUE.

A prior application which does not contain or suggest the invention in issue, but, on the contrary, was the disclosure from which the invention in issue started and over which it was an improvement, does not constitute a reduction to practice of such invention. [*Bogart v. Ruppel*, 633.]

6. SAME—SAME—SAME.

Concurring decisions of the tribunals of the Patent Office holding that a prior application of R., relied upon for a constructive reduction to practice, failed to disclose the invention and awarding priority to B. affirmed. (For Commissioner's decision see 265 O. G., 633.) [*Ruppel v. Bogart*, 631.]

REGISTRATION OF TRADE-MARKS.

See Unfair Competition.

1. EFFECT—SUBSEQUENT REGISTRATION.

Where a trade-mark for a gum-wrapper, consisting of an exhibited design containing the words "Peptomint" and "Gum," was registered with an explicit disclaimer of the words "Peptomint" and "Gum," the statutory right respecting "Peptomint" as one of the elements of the trade-mark was exhausted, the trade-mark statute containing no provision for reissue or amendment after issue, and the registrant could not thereafter by subsequent registration acquire any right respecting the word "Peptomint." [*L. P. Larson, Jr., Co. et al. v. Lamont, Corliss & Co. et al.*, 148.]

2. "SERVICE," FOR RUBBER AND FABRIC BELTS—DESCRIPTIVE.

A mark for rubber and fabric belts consisting of the word "Service" surmounting a bar with V-shaped ends *held* properly refused registration, since this word has a fixed meaning in the trade, indicating that the goods are serviceable and will not only wear well, but are especially adapted to meet the requirements of the user. [*In re Link-Belt Company*, 634.]

REISSUES.

See Particular Patents.

1. BROADENED CLAIMS—DELAY IN FILING APPLICATION.

The rule is well established that a reissue applied for more than two years after the date of the issue of the original patent, where it amounts to merely a broadening of the claims of the patent, ordinarily will not be allowed. [*In re Otto, Jr.*, 306.]

2. SAME—SAME.

Undoubtedly there are exceptions to the rule that an application for reissue with broadened claims must be filed within two years; but in such a case the applicant will be held to a strict rule of diligence, and it must clearly appear that he moved promptly after the discovery of the error in the original patent. [*Id.*]

3. SAME—SAME.

Claims considered and *held* to be broader than the claims of the patent, and, further, *held* that the facts do not bring the case within any exceptions of the rule that such reissues must be filed within two years. [*Id.*]

RESULTS.

See Invention.

REVIEW OF DECISIONS OF THE PATENT OFFICE.

See Appeal to the Court of Appeals of the District of Columbia, 1; Delay in Filing Applications, 3.

RIGHT TO MAKE CLAIMS.

See Appeal to the Court of Appeals of the District of Columbia, 2.

INTERFERENCE.

Where one of the counts of the issue in interference called for a soft-iron pole-piece and a hardened-steel bar welded together end to end and the specification of the application did not state that the parts were so welded and the construction could not be inferred from the drawing *Held* that the applicant could not make the claim. [Parker v. Craft and Reynolds, 305.]

SIMILARITY OF MARKS.

See Unfair Competition, 2, 3.

SPECIFICATIONS.

See Right to Make Claim.

STATE OF THE ART.

See Construction of Claims.

STATUTORY RIGHTS.

See Registration of Trade-Marks.

TESTS.

See Priority of Invention, 3; Reduction to Practice, 3.

UNFAIR COMPETITION IN TRADE.

1. COMMON-LAW RIGHTS.

Where a gum-manufacturer's label was marked with the word "Peptomint," wreathed with sprigs of peppermint, and the quoted word was popularly taken as corrupt spelling of peppermint and so pronounced, the manufacturer, in attempting to assert a common-law right to the quoted word as an independent trade-mark, could not, after disclaimer of such word in the registration of his trade-mark, claim that such word was arbitrarily coined from "peptone." [L. P. Larson, Jr., Co. et al. v. Lamont, Corliss & Co. et al., 148.]

2. EVIDENCE.

In an action based on unfair competition by a manufacturer in using the word "Peptomint" to simulate both in color and design the word "Pep-O-Mint" on plaintiff's candy-labels evidence *Held* to require a decree for plaintiff. [41d.]

3. REGISTERED TRADE-MARKS—PRESUMPTIONS.

In an action for unfair competition in the use of the word "Peptomint" to simulate plaintiff's word "Pep-O-Mint" that plaintiff's label bore the words "Trade-Mark Registered," while the word "Pep-O-Mint" had not been registered, did not require a dismissal of plaintiff's bill where such words were attributable to a legend on plaintiff's products that actually had been registered and in view of the presumption that a suitor's hands are clean. [41d.]

UTILITY.

See Reduction to Practice, 1, 3.

VOID PATENTS.

See Particular Patents.

WITNESSES.

See Interference, 3, 4.

ALPHABETICAL LIST OF PATENTEEES

TO WHOM

PATENTS WERE ISSUED ON THE 5TH DAY OF AUGUST, 1919.

- Abraham, Herbert, New York, N. Y., assignor to The Standard Paint Company. Bituminized fabric. No. 1,311,941; Aug. 5; v. 265; p. 17.
- Adams & Westlake Co., The. (See Hamm, William S., assignor.)
- Adams, Samuel J., Montclair, N. J. Mottler and pen tray. No. 1,312,379; Aug. 5; v. 265; p. 98.
- Ajax Metal Company, The. (See Wyatt, James H., assignor.)
- Aldridge, Arthur, and H. Terhune, assignors to Chambersburg Engineering Company, Chambersburg, Pa. Electromagnetically-controlled board drop-hammer. No. 1,311,942; Aug. 5; v. 265; p. 17.
- Alexa, Victor, Chicago, Ill. Universal drafting-machine. No. 1,311,867; Aug. 5; v. 265; p. 3.
- Allen, Joseph S., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Combination organ-stop action. No. 1,311,865; Aug. 5; v. 265; p. 3.
- Allison, Daniel K., assignor to The J. H. Day Company, Cincinnati, Ohio. Machine for cooling bread. No. 1,312,294; Aug. 5; v. 265; p. 82.
- Almen, August A., Minneapolis, Minn. Combination cot and bench. No. 1,312,299; Aug. 5; v. 265; p. 83.
- American Bosch Magneto Corporation. (See Kratz, Franz, assignor.)
- American Malt Products Company. (See Daly, Raymond E., assignor.)
- American Motorbus Corporation. (See Weaver, Harold H., assignor.)
- American Telephone and Telegraph Company. (See Carson, John H., assignor.)
- American Thermophone Company. (See Van Lynden, Robert A. B., assignor.)
- Amieux, Louis E., assignor to Société Amieux Frères & Co., Nantes-Chantenay, France. Receiptable. No. 1,312,466; Aug. 5; v. 265; p. 115.
- Anable, Clarence E. (See Miller, Arthur E., assignor.)
- Anacunda Copper Mining Company. (See Finlay, John S., assignor.)
- Anderson, Edward G., and A. H. Graham, Portland, Oreg. Canvas-securing fastening-clamp for hatches of vessels. No. 1,312,490; Aug. 5; v. 265; p. 121.
- Anderson, Ernst G. K., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric switch. No. 1,312,380; Aug. 5; v. 265; p. 98.
- Anderson, John L., assignor of one-half to H. W. J. Wolford, Italy, Tex. Elevating-truck. No. 1,312,089; Aug. 5; v. 265; p. 44.
- Andreas, Frederick. (See Herrenbruck and Andreas.)
- Andrews, Benjamin, Houston, Tex., and W. C. Averill, Jr., Merans, La. Apparatus for treating hydrocarbons. No. 1,312,467; Aug. 5; v. 265; p. 115.
- Andrews, George C., Minneapolis, Minn. Driving-gear for traction-wheels. No. 1,311,943; Aug. 5; v. 265; p. 17.
- Andrist, Charles M., et al., trustees. (See Chalmers, Charles H., assignor.)
- Anglo-American Textile Machinery Company. (See Jopson, William G., assignor.)
- Anla, Anthony, Corona, N. Y. Aeroplane. No. 1,312,300; Aug. 5; v. 265; p. 83.
- Arvelink, John F., Shawano, Wis. Pail cover and strainer. No. 1,312,428; Aug. 5; v. 265; p. 108.
- Appel, Daniel, Cleveland Heights, Ohio. Internal-combustion engine. No. 1,311,944; Aug. 5; v. 265; p. 17.
- Apple, Vincent G., Dayton, Ohio. License-plate bracket for automobiles. No. 1,312,295; Aug. 5; v. 265; p. 82.
- Apple, Vincent G., Dayton, Ohio. Shaft-coupling. No. 1,312,280; Aug. 5; v. 265; p. 82.
- Armstrong, Percy A. E., Loudonville, N. Y. Process of and apparatus for removing sand from hollow drill-roads and the like. No. 1,311,866; Aug. 5; v. 265; p. 3.
- Aronson, I. Leonard. (See Emmons, Albert F., assignor.)
- Arter, William, assignor to The Persons-Arter Machine Company, Worcester, Mass. Automatic reversing mechanism. No. 1,312,091; Aug. 5; v. 265; p. 45.
- Arter, William, assignor to The Persons-Arter Machine Company, Worcester, Mass. Magnetic chuck. No. 1,312,092; Aug. 5; v. 265; p. 45.
- Askew, Harry H., Los Angeles, Calif. Railway-crossing. No. 1,312,090; Aug. 5; v. 265; p. 45.
- Atanasiw, Leo, Milwaukee, Wis. Tie-holder. No. 1,312,071; Aug. 5; v. 265; p. 41.
- Automatic Reclosing Circuit Breaker Company, The. (See Rancey, Estelle C., assignor.)
- Averill, Willard C., Jr. (See Andrews and Averill.)
- Avery Company. (See Springer, William N., assignor.)
- B. W. J. Wolford. (See Anderson, John L., assignor.)
- Baekeland, Leo H., Yonkers, assignor to General Bakelite Company, New York, N. Y. Treating tung-oil and coating or impregnating objects therewith. No. 1,312,093; Aug. 5; v. 265; p. 45.
- Baker, George W. (See Eisenmann, Hodel, and Baker.)
- Baker, George H., London, and J. W. Owen, Plymouth, England. Bread-making. No. 1,312,094; Aug. 5; v. 265; p. 46.
- Bangert, Henry J., Ferguson, Mo. Material-spreader. No. 1,312,220; Aug. 5; v. 265; p. 70.
- Barbee, James H., Central City, and O. J. Cross, Nederland, Colo. Jig. No. 1,312,429; Aug. 5; v. 265; p. 108.
- Barber, Howard M., Stonington, Conn., assignor, by mesne assignments, to C. H. Cottrell & Sons Company, New York, N. Y. Printing-press. No. 1,312,151; Aug. 5; v. 265; p. 56.
- Barnes, Edwin H., assignor of one-third to I. M. Danrell and one-third to O. E. E. Blasser, Boston, Mass. Paint. No. 1,311,945; Aug. 5; v. 265; p. 17.
- Barnes, John A., West New Brighton, N. Y., and S. W. Schofield, Paterson, N. J., assignors to Locomotive Superheater Company, New York, N. Y. Superheater. No. 1,311,868; Aug. 5; v. 265; p. 3.
- Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Self-contained base single-observer height-measuring instrument of the range-finder type. No. 1,312,013; Aug. 5; v. 265; p. 30.
- Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Self-contained base single-observer height-measuring instrument of the range-finder type. No. 1,312,014; Aug. 5; v. 265; p. 30.
- Barrett Company, The. (See Perry, Ray P., assignor.)
- Barrett Company, The. (See Rothermel, Curtis J., assignor.)
- Barwicklow, Irvin E., San Francisco, Calif. Carbureter. No. 1,312,468; Aug. 5; v. 265; p. 116.
- Barwicklow, Irvin E., San Francisco, Calif. Carbureter. No. 1,312,469; Aug. 5; v. 265; p. 116.
- Barrow, Thomas, Wheatland, assignor to Hlaw-Knox Company, Hoboken, Pa. Hollow sheet-metal structure and the manufacture thereof. No. 1,312,152; Aug. 5; v. 265; p. 56.
- Barton, George, Easthampton, Mass., assignor to H. W. Butterworth & Sons Company. Cloth-guiding device for textile-machines. No. 1,312,153; Aug. 5; v. 265; p. 57.
- Bassham, John W., Columbia, Tenn. Inner tube. No. 1,312,072; Aug. 5; v. 265; p. 41.
- Batchelder, Frank H., assignor, by mesne assignments, to Mills Woven Cartridge Belt Company, Worcester, Mass. Carrier for machine-gun magazines. No. 1,311,869; Aug. 5; v. 265; p. 3.
- Bates, Arthur, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-upper-shaping machine. No. 1,312,470; Aug. 5; v. 265; p. 116.
- Bates, Lindell T., New York, N. Y. Depth-shell. No. 1,312,227; Aug. 5; v. 265; p. 70.
- Beatty, William R., Chicago, Ill. Automobile-sunshade. No. 1,311,870; Aug. 5; v. 265; p. 4.
- Beckman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Means for clamping stereotype plates in plate-finishing machines. No. 1,312,073; Aug. 5; v. 265; p. 41.
- Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort-oven. No. 1,312,301; Aug. 5; v. 265; p. 83.
- Beddingfield, John C., Carl, assignor of one-half to E. L. Williamson, Jefferson, Ga. Package-tie. No. 1,312,015; Aug. 5; v. 265; p. 30.
- Beckhuis, Hermann A., assignor to California Peach Growers (Inc.), Fresno, Calif. Device for cleansing and removing the skins from dried fruits, such as peaches and apricots, &c. No. 1,312,381; Aug. 5; v. 265; p. 98.
- Beeman, Ralph E., Minneapolis, Minn. Adjustable spark-plug tester. No. 1,312,010; Aug. 5; v. 265; p. 31.
- Beckink, Reuben, North Yakima, Wash. Carbureting apparatus. No. 1,312,228; Aug. 5; v. 265; p. 70.
- Bell, Alfred W., Milan, Tenn. Electric igniting device. No. 1,312,229; Aug. 5; v. 265; p. 70.
- Benns, Maurice E., Charleston, W. Va. Rocking toy. No. 1,312,382; Aug. 5; v. 265; p. 98.
- Benjamin, Bert R., Oak Park, Ill., assignor, by mesne assignments, to International Harvester Company. Grain-distributing mechanism. No. 1,312,302; Aug. 5; v. 265; p. 83.

Benjamin, Charles S., East Orange, N. J., assignor to General Chemical Company, New York, N. Y., clipped inter-
cake and making same. No. 1,312,430; Aug. 5; v. 265;
p. 108.
Benjamin Electric Manufacturing Company. (See Ander-
son, Ernst G. K., assignor.)
Berry, George W., Brooklyn, N. Y., Aircraft inclinometer.
No. 1,312,393; Aug. 5; v. 265; p. 83.
Bessolo, William L., San Diego, Calif., Quick adjustable
wrench. No. 1,312,471; Aug. 5; v. 265; p. 116.
Bickert, Charles A., Cincinnati, Ohio, Machine tool. No.
1,312,297; Aug. 5; v. 265; p. 82.
Bileck, William S., Franklin, Kans., Drill connection. No.
1,312,298; Aug. 5; v. 265; p. 82.
Birkemeyer, Theodore, St. Louis, Mo., Controlling mech-
anism for laundry machines. No. 1,312,431; Aug. 5; v.
265; p. 109.
Birkigt, Marc, Bou-Columbes, France, Motor-vehicle. No.
1,312,383; Aug. 5; v. 265; p. 99.
Bisdel, John P., (See Metz, Harry J., assignor.)
Blasner, Olga E. E., et al., (See Barnes, Edwin R., as-
signor.)
Blaw Knox Company. (See Barrow, Thomas, assignor.)
Blotch Process Company. (See Wheeler, Frank G., as-
signor.)
Blotter Manufacturing Company. (See Greenstreet, Mil-
fred L., assignor.)
Bonstedt, Charles L., Moose Jaw, Saskatchewan, Canada,
Aluminum-solder flux. No. 1,312,154; Aug. 5; v. 265;
p. 57.
Booth, Ernest S., Muskegon Heights, Mich., Supporting
device. No. 1,312,250; Aug. 5; v. 265; p. 71.
Bowden, William, Manchester, England, Liquid-meter.
No. 1,312,095; Aug. 5; v. 265; p. 46.
Boyle, Charles W., Pittsburgh, Pa., Insect trap. No.
1,312,096; Aug. 5; v. 265; p. 46.
Bowden, William, Manchester, England, Liquid meter.
No. 1,312,231; Aug. 5; v. 265; p. 71.
Bridge & Beach Mfg. Co., (See Herrenbruck and Andreas,
assignors.)
Brown, Charles A., (See Lambert, Frank R., assignor.)
Brown, David, New York, N. Y., Compartment-container.
No. 1,312,172; Aug. 5; v. 265; p. 110.
Bruggemann, George F. A., St. Louis, Mo., Door. No.
1,312,155; Aug. 5; v. 265; p. 57.
Bryan, Columbus, Princeton, Oreg., Clutch control. No.
1,312,384; Aug. 5; v. 265; p. 99.
Bryson, Tandy A., Troy, N. Y., assignor to Taltbust Ma-
chine Works, Centrifugal drying-machine. No.
1,311,871; Aug. 5; v. 265; p. 4.
Buchholz, Frank W., (See Grover, George, assignor.)
Buck, H. L., (See Jordan, Bennett W., assignor.)
Buckham, George T., (See Dawson and Buckham.)
Buckner, Levi G., and S. J. Shiley, Memphis, Tenn., Au-
tomatic signal apparatus to indicate failure of lubricat-
ing systems. No. 1,312,097; Aug. 5; v. 265; p. 46.
Buell, William H., New Haven, Conn., assignor to E. I.
du Pont de Nemours and Company, Wilmington, Del.,
Charge for primers. No. 1,311,872; Aug. 5; v. 265;
p. 4.
Buell, William H., New Haven, Conn., Priming charge.
No. 1,312,156; Aug. 5; v. 265; p. 57.
Buente, Charles E., Avalon, Pa., Collapsible core for
molds. No. 1,312,157; Aug. 5; v. 265; p. 57.
Burch, Willie, Lowell, Mich., Railway tie. No. 1,311,940;
Aug. 5; v. 265; p. 18.
Burgess, Edward W., Chicago, Ill., assignor, by mesne
assignments, to International Harvester Company,
Grain-harvesting machinery. No. 1,312,391; Aug. 5;
v. 265; p. 84.
Burgess, Edward W., Chicago, Ill., assignor, by mesne
assignments, to International Harvester Company,
Corn harvester. No. 1,312,432; Aug. 5; v. 265; p. 109.
Burtin Page Company, The. (See Primand, Peter A., as-
signor.)
Busse, Edwin G., and A. P. Hissler, assignors to Chicago
Railway Equipment Company, Chicago, Ill., Rail
anchor. No. 1,312,158; Aug. 5; v. 265; p. 58.
Butler, Jay W., Chicago, Ill., Fusible link. No. 1,311,873;
Aug. 5; v. 265; p. 4.
C. B. Cottrell & Sons Company. (See Barber, Howard
M., assignor.)
C. H. Smith Company. (See Trotman, Walter G., as-
signor.)
Cahill, Robert R., Chicago, Ill., Disappearing towel-
cabinet. No. 1,312,385; Aug. 5; v. 265; p. 99.
Caine, Marshall, Barberton, Ohio, Machine for inverting
pipe. No. 1,312,017; Aug. 5; v. 265; p. 31.
California Peach Growers (Inc.), (See Beckholz, Her-
mann A., assignor.)
Canna, John A., (See Shields and Canna.)
Camp, Orrin B., assignor of one-half to R. A. Lennon,
Englewood, Calif., Pulling block for rock-drill bits.
No. 1,312,224; Aug. 5; v. 265; p. 71.
Campbell, James H., assignor to The Columbus Glass
Company, Lancaster, Ohio, Method and apparatus for
manufacturing window glass cylinders. No. 1,312,305;
Aug. 5; v. 265; p. 81.
Campbell, James H., assignor to The Columbus Glass
Company, Lancaster, Ohio, Horse for glass cylinders.
No. 1,312,306; Aug. 5; v. 265; p. 81.
Carbonizing Engineering Company, The. (See Melano,
Charles F., assignor.)

Carlin, Samuel E., Chicago, Ill., assignor, by mesne as-
signments, to Underwood Computing Machine Com-
pany, Calculating-machine. No. 1,312,018; Aug. 5;
v. 265; p. 31.
Carlson, Anna, (See Carlson, Theodore A., assignor.)
Carlson, Theodore A., assignor to A. Carlson, Muskegon,
Mich., Engine. No. 1,312,234; Aug. 5; v. 265; p. 71.
Carr, Oma, New York, N. Y., assignor of one-half to E.
W. Fleming, New Orleans, La., Method of and appar-
atus for evaporating liquids. No. 1,312,019; Aug. 5;
v. 265; p. 31.
Carson, John R., New York, N. Y., assignor to American
Telephone and Telegraph Company, Translating cir-
cuits. No. 1,312,433; Aug. 5; v. 265; p. 109.
Cavanagh, John F., assignor to Connecticut Telephone &
Electric Co., Inc., Meriden, Conn., Transformer-coll
for ignition, &c. No. 1,312,497; Aug. 5; v. 265; p. 121.
Caviechl, Ercole, Quincy, Mass., Grinding or polishing
machine. No. 1,312,235; Aug. 5; v. 265; p. 72.
Cement-Gun Construction Company. (See Weber, Carl,
assignor.)
Cerruti, Antonio, San Francisco, Calif., Apparatus for
sorting articles according to relative buoyancy. No.
1,312,098; Aug. 5; v. 265; p. 47.
Challenger, George H., Westminster, London, and H. A.
Savage, Boxley Heath, assignors to Vickers Limited,
Westminster, England, Aircraft. No. 1,312,099; Aug.
5; v. 265; p. 47.
Chalmers, Charles H., et al., trustees. (See Chalmers,
Charles H., assignor.)
Chalmers, Charles H., assignor to F. E. Holton, C. M.
Andrist, J. M. Shoberg, and C. H. Chalmers, trustees,
Minneapolis, Minn., Tractor. No. 1,312,159; Aug. 5;
v. 265; p. 58.
Chamberlin, John, London, England, Controlled lever-
feed for machine-tools. No. 1,311,947; Aug. 5; v.
265; p. 18.
Chambersburg Engineering Company. (See Abldridge and
Technue, assignors.)
Chenery, Charles R., Buffalo, N. Y., Paper jar or re-
ceptacle. No. 1,312,434; Aug. 5; v. 265; p. 109.
Cherry, William H., Nilwood, Ill., Spike-puller. No.
1,311,948; Aug. 5; v. 265; p. 18.
Chicago Railway Equipment Company. (See Busse and
Hissler, assignors.)
Christoffer Hannevig and Hannevig Brothers, A/S. (See
Schroder-Nielsen, Thoralf, assignor.)
Christy, Loyd E., Monticello, Ind., Door latch and lock.
No. 1,312,160; Aug. 5; v. 265; p. 58.
Cleveland, Evan F., et al., (See Patrick, Henry W., as-
signor.)
Cleveland, Forrest A., et al., (See Patrick, Henry W., as-
signor.)
Clotlier, Albert E. C., Swarthmore, Pa., Reversible cuff.
No. 1,312,100; Aug. 5; v. 265; p. 47.
Clough, James E., W. H. Stilwell, Paris, and A. R. Fu-
gins, Louisville, Ky., Rail-contact circuit-controller.
No. 1,312,101; Aug. 5; v. 265; p. 47.
Cockburn, David, and D. MacNicol, assignors to Cock-
burns, Limited, Cardonald, near Glasgow, Scotland,
Valve. No. 1,312,102; Aug. 5; v. 265; p. 47.
Cockburns, Limited. (See Cockburn and MacNicol, as-
signors.)
Cole, Francis J., Schenectady, N. Y., Locomotive trailing
truck. No. 1,311,875; Aug. 5; v. 265; p. 4.
Coleman, Clyde J., New Rochelle, N. Y., Combined mov-
ing picture machinery and phonographic apparatus.
No. 1,312,103; Aug. 5; v. 265; p. 48.
Colonna, Benito. (See Sartorius, Hanslara, and Colonna,
assignors.)
Columbus Glass Company, The. (See Campbell, James
H., assignor.)
Compton, John H., Nottingham, England, Controlling
circuits of ball-actuating magnets for automatic
organs. No. 1,312,386; Aug. 5; v. 265; p. 99.
Condit, S. B., Jr., (See Schiffrt, Daniel M., assignor.)
Connecticut Telephone & Electric Co., (See Cavanagh,
John F., assignor.)
Connolly, John J., Pittsburgh, assignor of one-third to
T. H. Flynn, Knoxville, and one-third to F. A. Gal-
lagher, Pittsburgh, Pa., Internal-combustion engine.
No. 1,312,387; Aug. 5; v. 265; p. 99.
Continental Gun Company. (See Munger, Robert S., as-
signor.)
Converse, Dan M., Albert, Kans., Detachable grain-heater.
No. 1,312,388; Aug. 5; v. 265; p. 100.
Converse, Dan M., Albert, Kans., Grain-header attach-
ment for tractors. No. 1,312,389; Aug. 5; v. 265;
p. 100.
Cooper, James J. G., Jacksonville, Fla., Toy cartridge.
No. 1,311,949; Aug. 5; v. 265; p. 18.
Cooper, James J. G., Jacksonville, Fla., Toy cartridge.
No. 1,311,950; Aug. 5; v. 265; p. 18.
Corcoran, Cornelius R., assignor to Underwood Type-
writer Company, New York, N. Y., Type-writing ma-
chine. No. 1,312,161; Aug. 5; v. 265; p. 58.
Corcoran, Cornelius R., assignor to Underwood Type-
writer Company, New York, N. Y., Type-writing ma-
chine. No. 1,312,162; Aug. 5; v. 265; p. 58.
Corona Typewriter Company. (See De Clamecy, Philippe,
assignor.)
Corona Typewriter Company. (See Peterman, Otto, as-
signor.)

Corona Typewriter Company. (See Seagers and Drake,
assignors.)
Corona Typewriter Company. (See Simpson, James E.,
assignor.)
Corona Typewriter Company. (See Tucker, Benjamin W.,
assignor.)
Currier, James H., Bay City, Mich., Train-control mecha-
nism. No. 1,312,163; Aug. 5; v. 265; p. 58.
Coulston, Harry, assignor to The Philadelphia Textile Ma-
chinery Company, Philadelphia, Pa., Stocking-drying
machine. No. 1,312,236; Aug. 5; v. 265; p. 72.
Courbon, Jean, Lyon, France, Folding brazier. No.
1,312,307; Aug. 5; v. 265; p. 84.
Coventry Ordnance Works, The. (See Redpath, Robert,
assignor.)
Cox, James W., assignor to Pacific Flush Tank Company,
Chicago, Ill., Registering attachment for flush-tanks.
No. 1,311,870; Aug. 5; v. 265; p. 5.
Cox Multi-Miller Co., (See Hunscke, John, assignor.)
Coy, William F., Boston, Mass., Power-generator. No.
1,311,877; Aug. 5; v. 265; p. 5.
Craig, Richard M., San Antonio, Tex., Advertising sign.
No. 1,312,287; Aug. 5; v. 265; p. 72.
Crawford, Milo, Springfield, Mo., Headlight-dimmer. No.
1,311,951; Aug. 5; v. 265; p. 18.
Crownwell, John C., Cleveland, Ohio, Metal-casting appa-
ratus. No. 1,312,164; Aug. 5; v. 265; p. 59.
Cross, Otto J., (See Harlee and Cross.)
Cru Patents Corporation. (See Wenderhold, William, as-
signor.)
Cullings, Roswell E., Wilkinsburg, Pa., assignor to West-
inghouse Electric & Manufacturing Company, Voltage-
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Ella, Giovanni E., New York, N. Y., Torpedo-boat. No.
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Fetter, Edward, Baltimore, Md. Vulcanizing apparatus and process. No. 1,312,029; Aug. 5; v. 265; p. 34.

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Fitts, James I., (See Serrill, John A., assignor.)

Flaherty, Edmund M., Farlin, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Anesthesia ether and making the same. No. 1,312,475; Aug. 5; v. 265; p. 117.

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Flue, Emil F., Buffalo, N. Y. Automatic compensating bolt for fire-arms of the breakdown type. No. 1,312,170; Aug. 5; v. 265; p. 60.

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Foley, John P., Galesburg, Ill. Casket-handle. No. 1,312,171; Aug. 5; v. 265; p. 60.

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Forrest, Howard H., Kent, Ohio. Tire-mold. No. 1,312,438; Aug. 5; v. 265; p. 110.

Fortier, Charles L., Milwaukee, Wis. Automatic control device. No. 1,312,244; Aug. 5; v. 265; p. 73.

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Franc, Joseph M. E., St. Vallier, France. Washing, rinsing, and wringing machine. No. 1,312,393; Aug. 5; v. 265; p. 101.

Frank, Edwin, Philadelphia, Pa. Measuring-tape. No. 1,312,172; Aug. 5; v. 265; p. 60.

Frankland, Alexander J., Berkeley, Calif. Sanitary spoon. No. 1,312,111; Aug. 5; v. 265; p. 40.

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French, Theodore H., (See Greger and French.)

Frimand, Peter A., Wilmette, assignor to The Burton Page Company, Chicago, Ill. Milking-machine. No. 1,311,959; Aug. 5; v. 265; p. 20.

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Gairling, Emil, assignor to The Gairling-Needham Tool Co., Inc., Detroit, Mich. Floating-tool holder. No. 1,311,960; Aug. 5; v. 265; p. 20.

Gairling, Emil, assignor to The Gairling-Needham Tool Co., Inc., Detroit, Mich. Gage for floating-tool holders. No. 1,311,961; Aug. 5; v. 265; p. 20.

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Gandara, Jose F., (Sartorius, Gandara, and Colonna.)

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Garrett, Robert E., Nashville, Tenn. Gear-cutting machine. No. 1,312,245; Aug. 5; v. 265; p. 73.

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Gehring, John, Ann Arbor, Mich. Weed-exterminator. No. 1,312,246; Aug. 5; v. 265; p. 73.

Gelzer, Leonard, Cincinnati, Ohio. Pedal-locking mechanism. No. 1,312,247; Aug. 5; v. 265; p. 74.

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General Briquetting Company, (See Vogel, Felix A., assignor.)

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General Electric Company, (See Stock, Henry W., assignor.)

General Research Laboratories, (See Knox and Mallet, assignors.)

George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Metal-heating furnace. No. 1,311,962; Aug. 5; v. 265; p. 21.

Gerken, Frederick, New York, N. Y. Spark-plug. No. 1,312,317; Aug. 5; v. 265; p. 80.

Gerlach, Oscar, Danville, and C. B. Lihme, Chicago, Ill., assignors to The Industrial Research Laboratories. Process and machine for reclaiming retort-waste. No. 1,312,173; Aug. 5; v. 265; p. 60.

Gillis & Geoghegan, (See Murloch, Franklin P., assignor.)

Gilman, Frank L., and J. R. Wilson, Pasadena, Calif. Automatic gas-burner. No. 1,312,441; Aug. 5; v. 265; p. 111.

Giordano, Pedro, Buenos Aires, Argentina. Marker. No. 1,312,248; Aug. 5; v. 265; p. 74.

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Globe Machine & Stamping Company, The. (See Root, Ralph R., assignor.)

Goddard, Robert H., Worcester, Mass. Magazine-rocket. No. 1,311,885; Aug. 5; v. 265; p. 7.

Gorton, George, and G. E. Gustafson, Racine, Wis.; said Gustafson assignor to said Gorton. Metal-working machine. No. 1,312,304; Aug. 5; v. 265; p. 101.

Goss Printing Press Company, (See Goss, Samuel G., assignor.)

Goss Printing Press Company, (See Lang, Hubert, assignor.)

Goss Printing Press Company, (See Seymour, Ralph C., assignor.)

Goss, Samuel Q., Glenview, Ill., assignor to Goss Printing Press Company. Sheet-handling machine. No. 1,311,886; Aug. 5; v. 265; p. 7.

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Grant, Melville M., Alliance, Ohio. Draft device for furnaces. No. 1,312,319; Aug. 5; v. 265; p. 80.

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Gray, Harry M., Los Angeles, Calif. Reeling previously-used rope. No. 1,312,477; Aug. 5; v. 265; p. 117.

Greenlee, Warren R., Pasadena, Calif. Well equipment. No. 1,312,442; Aug. 5; v. 265; p. 111.

Greenstreet, Milford L., assignor to Boker Manufacturing Company, Maplewood, Mo. Rolling toy. No. 1,312,174; Aug. 5; v. 265; p. 60.

Greenwalt, Leonard, Antioch, Neb. Gun-sight. No. 1,311,963; Aug. 5; v. 265; p. 21.

Gregor, August W., Meriden, Conn., and T. H. French, assignors, by means assignments, to The Mantle Lamp Company of America, Chicago, Ill. Lamp-burner. No. 1,312,478; Aug. 5; v. 265; p. 118.

Greiner, Henry J., Bridgeport, Conn. Sugar-dispensing device. No. 1,312,320; Aug. 5; v. 265; p. 87.

Grover, Joseph F., New York, N. Y. Printing and marking apparatus. No. 1,312,321; Aug. 5; v. 265; p. 87.

Grilley, Ernest M., (See Neuberth and Grilley.)

Groff, Howard M., Frankford, Pa. Mechanical time-fuse. No. 1,312,112; Aug. 5; v. 265; p. 40.

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Grosvener, William M., New York, N. Y., assignor to Perkins Glue Company. Vegetable glue and making the same. No. 1,311,965; Aug. 5; v. 265; p. 21.

Grover, George, assignor of one-half to F. W. Huchholz, South Norwalk, Conn. Cooking-basket. No. 1,312,075; Aug. 5; v. 265; p. 42.

Grievold, Frederick E., Eau Claire, Wis. Coal-chute. No. 1,312,498; Aug. 5; v. 265; p. 121.

Gulf Refining Company, (See Miller, Albert E., assignor.)

Gustafson, George E., (See Gorton, George, assignor.)

H. H. Smith Company, The. (See Reed, Richard D., assignor.)

H. C. Fry Glass Company, (See Scholes, Samuel R., assignor.)

H. W. Butterworth & Sons Company, (See Barton, George, assignor.)

Haberland, Oscar E., Philadelphia, Pa. Upsetting explosive toy. No. 1,311,887; Aug. 5; v. 265; p. 7.

Hales, Hugo, assignor to The Morgan Engineering Company, Alliance, Ohio. Hydraulic intensifier. No. 1,312,322; Aug. 5; v. 265; p. 87.

Hall, Everett E., (See Merrill and Hall.)

Hall, William L., (See Smith, Louis, assignor.)

Halsey, Edward S., Yonkers, N. Y. Individual thermostatic control for radiators. No. 1,312,113; Aug. 5; v. 265; p. 40.

Hamilton, Harry G., (See Medley, Harry L., assignor.)

Hamm, William S., Hubbard Woods, Ill., assignor to The Adams & Westlake Co. Lamp-chimney holder. No. 1,311,888; Aug. 5; v. 265; p. 7.

Hannah, Mary H., Chicago, Ill. Means for fastening rugs on carpets. No. 1,312,323; Aug. 5; v. 265; p. 87.

Hannon, Joseph J., Maynard, Mass. Milk-bottle container. No. 1,311,966; Aug. 5; v. 265; p. 21.

Hanriot, René, Neuilly-sur-Seine, and F. Gratieux, Paris, assignors to Societe R. Hanriot et Cie., Billancourt, France. Aeroplane. No. 1,311,967; Aug. 5; v. 265; p. 21.

Hanriot, René, Neuilly-sur-Seine, and F. Gratieux, Paris, assignors to Societe R. Hanriot et Cie., Billancourt, France. Aeroplane. No. 1,311,968; Aug. 5; v. 265; p. 22.

Hansen, Nigil A., Frederiksborg, near Copenhagen, Denmark. Low-water-alarm apparatus for steam-boilers. No. 1,312,175; Aug. 5; v. 265; p. 61.

Hardinge Brothers, (See Hardinge, Franklin, assignor.)

Hardinge, Franklin, Oak Park, assignor to Hardinge Brothers, Chicago, Ill. Counter-shaft. No. 1,311,969; Aug. 5; v. 265; p. 22.

Harman, Arthur C., Delta, Iowa. Farm-gate latch. No. 1,312,479; Aug. 5; v. 265; p. 118.

Harper, Charles W., Spring Valley, N. Y. Spoon-holding clip. No. 1,312,396; Aug. 5; v. 265; p. 101.

Harris, Robert L., and G. B. Smith, Jacksonville, Fla. Railway-crossing signal. No. 1,311,970; Aug. 5; v. 265; p. 22.

Hart, Clarence B., (See Hlack, Henry M., assignor.)

Hart, Edwin J., Philadelphia, Pa. Automatic stoker. No. 1,312,397; Aug. 5; v. 265; p. 101.

Hardorn, Louis G., New York, N. Y. Petcock-wrench. No. 1,311,889; Aug. 5; v. 265; p. 7.

Harvey, Richard S., Washington, D. C. Projectile. No. 1,312,114; Aug. 5; v. 265; p. 40.

Haskins, Butler J., assignor of three-fourths to A. Josephson, R. Finkelstein, Kansas City, Co., and A. H. Rablin, Chicago, Ill. Electrical block train-stoppage and signal-setting system. No. 1,312,240; Aug. 5; v. 265; p. 74.

Hatmaker, William T., Dayton, Ohio. Gasoline-dispensing pump. (Release.) No. 14,702; Aug. 5; v. 265; p. 123.

Hawn, Wallace F., Meadville, Pa. Locomotive-grate. No. 1,312,031; Aug. 5; v. 265; p. 34.

Havens, Neil F., Alexandria, Va. Hoisting mechanism. No. 1,312,115; Aug. 5; v. 265; p. 50.

Hawes, Robert W., Brunswick, Ga. Scaffold. No. 1,312,398; Aug. 5; v. 265; p. 102.

Hawkins, Owen, Globe, Ariz. Ore-separator. No. 1,312,324; Aug. 5; v. 265; p. 87.

Hecht, Joseph L., assignor to French & Hecht, Davenport, Iowa. Traction-wheel. No. 1,312,170; Aug. 5; v. 265; p. 61.

Helm, John, St. Louis, Mo. Evaporator. No. 1,311,890; Aug. 5; v. 265; p. 7.

Herndon, S. L., (See Evans, Pord, assignor.)

Herronbruck, Herman, and F. Andrews, assignors to Bridge & Beach Mfg. Co., St. Louis, Mo. Stove-door. No. 1,311,891; Aug. 5; v. 265; p. 8.

Hey, Edmund A., La Grange, Ill., assignor to The Williams Sealing Corporation, Waterbury, Conn. Feeding device for bottle-capping machines. No. 1,311,892; Aug. 5; v. 265; p. 8.

Heywood, Fannie H., administratrix. (See Heywood, Henry H.)

Heywood, Henry H., deceased; F. B. Heywood, administratrix, Atlanta, Ga. Device for climbing steel columns. No. 1,312,399; Aug. 5; v. 265; p. 102.

Hidden, Charles P., assignor to Nitrogen Products Company, Providence, R. I. Hydrolyzing cyanide to ammonia. No. 1,312,116; Aug. 5; v. 265; p. 50.

Hill, Earl V., Chicago, Ill. Ventilator for cars. No. 1,312,177; Aug. 5; v. 265; p. 61.

Hill, Howard H., assignor of one-half to M. Maybury, Montclair, N. J. Brush-suspending device. No. 1,312,178; Aug. 5; v. 265; p. 61.

Hlock, Henry M., assignor to C. B. Hart, Brooklyn, N. Y. Mold for the formation of candle sticks. No. 1,312,325; Aug. 5; v. 265; p. 88.

Hilton, Thomas, Hammersmith London, England. Bedstead, settee, and the like. No. 1,312,443; Aug. 5; v. 265; p. 111.

Hinkle, Jonathan G. E., Bethany, Mo. Anesthetic-machine. No. 1,312,117; Aug. 5; v. 265; p. 50.

Hodges, Edward R., Irvington, assignor to Spilldorf Electrical Company, Newark, N. J. Timer-distributor mechanism. No. 1,311,893; Aug. 5; v. 265; p. 8.

Hodel, John S., (See Eisenmann, Hodel, and Haler.)

Holmboe, Laurence S., Oklahoma, Okla. Talking-machine. No. 1,312,250; Aug. 5; v. 265; p. 74.

Holt, Harold E. S., Farnborough, England. Aerial illuminating device. No. 1,312,499; Aug. 5; v. 265; p. 121.

Holton, F. E., et al., trustees. (See Chalmers, Charles H., assignor.)

Hopkins, Arthur C., assignor to Mid-West Manufacturing Company, Minneapolis, Minn. Commutator. No. 1,311,894; Aug. 5; v. 265; p. 8.

Hopkinson, Ernest, New York, N. Y. Tire-making and apparatus therefor. No. 1,312,505; Aug. 5; v. 265; p. 123.

Horr, John V., (See Ripich and Horr.)

Hosce, Luzena, Indianapolis, Ind. Athletic belt. No. 1,312,400; Aug. 5; v. 265; p. 102.

Hough, Arthur, New York, N. Y. Condenser. No. 1,312,118; Aug. 5; v. 265; p. 50.

Hough, Arthur, New York, N. Y. Apparatus for nitration of organic liquids. No. 1,312,119; Aug. 5; v. 265; p. 50.

House, Thomas M., Richmond, assignor to Seward Trunk and Bag Company, Petersburg, Va. Drawer-lock. No. 1,312,632; Aug. 5; v. 265; p. 34.

Howe, Olaf L., Missoula, Mont. Water-motor. No. 1,312,326; Aug. 5; v. 265; p. 88.

Huber, William E., East Cleveland, assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Apparatus for bonding rails and the like. No. 1,312,401; Aug. 5; v. 265; p. 102.

Huggins, Murray J., Bridgeport, Conn., and R. H. Huggins, Middletown, N. Y. Counterboring-tool. No. 1,312,033; Aug. 5; v. 265; p. 34.

Huggins, Richard B., (See Huggins, Murray J. and R. B.)

Hult, Sven, Stockholm, Sweden, assignor to Norak Elektrisk Metallindustri Aktieselskap, Sundlökken, Sarpborg, Norway. Refining zinc. No. 1,312,480; Aug. 5; v. 265; p. 118.

Humphrey, Alfred H., New York, N. Y. Gas-stove. No. 1,311,895; Aug. 5; v. 265; p. 8.

Hunke, John, Melrose Park, assignor to Cox Multi-Mailer Co., Chicago, Ill. Stenciling apparatus. No. 1,312,481; Aug. 5; v. 265; p. 118.

Hunt, Helm, Ferris & Co. (See Ferris, Howard J., assignor.)

Hurt, Spencer M., Ridley Park, Pa., assignor to The Mynol Chemical Company. Polat for nerve-canals of teeth. No. 1,312,120; Aug. 5; v. 265; p. 51.

Iama, Abraham M., Gary, Ind. Furnace. No. 1,311,896; Aug. 5; v. 265; p. 9.

Ihrmark, Charles G., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Tool-holder. No. 1,311,897; Aug. 5; v. 265; p. 9.

Imhoff, Harry G., Waterloo, Iowa. Pneumatic tire. No. 1,312,482; Aug. 5; v. 265; p. 118.

Industrial Inventions Limited, (See Perry, Frank, assignor.)

Industrial Research Laboratories, The. (See Gerlach and Lihme, assignors.)

Ingersoll-Rand Company, (See Ihrmark, Charles G., assignor.)

Ingersoll-Rand Company, (See Slater, Fred M., assignor.)

Ingersoll-Rand Company, (See Smith, William A., assignor.)

International Conveyor Corporation, (See Stuart, Francis L., assignor.)

International Harvester Company, (See Benjamin, Berl H., assignor.)

International Harvester Company, (See Burgess, Edward W., assignor.)

International Harvester Company, (See Lindgren, Alexua C., assignor.)

International Harvester Company, (See Mowry, Edward, assignor.)

International Harvester Company, (See Sperry, Herbert B., assignor.)

Ireland, Ward S., St. Louis, Mo., and W. E. Lippert, Cincinnati, Ohio, assignors to National Shortband Machine Company, St. Louis, Mo. Type-writing machine. No. 1,312,179; Aug. 5; v. 265; p. 62.

J. H. Day Company, The. (See Allison, Daniel K., assignor.)

Jackson, James, London, Ontario, Canada. Child's vehicle. No. 1,312,444; Aug. 5; v. 265; p. 111.

Jackson, John L., River Forest, Ill. Indicator for pneumatic tires. No. 1,311,898; Aug. 5; v. 265; p. 9.

Jameson, Robert, assignor to Draper Corporation, Hopedale, Mass. Loom-seat. No. 1,312,251; Aug. 5; v. 265; p. 74.

Jerolamini, Henry F., Chicago, Ill. Mechanism for operating freight-car doors. No. 1,312,180; Aug. 5; v. 265; p. 62.

Jeter, John T., Dallas, assignor to Vulcan Iron Works, Wilkes-Barre, Pa. Gear-ring for rotary kilns. No. 1,312,252; Aug. 5; v. 265; p. 75.

Johansson, Johan P., Fannalund, Esköping, Sweden. Cam-wheel transmission. No. 1,312,328; Aug. 5; v. 265; p. 88.

Johnson, Andrew G., Stillman Valley, Ill. Map-box and map. No. 1,312,445; Aug. 5; v. 265; p. 111.

Johnson, Carl F., Milwaukee, Wis. Automatic control device. No. 1,312,253; Aug. 5; v. 265; p. 75.

Johnson, Forrest W., assignor of one-half to F. M. Wilson, Hartman, Colo. Feed-grinder. No. 1,312,446; Aug. 5; v. 265; p. 112.

Johnson, James T., Chicago, Ill. Automatic spark-arrester for saws. No. 1,312,121; Aug. 5; v. 265; p. 51.

Johnson, John E., Ruth, Nev. Automobile-tire enlarger. No. 1,311,971; Aug. 5; v. 265; p. 22.

Johnson, Oliver W., Cleveland, Ohio. Ground-engaging surface of traction-wheels. No. 1,311,972; Aug. 5; v. 265; p. 22.

Jones, Arthur L., Auburn, N. Y. Camera. No. 1,312,122; Aug. 5; v. 265; p. 51.

Jones, Ernest H., London, England. Electrode for electric arc soldering. No. 1,312,254; Aug. 5; v. 265; p. 75.

Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Attachment for coating-machines. No. 1,312,034; Aug. 5; v. 265; p. 35.

Jones, Joseph W., assignor to Jones Motrola, Inc., New York, N. Y. Winding device for the spring-motors of talking-machines. No. 1,312,181; Aug. 5; v. 265; p. 62.

Jones, Lloyd, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Shear mechanism. No. 1,312,182; Aug. 5; v. 265; p. 62.

Jones Motrola, Inc., (See Jones, Joseph W., assignor.)

Jones, Owen H., Hartford, Conn. Ball-cock. No. 1,312,329; Aug. 5; v. 265; p. 88.

Jones, Pearl N., Pittsburgh, and J. W. Welsh, Oakmont, Pa. Control of electric motors. No. 1,312,183; Aug. 5; v. 265; p. 62.

Joyson, William G., Abington, assignor to Anglo-American Textile Machinery Company, Boston, Mass. Pneumatic separator. No. 1,311,973; Aug. 5; v. 265; p. 23.

Jordan, Bennett W., Mullins, assignor of one-half to H. L. Buck, Horry county, S. C. Automatic heat and cold regulator alarm. No. 1,312,123; Aug. 5; v. 265; p. 51.

Josephson, Archie, et al. (See Haskins, Butler J., assignor.)

Kahlenberg Brothers Company. (See Kahlenberg, William R., assignor.)

Kahlenberg, William R., assignor to Kahlenberg Brothers Company, Two Rivers, Wis. Reversible starter for internal combustion engines. No. 1,312,402; Aug. 5; v. 265; p. 102.

Kalina, Steve, Braddock, Pa. Trolley. No. 1,312,076; Aug. 5; v. 265; p. 42.

Kaplan, Morduch L., Brooklyn, N. Y., assignor, by mesne assignments, to National Carbon Company, Inc., Cleveland, Ohio. Flash-light. No. 1,311,899; Aug. 5; v. 265; p. 9.

Kaufman, Jacob. (See Ripch and Horst, assignors.)

Keith, James L., St. Louis, Mo. Railway-train stop. No. 1,312,077; Aug. 5; v. 265; p. 42.

Kellough Switchboard and Supply Company. (See Allen, Joseph S., assignor.)

Kellow, Warren G., Los Angeles, Calif. Adjustable eye-tilting device for dolls. No. 1,312,447; Aug. 5; v. 265; p. 112.

Kelly, John P., Pittsfield, Mass. Lubricator for air-compressors. No. 1,312,320; Aug. 5; v. 265; p. 88.

Kelly Springfield Tire Co. (See McNeenathen, Robert, assignor.)

Keltonik, Stephen, Coonemagh, Pa. Inkstand. No. 1,312,184; Aug. 5; v. 265; p. 62.

Kent, George S., Buffalo, N. Y. Boiler-furnace. No. 1,312,185; Aug. 5; v. 265; p. 63.

Kenyon, George T., Lock No. 4, Pa. Shipping-case. No. 1,312,403; Aug. 5; v. 265; p. 103.

Kerr, George W., and L. A. Pray, Racine, Wis. Automobile-hood ramp. No. 1,312,078; Aug. 5; v. 265; p. 42.

Killen, Edward H., London, England. Rubber tire. No. 1,312,124; Aug. 5; v. 265; p. 51.

King, Albert T., Wimbledon, and F. A. Mason, London, England. Manufacture of aretals. No. 1,312,186; Aug. 5; v. 265; p. 63.

King, Jesse C., Montreal, Quebec, Canada. Electrode and making same. No. 1,312,255; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,256; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,257; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,258; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,259; Aug. 5; v. 265; p. 76.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,260; Aug. 5; v. 265; p. 76.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,261; Aug. 5; v. 265; p. 76.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,262; Aug. 5; v. 265; p. 76.

Kircher, Paul, Chicago, Ill., assignor, by mesne assignments, to Massey Concrete Products Corporation, Cribbing. No. 1,312,331; Aug. 5; v. 265; p. 88.

Kirino, Charles, Ogden, Utah. Method and machine for peeling tomatoes. No. 1,312,332; Aug. 5; v. 265; p. 89.

Kishida, Kokuo. (See Tjima and Kishida.)

Kitchen, Samuel R., Buffalo, N. Y. Spring mattress and the like. No. 1,312,125; Aug. 5; v. 265; p. 51.

Kittelson, Halmor C., assignor to Pressed Steel Automobile Lug Company, Inc., Minneapolis, Minn. Mud lug for automobile-tires. No. 1,312,483; Aug. 5; v. 265; p. 118.

Klarmann, Louis, North Bergen, N. J. Waste-pipe cleaner. No. 1,312,404; Aug. 5; v. 265; p. 103.

Klaxon Company. (See Wheelock, John H., assignor.)

Knox, William J., New York, N. Y., and J. P. Mallet, Elizabeth, N. J., assignors to General Research Laboratories, New York, N. Y. Apparatus for ozone generation. No. 1,312,484; Aug. 5; v. 265; p. 119.

Konigsberg, Joseph, assignor to L. Konigsberg, New York, N. Y. Guide for pipe-cutters. No. 1,312,187; Aug. 5; v. 265; p. 63.

Konigsberg, Lena. (See Konigsberg, Joseph, assignor.)

Koppers Company, The. (See Becker, Joseph, assignor.)

Koppers Company, The. (See Van Ackeren, Josef, assignor.)

Kosluski, Thomas M., Chicago, Ill. Tie-holder. No. 1,311,900; Aug. 5; v. 265; p. 10.

Koedt, Oscar G. (See Weinhold, Paul, assignor.)

Kraft, Henry P. (See Schweibert and Kraft.)

Kramer, Andrew A. (See Lirenwood, Winfield S., assignor.)

Kratz, Franz, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Electric switch. No. 1,311,974; Aug. 5; v. 265; p. 23.

Kroff, Leonard D., assignor to Evan L. Sterling Manufacturing Company, Sterling, Ill. Rack for seed-packets. No. 1,311,975; Aug. 5; v. 265; p. 23.

Krauth, Albert, deceased, Hamilton, Ohio; F. G. Diebach, administrator, Muskegon, Mich. No. 1,312,485; Aug. 5; v. 265; p. 119.

Kroff, Leonard D., assignor to Evan L. Sterling Manufacturing Company, Sterling, Ill. Display-rack for goods. No. 1,311,976; Aug. 5; v. 265; p. 23.

Krueger, Theodore H., Bridgeport, Conn. Moistening device for gummed tape, labels, and the like. No. 1,312,486; Aug. 5; v. 265; p. 119.

Krupa, Michal, assignor of one-fourth to J. Dzingel, Jerome, Pa. Locking device for coal-cutting trucks. No. 1,311,901; Aug. 5; v. 265; p. 10.

Kruse, Theodore H., assignor of one-half to M. G. Demetz, Arvada, Colo. Copy-holder. No. 1,312,035; Aug. 5; v. 265; p. 35.

Kyle, William D., Milwaukee, Wis. Insulator-bracket. No. 1,311,977; Aug. 5; v. 265; p. 23.

Lambert, Frank B., Chicago, assignor, by mesne assignments, to C. A. Brown, Hinsdale, Ill. Burning brick. No. 1,311,978; Aug. 5; v. 265; p. 24.

Lander, Frank E., Blackheath, London, assignor to Vickers Limited, Westminster, England. Means for parting the moorings of submarine mines or mine-sweeping ropes or cables. No. 1,312,405; Aug. 5; v. 265; p. 103.

Lang, Hubert, Chicago, Ill., assignor to Toss Printing Press Company, Printing-press. No. 1,312,487; Aug. 5; v. 265; p. 119.

Lange, William L. (See Rittberg and Lange.)

Latham, Mattie E., Montevideo, Ala. Automatic elevator-door closer. No. 1,312,500; Aug. 5; v. 265; p. 121.

Latimer, Henry G., Jr., Auburn, N. Y. Automobile-seat. No. 1,312,501; Aug. 5; v. 265; p. 121.

Leaver, Edmund S., assignor of one-half to C. E. Van Harneveld, Tucson, Ariz. Apparatus for extracting metals from their ores. No. 1,312,488; Aug. 5; v. 265; p. 119.

Leiby, States L., Charleston, S. C. Hydroplane-boat. No. 1,312,036; Aug. 5; v. 265; p. 35.

Lebow, Simon, Bellaire, Ohio. Device for smoothing and sizing pipe. No. 1,312,333; Aug. 5; v. 265; p. 89.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Sheet-metal wheel. No. 1,311,979; Aug. 5; v. 265; p. 24.

Lee, Clifford. (See Worley, Trowbridge, Wartenberg, and Lee.)

Lee, Hugh W., assignor to Sir W. G. Armstrong, Whitworth and Company, Limited, Newcastle-upon-Tyne, England. Pedestal gun-mounting. No. 1,312,037; Aug. 5; v. 265; p. 35.

Lehman, Joseph H., Hasbrouck Heights, N. J. Electric make-and-break device. No. 1,311,902; Aug. 5; v. 265; p. 10.

Lennon, Roy A. (See Camp, Orrin B., assignor.)

Leuchander, Anslu C., Port Blakeley, Wash. Staple. No. 1,311,903; Aug. 5; v. 265; p. 10.

Lewis, Joseph, Winnipeg, Manitoba, Canada. Attachment to printing-machines. No. 1,312,263; Aug. 5; v. 265; p. 76.

Lewis, Lee D., Tulsa, Okla. Wrench. No. 1,312,406; Aug. 5; v. 265; p. 103.

Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch and Signal Company, Swissvale, Pa. Railway-crossing signal and control therefor. No. 1,312,407; Aug. 5; v. 265; p. 103.

Lihme, Christian B. (See Gerlach and Lihme.)

Lindgren, Alexus C., Moline, Ill., assignor, by mesne assignments, to International Harvester Company, Wheeling, Mo. No. 1,312,188; Aug. 5; v. 265; p. 63.

Lippert, Walter E. (See Ireland and Lippert.)

Lirenwood, Winfield S., assignor to A. A. Kramer, Kansas City, Mo. Truck-hoist. No. 1,312,489; Aug. 5; v. 265; p. 119.

Locke, Frank L. B., Harpenden, England. Machine for the manufacture of candles and the like. No. 1,312,189; Aug. 5; v. 265; p. 63.

Locomotive Superheater Company. (See Barnes and Schofield, assignors.)

Locomotive Stoker Company. (See Ryan, Edward, assignor.)

Loewenhertz, Emanuel, Chicago, Ill. Tooth-cleaning device. No. 1,312,334; Aug. 5; v. 265; p. 89.

Loomis, Burdett, assignor to G. L. Loomis, Hartford, Conn. Making cellulose. No. 1,311,980; Aug. 5; v. 265; p. 24.

Loomis, Grace L. (See Loomis, Burdett, assignor.)

Lowrance, William T., Monte Vista, Colo. Fence-post. No. 1,312,448; Aug. 5; v. 265; p. 112.

Lucius, Christian V., Massillon, Ohio. Tank-vehicle. No. 1,311,981; Aug. 5; v. 265; p. 24.

Luhrman, Albert H., Cincinnati, Ohio. Storage-battery connection. No. 1,312,038; Aug. 5; v. 265; p. 35.

Lumley, Harold J., Buffalo, N. Y. Hot-water heater. No. 1,312,408; Aug. 5; v. 265; p. 104.

Lundberg, Adolf, Stockholm, Sweden. Apparatus for delivering toilet-paper piece by piece. No. 1,312,449; Aug. 5; v. 265; p. 112.

Lundell, Allen E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. No. 1,312,126; Aug. 5; v. 265; p. 52.

Lundgren, Fred, Los Angeles, Calif. Lubricating and cooling device for internal-combustion engines. No. 1,312,190; Aug. 5; v. 265; p. 64.

Lynn, Joseph J., Moose Jaw, Saskatchewan, Canada. Door-catch. No. 1,311,982; Aug. 5; v. 265; p. 24.

MacGuire, William E. (See Ervin and MacGuire.)

MacLeod, Walter, Cincinnati, Ohio. Furnace for melting metals. No. 1,312,129; Aug. 5; v. 265; p. 52.

MacNeill, Donald. (See Cockburn and MacNeill.)

Mallet, John P. (See Knox and Mallet.)

Mandel, Harry H. (See Patux, Alexander, assignor.)

Mantle Lamp Company of America, The. (See Gregor and French, assignors.)

Marsden, Joshua R., Huddersfield, England. Machine for sandpapering or smoothing wood moldings. No. 1,312,193; Aug. 5; v. 265; p. 64.

Martin, August, and H. H. Doering, Chicago, Ill.; said Doering assignor to said Martin. Egg-treating machine. No. 1,312,337; Aug. 5; v. 265; p. 89.

Mason, Frederick A. (See King and Mason.)

Massey Concrete Products Corporation. (See Kircher, Paul, assignor.)

Matteson, George F. (See Chew, Harry L., assignor.)

Maxton, Hudson, Hopatcong, N. J. Propulsion of automobile torpedoes. No. 1,311,984; Aug. 5; v. 265; p. 25.

Mayberry, Maxwell. (See Hill, Howard H., assignor.)

McAuliffe, John W., Putnam, N. Y. Cigar with self-contained holder. No. 1,312,490; Aug. 5; v. 265; p. 120.

McCanley, Charles G., Washington, D. C. Adjustable rail-brace. No. 1,312,264; Aug. 5; v. 265; p. 76.

McClatchy, Albert H., Baltimore, Md. Book-cover protector. No. 1,311,983; Aug. 5; v. 265; p. 25.

McClanathan, Robert, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y. Machine for and process of forming rubber tires. No. 1,312,491; Aug. 5; v. 265; p. 120.

McDonald, George P., St. Louis, Mo. Signaling sailing device for valves, &c. No. 1,312,191; Aug. 5; v. 265; p. 61.

McGouldrick, Timothy, Lincoln, N. H. Arm-cushion for crutches and fastenings therefor. No. 1,312,030; Aug. 5; v. 265; p. 34.

Mellroy, George H., assignor to J. S. Wakefield, Oklahoma, Okla. Sanitary closet-cabinet. No. 1,312,192; Aug. 5; v. 265; p. 64.

McKee, Ralph H., Ridgefield Park, N. J. Making phenol. No. 1,312,127; Aug. 5; v. 265; p. 52.

McKinnon, Samuel C., East Orange, assignor to Spiltdorf Electrical Company, Newark, N. J. Brush-holder. No. 1,311,984; Aug. 5; v. 265; p. 10.

McKerlie, John E., Waterford, Ontario, Canada. Soap-cutter. No. 1,312,335; Aug. 5; v. 265; p. 89.

McKay, Edwin A., and G. B. Moore, New Orleans, La. Disintegrating and conserving mechanism. No. 1,312,450; Aug. 5; v. 265; p. 112.

McNaughton, Don A., Maryville, Tenn. Combustion-indicator. No. 1,311,905; Aug. 5; v. 265; p. 10.

McNaughton, Robert L., Milot, N. D. Sack-holder. No. 1,312,336; Aug. 5; v. 265; p. 89.

McNeil, Frederick P., Seattle, Wash. Scraper. No. 1,312,128; Aug. 5; v. 265; p. 52.

Meahl, Philip J., Summit, N. J. Operating and controlling mechanism for player-pianos. No. 1,312,194; Aug. 5; v. 265; p. 84.

Meahl, Philip J., Summit, N. J. Player-piano. No. 1,312,195; Aug. 5; v. 265; p. 85.

Meahl, Philip J., Summit, N. J. Mechanism for player-pianos. No. 1,312,196; Aug. 5; v. 265; p. 85.

McIntosh, Charles P., Cleveland, Ohio, assignor to The Carbonizing Engineering Company, Composition for case-hardening. No. 1,312,339; Aug. 5; v. 265; p. 90.

Mechanical Rubber Company, The. (See Morron, John D., assignor.)

McLay, Harry L., Los Angeles, Calif., assignor of one-third to H. G. Hamilton, Youngstown, Ohio. Artificial ball. No. 1,312,451; Aug. 5; v. 265; p. 113.

Mellink, Charles F., Toledo, Ohio. Electric welding. No. 1,312,039; Aug. 5; v. 265; p. 35.

Melner, Elmer. (See Sperry and Melner.)

Merle, Henri, Paris, France. Automatic throttle for high-compression motors. No. 1,312,010; Aug. 5; v. 265; p. 35.

Merrill, Charles F., Jasper, Mo., and E. E. Hall, Bayard, Kans. Fire-trap for cattle. No. 1,312,130; Aug. 5; v. 265; p. 52.

Metz, Harry J., Davenport, Iowa, assignor of one-half to J. P. Bladel, Rock Island, Ill. Attachment for corn-plasters. No. 1,311,985; Aug. 5; v. 265; p. 25.

Mid-West Manufacturing Company, The. (See Hopkins, Arthur C., assignor.)

Miles, Edward J., Newton, Iowa. Vise. No. 1,311,986; Aug. 5; v. 265; p. 25.

Miller, Albert E., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Purifying oil. No. 1,311,987; Aug. 5; v. 265; p. 25.

Miller, Arthur E., and C. E. Anable, Sacramento, Calif. One-way screw or bolt. No. 1,312,409; Aug. 5; v. 265; p. 104.

Miller, Arthur E., and C. E. Anable, Sacramento, Calif. Safety-crank for automobiles. No. 1,312,410; Aug. 5; v. 265; p. 104.

Miller, James R., Okmulgee, Okla. Process and apparatus for refining oils. No. 1,312,265; Aug. 5; v. 265; p. 70.

Milner, Harry L., Morganton, N. C. Gas-producer. No. 1,312,411; Aug. 5; v. 265; p. 104.

Mills Woven Cartridge Belt Company. (See Hatchelder, Frank R., assignor.)

Miner, William H. (See Mitchell, John R., assignor.)

Minerals Separation American Syndicate (1913) Limited. (See Seale and Shellhear, assignors.)

Minerals Separation North American Corporation. (See Emerson, Edward H., assignor.)

Minerals Separation North American Corporation. (See Seale and Shellhear, assignors.)

Minol Chemical Company, The. (See Hartr, Spencer M., assignor.)

Mitchell, John R., Evanston, Ill., assignor to W. H. Miner, Chazy, N. Y. Buffer plate for passenger-cars. No. 1,311,988; Aug. 5; v. 265; p. 25.

Mitchell, Willard H., East St. Johnsbury, Vt. Chain mat for wheel-tires. No. 1,311,989; Aug. 5; v. 265; p. 25.

Moffatt, James H., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine and trimming mechanism therefor. No. 1,312,412; Aug. 5; v. 265; p. 104.

Moffatt, James H., assignor to Union Special Machine Company, Chicago, Ill. Trimming mechanism for sewing-machines. No. 1,312,413; Aug. 5; v. 265; p. 105.

Mojonner Bros. Co. (See Mojonner, Julius J., assignor.)

Mojonner, Julius J., Oak Park, assignor to Mojonner Bros. Co., Chicago, Ill. Extraction flask or tube. No. 1,312,340; Aug. 5; v. 265; p. 90.

Moller, Sune, Gottenborg, Sweden. Cooling utensil. No. 1,311,990; Aug. 5; v. 265; p. 26.

Monte, Fred, Newark, N. J. Dish-washing machine. No. 1,312,414; Aug. 5; v. 265; p. 105.

Moore, Charles T., assignor to The Columbus Glass Company, Lancaster, Ohio. Capping-off device. No. 1,312,341; Aug. 5; v. 265; p. 90.

Moore, George L. (See McKay and Moore.)

Moran, Arthur P., Canton, Mont. Device for pulling automobiles out of mudholes. No. 1,312,079; Aug. 5; v. 265; p. 42.

Morey, William E., Chicago, Ill., assignor to Rodger Ballast Car Company, Convertible freight-car. No. 1,311,906; Aug. 5; v. 265; p. 11.

Morgan Construction Company. (See George, Jerome R., assignor.)

Morgan Engineering Company, The. (See Hales, Hugo, assignor.)

Moriarty, Daniel, Oakland, Calif. Vehicle-wheel. No. 1,312,415; Aug. 5; v. 265; p. 105.

Morison, Donald H., Hurlerpool, England. Apparatus for filtering liquids. No. 1,312,041; Aug. 5; v. 265; p. 36.

Morron, John D., Lakewood, Ohio, assignor to The Mechanical Rubber Company. Recovering rubber solvent. No. 1,312,452; Aug. 5; v. 265; p. 113.

Mortensen, Einar, Tordens, near Moss, Norway. Condenser. No. 1,312,416; Aug. 5; v. 265; p. 105.

Morton, Burris M., Koshkonong, Mo. Automatic rail-power. No. 1,312,131; Aug. 5; v. 265; p. 53.

Mosher, Willet H., assignor to Candell, Powell & Mosher, Inc., Buffalo, N. Y. Trolley for holding apparatus, &c. No. 1,312,417; Aug. 5; v. 265; p. 106.

Moster, Arthur R., New York, N. Y. Gasket. No. 1,312,338; Aug. 5; v. 265; p. 89.

Mowry, Edward, Sterling, Ill., assignor, by mesne assignments, to International Harvester Company, Hay-loader. No. 1,312,342; Aug. 5; v. 265; p. 90.

Moxey, James A., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Removable standard for wagon bolsters. No. 1,312,343; Aug. 5; v. 265; p. 91.

Mueller, Otto, Elktion, Fla. Cultivator. No. 1,312,418; Aug. 5; v. 265; p. 100.

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Murdock, Franklin P., East Orange, N. J., assignor to Gillis & Geoghegan, New York, N. Y. Hanger for radiators. No. 1,311,908; Aug. 5; v. 265; p. 11.

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Navin, Frank, Salt Lake City, Utah. Separating the petroleum contents from petroleum-bearing sands or shale. No. 1,312,266; Aug. 5; v. 265; p. 76.

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 North, Thomas K., Westminster, England. Submarine mine. No. 1,312,340; Aug. 5; v. 265; p. 91.
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 Patrick, Henry W., assignor of one-fourth to E. F. Cleland and one-fourth to F. A. Cleland, Mansfield, Ohio. Combined gas-coolant and water-vapor burning heating apparatus. No. 1,312,080; Aug. 5; v. 265; p. 43.
 Patus, Alexander, assignor of one-half to H. H. Mandel, South Bend, Ind. Respirator. No. 1,312,200; Aug. 5; v. 265; p. 65.
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 Perkins, Harry J., Grand Rapids, Mich. Grinding-machine. No. 1,311,992; Aug. 5; v. 265; p. 26.
 Perry, Frank, Tipton, England, assignor to Industrial Inventions Limited, Tipton, Stafford, England. Infrared-gas lighting. No. 1,312,046; Aug. 5; v. 265; p. 37.
 Perry, Ray P., Upper Montclair, N. J., assignor to The Barrett Company. Cautic material in subdivided form. No. 1,312,201; Aug. 5; v. 265; p. 66.
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 Petermann, Otto, Groton, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,311,911; Aug. 5; v. 265; p. 11.
 Peterson, Per A., assignor to the Laval Steam Turbine Company, Groton, N. Y. Flexible gear-wheel. No. 1,311,912; Aug. 5; v. 265; p. 11.
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 Picard, Alric, Oldtown, Me. Combined tea and coffee pot. No. 1,312,203; Aug. 5; v. 265; p. 66.
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 Rainey, Paul M., Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Distributing apparatus. No. 1,311,915; Aug. 5; v. 265; p. 12.
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 Randall, Raymond G., assignor of one-fourth to E. F. Wolcott and one-fourth to C. Wolcott, Grinnell, Iowa. Method of and apparatus for mixing concrete. No. 1,312,207; Aug. 5; v. 265; p. 67.
 Raney, Estelle C., assignor to The Automatic Reclosing Circuit Breaker Company, Columbus, Ohio. Circuit-controlling mechanism. No. 1,312,454; Aug. 5; v. 265; p. 113.
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 Redpath, Robert, assignor to The Coventry Ordnance Works, Limited, Coventry, England. Cartridge-feed mechanism especially applicable for automatic guns. No. 1,312,048; Aug. 5; v. 265; p. 37.
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 Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Beam-locking device for looms. No. 1,312,269; Aug. 5; v. 265; p. 77.
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 Rogers, Guy A., Portland, Oreg. Combined brake and jack for vehicles. No. 1,311,998; Aug. 5; v. 265; p. 27.
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 Radin, Karl V., Stockholm, Sweden. Step-by-step mechanism in calculating-machines. No. 1,312,002; Aug. 5; v. 265; p. 28.

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 Schmitz, Richard, Chicago, Ill., assignor to Schmitz Engine Company. Valve for hydrocarbon-engines. No. 1,312,003; Aug. 5; v. 265; p. 28.
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 Schröder-Nelsen, Thoralf, Horton, assignor to Christoffer Paonevik and Hannevig Brothers A/S, Christiania, Norway. Boat-davit. No. 1,312,272; Aug. 5; v. 265; p. 77.
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 Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,312,363; Aug. 5; v. 265; p. 95.
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 Splittorf Electrical Company. (See McKown, Samuel C., assignor.)
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 Stanton, Gay A., Battle Creek, Mich. Spring suspension for vehicles. No. 1,312,284; Aug. 5; v. 265; p. 80.
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 Sutcliffe, Edw. R., Leigh, England, assignor to Pure Coal Briquette Co., Ltd., Cardiff, Wales, Press applicable for the production of briquettes and for other purposes. No. 1,312,267; Aug. 5; v. 265; p. 95.
 Swift and Company (See Richardson, William D., assignor.)
 Tanner, Harry L., assignor to Sperry Gyroscope Company, Brooklyn, N. Y., Gyroscopic pendulum for aeroplanes, torpedoes, and the like. No. 1,312,086; Aug. 5; v. 265; p. 41.
 Tajiima, Jukichi, Ibe, and K. Kishida, Toyohigashi, Yamaguchi, Japan, Apparatus for excluding dense fog. No. 1,312,286; Aug. 5; v. 265; p. 80.
 Terhune, Howard (See Aldridge and Terhune.)
 Thacher, Sheldon P., Weehawken, N. J., assignor to Reverse Rubber Company, Vulcanizing rubber and product obtained thereby. No. 1,312,144; Aug. 5; v. 265; p. 55.
 Thiel, George J., Aurora, Ill., Ear-protector. No. 1,312,493; Aug. 5; v. 265; p. 120.
 Thierfelder, Richard E., and J. Schmaetzel, Jr., Milwaukee, Wis., Preservative composition for treating rubber fabric. No. 1,312,097; Aug. 5; v. 265; p. 29.
 Thomas, Edward, New York, N. Y., and B. C. Stickney, Elizabeth, N. J., assignors, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., Type-writing machine. No. 1,312,145; Aug. 5; v. 265; p. 55.
 Thompson, Charles F., Washington, D. C., Resetting mechanism for counting machines. No. 1,312,008; Aug. 5; v. 265; p. 29.
 Thompson, John D., Rochester, N. Y., Signal. No. 1,312,217; Aug. 5; v. 265; p. 68.
 Thompson, Oscar A., Redwing, Kans., Spark-intensifier. No. 1,312,058; Aug. 5; v. 265; p. 96.
 Thorp, James M., Alameda, Calif., Explosion engine. No. 1,312,660; Aug. 5; v. 265; p. 114.
 Thrift, Homer C., Goose Creek, Tex., Pipe-pulling device. No. 1,312,099; Aug. 5; v. 265; p. 29.
 Thrower, Albert J., Dexter, Mo., Cotton-picker. No. 1,312,010; Aug. 5; v. 265; p. 29.
 Thuman, Francis J., Baltimore, Md., Hull of water-craft. No. 1,312,001; Aug. 5; v. 265; p. 96.
 Thien, Ellis orth, Duluth, Minn., Sounding signal device for automobiles. No. 1,312,370; Aug. 5; v. 265; p. 96.
 Tingley, Phil B., New York, N. Y., Realigning mechanism for writing machines. No. 1,312,063; Aug. 5; v. 265; p. 40.
 Tirrell, Allen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Vibrating contact relay for electrical regulators. No. 1,312,503; Aug. 5; v. 265; p. 122.
 Tolhurst Machine Works (See Bryson, Tandy A., assignor.)
 Towle, Erle A. (See Whitmore, George C., assignor.)
 Tritton, William A., Lincoln, England, Armor-plating. No. 1,312,711; Aug. 5; v. 265; p. 96.
 Trowbridge, John H. (See Worley, Trowbridge, Wurttemberg, and Lee.)
 Trotman, Walter G., West Springfield, Mass., assignor to C. H. Smith Company, Springfield, Mass., Seam. No. 1,311,927; Aug. 5; v. 265; p. 14.
 Tschanz, Otto, Berne, Switzerland, Driving mechanism for railway wheels with electric motors rigidly mounted on spring-suspended frames. No. 1,311,928; Aug. 5; v. 265; p. 14.
 Tucker, Benjamin W., South Orange, N. J., assignor to Corona Typewriter Company, Inc., Type-writing machine. No. 1,311,929; Aug. 5; v. 265; p. 15.
 Turner, Russell E., Cochituate, Mass., Curtain-light. No. 1,312,087; Aug. 5; v. 265; p. 41.
 Turner, Walter V., Wilkesburg, assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa., Straight-air emergency valve device. No. 1,311,930; Aug. 5; v. 265; p. 15.
 Twyman, Frank, London, England, and H. Workman, Glasgow, Scotland, Production of color cinematographic slides and means thereof. No. 1,312,088; Aug. 5; v. 265; p. 44.
 Underwood Computing Machine Company (See Carlin, Samuel E., assignor.)
 Underwood Computing Machine Company (See Thomas and Stickney, assignors.)
 Underwood Typewriter Company (See Corcoran, Cornelius B., assignor.)

Union Special Machine Company (See Moffatt, James R., assignor.)
 Union Special Machine Company (See Seymour, Dudley S., assignor.)
 Union Switch and Signal Company, The (See Lewis, Lloyd V., assignor.)
 United Engineering & Foundry Company (See Jones, Lloyd, assignor.)
 United Shoe Machinery Corporation (See Bates, Arthur, assignor.)
 United States Gypsum Company (See Utaman, Clarence W., assignor.)
 Ulanek, Joseph, Chicago, Ill., Car-indicator. No. 1,312,146; Aug. 5; v. 265; p. 65.
 Utaman, Clarence W., assignor to United States Gypsum Company, Chicago, Ill., Floor construction. No. 1,312,287; Aug. 5; v. 265; p. 80.
 Van Ackeren, Josef, assignor to The Koppers Company, Pittsburgh, Pa., Coking retort-oven. No. 1,312,372; Aug. 5; v. 265; p. 90.
 Van Barneveld, Charles E. (See Leaver, Edmund S., assignor.)
 Van Lynden, Robert A. B., Utrecht, Netherlands, assignor, by mesne assignments, to American Thermophone Company, Boston, Mass., Thermic telephone. No. 1,312,594; Aug. 5; v. 265; p. 122.
 Vickers Limited (See Challenger and Savage, assignors.)
 Vickers Limited (See Dawson and Buckham, assignors.)
 Vickers Limited (See Lander, Frank E., assignor.)
 Vickers Limited (See North, Thomas K., assignor.)
 Vogel, Felix A., assignor to General Briketting Company, New York, N. Y., Briketting glue-dust. No. 1,312,218; Aug. 5; v. 265; p. 68.
 Vogelsang, Fritz, Charlottenburg, near Berlin, Germany, Door-lock. No. 1,312,219; Aug. 5; v. 265; p. 69.
 Volz, Chris L., Cleveland, Ohio, Electrical apparatus. No. 1,312,044; Aug. 5; v. 265; p. 40.
 Vulcan Iron Works (See Jeter, John T., assignor.)
 Wacker, George W., Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y., Portable electric light. No. 1,312,220; Aug. 5; v. 265; p. 69.
 Wacker, George W., Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y., Portable electric light. No. 1,312,221; Aug. 5; v. 265; p. 69.
 Wadsworth, Henry L., Lexington, Mass., Sound recording and reproducing machine. No. 1,312,401; Aug. 5; v. 265; p. 114.
 Wahlstrom, Charles S., Boulder, Colo., Truss-pad. No. 1,312,222; Aug. 5; v. 265; p. 69.
 Wakefield, Charles S., Hampstead London, England, Temporary or portable structure or building. No. 1,312,065; Aug. 5; v. 265; p. 40.
 Wakefield, James S. (See Mellony, George D., assignor.)
 Wales, Rawland T., Seward, N. J., Mold for concrete construction. No. 1,312,162; Aug. 5; v. 265; p. 115.
 Waller, Carl R., Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y., Governing mechanism for fluid-pressure motors. No. 1,311,931; Aug. 5; v. 265; p. 15.
 Wallman, Otto F., Stratford, Wis., Letter-carrier. No. 1,312,066; Aug. 5; v. 265; p. 40.
 Wallwin, Josiah M., Warwick, England, Gas and air mixer. No. 1,312,147; Aug. 5; v. 265; p. 55.
 Ward Leonard Electric Company (See Schwagermann, William, assignor.)
 Warfvinger, Karl H. (See Werner and Warfvinger.)
 Warren Webster & Co. (See Serrell and Fitts, assignors.)
 Waterbury Jewel Company, The (See Neuberth and Grille, assignors.)
 Waugh Draft Gear Company (See Davidson, Arthur C., assignor.)
 Weaver, Harold B., New York, N. Y., assignor to American Motorbus Corporation, Ounifus, No. 1,312,288; Aug. 5; v. 265; p. 80.
 Weber, Carl, assignor to Cement-Gun Construction Company, Chicago, Ill., Holding clip for concrete-reinforcement. No. 1,311,032; Aug. 5; v. 265; p. 15.
 Webster, Bradford, assignor, by mesne assignments, to Paragon Binder Corporation, Newark, N. J., Perforator. No. 1,312,067; Aug. 5; v. 265; p. 40.
 Weissel, Frank J., Flandreau, S. D., Horse's nose protector or shield. No. 1,311,933; Aug. 5; v. 265; p. 15.
 Weinhold, Paul, assignor of one-half to O. G. Kostedt, St. Louis, Mo., Toy pistol. No. 1,311,934; Aug. 5; v. 265; p. 16.
 Weidie, William R., North East, Md., Pillers. No. 1,312,148; Aug. 5; v. 265; p. 56.
 Welsh, James W. (See Jones and Welsh.)
 Wenderhold, William, New York, N. Y., assignor to Cru Patents Corporation, Photographic-printing apparatus. No. 1,312,289; Aug. 5; v. 265; p. 81.
 Werner, Victor G., Heden, and K. H. Warfvinger, Stockholm, Sweden, Inductive wireless telephone system for railways and the like. No. 1,312,088; Aug. 5; v. 265; p. 41.
 Western Electric Company (See Landell, Alben E., assignor.)
 Western Electric Company (See Rainey, Paul M., assignor.)
 Westinghouse Air Brake Company The (See Turner, Walter V., assignor.)
 Westinghouse Electric & Manufacturing Company (See Tirrell, Allen A., assignor.)

Westinghouse Electric & Manufacturing Company (See Chilling, Roswell E., assignor.)
 Wheeler, Frank G., assignor to Beach Process Company, Appleton, Wis., Indicating device for electrolytic cells. No. 1,312,491; Aug. 5; v. 265; p. 120.
 Wheelock, John H., Worcester, Mass., assignor to Klaton Company, Newark, N. J., Sound-producer. No. 1,312,373; Aug. 5; v. 265; p. 97.
 White, Archibald, Dunbar, Pa., Pipe-wrench. No. 1,312,290; Aug. 5; v. 265; p. 81.
 White, Fred G., Kansas City, Mo., assignor, by mesne assignments, to The Electric Clipper Company, Fredonia, Kans., Hair-clipper. No. 1,311,935; Aug. 5; v. 265; p. 16.
 White, Joseph R., assignor to The Graphoscope Company, Washington, D. C., Picture-projecting apparatus. No. 1,312,374; Aug. 5; v. 265; p. 97.
 White, Richard P., Chicago, Ill., Ball-bearing for vessels. (Reissue.) No. 14,703; Aug. 5; v. 265; p. 123.
 Whitman, Herbert G. (See Whitman, John C., assignor.)
 Whitman, John C., Sugar Creek township, Venango county, assignor of one-half to H. G. Whitman, Franklin, Pa., Filtration of petroleum-oil. No. 1,312,375; Aug. 5; v. 265; p. 97.
 Whitmore, George C., assignor of one-half to E. A. Towle, Portland, Me., Brake-band. No. 1,311,936; Aug. 5; v. 265; p. 16.
 Wicker, Claude W., Memphis, Tenn., Cotton-lint condenser and drier. No. 1,312,291; Aug. 5; v. 265; p. 81.
 Wilkins, Norman F. (See Riddle and Wilkins.)
 Wilkinson, Albert R. J., Twickenham, England, Vice or like work-holder. No. 1,312,011; Aug. 5; v. 265; p. 29.
 Willcox, Oswald W., Dover, N. J., Treatment of waste sulfite liquors. No. 1,312,293; Aug. 5; v. 265; p. 81.
 Williams, John K., Jacksonville, Fla., Permutation-lock. No. 1,312,376; Aug. 5; v. 265; p. 97.
 Williams Sealing Corporation, The (See Hey, Edmund A., assignor.)
 Williams, William E., Chicago, Ill., Manufacturing piston-rings. No. 1,311,937; Aug. 5; v. 265; p. 16.
 Williamson, E. L. (See Reddingfield, John C., assignor.)
 Wilson, Floyd M. (See John, Forrest W., assignor.)
 Wilson, Joseph R. (See Gilman and Wilson.)
 Wilson, Lydell L., Randolph, N. Y., Bed construction for railways. No. 1,312,427; Aug. 5; v. 265; p. 108.
 Witt, William F., Chicago, Ill., Means for spraying water. No. 1,311,038; Aug. 5; v. 265; p. 10.
 Wolcott, Charles, et al. (See Randall, Raymond G., assignor.)

Wolcott, Eugene F., et al. (See Randall, Raymond G., assignor.)
 Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., Bursting charge for containers intended to be exploded and forming said charges. No. 1,312,464; Aug. 5; v. 265; p. 115.
 Woodbridge, Richard G., Jr., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., Making propellant powder. No. 1,312,463; Aug. 5; v. 265; p. 115.
 Woodruff, Will R., Stanton, Neb., Vermis-extirminator. No. 1,312,223; Aug. 5; v. 265; p. 69.
 Workman, Harold (See Twyman and Workman.)
 Worley, Floyd; J. H. Trowbridge, C. Wurttemberg, Nauvassuck, Conn., and C. Lee, New Brunswick, N. J., assignors to The Goodyear's Metallic Rubber Shoe Company, Brake and drive-control mechanism. No. 1,311,939; Aug. 5; v. 265; p. 16.
 Wotherspoon, William W., New York, N. Y., Apparatus for charging compartments with gas, &c. No. 1,312,224; Aug. 5; v. 265; p. 70.
 Wright, Morris S., Worcester, Mass., Pneumatic action for musical instruments. No. 1,312,465; Aug. 5; v. 265; p. 120.
 Wurttemberg, Charles (See Worley, Trowbridge, Wurttemberg, and Lee.)
 Wynt, James R., assignor to The Ajax Metal Company, Philadelphia, Pa., Induction-furnace having unidirectional circulation. No. 1,312,069; Aug. 5; v. 265; p. 41.
 Yager, Harvey J., Seattle, Wash., Electrically-operated railway crossing and signal. No. 1,312,377; Aug. 5; v. 265; p. 97.
 Yarrow, Harold E., Glasgow, Scotland, Air-valve for furnaces using liquid fuel. No. 1,312,378; Aug. 5; v. 265; p. 97.
 Yendelman, Alexander, New York, N. Y., Tip-attaching implement. No. 1,312,292; Aug. 5; v. 265; p. 81.
 Young, Hugo H., Londonville, Ohio, Movable foot-rail. No. 1,311,940; Aug. 5; v. 265; p. 17.
 Young, Sanford C., Hartford, V. Va., Ballot-seal punch. No. 1,312,070; Aug. 5; v. 265; p. 41.
 Yamada, Thomas, New York, N. Y., Stabilizer for airplanes. No. 1,312,225; Aug. 5; v. 265; p. 70.
 Zachry, John L., Atlanta, Ga., Water-heater. No. 1,312,012; Aug. 5; v. 265; p. 30.
 Zalke, Frank, Chester, Pa., Nutcracker. No. 1,312,149; Aug. 5; v. 265; p. 56.
 Zehn, George F., San Bernardino, Calif., Rolling-stock. No. 1,312,466; Aug. 5; v. 265; p. 115.
 Zentmyer, William H. H. (See Radukor and Zentmyer.)
 Zimlich, Joseph O., Cleveland, Ohio, Barrel-rack. No. 1,312,150; Aug. 5; v. 265; p. 50.

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American Electrical Heater Company (See Kuhn and Hand, assignors.)
 Baranoff, Francesco, Brooklyn, N. Y., Doll's cradle. No. 53,670; Aug. 5; v. 265; p. 128.
 Birch, Richard J. (See Brodstein, Arthur, assignor.)
 Blood, Louis H. (See Osterlein and Blood.)
 Boye Needle Company, The (See Flannery, John L., Jr., assignor.)
 Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky., Gasoline-dispenser. No. 53,671; Aug. 5; v. 265; p. 124.
 Breitenstein, Arthur, Akron, assignor to R. J. Birch, Cleveland, Ohio, Tire-casing. No. 53,672; Aug. 5; v. 265; p. 124.
 Cole, Roy E., assignor to Liberty Motor Car Company, Detroit, Mich., Lamp-front frame. No. 53,673; Aug. 5; v. 265; p. 124.
 Connor, Martha H., Baltimore, Md., assignor to Tin Decorating Company of Baltimore, Sifter-can or similar receptacle. No. 53,674; Aug. 5; v. 265; p. 124.
 Davies, Isaac R., Lakewood, Ohio, Vehicle-tire. Nos. 53,675-7; Aug. 5; v. 265; p. 124.
 Dwyer, Joseph F., Seattle, Wash., Casing for a ticket-dispensing machine. No. 53,678; Aug. 5; v. 265; p. 125.
 Fitz Gerald, Harold G., Los Angeles, Calif., Bracket. No. 53,679; Aug. 5; v. 265; p. 125.
 Flannery, John L., Jr., assignor to The Boye Needle Company, Chicago, Ill., Display-cabinet. No. 53,680; Aug. 5; v. 265; p. 125.
 Hand, Jay A. (See Kuhn and Hand.)
 Haupt, Mathias P., Spokane, Wash., Toy tank. No. 53,681; Aug. 5; v. 265; p. 125.
 Jacobs, Michael H., Brooklyn, N. Y., Liquid-soap fixture. No. 53,682; Aug. 5; v. 265; p. 125.
 Jordan, Roy E., Newark, N. J., Towel-rack. No. 53,683; Aug. 5; v. 265; p. 125.
 Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich., Electrical heater. No. 53,684; Aug. 5; v. 265; p. 126.

Libby, McNeill & Libby (See Taylor, Leroy J., assignor.)
 Liberty Motor Car Company (See Cole, Roy E., assignor.)
 Lunt, George C., Greenfield, Mass., Spoon, fork, or similar article. No. 53,685; Aug. 5; v. 265; p. 126.
 Malleable Iron Fittings Company (See Pickop, George B., assignor.)
 Martell, Leonard R., Detroit, Mich., Compression, combustion, and spark-plug tester. No. 53,686; Aug. 5; v. 265; p. 126.
 Osterlein, Charles D., and L. H. Blood, assignors to The Osterlein Machine Company, Cincinnati, Ohio, Milling-machine frame. No. 53,687; Aug. 5; v. 265; p. 126.
 Osterlein Machine Company, The (See Osterlein and Blood, assignors.)
 Oversmith, Clarence D., Lima, Ohio, Advertising display-case. No. 53,688; Aug. 5; v. 265; p. 126.
 Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn., Fitting. Nos. 53,689-90; Aug. 5; v. 265; p. 126.
 Schaffer, Henry J., assignor to J. Schaffer, Brooklyn, N. Y., Ash-can, garbage-can, or like receptacle. No. 53,691; Aug. 5; v. 265; p. 127.
 Schaffer, Jacob (See Schaffer, Henry J., assignor.)
 Stokes, Robert J., assignor to Thermoid Rubber Company, Trenton, N. J., Vehicle-tire. Nos. 53,692-3; Aug. 5; v. 265; p. 127.
 Taylor, Leroy J., assignor to Libby, McNeill & Libby, Chicago, Ill., Bottle or jar. No. 53,694; Aug. 5; v. 265; p. 127.
 Thermoid Rubber Company (See Stokes, Robert J., assignor.)
 Tin Decorating Company of Baltimore (See Connor, Martha H., assignor.)
 Visible Measure Gasoline Dispenser Company of America (See Brady, James H., assignor.)
 Wiltz, Albert, Addy, Wash., Fluid-pump casing. No. 53,695; Aug. 5; v. 265; p. 127.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Engineering Magazine Company, The, New York, N. Y. Certain named prints and publications. No. 126,228; Aug. 5; v. 265; p. 141.
Kerr, Archie H., Raleigh, N. C. Medicinal preparation for hogs. No. 126,229; Aug. 5; v. 265; p. 141.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Alfred Putnam & Company, New York, N. Y. "Thurber Brand Asparagus." (For Asparagus.) No. 21,372; Aug. 5; v. 265; p. 143.
Alfred Putnam & Company, New York, N. Y. "Windham Corn." (For Corn.) No. 21,373; Aug. 5; v. 265; p. 143.
Alfred Putnam & Company, New York, N. Y. "Thurber California Style Bartlett Pears." (For Pears.) No. 21,374; Aug. 5; v. 265; p. 143.
Alfred Putnam & Company, New York, N. Y. "Extra Choice California Peaches Heavy Syrup." (For Peaches.) No. 21,375; Aug. 5; v. 265; p. 143.
Annis Brothers, Louisville, Ky. "Sage and Wildroot." (For a Hair Tonic Preparation.) No. 21,376; Aug. 5; v. 265; p. 143.
Anahelm Orange & Lemon Association, Anaheim, Calif. "Meritoria." (For Valencia.) No. 21,377; Aug. 5; v. 265; p. 143.
Anahelm Orange & Lemon Association, Anaheim, Calif. "Anahelm Gloriana." (For Extra Fancy Valencia.) No. 21,378; Aug. 5; v. 265; p. 143.
Anahelm Orange & Lemon Association, Anaheim, Calif. "Isleida." (For Oranges.) No. 21,379; Aug. 5; v. 265; p. 143.
Anahelm Orange & Lemon Association, Anaheim, Calif. "Favorita." (For Oranges.) No. 21,380; Aug. 5; v. 265; p. 143.
Anahelm Orange & Lemon Association, Anaheim, Calif. "Sonia." (For Valencia.) No. 21,381; Aug. 5; v. 265; p. 143.
Anti-Pyorrhea Chemical Company, St. Louis, Mo. "Platite." (For Compositions for Fitting False Teeth.) No. 21,382; Aug. 5; v. 265; p. 143.
Arlington Cannery, Arlington, Calif. "Arlington." (For Canned Tomatoes.) No. 21,383; Aug. 5; v. 265; p. 143.
Armour and Company, Chicago, Ill. "Lata Blanca." (For a Preparation Consisting of Pork Sausage and Cereal Preserved to Last.) No. 21,384; Aug. 5; v. 265; p. 143.
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Baker Packing Company, Chicago, Ill. "Delfia." (The Name Tells.) (For Canned Beef.) No. 21,386; Aug. 5; v. 265; p. 143.
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Blouse-makers, Inc., The, New York, N. Y. "Mirro-Crepe." (For Blouses.) No. 21,389; Aug. 5; v. 265; p. 143.
Blouse-makers, Inc., The, New York, N. Y. "Shadow-Crepe." (For Blouses.) No. 21,391; Aug. 5; v. 265; p. 143.
Bosdeker & Co., Cincinnati, Ohio. "Bosdeker's Superior Grape-Wine." (For a Beverage.) No. 21,392; Aug. 5; v. 265; p. 143.
Buckley Macaroni Company, Inc., Kensington, Conn. "International Brand." (For Macaroni.) No. 21,393; Aug. 5; v. 265; p. 143.
Buhr, Pfaff & Co., Cincinnati, Ohio. "Sunset Chocolates." (For Chocolates.) No. 21,394; Aug. 5; v. 265; p. 143.
Buhr, Pfaff & Co., Cincinnati, Ohio. "Virginia Chocolates." (For Chocolates.) No. 21,395; Aug. 5; v. 265; p. 143.
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Colker, Abraham, Newport, Ky. "Kentucky Spearmint Chewing Gum." (For Chewing Gum.) No. 21,405; Aug. 5; v. 265; p. 143.
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George Borgfeldt & Co., New York, N. Y. "Morle." (For Building-Blocks and Construction Toys.) No. 21,419; Aug. 5; v. 265; p. 144.
George W. Blabon Company, The, Philadelphia, Pa. "Blabon Art Linoleums." (For Linoleums.) No. 21,418; Aug. 5; v. 265; p. 144.
Goldberg, David N., Chicago, Ill. "Vanity Fair." (For a Non-Alcoholic Beverage.) No. 21,420; Aug. 5; v. 265; p. 144.
Golland, Morris, New York, N. Y. "Ford Overcoat." (For Men's Overcoats.) No. 21,425; Aug. 5; v. 265; p. 144.
Gradian-Annis & Co., Inc., New York, N. Y. "Don Julian." (For Cigars.) No. 21,423; Aug. 5; v. 265; p. 144.
Greensburg Brewing Company, Greensburg, Pa. "White Label." (For Non-Intoxicating Beverages.) No. 21,421; Aug. 5; v. 265; p. 144.
Grivas, John B., Chicago, Ill. "Grivas Special Sauce." (For Sauce.) No. 21,422; Aug. 5; v. 265; p. 144.
Gurney, Edmund, New York, N. Y. "Perfect Sure-Fit Fastener." (For Snap-Buttons or Garment-Fasteners.) No. 21,426; Aug. 5; v. 265; p. 144.
Hammer & Co., San Francisco, Calif. "Eagle." (For Canteen.) No. 21,427; Aug. 5; v. 265; p. 144.
Hammer & Co., San Francisco, Calif. "Eagle." (For Kerosene.) No. 21,428; Aug. 5; v. 265; p. 144.
Hammer & Co., San Francisco, Calif. "Eagle." (For Olive-Oil.) No. 21,429; Aug. 5; v. 265; p. 144.
Hammer & Co., San Francisco, Calif. "Eagle." (For Salad-Oil.) No. 21,430; Aug. 5; v. 265; p. 144.
V. L. Blabnik and Sons, Chicago, Ill. "Bronchiline." (For a Medical Compound—Namely, Bronchiline.) No. 21,389; Aug. 5; v. 265; p. 143.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

A-C Manufacturing Co., Chicago, Ill. "Save Your Spokes—A Sure Cure for Loose Spokes in Auto, Buggy, and Wagon Wheels—Tighten Your Spokes Without Removing Your Rims or Tires—Any One Can Use—No Tools Necessary." (For Spoke Compound.) No. 5,135; Aug. 5; v. 265; p. 144.
Anglo-American Mill Company, Owensboro, Ky. "Let Us Place You Here." (For Flour-Mills.) No. 5,136; Aug. 5; v. 265; p. 144.
B. V. D. Company, The, New York, N. Y. "Yes, Sir! That Label Guarantees You B. V. D. Quality." (For Athletic Underwear.) No. 5,137; Aug. 5; v. 265; p. 144.
B. V. D. Company, The, New York, N. Y. "It's Great Boys, To Climb Into B. V. D." (For Athletic Underwear.) No. 5,138; Aug. 5; v. 265; p. 144.
B. V. D. Company, The, New York, N. Y. "Take It From Me, Insist On B. V. D." (For Athletic Underwear.) No. 5,139; Aug. 5; v. 265; p. 144.
B. V. D. Company, The, New York, N. Y. "Yes, dear, I asked for B. V. D. and here's the label." (For Athletic Underwear.) No. 5,140; Aug. 5; v. 265; p. 144.
Carraine, Eugene, Philadelphia, Pa. "Jug-L-Ball." (For a Game.) No. 5,142; Aug. 5; v. 265; p. 144.

Cream of Wheat Co., Minneapolis, Minn. "Welcome Home, Boys." (For Cream of Wheat Breakfast Food.) No. 5,143; Aug. 5; v. 265; p. 144.
Cream of Wheat Co., Minneapolis, Minn. "Menu." (For Cream of Wheat Breakfast Food.) No. 5,144; Aug. 5; v. 265; p. 144.
George W. Baker Shoe Company, Brooklyn, N. Y. "Quality without Extravagance—Style without Experiment." (For Footwear.) No. 5,141; Aug. 5; v. 265; p. 144.
Gooch Milling & Elevator Co., Lincoln, Nebr. "Gooch's Best Flour." (For Bread.) No. 5,145; Aug. 5; v. 265; p. 144.
Gooch Milling & Elevator Co., Lincoln, Nebr. "Gooch's Best Soft Rising Pancake-Flour." (For Pancake-Flour.) No. 5,146; Aug. 5; v. 265; p. 144.
Hall, L. W., Irwin and Mifflinburg, Pa. "Mentholyptine." (For Medicinal Preparations.) No. 5,149; Aug. 5; v. 265; p. 144.
Knickerbocker Watch Co., New York, N. Y. "Daynite." (For Watches.) No. 5,147; Aug. 5; v. 265; p. 144.
Knickerbocker Watch Co., New York, N. Y. "Day-Night." (For Watches.) No. 5,148; Aug. 5; v. 265; p. 144.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

Abernathy, Samuel E., Indianapolis, Ind. Hair preparation and tonic, hair-growers, temple-grower, etc. No. 117,265; Aug. 5; v. 265; p. 135.
American Electric Co., Chicago, Ill. Telephone-brackets. No. 115,894; Aug. 5; v. 265; p. 132.
Andrews, Chas. S., Chastanoga, Tenn. Hosiery for men, women, and children. Nos. 118,034-5; Aug. 5; v. 265; p. 137.
Andrew Jergens Company, Cincinnati, Ohio. Perfumes and toilet waters. No. 114,893; Aug. 5; v. 265; p. 131.
Arkwright Manufacturing Company, New York, N. Y. Cotton piece goods and silk piece goods. No. 117,790; Aug. 5; v. 265; p. 136.
Baby's Bonolir, Inc., Portland, Oreg. Pillow tops, fancy covers, sheets, pads, towels, etc. No. 117,104; Aug. 5; v. 265; p. 134.
Barnett, Warren W., Phoenix, Ariz. Ointments for sores, burns, etc., skin trouble generally. No. 118,343; Aug. 5; v. 265; p. 138.
Basket Stores Co., Omaha, Nebr. Canned evaporated milk, canned salmon, etc., flavoring extracts for food, etc. No. 115,278; Aug. 5; v. 265; p. 132.
Belhabner Bros. Candy Co., New York, N. Y. Candy. No. 118,595; Aug. 5; v. 265; p. 139.
Bejean, Etienne, Paris, France. Preparation for treatment of gout and rheumatism. No. 107,150; Aug. 5; v. 265; p. 130.
Bock, Charlotte E., Mineral Wells, Tex. Toy well-houses. No. 117,369; Aug. 5; v. 265; p. 135.
Boselman, Rudolph L., New York, N. Y. Fireproof garments, smocks, coats, outer shirts, and trousers. No. 117,079; Aug. 5; v. 265; p. 134.
Brewer-Titchener Corporation, Cortland, N. Y. Vehicle parts, bow-sockets, curtain-lights, body-plates, etc. No. 109,620; Aug. 5; v. 265; p. 130.
Brown, Clark & Company, Brooklyn, N. Y. Chemical carbon-removers. No. 118,364; Aug. 5; v. 265; p. 138.
Cannon Mills, New York, N. Y. Hosiery for men, women, and children. No. 116,522; Aug. 5; v. 265; p. 133.
Carl, Malcolm L., New York, N. Y. Coal. No. 111,408; Aug. 5; v. 265; p. 130.
Cheney Brothers, South Manchester, Conn. Fabrics of silk and silk mixtures in the piece. No. 118,430; Aug. 5; v. 265; p. 139.
Commerce Motor Car Company, Detroit, Mich. Motor-trucks. No. 109,427; Aug. 5; v. 265; p. 139.
Continental Auto-Parts Company, Kalamazoo, Ind.; San Francisco, Calif., and New York, N. Y. Shock-absorbers, foot-rests, etc., and industrial platform-trucks. No. 117,294; Aug. 5; v. 265; p. 135.
Cooper Underwear Company, Kenosha, Wis. Underwear, woven and knitted, for men, women, and children. No. 113,532; Aug. 5; v. 265; p. 131.
De Long Hook and Eye Company, Philadelphia, Pa. Snap-fasteners. No. 118,958; Aug. 5; v. 265; p. 140.
Douglass Barnes Corporation, New York, N. Y. Men's worsted and wool V-neck six-button jackets, etc., wool and jersey bathing-suits. No. 116,328; Aug. 5; v. 265; p. 133.
Douglass Barnes Corporation, New York, N. Y. Ladies' sport-coats, sweaters, slip-ons, etc. No. 116,329; Aug. 5; v. 265; p. 133.
Eberhart, Jessica C., Chicago, Ill. Children's dresses. No. 116,565; Aug. 5; v. 265; p. 133.
Edward F. Stahl & Co., New York, N. Y. Woolen piece goods. No. 116,552; Aug. 5; v. 265; p. 134.

Elder Manufacturing Co., St. Louis, Mo. Boys' and children's clothing, sweaters, stockings, etc. No. 115,340; Aug. 5; v. 265; p. 132.
Elizabeth City Hosiery Co., Elizabeth City, N. C. Hosiery for men, women, and children. No. 118,141; Aug. 5; v. 265; p. 137.
Elizabeth City Hosiery Co., Elizabeth City, N. C. Men's, women's, or children's hosiery. No. 118,202; Aug. 5; v. 265; p. 138.
Enaley, Clarence E., Moulton, Iowa. Medicinal preparation called worm-salts for live stock and poultry. No. 114,035; Aug. 5; v. 265; p. 131.
Farnum, James L., Columbus, Ohio. Laxative and cathartic pill for the treatment of liver and intestinal tract. No. 118,146; Aug. 5; v. 265; p. 137.
Forstman & Hoffmann Company, Passaic, N. J. Woolen piece goods. No. 110,486; Aug. 5; v. 265; p. 133.
Frank, Richard, New York, N. Y. Non-alcoholic non-cereal maltless beverage sold as a soft drink. No. 115,977; Aug. 5; v. 265; p. 132.
Gallaudet Aircraft Corporation, East Greenwich, R. I. Airplanes. No. 117,524; Aug. 5; v. 265; p. 135.
Genatosan, Limited, London, England. Medicines used as remedies for colds, influenza, headaches, etc. No. 118,467; Aug. 5; v. 265; p. 139.
Hare, William L., New York, N. Y. Wedding-trowels. No. 118,053; Aug. 5; v. 265; p. 137.
Hatheway & Reynolds, Oriskany Falls, N. Y. Knitted sweaters, sweater-coats, and knit underwear. No. 117,877; Aug. 5; v. 265; p. 136.
Herbert F. L. Funke Co., Inc., New York, N. Y. Spokes, nipples, hubs, pedals, saddles, all for bicycles and motor-cycles. No. 111,240; Aug. 5; v. 265; p. 130.
Herman, I. C., New York, N. Y. Handkerchiefs. No. 96,692; Aug. 5; v. 265; p. 129.
Hochberger, A., Chicago, Ill. Pile fabrics made of silk, cotton, mohair, etc., and combinations thereof. No. 119,125; Aug. 5; v. 265; p. 140.
Holcomb, Austin, Los Angeles, Calif. Rubber tires. No. 115,381; Aug. 5; v. 265; p. 138.
J. C. Blair Company, Huntington, Pa. Paper for writing and printing purposes, etc., envelopes and tablets, etc. No. 116,143; Aug. 5; v. 265; p. 132.
Jointless Fire Brick Company, Chicago, Ill. Fire-resisting cement for forming furnace-linings. No. 106,948; Aug. 5; v. 265; p. 129.
Julius Kayser & Co., New York, N. Y. Hosiery. No. 117,601; Aug. 5; v. 265; p. 136.
Kaola Company, Portland, Oreg. Coconut-butter. No. 109,888; Aug. 5; v. 265; p. 130.
Leadon, Theodore C., Toledo, Ohio, and Oil City, Pa. Evaporated milk. No. 118,478; Aug. 5; v. 265; p. 139.
Leubke, Carl H. F., Youngstown, Ohio. Medicine used in the treatment of coughs, colds, croup, etc., all affections of the lungs. No. 118,312; Aug. 5; v. 265; p. 138.
Lenox Jewelry Co., Boston, Mass. Bracelets, chatelaines, pendants, scarf-pins, fobs, chains, charms, etc. No. 103,177; Aug. 5; v. 265; p. 129.
Litcham-Conover Company, Worcester, Mass. Corsets, corset-waists, and brassieres. No. 113,452; Aug. 5; v. 265; p. 131.
Liondale Shirt Co., Inc., New York, N. Y. Men's dress and negligee shirts. No. 118,314; Aug. 5; v. 265; p. 138.

xiv ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.
(REGISTRATION APPLIED FOR.)

Lister's Agricultural Chemical Works, Newark, N. J., and New York, N. Y. Fertilizer. No. 118,566; Aug. 5; v. 265; p. 139.
Loose-Wiles Biscuit Company, Long Island City, N. Y. Cakes, crackers, and biscuits. No. 112,496; Aug. 5; v. 265; p. 139.
Loose-Wiles Biscuit Company, New York, N. Y. Cakes, wafers, and crackers or biscuits. No. 114,133; Aug. 5; v. 265; p. 139.
Mager, David L., York, Pa. Candy. No. 115,352; Aug. 5; v. 265; p. 132.
Marie Aceto & Co., New Haven, Conn. Hair-tonic. No. 117,290; Aug. 5; v. 265; p. 135.
Mayhew, John, Chicago, Ill. Cleaning and polishing preparation for furniture, pianos, automobiles, &c. No. 116,694; Aug. 5; v. 265; p. 133.
McDonald Bros. Co., Minneapolis, Minn. Pajamas, night-gowns, shirts, rain-coats, &c. No. 117,678; Aug. 5; v. 265; p. 136.
Michigan Lubricator Company, Detroit, Mich. Cylinder-lubricators, bearing-oilers, oil-pumps, sight-feed valves, &c. Nos. 117,017-18; Aug. 5; v. 265; p. 134.
Mills & Gibbs Corporation, New York, N. Y. Linen piece goods. No. 116,089; Aug. 5; v. 265; p. 134.
Mills & Gibbs Corporation, New York, N. Y. Cotton and silk piece goods and mixtures of the same. No. 117,384; Aug. 5; v. 265; p. 135.
Mohler, Edwin R., Reading, Pa. Expectorant. No. 117,302; Aug. 5; v. 265; p. 135.
Monroe Calculating Machine Company, Orange, N. J. Calculating and adding machines. No. 117,288; Aug. 5; v. 265; p. 135.
Moreland Motor Truck Co., Los Angeles, Calif. Motor-trucks and automobile trailers. No. 119,430; Aug. 5; v. 265; p. 140.
National Blank Goods Company Inc., New York, N. Y. Women's dresses and outer waists. No. 117,411; Aug. 5; v. 265; p. 135.
O-H-I Company, New York, N. Y. Candy. No. 116,931; Aug. 5; v. 265; p. 134.
Oatberg, Ivan, Chicago, Ill. Grass-seed. No. 117,945; Aug. 5; v. 265; p. 136.
Oxygen Gas Company, Kansas City, Mo. Nitrous oxid prepared for anesthetic purposes. Oxygen gas for medical purposes. No. 118,835; Aug. 5; v. 265; p. 140.
Peck & Co., New York, N. Y. Ladies' outer garments—viz., coats, suits, dresses, &c. No. 114,813; Aug. 5; v. 265; p. 131.
Peterson, Frank W., Minneapolis, Minn. Medicinal nutritive tonic for internal use. No. 94,802; Aug. 5; v. 265; p. 129.
Peterson, Frank W., Minneapolis, Minn. Liniment for pains in the muscles and neuralgia, &c. No. 94,805; Aug. 5; v. 265; p. 129.
Philadelphia Quartz Company, Philadelphia, Pa. Sodium silicate. No. 118,933; Aug. 5; v. 265; p. 140.
Polier and Lindeman Co., New York, N. Y. Hair-pets. No. 118,065; Aug. 5; v. 265; p. 137.
Racine Auto Tire Company, Racine, Wis. Vehicle-tires made wholly or partly of rubber and inner tubes for pneumatic tires. No. 118,185; Aug. 5; v. 265; p. 137.
Reao Products Co. Ltd., Zurich, Switzerland. Antiseptic solution and salves for treatment of wounds, burns, &c. No. 103,361; Aug. 5; v. 265; p. 129.
Reversible Collar Company, Boston, Mass. Collars, cuffs, and shirt-bosoms. No. 118,780; Aug. 5; v. 265; p. 132.
Rice-Stix Dry Goods Company, St. Louis, Mo. Blankets, lap-robes, bedspreads, quilts, and comforts. No. 118,402; Aug. 5; v. 265; p. 139.
Robert Smith Ale-Brewing Co., Philadelphia, Pa. Non-fermenting cereal malt beverage, &c. No. 118,573; Aug. 5; v. 265; p. 139.
Rogers-Peel Company, New York, N. Y. Bicycle. No. 118,069; Aug. 5; v. 265; p. 137.
Rosenthal & Goldberg, New York, N. Y. Men's and boys' suits and outer clothing, coats, vests, pants, &c. No. 118,400; Aug. 5; v. 265; p. 139.
Royal Embroidery Works, Naday & Fleischer, New York, N. Y. Silk fabrics. No. 110,610; Aug. 5; v. 265; p. 134.
Santa Cruz Canning Corporation, San Francisco and Santa Cruz, Calif. Canned sardines, peaches, tomatoes with purée from trimmings. No. 115,163; Aug. 5; v. 265; p. 131.
Schuykill Silk Mills, (now by change of name Vanity Fair Silk Mills,) Reading, Pa. Combination-garment consisting of attached chemise and drawers. No. 110,215; Aug. 5; v. 265; p. 133.
Simmons Hardware Company, St. Louis, Mo. Lead-pencils and wrapping-paper. No. 117,905; Aug. 5; v. 265; p. 136.
Simmons Hardware Company, St. Louis, Mo. Fish-hooks. No. 117,098; Aug. 5; v. 265; p. 130.
Simon & Mendelssohn, New York, N. Y. Bloomers. No. 118,281; Aug. 5; v. 265; p. 138.
Simon & Mendelssohn, New York, N. Y. Bloomer and petticoat combined. No. 118,282; Aug. 5; v. 265; p. 138.
Southern Chemical Company, Baltimore, Md. Antiseptic, disinfectant, and deodorant. No. 116,394; Aug. 5; v. 265; p. 133.
Specialty Device Company, Cincinnati, Ohio. Shock-absorbers for vehicles. No. 118,193; Aug. 5; v. 265; p. 138.
Spehr's, Chicago, Ill. Candy. No. 119,049; Aug. 5; v. 265; p. 140.
Stanwear Shoe Co., Chicago, Ill. Leather shoes for masses, children, and infants. No. 118,710; Aug. 5; v. 265; p. 140.
Sun Harbor Packing Corporation, San Diego, Calif. Canned sardines and canned tuna. No. 117,703; Aug. 5; v. 265; p. 136.
Texas Company, Houston, Tex., and New York, N. Y. Lubricating-oil. No. 117,710; Aug. 5; v. 265; p. 130.
Toolul Broadhurst Lee Company Limited, Manchester, England. Handkerchiefs, sheets, dollies, polishing-cloths, &c. No. 115,360; Aug. 5; v. 265; p. 132.
Vanity Fair Silk Mills. (See Schuykill Silk Mills.)
Washington Times Company, Washington, D. C. Newspapers, (published daily and Sunday.) No. 111,533; Aug. 5; v. 265; p. 130.
Welch Grape Juice Company, Westfield, N. Y. Jam, jelly, fruit preserves, fruit butter, and conserves. No. 118,003; Aug. 5; v. 265; p. 137.
Weldon, Hay H., Tulsa, Okla. Bug and insect powder. No. 117,583; Aug. 5; v. 265; p. 135.
Wilght Company, Lamon, Iowa. Medicinal product for treatment of diseases of fowls and swine. No. 118,816; Aug. 5; v. 265; p. 140.
Wisconsin Butterine Co., Milwaukee, Wis. Oleomargarin. No. 109,308; Aug. 5; v. 265; p. 130.
Wolcott, Charles M., Baltimore, Md. Rubber heels and rubber soles for shoes. No. 118,029; Aug. 5; v. 265; p. 137.
Wolfe, Charles W., East Orange, N. J. Suits, coats, blouses, and shirts of outer wearing-apparel for men, women, and children. No. 117,146; Aug. 5; v. 265; p. 134.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 5TH DAY OF AUGUST, 1919.

Acetals, Manufacture of. A. T. King and F. A. Mason. No. 1,312,180; Aug. 5; v. 265; p. 63.
Adhesive. W. M. Grosvenor. No. 1,311,964; Aug. 5; v. 265; p. 21.
Aerial bomb. B. A. Sigler. No. 1,312,005; Aug. 5; v. 265; p. 28.
Aerial bomb. M. Soloun. No. 1,312,212; Aug. 5; v. 265; p. 67.
Aerial illuminating device. H. E. S. Holt. No. 1,312,499; Aug. 5; v. 265; p. 121.
Aerial-observation instrument. R. F. Power. No. 1,311,994; Aug. 5; v. 265; p. 26.
Aeroplane. A. Ania. No. 1,312,300; Aug. 5; v. 265; p. 83.
Aeroplane. R. Hanriot and F. Gratleux. No. 1,311,967; Aug. 5; v. 265; p. 21.
Aeroplane. H. Hanriot and F. Gratleux. No. 1,311,968; Aug. 5; v. 265; p. 22.
Aeroplane, torpedoes, and the like. Gyroscope pendulum for. H. L. Tanner. No. 1,312,086; Aug. 5; v. 265; p. 44.
Aiming devices, telemeters, and other applications. Support for. J. L. Routin. No. 1,312,000; Aug. 5; v. 265; p. 27.
Air-brake apparatus. Z. Riddle and N. F. Wilkins. No. 1,312,357; Aug. 5; v. 265; p. 95.
Air-compressors. Lubricator for. J. P. Kelly. No. 1,312,330; Aug. 5; v. 265; p. 88.
Air-currents. Motive-power means for utilizing energy of. W. J. Dickason and A. H. Stark. No. 1,312,021; Aug. 5; v. 265; p. 32.
Aircraft. G. H. Challenger and H. A. Savage. No. 1,312,099; Aug. 5; v. 265; p. 47.
Aircraft-inclinometer. G. W. Berry. No. 1,312,303; Aug. 5; v. 265; p. 83.
Airplane-stabilizer. T. Yamada. No. 1,312,225; Aug. 5; v. 265; p. 70.
Alarm. See—
Heat and cold regulator alarm.
Ammonia, Hydrolyzing cyanid to. C. P. Hidden. No. 1,312,110; Aug. 5; v. 265; p. 50.
Anesthetic-machine. J. G. E. Hinkle. No. 1,312,117; Aug. 5; v. 265; p. 50.
Antiskidding attachment for wheels. M. M. Duff. No. 1,312,436; Aug. 5; v. 265; p. 110.
Armor-plating. W. A. Tritton. No. 1,312,371; Aug. 5; v. 265; p. 96.
Automatic gate. F. Olinck. No. 1,312,267; Aug. 5; v. 265; p. 77.
Automatic reversing mechanism. W. Arter. No. 1,312,091; Aug. 5; v. 265; p. 45.
Automobile-hoof clamp. G. W. Kerr and J. A. Pray. No. 1,312,078; Aug. 5; v. 265; p. 42.
Automobile-lock. N. S. Dreik. No. 1,312,435; Aug. 5; v. 265; p. 109.
Automobile-lock. R. C. Price. No. 1,312,204; Aug. 5; v. 265; p. 66.
Automobile-seat. H. G. Latimer, Jr. No. 1,312,501; Aug. 5; v. 265; p. 122.
Automobile-signal. V. A. Doty. No. 1,312,109; Aug. 5; v. 265; p. 49.
Automobile-sunshade. W. R. Beatty. No. 1,311,870; Aug. 5; v. 265; p. 4.
Automobiles out of mudholes. Device for pulling. A. P. Moran. No. 1,312,079; Aug. 5; v. 265; p. 42.
Automobiles. License-plate bracket for. V. G. Apple. No. 1,312,293; Aug. 5; v. 265; p. 82.
Automobiles. Safety-crank for. A. E. Miller and C. E. Anable. No. 1,312,410; Aug. 5; v. 265; p. 104.
Automobiles. Sounding signal device for. E. Tilden. No. 1,312,370; Aug. 5; v. 265; p. 96.
Ball, Artificial. H. L. Medley. No. 1,312,451; Aug. 5; v. 265; p. 113.
Banjo and similar stringed instruments. W. P. Reitzberg and W. L. Lange. No. 1,312,260; Aug. 5; v. 265; p. 67.
Barrel-rack. J. G. Zimlich. No. 1,312,150; Aug. 5; v. 265; p. 56.
Basket, Cooking. G. Grover. No. 1,312,075; Aug. 5; v. 265; p. 42.
Battery connection. Storage. A. H. Lahrman. No. 1,312,038; Aug. 5; v. 265; p. 35.
Bedstead, settee, and the like. T. Hilton. No. 1,312,443; Aug. 5; v. 265; p. 111.
Bedstead-table. W. J. Sculthorp. No. 1,312,274; Aug. 5; v. 265; p. 78.
Beds. Patient-handling apparatus for. T. L. Foster. No. 1,312,439; Aug. 5; v. 265; p. 110.
Belt, Athletic. L. Hosea. No. 1,312,400; Aug. 5; v. 265; p. 102.
Biluminized fabric. H. Abraham. No. 1,311,941; Aug. 5; v. 265; p. 17.
Board. See—
Game-board.
Boat, Hydroplane. S. L. Leiby. No. 1,312,036; Aug. 5; v. 265; p. 35.
Boat, Torpedo. G. E. Elia. No. 1,312,391; Aug. 5; v. 265; p. 100.
Boller. R. D. Reed. No. 1,312,353; Aug. 5; v. 265; p. 93.
Boller. J. Sulwinski and G. Rasch. No. 1,312,002; Aug. 5; v. 265; p. 40.
Boller-furnace. G. S. Kent. No. 1,312,185; Aug. 5; v. 265; p. 63.
Boller-handle. J. Schaffer. No. 1,312,135; Aug. 5; v. 265; p. 54.
Book. H. C. Dwell. No. 1,312,022; Aug. 5; v. 265; p. 32.
Book-cover protector. A. H. McClatchy. No. 1,311,983; Aug. 5; v. 265; p. 25.
Bottle-capping machines. Feeding device for. E. A. Hey. No. 1,311,892; Aug. 5; v. 265; p. 8.
Bottle container. Milk. J. J. Hannon. No. 1,311,060; Aug. 5; v. 265; p. 21.
Brace. See—
Rail-brace.
Bracket. See—
Insulator-bracket.
Brake and drive-control mechanism. F. Worley, J. H. Trowbridge, C. Wurttemberg, and C. Lee. No. 1,311,939; Aug. 5; v. 265; p. 16.
Brake-band. G. C. Whitmore. No. 1,311,930; Aug. 5; v. 265; p. 16.
Brasler, Folding. J. Courison. No. 1,312,307; Aug. 5; v. 265; p. 84.
Bread, Machine for cooling. D. K. Allison. No. 1,312,294; Aug. 5; v. 265; p. 82.
Bread-making. G. H. Baker and J. W. Owen. No. 1,312,094; Aug. 5; v. 265; p. 46.
Brick, Burning. F. B. Lambert. No. 1,311,978; Aug. 5; v. 265; p. 24.
Broom, attachment. J. C. Dahl. No. 1,311,953; Aug. 5; v. 265; p. 19.
Brush-holder. S. C. McKeown. No. 1,311,004; Aug. 5; v. 265; p. 10.
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 Waste-pipe cleaner. L. Klarmann. No. 1,312,404; Aug. 5; v. 265; p. 103.
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 Welding. Electric. C. F. Mellink. No. 1,312,030; Aug. 5; v. 265; p. 35.
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 Well-tube-draining device. C. E. Ranney. No. 1,312,423; Aug. 5; v. 265; p. 107.
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 Flexible gear-wheel. Traction-wheel.
 Resilient wheel. Vehicle-wheel.
 Sheet-metal wheel.
 Wheel attachment. J. M. Faulk. No. 1,312,437; Aug. 5; v. 265; p. 110.
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 Wheels. Ground-engaging surface of traction. O. W. Johnson. No. 1,311,972; Aug. 5; v. 265; p. 22.
 Wheeled plow. A. C. Lindgren. No. 1,312,188; Aug. 5; v. 265; p. 63.
 Wire-uncolling apparatus. R. J. Smirle. No. 1,312,058; Aug. 5; v. 265; p. 38.
 Wireless telephone system for railways and the like. Inductive. V. G. Werner and K. H. Warfvinge. No. 1,312,068; Aug. 5; v. 265; p. 41.
 Wood separators. Producing. T. F. Ferry. No. 1,312,243; Aug. 5; v. 265; p. 73.
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 Pipe-wrench. Quick-adjustable wrench.
 Wrench. L. D. Lewis. No. 1,312,406; Aug. 5; v. 265; p. 103.
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 Writing-machines. Re-aligning mechanism for. P. H. Ting-ley. No. 1,312,068; Aug. 5; v. 265; p. 40.
 Zinc. Refining. S. Huld. No. 1,312,480; Aug. 5; v. 265; p. 115.

ALPHABETICAL LIST OF DESIGNS.

Advertising display-case. C. D. OverSmith. No. 53,688; Aug. 5; v. 265; p. 126.
 Ash-can, garbage can, or like receptacle. H. J. Schaffer. No. 53,691; Aug. 5; v. 265; p. 127.
 Bottle or jar. I. J. Taylor. No. 53,694; Aug. 5; v. 265; p. 127.
 Bracket. H. G. Pitta Gerald. No. 53,679; Aug. 5; v. 265; p. 125.
 Compression, combustion, and spark-plug tester. L. R. Martell. No. 53,680; Aug. 5; v. 265; p. 126.
 Can or similar receptacle, sifter-top. M. H. Connor. No. 53,674; Aug. 5; v. 265; p. 124.
 Display-cabinet. J. L. Flannery, Jr. No. 53,680; Aug. 5; v. 265; p. 125.
 Doll's cradle. F. Baranella. No. 53,676; Aug. 5; v. 265; p. 123.
 Electrical heater. F. Kahn and J. A. Hand. No. 53,684; Aug. 5; v. 265; p. 126.
 Fitting. G. R. Pickop. No. 53,689-90; Aug. 5; v. 267; pp. 126-7.
 Gasoline-dispenser. J. H. Brady. No. 53,671; Aug. 5; v. 265; p. 124.

Lamp-front frame. R. E. Cole. No. 53,673; Aug. 5; v. 265; p. 124.
 Milling-machine frame. C. D. Osterlehn and L. H. Blood. No. 53,687; Aug. 5; v. 265; p. 126.
 Pump casing. Fuld. A. Wiliz. No. 53,695; Aug. 5; v. 265; p. 127.
 Tire-casing. A. Breitenstelo. No. 53,672; Aug. 5; v. 265; p. 124.
 Soap fixture, liquid. M. H. Jacobs. No. 53,682; Aug. 5; v. 265; p. 125.
 Spoon, fork, or similar article. G. C. Lunt. No. 53,685; Aug. 5; v. 265; p. 124.
 Ticket-dispensing machine, casing for. J. F. Dwyer. No. 53,678; Aug. 5; v. 265; p. 125.
 Tire, Vehicle. I. H. Davles. Nos. 53,675-7; Aug. 5; v. 265; p. 124.
 Tire, Vehicle. H. J. Stokes. Nos. 53,692-3; Aug. 5; v. 265; p. 127.
 Towel-rack. R. E. Jordan. No. 53,683; Aug. 5; v. 265; p. 125.
 Toy tank. M. P. Haupt. No. 53,681; Aug. 5; v. 265; p. 125.

ALPHABETICAL LIST OF TRADE-MARKS.

Clothing. Certain named. M. N. Mayhoff Co., Incorporated. No. 126,230; Aug. 5; v. 265; p. 141.
 Medicinal preparations for hogs. A. H. Kerr. No. 126,229; Aug. 5; v. 265; p. 141.

Prints and publications. Certain named. Engineering Magazine Company. No. 126,228; Aug. 5; v. 265; p. 141.

ALPHABETICAL LIST OF LABELS.

"Anahelm Gloriana." (For Extra Fancy Valencia.) Anahelm Orange & Lemon Association. No. 21,378; Aug. 5; v. 265; p. 143.
 "Arlington." (For Canned Tomatoes.) Arlington Cannery. No. 21,383; Aug. 5; v. 265; p. 143.
 "Blason Art Linoleums." (For Linoleums.) The George W. Blason Company. No. 21,418; Aug. 5; v. 265; p. 144.
 "Boschke's Superior Grape-Wine." (For a Beverage.) Boschke & Co. No. 21,392; Aug. 5; v. 265; p. 143.
 "Bronchiline." (For a Medical Compound—Namely, Bronchiline.) V. L. Blahnik and Sons. No. 21,389; Aug. 5; v. 265; p. 143.
 "Brunswick Chocolates." (For Chocolates.) General Candy Co. No. 21,417; Aug. 5; v. 265; p. 144.
 "Dead Shot Non-Poisonous Insecticide." (For a Powder for Killing and Destroying All Kinds of Insects.) Dead Shot Chemical Company. No. 21,411; Aug. 5; v. 265; p. 143.
 "Dead Shot Rat Killer." (For a Powder for Killing and Destroying Rats.) Dead Shot Chemical Company. No. 21,412; Aug. 5; v. 265; p. 144.
 "Delicia." (For Oranges.) Anahelm Orange & Lemon Association. No. 21,379; Aug. 5; v. 265; p. 143.
 "Delicia." (For Corned Beef.) Baker Packing Company. No. 21,386; Aug. 5; v. 265; p. 143.
 "De Luxe." (For Oleomargarin.) Elson Brothers. No. 21,416; Aug. 5; v. 265; p. 144.
 "Dexter's Mather's Bread." (For Bread.) E. A. Dexter. No. 21,413; Aug. 5; v. 265; p. 144.
 "Don Julian." (For Cigars.) Gradax Annis & Co., Inc. No. 21,421; Aug. 5; v. 265; p. 144.
 "Eagle." (For Gasoline.) Hammer & Co. No. 21,427; Aug. 5; v. 265; p. 144.
 "Eagle." (For Kerosene.) Hammer & Co. No. 21,428; Aug. 5; v. 265; p. 144.
 "Eagle." (For Olive-Oil.) Hammer & Co. No. 21,429; Aug. 5; v. 265; p. 144.
 "Eagle." (For Salad-Oil.) Hammer & Co. No. 21,430; Aug. 5; v. 265; p. 144.
 "Extra Choice California Peaches Heavy Syrup." (For Peaches.) Alfred Putnam & Company. No. 21,375; Aug. 5; v. 265; p. 143.
 "Favorita." (For Oranges.) Anahelm Orange & Lemon Association. No. 21,380; Aug. 5; v. 265; p. 143.
 "Florida Mellow Fruit Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,399; Aug. 5; v. 265; p. 143.
 "Florida Peppermint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,407; Aug. 5; v. 265; p. 143.
 "Florida Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,400; Aug. 5; v. 265; p. 143.
 "Ford Overcoat." (For Men's Overcoats.) M. Golland. No. 21,425; Aug. 5; v. 265; p. 144.
 "Gen Co Brand." (For Crushed Fruits—Namely, Raspberry.) General Fruit & Syrup Co. No. 21,424; Aug. 5; v. 265; p. 144.
 "Griens Special Sauce." (For Sauce.) J. B. Griens. No. 21,422; Aug. 5; v. 265; p. 144.

"International Brand." (For Mararoni.) Buckley Macaroni Company, Inc. No. 21,393; Aug. 5; v. 265; p. 143.
 "Juicy Fruit." (For Non-Alcoholic Beverages.) The Bee Bee Confection Co. No. 21,387; Aug. 5; v. 265; p. 143.
 "Kast-Rust Spring Lubricant." (For Lubricants.) Cee & Vee Products Co. No. 21,390; Aug. 5; v. 265; p. 143.
 "Kentucky Fruit-Frappe Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,406; Aug. 5; v. 265; p. 143.
 "Kentucky Peppermint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,404; Aug. 5; v. 265; p. 143.
 "Kentucky Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,405; Aug. 5; v. 265; p. 143.
 "Lata Blanca." (For a Preparation Consisting of Pork Sausage and Cereal Preserved in Lard.) Armour and Company. No. 21,384; Aug. 5; v. 265; p. 143.
 "Liberty." (For Cantaloupes.) Cohen, Mann & Kahn. No. 21,398; Aug. 5; v. 265; p. 143.
 "Mary Jones Demos." (For Candy.) Charles N. Miller Company. No. 21,397; Aug. 5; v. 265; p. 143.
 "Meritoria." (For Valencia.) Anahelm Orange & Lemon Association. No. 21,377; Aug. 5; v. 265; p. 143.
 "Milton's Hair Tonic." (For Hair Tonic.) L. Auerbach. No. 21,385; Aug. 5; v. 265; p. 143.
 "Mirro-Crepe." (For Blouses.) The Housemakers, Inc. No. 21,390; Aug. 5; v. 265; p. 143.
 "Movie." (For Building-Blocks and Construction Toys.) George Borgfeldt & Co. No. 21,419; Aug. 5; v. 265; p. 144.
 "Pepper-Mint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,403; Aug. 5; v. 265; p. 143.
 "Perfect Sure-Fit Fastener." (For Soap-Buttons or Garment-Fasteners.) E. Gurney. No. 21,426; Aug. 5; v. 265; p. 144.
 "Platite." (For Compositions for Fitting False Teeth.) Anti-Pyorrhea Chemical Company. No. 21,382; Aug. 5; v. 265; p. 143.
 "Prophy-lactic Penetrator Hair Brush." (For Hair-Brushes.) Florence Manufacturing Company. No. 21,416; Aug. 5; v. 265; p. 144.
 "Rob Roy." (For Tea.) The Donald Company. No. 21,414; Aug. 5; v. 265; p. 144.
 "Sage and Wildroots." (For a Hair-Tonic Preparation.) Ambe Brothers. No. 21,370; Aug. 5; v. 265; p. 143.
 "Shado-Crepe." (For Blouses.) The Housemakers, Inc. No. 21,391; Aug. 5; v. 265; p. 143.
 "Sonia." (For Valencia.) Anahelm Orange & Lemon Association. No. 21,381; Aug. 5; v. 265; p. 143.
 "Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,402; Aug. 5; v. 265; p. 143.
 "Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,408; Aug. 5; v. 265; p. 143.
 "Spot Slide." (For Garment-Spotters.) J. F. Benedict. No. 21,388; Aug. 5; v. 265; p. 143.

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ALPHABETICAL LIST OF LABELS.

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"Sunset Chocolates." (For Chocolates.) Buhr, Pfaff & Co. No. 21,394; Aug. 5; v. 265; p. 143.
 "Thurber Brand Asparagus." (For Asparagus.) Alfred Putnam & Company. No. 21,372; Aug. 5; v. 265; p. 143.
 "Thurber California Style Bartlett Pears." (For Pears.) Alfred Putnam & Company. No. 21,374; Aug. 5; v. 265; p. 143.
 "Trench Tubes." (For Trench Tubes.) Davis & Geck, Inc. No. 21,410; Aug. 5; v. 265; p. 143.
 "Vanity Fair." (For a Non-Alcoholic Beverage.) D. N. Goldberg. No. 21,420; Aug. 5; v. 265; p. 144.

"Virginia Chocolates." (For Chocolates.) Buhr, Pfaff & Co. No. 21,395; Aug. 5; v. 265; p. 143.
 "White Label." (For Non-Intoxicating Beverages.) Greensburg Brewing Company. No. 21,421; Aug. 5; v. 265; p. 144.
 "White Lily Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,401; Aug. 5; v. 265; p. 143.
 "Windham Corn." (For Corn.) Alfred Putnam & Company. No. 21,373; Aug. 5; v. 265; p. 143.
 "Yucca Brand Pink Meat Cantaloupes." (For Cantaloupes.) Crutchfield & Woolfolk. No. 21,409; Aug. 5; v. 265; p. 143.

ALPHABETICAL LIST OF PRINTS.

"Day-Night." (For Watches.) Knickerbocker Watch Co. No. 5,148; Aug. 5; v. 265; p. 144.
 "Daylight." (For Watches.) Knickerbocker Watch Co. No. 5,147; Aug. 5; v. 265; p. 144.
 "Goose's Best Flour." (For Bread.) Goose Milling & Elevator Co. No. 5,145; Aug. 5; v. 265; p. 144.
 "Goose's Best Self Rising Pancake-Flour." (For Pancake-Flour.) Goose Milling & Elevator Co. No. 5,146; Aug. 5; v. 265; p. 144.
 "It's Great, Boys, To Climb Into B. V. D." (For Athletic Underwear.) The B. V. D. Company. No. 5,138; Aug. 5; v. 265; p. 144.
 "Jug-It-Hall." (For a Game.) E. Carraine. No. 5,142; Aug. 5; v. 265; p. 144.
 "Let Us Place You Here." (For Flour-Mills.) Anglo-American Mill Company. No. 5,136; Aug. 5; v. 265; p. 144.
 "Mentholyptine." (For Medicinal Preparations.) L. W. Hall. No. 5,149; Aug. 5; v. 265; p. 144.
 "Menu." (For Cream of Wheat Breakfast Food.) Cream of Wheat Co. No. 5,144; Aug. 5; v. 265; p. 144.

"Quality Without Extravagance—Style Without Experiment." (For Footwear.) George W. Baker Shoe Company. No. 5,141; Aug. 5; v. 265; p. 144.
 "Save Your Spokes—A Sure Cure for Loose Spokes in Auto, Buggy and Wagon Wheels—Tighten Your Spokes Without Removing Your Hubs or Tires—Any One Can Use—No Tools Necessary." (For Spoke Compound.) A. C. Manufacturing Co. No. 5,135; Aug. 5; v. 265; p. 144.
 "Take It From Me, Insist On B. V. D!" (For Athletic Underwear.) The B. V. D. Company. No. 5,139; Aug. 5; v. 265; p. 144.
 "Yes, dear, I asked for B. V. D. and here's the label." (For Athletic Underwear.) The B. V. D. Company. No. 5,140; Aug. 5; v. 265; p. 144.
 "Yes, Sir! That Label Guarantees Your B. V. D. Quality." (For Athletic Underwear.) The B. V. D. Company. No. 5,137; Aug. 5; v. 265; p. 144.
 "Welcome Home, Boys." (For Cream of Wheat Breakfast Food.) Cream of Wheat Co. No. 5,143; Aug. 5; v. 265; p. 144.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Airplanes. Galludet Aircraft Corporation. No. 117,524; Aug. 5; v. 265; p. 135.
 Antiseptic, disinfectant, and deodorant. Southern Chemical Company. No. 116,394; Aug. 5; v. 265; p. 133.
 Antiseptic solutions and salves. Heco Products Co., Ltd. No. 103,301; Aug. 5; v. 265; p. 129.
 Beverage, &c., Non-Intoxicating cereal malt. The Robert Smith Ale Brewing Co. No. 118,573; Aug. 5; v. 265; p. 139.
 Beverage sold as a soft drink, Non-alcoholic non-cereal maltless. R. Frank. No. 115,977; Aug. 5; v. 265; p. 132.
 Bicycle. Rogers-Pest Company. No. 118,069; Aug. 5; v. 265; p. 137.
 Bicycle and motor-cycle spokes, nipples, hubs, pedals, &c. Herbert F. L. Funke Co., Inc. No. 111,246; Aug. 5; v. 265; p. 130.
 Blankets, lap robes, bedspreads, quilts, and comforts. Rice-Six Dry Goods Company. No. 118,402; Aug. 5; v. 265; p. 138.
 Bloomer and petticoat combined. Simon & Mendelssohn. No. 118,282; Aug. 5; v. 265; p. 138.
 Bloomers. Simon & Mendelssohn. No. 118,281; Aug. 5; v. 265; p. 138.
 Bracelets, scarf-pins, charms, ear-rings, emblems, &c. Lenox Jewelry Co. No. 103,177; Aug. 5; v. 265; p. 129.
 Butter, Coconut. Kuola Company. No. 109,888; Aug. 5; v. 265; p. 130.
 Cakes, crackers, and biscuits. Loose-Wiles Biscuit Company. No. 112,496; Aug. 5; v. 265; p. 130.
 Cakes, wafers, crackers, or biscuits. Loose-Wiles Biscuit Company. No. 114,133; Aug. 5; v. 265; p. 131.
 Calculating and adding machines. Monroe Calculating Machine Company. No. 117,258; Aug. 5; v. 265; p. 135.
 Candy. Behnhauer Bros. Candy Co. No. 118,506; Aug. 5; v. 265; p. 130.
 Candy. D. F. Magree. No. 115,352; Aug. 5; v. 265; p. 132.
 Candy. Spoehr's. No. 119,049; Aug. 5; v. 265; p. 140.
 Candy. The O-H Company. No. 116,931; Aug. 5; v. 265; p. 134.
 Canned evaporated milk, canned salmon, pickles, apples, gelatin, coffee, &c. The Basket Stores Co. No. 115,278; Aug. 5; v. 265; p. 132.
 Canned sardines and tuna. Sun Harbor Packing Corporation. No. 117,703; Aug. 5; v. 265; p. 136.
 Canned sardines, peaches, and tomatoes with puree from trimmings. Santa Cruz Canning Corporation. No. 115,163; Aug. 5; v. 265; p. 131.
 Cement for forming furnace-linings, Fire-resisting. Jointless Fire Brick Company. No. 100,948; Aug. 5; v. 265; p. 129.

Chemical carbon-removers. Brown, Clark & Company. No. 118,264; Aug. 5; v. 265; p. 138.
 Coal. M. L. Carl. No. 111,408; Aug. 5; v. 265; p. 130.
 Collars, cuffs, and shirt-bosoms. Reversible Collar Company. No. 115,780; Aug. 5; v. 265; p. 132.
 Corsets, corset-waists, and brassieres. Lineham-Conover Company. No. 113,452; Aug. 5; v. 265; p. 131.
 Cotton and silk piece goods. Arkwright Manufacturing Company. No. 117,790; Aug. 5; v. 265; p. 130.
 Cotton and silk piece goods, &c. Mills & Glibb Corporation. No. 117,384; Aug. 5; v. 265; p. 135.
 Cylinder-lubricators, bearing-rollers, oil-pumps, &c. Michigan Lubricator Company. Nos. 117,017-18; Aug. 5; v. 265; p. 134.
 Dresses and outer waists. Women's National Black Goods Company, Inc. No. 117,411; Aug. 5; v. 265; p. 135.
 Dresses, Children's. J. C. Eberhart. No. 116,565; Aug. 5; v. 265; p. 133.
 Expectorant. E. R. Mohler. No. 117,302; Aug. 5; v. 265; p. 135.
 Fabrics made of silk, cotton, mohair, &c. Pile. A. Hoeningberger. No. 119,125; Aug. 5; v. 265; p. 140.
 Fabrics of silk and silk mixtures in the piece. Cheney Brothers. No. 118,430; Aug. 5; v. 265; p. 139.
 Fabrics, Silk. Royal Embroidery Works, Naday & Fleischer. No. 116,610; Aug. 5; v. 265; p. 134.
 Fasteners, Snap. The De Long Hook and Eye Company. No. 118,958; Aug. 5; v. 265; p. 140.
 Fertilizers. Lister's Agricultural Chemical Works. No. 118,566; Aug. 5; v. 265; p. 130.
 Fireproof garments. R. L. Roselman. No. 117,079; Aug. 5; v. 265; p. 134.
 Fish-hooks. Simmons Hardware Company. No. 117,908; Aug. 5; v. 265; p. 136.
 Furniture-polish. J. Mayhood. No. 116,604; Aug. 5; v. 265; p. 604.
 Garment consisting of attached chemise and drawers, Combination. Schuykill Silk Mills. (now by change of name Vanity Fair Silk Mills.) No. 116,215; July 5; v. 265; p. 133.
 Garments, Ladies' outer. Peck & Co. No. 114,813; Aug. 5; v. 265; p. 131.
 Hair-oils. Poirier and Lindeman Co. No. 118,065; Aug. 5; v. 265; p. 137.
 Hair preparations and tonics. S. E. Abernathy. No. 117,269; Aug. 5; v. 265; p. 135.
 Hair-tonsic. Marie Aceto & Co. No. 117,290; Aug. 5; v. 265; p. 135.
 Handkerchiefs. I. C. Herman. No. 96,692; Aug. 5; v. 265; p. 129.
 Handkerchiefs, sheets, curtains, dollies, polishing-cloths, &c. Tootal Broadhurst Lax Company Limited. No. 115,300; Aug. 5; v. 265; p. 132.

Hosiery for men, women, and children. Cannon Mills. No. 116,522; Aug. 5; v. 265; p. 522.
Hosiery. C. S. Andrews. Nos. 118,034-5; Aug. 5; v. 265; p. 137.
Hosiery. Elizabeth City Hosiery Co. No. 118,141; Aug. 5; v. 265; p. 137.
Hosiery. Elizabeth City Hosiery Co. No. 118,202; Aug. 5; v. 265; p. 138.
Hosiery. Julius Kayser & Co. No. 117,601; Aug. 5; v. 265; p. 136.
Jam. Jelly, fruit preserves, fruit butter, and conserves. The Welch Grape Juice Company. No. 118,003; Aug. 5; v. 265; p. 137.
Knitted sweaters, sweater-coats, and underwear. Hatheway & Reynolds. No. 117,877; Aug. 5; v. 265; p. 136.
Linen piece goods. Mills & Gibb Corporation. No. 116,689; Aug. 5; v. 265; p. 134.
Linctant for neuralgia, rheumatism, &c. F. W. Peterson. No. 94,805; Aug. 5; v. 265; p. 129.
Medicinal product for treatment of diseases of fowls and swine. The Wright Company. No. 118,816; Aug. 5; v. 265; p. 140.
Medicine for coughs, colds, croup, bronchitis, &c. C. H. F. Lemke. No. 118,312; Aug. 5; v. 265; p. 138.
Milk, Evaporated. T. C. Leedom. No. 118,478; Aug. 5; v. 265; p. 139.
Newspapers, (published daily and Sunday.) The Washington Times Company. No. 111,533; Aug. 5; v. 265; p. 130.
Nitrous oxid prepared for anesthetic purposes and oxygen gas for medical purposes. Oxygen Gas Company. No. 118,835; Aug. 5; v. 265; p. 140.
Oil, Lubricating. The Texas Company. No. 117,710; Aug. 5; v. 265; p. 136.
Ointment for sores, burns, toilet use, and skin troubles generally. W. W. Barnett. No. 118,343; Aug. 5; v. 265; p. 138.
Oleomargarine. Wisconsin Butterine Co. No. 109,308; Aug. 5; v. 265; p. 130.
Pajamas, nightgowns, rain-coats, &c. McDonald Bros. Co. No. 117,678; Aug. 5; v. 265; p. 136.
Paper for writing and printing, envelopes, tablets, blank books, &c. J. C. Blais Company. No. 116,143; Aug. 5; v. 265; p. 132.
Pencils and wrapping-paper. Lead. Simmons Hardware Company. No. 117,965; Aug. 5; v. 265; p. 136.
Perfumes and toilet waters. The Andrew Jergins Company. No. 114,893; Aug. 5; v. 265; p. 131.
Pill for treatment of liver, &c. Laxative and cathartic. J. L. Farnum. No. 118,146; Aug. 5; v. 265; p. 137.
Pillow tops, pillow-cases, babies' sheets and pads, washcloths, &c. Baby's Boudoir, Inc. No. 117,104; Aug. 5; v. 265; p. 134.
Powder, Bug and insect. H. H. Welden. No. 117,583; Aug. 5; v. 265; p. 135.
Preparation for treatment of gout and rheumatism. E. Bejean. No. 107,150; Aug. 5; v. 265; p. 130.
Remedies for colds, influenza, headaches, neuralgia, &c. Genatosan, Limited. No. 118,467; Aug. 5; v. 265; p. 130.
Rubber heels and soles for shoes. C. M. Wolcott. No. 118,020; Aug. 5; v. 265; p. 137.
Seed, Grass. I. Ostberg. No. 117,945; Aug. 5; v. 265; p. 136.
Shirts, Men's dress and negligée. The Liondale Shirt Co., Inc. No. 118,314; Aug. 5; v. 265; p. 138.
Shock-absorbers, foot-rests, running-board supports, &c. Continental Auto Parts Company. No. 117,294; Aug. 5; v. 265; p. 135.
Shock-absorbers for vehicles. The Specialty Device Company. No. 118,193; Aug. 5; v. 265; p. 138.
Shoes, Leather. The Stanwear Shoe Co. No. 118,710; Aug. 5; v. 265; p. 140.
Sodium silicate. Philadelphia Quarts Company. No. 118,933; Aug. 5; v. 265; p. 140.
Suits and outer clothing, Men's and boys'. Rosenthal & Goldberg. No. 118,400; Aug. 5; v. 265; p. 139.
Suits, coats, blouses, and shirts of outer wearing-apparel. C. W. Wolfe. No. 117,146; Aug. 5; v. 265; p. 134.
Sweaters, stockings, hats, shoes, and overshoes, night-shirts, &c. Elder Manufacturing Co. No. 115,340; Aug. 5; v. 265; p. 132.
Telephone-brackets. American Electric Co. No. 115,804; Aug. 5; v. 265; p. 132.
Tires made wholly or partly of rubber and inner tubes for pneumatic tires. Vehicle. Racine Auto Tire Company. No. 118,185; Aug. 5; v. 265; p. 137.
Tires, Rubber. A. Holcomb. No. 118,381; Aug. 5; v. 265; p. 138.
Tonic for internal use. Medicinal nutritive. F. W. Peterson. No. 94,802; Aug. 5; v. 265; p. 129.
Toy well-houses. C. E. Bock. No. 117,369; Aug. 5; v. 265; p. 411.
Trowels, Weeding. W. I. Hare. No. 118,053; Aug. 5; v. 265; p. 137.
Trucks and automobile-trailers. Motor. Moreland Motor Truck Co. No. 119,430; Aug. 5; v. 265; p. 140.
Trucks, Motor. The Commerce Motor Car Company. No. 109,427; Aug. 5; v. 265; p. 130.
Vehicle parts, &c. Brewer-Titchener Corporation. No. 109,620; Aug. 5; v. 265; p. 130.
Wearing-apparel for ladies. Douglass Barnes Corporation. No. 116,329; Aug. 5; v. 265; p. 133.
Wearing-apparel for men and boys. Douglass Barnes Corporation. No. 116,328; Aug. 5; v. 265; p. 133.
Woolen piece goods. E. P. Stahel & Co. No. 116,852; Aug. 5; v. 265; p. 134.
Woolen piece goods. Forstmann & Hufmann Co. No. 116,480; Aug. 5; v. 265; p. 133.
Worm-salts for live stock and poultry. C. E. Easley. No. 114,035; Aug. 5; v. 265; p. 131.
Woven and knitted underwear and socks, &c. Cooper Underwear Company. No. 115,532; Aug. 5; v. 265; p. 131.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 5, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

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22: 1,312,063	1,312,075	1,312,195	68: 1,312,355	14: 1,311,971	135: 1,312,161
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31: 1,312,488	40: 1,312,010	20: 1,311,874	12: 1,312,426	22: 1,312,482	202— 9: 1,312,301
18: 1,312,015	100: 1,312,388	87— 8: 1,311,965	15: 1,312,097	52: 1,311,999	1,312,372
56: 1,312,071	57— 9: 1,311,908	1,312,286	1,312,175	51: 1,312,268	204— 29: 1,312,038
85: 1,312,421	1,312,241	1,312,283	22: 1,312,025	81: 1,312,333	1,312,243
121: 1,312,455	60— 16: 1,312,402	27: 1,312,013	31: 1,312,217	9: 1,312,491	32: 1,312,484
135: 1,311,991	42: 1,311,984	1,312,014	73: 1,312,350	1,312,505	64: 1,312,060
213: 1,312,138	61— 47: 1,312,331	16: 2: 1,312,103	156: 1,312,130	51: 1,311,941	1,312,480
242: 1,311,989	62— 91: 1,311,940	16: 4: 1,312,088	1: 1,312,379	22: 1,312,251	65: 1,312,255
268: 1,311,924	1: 1,312,035	2: 1,312,184	5: 1,312,184	25: 1,312,501	1,312,256
40: 1,312,017	64— 10: 1,312,299	27: 1,312,107	30: 1,312,035	157— 6: 1,312,148	1,312,257
84: 1,312,367	14: 1,311,960	33: 1,312,048	42: 1,312,440	158— 1,312,378	1,312,258
128: 1,312,157	48: 1,311,871	27: 1,312,007	10: 1,311,925	13: 1,312,080	1,312,259
131: 1,312,462	96: 1,312,296	40: 1,312,098	105: 1,312,143	86: 1,312,108	1,312,260
157: 1,311,978	65— 32: 1,312,142	1,312,371	1,312,285	109: 1,312,147	1,312,261
16: 1,312,236	67— 38: 1,312,478	43: 1,312,105	109: 1,312,012	40: 1,312,182	1,312,262
18: 1,312,153	89: 1,312,046	14: 1,312,394	218: 1,312,353	91: 1,312,067	205— 3: 1,312,197
21: 1,312,073	18: 1,312,393	18: 1,312,207	373: 1,312,185	104: 1,312,360	1: 1,312,360
99: 1,312,121	68— 18: 1,312,393	23: 1,312,276	467: 1,311,868	119: 1,312,492	59: 1,312,202
100: 1,311,897	1,312,431	57: 1,312,345	498: 1,312,168	9: 1,312,047	1,312,211
156: 1,311,967	27: 1,312,349	1,312,277	34: 1,312,460	29: 1,312,224	210— 5: 1,312,041
1: 1,311,935	30: 1,312,062	53: 1,312,034	58: 1,312,234	26: 1,311,873	1,312,477
12: 1,312,390	28: 1,312,051	66: 1,311,877	59: 1,312,003	170— 131: 1,312,326	16: 1,312,027
14: 1,312,428	29: 1,312,219	70: 1,312,080	149: 1,312,190	65: 1,311,877	25: 1,312,316
98: 1,311,959	42: 1,312,199	122: 1,311,952	143: 1,312,387	74: 1,311,944	8: 1,312,329
32: 1,312,197	53: 1,312,376	36: 1,312,366	162: 1,311,902	149: 1,312,273	14: 1,311,973
1: 1,311,946	64: 1,312,466	9: 1,312,052	167: 1,311,904	173— 321: 1,311,977	24: 1,312,043
42: 1,312,068	82: 1,312,078	32: 1,312,122	168: 1,311,863	91: 1,312,229	23: 1,312,449
46: 1,311,994	99: 1,312,354				36: 1,312,133

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212- 38: 1,311,115	229- 43: 1,312,434	249- 1: 1,312,310	264- 21: 1,311,988	284- 150: 1,312,079	300- 60: 1,311,886
137: 1,311,166	230- 17: 1,312,228	1,312,311	245- 10: 1,311,927	256- 22: 1,312,242	311- 10: 1,312,250
213- 39: 1,311,288	231- 34: 1,311,952	1,312,312	346- 10: 2: 1,312,163	257- 51: 1,312,418	1,312,461
1,311,187	232- 3: 1,311,884	8: 5: 1,311,899	63: 1,312,249	156: 1,312,045	273- 9: 1,312,214
214- 17: 1,311,917	233- 50: 1,312,070	1,312,230	66: 1,312,077	258- 17: 1,312,059	15: 1,312,226
81: 1,311,066	56: 1,312,018	1,312,231	251: 1,312,101	261- 39: 1,312,499	13: 1,312,231
83: 1,311,334	63: 1,312,022	41: 1,312,179	273: 1,312,090	315: 1,312,468	279- 16: 1,311,960
217- 28: 1,311,238	91: 1,311,876	65: 2: 1,311,951	378: 1,312,377	6: 1,311,932	22: 1,311,961
36: 1,311,592	98: 1,312,283	62: 1,312,054	248- 29: 1,311,966	13: 1,312,129	77: 1,312,238
219- 19: 1,311,039	144: 1,312,008	71: 1,312,145	30: 1,312,285	7: 1,312,232	8: 1,312,444
12: 1,312,254	23- 42: 1,312,113	98: 1,311,888	43: 1,311,918	11: 1,312,081	28- 34: 1,311,983
21: 1,312,270	82: 1,312,255	55: 1,311,966	43: 1,312,000	281- 34: 1,311,983	23- 33: 1,312,205
1,312,347	1,312,256	77: 1,312,067	50: 1,312,178	70: 1,312,132	66: 1,312,022
220- 6: 1,312,000	238- 7: 1,312,425	91: 1,311,956	56: 1,312,150	8: 1,312,284	50: 1,312,001
53: 1,312,466	1,312,426	128: 1,312,058	82: 1,312,102	19: 1,311,913	111: 1,312,152
92: 1,311,700	39: 1,312,419	1,312,059	158: 1,311,964	33: 1,312,139	58: 1,312,021
221- 102: 1,312,302	31: 1,312,419	1: 1,312,300	253- 52: 1,311,878	6: 1,312,140	19: 1,312,489
1,312,351	48: 1,312,049	2: 1,312,300	254- 27: 1,311,948	8: 1,312,180	
224- 28: 1,311,993	113: 1,311,946	29: 1,311,967	30: 1,312,009	270- 41: 1,312,458	
225- 8: 1,312,369	207: 1,312,254	1,312,066	100: 1,311,901		
229- 7: 1,312,472	239: 1,312,158	1,312,225			

ALPHABETICAL LIST OF PATENTEEES

TO WHOM

PATENTS WERE ISSUED ON THE 12TH DAY OF AUGUST, 1919.

- A. O. Smith Corporation. (See Smith, Charles S., assignor.)
 Abrahamsen, Brynjulv, Trondhjem, Norway. Sheet-iron plate. No. 1,312,937; Aug. 12; v. 265; p. 237.
 Accornero, Louis R., and A. Gaydon, New York, N. Y. Landing device for aeroplanes. No. 1,312,507; Aug. 12; v. 265; p. 153.
 Adama, Carl, East Rutherford, N. J. Elastic fabric. No. 1,313,037; Aug. 12; v. 265; p. 257.
 Adams, Charles F. (See Scarlett and Adams.)
 Adsett, Frank W., St. Paul, Minn. Machine-gun. No. 1,313,038; Aug. 12; v. 265; p. 257.
 Aeolian Company, The. (See Votey, Edwin S., assignor.)
 Airtsafe Inner Tire Company. (See Grube, John H., assignor.)
 Akimoff, Nicholas W., Philadelphia, Pa., assignor to Vibration Specialty Company. Balancing appliance. No. 1,313,039; Aug. 12; v. 265; p. 257.
 Aktiebolaget Svenska Kullagerfabriken. (See Palmgren, Nils A., assignor.)
 Aktieselskabet G. Hartmann. (See Westad and Hagg, assignors.)
 Albrecht, John H., Baltimore, Md. Support for windshields. No. 1,312,508; Aug. 12; v. 265; p. 153.
 Alexander, Albert N., Bergenfield, N. J. Spark-plug. No. 1,313,040; Aug. 12; v. 265; p. 258.
 Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Wireless-telephone system. No. 1,313,041; Aug. 12; v. 265; p. 258.
 Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system. No. 1,313,042; Aug. 12; v. 265; p. 258.
 Allen, Edward L., Pittsburgh, Pa. Garment-supporter. No. 1,312,718; Aug. 12; v. 265; p. 194.
 Almqvist, Carl G., Chicago, Ill. Counterbalance. No. 1,312,665; Aug. 12; v. 265; p. 184.
 Amato, Frank, Long Island City, N. Y. Automobile bumper. No. 1,313,043; Aug. 12; v. 265; p. 258.
 American Bosch Magneto Corporation. (See Heins, Wild, and Schwarzmatt, assignors.)
 American Bosch Magneto Corporation. (See Kazenmaler and Bauer, assignors.)
 American Bosch Magneto Corporation. (See Kazenmaler, August, assignor.)
 American Bosch Magneto Corporation. (See Krats and Schäfer, assignors.)
 American Manganese Steel Company. (See Johnson, Frank E., assignor.)
 American Optical Company. (See Pellow, Arthur, assignor.)
 American Power Shovel Company. (See Jackson, George W., assignor.)
 American Pressweld Radiator Corporation. (See Singer, Frank J., assignor.)
 American Pure Food Process Company, The. (See Schmitt, Edward D., assignor.)
 American Steam Gauge & Valve Manufacturing Company. (See Hopkins, Frank H., assignor.)
 American Telephone and Telegraph Company. (See Parker, Raymond D., assignor.)
 American Telephone and Telegraph Company. (See Pierce, Ralph E., assignor.)
 American Toyland Creators, Inc. (See Wiebe, Sigurd, assignor.)
 Anable, Clarence E., Sacramento, Calif. Permutation-lock. No. 1,312,938; Aug. 12; v. 265; p. 237.
 Anable, Clarence E., Sacramento, Calif. Permutation-padlock. No. 1,312,939; Aug. 12; v. 265; p. 237.
 Anable, Clarence E., Sacramento, Calif. Combination-lock. No. 1,312,940; Aug. 12; v. 265; p. 238.
 Anderson, Athin J., Kings Park, N. Y. Hayes-trough hanger. No. 1,313,044; Aug. 12; v. 265; p. 259.
 Anderson, Abraham. (See Nord and Anderson.)
 Anderson, Carl P., Jamestown, N. Y. Gas-heater. No. 1,313,045; Aug. 12; v. 265; p. 259.
 Anderson, Charles M., Waterloo, Iowa. Teat-cup for milking-machines. No. 1,312,941; Aug. 12; v. 265; p. 238.
 Anderson, Gustav R., Long Island, N. Y. Vending-machine. No. 1,313,046; Aug. 12; v. 265; p. 259.
 Anderson, Harry, and J. P. Kane, Chicago, Ill. Clamping device for paper-hangers' outfit. No. 1,313,047; Aug. 12; v. 265; p. 259.
 Anderson, Nils H., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,312,820; Aug. 12; v. 265; p. 215.
 Anderson, Nils H., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,312,821; Aug. 12; v. 265; p. 215.
 Anderson, Otis W., assignor of twenty-one-hundredths to H. T. Shepherd, twenty-one-hundredths to N. J. Tiedemann, and twenty-one-hundredths to W. W. Holman, Waterloo, Iowa. Composition gutter. No. 1,313,154; Aug. 12; v. 265; p. 281.
 Anderson, Fabr., Cambridge, Mass., assignor to Dover Stamping & Manufacturing Company, Portland, Me. Safety-can. No. 1,312,822; Aug. 12; v. 265; p. 215.
 Anderson, William P., N. C. Clarke, and J. F. Whitelaw, Birmingham, England. Quick-locking device. No. 1,312,942; Aug. 12; v. 265; p. 238.
 Antis, Thomas W., East Pittsburgh, Pa. Belt-shifting mechanism. No. 1,313,155; Aug. 12; v. 265; p. 281.
 Armour Fertilizer Works. (See Shoeld, Mark, assignor.)
 Armstrong, Louie E., Pensacola, Fla. Safe-saving device. No. 1,313,156; Aug. 12; v. 265; p. 281.
 Arney, John W., Tomahawk, Wis., assignor to A. B. Leith, Chicago, Ill. Occupant-propelled vehicle. No. 1,313,157; Aug. 12; v. 265; p. 281.
 Arrowsmith, James W., Morristown, N. J., assignor to Arrowsmith Manufacturing Company. Device for measuring the feet. No. 1,313,048; Aug. 12; v. 265; p. 259.
 Arrowsmith Manufacturing Company. (See Arrowsmith, James W., assignor.)
 Arthur, James F., Dickson City, Pa. Domestic-boiler stand. No. 1,312,719; Aug. 12; v. 265; p. 194.
 Ashton, Hannah, executrix. (See Ashton, Orrell.)
 Ashton, Orrell, deceased; H. Ashton, executrix, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for use in assembling soles on lasts. No. 1,312,509; Aug. 12; v. 265; p. 153.
 Atlas Car and Manufacturing Company. (See Wright, Scheilentrager, and Martin assignors.)
 Atwood, Benjamin S., Milford, Mass. Shuttle. No. 1,312,666; Aug. 12; v. 265; p. 184.
 Auto-Ordinance Corporation. (See Elckhoff, Theodore H., assignor.)
 Automatic Electric Company. (See Blessing, John G., assignor.)
 Automatic Electric Company. (See Erickson, John, assignor.)
 Automatic Electric Company. (See Martin, Talbot G., assignor.)
 Automatic Electric Company. (See Schwartz, Michael, assignor.)
 Ayres, George J., New York, N. Y. Hinge for doors. No. 1,312,667; Aug. 12; v. 265; p. 185.
 Bachman, Frank H. (See Bachman, Reuben H. and F. H.)
 Bachman, Reuben H. and F. H., Allentown, Pa. Fastening device. No. 1,313,049; Aug. 12; v. 265; p. 260.
 Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Liquid fuel. No. 1,313,158; Aug. 12; v. 265; p. 281.
 Bacon, Raymond F., Pittsburgh, Pa., assignor to Metals Recovery Company, New York, N. Y. Sulfidation and flotation of ores. No. 1,312,668; Aug. 12; v. 265; p. 185.
 Baetz, Henry, St. Louis, Mo. Drying apparatus. No. 1,312,669; Aug. 12; v. 265; p. 173.
 Baker, George, Goldfield, Colo. Sound-controlled dirigible torpedo. No. 1,312,510; Aug. 12; v. 265; p. 153.
 Bales, Solomon D., Seattle, Wash. Animal-trap. No. 1,312,943; Aug. 12; v. 265; p. 238.
 Balkwill, Wesley J., and W. F. Schweiger, assignor to Multipost Company, Rochester, N. Y. Stamp-feeding machine. No. 1,312,669; Aug. 12; v. 265; p. 185.
 Ball, John D., Milwaukee, Wis., assignor to General Electric Company. Means for preventing voltage fluctuation on distribution-circuits. No. 1,313,050; Aug. 12; v. 265; p. 260.
 Ballou, Walter B., North Attleboro, Mass. Belt-buckle. No. 1,312,670; Aug. 12; v. 265; p. 184.
 Baltimore Oil Engine Company. (See Wygodsky, Leon, assignor.)
 Barnett, Morrisson J., San Francisco, Calif. Timer. No. 1,312,855; Aug. 12; v. 265; p. 227.
 Barrett Company, The. (See Hultberg, Gottfrid, assignor.)
 Barrett, Harry R., assignor of one-half to W. Bramwell, Philadelphia, Pa. Collapsible back-rest. No. 1,312,774; Aug. 12; v. 265; p. 205.

Bartlett, Edwin E., Nashua, N. H., Arbor-press. No. 1,312,571; Aug. 12; v. 265; p. 185.
 Barton, Frederick C., Fort Wayne, Ind., assignor to General Electric Company, Temperature-compensator for electrical control devices. No. 1,313,051; Aug. 12; v. 265; p. 280.
 Baskin, Louis, New York, N. Y., Spark-plug. No. 1,312,511; Aug. 12; v. 265; p. 153.
 Bassinger, William H., Passaic, N. J., Filling-cabinet. No. 1,312,672; Aug. 12; v. 265; p. 185.
 Bauer, Eugen (See Katzenmaier and Bauer.)
 Baumann, Max, New York, N. Y., Goto-setting. No. 1,313,052; Aug. 12; v. 265; p. 260.
 Baumann, Karl, Urmston, England, assignor to The British Westinghouse Electric and Manufacturing Company, Limited, Condensing steam-turbine plant. No. 1,312,512; Aug. 12; v. 265; p. 154.
 Bayden, William E., Chicago, Ill., Pillow. No. 1,312,886; Aug. 12; v. 265; p. 227.
 Beach, Ralph L., East Orange, N. J., assignor to General Electric Company, Incandescent-lamp wrapper. No. 1,312,513; Aug. 12; v. 265; p. 154.
 Beard, Willie L., Comanche, Tex., Peanut-harvester. No. 1,313,053; Aug. 12; v. 265; p. 260.
 Beck, John L., Springfield, Mass., Oil-burner. No. 1,312,673; Aug. 12; v. 265; p. 185.
 Besman, Lyle, Milwaukee, Wis., Automatic sign. No. 1,313,150; Aug. 12; v. 265; p. 281.
 Bellow, Edward A., Goddard, assignor of one-half to Kynoch, Limited, Wilton, Birmingham, England. Hinge. No. 1,312,941; Aug. 12; v. 265; p. 238.
 Bellow, Edward A., Goddard, assignor of one-half to Kynoch, Limited, Wilton, Birmingham, England. Hinge. No. 1,312,945; Aug. 12; v. 265; p. 238.
 Bennett, Irvin, assignor to Pacific Coast Typewriter Company, Placerville, Calif., Telegraphic type-writer. No. 1,312,775; Aug. 12; v. 265; p. 205.
 Berger, Joseph, Jr., Etica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., Feeding mechanism for sewing machines. No. 1,312,823; Aug. 12; v. 265; p. 215.
 Berry, Arthur F., London, England, Magnetic material suitable for use in static transformers and other electrical apparatus. No. 1,313,054; Aug. 12; v. 265; p. 261.
 Besonnet, George C., Chicago, Ill., Mud-holder. No. 1,313,055; Aug. 12; v. 265; p. 261.
 Bethened, Joseph, (See Girardou and Bethened.)
 Bevin Brothers Manufacturing Company, (See Moard, Eric, assignor.)
 Beyer, Max W., Edgewater, N. J., Camera attachment. No. 1,312,674; Aug. 12; v. 265; p. 186.
 Beyer, Max W., Edgewater, N. J., Stereoscopic attachment for cameras. No. 1,312,675; Aug. 12; v. 265; p. 186.
 Bianchi, Leone L., assignor to Società Italiana di Elettrotecnica, Rome, Italy, Compressing chlorine and other gases. No. 1,313,160; Aug. 12; v. 265; p. 281.
 Bickley, Ross M., (See Patterson and Bickley.)
 Billington, Arthur G., Rye, N. Y., Flag-holder. No. 1,312,947; Aug. 12; v. 265; p. 239.
 Blackwood, Oswald H., Rolla, Mo., and F. Pearson, Chicago, Ill., Fountain-pen. No. 1,313,056; Aug. 12; v. 265; p. 261.
 Blair, Joseph, Dinuba, Calif., Brush rake. No. 1,313,057; Aug. 12; v. 265; p. 261.
 Blaisdell, Robert W., assignor of one-half to F. J. Mayer, Milwaukee, Wis., Shoe-relasting machine. No. 1,312,676; Aug. 12; v. 265; p. 186.
 Blooming, John W., assignor to Automatic Electric Company, Chicago, Ill., Trunk-selecting switch. No. 1,312,514; Aug. 12; v. 265; p. 154.
 Blumberg, Gustav, and J. A. Rotkus, Baltimore, Md., Electric clock. No. 1,312,946; Aug. 12; v. 265; p. 239.
 Boardman, Alfred E., Seattle, Wash., Automatic sprinkler. No. 1,312,515; Aug. 12; v. 265; p. 154.
 Boesch, Gustav, Danbury, Conn., Apparatus for applying tires to vehicle-wheels. No. 1,312,608; Aug. 12; v. 265; p. 174.
 Bogla, Frank H., Harrison, Wis., Stanchion alignment device. No. 1,312,677; Aug. 12; v. 265; p. 186.
 Bonan, Henry, Tulsa, Okla., Fishhook. No. 1,312,824; Aug. 12; v. 265; p. 215.
 Bononi, Alfred, Paterson, N. J., Reversible turbine. No. 1,313,058; Aug. 12; v. 265; p. 261.
 Boston Blacking Company, (See Ordway, Joseph H., assignor.)
 Bostwick, Arthur R., St. Albans, Vt., Chalk. No. 1,312,720; Aug. 12; v. 265; p. 194.
 Bousquet, William J., Springfield, Mass., Guide and holder for flexible rules. No. 1,312,887; Aug. 12; v. 265; p. 227.
 Bowery, Ernest, Oil Center, Calif., Oil-well pump shoe. No. 1,312,825; Aug. 12; v. 265; p. 216.
 Bowman, Abe, Long Beach, Calif., Transmission mechanism. No. 1,312,609; Aug. 12; v. 265; p. 174.
 Boyer, Joseph A., and H. E. Bryant, Jacksonville, Fla., Turpentine-distilling apparatus. No. 1,312,826; Aug. 12; v. 265; p. 216.
 Boyle, John L., Boston, Mass., Combined talking-machine and stereopticon. No. 1,313,190; Aug. 12; v. 265; p. 287.
 Boyle, John L., Boston, Mass., Combined talking and picture-exhibiting machine. No. 1,313,214; Aug. 12; v. 265; p. 292.

Bozeman, John W., Baltimore, Md., Flush-tank hull. No. 1,313,161; Aug. 12; v. 265; p. 282.
 Bradshaw, Edgar, (See Bridge and Bradshaw.)
 Brault, Harold J., Royal Oak, Mich., Mold for the manufacture of concrete tiles. No. 1,312,827; Aug. 12; v. 265; p. 216.
 Bramwell, Walter, (See Barrett, Harry R., assignor.)
 Brandfass, Charles E., Wheeling, W. Va., Timing apparatus. No. 1,312,888; Aug. 12; v. 265; p. 227.
 Brantley, James A., Sand Springs, Okla., Propelling mechanism for vehicles. No. 1,312,828; Aug. 12; v. 265; p. 216.
 Breitenbach, Julius M., New York, N. Y., Stretcher-support. No. 1,312,516; Aug. 12; v. 265; p. 154.
 Brew, Henry W., Baltimore, Md., Oil-burner. No. 1,313,059; Aug. 12; v. 265; p. 262.
 Brewster, Henry J., Detroit, Mich., Water-closet bowl. No. 1,313,060; Aug. 12; v. 265; p. 262.
 Bridge, Robert, and E. Bradshaw, assignors to David Bridge and Company Limited, Castleton, England, Friction-clutch. No. 1,312,776; Aug. 12; v. 265; p. 206.
 Brien, James T., Housick Falls, N. Y., assignor of one-half to J. C. Maxwell, Dayton, Ohio; J. A. Brien, executrix. Float-valve. No. 1,312,678; Aug. 12; v. 265; p. 180.
 Brien, Jeanne A., executrix, (See Brien, James T.)
 Brindle, Richard G., and A. H. Elliot, Chicago, Ill., assignors to Corn Products Refining Company, Product usable as fertilizer and manufacturing the same. No. 1,313,162; Aug. 12; v. 265; p. 282.
 Brindle, Richard G., Chicago, Ill., assignor to Corn Products Refining Company, Product from steep-water and manufacturing the same. No. 1,313,163; Aug. 12; v. 265; p. 282.
 Buoy, Pearl A., (See Hamilton and Buoy.)
 British Westinghouse Electric and Manufacturing Company, The, (See Baumann, Karl, assignor.)
 Brokenshire, Arthur R., assignor of one-half to F. J. Goodman, Fenelon Falls, Ontario, Canada, Tire-carrier for motor-cars. No. 1,312,829; Aug. 12; v. 265; p. 216.
 Brown, Charles A., (See Winslow, William H., assignor.)
 Brown Company, (See Moore and Richter, assignors.)
 Brown, Oscar W., Abilene, Kans., Welding-stand. No. 1,313,061; Aug. 12; v. 265; p. 262.
 Brown, Theophilus M., Seattle, Wash., Nut-tightener. No. 1,312,889; Aug. 12; v. 265; p. 227.
 Brunzel, Paul G., New York, N. Y., Propelling mechanism. No. 1,312,679; Aug. 12; v. 265; p. 187.
 Bryant, Henry E., (See Boyer and Bryant.)
 Bryce, James W., Bloomfield, N. J., assignor to Computing-Tabulating-Recording Company, New York, N. Y., Weighing apparatus. No. 1,313,062; Aug. 12; v. 265; p. 262.
 Buffalo Forge Company, (See Carrier, Willis H., assignor.)
 Bujnowski, Wlodzimierz, Peru, Ill., Comb and brush. No. 1,313,063; Aug. 12; v. 265; p. 262.
 Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass., Electric switch. No. 1,312,777; Aug. 12; v. 265; p. 206.
 Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass., Fuse for electric switches. No. 1,312,792; Aug. 12; v. 265; p. 209.
 Burroughs, Arthur S., (See Dutro and Burroughs.)
 Burrows, Robert J., assignor to Clark Equipment Company, Huchanog, Mich., Metal wheel. No. 1,312,890; Aug. 12; v. 265; p. 227.
 Busbey, Eli J., New York, N. Y., Air-moistener. No. 1,312,948; Aug. 12; v. 265; p. 239.
 Butkus, John A., (See Blumberg and Butkus.)
 Butler, George P., Lebanon, N. H., Machine for trimming temples. No. 1,313,064; Aug. 12; v. 265; p. 263.
 Byrnes, Patrick J., and B. B. Osburn, Rochester, N. Y., Manufacturing shoes. No. 1,313,065; Aug. 12; v. 265; p. 263.
 C. J. Bates & Son, (See Watrous, William R., assignor.)
 Cadillac Tool Co., (See Krueger, Henry R., assignor.)
 Cahusac, Clarence N., Jersey City, N. J., assignor to Slocum Avram & Slocum Inc., New York, N. Y., Electro-mechanical registering and resetting mechanism. No. 1,313,066; Aug. 12; v. 265; p. 263.
 Campbell Bosworth Machinery Company, (See Wilson, William, assignor.)
 Campbell, Charles L., (See Meyers, Campbell, and McSweeney.)
 Campbell, Sterling H., St. Louis, Mo., Brake-rod jaw. No. 1,312,680; Aug. 12; v. 265; p. 187.
 Camm, Charles E., Salt Lake City, Utah, assignor of one-half to W. H. Turver, Los Angeles, Calif., Electrically-heated garment. No. 1,312,830; Aug. 12; v. 265; p. 216.
 Carlin, Arvid F., New York, N. Y., Shelf-support. No. 1,312,891; Aug. 12; v. 265; p. 228.
 Carlson, Hjalmar G., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., Making booster-casings and adapters for gas-shells or the like. No. 1,312,517; Aug. 12; v. 265; p. 154.
 Carrier Engineering Corporation, (See Stacey, Alfred E., Jr., assignor.)
 Carrier, Willis H., assignor to Buffalo Forge Company, Buffalo, N. Y., Nozzle-flushing mechanism for air and gas washers and the like. No. 1,312,721; Aug. 12; v. 265; p. 194.
 Carlton, Jack C., (See Cockburn and Carlton.)

Carse, James, Bedlington, England, Free-wheel mechanism for cycles and the like. No. 1,313,067; Aug. 12; v. 265; p. 263.
 Casablancas, Fernando, Sahadell, Barcelona, Spain, Spinning-frame. No. 1,313,164; Aug. 12; v. 265; p. 282.
 Cashen, Robert A., Meriden, Conn., Radiator-cap. No. 1,312,892; Aug. 12; v. 265; p. 228.
 Casselman, Amos B., Washington, D. C., Suspensory. No. 1,313,165; Aug. 12; v. 265; p. 282.
 Caudle, Theron L., Wadsworth, N. C., Garment-supporter. No. 1,313,215; Aug. 12; v. 265; p. 292.
 Chanard, Auguste, Paris, France, Receptacle for incendiary aerial bombs. No. 1,313,068; Aug. 12; v. 265; p. 263.
 Chapman, Clida, Cherryvale, Kans., Washing-machine. No. 1,312,831; Aug. 12; v. 265; p. 217.
 Chapman, Penrose E., and R. H. Robinson, St. Louis, Mo., said Robinson assignor to said Chapman, Variably pitched and actuated bell. No. 1,312,610; Aug. 12; v. 265; p. 174.
 Chapman, William L., Brooklyn, N. Y., Fountain-pen. No. 1,312,681; Aug. 12; v. 265; p. 187.
 Charles Cory & Son, (See Wood, Frank W., assignor.)
 Chason, Daniel H., Elizabeth, N. J., Antirattling device for window-sashes. No. 1,313,069; Aug. 12; v. 265; p. 264.
 Cherkoff Manufacturing Company, (See Hirst, James, assignor.)
 Chess, Philip S., Pittsburgh, Pa., Package. No. 1,312,611; Aug. 12; v. 265; p. 174.
 Chester, Ashmead B., Jacksonville, Ill., Diestock. No. 1,312,949; Aug. 12; v. 265; p. 239.
 Chile Exploration Company, (See Page, William K., assignor.)
 Chryst, William A., (See Kettering and Chryst.)
 Churchill, William, New York, assignor to Corning Glass Works, Corning, N. Y., Headlight-corer glass. No. 1,312,950; Aug. 12; v. 265; p. 239.
 Cipolla, Joseph, Philadelphia, Pa., Spring bed-bottom. No. 1,312,612; Aug. 12; v. 265; p. 174.
 Cities Illuminating Company, (See Vincent, Sidney C., assignor.)
 Clapp, Albert L., Marblehead, assignor to The Metallite Company, Amesbury, Mass., Waterproofing sheet material. No. 1,312,682; Aug. 12; v. 265; p. 187.
 Clark, Christopher T., East Shore Park, Minn., Flat-surface-pressure device. No. 1,312,518; Aug. 12; v. 265; p. 155.
 Clark, Edgar H., (See Lundell and Clark.)
 Clark, Edwin W., Kansas City, Mo., assignor to Photo Motion Company, Shutter for motion-picture-projecting machines. No. 1,312,722; Aug. 12; v. 265; p. 195.
 Clark, Emerson L., Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., Pyrometer. No. 1,312,951; Aug. 12; v. 265; p. 240.
 Clark Equipment Company, (See Burrows, Robert J., assignor.)
 Clarke, Norman C., (See Anderson, Clarke, and Whitelaw.)
 Clanssen, Henry P., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y., Telephone-exchange system. No. 1,312,775; Aug. 12; v. 265; p. 206.
 Clements, Charles F., Peoria, Ill., Grain-weigher. No. 1,312,832; Aug. 12; v. 265; p. 217.
 Cobb, John H., Fairfield, Conn., Sash-fastener. No. 1,312,893; Aug. 12; v. 265; p. 228.
 Cockburn, Francis H., and J. C. Carlton, assignors to The Lodge & Shipley Machine Tool Company, Cincinnati, Ohio, Projectile-turner. No. 1,313,166; Aug. 12; v. 265; p. 282.
 Codd, William C., et al., (See Schumann, Alfred F., assignor.)
 Cody, Arthur P., Cleveland, Ohio, Bath-room fixture. No. 1,312,613; Aug. 12; v. 265; p. 175.
 Cohen, Louis, Washington, D. C., Electrical signaling. No. 1,313,070; Aug. 12; v. 265; p. 264.
 Collins, Alexander P., Detroit, Mich., Cooking apparatus. No. 1,312,833; Aug. 12; v. 265; p. 217.
 Colling, Ralph, San Francisco, Calif., Musical instrument. No. 1,312,614; Aug. 12; v. 265; p. 175.
 Commercial Specialty Company, (See Kimball, Don L., assignor.)
 Computing-Tabulating-Recording Company, (See Bryce, James W., assignor.)
 Condit, Sears B., Jr., (See Burnham, George A., assignor.)
 Cook, William E., New York, N. Y., Wire-uncoiling machine. No. 1,312,952; Aug. 12; v. 265; p. 240.
 Cook, William E., New York, N. Y., Collecting mechanism for carding-machines. No. 1,312,953; Aug. 12; v. 265; p. 240.
 Cook, William E., New York, N. Y., Insulated-wire-making machine. No. 1,312,954; Aug. 12; v. 265; p. 240.
 Cooper, Simon, New York, N. Y., assignor to The Hobart M. Cable Company, Laporte, Ind., Method and apparatus for applying fluid-pressure. No. 1,312,615; Aug. 12; v. 265; p. 175.
 Copeman Electric Store Company, (See Copeman, Lloyd G., assignor.)
 Copeman, Lloyd G., assignor to Copeman Electric Store Company, Flint, Mich., Adjustable thermometer. No. 1,312,834; Aug. 12; v. 265; p. 217.
 Corbitt, Thomas L., Johnson City, Ill., Thermal circuit-closer. No. 1,312,835; Aug. 12; v. 265; p. 217.

Corn Products Refining Company, (See Brindle and Elliot, assignors.)
 Corn Products Refining Company, (See Brindle, Richard G., assignor.)
 Corning Glass Works, (See Churchill, William, assignor.)
 Cortland Forging Company, (See Elson, William J., assignor.)
 Cosgrove, John W., Medford, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Machine for inserting fastenings. No. 1,312,519; Aug. 12; v. 265; p. 155.
 Cosgrove, Patrick D., Cobram, Victoria, Australia, Suspension of vehicles. No. 1,313,167; Aug. 12; v. 265; p. 283.
 Courard & Neville, (See Laviolette, Felix, assignor.)
 Cowan, Arthur E., Gloucester, Mass., assignor of one-fourth to G. Crosby, Glen Ridge, N. J., Culinary device. No. 1,312,616; Aug. 12; v. 265; p. 175.
 Cox, Archibald, (See Spencer, Arthur C., assignor.)
 Cox, Walter, assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., Apparatus for rolling ribbed glass. No. 1,313,071; Aug. 12; v. 265; p. 264.
 Crane Company, (See Farley, John A., assignor.)
 Crawford, Frank, Los Angeles, Calif., Self-oiling hub. No. 1,312,683; Aug. 12; v. 265; p. 187.
 Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company, Protection of transmission systems. No. 1,313,072; Aug. 12; v. 265; p. 264.
 Crider, Samuel N., (See Smith and Crider.)
 Crisley, Corham, (See Cowan, Arthur E., assignor.)
 Crulshank, James W., assignor to J. W. Crulshank Engineering Company, Pittsburgh, Pa., Apparatus for annealing glass. No. 1,313,222; Aug. 12; v. 265; p. 298.
 Cuddigan, Bartholomew O., assignor of one-third to W. H. Gehr, Wadena, Minn., Potato-cutting machine. (Reissue.) No. 1,4704; Aug. 12; v. 265; p. 297.
 Cunningham, William P., Norristown, Pa., Apparatus for casting chain-links. No. 1,312,955; Aug. 12; v. 265; p. 240.
 Currier, Hiram D., Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Telephone system. No. 1,312,894; Aug. 12; v. 265; p. 228.
 Curtain Supply Company, The, (See Whitmore, Edward E., assignor.) (Reissue.)
 Curtis, Almon W., Cortland, N. Y., Folding carriage-top. No. 1,312,836; Aug. 12; v. 265; p. 218.
 Curtis, Almon W., Cortland, N. Y., Folding carriage-top for automobiles. No. 1,312,837; Aug. 12; v. 265; p. 218.
 Cutler-Hammer Mfg. Co., The, (See Evans, Clarence T., assignor.)
 Cutler-Hammer Mfg. Co., The, (See Klein, Charles J., assignor.)
 Daniel, Ulysses S., Beaumont, Tex., Attachment for motor-vehicles. No. 1,312,956; Aug. 12; v. 265; p. 241.
 Danielson, Frank, Chicago, Ill., Universal clamping-fixture for internal-combustion engines. No. 1,312,617; Aug. 12; v. 265; p. 175.
 Daven, Paul H., assignor of one-half to C. Ottosen, Ottosen, Iowa, Steering-rod-controlling device. No. 1,313,216; Aug. 12; v. 265; p. 292.
 David Bridge and Company Limited, (See Bridge and Bradshaw, assignors.)
 Davidson, John M., Xenia, Ohio, Attachment for lawnmowers. No. 1,312,618; Aug. 12; v. 265; p. 176.
 Davis, Charles B., New York, N. Y., Treating pearl buttons or blanks. No. 1,312,723; Aug. 12; v. 265; p. 195.
 Davis, George H., West Orange, N. J., Perforated roll for musical instruments. No. 1,312,520; Aug. 12; v. 265; p. 155.
 Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation, Phonograph transmission-rod. No. 1,312,957; Aug. 12; v. 265; p. 241.
 Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation, Phonograph transmission. No. 1,312,958; Aug. 12; v. 265; p. 241.
 Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation, Talking-machine. No. 1,312,959; Aug. 12; v. 265; p. 241.
 Dayton Engineering Laboratories Company, The, (See Kettering and Chryst, assignors.)
 De Laski and Thropp Circular Woven Tire Company, The, (See Thropp, John E., and P. D., assignors.)
 De Long, Nelson, Chicago, Ill., Treating peat. No. 1,312,521; Aug. 12; v. 265; p. 155.
 Demera, Nazaire, Worcester, Mass., Picker-check. No. 1,312,960; Aug. 12; v. 265; p. 242.
 Dembowski, Emil, Metuchen, N. J., Engloe. No. 1,312,838; Aug. 12; v. 265; p. 218.
 Dembowski, Emil, Metuchen, N. J., Free-flow and packing-less valve. No. 1,312,839; Aug. 12; v. 265; p. 218.
 Derby, John H., New York, N. Y., Release-box. No. 1,312,695; Aug. 12; v. 265; p. 228.
 Devora, Clyde E., assignor to The McCaskey Register Company, Incorporated in 1914, Alliance, Ohio, Cost-recording appliance. No. 1,312,684; Aug. 12; v. 265; p. 187.
 De Voe, Andrew J., Hackensack, N. J., Weather-indicator. No. 1,312,961; Aug. 12; v. 265; p. 242.
 Dick, Burns, assignor to Wagner Electric Manufacturing Company, St. Louis, Mo., Relay. No. 1,312,522; Aug. 12; v. 265; p. 155.

Dillon, Curtis H., Milan, Mich., assignor to Dillon Steam Motors Corporation. Motor. No. 1,312,523; Aug. 12; v. 265; p. 156.

Dillon Steam Motors Corporation. (See Dillon, Curtis H., assignor.)

Di Majo, Simone, New York, N. Y., Railing attachment for triangles. No. 1,313,168; Aug. 12; v. 265; p. 283.

Dion, Charles J., Minneapolis, Minn., Horseshoe. No. 1,312,685; Aug. 12; v. 265; p. 188.

Domeq, Joseph, Los Angeles, Calif., Hose drier and stretcher. No. 1,313,169; Aug. 12; v. 265; p. 283.

Donadio, Prospero, Brooklyn, N. Y., Safety-lock for rollers. No. 1,313,073; Aug. 12; v. 265; p. 264.

Donnelly, Laurence F., Lansford, Pa., Toilet utensil. No. 1,312,866; Aug. 12; v. 265; p. 229.

Dorr, Lucius H., Buffalo, N. Y., Airplane. No. 1,312,956; Aug. 12; v. 265; p. 188.

D'Orray, Isabel, New York, N. Y., Apparatus for treating parts of the human body. No. 1,312,619; Aug. 12; v. 265; p. 176.

Dorsey, Edward W., Newark, Ohio, Rail connection. No. 1,312,620; Aug. 12; v. 265; p. 176.

Dorsey, Edward W., Newark, Ohio, Rail-lock. No. 1,312,621; Aug. 12; v. 265; p. 176.

Doughy, Charles, assignor of one-half to F. J. Homan, Denver, Colo., Luggage-carrier for automobiles. No. 1,312,524; Aug. 12; v. 265; p. 156.

Dourte, George J., Denver, Colo., Valveless pump. No. 1,312,662; Aug. 12; v. 265; p. 242.

Dover Stamping & Manufacturing Company. (See Anderson, John, assignor.)

Dowdy, Roy F., assignor to Safety Gas Lighter Corporation, Roanoke, Va., Electric gaslighter. No. 1,312,022; Aug. 12; v. 265; p. 176.

Downer, Clarence L., Idaho Falls, Idaho, Internal-combustion engine. No. 1,313,170; Aug. 12; v. 265; p. 285.

Downing, Philip R., Everett, Mass., Currency-counting tray. No. 1,313,074; Aug. 12; v. 265; p. 264.

Draper Corporation. (See Rhodes, Alonzo E., assignor.)

Dr. H. R. Napoleon, assignor to The Miller, Du Brul and Peters Manufacturing Co., Cincinnati, Ohio, Continuous cigarette-machine. No. 1,312,525; Aug. 12; v. 265; p. 156.

Dundon, John H. (See Raab and Dundon.)

Duchack, Frank, Paterson, N. J., Jacquard-machine. No. 1,312,779; Aug. 12; v. 265; p. 207.

Dukelow, John E., Chicago, Ill., Chain driving-belt. No. 1,313,171; Aug. 12; v. 265; p. 283.

Duke, John F., Shortlands, England, Nut. No. 1,313,075; Aug. 12; v. 265; p. 263.

Dutro, Orville V., and A. S. Burroughs, Spokane, Wash., Web-feeding mechanism for printing-presses. No. 1,312,963; Aug. 12; v. 265; p. 242.

Dyke, Francis R., Dartmouth, Nova Scotia, Canada, Hov-lamp. No. 1,313,172; Aug. 12; v. 265; p. 283.

E. Fredericks, Inc. (See Speckerman, Ernest O., assignor.)

Eastman, Adelbert, New York, N. Y., Advertising device. No. 1,313,173; Aug. 12; v. 265; p. 284.

Eastman Kodak Company. (See Grass, Ernest, assignor.)

Eastman, Kodak Company. (See Jones, John H., assignor.)

Easton, Fred M., San Bernardino, Calif., Sawing-machine. No. 1,312,964; Aug. 12; v. 265; p. 243.

Economy Sales Company. (See Simpson, John T., assignor.)

Edward Packard and Company. (See Mills and Packard, assignors.)

Ely, Cecil H. A. (See Heyerman, Charles L., assignor.)

Ehrhart, Raymond N., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Co., Conduiter, No. 1,312,898; Aug. 12; v. 265; p. 229.

Elane, Halvor O., Detroit Harbor, Wis., Submarine gun. No. 1,312,897; Aug. 12; v. 265; p. 229.

Elkhoff, Theodore H., Cleveland, Ohio, assignor, by means assignments, to Auto-Ordnance Corporation, New York, N. Y., Firearm. No. 1,312,657; Aug. 12; v. 265; p. 188.

Elsenhardt, William J., Baltimore, Md., Dispensing apparatus. No. 1,313,174; Aug. 12; v. 265; p. 284.

Elborne, William, Peterborough, England, Chemical heat-producing means. No. 1,312,840; Aug. 12; v. 265; p. 218.

Ella, Giovanni E., Washington, D. C., Protective device for ships. No. 1,312,841; Aug. 12; v. 265; p. 219.

Elson, William J., assignor to Cortland Forging Company, Cortland, N. Y., Vehicle-top. No. 1,313,076; Aug. 12; v. 265; p. 265.

Ely, Walter C., Terre Haute, Ind., Fuel feeder and spreader for furnaces. No. 1,312,520; Aug. 12; v. 265; p. 156.

Emmerman, Kolman, and W. Nathanson, Chicago, Ill., Radiator. No. 1,313,077; Aug. 12; v. 265; p. 265.

Emmett, William L. R., Schenectady, N. Y., assignor to General Electric Company, Electric ship propulsion. No. 1,313,078; Aug. 12; v. 265; p. 265.

Emmett, William L. R., Schenectady, N. Y., assignor to General Electric Company, Electric ship propulsion. No. 1,313,079; Aug. 12; v. 265; p. 265.

Engelsson, John E., Kristinehamn, Sweden, Centrifugal governor. No. 1,313,175; Aug. 12; v. 265; p. 284.

Eusten, Louis H., Cleveland, Ohio, Knitted cap. No. 1,313,080; Aug. 12; v. 265; p. 266.

Erickson, John, assignor to Automatic Electric Company, Chicago, Ill., Measured-service telephone system. No. 1,312,688; Aug. 12; v. 265; p. 188.

Erickson, John, assignor to Automatic Electric Company, Chicago, Ill., Measured-service telephone system. No. 1,312,685; Aug. 12; v. 265; p. 243.

Esnault-Pelterie, Robert, Boulogne-sur-Seine, France, Internal-combustion turbine-engine. No. 1,312,899; Aug. 12; v. 265; p. 229.

Evans, Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., Electromagnetic blow-out device. No. 1,313,176; Aug. 12; v. 265; p. 284.

F. B. Redington Company. (See Milmo, Michael J., assignor.)

F. N. Hurt Company, Limited. (See Palmer, Lyndon G., assignor.)

Fana, Walter, Fort Douglas, Utah, Universal level. No. 1,312,527; Aug. 12; v. 265; p. 156.

Falati, Michael J., Columbus, Ohio, Stovepipe-collar holder. No. 1,312,900; Aug. 12; v. 265; p. 229.

Farley, John A., Chicago, Ill., assignor to Crane Company, Drinking-fountain fixture. No. 1,312,623; Aug. 12; v. 265; p. 176.

Farra, Francis J., Rochester, Minn., Safety-book. No. 1,312,966; Aug. 12; v. 265; p. 243.

Fenn, William B., New York, N. Y., Reinforced receptacle, tube, or the like and making the same. No. 1,312,780; Aug. 12; v. 265; p. 207.

Ferguson, George, Wollaston, Mass., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J., Rubber sole for turn-shoes. No. 1,312,528; Aug. 12; v. 265; p. 157.

Ferris, Walter. (See Magic and Ferris.)

Ferry, Joseph D., Niles, Calif., Fruit-gatherer. No. 1,312,967; Aug. 12; v. 265; p. 243.

Finch, Leon S., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., Making cyanogen compounds. No. 1,312,842; Aug. 12; v. 265; p. 219.

Finkelstein & Knopf Manufacturing Company. (See Rayfield, Charles L., assignor.)

Finley, Charles W., Battle Creek, Mich., Conduit-bushing. No. 1,312,901; Aug. 12; v. 265; p. 230.

Finney, Ellen M., Kansas City, Kans., Coaster. No. 1,313,081; Aug. 12; v. 265; p. 266.

Flaher, Herbert P., Los Angeles, Calif., Automatic water-heater. No. 1,312,724; Aug. 12; v. 265; p. 195.

Flannery, Howard J., Pittsburgh, Pa., Boot. No. 1,312,781; Aug. 12; v. 265; p. 207.

Flint, Amos H. (See Helndle and Flint.)

Flintkote Company, The. (See Spear, George A., assignor.)

Floyd W. Robison Company. (See Robison, Floyd W., assignor.)

Fogg, Harold J., Liverpool, England, Building, made mainly of blocks of concrete or equivalent material. No. 1,312,968; Aug. 12; v. 265; p. 243.

Ford, Robert H., C. P. Richardson, A. L. Greenbaum, Chicago, Ill., and H. M. Priest, Dayton, Ohio, Reinforced-concrete cribbing. No. 1,312,689; Aug. 12; v. 265; p. 188.

Fowler, Alfred B., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., Heel-scouring machine. No. 1,312,529; Aug. 12; v. 265; p. 157.

Fox, Mac L., Columbusville, Mich., Insecticide-distributor for cultivators. No. 1,312,969; Aug. 12; v. 265; p. 244.

Fraser, Le Roy B., New Haven, Conn., Method of and apparatus for imposing form elements. No. 1,313,082; Aug. 12; v. 265; p. 266.

Fredericks, Ernest O. (See Speckerman, Ernest O., assignor.)

Freedman, Louis A., New York, N. Y., Winding mechanism for talking-machines. No. 1,312,624; Aug. 12; v. 265; p. 177.

Fruehauf Trailer Company. (See Hartwick, Ernest F., assignor.)

Fuhrmann, Warren, Westfield, N. J., assignor, by means assignments, to Wilkinson Brothers and Company, Incorporated, New York, N. Y., Signal printing means for calculators. No. 1,313,177; Aug. 12; v. 265; p. 284.

Fuller, Franz A., assignor to The J. E. Merrett Company, Newark, N. J., Cigar-holder and ash-receptacle. No. 1,312,530; Aug. 12; v. 265; p. 157.

Gagnier, Joseph H., Fall River, Mass., Step-ladder. No. 1,312,725; Aug. 12; v. 265; p. 195.

Galt, Hugh A., Barborton, Ohio, Process and product for utilizing alter cake and similar substances. No. 1,312,782; Aug. 12; v. 265; p. 207.

Galt, Hugh A., Barborton, Ohio, Process and product for utilizing alter cake and similar substances. No. 1,312,783; Aug. 12; v. 265; p. 207.

Galt, Hugh A., Barborton, Ohio, Manufacture of glass. No. 1,312,784; Aug. 12; v. 265; p. 207.

Gamble, Joseph W., assignor to Harrison Safety Roller Works, Philadelphia, Pa., Liquid-weighting apparatus. No. 1,312,902; Aug. 12; v. 265; p. 230.

Garbia, Spiro D., Calcutta, India, Treasure-box and the like with keyless lock and metal seal. No. 1,312,970; Aug. 12; v. 265; p. 244.

Garbisch, Theodore W., Carter, Mont., Funnel. No. 1,312,531; Aug. 12; v. 265; p. 157.

Gardner, Arthur W. (See Ross, Robert H., assignor.)

Gardner, Edmund J., Valliant, Okla., Safety attachment. No. 1,312,843; Aug. 12; v. 265; p. 219.

Garner, William H., Erie, Pa., Engine drive-wheel. No. 1,313,178; Aug. 12; v. 265; p. 285.

Garnet Carter Co. (See Rose, Frederick C., assignor.)

Garwood Company. (See Karitsky, John, assignor.)

Gas Power Machinery Company. (See Grise, Harry A., assignor.)

Gaydon, Adolphe. (See Accornero and Gaydon.)

Gear Improvement Company. (See Williams, Harvey D., assignor.)

Geary, William H., Medicine Hat, Alberta, Canada, Internal-combustion engine. No. 1,312,971; Aug. 12; v. 265; p. 244.

Gehr, W. H. (See Cuddigan, Bartholomew O., assignor.) (Reissue.)

Gelat, William, St. Louis, Mo., Glare-protector. No. 1,313,083; Aug. 12; v. 265; p. 266.

General Electric Company. (See Alexander, Ernst F. W., assignor.)

General Electric Company. (See Ball, John D., assignor.)

General Electric Company. (See Barton, Frederick C., assignor.)

General Electric Company. (See Beach, Ralph L., assignor.)

General Electric Company. (See Emmet, William L. R., assignor.)

General Electric Company. (See Hall, Chester L., assignor.)

General Electric Company. (See Hull, Albert W., assignor.)

General Electric Company. (See Langmuir, Irving, assignor.)

General Electric Company. (See Lamp, Hermann, assignor.)

General Electric Company. (See Loewenstein, Louis C., assignor.)

General Electric Company. (See Macmillan, Campbell, assignor.)

General Electric Company. (See Payne, John H., Jr., assignor.)

General Electric Company. (See Quackenbush, Harvey E. and C. L., assignors.)

General Electric Company. (See Sanborn, Hugh D., assignor.)

General Electric Company. (See Sargent, Howard R., assignor.)

Genter, Helen C., administratrix. (See Genter, Jacob H., assignor.)

Genter, Jacob H., deceased, Newburgh, N. Y.; H. C. Genter, administratrix, Film-reel. No. 1,313,084; Aug. 12; v. 265; p. 266.

Giardino, Liborio G., Campello, Mass., Picture-banger. No. 1,312,903; Aug. 12; v. 265; p. 230.

Gilman, George H., assignor of one-half to H. M. Robertson, St. Paul, Minn., Body-bolster for railway-cars. No. 1,312,726; Aug. 12; v. 265; p. 195.

Gilman, John H., assignor to King & Hamilton Company, Ottawa, Ill., Elevator for corn, &c. (Reissue.) No. 1,312,904; Aug. 12; v. 265; p. 230.

Girardeau, Emile, and J. Berthod, Paris, France, Device for auxiliary starting for high-power radiotelegraphic stations. No. 1,312,972; Aug. 12; v. 265; p. 244.

Glafcke, Paul E., Denver, Colo., Adjustable stilt. No. 1,312,904; Aug. 12; v. 265; p. 230.

Glass, Perley R., Brookline, assignor to P. R. Glass Company, Boston, Mass., Folding-machine. No. 1,312,532; Aug. 12; v. 265; p. 158.

Glass, Perley R., Brookline, assignor to P. R. Glass Company, Boston, Mass., Folding-machine. No. 1,312,533; Aug. 12; v. 265; p. 158.

Gleason, James E., trustee. (See Williams, Harvey D., assignor.)

Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)

Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y., Hose coupling. No. 1,312,625; Aug. 12; v. 265; p. 177.

Goldie, William, Wilkesburg, Pa., Reinforcing means for concrete structures. No. 1,312,908; Aug. 12; v. 265; p. 231.

Goodman, Fred J. (See Brokenshire, Arthur R., assignor.)

Goote, James, Wilmington, Del., Coupling for hose of air-lines. No. 1,313,225; Aug. 12; v. 265; p. 294.

Gordon, Alexander W., Crossfield, Alberta, Canada, Hanger for sliding doors. No. 1,312,973; Aug. 12; v. 265; p. 244.

Gondel, Charles, assignor to the Firm of Societe d'Etudes Chimiques pour l'Industrie, Geneva, Switzerland, Process and apparatus for fractional distillation of liquids. No. 1,312,974; Aug. 12; v. 265; p. 245.

Gough, John J., Benton, Ky., Auxiliary air-supply for internal-combustion engines. No. 1,312,975; Aug. 12; v. 265; p. 245.

Grandia, William, Kewanee, Wis., Can body and top. No. 1,312,626; Aug. 12; v. 265; p. 177.

Grass, Ernest, assignor to Eastman Kodak Company, Rochester, N. Y., Etching. No. 1,313,283; Aug. 12; v. 265; p. 296.

Gravell, James H., Brooklyn, N. Y., assignor to Thomson Spot Welder Company, Boston, Mass., Electric welding. No. 1,312,844; Aug. 12; v. 265; p. 219.

Gravell, James H., Philadelphia, Pa., assignor to Thomson Spot Welder Company, Boston, Mass., Electric welding-machine. No. 1,312,845; Aug. 12; v. 265; p. 219.

Gray National Telautograph Company. (See Tilly, George S., assignor.)

Gray, William H., Louisville, Ky., Conduit. No. 1,313,179; Aug. 12; v. 265; p. 285.

Greenbaum, Alexander L. (See Ford, Richardson, Greenbaum, and Priest.)

Greene, Holdridge G., assignor to Triumph Trap Co., Omaha, N. Y., Spring-trap. No. 1,312,690; Aug. 12; v. 265; p. 188.

Greene, John A., Atascadero, Calif., Combined andirons, radiator, and ventilator. No. 1,313,085; Aug. 12; v. 265; p. 267.

Greenwood, Harold C., Putney, London, England, Synthetic production of ammonia. No. 1,312,534; Aug. 12; v. 265; p. 158.

Gresle, Charles W., assignor, by means assignments, to The Standard Parts Company, Cleveland, Ohio, Transversely-split demountable rim. No. 1,312,635; Aug. 12; v. 265; p. 158.

Grice, Harry A., Collinsville, Okla., assignor to Gas Power Machinery Company, Los Angeles, Calif., Making producer-gas. No. 1,313,180; Aug. 12; v. 265; p. 285.

Groch, Frank, Cobalt, Ontario, Canada, Apparatus for recovering pulp fibers, &c., from liquids containing them. No. 1,312,976; Aug. 12; v. 265; p. 245.

Grube, John H., assignor to Alrask Inner Tire Company, Los Angeles, Calif., Tire-liner mold. No. 1,312,627; Aug. 12; v. 265; p. 177.

Grumbos, John, et al. (See Santacrose, Agostino, assignor.)

Grundmann, William, St. Louis, Mo., Patella-splint. No. 1,313,181; Aug. 12; v. 265; p. 285.

Grunnet, Martin, assignor of one-half to H. Sells, Chicago, Ill., Switch-lock. No. 1,312,977; Aug. 12; v. 265; p. 245.

Guettler, Herbert. (See Hussey, William J., assignor.)

Gunn, Charles H., Emeryville, Calif., Sectional casing for pneumatic tires. No. 1,312,978; Aug. 12; v. 265; p. 246.

Gustafson, Adolph P., assignor to M. Schuls Company, Chicago, Ill., Tracking device for automatic musical instruments. No. 1,313,226; Aug. 12; v. 265; p. 294.

Gydesen, Alfred M., Bridgeport, Conn., Lathe-chuck. No. 1,312,628; Aug. 12; v. 265; p. 177.

H. A. Weymann and Son. (See Weymann, Harry W., assignor.)

Hachmann, Frederick, assignor of fifty-one one-hundredths to H. C. Stifel, St. Louis, Mo., Container. No. 1,312,629; Aug. 12; v. 265; p. 178.

Hackett, Charles W., Atlanta, Ga., assignor of one-half to F. D. Hackett, Northwicksboro, N. C., Combination tie-plate and rail-brace. No. 1,312,905; Aug. 12; v. 265; p. 231.

Hackett, Frank D. (See Hackett, Charles W., assignor.)

Haentjens, Otto, Hazelton, Pa., Centrifugal pump. No. 1,312,979; Aug. 12; v. 265; p. 246.

Hagg, Erik L. (See Westad and Hagg.)

Hale & Kilburn Corporation. (See Lambert, Albert L., assignor.)

Hale & Kilburn Corporation. (See Ruchmann, Louis E., assignor.)

Halléges, Gustave A., Turbier, France, Wick-holder. No. 1,312,536; Aug. 12; v. 265; p. 158.

Hall, Chester L., Fort Wayne, Ind., assignor to General Electric Company, Charging system for storage batteries. No. 1,312,980; Aug. 12; v. 265; p. 246.

Hall, Holmes, et al. (See May, Harry E., assignor.)

Hallowell, Howard T., Philadelphia, Pa., Metal bench structure. No. 1,313,182; Aug. 12; v. 265; p. 285.

Hambek, Frank M., Lidgerwood, N. D., Change-speed gearlug. No. 1,312,981; Aug. 12; v. 265; p. 246.

Hamblin & Russell Manufacturing Company. (See Ryerson, Eugene H., assignor.)

Hamel, Albert H. (See Shepherd, Arthur W., assignor.)

Hamel Shoe Machinery Company. (See Scarlett and Adams, assignors.)

Hamilton, John M., and P. A. Rooy, Los Angeles, Calif., Roller-bearing spring-insert. No. 1,313,183; Aug. 12; v. 265; p. 286.

Hamlin, Allen L. (See Rose and Hamlin.)

Hamlin, Ben M., assignor to J. V. Meyerling Trunk Company, Chicago, Ill., Hatbox for trunks. No. 1,313,223; Aug. 12; v. 265; p. 294.

Hampsher, Wallace S., Chicago, Ill., Curtain-structure. No. 1,313,237; Aug. 12; v. 265; p. 296.

Handley, Samuel E., Chicago, Ill., Machinist's testing device. No. 1,313,086; Aug. 12; v. 265; p. 267.

Hanson, John H., Somerville, Mass., Drifting valve for locomotives. No. 1,312,986; Aug. 12; v. 265; p. 231.

Hanson, Lewis, assignor to Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ontario, Canada, Casement-window stay. No. 1,312,727; Aug. 12; v. 265; p. 196.

Harding, Charles E., assignor of one-third to H. B. Lane, Sioux Falls, S. D., Transmission-gear lock. No. 1,312,728; Aug. 12; v. 265; p. 196.

Harpman, Charles A., Youngstown, Ohio, Direction-indicator for vehicles. No. 1,312,537; Aug. 12; v. 265; p. 159.

Harriman, David R., Jr. (See Redmond, Harriman, and Richardson.)

Harris Automatic Press Company, The. (See Harrold, Charles W., assignor.)

Harrison, Edith. (See Mundy and Harrison.)

Harrison Safety Roller Works. (See Gamble, Joseph W., assignor.)
 Harrison, Victor B., Toronto, Ontario, Canada. Sharpening device. No. 1,312,538; Aug. 12; v. 265; p. 159.
 Harrold, Charles W., Warren, assignor to The Harris Automatic Press Company, Niles, Ohio. Sheet-feeder. No. 1,312,539; Aug. 12; v. 265; p. 159.
 Harrold, Charles W., Warren, assignor to The Harris Automatic Press Company, Niles, Ohio. Sheet-feeder. No. 1,312,540; Aug. 12; v. 265; p. 159.
 Hartwick, Ernest F., assignor to Fruehauf Trailer Company, Detroit, Mich. Supporting jack. No. 1,313,087; Aug. 12; v. 265; p. 267.
 Harvey, Louis B., Stockton, Calif. Tractor. No. 1,312,982; Aug. 12; v. 265; p. 244.
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 Hathaway, Joseph D., Montreal, Quebec, Canada. Cover for fuses of projectiles. No. 1,313,098; Aug. 12; v. 265; p. 267.
 Hauer, Gustav W., Jackson, Tenn. Awning-arm. No. 1,312,840; Aug. 12; v. 265; p. 219.
 Hayden, Henry A., assignor to Hayden Inventions Corporation, Westfield, N. J. Cleaning implement. No. 1,313,184; Aug. 12; v. 265; p. 286.
 Hayden, Henry A., assignor to Hayden Inventions Corporation, Westfield, N. J. Brush. No. 1,313,185; Aug. 12; v. 265; p. 286.
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 Hayes, Stanley W., Richmond, Ind. Switch-stand. No. 1,312,691; Aug. 12; v. 265; p. 189.
 Helligenslein, Gus, Altamont, Ill. Railway-crossing signal. No. 1,312,630; Aug. 12; v. 265; p. 178.
 Helms, Otto C. M. Wild, Southwick, and W. E. Schwarzmunn, Springfield, Mass., assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Electrical condenser and mounting therefor. No. 1,312,983; Aug. 12; v. 265; p. 247.
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 Helms, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,312,785; Aug. 12; v. 265; p. 207.
 Helms, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,312,786; Aug. 12; v. 265; p. 208.
 Hellstrom, Frank O., Bismarck, N. D. Building-block mold. No. 1,312,631; Aug. 12; v. 265; p. 178.
 Helni, Clyde D., assignor to Oil Mill Machinery & Manufacturing Co., Fort Worth, Tex. Saw-gunmer. No. 1,313,238; Aug. 12; v. 265; p. 297.
 Heedrickson, William A., assignor to McWhorter Manufacturing Company, Riverton, N. J. Potato-picker mechanism for potato-planters. No. 1,312,984; Aug. 12; v. 265; p. 247.
 Herbst, William R., Columbus, Ind. Screen for inclosed automobile bodies. No. 1,312,542; Aug. 12; v. 265; p. 159.
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 Herr, Herbert T., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Guard-turbine installation. No. 1,312,907; Aug. 12; v. 265; p. 231.
 Horace, Frederick C., Waltham, Mass. Timer-casing. No. 1,312,985; Aug. 12; v. 265; p. 247.
 Hoyerman, Charles L., assignor of one-half to C. H. A. Elye, London, England. Steering mechanism for motor vehicles. No. 1,312,900; Aug. 12; v. 265; p. 231.
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 Heya, John J., Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Last. No. 1,312,543; Aug. 12; v. 265; p. 160.
 Hirst, James, Melrose, Mass., assignor to Charnock Manufacturing Company, Pawtucket, R. I. Warp-delivering means for looms. No. 1,312,847; Aug. 12; v. 265; p. 219.
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 Hoffmann, Ignatz, Ford City, Pa. Machine for the manufacture of paper excelsior. No. 1,312,986; Aug. 12; v. 265; p. 247.
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 Hoke, Harry A., Altoona, Pa. Cross-head wrist-pile for locomotives. No. 1,312,987; Aug. 12; v. 265; p. 247.
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 Hopkins, Frank H., Somerville, assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Intermittent-grip device. No. 1,312,787; Aug. 12; v. 265; p. 208.
 Hopkins, William A. (See Strubbs and Hopkins.)
 Horn, Lloyd R., Little Rock, Ark. Engine-valve. No. 1,312,730; Aug. 12; v. 265; p. 196.
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Horsch, Walter E., deceased; A. M. Horsch, administratrix; assignor to The Measuregraph Company, St. Louis, Mo. Counter attachment. No. 1,312,693; Aug. 12; v. 265; p. 189.
 Howard, Wallace E., Chicago, Ill. Automobile-inclosure. No. 1,313,156; Aug. 12; v. 265; p. 286.
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 Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Method of and means for amplifying electrical variations. No. 1,313,187; Aug. 12; v. 265; p. 287.
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 Hultberg, Gottfrid, Chicago, Ill., assignor to The Harrington Company. Shingle-machine. No. 1,313,224; Aug. 12; v. 265; p. 294.
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 Hunt, Jonathan A., Salem, Mass. Needle for sound-reproducing machines. No. 1,312,849; Aug. 12; v. 265; p. 220.
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 He, William, New York, N. Y. Attachment-plug. No. 1,313,089; Aug. 12; v. 265; p. 247.
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 Irach, Jacob, New York, N. Y. Amusement device. No. 1,312,988; Aug. 12; v. 265; p. 248.
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 J. W. Cruikshank Engineering Company. (See Cruikshank, James W., assignor.)
 Jabez Burns & Sons. (See Schnuck, Edward F., assignor.)
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,217; Aug. 12; v. 265; p. 292.
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,218; Aug. 12; v. 265; p. 292.
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Tractor. No. 1,313,219; Aug. 12; v. 265; p. 293.
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Bucket structure for excavating and like machines. No. 1,313,220; Aug. 12; v. 265; p. 295.
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Boom and bucket control for loading and excavating machines. No. 1,313,221; Aug. 12; v. 265; p. 293.
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 Judge, Fred, Hastings, England. Camera for composite heliography. No. 1,312,994; Aug. 12; v. 265; p. 189.
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 Kaufman, Sydney L. (See Schoradt, Frederick W. B., assignor.)
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 Kelly, Daniel X., St. Louis, Mo. Aeroplane. No. 1,312,548; Aug. 12; v. 265; p. 161.
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 Kessler, Louis, assignor to Non-Explosive Can and Tube Company, Chicago, Ill. Filler-tube and closure therefor for receptacles. No. 1,312,695; Aug. 12; v. 265; p. 189.
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 Langguth, Joseph O., Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-interrupter. No. 1,313,092; Aug. 12; v. 265; p. 288.
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 Lavolette, Felix, assignor of one-half to Connard & Neville, Green Bay, Wis. Dirigible headlight. No. 1,312,914; Aug. 12; v. 265; p. 232.
 Leake, John M., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass. Roll or wheel for roller-skates. No. 1,312,855; Aug. 12; v. 265; p. 221.
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 Lamp, Hermann, Erie, Pa., assignor to General Electric Company. Controlling means for engine-generator-driven vehicles. No. 1,313,097; Aug. 12; v. 265; p. 289.
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 Lewis, Frank D., West Orange, N. J., assignor, by mesne assignments, to the F. W. Freres Phonograph Company, New York, N. Y. Stay-arm. No. 1,312,636; Aug. 12; v. 265; p. 179.
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 Little, Edwin C., Denver, Colo. Promoting combustion. No. 1,312,916; Aug. 12; v. 265; p. 233.
 Limbach, Gustave A., New York, N. Y. Garment hanger and lock. No. 1,312,553; Aug. 12; v. 265; p. 161.
 Lindsley, Edward A., Spokane, Wash. Apparatus for coating or impregnating posts. No. 1,312,857; Aug. 12; v. 265; p. 221.
 Lister, Charles H., assignor to Minnesota Manufacturers' Association, North St. Paul, Minn. Spiral chute. No. 1,312,995; Aug. 12; v. 265; p. 249.
 Lister, George, Tow Law, England. Chimney pot, fue-top, and the like. No. 1,312,990; Aug. 12; v. 265; p. 249.
 Little, Orton C., Menasha, Wis. Humidifier. No. 1,312,997; Aug. 12; v. 265; p. 249.
 Littlefield, Augustine F., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,312,637; Aug. 12; v. 265; p. 179.
 Lo Cascio, Pasquale, Brooklyn, N. Y. Permutation-padlock. No. 1,312,790; Aug. 12; v. 265; p. 208.
 Locomotive Stoker Company. (See Lower, Nathan M., assignor.)
 Lodge & Shipley Machine Tool Company, The. (See Cockburn and Carlton, assignors.)
 Loewenstein, Louis C., Lynn, Mass., assignor to General Electric Company. Volume-corrector. No. 1,313,099; Aug. 12; v. 265; p. 260.
 Logan, Thomas P., Columbus, Ohio. Manifold-heater. No. 1,312,554; Aug. 12; v. 265; p. 161.
 Longoria, Nicholas, Laredo, Tex. Torpedo-controlling apparatus. No. 1,313,100; Aug. 12; v. 265; p. 250.
 Lower, Nathan M., Pittsburgh, Pa., assignor to Locomotive Stoker Company, Schenectady, N. Y. Locomotive stoker mechanism. No. 1,312,558; Aug. 12; v. 265; p. 222.
 Lucke, Charles E., New York, N. Y. Apparatus for burning explosive gaseous mixtures. No. 1,313,100; Aug. 12; v. 265; p. 288.
 Lundell, Alben E., and E. H. Clark, assignors to Western Electric Company, Incorporated, New York, N. Y. Signalling system. No. 1,312,791; Aug. 12; v. 265; p. 208.
 M. Schulz Company. (See Gustafson, Adolph P., assignor.)
 MacAndrews & Forbes Company. (See Melis, Charles H., assignor.)
 Macdonnell, Harry W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,312,795; Aug. 12; v. 265; p. 209.

MacGahan, Paul, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical protective device. No. 1,312,799; Aug. 12; v. 265; p. 269.

MacKenzie, Fred L., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation. Paterson, N. J. Machine for inserting fastenings. No. 1,312,557; Aug. 12; v. 265; p. 102.

Mackintosh, Edith M., et al. (See Mackintosh, Edward D., assignor.)

Mackintosh, Edward D., Brooklyn, assignor to S. S. Hepworth Company, New York, and E. M. Mackintosh, Brooklyn, N. Y. Lining for centrifugal machines. No. 1,313,227; Aug. 12; v. 265; p. 264.

Macmillan, Campbell, Schenectady, N. Y., assignor to General Electric Company. Electric ship propulsion. No. 1,313,102; Aug. 12; v. 265; p. 270.

MacMonagle, Roy O. (See Meyer and MacMonagle.)

Madison-Kipp Lubricator Company. (See Putnam, William H., assignor.)

Magle, William E., Buffalo, N. Y., and W. Ferris, Milwaukee, Wis. Leakage-return for hydraulic transmission. No. 1,312,701; Aug. 12; v. 265; p. 191.

Mahoney, Joseph P., Salt Lake City, Utah. Automobile-brake. No. 1,313,103; Aug. 12; v. 265; p. 270.

Mallinckrodt, John F., Salt Lake City, Utah. Pan-rolling machine. No. 1,312,640; Aug. 12; v. 265; p. 180.

Marchese, Antonietta. (See Marchese, Concettina and A.)

Marchese, Concettina and A., Brooklyn, N. Y. Inserting openwork in fabrics. No. 1,313,198; Aug. 12; v. 265; p. 288.

Martin, Charles C. (See Wright, Schellentrager, and Martin.)

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill. Automatic private-branch exchange telephone system. No. 1,312,558; Aug. 12; v. 265; p. 162.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill. Measured-service telephone system. No. 1,312,702; Aug. 12; v. 265; p. 191.

Martin, Harry N., Hyre, N. Y. Apparatus for delineating character according to the character of the hand. No. 1,312,860; Aug. 12; v. 265; p. 222.

Marx, Joseph J., St. Louis, Mo. Pad-support for pressing-machines. No. 1,312,641; Aug. 12; v. 265; p. 180.

Mason, Mittle, Washington, D. C. Cover for latrine-seats. No. 1,313,236; Aug. 12; v. 265; p. 296.

Matthews, Leslie, Plainfield, N. J. Score-board. No. 1,313,104; Aug. 12; v. 265; p. 270.

Mattson, Edward. (See Mattson, Henry and E.)

Mattson, Henry and E., Hutchinson, Minn. Combination hay and manure hook. No. 1,312,703; Aug. 12; v. 265; p. 191.

Maxim, Hudson, Hopatcong borough, N. J. Roadway and apparatus for its manufacture. No. 1,313,090; Aug. 12; v. 265; p. 250.

May, Harry E., assignor of one-third to H. Hall, one-fourth to W. B. O'Hannon, and one-twelfth to W. M. May, Sedalia, Mo. Gas-engine. No. 1,313,001; Aug. 12; v. 265; p. 250.

May, William M., et al. (See May, Harry E., assignor.)

Mayer, Fred J. (See Blaisdell, Robert W., assignor.)

Mayer, Louis, Kaukauna, Wis. Power-hammer guide-head. No. 1,313,092; Aug. 12; v. 265; p. 250.

Mayer, Virgilus A., Wollaston, Mass. Calculator. No. 1,312,797; Aug. 12; v. 265; p. 210.

McCallin, George L., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon motor. No. 1,312,556; Aug. 12; v. 265; p. 162.

McCluskey Register Company, The. (See Devera, Clyde E., assignor.)

McConnell, Lert, Grand River, Iowa. Cattle-guard. No. 1,312,793; Aug. 12; v. 265; p. 260.

McComick, Frank L., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y. Double-tracker musical instrument. No. 1,312,917; Aug. 12; v. 265; p. 233.

McCray, Harry F., Reno, Nev. Sparking device for explosive engines. No. 1,312,638; Aug. 12; v. 265; p. 179.

McCreary, Walter E., Altoona, Pa. Automobile magneto contact. No. 1,312,794; Aug. 12; v. 265; p. 260.

McCurdy, Arthur W., Victoria, British Columbia, Canada. Device for coating surfaces. No. 1,313,197; Aug. 12; v. 265; p. 288.

McDonald, William B., London, Ark. Well-cover. No. 1,312,559; Aug. 12; v. 265; p. 162.

McGrath, George E., Chicago, Ill. Catch-basin for downspouts. No. 1,312,699; Aug. 12; v. 265; p. 190.

McGuickin, Hugh, Syracuse, N. Y. Anchor for guy-rods. No. 1,312,918; Aug. 12; v. 265; p. 233.

McInerney, Joseph P., St. Louis, Mo. Portable house. No. 1,312,700; Aug. 12; v. 265; p. 191.

McIntyre, Joseph J., Brooklyn, N. Y. Aerial bomb. No. 1,312,898; Aug. 12; v. 265; p. 240.

McKee, Garret W., Rockford, Ill. Automatic temperature control for gas-furnaces and the like. No. 1,312,639; Aug. 12; v. 265; p. 179.

McKillop, James W. A., Montreal, Quebec, Canada. Power transmitting device. No. 1,312,699; Aug. 12; v. 265; p. 190.

McNulty, Thomas E., San Francisco, Calif. Ballot-box. No. 1,313,101; Aug. 12; v. 265; p. 270.

McQuarrie, James L. (See Scribner and McQuarrie.)

McQuirey, William H., and G. A. Keating, Buffalo, N. Y. Demountable wheel. No. 1,312,559; Aug. 12; v. 265; p. 222.

McSweeney, Frank H. (See Meyers, Campbell, and McSweeney.)

McWhorter Manufacturing Company. (See Hendrickson, William A., assignor.)

Meaunregraph Company, The. (See Hoesch, Walter E., assignor.)

Meklenburg, Wincenty P., Adena, Ohio. Garbage-receptacle. No. 1,313,003; Aug. 12; v. 265; p. 250.

Meigs, Charles H., Philadelphia, Pa., assignor to MacAndrews & Forbes Company, Camden, N. J. Fire-extinguishing apparatus. No. 1,312,559; Aug. 12; v. 265; p. 163.

Melersick, Erwin, Lockport, N. Y. Automatic train control. No. 1,312,919; Aug. 12; v. 265; p. 233.

Melton, Pink J., Memphis, Tex. Malt-header. No. 1,313,004; Aug. 12; v. 265; p. 251.

Messer, George F., Aberdeen, Wash. Dirigible headlight for automobiles. No. 1,312,560; Aug. 12; v. 265; p. 163.

Metals Recovery Company. (See Bacon, Raymond F., assignor.)

Metalite Company, The. (See Clapp, Albert L., assignor.)

Meyer, Charles L., and R. O. MacMonagle, Omaha, Neb. Mold for concrete columns. No. 1,313,005; Aug. 12; v. 265; p. 251.

Meyers, Frank W., C. L. Campbell, and F. H. McSweeney, Houston, Tex. Lint separator and cleaner. No. 1,312,798; Aug. 12; v. 265; p. 210.

Middleton, Claude E., Eagle Grove, Iowa. Traction-wheel. No. 1,312,740; Aug. 12; v. 265; p. 198.

Miller, Du Brul and Peters Manufacturing Co., The. (See Du Brul, Napoleon, assignor.)

Mills, Willie G., and C. T. Packard, assignors to Edward Packard and Company, Limited, Ipswich, England. Chamber used in the manufacture of sulfuric acid. No. 1,312,741; Aug. 12; v. 265; p. 198.

Mills, Willie G., and C. T. Packard, assignors to Edward Packard and Company, Limited, Ipswich, England. Chamber used in the manufacture of sulfuric acid. No. 1,312,742; Aug. 12; v. 265; p. 199.

Milmos, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Driving-wheel. No. 1,312,704; Aug. 12; v. 265; p. 191.

Minnesota Manufacturers' Association. (See Lister, Charles H., assignor.)

Minnich, Mary C. (See Minnich, Simon B., assignor.)

Minnich, Simon B., assignor to M. C. Minnich, Landisville, Pa. Press. No. 1,312,228; Aug. 12; v. 265; p. 291.

Mitchell, John C., East Orange, N. J. Dumping-bucket. No. 1,312,705; Aug. 12; v. 265; p. 192.

Mitchell, Oscar J., Ingersoll, Ontario, Canada. Combined wagon and horse body for motors with movable attachments. No. 1,312,561; Aug. 12; v. 265; p. 183.

Moard, Eric, assignor to Beech Brothers Manufacturing Company, East Hampton, Conn. Signaling device. No. 1,313,069; Aug. 12; v. 265; p. 251.

Moya, Emilio G., Nymegen, Netherlands. Preparing sub-lime. No. 1,312,743; Aug. 12; v. 265; p. 199.

Moffatt, James R., and R. S. Kelso, assignors to Union Special Machine Company, Chicago, Ill. Thread-ripper. No. 1,312,799; Aug. 12; v. 265; p. 210.

Moore, Hugh K., and G. A. Richter, assignors to Brown Company, Berlin, N. H. Making carbon bisulfide. No. 1,312,800; Aug. 12; v. 265; p. 210.

Moran, Frank B., Dallas, Tex. Faucet. No. 1,313,105; Aug. 12; v. 265; p. 271.

Morison, Donald B., Hartlepool, England. Apparatus for heating boiler feed-water. No. 1,313,189; Aug. 12; v. 265; p. 289.

Morris, Thomas J., Springfield, Mass. Sectional support. No. 1,312,861; Aug. 12; v. 265; p. 222.

Morrison, Cary A., Delaware, Ohio. Elastic non-inflatable tire. No. 1,313,097; Aug. 12; v. 265; p. 251.

Morrow, Alexander H., Pittsburgh, Pa. Heater or boiler. No. 1,312,801; Aug. 12; v. 265; p. 210.

Morse, Thomas, Bexley, near Sydney, New South Wales, Australia. Luggage-carrier. No. 1,312,562; Aug. 12; v. 265; p. 164.

Mockwitz, Rudolph, Detroit, Mich. Toy. No. 1,312,563; Aug. 12; v. 265; p. 164.

Mueller, Herman C., Milwaukee, Wis. Armature-winding mechanism. No. 1,312,564; Aug. 12; v. 265; p. 164.

Multipost Company. (See Balkwill and Schweizer, assignors.)

Mundy, Herbert C., and E. Harrison, Los Angeles, Calif. Garden-tool. No. 1,313,200; Aug. 12; v. 265; p. 289.

Munter, Charles, New York, N. Y. Body-conformer. No. 1,312,744; Aug. 12; v. 265; p. 199.

Murdoch, Everett C., Berkeley, Calif., and G. J. Kelly, Haverhill, Mass. Pyrophoric gas-limiter. No. 1,312,562; Aug. 12; v. 265; p. 222.

Murdock, George J., Newark, N. J. Self-sealing fuel-tank. No. 1,312,745; Aug. 12; v. 265; p. 199.

Murphy, Walter P. (See Slason, Vinton E., assignor.)

Murphy, Walter P., Chicago, Ill. Sheet-metal end structure for railway-cars. No. 1,312,106; Aug. 12; v. 265; p. 271.

Muster, Gerald F., Brooklyn, N. Y. Packing. No. 1,313,201; Aug. 12; v. 265; p. 289.

Muster, Gerald F., Brooklyn, N. Y. Packing. No. 1,313,202; Aug. 12; v. 265; p. 289.

Naraszewicz, Konstanty, Chicago, Ill. Caster. No. 1,312,563; Aug. 12; v. 265; p. 223.

Nathanson, William. (See Emmertman and Nathanson.)

National Carbon Company. (See Clark, Emerson L., assignor.)

Nelson, Henry W., Ashby, Minn. Window-sash fastener. No. 1,312,564; Aug. 12; v. 265; p. 223.

New Idea Spreader Company. (See Rollman, Bruce B., assignor.)

New Jersey Zinc Company. (See Rowand, Lewis G., assignor.)

Newhall, Henry B., Jr., executor. (See Pleister, Henry W., assignor.)

Niemann, Harry N., Armstrong, Iowa. Compressed-air grease-gun. No. 1,312,642; Aug. 12; v. 265; p. 180.

Niewinski, Victor, St. Paul, Minn. Adjustable saw-frame. No. 1,313,107; Aug. 12; v. 265; p. 271.

Niles, Irving F., Plainfield, N. J., assignor to H. Hoe and Co., New York, N. Y. Sheet-feeding mechanism. No. 1,312,865; Aug. 12; v. 265; p. 223.

Nofta, Harry H., and F. J. Schweinmer, Toledo, Ohio. Combined rotary earth-boring and draw machine. No. 1,312,565; Aug. 12; v. 265; p. 165.

Noiseless Typewriter Company, The. (See Anderson, Nils H., assignor.)

Non-Explosive Can and Tube Company. (See Kessler, Louis, assignor.)

Nord, Sverre, and A. Anderson, Seklu, Wash. Loading-boom. No. 1,313,108; Aug. 12; v. 265; p. 271.

Ofeldt, George, Philadelphia, Pa. Shaft-coupling. No. 1,313,109; Aug. 12; v. 265; p. 271.

Norris, Alexander, Dexter City, Ohio. Convertible self-grinding hoe. No. 1,312,802; Aug. 12; v. 265; p. 211.

North-Western Expanded Metal Co. (See Turner, Edgar A., assignor.)

Oakes, Lars E., Elk Point, S. D. Harrow. No. 1,313,006; Aug. 12; v. 265; p. 251.

O'Hannon, William D. (See May, Harry E., assignor.)

Ohlson, Olof, West Newton, assignor to Waltham Watch Company, Waltham, Mass. Time-fuse for artillery-projectiles. No. 1,312,863; Aug. 12; v. 265; p. 223.

Ohnell, Ernst J., Brooklyn, N. Y. Measuring instrument. No. 1,312,566; Aug. 12; v. 265; p. 165.

Oil Mill Machinery & Manufacturing Co. (See Helm, Clyde D., assignor.)

Ondulcon, Lansing, New York, N. Y. assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,312,866; Aug. 12; v. 265; p. 223.

Ordway, Joseph H., Brookline, assignor to Boston Blacking Company, Cambridge, Mass. Machine for use in manufacturing stiffeners for boots and shoes. No. 1,312,567; Aug. 12; v. 265; p. 165.

Osburn, Benjamin B. (See Byrnes and Osburn.)

Osmun, Orville H., Covington, Ky. Lifting-jack. No. 1,312,568; Aug. 12; v. 265; p. 165.

Otto, Maximilian J., New York, N. Y. Fluid heating and cooking stove. No. 1,312,804; Aug. 12; v. 265; p. 211.

Ottosen, Christopher. (See Dassen, Paul H., assignor.)

P. R. Glass Company. (See Glass, Perley R., assignor.)

Pacific Coast Typewriter Company. (See Bennett, Orin, assignor.)

Packard, Charles T. (See Mills and Packard.)

Packard Motor Car Company. (See McCain, George L., assignor.)

Padilla, Rafael, Habana, Cuba. Advertising device. No. 1,313,110; Aug. 12; v. 265; p. 272.

Page, William K., Orange, N. J., assignor to Chile Exploration Company, New York, N. Y. Belt conveyor. No. 1,313,111; Aug. 12; v. 265; p. 272.

Palke, James H., Manchester, N. H. Shaking-mixer. No. 1,312,569; Aug. 12; v. 265; p. 166.

Pakeman, Harry, Niles, Ohio. Suction fly-catcher. No. 1,313,203; Aug. 12; v. 265; p. 290.

Palmer, Charles S., Pittsburgh, Pa. Treating petroleum residues, &c. No. 1,313,069; Aug. 12; v. 265; p. 252.

Palmer, Lyndon C., Buffalo, N. Y., assignor to F. S. Hart Company, Limited, Toronto, Ontario, Canada. Box-making machine. No. 1,312,570; Aug. 12; v. 265; p. 166.

Palmgren, Nils A., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Determining the pressure between two bodies. No. 1,312,565; Aug. 12; v. 265; p. 211.

Parker, Charles L., Newark, N. J. Safety-catch for pins, brooches, and the like. No. 1,313,010; Aug. 12; v. 265; p. 252.

Parker, Humphrey F., Dunedin, New Zealand. Aeroplane and the like. No. 1,312,571; Aug. 12; v. 265; p. 166.

Parker, Hatzemood D., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Secret-signaling system. No. 1,312,572; Aug. 12; v. 265; p. 166.

Parker, Roy T., Buffalo, N. Y. Spring-clamp. No. 1,312,746; Aug. 12; v. 265; p. 199.

Pasa & Seymour. (See Thompson, Don N., assignor.)

Pathe Freres Phonograph Company. (See Lewis, Frank D., assignor.)

Patterson, William J., and R. M. Hickley, assignors to Heyl & Patterson, Inc., Pittsburgh, Pa. Coal-cleaning apparatus. No. 1,312,573; Aug. 12; v. 265; p. 222.

Payne, John H., Jr., Schenectady, N. Y., assignor to General Electric Company. Radiotelephone system. No. 1,313,112; Aug. 12; v. 265; p. 272.

Pearson, Fred. (See Blackwood and Pearson.)

Pellow, Arthur, assignor to American Optical Company, Southbridge, Mass. Lens-forming process. No. 1,312,920; Aug. 12; v. 265; p. 234.

Pennsylvania Wire Glass Company. (See Cox, Walter, assignor.)

Perkell, Louis F., assignor to Traverse City Refrigerator Co., Traverse City, Mich. Refrigerator construction. No. 1,312,868; Aug. 12; v. 265; p. 223.

Perrault Company, The. (See Kriegelsheim, Heinrich, assignor.)

Petosa, Joseph, Philadelphia, Pa. Excavator and hoist and traveler or trolley therefor. No. 1,312,869; Aug. 12; v. 265; p. 224.

Peterson, Harriett L., Portland, Oreg. Combined secret pocket and hose-supporter. No. 1,313,229; Aug. 12; v. 265; p. 295.

Pettersson, Erik W., Jamestown, assignor to W. Lewis, Utica, N. Y. Spring bed or seat. No. 1,312,570; Aug. 12; v. 265; p. 224.

Phoenix Hermetic Company. (See Tallafiero, Thomas L., assignor.)

Photo Motion Company. (See Clark, Edwin W., assignor.)

Picard, René, Paris, France. Mileage and time indicator for vehicles. No. 1,312,747; Aug. 12; v. 265; p. 199.

Pichot, de Berenne, Léontine, Angers, France. Trap for flies and the like. No. 1,312,573; Aug. 12; v. 265; p. 167.

Pierce, Ralph E., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Secret-signaling system. No. 1,312,574; Aug. 12; v. 265; p. 167.

Pike, Robert D., San Francisco, Calif. Manufacturing magnesite refractories. No. 1,312,871; Aug. 12; v. 265; p. 224.

Pinger, Leo, Fallon, Nev., assignor of one-half to Z. Kendall, San Francisco, Calif. Roller-grizzly. No. 1,313,011; Aug. 12; v. 265; p. 252.

Plester, Henry W., Westfield, N. J., assignor to H. B. Newhall, Jr., executor. Conduit and cable clamp. No. 1,313,113; Aug. 12; v. 265; p. 272.

Poetsch, Max, Chilton, N. J. Burling or examining machine. No. 1,313,012; Aug. 12; v. 265; p. 252.

Pollon, George V., Tarrytown, N. Y. Micrometer-callipers. No. 1,312,643; Aug. 12; v. 265; p. 180.

Polycar, Constantine C., Tonnerre, France. Method and apparatus for casing wells. No. 1,313,013; Aug. 12; v. 265; p. 252.

Posternak, Swigol, Chant-Bougeries, near Geneva, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Organic phosphorus compound from plants. No. 1,313,014; Aug. 12; v. 265; p. 253.

Powers Accounting Machine Company. (See Powers, James, assignor.)

Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Record-card feed. No. 1,312,806; Aug. 12; v. 265; p. 212.

Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Counter for accounting-machines. No. 1,312,807; Aug. 12; v. 265; p. 212.

Priest, Henry M. (See Ford, Richardson, Greenbaum, and Priest.)

Pritchard, Albert R., New York, N. Y. Extension waste-basket. No. 1,312,575; Aug. 12; v. 265; p. 167.

Putnam, William H., assignor to Madison-Kipp Lubricator Company, Madison, Wis. Lubricator. No. 1,313,204; Aug. 12; v. 265; p. 290.

Quackenbush, Clinton L. (See Quackenbush, Harvey E., and C. L.)

Quackenbush, Harvey E. and C. L., Bloomfield, N. J., assignors, by mesne assignments, to General Electric Company. Glass-blowing apparatus. No. 1,313,205; Aug. 12; v. 265; p. 290.

Quass, Ralph L., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system for telephone-exchanges. No. 1,312,808; Aug. 12; v. 265; p. 212.

R. Hoe and Co. (See Niles, Irving F., assignor.)

Raab, Henry C., Garrettville, and J. H. Dundon, Youngstown, Ohio. Valve. No. 1,312,614; Aug. 12; v. 265; p. 180.

Ratcliff, John M. (See Wright and Ratcliff.)

Rauch, Otto, New Braunfels, Tex. Farm implement. No. 1,312,748; Aug. 12; v. 265; p. 200.

Rayfield, Charles L., assignor to Finkelsen & Kropf Manufacturing Company, Chicago, Ill. Carburetor. No. 1,312,749; Aug. 12; v. 265; p. 200.

Rea, Stanley O., Toronto, Ontario, Canada. Poultry-feeder. No. 1,312,576; Aug. 12; v. 265; p. 167.

Redmond, George H., D. R. Harriman, Jr., and O. L. Richardson, Griffin, Ga.; said Harriman assignor to The Terrell Machine Company, Charlotte, N. C. Robbin or quill cleaning attachment for looms. No. 1,312,750; Aug. 12; v. 265; p. 200.

Reid, Casper L., Chicago, Ill. Stereotyping-machine. No. 1,313,114; Aug. 12; v. 265; p. 272.

Redrup, Charles B., Leeds, England. Valve-gear of internal-combustion engines. No. 1,312,577; Aug. 12; v. 265; p. 167.

Reeve, Sidney A., New Brighton, N. Y. Musical notation. No. 1,313,015; Aug. 12; v. 265; p. 253.

Reld, Charles F., Louisville, Ky. Broom. No. 1,313,206; Aug. 12; v. 265; p. 290.

Reiff, George J., Hattboro, Pa. Window construction. No. 1,313,239; Aug. 12; v. 265; p. 297.

Rettinger, William N., Bourbon, Ind. Wire cable. No. 1,312,872; Aug. 12; v. 265; p. 224.

Rhodes, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Harness motion for looms. No. 1,312,751; Aug. 12; v. 265; p. 200.
 Rhodes, Thurman A., Altamont, Ill. Crate-opener. No. 1,312,873; Aug. 12; v. 265; p. 221.
 Richardson, Charles F. (See Ford, Richardson, Greenbaum, and Prust.)
 Richardson, Oliver L. (See Redmond, Harriman, and Richardson.)
 Richter, George A. (See Moore and Richter.)
 Riley, Lynn G., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,312,752; Aug. 12; v. 265; p. 201.
 Ringer, Luther, assignor to The Simmen Automatic Railway Signal Company, Buffalo, N. Y. Signal system for single-track railways. No. 1,312,921; Aug. 12; v. 265; p. 231.
 Roberts, Edward J., Alexandria, Minn. Road-scraper. No. 1,313,115; Aug. 12; v. 265; p. 273.
 Roberts, Arthur, Evanston, Ill. Regenerative roke-oven. No. 1,313,207; Aug. 12; v. 265; p. 290.
 Roberts, Arthur, Evanston, Ill. Regenerative coke-oven. No. 1,313,208; Aug. 12; v. 265; p. 290.
 Roberts, John W., Passaic, N. J. Textile apparatus. No. 1,312,874; Aug. 12; v. 265; p. 225.
 Roberts, William T., Buckingham, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for stitching fastenings. No. 1,312,578; Aug. 12; v. 265; p. 168.
 Robertson, Henry M. (See Gilman, George H., assignor.)
 Robinson, Roland H. (See Chapman and Robinson.)
 Robinson, Roland H. (See Chapman, Penrose E., assignor.)
 Robison, Floyd W., assignor to Floyd W. Robison Company, Detroit, Mich. Treating coffee. No. 1,313,209; Aug. 12; v. 265; p. 291.
 Rockwood Sprinkler Company of Massachusetts. (See Carlson, Edmar G., assignor.)
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 Rollman, Bruce H., Pittsburgh, Pa., assignor to New Idea Spreader Company, Coldwater, Ohio. Gearing for manure-spreaders. No. 1,313,110; Aug. 12; v. 265; p. 273.
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 Rose, Daniel A., Hills, Iowa. Automobile-extractor. No. 1,312,759; Aug. 12; v. 265; p. 168.
 Rose, Frederick C., assignor to Garret Carter Co. Inc., Chattanooga, Tenn. Trade-stimulating means. No. 1,312,922; Aug. 12; v. 265; p. 231.
 Rose, James H., Edgeworth, Pa. Apparatus for producing combustible fuel. No. 1,312,875; Aug. 12; v. 265; p. 225.
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 Ruchlman, Louis E., assignor to Hale & Kilburn Corporation, Philadelphia, Pa. Panel-retaining means. No. 1,312,925; Aug. 12; v. 265; p. 233.
 Rushton, Herbert J., Southfields, England. Means for supporting ceramic ware while being fired in ovens. No. 1,313,018; Aug. 12; v. 265; p. 233.
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 Samuel Winslow Skate-Mfg. Co., The. (See Louke, John M., assignor.)
 Sanborn, Hugh D., Swampscott, Mass., assignor to General Electric Company. Constant-current regulator. No. 1,313,117; Aug. 12; v. 265; p. 273.
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 Santacrose, Agostino, assignor of three-tenths to J. Grumbos and three-tenths to S. Sadaris, Elyria, Ohio. Sole. No. 1,313,119; Aug. 12; v. 265; p. 273.
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Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Ping-pong-plate for use with rucks. No. 1,313,120; Aug. 12; v. 265; p. 273.
 Sarla, Joseph H., Beloit, Wis. Driving-belt. No. 1,312,580; Aug. 12; v. 265; p. 168.
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 Schellentrager, Eugene W. (See Wright, Schellentrager, and Martin.)
 Schies, John, Anderson, Ind. Apparatus for feeding and delivering glass. No. 1,312,876; Aug. 12; v. 265; p. 225.
 Schmid, Peter, Basel, Switzerland. Producing foam or froth baths for ungumming silk and silk waste. No. 1,313,235; Aug. 12; v. 265; p. 296.
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 Schoradt, Fredrick W. H., assignor to S. L. Kaufman, Kittanning, Pa. Adding and type-writing machine. No. 1,313,230; Aug. 12; v. 265; p. 295.
 Schoradt, Fredrick W. H., assignor to S. L. Kaufman, Kittanning, Pa. Adding-machine. No. 1,313,231; Aug. 12; v. 265; p. 295.
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 Schumann, Alfred F., assignor of one-third to W. C. Cold and one-third to A. G. Schumann, Baltimore, Md. Water-cooled valve. No. 1,313,122; Aug. 12; v. 265; p. 274.
 Schwartz, Michael, assignor to Automatic Electric Company, Chicago, Ill. Selective ringing telephone system. No. 1,312,706; Aug. 12; v. 265; p. 192.
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 Schweiger, William F. (See Balkwill and Schweiger.)
 Schwimmer, Fredrick J. (See Notz and Schwimmer.)
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 Scott, David J., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Multicolor offset-press. No. 1,313,123; Aug. 12; v. 265; p. 274.
 Scott, Isabella, et al., executors. (See Scott, David J., assignor.)
 Scott, Gertrude M., Scotta Mills, Oreg. Hot-water bottle. No. 1,313,021; Aug. 12; v. 265; p. 254.
 Scott, Walter, Sheridan, Wyo. Compiling device. No. 1,312,584; Aug. 12; v. 265; p. 169.
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 Seldin, Jacob J., Syracuse, N. Y. Tailor's steaming-iron. No. 1,313,124; Aug. 12; v. 265; p. 275.
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 Sherman, Guy, Bremerton, Wash. Clamp for sheets. No. 1,312,926; Aug. 12; v. 265; p. 235.
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 Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electric-furnace electrode. No. 1,113,126; Aug. 12; v. 265; p. 275.
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 Silver, Herman, Minneapolis, Minn. Cupola-ventilator for barns and the like. No. 1,312,586; Aug. 12; v. 265; p. 169.
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 Slapson, John T., assignor to Economy Sales Company, Chicago, Ill. Furnace-grate and vaporizer construction. No. 1,313,127; Aug. 12; v. 265; p. 275.
 Singer, Frank J., assignor to American Pressweld Radiator Corporation, Detroit, Mich. Radiator. No. 1,313,212; Aug. 12; v. 265; p. 291.

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 Strang, Harry B., London, assignor to Thos. Frith and Sons Limited, Sheffield, England. Projectile. No. 1,312,763; Aug. 12; v. 265; p. 203.
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 Thomas, John H., Mount Vernon, N. Y. Surgical-bandage fastener. No. 1,313,138; Aug. 12; v. 265; p. 277.
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 Tiffany, George S., Summit, N. J., assignor to Gray National Telautograph Company, New York, N. Y. Telautographic apparatus. No. 1,312,596; Aug. 12; v. 265; p. 171.
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Turner, Walter V., Wilkesburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. No. 1,312,049; Aug. 12; v. 265; p. 181.

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Underwood Typewriter Company. (See White, William L., assignor.)

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

Union Special Machine Company. (See Moffatt and Kelso, assignors.)

Union Special Machine Company. (See Onderdonk, Lansing, assignor.)

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United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)

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United Shoe Machinery Corporation. (See Roberts, William T. R., assignor.)

United Shoe Machinery Corporation. (See Warren, Frank H., assignor.)

United Shoe Machinery Corporation. (See Winkley, Erasmus E., assignor.)

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Vincent, Sidney C., Baltimore, Md., assignor, by mesne assignments, to Cities Illuminating Company, New York, N. Y. Gas-cork. No. 1,313,149; Aug. 12; v. 265; p. 278.

Vogeler, John, New York, N. Y. Drumhead-tightener. No. 1,312,771; Aug. 12; v. 265; p. 205.

Votey, Edwin S., Summit, N. J., assignor to The Aeolian Company. Machine device for pianos. No. 1,313,141; Aug. 12; v. 265; p. 278.

Wagner Electric Manufacturing Company. (See Dick, Burns, assignor.)

Wahlen, Harley A., West Terre Haute, Ind. Grate dumping and handling apparatus. No. 1,313,142; Aug. 12; v. 265; p. 278.

Wall, Willie F., San Francisco, Calif. Pen-point. No. 1,312,712; Aug. 12; v. 265; p. 193.

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Warren, Frank H., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. No. 1,312,398; Aug. 12; v. 265; p. 171.

Watrons, William R., assignor to C. J. Bates & Son, Chester, Conn. Manicure implement. No. 1,312,653; Aug. 12; v. 265; p. 182.

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Weaver, Charlie R., Los Angeles, Calif. Knife-sharpener. No. 1,312,654; Aug. 12; v. 265; p. 182.

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Weiss, Jay G., Montclair, and Knoch, Newark, assignors to Hyatt Roller Bearing Division, United Motors Corporation, Harrison, N. J. Roll grinding machine. No. 1,312,831; Aug. 12; v. 265; p. 216.

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Wenrick, David L., Harrisburg, Pa. Sash-fastener. No. 1,312,933; Aug. 12; v. 265; p. 236.

Westad, Abraham G., and E. L. Hagg, Hunsfos, assignors to Aktieselskabet G. Hartmann, Christiania, Norway. Sieve for wood-pulp plants. No. 1,313,145; Aug. 12; v. 265; p. 279.

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Western Electric Company. (See Scribner and McQuarrie, assignors.)

Western Electric Company. (See Taggart, Dawson M., assignor.)

Western Electric Company. (See Wilbur, Ray S., assignor.)

Western Electric Company. (See Williams, Samuel B., Jr., assignor.)

Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)

Westinghouse Electric & Manufacturing Co. (See Ehrhart, Raymond N., assignor.)

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Westinghouse Electric & Manufacturing Company. (See Langguth, Joseph O., assignor.)

Westinghouse Electric & Manufacturing Company. (See MacGahan, Paul, assignor.)

Westinghouse Electric & Manufacturing Company. (See Riley, Lynn G., assignor.)

Westinghouse Electric & Manufacturing Company. (See Smith, Walter H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Turnbull, Lawrence W., assignor.)

Westlake, Charles T., St. Louis, Mo. Internal-combustion engine. No. 1,313,033; Aug. 12; v. 265; p. 256.

Weymann, Harry W., Philadelphia, Pa., assignor to H. A. Weymann and Son. Banjo attachment. No. 1,312,882; Aug. 12; v. 265; p. 224.

Whalen, James, Omaha, Nebr. Valve and ignition mechanism for gas-stoves. No. 1,312,655; Aug. 12; v. 265; p. 182.

Wheary, George H., Racine, Wis. Trunk-drawer construction. No. 1,312,714; Aug. 12; v. 265; p. 193.

Wheeler, John H., Plymouth, Wis. Cheese-box. No. 1,312,772; Aug. 12; v. 265; p. 205.

Wheelock, Herbert K., Long Beach, Calif. Spraying and burning apparatus. No. 1,312,934; Aug. 12; v. 265; p. 237.

White, William L., Birmingham, Ala., assignor to Underwood Typewriter Company, New York, N. Y. Typewriter. No. 1,312,883; Aug. 12; v. 265; p. 224.

Whitelaw, John F. (See Anderson, Clarke, and Whitelaw.)

Whitmore, Edward E., assignor to The Curtail Supply Company, Chicago, Ill. Diaphragm-buffing mechanism. (Reissue.) No. 1,470,606; Aug. 12; v. 265; p. 298.

Wickstrom, Joseph H., Beresford, S. D. Hog-watering trough. No. 1,313,146; Aug. 12; v. 265; p. 279.

Wiele, Sigurd, Brooklyn, assignor to American Toyland Creators, Inc., New York, N. Y. Submersible toy submarine. No. 1,312,656; Aug. 12; v. 265; p. 183.

Wigand, Edwin L., Youngstown, Ohio. Emplacing process and apparatus. No. 1,312,657; Aug. 12; v. 265; p. 183.

Wilbur, Ray S., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,312,773; Aug. 12; v. 265; p. 205.

Wild, Charles M. (See Helms, Wild, and Schwarzmann.)

Wilkinson Brothers and Company. (See Fuhrmann, Warren, assignor.)

Williams, Edward T., New York, N. Y. Refrigerating-machine. No. 1,312,600; Aug. 12; v. 265; p. 172.

Williams, Harvey D., Wallingford, Conn., assignor, by mesne assignments, to J. E. Gleason, trustee, Rochester, N. Y. Gear-cutting tool. No. 1,313,034; Aug. 12; v. 265; p. 257.

Williams, Harvey D., Wallingford, Conn., assignor to Gear Improvement Company, Inc., New York, N. Y. Internal gear. No. 1,313,035; Aug. 12; v. 265; p. 257.

Williams, Hugh R., Chicago, Ill. Knob-attaching means. No. 1,313,147; Aug. 12; v. 265; p. 279.

Williams, Milton F., St. Louis, Mo. Combined disintegrating and separating device. No. 1,312,658; Aug. 12; v. 265; p. 183.

Williams, Samuel B., Jr., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic switch-control circuits. No. 1,312,884; Aug. 12; v. 265; p. 227.

Williamson, John D., Jr., Philadelphia, Pa. Electrical steering-gear. No. 1,312,935; Aug. 12; v. 265; p. 237.

Wilson, Fred G., Brooklyn, N. Y. Roller-bearing. No. 1,312,936; Aug. 12; v. 265; p. 237.

Wilson, Robert G., Orndoff, W. Va. Hand bean and corn planter. No. 1,312,617; Aug. 12; v. 265; p. 214.

Wilson, William, Boston, Mass., assignor to Campbell Borth Machinery Company, Portland, Me. Sewing-machine. No. 1,312,659; Aug. 12; v. 265; p. 183.

Winkley, Erasmus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Feed mechanism. No. 1,313,148; Aug. 12; v. 265; p. 279.

Winslow, William H., River Forest, assignor of one-half to C. A. Brown, Hinsdale, Ill. Carburation. No. 1,312,660; Aug. 12; v. 265; p. 183.

Winston, Overton, Minneapolis, Minn. Headlight. No. 1,312,715; Aug. 12; v. 265; p. 193.

Wise, Maxwell M., Detroit, Mich. Coating metals. No. 1,312,716; Aug. 12; v. 265; p. 194.

Wojcik, Joseph J., Pulaski, Wis. Grain-measuring and sack-filling device. No. 1,313,149; Aug. 12; v. 265; p. 280.

Wolf, John, Topeka, Kans. Lock. No. 1,312,601; Aug. 12; v. 265; p. 172.

Wollesen, Jacob F., Lockwood, Calif. Variable-speed transmission. No. 1,313,036; Aug. 12; v. 265; p. 257.

Wood, Frank W., Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y. Gun-fire-control apparatus. No. 1,312,602; Aug. 12; v. 265; p. 172.

Wood, Frank W., Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y. Signaling apparatus. No. 1,312,603; Aug. 12; v. 265; p. 172.

Wood, Rodney J., Dayton, Ohio. Credit file. No. 1,313,150; Aug. 12; v. 265; p. 280.

Woodbridge, Joseph L., Philadelphia, Pa. Means for transmission of power. No. 1,312,604; Aug. 12; v. 265; p. 173.

Worden, Dudley, Ferndale, Wash. Saw attachment. No. 1,312,661; Aug. 12; v. 265; p. 184.

Wright, Harvey W., and J. M. Ratcliff, Florence, Ala. Gear-wheel. No. 1,312,818; Aug. 12; v. 265; p. 214.

Wright, Samson D., E. W. Schellentrager, and C. C. Martin, said Schellentrager and said Martin assignors to Atlas Car and Manufacturing Company, Cleveland, Ohio. Truck. No. 1,313,151; Aug. 12; v. 265; p. 280.

Wygodsky, Leon, assignor to Baltimore Oil Engine Company, Baltimore, Md. Internal-combustion engine. No. 1,312,605; Aug. 12; v. 265; p. 173.

Yarrow, Harold E., Scotstoun, Glasgow, Scotland. Cooling device for steam-generating apparatus of submarine vessels. No. 1,312,662; Aug. 12; v. 265; p. 184.

Yarrow, Harold E., Glasgow, Scotland. Turbine-blade. No. 1,313,152; Aug. 12; v. 265; p. 280.

Yernaux, Joseph E., Lutetia, France. Screening apparatus. No. 1,312,604; Aug. 12; v. 265; p. 184.

Young Brothers Company. (See Young, George A., assignor.)

Young, George A., assignor to Young Brothers Company, Detroit, Mich. Oven-wall. No. 1,312,663; Aug. 12; v. 265; p. 184.

Zboyan, Julia E., Lyons, N. J. Sink attachment. No. 1,313,153; Aug. 12; v. 265; p. 280.

Ziemer, Fredrick, Freeport, N. Y. Tool-handle fastener. No. 1,312,819; Aug. 12; v. 265; p. 214.

Zion, John E., Enid, Okla. Calliper device. No. 1,312,606; Aug. 12; v. 265; p. 173.

Zoeller, Milton G., Kansas City, Mo. Feed-mill. No. 1,312,717; Aug. 12; v. 265; p. 194.

Zweeres, William K. (See Kargaa and Zweeres.)

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Hoeer, Philipp, Peoria, Ill. Patches for repairing inner tubes, tire-casings, and other rubber goods. No. 126,231; Aug. 12; v. 265; p. 301.

Price-Booker Manufacturing Co., Houston, Tex. Certain named foods. No. 126,232; Aug. 12; v. 265; p. 301.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Howard & Casey Co., Mount Vernon, Ill. "Scout." (For Coffee.) No. 21,431; Aug. 12; v. 265; p. 303.

Hedges-Buck Company, Stockton, Calif. "Hedges Fancy Blend Coffee." (For Coffee.) No. 21,432; Aug. 12; v. 265; p. 303.

Hoye, Stephen M., New York, N. Y., assignor to Ka-Zu Beverage Co., Inc. "Victory Punch." (For Victory Punch Tablets.) No. 21,433; Aug. 12; v. 265; p. 303.

Hudson County Tobacco Co., Jersey City, N. J. "84." (For Cigars and Tobacco.) No. 21,434; Aug. 12; v. 265; p. 303.

Ka-Zu Beverage Co., Inc. (See Hoye, Stephen M., assignor.)

Marl, E. & O., Winfield Junction, N. Y. "La Perferita." (For Musical-Instrument Strings Made of Gut.) No. 21,435; Aug. 12; v. 265; p. 303.

Incarbone, Mario, New York, N. Y. "Bloom of Youth." (For a Facial Liquid Rouge.) No. 21,436; Aug. 12; v. 265; p. 303.

Indian Head Products Corporation, Buffalo, N. Y. "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) No. 21,437; Aug. 12; v. 265; p. 303.

Iroquois Beverage Co., Buffalo, N. Y. "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) No. 21,438; Aug. 12; v. 265; p. 303.

Johnson, Charles W., Springfield, Mass. "Photo Flowers." (For Folders Containing Photographs of Flowers.) No. 21,439; Aug. 12; v. 265; p. 303.

Kelly, W. H., St. Paul, Minn. "Hair-Ze." (For Hair-Tonic.) No. 21,440; Aug. 12; v. 265; p. 303.

Klar, Adolph, New York, N. Y. "Hold-Tight." (For Hair-Wavers.) No. 21,441; Aug. 12; v. 265; p. 303.

Kolb, George O., Hartford, Conn. "Kolb's Scotch Loaf." (For Bread.) No. 21,442; Aug. 12; v. 265; p. 303.

La Sierra Heights Canning Co., Los Angeles, Calif. "La Liberta." (For Tomato Paste with Basilico.) No. 21,443; Aug. 12; v. 265; p. 303.

Lawrence Airplane Model and Supply Company, Chicago, Ill. "Military Biplane." (For Toy Airplanes, Model Airplanes, and Scale Models of Airplanes.) No. 21,444; Aug. 12; v. 265; p. 303.

Leach, Edgar M., Columbus, Ohio. "Ka-O-Ka Nerve and Blood Remedy." (For a Nerve and Blood Remedy.) No. 21,451; Aug. 12; v. 265; p. 303.

Lortie, C. & H., Brooklyn, N. Y. "Lortie's Laundry Marvel The Wonder Washing Powder." (For a Washing Powder.) No. 21,445; Aug. 12; v. 265; p. 303.

Lubric Oil Company, The, Cleveland, Ohio. "Koolmotor." (For Lubricating-Oil.) No. 21,446; Aug. 12; v. 265; p. 303.

Lubric Oil Company, The, Cleveland, Ohio. "Supero." (For Lubricating-Oil.) No. 21,447; Aug. 12; v. 265; p. 303.

MacDonald & Co., San Francisco, Calif. "MacDonald's East India Tea." (For Tea.) No. 21,448; Aug. 12; v. 265; p. 303.

Maddas, Frank A., Jeannette, Pa. "Victor." (For Non-Intoxicating Beverage.) No. 21,449; Aug. 12; v. 265; p. 303.

Massaro Macaroni Co., Fulton, N. Y. "I Have Brand Macaroni." (For Macaroni.) No. 21,450; Aug. 12; v. 265; p. 303.

Major, Joseph, Detroit, Mich. "Joseph Major." (For a Preparation for Spanish Influenza, La Grippe, Lung, and Blood.) No. 21,452; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Co., Milwaukee, Wis. "Fairlie Urram." (For Chocolate Candy.) No. 21,453; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "Hard Center Chocolate." (For Chocolate Candy.) No. 21,454; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "National Pride." (For Chocolate Candy.) No. 21,455; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "Talked of Package." (For Chocolate Candy.) No. 21,456; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "Brazil Nuts in Cream." (For Chocolate Candy.) No. 21,457; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "Columbian Chocolates." (For Chocolate Candy.) No. 21,458; Aug. 12; v. 265; p. 303.

Murphy, Charles E., Chillicothe, Mo. "Moon Shine Magic Cleaner." (For Cleaning Field.) No. 21,459; Aug. 12; v. 265; p. 303.

Naco Products Co., New York, N. Y. "Naco." (For a Preparation for Whitening or Bleaching Clothes and other Articles of Fabric, &c.) No. 21,460; Aug. 12; v. 265; p. 303.

N. Sellman Merchandise Co., Inc., New York, N. Y. "Mildady." (For Human-Hair Nets.) No. 21,475; Aug. 12; v. 265; p. 304.

Ohio Beverage Company, The, Columbus, Ohio. "Ohio Club." (For Ginger-Ale.) No. 21,461; Aug. 12; v. 265; p. 303.

Owl Supply Company, Boston, Mass. "Owl Clips." (For Paper-Clips.) No. 21,462; Aug. 12; v. 265; p. 303.

Oxnard Citrus Ass'n, Buena Vista, Calif. "Oxnard." (For Lemons.) No. 21,463; Aug. 12; v. 265; p. 303.

Pan-America Supply Company, Inc., New York, N. Y. "Pasco." (For Greases.) No. 21,464; Aug. 12; v. 265; p. 303.

Paper Specialty Co., The, Wausau, Wis. "Parasilk." (For Barber Head-Rest Paper.) No. 21,465; Aug. 12; v. 265; p. 303.

Peppa Mina F., San Francisco, Calif. "La Ta'O." (For Hair Remedy.) No. 21,466; Aug. 12; v. 265; p. 303.

Planters Not & Chocolate Company, Wilkes-Barre, Pa. "Planters Peanut Presnats." (For Peanuts.) Nos. 21,467-8; Aug. 12; v. 265; p. 303.

Pasadena Orange Growers' Association, Pasadena, Calif. "Luscious." (For Oranges.) No. 21,469; Aug. 12; v. 265; p. 303.
 Pioneer Paper Company, Los Angeles, Calif. "Polly-Ana." (For Bread.) No. 21,470; Aug. 12; v. 265; p. 303.
 Pioneer Paper Company, Los Angeles, Calif. "Guaranteed." (For Bread.) No. 21,471; Aug. 12; v. 265; p. 303.
 Rooke, Bert G., Lindsay, Calif. "Sunshine Special." (For Oranges.) No. 21,472; Aug. 12; v. 265; p. 304.
 Rooke, Bert G., Lindsay, Calif. "Sunshine Special." (For Fresh Grapes.) No. 21,473; Aug. 12; v. 265; p. 304.
 Sackheim, Max, New York, N. Y. "Monogram No. 3." (For Cigars.) No. 21,474; Aug. 12; v. 265; p. 304.
 Santiago Orange Growers' Association, Orange, Calif. "Everette Brand." (For Valencia Oranges.) No. 21,475; Aug. 12; v. 265; p. 304.
 Santiago Orange Growers' Ass'n. "Epicure." (For Valencia Oranges.) No. 21,476; Aug. 12; v. 265; p. 304.
 Shepard, Abraham D., Chicago, Ill. "Ox-Wa." (For Charred Table-Waters.) No. 21,482; Aug. 12; v. 265; p. 304.
 Steel Packing Co., San Diego, Calif. "Steele Brand." (For Canned Sardines.) No. 21,477; Aug. 12; v. 265; p. 304.

Steele Packing Co., San Diego, Calif. "Steele Brand." (For Canned Spinach.) No. 21,479; Aug. 12; v. 265; p. 304.
 Steele Packing Co., San Diego, Calif. "Kenilworth." (For Canned Sardines.) No. 21,480; Aug. 12; v. 265; p. 304.
 Sunkist Candy Co., Los Angeles, Calif. "Sunkist." (For Candy.) No. 21,481; Aug. 12; v. 265; p. 304.
 Veliner, Eugene, Philadelphia, Pa. "Veliner's Albinol." (For Soap.) No. 21,483; Aug. 12; v. 265; p. 304.
 Webster, Frank B., Los Angeles, Calif. "Doro-lac." (For a Polishing and Cleaning Compound for Automobiles, Furniture, and All Varnished or Enameled Surfaces Requiring a High Polish.) No. 21,484; Aug. 12; v. 265; p. 304.
 Whittier Citrus Association, Whittier, Calif. "Whittier Brand." (For Oranges.) No. 21,485; Aug. 12; v. 265; p. 304.
 Wright, George C., Keene, N. H. "Rub-Knot." (For Powdered Washing Compound.) No. 21,486; Aug. 12; v. 265; p. 304.
 Yukon Mill & Grain Co., Yukon, Okla. "Yukon's Best." (For Pancake-Flour.) No. 21,487; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

Moore, Gales P. (See Rogers, Robert F., assignor.)
 Nut House Incorporated, The, Seattle, Wash. "The Chief Nut." (For Nut and Fruit Bars.) No. 5,150; Aug. 12; v. 265; p. 304.
 Nut House Incorporated, The, Seattle, Wash. "Bar of Bars." (For Nut and Fruit Bars.) No. 5,151; Aug. 12; v. 265; p. 304.
 Reuter, Clifford S., New York, N. Y. "Black Cat." (For Furniture.) No. 5,152; Aug. 12; v. 265; p. 304.
 Rogers, Robert F., New York, N. Y., assignor, by mesne assignments, to G. P. Moore, Bristol, Conn. "Ball Bearings." (For Ball-Bearings.) No. 5,153; Aug. 12; v. 265; p. 304.
 Rubber & Celluloid Products Company, New York, N. Y. "Rubber-set." (For Palot and Varnish Brushes.) No. 5,154; Aug. 12; v. 265; p. 304.
 Samuel Stores, Inc., The, New York, N. Y. "The Thrift Family." (For Clothing.) No. 5,155; Aug. 12; v. 265; p. 304.
 Samuel Stores, Inc., The, New York, N. Y. "Tommy Thrift." (For Clothing.) No. 5,156; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "Vers Thrift." (For Clothing.) No. 5,157; Aug. 12; v. 265; p. 304.
 Samuel Stores, Inc., The, New York, N. Y. "Mr. Thrift." (For Clothing.) No. 5,158; Aug. 12; v. 265; p. 304.
 Samuel Stores, Inc., The, New York, N. Y. "Mrs. Thrift." (For Clothing.) No. 5,159; Aug. 12; v. 265; p. 304.
 Sunbeam Chemical Company, Chicago, Ill. "The Charm of Youthful Colors." (For Dye-Soap.) No. 5,160; Aug. 12; v. 265; p. 304.
 Troy Underwear Co., Inc., Troy, N. Y. "Taco Union Suits." (For Union-Suits.) No. 5,161; Aug. 12; v. 265; p. 304.
 W. A. Sheaffer Pen Company, Fort Madison, Iowa; New York, N. Y.; Chicago, Ill.; Kansas City, Mo., and San Francisco, Calif. "Always Writes All Ways." (For Pencils and Fountain-Pens.) No. 5,162; Aug. 12; v. 265; p. 304.
 Whitlock Cordage Co., New York, N. Y. "Ropeconomy." (For Ropes and Cordage.) No. 5,163; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

Sonora Phonograph Corporation, New York, N. Y. Talking machines, phonographs, music-boxes, phonograph-needles, &c. No. 114,588; Aug. 12; v. 265; p. 299.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 12TH DAY OF AUGUST, 1919.

Accounting-machines, Counter for. J. Powers. No. 1,312,807; Aug. 12; v. 265; p. 212.
 Acid, Chamber used in the manufacture of sulfuric. W. Mills and C. T. Packard. No. 1,312,741; Aug. 12; v. 265; p. 198.
 Acid, Chamber used in the manufacture of sulfuric. W. Mills and C. T. Packard. No. 1,312,742; Aug. 12; v. 265; p. 199.
 Adding and type-writing machine. F. W. B. Schoradt. No. 1,313,230; Aug. 12; v. 265; p. 295.
 Adding-machine. F. W. B. Schoradt. No. 1,313,231; Aug. 12; v. 265; p. 295.
 Adjustable drill-jig. G. E. Swartz. No. 1,312,767; Aug. 12; v. 265; p. 204.
 Adjustable stilt. I. E. Glascke. No. 1,312,904; Aug. 12; v. 265; p. 230.
 Advertising device. A. Eastman. No. 1,313,173; Aug. 12; v. 265; p. 284.
 Advertising device. H. Huerta. No. 1,312,632; Aug. 12; v. 265; p. 178.
 Advertising device. R. Padilla. No. 1,313,110; Aug. 12; v. 265; p. 272.
 Aerial bomb. J. J. McIntyre. No. 1,312,998; Aug. 12; v. 265; p. 249.
 Aerial bombs, Receiptacle for incendiary. A. Chanard. No. 1,313,068; Aug. 12; v. 265; p. 263.
 Aeroplane. D. X. Kelly. No. 1,312,548; Aug. 12; v. 265; p. 161.
 Aeroplane and the like. H. F. Parker. No. 1,312,571; Aug. 12; v. 265; p. 166.
 Aeroplane landing device. L. R. Accornero and A. Gaydon. No. 1,312,597; Aug. 12; v. 265; p. 153.
 Aeroplane structure. A. S. Janta. No. 1,312,910; Aug. 12; v. 265; p. 232.
 Aeroplanes, Means for supporting radiators on. E. Letord. No. 1,313,195; Aug. 12; v. 265; p. 288.
 Air and gas washers and the like, Nozzle-bleeding mechanism for. W. H. Carrier. No. 1,312,721; Aug. 12; v. 265; p. 194.
 Air-lines, Coupling for hose of. J. Gootec. No. 1,313,225; Aug. 12; v. 265; p. 294.
 Air-moistener. E. J. Bushy. No. 1,312,948; Aug. 12; v. 265; p. 239.
 Airplane. L. B. Dorr. No. 1,312,686; Aug. 12; v. 265; p. 188.
 Ammonia, Manufacture of sulfate of. J. T. Sheard. No. 1,313,023; Aug. 12; v. 265; p. 254.
 Ammonia, Synthetic production of. H. C. Greenwood. No. 1,312,534; Aug. 12; v. 265; p. 158.
 Amusement device. J. Irsch. No. 1,312,988; Aug. 12; v. 265; p. 248.
 Anchor for guy-rods. H. McGuckin. No. 1,312,918; Aug. 12; v. 265; p. 233.
 Androns, radiator, and ventilator, Combined. J. A. Greene. No. 1,313,085; Aug. 12; v. 265; p. 267.
 Animal-trap. S. D. Bales. No. 1,312,943; Aug. 12; v. 265; p. 238.
 Anti-skid device. H. Heller. No. 1,312,729; Aug. 12; v. 265; p. 196.
 Arbor-press. E. E. Bartlett. No. 1,312,671; Aug. 12; v. 265; p. 185.
 Armature-winding machine. H. C. Mueller. No. 1,312,561; Aug. 12; v. 265; p. 164.
 Automatic gate. E. Sorduk. No. 1,312,877; Aug. 12; v. 265; p. 225.
 Automatic sign. L. Beeman. No. 1,313,159; Aug. 12; v. 265; p. 281.
 Automatic sprinkler. A. E. Boardman. No. 1,312,515; Aug. 12; v. 265; p. 154.
 Automobile bar-humper. F. Amato. No. 1,313,043; Aug. 12; v. 265; p. 258.
 Automobile bodies, Screen for enclosed. W. B. Herbst. No. 1,312,542; Aug. 12; v. 265; p. 159.
 Automobile-brake. J. P. Mahoney. No. 1,313,103; Aug. 12; v. 265; p. 270.
 Automobile-extractor. D. A. Rose. No. 1,312,579; Aug. 12; v. 265; p. 168.
 Automobile-inclosure. W. E. Howard. No. 1,313,186; Aug. 12; v. 265; p. 286.
 Automobile luggage-carrier. C. Doughty. No. 1,312,524; Aug. 12; v. 265; p. 150.
 Automobiles, Folding carriage-top for. A. W. Curtis. No. 1,312,837; Aug. 12; v. 265; p. 218.
 Automobiles, Mud-shoe for. J. Rowe. No. 1,312,924; Aug. 12; v. 265; p. 234.
 Awning-arm. G. W. Hauser. No. 1,312,846; Aug. 12; v. 265; p. 219.
 Back-rest, Collapsible. H. R. Barrett. No. 1,312,774; Aug. 12; v. 265; p. 205.
 Balancing appliance. N. W. Akimoff. No. 1,313,039; Aug. 12; v. 265; p. 257.
 Ballot-box. T. E. McNulty. No. 1,313,101; Aug. 12; v. 265; p. 270.
 Bands, Producing endless elastic. A. and H. J. Turner. No. 1,312,770; Aug. 12; v. 265; p. 204.
 Banjo attachment. H. W. Weymann. No. 1,312,882; Aug. 12; v. 265; p. 228.
 Barking apparatus. W. J. Hussey. No. 1,312,633; Aug. 12; v. 265; p. 178.
 Basin, Down-spout catch. G. E. McGrath. No. 1,312,600; Aug. 12; v. 265; p. 190.
 Basket, Extension waste. A. H. Pritchard. No. 1,312,575; Aug. 12; v. 265; p. 167.
 Bath-room fixture. A. P. Cody. No. 1,312,613; Aug. 12; v. 265; p. 175.
 Batteries, Charging system for storage. C. I. Hall. No. 1,312,980; Aug. 12; v. 265; p. 246.
 Bearing, Roller. F. G. Wilson. No. 1,312,936; Aug. 12; v. 265; p. 237.
 Bed or seat, Spring. E. W. Pettersson. No. 1,312,870; Aug. 12; v. 265; p. 224.
 Bell, Variably pitched and actuated. P. E. Chapman and H. H. Robinson. No. 1,312,610; Aug. 12; v. 265; p. 174.
 Belt, Chain driving. J. E. Dukelow. No. 1,313,171; Aug. 12; v. 265; p. 283.
 Belt conveyor. W. K. Page. No. 1,313,111; Aug. 12; v. 265; p. 272.
 Belt, Drive. W. S. Smith and S. M. Crider. No. 1,313,028; Aug. 12; v. 265; p. 255.
 Belt, Driving. J. H. Saris. No. 1,312,580; Aug. 12; v. 265; p. 168.
 Belt-shifting mechanism. T. W. Antis. No. 1,313,155; Aug. 12; v. 265; p. 281.
 Blender and making same. Clay. H. L. Kohler. No. 1,312,853; Aug. 12; v. 265; p. 221.
 Bit. See—
 Mining-bit.
 Board. See—
 Score-board.
 Boats and the like, Apparatus for obscuring submerged submarine. H. H. Suplee. No. 1,312,595; Aug. 12; v. 265; p. 171.
 Body-conformer. C. Munter. No. 1,312,744; Aug. 12; v. 265; p. 199.
 Boiler stand, Domestic. J. F. Arthur. No. 1,312,719; Aug. 12; v. 265; p. 194.
 Bollers, Feed-water regulator for steam. H. W. Spencer. No. 1,312,583; Aug. 12; v. 265; p. 169.
 Bomb-dropping machine. B. Killman. No. 1,312,911; Aug. 12; v. 265; p. 232.
 Boom, Loading. S. Nord and A. Anderson. No. 1,313,108; Aug. 12; v. 265; p. 271.
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- Welding, Electric, J. H. Gravell. No. 1,312,844; Aug. 12; v. 265; p. 219.
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- Well-cover, W. H. McDonald. No. 1,312,556; Aug. 12; v. 265; p. 162.
- Wells, Method and apparatus for casing, C. C. Polysu. No. 1,313,013; Aug. 12; v. 265; p. 252.
- Wheel, See—
Demountable wheel. Gear-wheel.
Driving-wheel. Metal-wheel.
Engine drive-wheel. Traction-wheel.
- Wheelbarrow, C. R. Johnson. No. 1,312,990; Aug. 12; v. 265; p. 248.
- Wick-holder, G. A. Hallvæges. No. 1,312,530; Aug. 12; v. 265; p. 158.
- Wind-shield support, J. H. Albrecht. No. 1,312,508; Aug. 12; v. 265; p. 153.
- Winding mechanism for talking-machines, J. A. Freedman. No. 1,312,624; Aug. 12; v. 265; p. 177.
- Window construction, G. J. Reiff. No. 1,313,239; Aug. 12; v. 265; p. 297.
- Window-sash fastener, H. W. Nelson. No. 1,312,804; Aug. 12; v. 265; p. 223.
- Window sash, Casement, L. Hanson. No. 1,312,727; Aug. 12; v. 265; p. 196.
- Wire cable, W. N. Rottlinger. No. 1,312,872; Aug. 12; v. 265; p. 224.
- Wire-grip, S. P. Leverich. No. 1,312,635; Aug. 12; v. 265; p. 179.
- Wire-making machine, Insulated, W. E. Cook. No. 1,312,954; Aug. 12; v. 265; p. 240.
- Wire-straightening and cutting machine, E. E. Shuster. No. 1,313,024; Aug. 12; v. 265; p. 255.
- Wire-winding machine, W. E. Cook. No. 1,312,952; Aug. 12; v. 265; p. 240.
- Wood-pulp plants, Sieve for, A. G. Westad and E. L. Hagz. No. 1,313,145; Aug. 12; v. 265; p. 279.
- Wrapping process, J. G. Jones. No. 1,313,234; Aug. 12; v. 265; p. 296.

ALPHABETICAL LIST OF TRADE-MARKS.

Foods, Certain named. Price-Booker Manufacturing Co. No. 126,232; Aug. 12; v. 265; p. 301.

Rubber goods, Patches for repairing inner tubes, tire-casing, and other. P. Hoerr. No. 126,231; Aug. 12; v. 265; p. 301.

ALPHABETICAL LIST OF LABELS.

- "Bloom of Youth." (For a Facial Liquid Rouge.) M. Incarbono. No. 21,436; Aug. 12; v. 265; p. 303.
- "Brazil Nuts in Cream." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,457; Aug. 12; v. 265; p. 303.
- "Colonial Chocolates." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,458; Aug. 12; v. 265; p. 303.
- "Duro-lac." (For a Polishing and Cleaning Compound for Automobiles, Furniture, and All Varnished or Enameled Surfaces Requiring a High Polish.) F. B. Webster. No. 21,484; Aug. 12; v. 265; p. 304.
- "84." (For Cigars and Tobacco.) Hudson County Tobacco Co. No. 21,454; Aug. 12; v. 265; p. 303.
- "Epicure." (For Valencia Oranges.) Santiago Orange Growers Ass'n. No. 21,476; Aug. 12; v. 265; p. 304.
- "Everite Brand." (For Valencia Oranges.) Santiago Orange Growers Association. No. 21,475; Aug. 12; v. 265; p. 304.
- "Fairie Dream." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,453; Aug. 12; v. 265; p. 303.
- "Guaranteed." (For Bread.) Pioneer Paper Company. No. 21,471; Aug. 12; v. 265; p. 303.
- "Hair-Zo." (For Hair-Tonic.) W. H. Kelly. No. 21,440; Aug. 12; v. 265; p. 303.
- "Hard Center Chocolate." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,454; Aug. 12; v. 265; p. 303.
- "Hedges Fancy Blend Coffee." (For Coffee.) Hedges-Huck Company. No. 21,432; Aug. 12; v. 265; p. 303.
- "Hold-Tight." (For Hair-Wavers.) A. Klar. No. 21,441; Aug. 12; v. 265; p. 303.
- "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) Indian Head Products Corporation. No. 21,437; Aug. 12; v. 265; p. 303.
- "Iroquois Indian Head." (For Non-Intoxicating Beverage.) Iroquois Beverage Co. No. 21,438; Aug. 12; v. 265; p. 303.
- "Joseph Major." (For a Preparation for Spanish Influenza, La Grippe, Lung, and Blood.) J. Major. No. 21,452; Aug. 12; v. 265; p. 303.
- "Ke-O-Ka Nerve and Blood Remedy." (For a Nerve and Blood Remedy.) E. M. Leach. No. 21,451; Aug. 12; v. 265; p. 303.
- "Kenilworth." (For Canned Sardines.) Steel Packing Co. No. 21,480; Aug. 12; v. 265; p. 304.
- "Kolb's Scotch Loaf." (For Bread.) G. O. Kolb. No. 21,442; Aug. 12; v. 265; p. 303.
- "Koolmotor." (For Lubricating-Oil.) The Lubric Oil Company. No. 21,446; Aug. 12; v. 265; p. 303.
- "La Liberté." (For Tomato Paste with Basilico.) La Sierra Heights Canning Co. No. 21,443; Aug. 12; v. 265; p. 303.
- "La Preferita." (For Musical-Instrument Strings Made of Gut.) E. & O. Marl. No. 21,435; Aug. 12; v. 265; p. 303.
- "La Ta'O." (For Hair Remedy.) N. F. Peppa. No. 21,466; Aug. 12; v. 265; p. 303.
- "Lortie's Laundry Marvel The Wonder Washing Powder." (For a Washing-Powder.) C. & H. Lortie. No. 21,445; Aug. 12; v. 265; p. 303.
- "Lucious." (For Oranges.) Pasadena Orange Growers' Association. No. 21,469; Aug. 12; v. 265; p. 303.
- "MacDonald's East India Tea." (For Tea.) MacDonald & Co. No. 21,448; Aug. 12; v. 265; p. 303.
- "Mildady." (For Human-Hair Nets.) N. Sellman Merchandise Co., Inc. No. 21,478; Aug. 12; v. 265; p. 304.
- "Military Biplane." (For Toy Airplanes, Model Airplanes, and Scale Models of Airplanes.) Lawrence Airplane Model and Supply Company. No. 21,444; Aug. 12; v. 265; p. 303.
- "Monogram No. 3." (For Cigars.) M. Sackheim. No. 21,474; Aug. 12; v. 265; p. 304.
- "Moon Shine Magic Cleaner." (For Cleaning Fluid.) C. E. Murphy. No. 21,459; Aug. 12; v. 265; p. 303.
- "Naco." (For a Preparation for Whitening or Bleaching Clothes and other Articles of Fabric, &c.) Naco Products Co. No. 21,460; Aug. 12; v. 265; p. 303.
- "National Pride." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,455; Aug. 12; v. 265; p. 303.
- "Ohio Club." (For Ginger-Ale.) The Ohio Beverage Company. No. 21,461; Aug. 12; v. 265; p. 303.
- "Owl Clips." (For Paper-Clips.) Owl Supply Company. No. 21,462; Aug. 12; v. 265; p. 303.
- "Oxnard." (For Lemons.) Oxnard Citrus Ass'n. No. 21,463; Aug. 12; v. 265; p. 303.
- "Ox-Wa." (For Charged Table-Water.) A. D. Shepard. No. 21,482; Aug. 12; v. 265; p. 304.
- "Parasilk." (For Barber Head-Rest Paper.) The Paper Specialty Co. No. 21,465; Aug. 12; v. 265; p. 303.
- "Pasco." (For Growers.) Pan-America Supply Company Inc. No. 21,464; Aug. 12; v. 265; p. 303.
- "Photo Flowers." (For Folders Containing Photographs of Flowers.) C. W. Johnson. No. 21,439; Aug. 12; v. 265; p. 303.
- "Pine Brand Macaroni." (For Macaroni.) Massaro Macaroni Company. No. 21,450; Aug. 12; v. 265; p. 303.
- "Planters Pennant Peanuts." (For Peanuts.) Planters Nut & Chocolate Company. Nos. 21,467-8; Aug. 12; v. 265; p. 303.
- "Polly-Ann." (For Bread.) Pioneer Paper Company. No. 21,470; Aug. 12; v. 265; p. 303.
- "Rub-Knot." (For a Powdered Washing Compound.) G. C. Wright. No. 21,456; Aug. 12; v. 265; p. 304.
- "Scout." (For Coffee.) Howard & Casey Co. No. 21,431; Aug. 12; v. 265; p. 303.
- "Steel Brand." (For Canned Sardines.) Steel Packing Co. No. 21,477; Aug. 12; v. 265; p. 304.
- "Steel Brand." (For Canned Spinach.) Steel Packing Co. No. 21,479; Aug. 12; v. 265; p. 304.
- "Sunshine Special." (For Fresh Grapes.) B. G. Rooke. No. 21,473; Aug. 12; v. 265; p. 304.
- "Sunshine Special." (For Oranges.) H. G. Rooke. No. 21,472; Aug. 12; v. 265; p. 304.
- "Sunkist." (For Candy.) Sunkist Candy Co. No. 21,481; Aug. 12; v. 265; p. 304.
- "Supero." (For Lubricating-Oil.) The Lubric Oil Company. No. 21,447; Aug. 12; v. 265; p. 303.
- "Talked It Package." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,456; Aug. 12; v. 265; p. 303.
- "Vellner's Albinol." (For Soap.) E. Vellner. No. 21,463; Aug. 12; v. 265; p. 304.
- "Victor." (For Non-Intoxicating Beverages.) F. A. Maddux. No. 21,449; Aug. 12; v. 265; p. 303.
- "Victory Punch." (For Victory Punch Tablets.) S. M. Moore. No. 21,433; Aug. 12; v. 265; p. 303.
- "Whittier Brand." (For Oranges.) Whittier Citrus Association. No. 21,485; Aug. 12; v. 265; p. 304.
- "Yukon's Rest." (For Pancake-Flour.) Yukon Mill & Grain Co. No. 21,487; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF PRINTS.

- "Always Writes All Ways." (For Pencils and Fountain-Pens.) W. A. Sheaffer Pen Company. No. 5,162; Aug. 12; v. 265; p. 304.
- "Bar of Bars." (For Nut and Fruit Bars.) The Nut House Incorporated. No. 5,151; Aug. 12; v. 265; p. 304.
- "Ball Bearings." (For Ball-Bearings.) R. F. Rogers. No. 5,153; Aug. 12; v. 265; p. 304.
- "Black Cat." (For Furniture.) C. S. Reuter. No. 5,152; Aug. 12; v. 265; p. 304.
- "Mr. Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,158; Aug. 12; v. 265; p. 304.
- "Mrs. Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,159; Aug. 12; v. 265; p. 304.
- "The Charm of Youthful Colors." (For Dye-Soap.) Sunbeam Chemical Company. No. 5,160; Aug. 12; v. 265; p. 304.
- "The Chief Nut." (For Nut and Fruit Bars.) The Nut House Incorporated. No. 5,150; Aug. 12; v. 265; p. 304.
- "The Thrift Family." (For Clothing.) The Samuel Stores, Inc. No. 5,155; Aug. 12; v. 265; p. 304.
- "Tommy Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,154; Aug. 12; v. 265; p. 304.
- "Taco Union Suits." (For Union-Suits.) Troy Underwear Co. Inc. No. 5,161; Aug. 12; v. 265; p. 304.
- "Ropeconomy." (For Ropes and Cordage.) Whitlock Cordage Co. No. 5,163; Aug. 12; v. 265; p. 304.
- "Versa Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,157; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Talking-machines, phonographs, music-boxes, phonograph-needles, Ac. Sonora Phonograph Corporation. No. 114,588; Aug. 12; v. 265; p. 299.

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CLASSIFICATION OF PATENTS

ISSUED AUGUST 12, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 6: 1,312,557	24— 241: 1,313,049	35— 25: 1,312,703	46— 26: 1,312,647	114— 240: 1,312,641	181— 21: 1,313,075
186: 1,312,558	25— 108: 1,313,713	85: 1,313,008	1,312,627	115— 21: 1,312,679	182— 5: 1,313,007
20: 1,312,519	121: 1,312,631	103: 1,312,101	56: 1,312,544	116— 1: 1,313,006	10: 1,312,582
63: 1,312,553	124: 1,312,613	138: 1,312,653	1,312,664	31: 1,312,603	14: 1,312,924
93: 1,312,744	131: 1,312,665	59: 1,313,004	1,312,867	33: 1,312,610	21: 1,312,535
106: 1,313,000	136: 1,313,018	71: 1,313,057	1,312,611	61: 1,312,576	24: 1,313,141
137: 1,312,788	2: 1,313,012	99: 1,312,967	64: 1,313,531	73: 1,313,146	114: 1,312,779
147: 1,313,198	2: 1,312,770	13: 1,312,706	85: 1,312,608	150: 1,312,677	154— 46: 1,312,758
3— 5: 1,313,161	2: 1,313,201	41: 1,312,944	34— 33: 1,312,614	158— 62: 1,313,066	155— 7: 1,312,913
14: 1,313,236	52: 1,312,671	61: 1,312,960	36: 1,312,771	46: 1,312,681	16: 1,312,720
22: 1,313,000	59: 1,312,617	79: 1,312,607	61: 1,313,141	100: 1,312,712	27: 1,312,774
27: 1,312,613	105: 1,313,034	103: 1,313,054	124: 1,312,882	14: 1,312,906	20: 1,313,237
33: 1,313,153	148: 1,312,517	47: 1,312,640	161: 1,312,226	26: 1,312,555	42: 1,312,846
13: 1,312,886	181: 1,312,987	63— 116: 1,312,600	162: 1,313,320	54: 1,312,838	1: 1,312,580
49: 1,312,612	31— 65: 1,312,547	63— 26: 1,313,052	166: 1,312,917	7: 1,312,326	6: 1,312,606
9: 1,313,235	102: 1,312,941	63— 26: 1,313,052	167: 1,312,722	44: 1,312,583	38: 1,312,156
9— 25: 1,313,130	32— 5: 1,313,031	64— 26: 1,313,154	193: 1,312,722	44: 1,312,583	69: 1,312,874
10— 123: 1,312,949	33— 108: 1,312,146	26: 1,312,643	27: 1,313,100	45: 1,312,971	99: 1,313,196
12— 14: 1,313,121	148: 1,312,606	27: 1,313,204	10: 1,313,038	53: 1,312,605	26: 1,312,883
15: 1,312,676	167: 1,312,643	62: 1,312,928	46: 1,312,878	80: 1,313,001	27: 1,313,172
33: 1,312,709	172: 1,313,086	91: 1,313,109	132: 1,313,064	133: 1,313,033	66: 1,312,874
42: 1,313,148	24: 1,312,759	67— 6: 1,313,862	47: 1,312,567	176: 1,313,096	68: 1,313,224
54: 1,312,532	46: 1,312,607	7: 1,312,536	50: 1,313,098	135: 1,312,660	13: 1,312,685
55: 1,312,533	6: 1,312,961	16: 1,313,140	51: 1,313,197	143: 1,312,638	5: 1,312,513
135: 1,312,543	2: 1,312,923	65: 1,313,059	54: 1,313,074	167: 1,312,888	7: 1,312,659
142: 1,313,065	4: 1,312,781	115: 1,312,644	68: 1,312,682	100: 1,312,511	171— 95: 1,312,753
22: 1,312,986	22: 1,312,528	9: 1,312,641	70: 1,313,815	119: 1,312,716	119: 1,313,117
13: 1,313,185	32: 1,312,119	26: 1,313,124	31: 1,313,145	176: 1,313,135	225: 1,313,060
19: 1,313,206	35: 1,313,118	19: 1,312,939	39: 1,313,570	180: 1,312,975	314: 1,312,980
28: 1,313,184	36: 1,313,026	27: 1,312,601	90: 1,312,740	186: 1,312,990	8: 1,312,833
7: 1,312,973	39: 1,313,026	50: 1,312,865	94— 6: 1,312,318	188: 1,312,730	190: 1,313,078
19: 1,312,864	5: 1,312,832	53: 1,312,938	95— 3: 1,312,694	190: 1,313,170	1,313,079
30: 1,312,933	24: 1,313,217	80: 1,312,970	86: 1,312,674	197: 1,312,585	1,313,102
53: 1,312,803	1,313,215	82: 1,312,746	1,312,675	13: 1,312,698	179: 1,312,752
106: 1,312,944	1,313,220	83: 1,313,001	1,312,820	125— 26: 1,312,989	1,312,785
108: 1,312,945	1,313,221	87: 1,313,147	1,312,748	41: 1,312,653	1,312,786
116: 1,312,665	1,313,221	113: 1,312,854	4: 1,312,586	52: 1,312,655	173— 330: 1,313,120
131: 1,312,563	40— 6: 1,312,611	128: 1,312,728	1,312,996	121: 1,313,085	343: 1,312,551
163: 1,312,667	36: 1,313,169	6: 1,312,977	1,312,996	162: 1,313,162	1,313,086
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42: 1,312,637	72: 1,313,173	72— 1: 1,312,968	1,312,996	271: 2: 1,312,934	30: 1,312,646
55: 1,312,789	78: 1,312,496	100: 1,312,556	1,312,996	314: 1,312,900	91: 1,312,622
5: 1,312,953	91: 1,313,055	110: 1,312,908	1,312,996	48: 1,312,811	183: 1,312,992
9: 1,312,798	145: 2: 1,312,903	119: 1,312,834	1,312,996	137: 1,313,123	273: 1,312,792
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81: 1,312,694	43— 66: 1,313,073	74— 6: 1,313,039	1,312,996	29: 1,312,764	158: 1,313,165
87: 1,312,755	14: 1,313,203	7: 1,312,618	1,312,996	171: 1,313,178	171: 1,313,178
4: 1,313,103	22: 1,312,573	1,312,709	1,312,996	129— 15: 1,312,672	284: 1,312,550
31: 1,313,839	23: 1,312,640	1,312,740	1,312,996	10: 1,313,132	294: 1,312,737
62: 1,313,076	31: 1,312,734	1,312,818	1,312,996	43: 1,312,525	1,312,796
1,313,186	31: 1,312,824	1,313,088	1,312,996	51: 1,312,530	1,313,072
68: 1,312,990	24: 1,312,943	1,313,129	1,312,996	9: 1,313,232	356: 1,313,054
69: 1,312,990	31: 1,312,943	1,313,136	1,312,996	22: 1,313,137	367: 1,312,546
80: 1,312,516	31: 1,312,734	1,312,966	1,312,996	32: 1,312,806	379: 1,312,537
105: 1,313,167	31: 1,312,824	1,312,987	1,312,996	35: 1,313,063	351: 1,312,602
141: 1,312,733	44— 1: 1,312,521	1,312,990	1,312,996	53: 2: 1,312,904	352: 1,312,809
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197: 1,312,909	31: 1,313,182	1,312,990	1,312,996	58: 1,312,721	28: 1,312,775
2: 1,313,114	55: 1,312,491	1,313,036	1,312,996	75: 1,312,816	179— 9: 1,312,702
13: 1,312,953	22: 1,312,565	1,313,066	1,312,996	104: 1,312,678	1,312,965
1,312,742	37: 1,312,655	1,313,088	1,312,996	109: 1,312,623	11: 1,313,688
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11: 1,312,782	56: 1,312,860	1,313,171	1,312,996	22: 1,312,990	18: 1,312,558
1,312,783	6: 1,312,731	1,312,880	1,312,996	46: 1,312,666	1,312,778
13: 1,312,552	74: 1,312,875	1,312,899	1,312,996	70: 1,313,037	1,312,884
1,312,743	215: 1,313,180	1,312,900	1,312,996	78: 1,312,751	27: 1,312,808
1,312,843	5: 1,312,876	1,312,900	1,312,996	85: 1,312,750	41: 1,312,773
21: 1,312,534	7: 1,313,205	1,312,900	1,312,996	140— 140: 1,313,024	73: 1,312,768
1,313,023	34: 1,313,071	1,312,900	1,312,996	142— 1: 1,313,064	1,312,793
22: 1,312,592	47: 1,313,222	1,312,900	1,312,996	143— 46: 1,312,964	1,312,804
24: 1,313,014	52: 1: 1,312,920	1,312,900	1,312,996	159: 1,312,651	171: 1,312,094
3: 1,312,887	6: 1,312,881	1,312,900	1,312,996	163: 1,312,661	180— 9: 1,312,828
19: 1,313,021	15: 1,312,580	1,312,900	1,312,996	208: 1,312,633	1,313,219
74: 1,312,670	16: 1,312,588	1,312,900	1,312,996	291: 1,312,615	10: 1,312,982
84: 1,312,718	17: 1,312,529	1,312,900	1,312,996	21: 1,312,873	1,313,095
129: 1,312,635	18: 1,312,654	1,312,900	1,312,996	7: R. 14,704	25: 1,312,648
157: 1,313,010	19: 1,312,653	1,312,900	1,312,996	21: 1,312,810	54: 1,313,151
170: 1,313,210	53— 5: 1,312,616	1,312,900	1,312,996		
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182—	10: 1,312,999		1,313,125		84: 1,312,575	330—	48: 1,312,950		9: 1,313,042	267—	33: 1,313,183
183—	62: 1,312,761		1,313,126		86: 1,312,695	330—	62: 1,312,560		20: 1,313,070	271—	29: 1,312,339
184—	58: 1,312,650	206—	44: 1,312,710		88: 1,312,745		1,312,736		27: 1,313,187		48: 1,312,540
185—	39: 1,312,624	208—	9: 1,313,067		1,312,822		1,312,812		36: 1,313,188	274—	25: 1,312,865
188—	1: 1,312,649		38: 1,313,134	221—	60: 1,313,180	331—	1: 1,313,914		37: 1,313,972		28: 1,312,867
	4: 1,312,690		164: 1,313,157		64: 1,312,629	331—	2: 1,313,229		41: 1,312,983		26: 1,312,869
189—	34: 1,312,641	310—	5: 1,312,976		74: 1,312,642	342—	8: 1,312,564	251—	16: 1,312,839		38: 1,312,848
	69: 1,312,727		25: 1,313,227		79: 1,312,912		55: 1,313,084		106: 1,313,105		1: 1,312,849
	78: 1,312,925	211—	8: 1,313,046		104: 1,313,171		72: 1,312,952		123: 1,313,711	279—	69: 1,312,628
	90: 1,312,918		12: 1,312,693		127: 1,312,984		75: 1,312,963		168: 1,313,122	280—	89: 1,312,843
190—	3: 1,313,223		14: 1,312,861	223—	19: 1,313,169		95: 1,312,579	253—	77: 1,313,152		1,313,216
191—	75: 1,312,697		33: 1,312,699	224—	29: 1,312,521	344—	131: 1,312,817	254—	188: 1,312,979	281—	8: 1,313,104
192—	5: 1,312,776		37: 1,312,713		1,312,562		1: 1,312,911		86: 1,313,087	282—	1: 1,313,048
	9: 1,312,699	212—	61: 1,313,108		1,313,829		2: 1,312,507		110: 1,312,568	283—	25: 1,312,684
193—	3: 1,312,594		109: 1,312,800		45: 1,313,047		1,312,910	255—	19: 1,312,565		2: 1,312,591
	4: 1,313,111	213—	9: 1,312,593	226—	33: 1,313,531		12: 1,312,571		69: 1,312,732	284—	47: 1,313,015
	13: 1,312,854	215—	2: 1,312,544	228—	17: 1,312,725		14: 1,312,686	257—	24: 1,312,512		60: 1,312,922
	42: 1,312,995		9: 1,312,581	229—	82: 1,312,513	346—	29: 1,312,548		1,313,199	285—	26: 1,312,901
	48: R. 14,795		80: 1,313,913	230—	14: 1,312,707		33: 1,312,921		130: 1,313,077		57: 1,313,225
194—	70: 1,313,032	216—	3: 1,312,597		24: 1,313,099		188: 1,312,919		140: 1,313,312		68: 1,312,625
196—	25: 1,312,971		119: 1,312,837		32: 1,313,160		274: 1,312,639	258—	2: 1,312,632	286—	180: 1,312,584
	1,313,099		1: 1,312,773	232—	2: 1,313,161		311: 1,313,677	259—	72: 1,312,569		1: 1,313,202
197—	25: 1,312,830	217—	12: 1,312,868	235—	44: 1,313,747		391: 1,313,620		128: 1,313,831	287—	25: 1,312,802
	1,312,821		60: 1,312,856		60: 1,313,177		404: 1,312,691		144: 1,313,211		26: 1,312,766
	41: 1,312,760	219—	4: 1,312,845		1,313,230		434: 1,312,621	261—	41: 1,312,749		34: 1,312,819
	177: 1,312,883		6: 1,313,025		1,313,231		448: 1,312,813		87: 1,312,588	290—	10: 1,312,604
200—	2: 1,312,777		10: 1,312,844		78: 1,313,797	243—	30: 1,313,195		107: 1,312,648		17: 1,313,097
	24: 1,312,769		38: 1,312,554		91: 1,312,807		36: 1,313,113		108: 1,312,929		31: 1,312,549
	25: 1,312,794		46: 1,313,890		144: 1,313,066		1,313,191		1,312,680		38: 1,312,991
	31: 1,312,835	220—	32: 1,312,892	236—	33: 1,312,724		37: 1,312,947		116: 1,312,898	293—	55: 1,313,043
202—	9: 1,313,207		40: 1,312,587		90: 1,312,639		41: 1,312,719	263—	43: 1,312,927	295—	2: 1,313,178
	1,313,208		41: 1,313,003	238—	5: 1,313,000	249—	32: 1,312,832	264—	15: 1,313,175	296—	16: 1,312,561
203—	3: 1,312,826		55: 1,312,626		117: 1,312,645	250—	6: 1,313,041	265—	1: 1,312,805		84: 1,312,598
204—	5: 1,312,756		71: 1,313,022		293: 1,312,905		1,313,112		8: 1,313,062	298—	114: 1,312,836

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 19TH DAY OF AUGUST, 1919.

- A. Schender's Son. (See Nielsen, Frederik, assignor.)
A. Wittnauer Co. (See Trommer, Charles F., assignor.)
Accounting Devices Company. (See Dunbar, Charles J., assignor.)
Adams-Bagnall Electric Company, The. (See Mezeo, Salvatore, assignor.)
Adams, Henry T., assignor to Henry T. Adams Mfg. Co., Chicago, Ill. Loose-leaf bookbinder. No. 1,313,240; Aug. 19; v. 265; p. 313.
Aircraft Manufacturing Company, The. (See Hucks, Bentfield C., assignor.)
Ajax Metal Company, The. (See Wyatt, James R., assignor.)
Akeley Camera. (See Akeley, Carl E., assignor.)
Akeley, Carl E., assignor to Akeley Camera Inc., New York, N. Y. Motion-picture trench-camera. No. 1,313,243; Aug. 19; v. 265; p. 313.
Aladdin Lamp Syndicate Limited (in liquidation). (See Ott von Batorkez und Verinkhaz, Adolph, assignor.)
American Assembling Machine Company. (See Juengst, Charles A., assignor.)
American Brake Shoe & Foundry Company. (See Jones, Harry, assignor.)
American Cap Company. (See Graham, Charles W., assignor.) (Reissue.)
American Dairy Supply Company. (See Compton, Harry L., assignor.)
American Guaranteed Tooth Company. (See Dover, George W., assignor.)
American Lithographic Company. (See Dietsche, Adolph, assignor.)
American Power Shovel Company. (See Jackson, George W., assignor.)
American Rolling Mill Company, The. (See Willson, Dixon, and McLaughlin, assignors.)
American Steam Conveyor Corporation. (See Webster, Townner K., Jr., assignor.)
American Telephone and Telegraph Company. (See Osborne, Harold S., assignor.)
American Warp Drawing Machine Company. (See Hathaway and Lea, assignors.)
Anderson, August, Berkeley, Calif. Massaging implement. No. 1,313,448; Aug. 19; v. 265; p. 352.
Anderson, Elder E., Minneapolis, Minn. Envelop-cutting machine. No. 1,313,244; Aug. 19; v. 265; p. 314.
Andreu, Roland L., assignor to E. du Pont de Nemours and Company, Wilmington, Del. Producing synthetic camphor. No. 1,313,661; Aug. 19; v. 265; p. 391.
Andrews, Benjamin, Houston, Tex. Deep-well pump. No. 1,313,245; Aug. 19; v. 265; p. 314.
Anschütz & Co. (See Anschütz-Kaempfe, Hermann, assignor.)
Anschütz-Kaempfe, Hermann, assignor to Anschütz & Co., Neumühlen, near Kiel, Germany. Boring-tool. No. 1,313,367; Aug. 19; v. 265; p. 356.
Antisell, Frank L., Perth Amboy, N. J. Electrolytic process and anode. No. 1,313,246; Aug. 19; v. 265; p. 314.
Arbuckle, Samuel F., Indianapolis, Ind. Self-lubricating piston. (Reissue.) No. 1,4707; Aug. 19; v. 265; p. 431.
Armstrong Cork Company. (See Fitz, Frank C., assignor.)
Armstrong, Wesley J., assignor to McKinnon Dash Company, Buffalo, N. Y. Folding table. No. 1,313,662; Aug. 19; v. 265; p. 391.
Asakawa, Shozo, Kanagawa-Ken, Japan. Ship construction. No. 1,313,663; Aug. 19; v. 265; p. 392.
Ashley, John F., Dallas, Tex. Cultivator. No. 1,313,242; Aug. 19; v. 265; p. 313.
Ashley, Walter J., Chicago, Ill. Automatic universal stereopticon. No. 1,313,241; Aug. 19; v. 265; p. 313.
Atkinson, Frank L., and N. Sclar, Hoboken, N. J. Knock-down picture-frame. No. 1,313,778; Aug. 19; v. 265; p. 414.
Automatic Electric Company. (See Willis, Bernard D., assignor.)
Automotive Development Co. (See Higgins, Merion J., assignor.)
Aylworth, Bay E., and I. Wiersma, assignors of one-third to H. E. Kilmer, Grand Rapids, Mich. Matched-board layer. No. 1,313,664; Aug. 19; v. 265; p. 392.
B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
B. F. Goodrich Company, The. (See Schweisgood, Charles E., assignor.)
Bailey, George D., assignor to Bailey Non-Stall Differential Corporation, Chicago, Ill. Differential releasing-clutch. No. 1,313,247; Aug. 19; v. 265; p. 314.
Bailey Non-Stall Differential Corporation. (See Bailey, George D., assignor.)
Baker, John K., Irwin, and T. E. McGuire, East Pittsburgh, Pa. Electric welding-tool. No. 1,313,572; Aug. 19; v. 265; p. 375.
Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
Ball, George, Philadelphia, Pa., assignor to Whiting-Patterson Company, Incorporated. Envelop-machine. No. 1,313,248; Aug. 19; v. 265; p. 314.
Barker, Pearl M., Chicago, Ill. Music-instruction device. No. 1,313,440; Aug. 19; v. 265; p. 352.
Barrett, Ernest D., assignor to Barrett Motor Starter Corporation, New York, N. Y. Motor-starter. No. 1,313,618; Aug. 19; v. 265; p. 384.
Barrett Motor Starter Corporation. (See Barrett, Ernest D., assignor.)
Basler Machinery Company. (See Wright, Wallace C., assignor.)
Bates, Lindell T., New York, N. Y. Means for destroying vessels and protecting ships from torpedo attacks. No. 1,313,665; Aug. 19; v. 265; p. 392.
Bauwens, Scraphine F., Chicago, Ill., assignor, by mesne assignments, to Wirebonds Patents Company, Kittery, Me. Wire-bound-box machine. No. 1,313,854; Aug. 19; v. 265; p. 428.
Bauwens, Scraphine F., Chicago, Ill., assignor, by mesne assignments, to Wirebonds Patents Company, Kittery, Me. Wire-bound-box machine. No. 1,313,855; Aug. 19; v. 265; p. 428.
Beach, Charles P., Littleton, N. H. Gear-remover. No. 1,313,511; Aug. 19; v. 265; p. 363.
Beala, Wallace M., Avon, Mass. Turnbuckle. No. 1,313,450; Aug. 19; v. 265; p. 352.
Beam, Frank E., Toledo, Ohio. Machine for packing articles of paper-board and the like. No. 1,313,573; Aug. 19; v. 265; p. 375.
Beaver Company, The. (See Sidwell, Benjamin W., assignor.)
Beck, Heinrich, Schenectady, N. Y., assignor to General Electric Company. Search-light arc-lamp. No. 1,313,666; Aug. 19; v. 265; p. 392.
Bedell, Charles H., and G. E. Edgar, New London, Conn., assignors to Electric Boat Company, New York, N. Y. Cooling, ventilating, and rendering innocuous storage batteries. No. 1,313,512; Aug. 19; v. 265; p. 363.
Bedell, Charles H., New London, Conn., assignor to Electric Boat Company. Storage-battery installation. No. 1,313,513; Aug. 19; v. 265; p. 364.
Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for autotrailers. No. 1,313,451; Aug. 19; v. 265; p. 352.
Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for trailers. No. 1,313,452; Aug. 19; v. 265; p. 352.
Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for trailers. No. 1,313,453; Aug. 19; v. 265; p. 352.
Beldier, George C., Rochester, N. Y. Camera. No. 1,313,454; Aug. 19; v. 265; p. 352.
Bell, John E., New York, N. Y. Furnace. No. 1,313,779; Aug. 19; v. 265; p. 414.
Bellows, William S., Benton Harbor, Mich. Safety device for use in repairing the renewing insulators of high-voltage transmission-lines. No. 1,313,249; Aug. 19; v. 265; p. 315.
Bender, Henry J. (See Cooney and Bender.)
Bentley, Edward M., Lawrence, N. Y. Rheostat. No. 1,313,853; Aug. 19; v. 265; p. 428.
Benz, Leonhardt W., New Orleans, La. Culvert construction. No. 1,313,667; Aug. 19; v. 265; p. 392.
Bernardi, Neri M., Florence, Italy. Screw-wrench in which no detrimental play can obtain. No. 1,313,575; Aug. 19; v. 265; p. 376.
Betts, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,313,780; Aug. 19; v. 265; p. 414.
Betts, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,313,781; Aug. 19; v. 265; p. 414.
Betts, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,313,782; Aug. 19; v. 265; p. 414.
Bimler, Peter, Zoar, and E. T. Dieringer, Bolivar, Ohio. Wind-shield-cleaning device. No. 1,313,576; Aug. 19; v. 265; p. 376.
Birdsey, Charles R. (See Nies and Birdsey.)
Blackburn, Wilmoth E., Summit, N. J. Game apparatus. No. 1,313,783; Aug. 19; v. 265; p. 415.
Blakeslee, George S., Chicago, Ill. Washing-machine. No. 1,313,455; Aug. 19; v. 265; p. 353.

Blauvelt, Frederic D., East Orange, N. J. Piston-ring. No. 1,313,784; Aug. 19; v. 265; p. 413.
 Blood, Burr R., assignor to G. Heikman and N. A. Street, Chicago, Ill. Phonograph. No. 1,313,250; Aug. 19; v. 265; p. 315.
 Bonnell, William A., Brooklyn, N. Y. Joint or coupling for electrical conduits. No. 1,313,456; Aug. 19; v. 265; p. 353.
 Bookmiller, Charles S., and F. A. Daubin, Washington, D. C. Submarine signaling apparatus. No. 1,313,785; Aug. 19; v. 265; p. 415.
 Borghin, Joseph V., Seattle, Wash. Ship-launching device. No. 1,313,786; Aug. 19; v. 265; p. 415.
 Bourdon, Leo R. (See Bourdon, Allen P. and L. R.)
 Bourdon, Allen P. and L. R., assignors to Woodstock Manufacturing Company, Woodstock, Vt. Merry-go-round. No. 1,313,648; Aug. 19; v. 265; p. 393.
 Bousfield, John H. A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Track-scale. No. 1,313,577; Aug. 19; v. 265; p. 376.
 Bowman, Nathan W., Durand, Wis. Current-motor. No. 1,313,457; Aug. 19; v. 265; p. 353.
 Boyler, Emanuel J. (See Puter and Boyler.)
 Boyler, Emanuel J., New Haven, Conn., assignor to Duplex Snap Fastener Co. Inc. Separable fastener. No. 1,313,158; Aug. 19; v. 265; p. 353.
 Branson, Charles R., Lincoln, Nebr. Constructive design of face-plates used for the purpose of covering openings in air-registers and ventilators through which air passes. No. 1,313,460; Aug. 19; v. 265; p. 354.
 Brass, John F., Downers Grove, Ill. Sprinkler-head. No. 1,313,787; Aug. 19; v. 265; p. 415.
 Brews, Douglas, Cleveland, Ohio. Steam-whistle. No. 1,313,251; Aug. 19; v. 265; p. 315.
 Broadbent, Alfred L., and R. G. Woodbridge, Jr., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Making propellant powder. No. 1,313,459; Aug. 19; v. 265; p. 354.
 Brong, Wallie J. (See Wright and Brong.)
 Brooke Aircraft Company, The. (See Brooke, Thomas P., assignor.)
 Brooke, Thomas P., Chicago, Ill., assignor to The Brooke Aircraft Company. Flying-boat. No. 1,313,252; Aug. 19; v. 265; p. 315.
 Brooks, Edward J., East Orange, N. J. Strap-tightening tool. No. 1,313,669; Aug. 19; v. 265; p. 393.
 Brosius, Edgar E., Pittsburgh, Pa. Machine for charging slabs, billets, &c. No. 1,313,619; Aug. 19; v. 265; p. 384.
 Brown, Robert P., London, England. Manufacture of gas. No. 1,313,514; Aug. 19; v. 265; p. 364.
 Brown, James W., Omaha, Nebr. Clinker-tongs. No. 1,313,788; Aug. 19; v. 265; p. 416.
 Brown, Theophilus, and C. G. Strandlund, assignors to Deere & Company, Moline, Ill. Lever. No. 1,313,253; Aug. 19; v. 265; p. 315.
 Brown, William H., Cleveland, Ohio. Knitting-needle. No. 1,313,461; Aug. 19; v. 265; p. 354.
 Brown, William J., Pittsburgh, Pa. Wall-paper-removing machine. No. 1,313,462; Aug. 19; v. 265; p. 354.
 Buck, Frank W., De Kalb, Ill. Automobile-signal. No. 1,313,463; Aug. 19; v. 265; p. 354.
 Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
 Buckham, George T., assignor to Vickers Limited, Westminster, London, England. Pedestal gun-mounting. No. 1,313,464; Aug. 19; v. 265; p. 354.
 Buckley, Claude W., Memphis, Tenn. Mud-shoe for vehicle-tires. No. 1,313,465; Aug. 19; v. 265; p. 355.
 Hulman, William, Kirkdale, F. W. Smith, Liverpool, and W. Jones, Southampton, England. Ship's-boat-launching tackle or gear. No. 1,313,789; Aug. 19; v. 265; p. 416.
 Hurchett, John H. P., Kew Gardens, England. Internal-combustion engine. No. 1,313,578; Aug. 19; v. 265; p. 376.
 Burdick, Charles L., Wood Green, London, England. Painting machine. No. 1,313,670; Aug. 19; v. 265; p. 393.
 Burgess, John W. (See Burgess, John W. and G. F.)
 Burgess, John W. and G. F., Kansas City, Mo. Tire. No. 1,313,234; Aug. 19; v. 265; p. 316.
 Burket, Orrin V. (See Hershey, Grant W., assignor.)
 Burke, Henry T. (See Laxman and Burke.)
 Burns, James W. (See Mitcham and Burns.)
 Butterick Publishing Company, The. (See Millard, Hannah G., assignor.)
 Ruxton, Francis E., Indianapolis, Ind. Journal-bearing. No. 1,313,466; Aug. 19; v. 265; p. 355.
 C. J. Tagliabue Manufacturing Company. (See Wright, William H., assignor.)
 Caffrey, Peter C., Newark, N. J. Brush. No. 1,313,515; Aug. 19; v. 265; p. 364.
 Calhoun, Benjamin C., Valley Falls, R. I., assignor to Price Campbell Cotton Picker Corporation, New York, N. Y. Journal-bearing mechanism for picking-ingers in cotton-picking machines. No. 1,313,255; Aug. 19; v. 265; p. 316.
 Caldwell, John, Corry, Pa. Mower-knife sharpener. No. 1,313,790; Aug. 19; v. 265; p. 416.
 Cambren, Leon, New York, N. Y. Cooling system for internal-combustion motors. No. 1,313,620; Aug. 19; v. 265; p. 385.
 Cannon, Vernon R., Sapulpa, Okla. Vise for holding vehicle springs. No. 1,313,256; Aug. 19; v. 265; p. 310.

Cantlin, Kenneth A., Honolulu, Hawaii. Portable flashlight. No. 1,313,516; Aug. 19; v. 265; p. 364.
 Capello, Frank, Schenectady, N. Y., assignor to General Electric Company. Fire-plug. No. 1,313,071; Aug. 19; v. 265; p. 306.
 Carillo, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company. Calculating-machine. No. 1,313,517; Aug. 19; v. 265; p. 364.
 Carlson, Amandus A., Barnesville, Minn. Bag-rack. No. 1,313,257; Aug. 19; v. 265; p. 310.
 Carmean, James H. and S. M., Kansas City, Mo. Electric heater. No. 1,313,258; Aug. 19; v. 265; p. 316.
 Carmean, Samuel M. (See Carmean, Samuel M. and J. H.)
 Carpenter, William J. (See Eaton, Reason B., assignor.)
 Carrier, Albert H., Asheville, N. C., assignor of one-half to E. W. Grove, St. Louis, Mo. Window-shade mounting. No. 1,313,672; Aug. 19; v. 265; p. 393.
 Carroll, Edward W., Weston, W. Va. Safety attachment for cigar-cutters. No. 1,313,467; Aug. 19; v. 265; p. 355.
 Case, Egerton R. (See Lenfestey, Gerald T., assignor.)
 Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Power-generating system. No. 1,313,073; Aug. 19; v. 265; p. 303.
 Cavanaugh, John F., Meriden, Conn., assignor to Connecticut Telephone & Electric Company, Inc. Circuit-interrupter. No. 1,313,856; Aug. 19; v. 265; p. 428.
 Cavanaugh, Joseph J., Los Angeles, Calif. Automobile-radiator attachment. No. 1,313,791; Aug. 19; v. 265; p. 416.
 Cawen, Paul, Cleveland, Ohio. Tire-chain-fastening device. No. 1,313,368; Aug. 19; v. 265; p. 337.
 Champion Spark Plug Company. (See Nason, George B., assignor.)
 Champion Spark Plug Company. (See Rohde, Otto C., assignor.)
 Champion Spark Plug Company. (See Stranahan, Robert A., assignor.)
 Charles J. Tagliabue Manufacturing Co. (See Roach, Alfred, assignor.)
 Chemical Construction Company. (See Hechenblekner, Ingenuin, assignor.)
 Clark, Arthur T., Sacandaga Lake, N. Y. Radiator. No. 1,313,518; Aug. 19; v. 265; p. 365.
 Clover Electrical Corporation. (See Clover, Howard K., assignor.)
 Clover, Howard K., Los Angeles, Calif., assignor, by mesne assignments, to Clover Electrical Corporation. Electrically-heated faucet. No. 1,313,519; Aug. 19; v. 265; p. 365.
 Coates, Ray G., Pasadena, Calif., assignor to Valley Mould and Iron Corporation, Sharpville, Pa. Removable-sided ingot-mold. No. 1,313,259; Aug. 19; v. 265; p. 317.
 Cohn, Samuel, New York, N. Y. Machine for stretching and drying tubular fabrics. No. 1,313,468; Aug. 19; v. 265; p. 355.
 Coker, Carl D., Detroit, Mich. Slide-closure. No. 1,313,580; Aug. 19; v. 265; p. 377.
 Cole, John F., Somerville, Mass. Course-protractor. No. 1,313,260; Aug. 19; v. 265; p. 365.
 Coleman, Clyde J., New Rochelle, assignor to Stern-Coleman Diamond Machine Company, Inc., New York, N. Y. Polishing-machine. No. 1,313,260; Aug. 19; v. 265; p. 317.
 Collier, Frederick W., Worcester, Mass., assignor to Packmore Manufacturing Company, Washington, D. C. Brush-adjusting means for cleaning-machines. No. 1,313,261; Aug. 19; v. 265; p. 317.
 Collins, Cornelius, Buellington, Calif. Metal partition construction. No. 1,313,581; Aug. 19; v. 265; p. 377.
 Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Rimailho, Emile, assignor.)
 Compre, Dolphus E., Dallas, Tex. Mechanical device for concentrating vision. No. 1,313,262; Aug. 19; v. 265; p. 317.
 Compton, Harry L., assignor to American Dairy Supply Company, Washington, D. C. Attached-handle closure-disk. No. 1,313,674; Aug. 19; v. 265; p. 394.
 Conger, Hugh E., and C. W. Waller, Chicago, Ill. Carcass-splitting machine. No. 1,313,579; Aug. 19; v. 265; p. 377.
 Conn, George R., Omaha, Nebr. Level. No. 1,313,263; Aug. 19; v. 265; p. 317.
 Connecticut Telephone & Electric Company. (See Cavanaugh, John F., assignor.)
 Connor, Herschel M., and D. D. Miles, assignors of one-half to A. H. Herbert, one-fourth to M. C. Miles, and one-fourth to P. I. Connor, San Francisco, Calif. Carburetor. No. 1,313,521; Aug. 19; v. 265; p. 365.
 Connor, Pansy L., et al. (See Connor and Miles, assignors.)
 Converse, Tommy J., Bellingham, Wash. Reinforcement for tire-casings. No. 1,313,792; Aug. 19; v. 265; p. 416.
 Cooney, Michael J., and H. J. Bender, Plainfield, N. J. Closure for containers. No. 1,313,264; Aug. 19; v. 265; p. 318.
 Coons, Oscar A., Patterson, La. Silo. No. 1,313,369; Aug. 19; v. 265; p. 337.
 Cooper, Michael. (See Siegel, Ernest, assignor.)
 Corral, Herbert, Helsingborg, Scotland, assignor to The Singer Manufacturing Company. Sewing-machine. No. 1,313,265; Aug. 19; v. 265; p. 318.
 Cosden & Company. (See Francis and Morgan, assignors.)
 Couch-Dean Corporation. (See Couch, Elbert L., assignor.)

Couch, Elbert L., assignor to Couch-Dean Corporation, Hartford, Conn. Belt. No. 1,313,266; Aug. 19; v. 265; p. 318.
 Cowan, Henry, New York, N. Y. Tea-ball. No. 1,313,582; Aug. 19; v. 265; p. 377.
 Cowles, A. W., et al. (See Johns, Paul H., assignor.)
 Craddock, Alcy R., Hilliard, Wash. Belt-gulke. No. 1,313,267; Aug. 19; v. 265; p. 318.
 Cramblet, H. P., et al. (See Kavanagh, Enoch, assignor.)
 Crane, George W. (See Mosser and Crane.)
 Cressy, Anson H., Hartington, Nebr. Spark-plug. No. 1,313,522; Aug. 19; v. 265; p. 366.
 Crossley, Noel, assignor of ten per cent. to M. J. Hunt, Bracebridge, Ontario, Canada. Combined eye shade and shield. No. 1,313,469; Aug. 19; v. 265; p. 355.
 Crowe, Henry, Saltburn, England. Operating-gear for hydraulic valves. No. 1,313,323; Aug. 19; v. 265; p. 366.
 Crossius, Arthur A., New York, N. Y. Air-inlet device. No. 1,313,584; Aug. 19; v. 265; p. 378.
 Crystal Washing Machine Company. (See Sperlich, Herman A., assignor.)
 Cunningham, William P., Cleveland, Ohio, assignor, by mesne assignments, to The Guardian Savings & Trust Company, trustee. Clamp. No. 1,313,268; Aug. 19; v. 265; p. 318.
 Curtain Supply Company, The. (See Klipp, Alfred J., assignor.)
 Curtin, Walter, Wilkesden Green, London, England. Means for controlling the electric lighting of motor-vehicles. No. 1,313,583; Aug. 19; v. 265; p. 377.
 Custer, David W., Sydney, Australia, assignor to E. O. Townsend, Mansfield, Ohio. Method of and apparatus for stoneworking. No. 1,313,269; Aug. 19; v. 265; p. 319.
 Cutler-Hammer Mfg. Co., The. (See Henderson, Clark T., assignor.)
 Cutler-Hammer Mfg. Co., The. (See Klein, Charles J., assignor.)
 Cutler-Hammer Mfg. Co., The. Wiegand, Henry J., assignor.)
 D. M. Seehler Implement & Carriage Company. (See Englund, Ernst E., assignor.)
 D. M. Seehler Implement & Carriage Company. (See Hartsock, Sherman C., assignor.)
 D. Napier & Son. (See Mortimer, George, assignor.)
 Daggs, Herbert W., Rochester, N. Y. Seal-lock. No. 1,313,270; Aug. 19; v. 265; p. 319.
 Dahlberg, B. G. (See Shaw, John K., assignor.)
 Dalton, John B., Pittsburgh, Pa. Packaging ice-cream. No. 1,313,793; Aug. 19; v. 265; p. 416.
 Dammann, Edward, St. Louis, Mo. Wind or water power. No. 1,313,621; Aug. 19; v. 265; p. 385.
 Danner, Hugh C., Martinsburg, W. Va. Device for opening watchcases and other articles. No. 1,313,271; Aug. 19; v. 265; p. 319.
 Darker, Alfred H., Blackheath, assignor to J. Stane & Company, Limited, Deptford, England. Dynamo-electric machine and method of and apparatus for controlling the output thereof. No. 1,313,272; Aug. 19; v. 265; p. 319.
 Da Rosa, Edward L., Elk Grove, Calif. Self-serving store. No. 1,313,794; Aug. 19; v. 265; p. 417.
 Daubin, Frederick A. (See Bookmiller and Daubin.)
 Davis, Algic P., assignor of one-third to W. S. Davis, White Rock, Colo. Wire-holder. No. 1,313,795; Aug. 19; v. 265; p. 417.
 Davis, Henry P., New York, N. Y. Window-frame. No. 1,313,675; Aug. 19; v. 265; p. 394.
 Davis, Mark H., assignor of one-half to J. W. Nee, Flint, Tex. Fruit-cutting implement. No. 1,313,273; Aug. 19; v. 265; p. 319.
 Davis, Winthrop S. (See Davis, Algic P., assignor.)
 De Barros, Diogo D., São Paulo, Brazil. Means for reducing ores. No. 1,313,274; Aug. 19; v. 265; p. 320.
 Dehman, Henry W., Houston, Tex. Boring-tool. No. 1,313,371; Aug. 19; v. 265; p. 337.
 Deere & Company. (See Brown and Strandlund, assignors.)
 Deere & Company. (See Wilson, Frederick D., assignor.)
 Delby, Desdré, San Francisco, Calif. Tobacco-pipe. No. 1,313,796; Aug. 19; v. 265; p. 417.
 De Milt, David G., Tampa, Fla. Ball-cock. No. 1,313,797; Aug. 19; v. 265; p. 417.
 Denington, Arthur R., East Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent lamp. No. 1,313,857; Aug. 19; v. 265; p. 428.
 Detroit Pressed Steel Company. (See Putnam, Alden L., assignor.) (Release.)
 Devine Mfg. Co. (See Devine, William P., assignor.)
 Devine, William P., Dorchester, assignor to Devine Mfg. Co., Inc., Boston, Mass. Watch-protector. No. 1,313,798; Aug. 19; v. 265; p. 417.
 De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Edge-guide. No. 1,313,275; Aug. 19; v. 265; p. 320.
 De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Differential feeding mechanism. No. 1,313,524; Aug. 19; v. 265; p. 366.
 Diamond Match Company, The. (See Donnelly, Joseph C., assignor.)
 Disphone Signal Company Limited, The. (See Sims, Frederick L. H., assignor.)
 Dieringer, Ernst T. (See Rimeler and Dieringer.)
 Dietzsch, Adolph, Forest Hills, assignor to American Lithographic Company, New York, N. Y. Display-carton. No. 1,313,585; Aug. 19; v. 265; p. 379.

Dillard, William J., and J. D. Taylor, Portland, Ore. Automatic weather-strip. No. 1,313,799; Aug. 19; v. 265; p. 418.
 Discher, Bert J., Flint, Mich. Toy vehicle. No. 1,313,470; Aug. 19; v. 265; p. 355.
 Dixon, George W. (See Wilson, Dixon, and McLaughlin.)
 Dixon, Thomas, Langley Park, England. Means for operating switches for tramways in mines, quarries, or the like. No. 1,313,580; Aug. 19; v. 265; p. 378.
 Doble, Abner, assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Liquid-fuel-burning apparatus. No. 1,313,525; Aug. 19; v. 265; p. 366.
 Doble, Abner, assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Combustion-hearth. No. 1,313,526; Aug. 19; v. 265; p. 367.
 Doble, Abner, assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Protective mechanism for steam-automobile power plants. No. 1,313,527; Aug. 19; v. 265; p. 367.
 Doble-Detroit Steam Motors Co. (See Doble, Abner, assignor.)
 Dodds, Ethan I. (See Flannery and Dodds.)
 Dodds, Ethan I. (See Stafford and Dodds.)
 Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Lamp. No. 1,313,622; Aug. 19; v. 265; p. 385.
 Dodds, Ethan I., assignor to Flannery Bolt Company. Stay-bolt structure. No. 1,313,623; Aug. 19; v. 265; p. 385.
 Dodge, Theodore J., Olympia, Wash. Swivel. No. 1,313,372; Aug. 19; v. 265; p. 337.
 Domke, Verou, Fremerton, Wash. Automobile-tire. No. 1,313,800; Aug. 19; v. 265; p. 418.
 Donnelly, Joseph C., Harborton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Machine for making card-matches. No. 1,313,471; Aug. 19; v. 265; p. 356.
 Donnelly, Joseph C., Harborton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Means for treating match-spills with powdered material. No. 1,313,472; Aug. 19; v. 265; p. 316.
 Doran, James A., Providence, R. I. Primer-detonator. No. 1,313,801; Aug. 19; v. 265; p. 418.
 Douglas, Harry A., assignor to Douglas & Rudd Mfg. Co., Brounson, Mich. Reflecting electric lamp. No. 1,313,473; Aug. 19; v. 265; p. 356.
 Douglas & Rudd Mfg. Co. (See Douglas, Harry A., assignor.)
 Douglas, Leon F., San Rafael, Calif. Cinematography. No. 1,313,587; Aug. 19; v. 265; p. 378.
 Dover, George W., Cranston, R. I., assignor, by mesne assignments, to American Guaranteed Tooth Company, Incorporated, Boston, Mass. Making false-tooth backings from sheet metal. No. 1,313,528; Aug. 19; v. 265; p. 369.
 Draper Corporation. (See Stimpson, Edward S., assignor.)
 Drummond, Charles W., San Francisco, Calif. Kaleidoscope. No. 1,313,848; Aug. 19; v. 265; p. 427.
 Dufour, George H., assignor to Marshall Field & Company, Chicago, Ill. Feeding device for presses. No. 1,313,474; Aug. 19; v. 265; p. 356.
 Dunbar, Charles J., Kalamazoo, Mich., assignor to Accounting Devices Company, Chicago, Ill. Mechanical posting. No. 1,313,588; Aug. 19; v. 265; p. 378.
 Dunlap, Elon, Diamond Springs, Calif. Yielding mount for plows and other tools. No. 1,313,802; Aug. 19; v. 265; p. 418.
 Dunn, James A., Saugus, Mass. Article-holder. No. 1,313,803; Aug. 19; v. 265; p. 418.
 Duplex Snap Fastener Co. (See Boyler, Emanuel J., assignor.)
 Duplex Snap Fastener Co. (See Puter and Boyler, assignors.)
 Du Pont, Francis L., Wilmington, Del. Water and steam system for steam-driven automobiles. No. 1,313,676; Aug. 19; v. 265; p. 394.
 Drer, Lewis G., Cattaraugus, N. Y. Tractor attachment. No. 1,313,677; Aug. 19; v. 265; p. 394.
 Durham, Robert P., Chicago, Ill. Vessel construction. No. 1,313,529; Aug. 19; v. 265; p. 367.
 Duryea, Charles E., Philadelphia, Pa. Internal-combustion engine. No. 1,313,276; Aug. 19; v. 265; p. 320.
 E. and T. Fairbanks and Company. (See Bousfield, John H. A., assignor.)
 E. B. Estes & Sons. (See Estes, Webster C., assignor.)
 E. I. du Pont de Nemours and Company. (See Andreau, Roland L., assignor.)
 E. I. du Pont de Nemours and Company. (See Broadbent and Woodbridge, assignors.)
 E. I. du Pont de Nemours and Company. (See Stine, Charles M., assignor.)
 Eagle, Harry J., Terre Haute, Ind. Signal. No. 1,313,678; Aug. 19; v. 265; p. 394.
 Eaton, Reason B., Oswego, Kans., assignor of one-third to W. J. Carpenter, Kansas City, Mo. Nut-lock. No. 1,313,589; Aug. 19; v. 265; p. 379.
 Edgar, Grant E. (See Hedell and Edgar.)
 Edge, Howard H., assignor to The Locomobile Company of America, Bridgeport, Conn. Valve. No. 1,313,858; Aug. 19; v. 265; p. 429.
 Edison Storage Battery Company. (See Hutchison and Norton, assignors.)
 Edwards, Eugene P., Plainfield, N. J. Vehicle. No. 1,313,530; Aug. 19; v. 265; p. 367.

Eklund, Elmer, Jamestown, N. Y. Ice-pick. No. 1,313,894; Aug. 19; v. 265; p. 418.
 Elder, Benjamin S., Durham, England. Punching-machine, drilling-machine, and the like. No. 1,313,277; Aug. 19; v. 265; p. 320.
 Electric Boat Company. (See Bedell and Edgar, assignors.)
 Electric Boat Company. (See Bedell, Charles H., assignor.)
 Electro-Dynamic Company. (See Trudeau, John F., assignor.)
 Ellis Drier & Elevator Company. (See Ellis, Hubert C., assignor.)
 Ellis, Hubert C., Evanston, assignor to Ellis Drier & Elevator Company, Chicago, Ill. Grain-drier. No. 1,313,279; Aug. 19; v. 265; p. 320.
 Ellis, Julian S., Petersham, New South Wales, Australia. Feed-water-regulating valve for steam-boilers. No. 1,313,273; Aug. 19; v. 265; p. 337.
 Engel, Abraham, New York, N. Y. Multiple mixing-valve. No. 1,313,500; Aug. 19; v. 265; p. 379.
 England, Ernst E., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill. Planter. No. 1,313,475; Aug. 19; v. 265; p. 356.
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 Everson, Sam, Billings, Mont. Door-actuating mechanism for elevators. No. 1,313,591; Aug. 19; v. 265; p. 370.
 Ewert, Walter S., Los Angeles, Calif. Artificial bait. No. 1,313,476; Aug. 19; v. 265; p. 357.
 F. L. Smith & Co. (See Easting, John S., assignor.)
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 Farley, Charles H., Hayes, England. Controlling device for aeroplanes. No. 1,313,651; Aug. 19; v. 265; p. 393.
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 Faris, Harry N., Kansas City, Kans., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Trunk-circuit. No. 1,313,477; Aug. 19; v. 265; p. 357.
 Fasting, John S., Frederiksberg, near Copenhagen, Denmark, assignor to F. L. Smith & Co., New York, N. Y. Rotary kiln. No. 1,313,281; Aug. 19; v. 265; p. 321.
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 Flala, Joseph B., assignor to Standard Pneumatic Action Company, New York, N. Y. Player-piano for producing solo effects. No. 1,313,625; Aug. 19; v. 265; p. 385.
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 Flanagan, Ambrose J., Castalia, Iowa. Feeder. No. 1,313,282; Aug. 19; v. 265; p. 321.
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 Flannery Bolt Company. (See Flannery and Dodds, assignors.)
 Flannery Bolt Company. (See Stafford and Dodds, assignors.)
 Flannery, John R., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt for boilers. No. 1,313,627; Aug. 19; v. 265; p. 386.
 Flidat, Thorolf, Brooklyn, N. Y. Flashing-insert for roof construction. No. 1,313,283; Aug. 19; v. 265; p. 321.
 Follows, George H., Pittsburgh, Pa. Pocket-orderly. No. 1,313,374; Aug. 19; v. 265; p. 338.
 Fontaine, Albert C., Millbury, Mass. Air-controlling device for carbureters. No. 1,313,478; Aug. 19; v. 265; p. 357.
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 Ford, Harry, Uttroster, England. Article adapted to be used as light-reflectors, vase, or the like. No. 1,313,806; Aug. 19; v. 265; p. 419.
 Foster, Ernest H., Duncan Hills, N. Y. Apparatus for expanding superheater-tubes. No. 1,313,284; Aug. 19; v. 265; p. 321.
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Gallmeyer, Sigmund H., Rochester, N. Y. Camera. No. 1,313,285; Aug. 19; v. 265; p. 321.
 Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making cord tires and tire-making cord bands therefor. No. 1,313,286; Aug. 19; v. 265; p. 322.
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 General Electric Company. (See Schinischoll, Erich, assignor.)
 General Electric Company. (See Steenstrup, Christian, assignor.)
 Genovese, Rosario, assignor of one-half to M. Farber, New York, N. Y. Toy aeroplane. No. 1,313,849; Aug. 19; v. 265; p. 427.
 George, Charles L., assignor to The Buckeye Traction Ditcher Company, Findlay, Ohio. Internal pipe-wrench. No. 1,313,479; Aug. 19; v. 265; p. 357.
 Gerard, H. H., et al. (See Kavanagh, Enoch, assignor.)
 Gerlach, Oscar, Danville, Ill. Economizing metallic reductions. No. 1,313,287; Aug. 19; v. 265; p. 322.
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 Gilbert, Walter R., London, England. Apparatus for reproducing the motions of the upper part of vessels in motion. No. 1,313,685; Aug. 19; v. 265; p. 396.
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 Gilman, George H., Claremont, N. H., assignor to Sullivan Machinery Company, Boston, Mass. Drilling apparatus. No. 1,313,859; Aug. 19; v. 265; p. 429.
 Girodo, Louis, London, assignor to Fallolita Limited, Westminster, England. Acetylene-generator. No. 1,313,810; Aug. 19; v. 265; p. 420.
 Glaz, Joseph, Philadelphia, Pa. Electric fuse-plug. No. 1,313,288; Aug. 19; v. 265; p. 322.
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 Gidden, Harvey L., Natick, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Cut-sole rack. No. 1,313,299; Aug. 19; v. 265; p. 322.
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 Goulbork, Walter F., Toronto, Ontario, Canada. Greenhouse. No. 1,313,811; Aug. 19; v. 265; p. 420.
 Graham, Charles W., Allendale, N. J., assignor to American Can Company, New York, N. Y. Can-end and gasket assembling machine. (Reissue.) No. 1,313,408; Aug. 19; v. 265; p. 431.
 Graham, Charles W., Allendale, N. J., assignor to American Can Company, New York, N. Y. Applying gaskets or ring-liners. (Reissue.) No. 1,313,409; Aug. 19; v. 265; p. 432.
 Graham Copy-Holder Company, The. (See Graham, Elmer, assignor.)
 Graham, Elmer, assignor to The Graham Copy-Holder Company, Wray, Colo. Copy-holder. No. 1,313,812; Aug. 19; v. 265; p. 420.
 Grant, Charles H., New York, N. Y. Toy aeroplane. No. 1,313,290; Aug. 19; v. 265; p. 322.
 Gray, Charles R., Knoxville, Tenn. Machine for cutting sheet-form material. No. 1,313,481; Aug. 19; v. 265; p. 358.
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 Gray, John, London, England, and J. G. Gray, Glasgow, Scotland. Gyrostatic apparatus. No. 1,313,532; Aug. 19; v. 265; p. 368.
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 Griffith, Jacob K., assignor to A. J. Griffith, Pittsford, Pa. Art of casting. No. 1,313,503; Aug. 19; v. 265; p. 379.
 Grob, John, Chicago, Ill. Pipe-cleaning machine. No. 1,313,850; Aug. 19; v. 265; p. 427.
 Gross, Daniel N., South Fort Smith, Ark. Gas heating stove. No. 1,313,813; Aug. 19; v. 265; p. 420.
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 Gruetter, John R. (See Loew and Gruetter.)
 Gruetter, John R., assignor to The Loew Manufacturing Company, Cleveland, Ohio. Bottle-cleaning apparatus. No. 1,313,814; Aug. 19; v. 265; p. 420.
 Guardian Saving & Trust Company, The, trustee. (See Cunningham, William P., assignor.)
 Guillaume, Charles E., Suresne, France. Compensating balance-spring for chronometers and watches. No. 1,313,291; Aug. 19; v. 265; p. 322.
 H. B. Wiggin's Sons Company. (See Wiggin, Rollin H., assignor.)

Hagerstrom, John A., Scranton, Pa., assignor to Victor Typewriter Company, New York, N. Y. Type-writer ribbon-spool and mount therefor. No. 1,313,631; Aug. 19; v. 265; p. 386.
 Hahn, John H., Sank City, Wm. Counter display case and cabinet. No. 1,313,605; Aug. 19; v. 265; p. 430.
 Hall, Henry L., and C. A. Sharp, Crickwood, England. Building and fitting of same for the application of finishes to surfaces. No. 1,313,376; Aug. 19; v. 265; p. 338.
 Hamilton, John R., Yonkers, assignor to Sypho-Chemical Sprinkler Corporation, Croton-on-Hudson, N. Y. Automatic fire-extinguishing apparatus. No. 1,313,292; Aug. 19; v. 265; p. 322.
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 Hammond, John H., Jr., Gloucester, Mass. Electric-wave-relaying system. No. 1,313,860; Aug. 19; v. 265; p. 429.
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 Hansen-Ellehammer, Jacob C., Copenhagen, Denmark. Steam-engine. No. 1,313,278; Aug. 19; v. 265; p. 320.
 Hansen, Jens P., Copenhagen, Denmark. Combined printing, enlarging, and diminishing apparatus for photographic use. No. 1,313,815; Aug. 19; v. 265; p. 421.
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 Harris, Henry K., London, England. Advertising device. No. 1,313,817; Aug. 19; v. 265; p. 421.
 Harris, John J. R., Broadheath, England, assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Stereotype's matrix and vertical mold for casting stereotype-plates from it. No. 1,313,632; Aug. 19; v. 265; p. 387.
 Harris, Mark, New York, N. Y. Combination letter-sheet and envelop. No. 1,313,293; Aug. 19; v. 265; p. 323.
 Harris, William A., Greenville, S. C. Low-pressure alarm for pneumatic tubes. No. 1,313,533; Aug. 19; v. 265; p. 368.
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 Hartshorne, William H., Methuen, Mass., assignor to The Text Corporation, Lawrence, Mass. Textile art. No. 1,313,594; Aug. 19; v. 265; p. 380.
 Hartsock, Sherman C., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill. Fertilizer-distributor. No. 1,313,595; Aug. 19; v. 265; p. 380.
 Hassel, Nels H., Pasadena, Calif. Menu-holder. No. 1,313,377; Aug. 19; v. 265; p. 338.
 Hathaway, Edgar F., and C. Lea, Boston, Mass., assignors to American Warp Drawing Machine Company. Textile-machine. No. 1,313,294; Aug. 19; v. 265; p. 323.
 Hayhurst, Walter, Woodlands Acclington, England. Vessel for containing acids and other liquids. No. 1,313,810; Aug. 19; v. 265; p. 421.
 Healey, Patrick J., Jersey City, N. J. Sewer-cleaning device. No. 1,313,378; Aug. 19; v. 265; p. 338.
 Heckenbleiker, Ingenieur, assignor to Chemical Construction Company, Charlotte, N. C. Making phosphoric acid. No. 1,313,379; Aug. 19; v. 265; p. 339.
 Hegardt, Axel E., Philadelphia, Pa. Flexible rule. No. 1,313,482; Aug. 19; v. 265; p. 358.
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 Helsing, Raymond A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. High-frequency-carrier telephony. No. 1,313,483; Aug. 19; v. 265; p. 358.
 Hellweg, Henry, assignor of one-half to L. Schlesinger, Milwaukee, Wis. Trunk-fastening. No. 1,313,687; Aug. 19; v. 265; p. 396.
 Hemp, Joseph L., St. Louis, Mo. Storepipe. No. 1,313,633; Aug. 19; v. 265; p. 387.
 Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor-controller. No. 1,313,688; Aug. 19; v. 265; p. 396.
 Henderson, John, Chicago, Ill. Fuselage. No. 1,313,690; Aug. 19; v. 265; p. 397.
 Hendrick, Charles, New York, N. Y. Hand-loom. No. 1,313,596; Aug. 19; v. 265; p. 380.
 Hendron, James J., Chilopoe Falls, Mass. Game apparatus. No. 1,313,484; Aug. 19; v. 265; p. 358.
 Heugli, Lewis O., Oakmont, Pa. Forming-tool. No. 1,313,380; Aug. 19; v. 265; p. 340.
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 Herbert, Albert H., et al. (See Connor and Miles, assignors.)
 Hershey, Grant W., assignor of one-half to O. V. Burkett, Fremont, Ohio. Starting-crank lock. No. 1,313,485; Aug. 19; v. 265; p. 358.
 Hess, Francis E., Blackwell, Okla. Straw-toothpick-making machine. No. 1,313,820; Aug. 19; v. 265; p. 422.
 Hess, Wendell Jr., assignor to W. & L. E. Gurley, Troy, N. Y. Sender for water-stage recorders. No. 1,313,690; Aug. 19; v. 265; p. 397.
 Hiller, George A., East Rochester, assignor to K. Gleason, Pittsford, N. Y. Draft-bar. No. 1,313,351; Aug. 19; v. 265; p. 339.

Hiller, George A., East Rochester, assignor to K. Gleason, Pittsford, N. Y. Draft-gear for trailers. No. 1,313,382; Aug. 19; v. 265; p. 339.
 Hiltz, George S., New York, N. Y. Inking mechanism for printing-telegraph receivers. No. 1,313,295; Aug. 19; v. 265; p. 323.
 Hixon, Calvin D., Hlawatha, Kans. Coop. No. 1,313,601; Aug. 19; v. 265; p. 397.
 Hobbs, Robert F., Great Neck, N. Y. Toilet article. (Reissue.) No. 1,313,602; Aug. 19; v. 265; p. 397.
 Hoffman, George E., Pensacola, Fla. Submarine vessel. No. 1,313,534; Aug. 19; v. 265; p. 368.
 Horiochi, Hirotsuke, Taiwan, Japan. Vertical cylindrical water-tube boiler. No. 1,313,692; Aug. 19; v. 265; p. 397.
 Hosken, William H., Warland, Mont. Slaughtering apparatus. No. 1,313,383; Aug. 19; v. 265; p. 339.
 Hucks, Benfield C., London, assignor to The Aircraft Manufacturing Company Limited, Westminster, London, England. Means for starting the engines of aeroplanes. No. 1,313,693; Aug. 19; v. 265; p. 397.
 Huggins, Merion J., assignor to Automotive Development Co., Inc., New York, N. Y. Speed-controlling mechanism for automobiles. No. 1,313,555; Aug. 19; v. 265; p. 368.
 Hunt, Mary J. (See Crossley, Noel, assignor.)
 Hunter, Albert, Vancouver, Wash. Tool-holder. No. 1,313,597; Aug. 19; v. 265; p. 380.
 Hunter, George D., Bloomington, Ind., assignor to Sullivan Machinery Company, Claremont, N. H. Stone-channeling machine. No. 1,313,821; Aug. 19; v. 265; p. 422.
 Hunter, John, Barrow-in-Furness, England. Gas-burner. No. 1,313,694; Aug. 19; v. 265; p. 398.
 Hutchison, Miller R., and C. W. Norton, assignors to Edison Storage Battery Company, West Orange, N. J. Battery-supporting device. No. 1,313,384; Aug. 19; v. 265; p. 339.
 Indianapolis Manufacturing Company. (See Nordyke and Norris, assignors.)
 Indianapolis Manufacturing Company. (See Nordyke, Horace W., assignor.)
 Ingalls, James, Muskegon, Mich. Propeller-wheel. No. 1,313,598; Aug. 19; v. 265; p. 380.
 Ingalls, James, Muskegon, Mich. Aeroplane propeller and tractor. No. 1,313,599; Aug. 19; v. 265; p. 380.
 International Conveyor Corporation. (See Stuart, Francis L., assignor.)
 Iseman, Richard B., Clarion, Pa. Traveling automobile turn-table. No. 1,313,486; Aug. 19; v. 265; p. 358.
 J. Stone & Company. (See Darker, Alfred H., assignor.)
 Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,695; Aug. 19; v. 265; p. 398.
 Jay, William H., Mohridge, S. D. Combination-lock. No. 1,313,536; Aug. 19; v. 265; p. 368.
 Jayne, Irving, Edwall, Wash. Internal-combustion engine. No. 1,313,634; Aug. 19; v. 265; p. 387.
 Jenkins, William L., Jr. (See Jenkins, William L., Sr., and W. L., Jr.)
 Jenkins, William L., Sr., and W. L., Jr., Niles, Ohio. Double. No. 1,313,635; Aug. 19; v. 265; p. 387.
 Jennings, Valerius T., Chicago, Ill. Portable electric lamp. No. 1,313,296; Aug. 19; v. 265; p. 323.
 Jockma, Charles H., Ansonia, Conn. Splash-feed oil-cup. No. 1,313,385; Aug. 19; v. 265; p. 340.
 Johns, Paul H., assignor of one-fourth to E. Johnson, one-fourth to A. W. Cowles, Utica, and one-fourth to E. W. Morgan, Winona, Minn. Manure-loader. No. 1,313,297; Aug. 19; v. 265; p. 324.
 Johnson Acetylene Gas Company. (See Ruckman, Floyd A., assignor.)
 Johnson, Charles H., Sacramento, Calif. Game-board. No. 1,313,600; Aug. 19; v. 265; p. 380.
 Johnson, Fred, et al. (See Johns, Paul H., assignor.)
 Johnson, Frederick G. L., assignor to Vickers Limited, Westminster, London, England. Shell-fuse. No. 1,313,298; Aug. 19; v. 265; p. 324.
 Johnson, Oscar R., Providence, R. I. Lingerie-clasp. No. 1,313,299; Aug. 19; v. 265; p. 324.
 Johnson, Ralph C., Chicago, Ill. Landing-gear for flying-machines. No. 1,313,696; Aug. 19; v. 265; p. 398.
 Jones, George, Manor Park, England. Driving arrangement of electric motors. No. 1,313,537; Aug. 19; v. 265; p. 369.
 Jones, George A. E., assignor to United States Electric Company, New London, Conn. Electric rivet-heating appliance. No. 1,313,538; Aug. 19; v. 265; p. 369.
 Jones, George A. E., assignor to United States Electric Company, New London, Conn. Apparatus for heating rivets. No. 1,313,539; Aug. 19; v. 265; p. 369.
 Jones, Harry, Suffern, N. Y., assignor to American Brake Shoe & Foundry Company, Mahwah, N. J. Brake-shoe. No. 1,313,540; Aug. 19; v. 265; p. 369.
 Jones, John M. (See Orbin, George, assignor.)
 Jones, John M., St. Joseph, Mo. Resilient tire. No. 1,313,541; Aug. 19; v. 265; p. 369.
 Jones, Llewellyn L., Battle Creek, Mich. Funnel. No. 1,313,556; Aug. 19; v. 265; p. 340.
 Jones, Walter A., Falls City, Neb. Boiler tube and sheet joint. No. 1,313,542; Aug. 19; v. 265; p. 370.
 Jones, William. (See Bulman, Smith, and Jones.)

Joyce, Stephen V., New York, N. Y. Chute for proportioning and forwarding materials. No. 1,313,552; Aug. 19; v. 265; p. 328.

Juengst, Charles A., Croton Falls, N. Y., assignor, by mesne assignments, to American Assembling Machine Company. Delivery mechanism. No. 1,313,487; Aug. 19; v. 265; p. 359.

Just, John H., Syracuse, N. Y. Valve-grinder. No. 1,313,601; Aug. 19; v. 265; p. 381.

Kaarbo, Agnar, Cleveland, Ohio. Welded-steel barrel and method of making same. No. 1,313,387; Aug. 19; v. 265; p. 340.

Kallina, Lesser, New York, N. Y. Woman's garment. No. 1,313,697; Aug. 19; v. 265; p. 398.

Kasley, Alexander T., Switzville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Generating pressure. No. 1,313,698; Aug. 19; v. 265; p. 398.

Katzke, Albert, Milwaukee, Oreg. Necktie-holder. No. 1,313,822; Aug. 19; v. 265; p. 422.

Kayabagh, Enoch, assignor of one-fourth to H. P. Cramble and one-fourth to H. H. Gerard, Des Moines, Iowa. Adjustable punch-holder. No. 1,313,699; Aug. 19; v. 265; p. 399.

Kelm, Archer. (See Schlechter and Kelm.)

Keller, Joseph F., New York, assignor to Keller Mechanical Engraving Company, Brooklyn, N. Y. Die sinking, engraving, and reproducing device for milling-machines. No. 1,313,543; Aug. 19; v. 265; p. 370.

Keller Mechanical Engraving Company. (See Keller, Joseph F., assignor.)

Kellogg Switchboard and Supply Company. (See Faria, Harry N., assignor.)

Kelly, Edwin, Caspovilla, Wis. Mechanism for unloading wagons. No. 1,313,588; Aug. 19; v. 265; p. 340.

Kelly, Louis N., Lancaster, N. Y. Automobile-wheel sled. No. 1,313,823; Aug. 19; v. 265; p. 422.

Kelly Springfield Tire Co. (See McClenathen, Robert, assignor.)

Kemm, Charles F., assignor of one-third to B. Perera, Albuquerque, N. Mex. Bomb. No. 1,313,300; Aug. 19; v. 265; p. 324.

Kenny, Frank E., assignor of one-half to F. A. Sweeney, Portland, Oreg. Stump-puller. No. 1,313,545; Aug. 19; v. 265; p. 370.

Kiefer, Karl, Cincinnati, Ohio. Filling-machine. No. 1,313,501; Aug. 19; v. 265; p. 324.

Kilmer, Harvey E. (See Aylworth and Wiersma, assignor.)

Kimball, Perley L., assignor to The Vermont Farm Machine Company, Bellows Falls, Vt. Speed-indicator. No. 1,313,380; Aug. 19; v. 265; p. 340.

King, Charles H., Detroit, Mich. Pump. No. 1,313,700; Aug. 19; v. 265; p. 399.

King, Tullie, Reynoldsburg, Ohio. Wire-splicing tool. No. 1,313,488; Aug. 19; v. 265; p. 359.

Kipp, Alfred J., Milwaukee, Wis., assignor to The Curtain Supply Company, Chicago, Ill. Diaphragm buffing mechanism. No. 1,313,302; Aug. 19; v. 265; p. 324.

Klein, Charles J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,313,501; Aug. 19; v. 265; p. 399.

Klema, Joseph N., Austin, Minn. Lantern. No. 1,313,390; Aug. 19; v. 265; p. 340.

Knoll, Andrew, Jr., Baltimore, Md. Device for preventing theft of automobiles. No. 1,313,544; Aug. 19; v. 265; p. 370.

Knowing, George, Jr., St. John, Newfoundland. Demountable rim. No. 1,313,824; Aug. 19; v. 265; p. 422.

Kohn, Leo M. (See MacFarland, Allison M., assignor.)

Kunkoff, Harry R., New York, N. Y. Adjustable dress-form. No. 1,313,303; Aug. 19; v. 265; p. 325.

Kramer Rotary Harrow Company. (See Rapp, Mathew, assignor.)

Kretzer, Sidney D., St. Louis, Mo. Lightning rod coupling. No. 1,313,391; Aug. 19; v. 265; p. 341.

Krieger, Hugo, New York, N. Y. Lens-grinding machine. No. 1,313,702; Aug. 19; v. 265; p. 399.

Kruger, Harry R. (See Stranders, Julian, assignor.)

Kubish, John, Indian Orchard, Mass. Flying machine. No. 1,313,825; Aug. 19; v. 265; p. 422.

Lack, Fred S., Paducah, Ky. Vehicle-wheel. No. 1,313,489; Aug. 19; v. 265; p. 359.

Lal Datta, Rasik, Calcutta, India. Recovery of sulfur. No. 1,313,370; Aug. 19; v. 265; p. 337.

Lambert, George H., Asheville, N. C. Machine for washing golf balls and other articles. No. 1,313,703; Aug. 19; v. 265; p. 399.

Lander, Frank E., Lewisham, London, assignor to Vickers Limited, Westminster, London, England. Safety device. No. 1,313,546; Aug. 19; v. 265; p. 370.

Landis, Frank F., Waynesboro, Pa. Secondary electric clock. No. 1,313,304; Aug. 19; v. 265; p. 325.

Larkin, William J., assignor to Waterbury Clock Co., Waterbury, Conn. Watchcase. No. 1,313,636; Aug. 19; v. 265; p. 387.

Larrabee, Clinton R., Birmingham, N. Y. Synchronizing clock system. No. 1,313,305; Aug. 19; v. 265; p. 325.

Larsen, James M., Chicago, Ill. Transmission mechanism for motor vehicles. No. 1,313,392; Aug. 19; v. 265; p. 341.

Larson, Albert W., assignor to Stenman Electric Valve Grinder Company, Worcester, Mass. Valve-grinder. No. 1,313,490; Aug. 19; v. 265; p. 359.

Larson, Fredrik E., Waterbury, Conn. Pen and pencil clip. No. 1,313,826; Aug. 19; v. 265; p. 423.

Larsen, Herman G., New Rochelle, N. Y. Concrete-mold. No. 1,313,393; Aug. 19; v. 265; p. 341.

Lasserre, Charles W., Fernandina, Fla. Broad-gage attachment for vehicles. No. 1,313,394; Aug. 19; v. 265; p. 341.

Latimer, Joseph H. (See Michon, Joseph H. M., assignor.) (Reissue.)

Latman, Grant L., and H. T. Burke, Tulsa, Okla. Clothes-eack. No. 1,313,827; Aug. 19; v. 265; p. 423.

Lazzell, James A., Columbus, Ind. Furnace feed-chute. No. 1,313,491; Aug. 19; v. 265; p. 359.

Lea, Charles. (See Hathaway and Lea.)

Lee, Bernard S., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wax-thread sewing-machine. No. 1,313,704; Aug. 19; v. 265; p. 400.

Leigh, Alfredo G., Santiago, Chile. Aeroplane. No. 1,313,828; Aug. 19; v. 265; p. 423.

Leiman, George W. (See Leiman, William H. and G. W.)

Leiman, William H. and G. W., Newark, N. J. Sand-blast machine. No. 1,313,300; Aug. 19; v. 265; p. 325.

Leisner, Gerald T. D., assignor of one-third to E. R. Case, Toronto, Ontario, Canada. Demountable motor-vehicle frame. No. 1,313,429; Aug. 19; v. 265; p. 348.

Lenz, William A., Lebanon, Mo. Photoprint-washer. No. 1,313,395; Aug. 19; v. 265; p. 342.

Lersch, William G., assignor to Miller Rubber Company, Akron, Ohio. Reed. No. 1,313,705; Aug. 19; v. 265; p. 400.

Leyland Motors (1914) Ltd. (See Thomas, John G. P., assignor.)

Litchfield, Henry L., and V. Speer, Waterloo, Iowa; said Speer assignor to said Litchfield. Straw-spreader. No. 1,313,637; Aug. 19; v. 265; p. 388.

Litchfield, Henry L., and V. Speer, Waterloo, Iowa; said Speer assignor to said Litchfield. Spreader. No. 1,313,638; Aug. 19; v. 265; p. 388.

Lohr, George H., Toledo, Ohio. Automobile-radiator. No. 1,313,492; Aug. 19; v. 265; p. 360.

Locomobile Company of America, The. (See Edge, Howard H., assignor.)

Loefer, James R., Washington, D. C. Holding means for portable apparatus. No. 1,313,307; Aug. 19; v. 265; p. 325.

Loew, Charles H., and J. R. Gruetter, assignors to The Loew Manufacturing Company, Cleveland, Ohio. Bottle washer. No. 1,313,706; Aug. 19; v. 265; p. 400.

Loew Manufacturing Company, The. (See Gruetter, John R., assignor.)

Loew Manufacturing Company. (See Loew and Gruetter, assignors.)

Lokey, Charles W., Birmingham, Ala. Leak-detector for pneumatic-tire valves. No. 1,313,493; Aug. 19; v. 265; p. 360.

Luebbert, William M., San Francisco, Calif. Hanger. No. 1,313,547; Aug. 19; v. 265; p. 371.

Lutz, William H., Philadelphia, Pa. Quilting-machine. No. 1,313,308; Aug. 19; v. 265; p. 326.

Luzmore, William, Chicago, Ill. Casting device. No. 1,313,692; Aug. 19; v. 265; p. 398.

Lyman, Henry D., Minneapolis, Minn. Display device. No. 1,313,548; Aug. 19; v. 265; p. 371.

MacEachern, Peter A. (See MacRae and MacEachern.)

MacFarland, Allison M., assignor to L. M. Kohn, Buffalo, N. Y. Sheet-folding machine. No. 1,313,712; Aug. 19; v. 265; p. 401.

MacFarland, Allison M., assignor to L. M. Kohn, Buffalo, N. Y. Sheet-folding machine. No. 1,313,713; Aug. 19; v. 265; p. 402.

Macfiae, Lachlan D., and P. A. MacEachern, Nacozari, Mexico. Settling-tank. No. 1,313,714; Aug. 19; v. 265; p. 402.

Mac, Anton, New Haven, Conn. Pillars. No. 1,313,399; Aug. 19; v. 265; p. 342.

Macell, Frederick H., St. Marys, Ohio. Gun-sight. No. 1,313,549; Aug. 19; v. 265; p. 371.

Maher, Charles P., and E. J. Fetherstonhaugh, Montreal, Quebec, Canada. Detachable heel. No. 1,313,400; Aug. 19; v. 265; p. 342.

Mambourg, Leopold, assignor to The Mambourg Continous Iron and Steel Furnace Co., Lancaster, Ohio. Smelting and refining ore. No. 1,313,309; Aug. 19; v. 265; p. 326.

Mann, Orville C., Oak Park, Ill. Ventilator. No. 1,313,401; Aug. 19; v. 265; p. 342.

Mantle, Joseph G. C., New York, N. Y., assignor to Stern-Coleman Diamond Machine Co., Inc. Polishing-machine. No. 1,313,402; Aug. 19; v. 265; p. 343.

Marconi Wireless Telegraph Company of America. (See Weagant, Roy A., assignor.)

Marsden, Mark W., Philadelphia, Pa. Treatment of rice-straw for recovery of its values. No. 1,313,403; Aug. 19; v. 265; p. 343.

Marshall Field & Company. (See Dufour, George H., assignor.)

Marten, Thomas H., New York, N. Y. Ship's davit. No. 1,313,404; Aug. 19; v. 265; p. 343.

Marvin, Clarence, Mather, Wis. Extruder. No. 1,313,715; Aug. 19; v. 265; p. 402.

Mason, James H. (See Thurston, Elmer A., assignor.)

Mason, John H., Heavener, Okla. Emergency-bub. No. 1,313,405; Aug. 19; v. 265; p. 343.

Mathes, Robert C., assignor to Western Electric Company, Incorporated, New York, N. Y. Vacuum-tube repeater. No. 1,313,406; Aug. 19; v. 265; p. 343.

Mattison, Henry, Hansboro, N. D. Weed-destroyer. No. 1,313,310; Aug. 19; v. 265; p. 326.

Marted, Edward B., Walsall, England. Process and apparatus for the hydrogenation of oils, fats, and like materials. No. 1,313,407; Aug. 19; v. 265; p. 344.

Mazzeo, Salvatore, assignor to The Adama-Bagnall Electric Company, Cleveland, Ohio. Head-lamp. No. 1,313,716; Aug. 19; v. 265; p. 402.

McCain, Walter W., Ogden, Utah. Gearless differential. No. 1,313,306; Aug. 19; v. 265; p. 342.

McClenathen, Robert, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y. Inner-tube deflator. No. 1,313,603; Aug. 19; v. 265; p. 381.

McGuire, Thomas E. (See Baker and McGuire.)

McKenna, Terrence L., London, Colo. Resilient wheel. No. 1,313,707; Aug. 19; v. 265; p. 400.

McKeogh, Thomas J., assignor to Sherwin-Williams Company, Limited, Montreal, Quebec, Canada. Package. No. 1,313,397; Aug. 19; v. 265; p. 342.

McKinnon, Dash Company. (See Armstrong, Wesley J., assignor.)

McKay, Edwin A., and C. D. Moore, New Orleans, La. Stump-harvester. No. 1,313,708; Aug. 19; v. 265; p. 400.

McKay, Edwin A., and G. D. Moore, New Orleans, La. Method of harvesting stumps. No. 1,313,709; Aug. 19; v. 265; p. 401.

McKay, Edwin A., New Orleans, La. Cutter-head. No. 1,313,710; Aug. 19; v. 265; p. 401.

McLaughlin, William E. (See Wilson, Dixon, and McLaughlin.)

McManus, Lewis R., Houston, Tex. Vehicle-indicator. No. 1,313,398; Aug. 19; v. 265; p. 342.

McMurtry, Edward A., Chicago, Ill. Expression organ-keyboard. No. 1,313,711; Aug. 19; v. 265; p. 401.

McNeill Chair Company. (See McNeill, Harry, assignor.)

McNeill, Harry, assignor to McNeill Chair Company, Sheboygan, Wis. Combination telephone-support and chair. No. 1,313,404; Aug. 19; v. 265; p. 360.

Madville Wrench Company. (See Smith, Edward C., assignor.)

Meikleham, William J., Denver, Colo. Fan-belt retainer. No. 1,313,829; Aug. 19; v. 265; p. 423.

Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Piston-controlling mechanism. No. 1,313,807; Aug. 19; v. 265; p. 431.

Merkel, Charles E., Marion, Ohio. Clevis. No. 1,313,311; Aug. 19; v. 265; p. 326.

Messiter, William F., Brooklyn, N. Y. Cap-cover block. No. 1,313,717; Aug. 19; v. 265; p. 402.

Metzger, Floyd J., New York, N. Y. Production of formates. No. 1,313,312; Aug. 19; v. 265; p. 326.

Metzger, Floyd J., New York, N. Y. Production and extraction of cyanide. No. 1,313,313; Aug. 19; v. 265; p. 326.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,314; Aug. 19; v. 265; p. 327.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,315; Aug. 19; v. 265; p. 327.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,316; Aug. 19; v. 265; p. 327.

Meyer, Frederick W., Jersey City, N. J., assignor of one-half to P. W. B. Garry, New York, N. Y. Water-tank electric display-sign. No. 1,313,550; Aug. 19; v. 265; p. 371.

Meyner, Walter, New York, N. Y. Self-illuminating notebook. No. 1,313,551; Aug. 19; v. 265; p. 371.

Micband, Joseph O., Fort Kent, Me. Internal-expanding brake. No. 1,313,317; Aug. 19; v. 265; p. 327.

Michelson, Albert A., Chicago, Ill. Optical range-finder. No. 1,313,495; Aug. 19; v. 265; p. 350.

Michon, Joseph H. M., Baltimore, Md., assignor of one-eighth to J. H. Latimer, Washington, D. C. Expandable wheel-rim. (Reissue.) No. 1,4712; Aug. 19; v. 265; p. 437.

Miles, Don D. (See Connor and Miles.)

Miles, Myrtle C., et al. (See Connor and Miles, assignors.)

Miles, Vester, Pageland, S. C. Water-lifting device. No. 1,313,718; Aug. 19; v. 265; p. 403.

Millard, Hannah G., assignor to The Butterick Publishing Company, New York, N. Y. Dressmaker's pattern outfit. No. 1,313,496; Aug. 19; v. 265; p. 360.

Miller, Andrew B., Baldwin, Wis. Dry-cleaning and washing machine. No. 1,313,497; Aug. 19; v. 265; p. 361.

Miller, George F., New York, N. Y. Joint for filter-press devices. No. 1,313,318; Aug. 19; v. 265; p. 327.

Miller, Julius J., St. Joseph, Mich. Internal-combustion-engine ignition-indicator. No. 1,313,319; Aug. 19; v. 265; p. 327.

Miller, Norman B., New York, N. Y. Packing for piston-rods, plungers, pistons, etc. No. 1,313,320; Aug. 19; v. 265; p. 327.

Miller Rubber Company. (See Lerch, William G., assignor.)

Miller, Thomas S., South Orange, N. J. Winding-engine. No. 1,313,719; Aug. 19; v. 265; p. 403.

Mills, Joseph E., Los Angeles, Calif. Suspenders. No. 1,313,321; Aug. 19; v. 265; p. 328.

Mink, Clarence, New York, N. Y. Stirring device. No. 1,313,830; Aug. 19; v. 265; p. 423.

Mitcham, James L., and J. W. Burns, Rockdale, Tex. Scoop. No. 1,313,408; Aug. 19; v. 265; p. 344.

Mitchell, Robert G., Mount Vernon, N. Y. Sound reproducing and recording apparatus. No. 1,313,720; Aug. 19; v. 265; p. 403.

Moffat, James R., assignor to Union Special Machine Company, Chicago, Ill. Take-up mechanism for sewing-machines. No. 1,313,721; Aug. 19; v. 265; p. 403.

Moore, George D. (See McKay and Moore.)

Morin, Alfred C., Paris, France. Making metal wheels. No. 1,313,322; Aug. 19; v. 265; p. 328.

Morden Frog & Crossing Works. (See Gibbs, Benedict T., Jr., assignor.)

Morgan, David G. (See Francha and Morgan.)

Morgan, E. W., et al. (See Johns, Paul H., assignor.)

Mortimer, George, Somerset, assignor to D. Napier & Son, Limited, London, England. Locking and adjusting device. No. 1,313,409; Aug. 19; v. 265; p. 344.

Mortimer, Harry E., St. Louis, Mo. Device for applying tire-chains. No. 1,313,410; Aug. 19; v. 265; p. 344.

Moaner, John W., and G. W. Crane, Syracuse, N. Y. Steam and hot-water boiler. No. 1,313,722; Aug. 19; v. 265; p. 403.

Mullally, John B., Seattle, Wash. Envelop-molstener. No. 1,313,723; Aug. 19; v. 265; p. 403.

Myers, Perry E., Monroe, City, Ind. Hinge. No. 1,313,411; Aug. 19; v. 265; p. 344.

Myrick, John M., Youngstown, Ohio. Insecticide or compound for destroying cotton boll-weevil. No. 1,313,724; Aug. 19; v. 265; p. 404.

Nantz, John H., Samson, Ala. Refrigerator. No. 1,313,552; Aug. 19; v. 265; p. 371.

Nason, George B., assignor to Champion Spark Plug Company, Toledo, Ohio. Display-cabinet. No. 1,313,498; Aug. 19; v. 265; p. 361.

Neale, Robert M. (See Nelson, Lewis D., assignor.)

Needham, Houghton L., Chicago, Ill. Boiler-tube cleaner. No. 1,313,725; Aug. 19; v. 265; p. 404.

Nelson, Lewis D., assignor of one-half to H. M. Neale, Union City, Mich. Air-heating attachment for internal-combustion engines. No. 1,313,639; Aug. 19; v. 265; p. 388.

New Idea Spreader Co. (See Synck, Henry, assignor.)

Newton, George H., Haddam, Conn. Trace-end carrier. No. 1,313,499; Aug. 19; v. 265; p. 361.

Nicol, Norman C., Buffalo, N. Y. Hinge. No. 1,313,726; Aug. 19; v. 265; p. 404.

Nielsen, Frederik, Boston, Mass., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Inflating-valve. No. 1,313,553; Aug. 19; v. 265; p. 372.

Nielsen, Frederik, Boston, Mass., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Inflating-valve. No. 1,313,554; Aug. 19; v. 265; p. 372.

Nies, William L., and C. H. Birdsey, assignors to United States Gypsum Company, Chicago, Ill. Floor construction or the like. No. 1,313,500; Aug. 19; v. 265; p. 361.

Nixdorf, William H., Jr. (See Wilkinson and Nixdorf.)

Nobles, Milton A., Philadelphia, assignor, by mesne assignments, to W. S. Russell, trustee, Carlisle, Pa. Gas-detector. No. 1,313,323; Aug. 19; v. 265; p. 328.

Noe, John W. (See Davis, Mack H., assignor.)

Nordyke, Addison H., and J. E. Norrie, assignors to Indianapolis Manufacturing Company, Indianapolis, Ind. Wood-strip-cutting machine. No. 1,313,325; Aug. 19; v. 265; p. 328.

Nordyke, Horace W., assignor to Indianapolis Manufacturing Company, Indianapolis, Ind. Separator for storage batteries. No. 1,313,324; Aug. 19; v. 265; p. 328.

Norris, John E. (See Nordyke and Norris.)

Northover, Harry R., Winnipeg, Manitoba, Canada. Machine for filling the magazines of machine-guns. No. 1,313,727; Aug. 19; v. 265; p. 404.

Norton, Charles W. (See Hutchinson and Norton.)

Noxer, Emil V., St. Louis, Mo. Lock for shift-levers of automobiles. No. 1,313,412; Aug. 19; v. 265; p. 345.

Notting, Louis R., Pelham, N. Y., assignor to Power Specialty Company, New York, N. Y. Anchoring means for superheaters. No. 1,313,326; Aug. 19; v. 265; p. 328.

Officer, Charles R., Claremont, N. H., assignor to Sullivan Machinery Company. Mining-machine. No. 1,313,809; Aug. 19; v. 265; p. 431.

O'Neill, William F., Wilkesburg, Pa. Cabinet-type switch-jewel. No. 1,313,555; Aug. 19; v. 265; p. 372.

Orlin, George, assignor of one-third to J. M. Jones, Milwaukee, Wis. Spring-wheel. No. 1,313,501; Aug. 19; v. 265; p. 361.

Osborne, Harold S., New York, N. Y., assignor to American Telephone and Telegraph Company. Composite ringing apparatus. No. 1,313,413; Aug. 19; v. 265; p. 345.

Osten, Charles, New Haven, Conn. Combined button and belt loop. No. 1,313,640; Aug. 19; v. 265; p. 388.

Ott von Batorke and Verinkhar, Adolph, Baron, West Kensington, London, assignor to Aladdin Lamp Syndicate Limited, (in liquidation), London, England. Machine for cutting electric bulbs and regenerating them. No. 1,313,845; Aug. 19; v. 265; p. 426.

Ottwell, Victor G., Withrow, Minn. Internal-combustion engine. No. 1,313,414; Aug. 19; v. 265; p. 345.

Owens, Jesse C., Los Angeles, Calif. Muffler-valve ball-cock. No. 1,313,831; Aug. 19; v. 265; p. 424.

Package Machinery Company. (See Smith and Phelon, assignors.)
 Package Machinery Company. (See Smith, Elmer L., assignor.)
 Packmore Manufacturing Company. (See Collier Frederick W., assignor.)
 Pangborn, Leo D., Eau Claire, Wis. Skee-skoat. No. 1,313,502; Aug. 19; v. 265; p. 362.
 Parker, Arthur. (See Parker, Fred and A.) Toy. No. 1,313,327; Aug. 19; v. 265; p. 329.
 Parr, Frank E., Buffalo, N. Y. Saw-vise. No. 1,313,728; Aug. 19; v. 265; p. 404.
 Parsons, Edward T., Newark, N. J. Flour-sifting apparatus. No. 1,313,729; Aug. 19; v. 265; p. 404.
 Pass, Wendelin, Export, Pa. Saddler's implement. No. 1,313,556; Aug. 19; v. 265; p. 372.
 Patterson, Ralph J., Berlin, N. H. Electric humidifier. No. 1,313,832; Aug. 19; v. 265; p. 424.
 Paxton, Sherman H., St. Paul, Minn. Ink-applying device. No. 1,313,833; Aug. 19; v. 265; p. 424.
 Pease, Edward L., Burlington, England. Gilled heat-interchanging apparatus. No. 1,313,730; Aug. 19; v. 265; p. 405.
 Peoples, James E., Alva, Okla. Hydraulic transmission. No. 1,313,415; Aug. 19; v. 265; p. 345.
 Perea, Biblan. (See Kenna, Charles F., assignor.)
 Peterson, William T., San Jose, Calif. Bottle-closure. No. 1,313,503; Aug. 19; v. 265; p. 362.
 Peterson, Johann G., Jersey City, N. J. Electrical attachment-plug. No. 1,313,328; Aug. 19; v. 265; p. 329.
 Pettit, André, Habana, Cuba. Tilting platform for side-dumping cars. No. 1,313,416; Aug. 19; v. 265; p. 345.
 Phelon, Arthur E. (See Smith and Phelon.)
 Phelps, James C., Springfield, Mass. Outlet-cap and making the same. No. 1,313,329; Aug. 19; v. 265; p. 329.
 Philipp, Frank A. (See Evans and Philipp.)
 Pflor, Bruno, and R. O. Stange, Honolulu, Hawaii; said Pflor assignor to said Stange. Drying bananas. No. 1,313,557; Aug. 19; v. 265; p. 372.
 Pocock, Sidney J., Esher, England. Child's combined rotary chair and play-table. No. 1,313,330; Aug. 19; v. 265; p. 329.
 Porter, Wiley M., and E. H. Sprague, Sacramento, Calif. Repair-bench. No. 1,313,604; Aug. 19; v. 265; p. 381.
 Power Specialty Company. (See Nottling, Louis B., assignor.)
 Pratt, George L., assignor to M. L. Pratt, Atlanta, Ga. Measuring device. No. 1,313,731; Aug. 19; v. 265; p. 405.
 Pratt, George W., Oakland, Calif. Policeman's pippers and handcuffs combined. (Reissue.) No. 1,471,4; Aug. 19; v. 265; p. 432.
 Pratt, John S. (See Redmond, James E., assignor.) (Reissue.)
 Pratt, Margaret L. (See Pratt, George L., assignor.)
 Price-Campbell Cotton Picker Corporation. (See Calderwood, Benjamin C., assignor.)
 Pinter, Stephen A., D., Berkely, Calif., and E. J. Boyler, New Haven, Conn., assignors to Duplex Snap Fastener Co. Inc. Separable fastener. No. 1,313,331; Aug. 19; v. 265; p. 330.
 Putnam, Allen L., assignor to Detroit Pressed Steel Company, Detroit, Mich. Forming tapering cross-section disks. (Reissue.) No. 1,471,3; Aug. 19; v. 265; p. 432.
 Rafter, Paul L., New York, N. Y. Drawing-board attachment. No. 1,313,732; Aug. 19; v. 265; p. 405.
 Ramsher, John C., Shenandoah, Pa. Film winding and re-winding apparatus. No. 1,313,733; Aug. 19; v. 265; p. 405.
 Randall, Charles A., Halesbury, Ontario, Canada. Ore-classifier. No. 1,313,734; Aug. 19; v. 265; p. 405.
 Rapp, Mathew, Morton, Ill. Straw-spreading machine. (Reissue.) No. 1,471,5; Aug. 19; v. 265; p. 433.
 Rapp, Mathew, assignor to Kramer Rotary Harrow Company, Morton, Ill. Straw-spreader. No. 1,313,735; Aug. 19; v. 265; p. 406.
 Rayfield, Charles L., assignor to Elndelsen & Kropf Manufacturing Company, Chicago, Ill. Carburetor. No. 1,313,332; Aug. 19; v. 265; p. 330.
 Raymond, William C., Detroit, Mich. Kitchen-fork. No. 1,313,417; Aug. 19; v. 265; p. 346.
 Reber, John G., deceased, Chicago, Ill., by Sefton Manufacturing Corporation, Millbrook, N. Y., and Chicago, Ill. Packing box or carton. (Reissue.) No. 1,471,6; Aug. 19; v. 265; p. 433.
 Redmond, James E., Crandall, Ga., assignor to J. S. Pratt, Toledo, Ohio. Scraping and excavating apparatus. (Reissue.) No. 1,471,7; Aug. 19; v. 265; p. 433.
 Reed, William R., Baltimore, Md. Grain-conveyer. No. 1,313,418; Aug. 19; v. 265; p. 346.
 Regan, Joseph C., New Britain, assignor to The Trumbull Electric Mfg. Co., Plainville, Conn. Electric switch. No. 1,313,841; Aug. 19; v. 265; p. 388.
 Reid, James E., Moorestown, N. J., and F. W. Side, Camden, N. J.; said Side assignor to said Reid. Hot-air dental syringe. No. 1,313,861; Aug. 19; v. 265; p. 429.
 Rennerfelt, Ivar, Djursholm, Sweden. Electric furnace. No. 1,313,834; Aug. 19; v. 265; p. 424.
 Reynolds, Joy S., Seattle, Wash. Cutting-torch tip. No. 1,313,605; Aug. 19; v. 265; p. 381.

Rice, Richard H., Swampscott, Mass., assignor to General Electric Company. Bearing and oiling means therefor. No. 1,313,736; Aug. 19; v. 265; p. 406.
 Rimailho, Emile, assignor to Compagnie des Forges et Aciéries de la Marine et d'Homécourt, Paris, France. Device for feeding buffers for ordnance with liquids. No. 1,313,835; Aug. 19; v. 265; p. 424.
 Roberts, William E., Riverdale, Oreg. Gas-engine. No. 1,313,836; Aug. 19; v. 265; p. 424.
 Robertson, Bedford S. (See St. Clair and Robertson.)
 Rosch, Alfred, assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Indicating and recording instrument. No. 1,313,333; Aug. 19; v. 265; p. 330.
 Roessler & Hasselacher Chemical Co., The. (See Sargent, Ralph N., assignor.)
 Rohde, Otto C., assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plug. No. 1,313,419; Aug. 19; v. 265; p. 346.
 Rolfe, Charles A., Redlands, Calif. Golf-club. No. 1,313,504; Aug. 19; v. 265; p. 362.
 Rosenberg, Benjamin, Brooklyn, N. Y. Spark-plug electrode. No. 1,313,334; Aug. 19; v. 265; p. 330.
 Rotsmert, Medard J. E., Portland, Oreg. Printer's border-mitering jig. No. 1,313,606; Aug. 19; v. 265; p. 382.
 Ruckman, Floyd A., Columbia City, assignor to Johnson Acetylene Gas Company, Crawfordsville, Ind. Acetylene-generator. No. 1,313,607; Aug. 19; v. 265; p. 382.
 Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Driving wheel and crank. No. 1,313,737; Aug. 19; v. 265; p. 406.
 Russell, W. S., trustee. (See Nobles, Milton A., assignor.)
 Ryan, Frederick H., Boston, Mass. Center-punch. No. 1,313,335; Aug. 19; v. 265; p. 330.
 Ryan, James, Indianapolis, Ind. Liquid-level indicator. No. 1,313,738; Aug. 19; v. 265; p. 407.
 Ryerson, Charles S., Norfolk, Va. Lamp-mounting. No. 1,313,739; Aug. 19; v. 265; p. 406.
 Sager, Peter H., Marianna, Fla. Flushing and cover-operating mechanism for toilets. No. 1,313,740; Aug. 19; v. 265; p. 406.
 Sanitary Manufacturing Corporation. (See Evans and Philipp, assignors.)
 Sargent, Ralph N., Perth Amboy, N. J., assignor to The Roessler & Hasselacher Chemical Co., New York, N. Y. Molding. No. 1,313,558; Aug. 19; v. 265; p. 373.
 Saum, Robert J., assignor to The Western Tool & Manufacturing Company, Springfield, Ohio. Tool-holder. No. 1,313,336; Aug. 19; v. 265; p. 330.
 Savage, Frederick, London, England. Manufacturing tone-arms for talking-machines and the like. No. 1,313,559; Aug. 19; v. 265; p. 373.
 Scanlon, Thomas J., El Paso, Tex. Derrick. No. 1,313,741; Aug. 19; v. 265; p. 407.
 Schadt, Jacob, Bloomington, Ill. Detachable eave-trough. No. 1,313,742; Aug. 19; v. 265; p. 407.
 Schlosch, Erich, Asbland, N. H., assignor to General Electric Company. Electric-lamp carrier. No. 1,313,337; Aug. 19; v. 265; p. 331.
 Schlesinger, Louis. (See Hellweg, Henry, assignor.)
 Schlechter, Walter F., Pottstown, and A. Keim, Spring City, Pa. Automatic railway safety-gate. No. 1,313,338; Aug. 19; v. 265; p. 331.
 Schmidt, Jesse, Tracy, Calif. Saw-oller. No. 1,313,743; Aug. 19; v. 265; p. 407.
 Schneider & Cie. (See Schneider, Eugene, assignor.)
 Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Machine for restraining run-charge cases. No. 1,313,560; Aug. 19; v. 265; p. 373.
 Schoshusen, Arthur, assignor to E. Schoshusen, Pittsburg, Kan. Boot-leg form. No. 1,313,505; Aug. 19; v. 265; p. 362.
 Schoshusen, Elsa. (See Schoshusen, Arthur, assignor.)
 Schrantz, Samuel, St. Louis, Mo. Fly-trap. No. 1,313,837; Aug. 19; v. 265; p. 424.
 Schubert, Walter E., Brooklyn, N. Y. Spark-plug. No. 1,313,744; Aug. 19; v. 265; p. 407.
 Schumacher, Frank W., Shawano, Wis. Wire-stretcher. No. 1,313,339; Aug. 19; v. 265; p. 331.
 Schwartz, Nathan, New York, N. Y. Gas-mask and respirator. No. 1,313,745; Aug. 19; v. 265; p. 407.
 Schwelsgood, Charles E., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Belt-fastener. No. 1,313,642; Aug. 19; v. 265; p. 388.
 Sclar, Nathan. (See Atkinson and Sclar.)
 Sefton Manufacturing Corporation. (See Reber, John G., assignor.) (Reissue.)
 Sefton Manufacturing Corporation. (See Twimley, Melvan L., assignor.)
 Sell, Emanuel M., Independence, Kans. Barrel-rack. No. 1,313,340; Aug. 19; v. 265; p. 331.
 Shannon, Woodford, Louisville, Ky. Spring structure. No. 1,313,341; Aug. 19; v. 265; p. 331.
 Sharp, Cecil A. (See Hall and Sharp.)
 Shaw, James, Chicago, Ill. Internal-combustion engine. No. 1,313,608; Aug. 19; v. 265; p. 382.
 Shaw, John K., Minneapolis, assignor to B. G. Dahlberg, St. Paul, Minn. Corner for buildings. No. 1,313,420; Aug. 19; v. 265; p. 346.
 Shaw, John K., Minneapolis, assignor to B. G. Dahlberg, St. Paul, Minn. Side wall and corner for buildings. No. 1,313,421; Aug. 19; v. 265; p. 346.
 Shaw, Solomon B., Grand Rapids, Mich. Signal. No. 1,313,609; Aug. 19; v. 265; p. 382.
 Shelters, Hiram H., Burlington, Vt. Timer. No. 1,313,501; Aug. 19; v. 265; p. 373.

Shepard, Isaac R., River Junction, Fla. Metal screen. No. 1,313,562; Aug. 19; v. 265; p. 373.
 Sherwin-Williams Company. (See McKeogh, Thomas J., assignor.)
 Shipton, James D., Vancouver, British Columbia, Canada. Electric melting-furnace. No. 1,313,746; Aug. 19; v. 265; p. 408.
 Shotwell, Marcus A. K., Miami, Fla. Automobile-tire. No. 1,313,506; Aug. 19; v. 265; p. 362.
 Shutts, Samuel B. (See Wendell and Shutts.)
 Sibbey, James T., Newark, N. J. Combined tone-arm and stop device for talking-machines. No. 1,313,342; Aug. 19; v. 265; p. 331.
 Side, Frederick W. (See Reid and Side.)
 Sidwell, Benjamin W., Buffalo, N. Y., assignor to The Weaver Company. Size for wood-fiber products. No. 1,313,343; Aug. 19; v. 265; p. 332.
 Siegel, Ernest, assignor of one-half to M. Cooper, New York, N. Y. Shock-absorber. No. 1,313,643; Aug. 19; v. 265; p. 389.
 Simon, Adolph, London, England. Watch and other bracelet. No. 1,313,644; Aug. 19; v. 265; p. 389.
 Simon, Adolph, London, England. Shock-absorber for bracelets or the like. No. 1,313,645; Aug. 19; v. 265; p. 389.
 Sims, Frederick L. H., Toronto, Ontario, Canada. Rail-anchor. No. 1,313,747; Aug. 19; v. 265; p. 408.
 Sims, Frederick L. H., assignor to The Diaphone Signal Company, Limited, Toronto, Ontario, Canada. Key-bolt. No. 1,313,748; Aug. 19; v. 265; p. 408.
 Singer Manufacturing Company, The. (See Corral, Herbert, assignor.)
 Singer Manufacturing Company, The. (See De Yoe, Albert H., assignor.)
 Sloper, Thomas, Wrexham, England. Aeroplane-wheel bearing. No. 1,313,646; Aug. 19; v. 265; p. 389.
 Small, Fred K., Libon Falls, Me. Pneumatic tire. No. 1,313,749; Aug. 19; v. 265; p. 408.
 Smart, Edward N., Madison, Neb. Surgical appliance. No. 1,313,344; Aug. 19; v. 265; p. 332.
 Smith, Arthur J., New York, N. Y. Hairpin. No. 1,313,750; Aug. 19; v. 265; p. 408.
 Smith, Edith K. (See Smith, Hampton K., assignor.)
 Smith, Edward C., assignor to Meadville Wrench Company, Meadville, Pa. Machine for forming wrench-heads. No. 1,313,345; Aug. 19; v. 265; p. 332.
 Smith, Elmer L., assignor to Package Machinery Company, Springfield, Mass. Strip feeding and cutting mechanism. No. 1,313,562; Aug. 19; v. 265; p. 373.
 Smith, Elmer L., and A. E. Phelon, assignors to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,313,863; Aug. 19; v. 265; p. 430.
 Smith, Elmer L., and A. E. Phelon, assignors to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,313,864; Aug. 19; v. 265; p. 430.
 Smith, Francis W. (See Bulman, Smith, and Jones.)
 Smith, Hampton K., Union, S. C., assignor to E. K. Smith. Automobile-signal. No. 1,313,346; Aug. 19; v. 265; p. 332.
 Smith, Harald, Copenhagen, Denmark. Vibration-transferring means. No. 1,313,751; Aug. 19; v. 265; p. 408.
 Smith, Herman C., Waterloo, Iowa. Lifting-tongs for jars. No. 1,313,752; Aug. 19; v. 265; p. 409.
 Snyder, Martin S., Calgary, Alberta, Canada. Tip. No. 1,313,422; Aug. 19; v. 265; p. 347.
 Sonnemann, Carl, New York, N. Y. Multiple-slicing machine. No. 1,313,753; Aug. 19; v. 265; p. 409.
 Sopousek, Joseph, Cedar Rapids, Iowa. Combination lawnmower trimmer. No. 1,313,866; Aug. 19; v. 265; p. 430.
 Sosa, Joseph, New York, N. Y. Window-panel-supporting frame. No. 1,313,347; Aug. 19; v. 265; p. 332.
 Speer, Victor. (See Hitchfield and Speer.)
 Sperlich, Herman A., Highland Park, assignor to Crystal Washing Machine Company, Detroit, Mich. Gearing for washing machines. No. 1,313,423; Aug. 19; v. 265; p. 347.
 Spin, Nicholas, Auburn, N. Y. Wheel. No. 1,313,348; Aug. 19; v. 265; p. 333.
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 Sprague, Edward H. (See Porter and Sprague.)
 Stafford, Benjamin E. D., and E. I. Dods, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,313,647; Aug. 19; v. 265; p. 389.
 Standard Pneumatic Action Company. (See Flala, Joseph B., assignor.)
 Stange, Robert O. F. (See Pflors and Stange.)
 St. Clair, Walter, and B. S. Robertson, Rocky Mount, Va. Stomach-pump attachment. No. 1,313,610; Aug. 19; v. 265; p. 385.
 Steadman, Thomas H., Turfontein, Johannesburg, South Africa. Water-heater and auxiliary oven for stoves. No. 1,313,754; Aug. 19; v. 265; p. 409.
 Stenman Electric Valve Grinder Company. (See Larson, Albert W., assignor.)
 Stern-Coleman Diamond Machine Company. (See Coleman, Clyde J., assignor.)
 Stern-Coleman Diamond Machine Co. (See Mantle, Joseph G. C., assignor.)
 Stern, Harry H., Moscow, Idaho. Tire. No. 1,313,424; Aug. 19; v. 265; p. 347.
 Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,313,648; Aug. 19; v. 265; p. 389.

Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,313,649; Aug. 19; v. 265; p. 390.
 Stimpson, Edward S., assignor, by mesene assignments, to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,313,349; Aug. 19; v. 265; p. 333.
 Stimpson, Edward S., assignor, by mesene assignments, to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,313,350; Aug. 19; v. 265; p. 333.
 Stine, Charles M., Chester, Pa., assignor, by mesene assignments, to E. I. du Pont de Nemours and Company. Composition for detonators. No. 1,313,650; Aug. 19; v. 265; p. 390.
 Stirling, John, Grabow, La. Plow attachment. No. 1,313,611; Aug. 19; v. 265; p. 383.
 Stodder, Edward D., New Rochelle, N. Y. Schmarine observatory. No. 1,313,838; Aug. 19; v. 265; p. 425.
 Stotter, George W., Detroit, Mich. Combined door-check and door-closing device. No. 1,313,612; Aug. 19; v. 265; p. 383.
 Stranahan, Robert A., assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plug. No. 1,313,425; Aug. 19; v. 265; p. 347.
 Strandlund, Carl G. (See Brown and Strandlund.)
 Strandera, Jullen, Brooklyn, assignor to H. B. Kruger, New York, N. Y. Advertising or display device. No. 1,313,351; Aug. 19; v. 265; p. 333.
 Street, Norman A., et al. (See Blood, Burr B., assignor.)
 Strom, Carl A., Floral Park, N. Y. Aeroplane-rudder. No. 1,313,839; Aug. 19; v. 265; p. 425.
 Strom, Carl E., and C. Swanson, New Britain, Conn. Safety window-catch. No. 1,313,840; Aug. 19; v. 265; p. 425.
 Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Reclaiming and conveying apparatus. No. 1,313,352; Aug. 19; v. 265; p. 333.
 Stuer, Jules, Methuen, Mass. Stop-motion for looms. No. 1,313,755; Aug. 19; v. 265; p. 408.
 Sullivan Machinery Company. (See Gilman, George H., assignor.)
 Sullivan Machinery Company. (See Hunter, George D., assignor.)
 Sullivan Machinery Company. (See Mercer, Henry H., assignor.)
 Sullivan Machinery Company. (See Officer, Charles B., assignor.)
 Sullivan, Maurice P., Torrington, Conn., assignor to Splittdorf Electrical Company, Newark, N. J. Spark-plug. No. 1,313,426; Aug. 19; v. 265; p. 348.
 Summers, Bertrand S., Port Huron, Mich. Scutcher. No. 1,313,841; Aug. 19; v. 265; p. 425.
 Sutcliffe, John, London, British Columbia, Canada. Railway-crossing gate. No. 1,313,756; Aug. 19; v. 265; p. 409.
 Sutton, Francis A., Oakhurst, Asford, England, assignor to C. C. Williams, acting chief of ordnance, U. S. Army, trustee. Fuse for projectiles. No. 1,313,651; Aug. 19; v. 265; p. 390.
 Swanson, Carl. (See Strom and Swanson.)
 Sweeney, Frank A. (See Kenney, Frank E., assignor.)
 Swidler, Samuel C., Pratt, Kans. Automatic sign. No. 1,313,757; Aug. 19; v. 265; p. 419.
 Synek, Henry, assignor to New Idea Spreader Co., Coldwater, Ohio. Manure-spreader. No. 1,313,427; Aug. 19; v. 265; p. 348.
 Synch-Chemical Sprinkler Corporation. (See Hamilton, John R., assignor.)
 Tanna, Elmer A., Ambrose, N. D. Self-feeding container. No. 1,313,613; Aug. 19; v. 265; p. 383.
 Tanner, Adaline M., Devle Lake, N. D. Invalid lifter and conveyor. No. 1,313,428; Aug. 19; v. 265; p. 348.
 Tarrant, Walter G., Ryde, England. Aeroplane-wing structure. No. 1,313,563; Aug. 19; v. 265; p. 373.
 Taylor, Cecil H., Detroit, Mich. Radiator. No. 1,313,652; Aug. 19; v. 265; p. 390.
 Taylor, John D. (See Dillard and Taylor.)
 Taylor, John K., Windsor, Ontario, Canada. Tool. No. 1,313,758; Aug. 19; v. 265; p. 410.
 Taylor, William, Lowell, Ind. Nut-lock. No. 1,313,759; Aug. 19; v. 265; p. 410.
 Teasdale, George W., St. Louis, Mo. Disappearing bed. No. 1,313,760; Aug. 19; v. 265; p. 410.
 Teixeira, Antonio M., Ipanema, São Paulo, Brazil. Electrical furnace. No. 1,313,761; Aug. 19; v. 265; p. 410.
 Tetzel, Edmund, Jr. (See Turner and Tetzel.)
 Text Corporation, The. (See Hartshorne, William D., assignor.)
 Theobald, John L., New York, N. Y., assignor to Toledo Scale Company, Toledo, Ohio. Automatic weighing-scale. No. 1,313,614; Aug. 19; v. 265; p. 385.
 Thomas, Charles, Victoria, British Columbia, Canada. Internal-combustion engine. No. 1,313,762; Aug. 19; v. 265; p. 411.
 Thomas, Edmund P., Centalla, Wash. Shock-absorber. No. 1,313,763; Aug. 19; v. 265; p. 411.
 Thomas, John G. L., London, assignor to Leyland Motors (1914) Ltd., Leyland, England. Electric starting and ignition system. No. 1,313,764; Aug. 19; v. 265; p. 370.
 Thomas-Oberkirch Company. (See Thomas, William M., assignor.)

Thomas, William M., assignor, by mesne assignments, to Thomas Oberkirk Company Limited, New York, N. Y. Method of and apparatus for photographic exposures and projection. No. 1,313,615; Aug. 19; v. 265; p. 384.

Thurston, Elmer A., assignor of one-half to J. H. Mason, Norfolk, Neb. Flexible pitman. No. 1,313,764; Aug. 19; v. 265; p. 411.

Tobin, John E., Mansfield, Ohio. Track elevating and ballasting machine. No. 1,313,353; Aug. 19; v. 265; p. 334.

Todd, Frederick A., Rutte, Mont. Aerial camera. No. 1,313,564; Aug. 19; v. 265; p. 374.

Toledo Scale Company. (See Theobald, John L., assignor.)

Torkelson, Isak O., assignor of one-half to L. O. Torkelson, New Brighton, N. Y. Combination milk and mail box. No. 1,313,354; Aug. 19; v. 265; p. 334.

Torkelson, Lars O. (See Torkelson, Isak O., assignor.)

Turner, Isaac, and E. Tetzel, Jr., Terre Haute, Ind. Plastic-mold. No. 1,313,355; Aug. 19; v. 265; p. 334.

Townsend, Edwin O. (See Custer, David W., assignor.)

Townsend, Edwin D., Jamestown, N. Y. Wilmetree. No. 1,313,430; Aug. 19; v. 265; p. 348.

Townsend, James L., Manquin, Va. Fertilizer-distributing apparatus. No. 1,313,953; Aug. 19; v. 265; p. 390.

Traum, David, New York, N. Y. Loom for beadwork. No. 1,313,765; Aug. 19; v. 265; p. 411.

Trogoning, Joseph H., Greeley, Colo. Leaf-spring-lubricating tool. No. 1,313,565; Aug. 19; v. 265; p. 374.

Tridico, Salvatore, Brooklyn, N. Y. Air-motor. No. 1,313,542; Aug. 19; v. 265; p. 425.

Trommer, Charles F., assignor to A. Wittnauer Co., New York, N. Y. Wrist-watch. No. 1,313,843; Aug. 19; v. 265; p. 426.

Trowbridge, Ernest C., Gloucester, Mass. Medicine-dispenser. No. 1,313,566; Aug. 19; v. 265; p. 374.

Trudeau, John F., assignor to Electro-Dynamic Company, Bayonne, N. J. Waste-packed sleeve-bearing. No. 1,313,507; Aug. 19; v. 265; p. 362.

Trumbull Electric Mfg. Co., The. (See Regan, Joseph C., assignor.)

Twombly, Melvan L., Chicago, Ill., assignor, by mesne assignments, to Sefton Manufacturing Corporation, Millbrook, N. Y. Machine for making corrugated board. No. 1,313,844; Aug. 19; v. 265; p. 426.

Viam, Ura E., Chester, W. Va. Alarm for tin-cleaning machines. No. 1,313,766; Aug. 19; v. 265; p. 412.

Virch, Charles R., Jamestown, N. Y. Trolling attachment for fishing-lines. No. 1,313,567; Aug. 19; v. 265; p. 374.

Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)

Union Special Machine Company. (See Moffatt, James H., assignor.)

United Shoe Machinery Corporation. (See Glidden, Harvey L., assignor.)

United States Electric Company. (See Jones, George A. E., assignor.)

United States Gypsum Company. (See Nies and Birdsey, assignors.)

Universal Machine Company. (See Urschel, Bertis H., assignor.)

Upton, John F., Sapulpa, Okla. Valve for air-starter systems. No. 1,313,767; Aug. 19; v. 265; p. 412.

Urich, Benjamin, Milwaukee, Wis. Puncture-closing device for tires. No. 1,313,868; Aug. 19; v. 265; p. 431.

Urschel, Bertis H., assignor to Universal Machine Company, Bowling Green, Ohio. Universal joint. No. 1,313,568; Aug. 19; v. 265; p. 363.

Valley Mould and Iron Corporation. (See Coates, Ray H., assignor.)

Van Alstyne, Albert T., Grand Rapids, Mich. Garter. No. 1,313,556; Aug. 19; v. 265; p. 334.

Vermont Farm Machine Company, The. (See Kimball, Percy L., assignor.)

Vickers Limited. (See Buckham, George T., assignor.)

Vickers Limited. (See Johnson, Frederick G. L., assignor.)

Vickers Limited. (See Lander, Frank E., assignor.)

Vickers Limited. (See Watt, George E., assignor.)

Victor Talking Machine Company. (See Winans, Daniel M., assignor.)

Victor Typewriter Company. (See Hagerstrom, John A., assignor.)

Vincent-Alward Company, The. (See Vincent, William W., assignor.)

Vincent, William W., assignor to The Vincent-Alward Company, Kenosha, Wis. Wire-forming machine. No. 1,313,569; Aug. 19; v. 265; p. 363.

W. & L. E. Hurley. (See Hess, Wendell Jr., assignor.)

Walt, Henry H., Chicago, Ill. Dynamo-electric machine. No. 1,313,431; Aug. 19; v. 265; p. 348.

Walker, John H., Lexington, Ky. Combination-tool. No. 1,313,432; Aug. 19; v. 265; p. 349.

Waller, Charles W. (See Conger and Waller.)

Walker, Joseph J., assignor to The Goss Printing Press Company, Chicago, Ill. Inkling mechanism. No. 1,313,433; Aug. 19; v. 265; p. 349.

Walsh, John M., Petaluma, Calif. Street-symphonizer. No. 1,313,616; Aug. 19; v. 265; p. 384.

Waterbury Clock Co. (See Lackin, William J., assignor.)

Waters, Daniel E., St. Paul, Minn. Display-sign. No. 1,313,434; Aug. 19; v. 265; p. 349.

Watkins, William H., Hanwell, England. Aerial ropeway and the like. No. 1,313,357; Aug. 19; v. 265; p. 334.

Watkins, William H., Hanwell, England. Tractor for aerial ropeways and the like. No. 1,313,358; Aug. 19; v. 265; p. 335.

Watson, Daniel M., Portland, Oreg. Pump. No. 1,313,359; Aug. 19; v. 265; p. 335.

Watt, George E., assignor to Vickers Limited, Westminster, London, England. Cutting device for cables, chains, and the like. No. 1,313,435; Aug. 19; v. 265; p. 349.

Weagant, Roy A., Roselle Park, N. J., assignor to Marconi Wireless Telegraph Company of America. Receiver of electrical oscillations. No. 1,313,654; Aug. 19; v. 265; p. 390.

Webster, Towner K., Jr., Evanston, assignor to American Steam Conveyor Corporation, Chicago, Ill. Tank for ash-conveyer systems. No. 1,313,436; Aug. 19; v. 265; p. 349.

Welmar, William, Appleton, Wis. Treatment of fibrous material. No. 1,313,437; Aug. 19; v. 265; p. 350.

Weinheim, Emil, New York, N. Y. Process and apparatus for producing smooth-surfaced coating on textile fabrics. No. 1,313,655; Aug. 19; v. 265; p. 390.

Wels, Julius, St. Paul, Minn. Safety-pin. No. 1,313,846; Aug. 19; v. 265; p. 426.

Wendell, Carl A., Rockville Center, N. Y., and S. B. Shultz, Marietta, Pa. Gas-burner. No. 1,313,360; Aug. 19; v. 265; p. 335.

Wescott, Dana E., assignor to L. M. Hammerschmidt, trustee, South Bend, Ind. Cut-out for electric-lighting systems. No. 1,313,438; Aug. 19; v. 265; p. 350.

West, Harry H., Plymouth, Pa. Machine for forming tatting-braid. No. 1,313,439; Aug. 19; v. 265; p. 350.

Western Electric Company. (See Mathea, Robert C., assignor.)

Western Tool & Manufacturing Company, The. (See Saum, Robert J., assignor.)

Westinghouse Lamp Company. (See Dennington, Arthur H., assignor.)

Westervelt, Vincent, Bloomington, N. J. Curtain-bracket. No. 1,313,768; Aug. 19; v. 265; p. 412.

Westinghouse Electric & Manufacturing Company. (See Kasey, Alexander T., assignor.)

Wheary, George H., Racine, Wis. Trunk collar and track. No. 1,313,769; Aug. 19; v. 265; p. 412.

Wheeler, Newberry W., East Cleveland, Ohio. Means employed in key systems for title examiners. No. 1,313,617; Aug. 19; v. 265; p. 384.

Whitaker, Lester C., Santa Rosa, Calif. Time-switch for electric circuits. No. 1,313,440; Aug. 19; v. 265; p. 350.

White, Beet A., Detroit, Mich. Trolley-wire hanger. No. 1,313,656; Aug. 19; v. 265; p. 391.

White, David J., and D. H. Hanna, Oil City, Pa. Continuous frog for railways. No. 1,313,441; Aug. 19; v. 265; p. 350.

White, Jerry M., Boston, Mass. Automobile-signal. No. 1,313,770; Aug. 19; v. 265; p. 412.

White, John M., Meridian, Miss. Antipyloric arsenical preparation and making the same. No. 1,313,657; Aug. 19; v. 265; p. 391.

White, Richard P., Chicago, Ill. Tank-car. No. 1,313,361; Aug. 19; v. 265; p. 335.

Whiting-Patterson Company. (See Ball, George, assignor.)

Wiegand, Henry J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Gear-shifting mechanism. No. 1,313,362; Aug. 19; v. 265; p. 335.

Wiersma, Lambert. (See Aylworth and Wiersma.)

Wiggin, Rollin H., East Orange, N. J., assignor to H. B. Wiggin's Sons Company, Bloomfield, N. J. Producing wall-covering and product thereof. No. 1,313,658; Aug. 19; v. 265; p. 391.

Willey, Edward M., Canonbury, London, England. Device for cutting screw-threads by chasers. No. 1,313,568; Aug. 19; v. 265; p. 374.

Wilkinson, Howard A., and W. B. Nixdorf, Jr., Onelda, N. Y. Control for tail-lights. No. 1,313,847; Aug. 19; v. 265; p. 426.

Wilks, Arthur H., Olton, near Birmingham, and P. H. Hactborne, Birmingham, England. Internal-combustion engine. No. 1,313,569; Aug. 19; v. 265; p. 375.

Williams, Clarence C., trustee. (See Sutton, Francis A., assignor.)

Williams, Edward T., New York, N. Y. Air-cooled condenser for refrigerating-machines. No. 1,313,363; Aug. 19; v. 265; p. 336.

Williams, Ernest S., Toronto, Ontario, Canada. Sanitary serving device. No. 1,313,364; Aug. 19; v. 265; p. 336.

Williams, Payton, Johnetta, Pa. Rail-joint. No. 1,313,771; Aug. 19; v. 265; p. 412.

Willis, Bernard D., assignor to Automatic Electric Company, Chicago, Ill. Substation telephone-circuit. No. 1,313,570; Aug. 19; v. 265; p. 375.

Wilms, Lee W. V., Chicago, Ill. Metatarsal and anterior foot-support. No. 1,313,442; Aug. 19; v. 265; p. 350.

Wilson, Frederick H., assignor to Deere and Company, Moline, Ill. Mowing-machine. No. 1,313,443; Aug. 19; v. 265; p. 351.

Wilson, Joseph H., G. W. Dixon, and W. E. McLaughlin, assignors to The American Rolling Mill Company, Middletown, Ohio. Metal-working machine. No. 1,313,365; Aug. 19; v. 265; p. 336.

Winans, Daniel M., Binghamton, N. Y., assignor to Victor Talking Machine Company, Camden, N. J. Phonograph stop device. (Reissue.) No. 14,718; Aug. 19; v. 265; p. 433.

Winans, Daniel M., Binghamton, N. Y. Vehicle-top support. No. 1,313,772; Aug. 19; v. 265; p. 413.

Winer, Andrew A., Ocala, Fla. Electric drop-light. No. 1,313,773; Aug. 19; v. 265; p. 413.

Winkler, Carl, Berne, Switzerland. Mold for stereotype-plates and the like. No. 1,313,774; Aug. 19; v. 265; p. 413.

Winkler, Carl, Berne, Switzerland. Machine for trimming stereotype-plates. No. 1,313,775; Aug. 19; v. 265; p. 413.

Wirebonds Patents Company. (See Bauwens, Seraphine F., assignor.)

Witherow, Harry M., Johnson Creek, Wis. Retractable step. No. 1,313,444; Aug. 19; v. 265; p. 351.

Wunder, Enos O., Altoona, Kans. Label-holder. No. 1,313,659; Aug. 19; v. 265; p. 391.

Wood Newspaper Machinery Corporation. (See Harris, John J. B., assignor.)

Woodbridge, Richard G., Jr. (See Broadbent and Woodbridge.)

Woodstock Manufacturing Company. (See Bourdon, Allan P. and L. R., assignors.)

Worwitz, Alfred, New York, N. Y. Transmission mechanism. No. 1,313,776; Aug. 19; v. 265; p. 413.

Wright, Frederick A., and W. J. Brong, Dickson City, Pa. Electrical grade-crossing signal. No. 1,313,445; Aug. 19; v. 265; p. 351.

Wright, John W., Toronto, Ontario, Canada. Picture-book. No. 1,313,366; Aug. 19; v. 265; p. 336.

Wright, Melvin C., Paris, Ill. Clamp for hog rollers or tanks. No. 1,313,446; Aug. 19; v. 265; p. 351.

Wright, Wallace C., assignor to Basler Machinery Company, Lynn, Mass. Machine for leather flexing and tempering. No. 1,313,510; Aug. 19; v. 265; p. 363.

Wright, William H., Indianapolis, Ind., assignor to C. J. Tagliabue Manufacturing Company, Brooklyn, N. Y. Pressure-governor for gas-mains. No. 1,313,447; Aug. 19; v. 265; p. 351.

Wyatt, James R., assignor to The Ajax Metal Company, Philadelphia, Pa. Form for outlining electric-furnace channels. No. 1,313,671; Aug. 19; v. 265; p. 376.

Zimmerman, Amos M., Akron, Pa. Garment corner-turning and edge-creasing machine. No. 1,313,777; Aug. 19; v. 265; p. 414.

Zipf, Carl F., Johnstown, Pa. Amusement device. No. 1,313,660; Aug. 19; v. 265; p. 391.

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Adam, Harry C., St. Louis, Mo. Lighting-fixture. Nos. 53,696-7; Aug. 19; v. 265; p. 434.

Art Hand-Bag Frame Co., The. (See Turton, William, assignor.)

Bartelme, Leonard, Wilkinsburg, Pa. Service-bag. No. 53,698; Aug. 19; v. 265; p. 434.

Baudier, Arthur S., et al. (See Samson, Edwin J., assignor.)

Boemer, Idalyne M., Los Angeles, Calif. Flag, banner, pennant, sign, emblem, or article of a similar nature. No. 53,699; Aug. 19; v. 265; p. 434.

Bell, John W., Jr., Brooklyn, N. Y. Flag, pennant, sign, emblem, or article of a similar nature. No. 53,700; Aug. 19; v. 265; p. 434.

Blachitz, Ferdinand, assignor to Elektra Toy & Novelty Co., New York, N. Y. Statuette or figure. No. 53,701; Aug. 19; v. 265; p. 434.

Bowling Green Rubber Company, The. (See Greene, Charles W., assignor.)

Boyce, Harrison H., Forest Hills, N. Y. Casing for signal-horns. No. 53,702; Aug. 19; v. 265; p. 435.

Boyles, Charles H., Seattle, Wash. Anchor. No. 53,703; Aug. 19; v. 265; p. 435.

Campbell, Charles and D., Philadelphia, Pa. Photo frame or stand. No. 53,704; Aug. 19; v. 265; p. 435.

Campbell, Duncan. (See Campbell, Charles and D.)

Dean, Calvin, Providence, R. I. Emblem, button, ring-top, pin, or article of similar nature. No. 53,705; Aug. 19; v. 265; p. 435.

De Forest, Ella F., New Canaan, Conn. Tobacco-box. No. 53,706; Aug. 19; v. 265; p. 435.

Dialynas, Emmanuel M., Baltimore, Md. Pin and picture-frame. No. 53,707; Aug. 19; v. 265; p. 435.

Earl, Charles M., Detroit, Mich. Beverage-dispensing stand. No. 53,708; Aug. 19; v. 265; p. 436.

Elektra Toy & Novelty Co. See Blachitz, Ferdinand, assignor.)

Greene, Charles W., assignor to The Bowling Green Rubber Company, Toledo, Ohio. Tire. No. 53,709; Aug. 19; v. 265; p. 436.

Hardin, Richard L. (See Smith, Ray, assignor.)

Howe, Ernest P., Clinton, Mass. Oven turn-table. No. 53,710; Aug. 19; v. 265; p. 436.

Kepler, Jesse S., Dayton, Ohio, and M. O. Kepler, New York, N. Y. Combination nut bowl and cracker. Nos. 53,711-12; Aug. 19; v. 265; p. 436.

Kepler, Jesse S., Dayton, Ohio, and M. O. Kepler, New York, N. Y. Nutcracker. No. 53,713; Aug. 19; v. 265; p. 436.

Kepler, Milton O. (See Kepler, Jesse S. and M. O.)

Kerr, George W., Racine, Wis. Radiator-hood for automobiles. No. 53,714; Aug. 19; v. 265; p. 437.

McDannell, Decatur S., Jr., Moline, Ill. Sign-post. (Reissue.) No. 14,711; Aug. 19; v. 265; p. 432.

Samson, Edwin J., assignor of one-third to H. R. Voigtlander and one-third to A. S. Baudier, New York, N. Y. Tooth-brush. No. 53,715; Aug. 19; v. 265; p. 437.

Smith, Ray, assignor to R. L. Hardin, Portland, Oreg. Statuette or similar article. No. 53,716; Aug. 19; v. 265; p. 437.

Sokolowski, Aleksander, Peru, Ill. Stone. No. 53,717; Aug. 19; v. 265; p. 437.

Stein, Morris, Philadelphia, Pa. Aquarium and fountain. No. 53,718; Aug. 19; v. 265; p. 437.

Stein, Morris, Philadelphia, Pa. Aquarium. No. 53,719; Aug. 19; v. 265; p. 437.

Tognelli, Hys O., Lincoln, Calif. International patriotic emblem. No. 53,720; Aug. 19; v. 265; p. 438.

Turton, William, Newark, N. J., assignor to The Art Hand-Bag Frame Co., New York, N. Y. Hand-bag frame. No. 53,721; Aug. 19; v. 265; p. 438.

Twyman, B. Wickliffe, Muncie, Ind. Automobile-body. No. 53,722; Aug. 19; v. 265; p. 438.

Voigtlander, Herman H., et al. (See Samson, Edwin J., assignor.)

Wilkins, John H., Washington, D. C. Bag for containing merchandise. No. 53,723; Aug. 19; v. 265; p. 438.

Wrigley, Philip K., Chicago, Ill. Carton. No. 53,724; Aug. 19; v. 265; p. 438.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. B. Newman Co., New York, N. Y. Cigarette-papers. No. 126,224; Aug. 19; v. 265; p. 453.

A. G. Spaulding & Bros., New York, N. Y. Certain named toys and sporting goods. No. 126,231; Aug. 19; v. 265; p. 454.

Alaska Refrigerator Company, The. Muskegon Heights, Mich. Refrigerators. No. 126,233; Aug. 19; v. 265; p. 451.

Allison, Estelle, New York, N. Y. Dolls. No. 126,234; Aug. 19; v. 265; p. 451.

Amaroto, Aigi, Nagasaki, Japan. Medicinal preparation for treating certain named diseases and disorders. No. 126,235; Aug. 19; v. 265; p. 451.

American Butterine Co., Jersey City, N. J. Oleomargarin. No. 126,236; Aug. 19; v. 265; p. 451.

American Sugar Refining Company, Jersey City, N. J. and New York, N. Y. Icing for use as a food. No. 126,237; Aug. 19; v. 265; p. 451.

American Tobacco Co., The, New York, N. Y. Cigarettes. Nos. 126,238-9; Aug. 19; v. 265; p. 451.

Blackburn Products Co., The, Dayton, Ohio. Medicinal tonic. No. 126,240; Aug. 19; v. 265; p. 451.

Blackburn Products Co., The, Dayton, Ohio. Laxative tonic. No. 126,241; Aug. 19; v. 265; p. 451.

Blackman, Maurice R., Philadelphia, Pa. Non-alcoholic grape-julee. No. 126,248; Aug. 19; v. 265; p. 451.

Block, Louis A., New Orleans, La. Polishing and cleaning liquid for certain named surfaces. No. 126,249; Aug. 19; v. 265; p. 451.

Bonney Vase & Tool Works, Inc., Philadelphia and Allentown, Pa., and New York, N. Y. Certain named cutlery, &c. No. 126,250; Aug. 19; v. 265; p. 451.

Booth Fisheries Co., Chicago, Ill. Canned sardines. Nos. 126,251-3; Aug. 19; v. 265; p. 451.

E. J. Braeh & Sons, Chicago, Ill. Hard candles. No. 126,254; Aug. 19; v. 265; p. 451.

J. S. Brown Mercantile Co., Denver, Colo. Certain named foods. No. 126,255; Aug. 19; v. 265; p. 451.

Rowen, Stephen T., Chicago, Ill. Liquid polish for furniture, &c. No. 126,256; Aug. 19; v. 265; p. 451.

C. A. Gambrill Mfg. Company, Baltimore, Md. Self-rising buckwheat-flour. No. 126,284; Aug. 19; v. 265; p. 452.

C. R. Cook Paint Company, Kansas City, Mo. Certain named paints and painters' materials. No. 126,263; Aug. 19; v. 265; p. 452.

Celluloid Company, The, New York, N. Y. Cases, parasols, umbrellas, &c. No. 126,257-9; Aug. 19; v. 265; p. 451.

Chicago Apparatus Company, Chicago, Ill. Scientific instruments. No. 126,260; Aug. 19; v. 265; p. 451.

Chippewa Milling Company, Montevideo, Minn. Wheat-four. No. 126,261; Aug. 19; v. 265; p. 451.

Cincinnati Lathe and Tool Company, The, Cincinnati, Ohio. Metal-working engine-lathes. No. 126,262; Aug. 19; v. 265; p. 452.

Common Sense Manufacturing Co., Inc., Buffalo, N. Y. Preparation for destroying rats, bedbugs, &c. No. 126,263; Aug. 19; v. 265; p. 452.

Congoleum Company, Philadelphia, Pa. Prepared floor-coverings, &c. No. 126,264; Aug. 19; v. 265; p. 452.

Cox Confectionery Company, Boston, Mass. Candies. No. 126,266; Aug. 19; v. 265; p. 452.

Cradick, William F., Seattle, Wash., assignor to Vit-O-Net Manufacturing Company. Garments for imparting electric heat and radiation to the human body for therapeutic purposes. No. 126,267; Aug. 19; v. 265; p. 452.

Croft, William, Salem, N. H. Potato-chips. No. 126,268; Aug. 19; v. 265; p. 452.

E. M. Schwarz & Co., Inc., New York, N. Y. Cigars, cheroots, and little cigars. No. 126,245; Aug. 19; v. 265; p. 454.

Eagle Pencil Company, New York, N. Y. Lead-pencils, penholders, &c. No. 126,269; Aug. 19; v. 265; p. 452.

Eastern Manufacturing Company, Bangor, Me. Bond and writing papers. No. 126,270; Aug. 19; v. 265; p. 452.

Edible Oil Co., Incorporated, Louisville, Ky. Vegetable shortening. No. 126,271; Aug. 19; v. 265; p. 452.

Elliott, Clinton, New York, N. Y. Certain named receptacles for food products. No. 126,272; Aug. 19; v. 265; p. 452.

Esterline Company, The, Indianapolis, Ind. Permanent magnets. No. 126,273; Aug. 19; v. 265; p. 452.

Evan W. Hook & Co., Inc., Baltimore, Md. Certain named canned or preserved foods. No. 126,290; Aug. 19; v. 265; p. 452.

Fawcett & Fawcett, Brooklyn, N. Y. Certain named dental, medical, and surgical appliances. No. 126,275; Aug. 19; v. 265; p. 452.

Filhaber, George W., Chattanooga, Tenn. Medicines for constipation, biliousness, &c. No. 126,276; Aug. 19; v. 265; p. 452.

Fiske Brothers Refining Co., New York, N. Y. Lard-oil-greases. No. 126,277; Aug. 19; v. 265; p. 452.

Fuel Briquet Company, New York, N. Y., and Trenton, N. J. Fuel-briquets. No. 126,279; Aug. 19; v. 265; p. 452.

G. Amislock & Co., Inc., San Francisco, Calif. Coffee. No. 126,240-3; Aug. 19; v. 265; p. 451.

G. H. Hammond Company, The, Chicago, Ill. Canned peaches, plums, apricots, pineapples. No. 126,286; Aug. 19; v. 265; p. 452.

G. S. Nicholas & Son, Ltd., New York, N. Y. Whisky. No. 126,326; Aug. 19; v. 265; p. 454.

Gaffney, James C., New York, N. Y. Playing-cards. Nos. 126,280-2; Aug. 19; v. 265; p. 452.

Gaines, Clarence M., Bowling Green, Ky. General tonic and system-purifier. No. 126,283; Aug. 19; v. 265; p. 452.

Ginsburg, Alexander, New York, N. Y. Non-alcoholic malt-beverage. No. 126,285; Aug. 19; v. 265; p. 452.

H. B. Wixson's Sons Company, Bloomfield, N. J. Plaster of Paris for dental, &c., purposes. No. 126,371; Aug. 19; v. 265; p. 455.

Heising McKee Shoe Company, The, Cincinnati, Ohio. Ladies' and misses' shoes. No. 126,287; Aug. 19; v. 265; p. 452.

Hills Brothers Company, The, New York, N. Y. Cigarettes. No. 126,288; Aug. 19; v. 265; p. 452.

Holtzman, Abraham L., Philadelphia, Pa. Holder or case for shaving-brushes. No. 126,289; Aug. 19; v. 265; p. 452.

Hurst, Percy E., Croydon, England. Cigarettes. No. 126,291; Aug. 19; v. 265; p. 452.

Indersleben Canning Co., Chicago, Ill. Canned corn, canned beans and pork with tomato sauce. No. 126,292; Aug. 19; v. 265; p. 452.

Insulating Manufacturing Company, Salt Lake City, Utah. Certain named construction materials. No. 126,293; Aug. 19; v. 265; p. 453.

Insulating Materials Company, Detroit, Mich. Roofing-cement for repair of roofs. No. 126,294; Aug. 19; v. 265; p. 453.

J. C. Francesconi & Company, New York, N. Y. Paraffin-wax and certain named vegetable waxes, &c. No. 126,278; Aug. 19; v. 265; p. 452.

Jackson, Genevieve, Los Angeles, Calif. Bread. No. 126,295; Aug. 19; v. 265; p. 453.

Jacobs, Charles D., New York, N. Y. Writing and printing paper. No. 126,296; Aug. 19; v. 265; p. 453.

Jennings, Raymond A., Mattoon, Ill. Eggs. No. 126,297; Aug. 19; v. 265; p. 453.

John F. Bauer Co., The, Elmira, N. Y. Cereal food-drink. No. 126,244; Aug. 19; v. 265; p. 451.

Kansas City Macaroni Co., Kansas City, Mo. Macaroni and spaghetti. No. 126,298; Aug. 19; v. 265; p. 453.

Keith O'Brien Company, Salt Lake City, Utah. Certain named furniture. No. 126,300; Aug. 19; v. 265; p. 453.

Kellogg, Elias W., Milwaukee, Wis. Chicka and eggs. No. 126,301; Aug. 19; v. 265; p. 453.

Kellogg-Springfield Tire Company, New York, N. Y. Pneumatic tires of rubber and fabric. No. 126,302; Aug. 19; v. 265; p. 453.

King Chemical Company, Inc., New York, N. Y. Medicinal gases for treatment of diseases of the throat, nose, and lungs. No. 126,303; Aug. 19; v. 265; p. 453.

Kingman, Russell B., Orange, N. J., and San Francisco, Calif. Certain named food products in tins, glass, and packages. No. 126,304; Aug. 19; v. 265; p. 453.

Kluhe, Gustav, Chicago, Ill. Trunks, hand-bags, suit-cases, and pocket-books. No. 126,305; Aug. 19; v. 265; p. 453.

Koscherak Siphon Bottle Works, Hoboken, N. J. Bottle stoppers and caps and jar-closures. No. 126,306; Aug. 19; v. 265; p. 453.

Lee S. Smith & Son Manufacturing Company, Pittsburgh, Pa. Dental enamel. No. 126,349; Aug. 19; v. 265; p. 454.

Lesher, Whitman & Co., Inc., New York, N. Y. Piece goods. No. 126,308; Aug. 19; v. 265; p. 453.

Lubec Sardinia Co., Lubec, Me. Canned sardines. Nos. 126,309-12; Aug. 19; v. 265; p. 453.

M. P. Knezer & Co., Inc., New York, N. Y. Whole, ground, and mixed spices. No. 126,307; Aug. 19; v. 265; p. 453.

Makitol Company, Rochester, N. Y. Antiseptics. No. 126,313; Aug. 19; v. 265; p. 453.

Makris, Basil G., New York, N. Y. Salad-oil, &c. No. 126,314; Aug. 19; v. 265; p. 453.

Malloua Blehle & Co., Jacksonville, Fla. Growing and pressing half-coll. No. 126,341; Aug. 19; v. 265; p. 454.

Miami Butterline Co., The, Cincinnati, Ohio. Oleomargarin. No. 126,315; Aug. 19; v. 265; p. 453.

Miller, Earl L., Overbrook, Kans. Timer-brushes for ignition systems. No. 126,316; Aug. 19; v. 265; p. 453.

Molassine Company Limited, The, Greenwich, England. Chemical fertilizers. No. 126,317; Aug. 19; v. 265; p. 453.

Monarch Manufacturing Company, Council Bluffs, Iowa, and Toledo, Ohio. Lubricating greases and oils. No. 126,318; Aug. 19; v. 265; p. 453.

Monroe Coal Mining Company, Cambria township, Cambria county, and Philadelphia, Pa. Coal. No. 126,319; Aug. 19; v. 265; p. 453.

Montelaise Mercantile Co., The, Detroit, Mich. Non-toxicating maltless fruit beverage. No. 126,320; Aug. 19; v. 265; p. 453.

Music Master Co., Sturgis, Mich. Cabinet-phonographs. No. 126,321; Aug. 19; v. 265; p. 453.

Myers, Lewis E., Valparaiso, Ind. Combination portable desks. No. 126,322; Aug. 19; v. 265; p. 453.

N. K. Fairbank Company, The, Union township, near Guttenberg, N. J., and Chicago, Ill. Shortening compound, &c. No. 126,274; Aug. 19; v. 265; p. 452.

National Veneer Products Company, Mishawaka, Ind. Trunks. No. 126,323; Aug. 19; v. 265; p. 453.

Newton Tea & Spice Co., The, Cincinnati, Ohio. Mixture to be used in place of eggs in baking and cooking. No. 126,325; Aug. 19; v. 265; p. 453.

Northern Furniture Company, Sheboygan, Wis. Certain named furniture. No. 126,327; Aug. 19; v. 265; p. 454.

Nyman, Knute D., Cincinnati and Springfield, Ohio. Candies. No. 126,328; Aug. 19; v. 265; p. 454.

Oettinger, Fritz W., New Rochelle and New York, N. Y. Electric push-buttons, switches, fuses, &c. No. 126,329; Aug. 19; v. 265; p. 454.

Ohio Confection Company, The, Cleveland, Ohio. Candies. No. 126,330; Aug. 19; v. 265; p. 454.

Ottawa Milling Company, Kansas City, Mo., and Ottawa, Kans. Wheat flour. No. 126,331; Aug. 19; v. 265; p. 454.

Otto F. Stiff's Union Brewing Company, St. Louis, Mo. Oleomargarin. No. 126,338; Aug. 19; v. 265; p. 454.

Palmer Candy Company, Sioux City, Iowa. Candy. No. 126,332; Aug. 19; v. 265; p. 454.

Parson's Chemical Works, Grand Lodge, Mich. Antiseptic, insecticide, and disinfectant for live stock. No. 126,333; Aug. 19; v. 265; p. 454.

Parsons Chemical Works, Grand Lodge, Mich. Insecticide and disinfectant for live stock. No. 126,334; Aug. 19; v. 265; p. 454.

Peninsular Products Company, Wilmington, Del. Soft drinks. No. 126,335; Aug. 19; v. 265; p. 454.

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. No. 126,336; Aug. 19; v. 265; p. 454.

Post, Edward, Baltimore, Md. Maltless carbonated non-alcoholic beverages. No. 126,337; Aug. 19; v. 265; p. 454.

Postum Cereal Company, Battle Creek, Mich. Cereal breakfast foods. No. 126,338; Aug. 19; v. 265; p. 454.

Pure Cane Molasses Corporation, New York, N. Y. Molasses. No. 126,339; Aug. 19; v. 265; p. 454.

Relly-Taylor Company, The, New Orleans, La. Teas. No. 126,340; Aug. 19; v. 265; p. 454.

Ridgely Trimmer Company, Springfield, Ohio. Certain named painters' and decorators' tools and supplies. No. 126,342; Aug. 19; v. 265; p. 454.

S. Karpen & Bros., Chicago, Ill. Certain named furniture. No. 126,399; Aug. 19; v. 265; p. 453.

Samstax & Hilde Bros., New York, N. Y. Pearl buttons. No. 126,343; Aug. 19; v. 265; p. 454.

Schambler, Augustin F., Manchester, N. H. Cough-syrup. No. 126,344; Aug. 19; v. 265; p. 454.

Simmons Hardware Company, St. Louis, Mo. Refrigerators. No. 126,346; Aug. 19; v. 265; p. 454.

Simmons Hardware Company, St. Louis, Mo. Ice-cream freezers. No. 126,347; Aug. 19; v. 265; p. 454.

Sinclair Refining Company, Chicago, Ill. Certain named oils and greases. No. 126,348; Aug. 19; v. 265; p. 454.

Snyder Chaffee Co., The, Columbus, Ohio. Candy. No. 126,350; Aug. 19; v. 265; p. 454.

Stampede Company, The, St. Paul, Minn. Candy. No. 126,352; Aug. 19; v. 265; p. 454.

Standard Candy Company, Nashville, Tenn. Candy. No. 126,353; Aug. 19; v. 265; p. 454.

Standard Cooper-Hell Co., Chicago, Ill. Varnishes, paints, japans, paint-driers. No. 126,354; Aug. 19; v. 265; p. 454.

Standard Paint Company, Roundbrook, N. J., and New York, N. Y. Composition roofings and building-papers. No. 126,355; Aug. 19; v. 265; p. 454.

Stephens, Franklin, Atlantic City, N. J. Headache remedy. No. 126,356; Aug. 19; v. 265; p. 454.

Stevens, Abbie R., Atlanta, Ga. Dolls. No. 126,357; Aug. 19; v. 265; p. 451.

Stoddard, Gilbert & Co., Inc., New Haven, Conn. Cigars. Nos. 126,359-61; Aug. 19; v. 265; p. 455.

Toomba, Josephine W., Boston, Mass. Antiseptic ointments for burns, &c. No. 126,362; Aug. 19; v. 265; p. 455.

United Canners Company of California, Oakland, Calif. Canned peaches. No. 126,363; Aug. 19; v. 265; p. 455.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

(REGISTRATION APPLIED FOR.)

Adams, Cushing & Foster, Inc., Boston, Mass. Writing and printing paper and writing-tablets. No. 111,291; Aug. 19; v. 265; p. 441.

Ashwell, Davis & Co., Inc., New York, N. Y. Weekly magazine. No. 117,609; Aug. 19; v. 265; p. 445.

Atlas Valve Company, Newark, N. J. Reducing and seat valves, unions, &c. No. 118,987; Aug. 19; v. 265; p. 445.

Automotive Parts Company, Indianapolis, Ind. Fans for cooling the engines of automobiles, &c. No. 118,726; Aug. 19; v. 265; p. 447.

B. L. Johnson & Co., Knoxville, Tenn. Caramels, chocolates, cream candies, &c. No. 110,375; Aug. 19; v. 265; p. 440.

Bankers Supply Co., Denver, Colo., and Chicago, Ill. Safety-paper. Nos. 117,214-15; Aug. 19; v. 265; p. 444.

Barthels Manufacturing Company, Glendale, N. Y. Bricks. No. 117,387; Aug. 19; v. 265; p. 444.

Banket Stores Company, Omaha, Nebr. Coffee. No. 119,387; Aug. 19; v. 265; p. 447.

Blenmann, William J., El Paso, Tex. Pollah for furniture, &c. No. 116,986; Aug. 19; v. 265; p. 443.

Bltrose Co., Milwaukee, Wis. Candies. No. 118,437; Aug. 19; v. 265; p. 446.

Blemo Company, Canton, Ohio. Ointment for pimples, blackheads, tetter, itch, &c. No. 119,761; Aug. 19; v. 265; p. 440.

Cable Draper Baking Co., Detroit, Mich. Bread. No. 116,407; Aug. 19; v. 265; p. 442.

Car-Ho-Thymol Company, Atlanta, Ga. Medicated oil for catarrhal conditions of the nose, throat, and bronchi. No. 119,699; Aug. 19; v. 265; p. 449.

Charles McAdam Company, Chicago, Ill. Glove-bleach. No. 119,077; Aug. 19; v. 265; p. 447.

Coe-Stapley Manufacturing Corporation, Bridgeport, Conn. Automobile and bicycle pumps. No. 118,590; Aug. 19; v. 265; p. 440.

Columbia Mantel Company, Brooklyn, N. Y. Talking-machines. No. 117,870; Aug. 19; v. 265; p. 445.

Coughlin, John W., Fall River and Boston, Mass. Remedy for throat and nose diseases. No. 118,245; Aug. 19; v. 265; p. 446.

Cramer, John F., Freeport, Ill. Canned fruits and vegetables, tea, &c. No. 70,824; Aug. 19; v. 265; p. 439.

Cromwell Brothers, New York, N. Y. Textile fabrics for use in the manufacture of wearing-apparel. No. 118,106; Aug. 19; v. 265; p. 440.

Cuppie Company, Manufacturers, St. Louis, Mo. Phonographs. No. 111,038; Aug. 19; v. 265; p. 441.

D. E. Brooks & Co., Newburgh, N. Y. Canned foods, dried beef, horse-radish, &c. No. 114,890; Aug. 19; v. 265; p. 442.

Darwin & Miller, Inc., New York, N. Y. Compound anhydrous salts. No. 119,294; Aug. 19; v. 265; p. 447.

Davis, Albert M., Philadelphia, Pa. Felt hats. No. 114,879; Aug. 19; v. 265; p. 441.

Defiance Machine Works, Defiance, Ohio. Metal-working and wood-working machinery. No. 116,594; Aug. 19; v. 265; p. 443.

Edison, Thomas A., Jr., Orange, N. J. Devices to be attached to the carburetors of internal-combustion engines. No. 119,035; Aug. 19; v. 265; p. 447.

United Cigar Stores Company of America, Jersey City, N. J. Cigars, cigarettes, tobacco, and snuff. No. 126,364; Aug. 19; v. 265; p. 455.

United States Rubber Company, New Brunswick, N. J., and New York, N. Y. Certain named belting, hose, machinery packing, and tires. No. 126,365; Aug. 19; v. 265; p. 455.

Vanderpan Brothers, Denver, Colo. Furniture-polish. No. 126,366; Aug. 19; v. 265; p. 455.

Virocacao Company Inc., The, New York, N. Y. Certain named food. No. 126,367; Aug. 19; v. 265; p. 455.

Vit-O-Net Manufacturing Company. (See Caddick, William F., assignor.)

Wahl, William B., Buffalo, N. Y. Bread, biscuits, cake. No. 126,368; Aug. 19; v. 265; p. 455.

Warner-Patterson Company, Chicago, Ill. Shaving-brushes. No. 126,369; Aug. 19; v. 265; p. 455.

West Coast Packing Co., Los Angeles, Calif. Canned fish, fruit, and vegetables. No. 126,370; Aug. 19; v. 265; p. 455.

William Call Bltmo Company, The, New York, N. Y. Ready-mixed paint and varnish. No. 120,245; Aug. 10; v. 265; p. 451.

Wortendyke Manufacturing Company, Richmond, Va. Paper bags. No. 126,372; Aug. 19; v. 265; p. 455.

Zadek Feldstein Co., Inc., New York, N. Y. Certain named lays. No. 126,373; Aug. 19; v. 265; p. 455.

Zenite Metal Company, Indianapolis, Ind. Timers for internal-combustion-engine ignition systems. No. 126,374; Aug. 19; v. 265; p. 455.

Embalmer's Supply Co., Westport, Conn. Embalming fluid. No. 119,820; Aug. 19; v. 265; p. 449.

Esbeck Manufacturing Company, Turners Falls, Mass. Bond, typewriter, &c., paper. No. 117,599; Aug. 19; v. 265; p. 445.

Federal Milling Company, Lockport, N. Y. Wheat-flour. No. 119,827; Aug. 19; v. 265; p. 450.

Finch, Van Slyck & McConville, St. Paul, Minn. Piece goods. No. 104,243; Aug. 19; v. 265; p. 439.

Finlay, Thomas, Auckland, New Zealand. Gold-rulers for scholastic purposes. No. 99,211; Aug. 19; v. 265; p. 439.

Fleischmann's Vienna Model Bakery, (Inc.), New York, N. Y. Doughnuts. No. 117,665; Aug. 19; v. 265; p. 445.

Flehtmann, Watjen & Co., Inc., New York, N. Y. Dried fruits, evaporated milk, canned fish, lard, &c. No. 119,569; Aug. 19; v. 265; p. 448.

Foster, Merriam & Company, Meriden, Conn. Drawer and furniture handles, escutcheons, &c. No. 110,460; Aug. 19; v. 265; p. 442.

Franklin, Daisy, Jacksonville, Fla. Hair-growing preparations. No. 117,834; Aug. 19; v. 265; p. 445.

Fred L. Divine Co., Utica, N. Y. Fishing-rods. No. 117,155; Aug. 19; v. 265; p. 443.

Freilich, Louis, Chicago, Ill. Underwear made of textile fabric. No. 115,282; Aug. 19; v. 265; p. 440.

G. G. Cornwell & Son, Inc., Washington, D. C. Ice-cream cones. No. 119,407; Aug. 19; v. 265; p. 448.

Geneva Cutlery Corporation, Geneva, N. Y. Razors. No. 113,704; Aug. 19; v. 265; p. 441.

General Ordnance Company, Derby, Conn. Tractors and tractor parts. No. 118,226; Aug. 19; v. 265; p. 446.

Geo. Haisa Mfg. Co., Inc., New York, N. Y. Wagon-loaders of the elevator type. No. 116,599; Aug. 19; v. 265; p. 443.

Goodell-Pratt Company, Greenfield, Mass. Hack-saw-blades. Nos. 119,550-7; Aug. 19; v. 265; p. 448.

Hannibal Pharmacal Company, St. Louis, Mo. Antiseptic lotion for use as a depilatory. No. 119,801; Aug. 19; v. 265; p. 449.

Hendler Creamery Co., Baltimore, Md. Ice-cream, frozen custards, ice-cream. No. 117,139; Aug. 19; v. 265; p. 443.

High Rock Knitting Company, Philmont, N. Y. Underwear. No. 118,517; Aug. 19; v. 265; p. 446.

Holt & Company, New York, N. Y. Wheat-flour. No. 111,176; Aug. 19; v. 265; p. 441.

Ideal Sheet Metal Works, Chicago, Ill. Radiators for automobiles. No. 112,065; Aug. 19; v. 265; p. 441.

Island Petroleum Company, Baltimore, Md. Illuminating and lubricating oils and greases. No. 113,693; Aug. 19; v. 265; p. 441.

John D. Emack Co., Philadelphia, Pa. Roofing-slate. No. 115,659; Aug. 19; v. 265; p. 447.

Kessler Walst Co., Inc., New York, N. Y. Ladies' outer waists. No. 118,155; Aug. 19; v. 265; p. 440.

Kimberly-Clark Company, Neneah, Wis. Sanitary napkins. No. 118,017; Aug. 19; v. 265; p. 445.

Latta-Martin Pump Co., Hickory, N. C. Pumping systems, pneumatic displacement-pumps, &c. Nos. 117,180-91; Aug. 19; v. 265; p. 444.

Lever Brothers Company, Cambridge, Mass. Soap dyes. No. 119,658; Aug. 19; v. 265; p. 449.

(REGISTRATION APPLIED FOR.)

Liberty Steel Products Co. Inc., New York, N. Y. Brake-beams for vehicles. No. 118,056; Aug. 19; v. 265; p. 440.
 Lippitt, Thomas P., Washington, D. C. and San Juan, Porto Rico. Fresh fruits. No. 107,410; Aug. 19; v. 265; p. 440.
 Marathon Fishing & Packing Co., Seattle, Wash. Canned salmon. No. 119,421; Aug. 19; v. 265; p. 448.
 Mason, Au & Magenheimer Conf. Mfg. Co., Brooklyn, N. Y. Candies and chocolate. No. 115,998; Aug. 19; v. 265; p. 442.
 Mayers-Hoffman Co. Inc., New York, N. Y. Young men's coats, trousers, and waistcoats. No. 117,942; Aug. 19; v. 265; p. 445.
 McKinnle, Henry, Pittsburgh, Pa. Gaseous, oil, and solid fuel burning stoves, &c. No. 116,843; Aug. 19; v. 265; p. 443.
 Melnert, Grover N., Atlanta, Ga. Charcoal. No. 117,814; Aug. 19; v. 265; p. 445.
 Mint Products Company, Inc., New York, N. Y. Chew-ing-gum and sandv. No. 109,270; Aug. 19; v. 265; p. 440.
 Miyachi, Kilchi, Nodasam-Mura, Nodasam-Gun, Japan. Canned lobster, crabs, fish, and shell-fish. No. 108,531; Aug. 19; v. 265; p. 440.
 Mountain States Manufacturing Co., Provo, Utah. Egg substitute. No. 101,401; Aug. 19; v. 265; p. 439.
 National Dairy Co., Toledo and Pioneer, Ohio, and Ennis and Moren, Mich. Sterilized milk in containers. No. 117,050; Aug. 19; v. 265; p. 443.
 Northwestern Chemical Co., Marietta, Ohio. Air-drying and engine enamels, rim and tire paints, &c. No. 110,485; Aug. 19; v. 265; p. 440.
 Oceanus Laboratories, Rockaway Beach, N. Y. Antiseptic powder. No. 119,748; Aug. 19; v. 265; p. 440.
 Pandolfo, Samuel C., St. Cloud, Minn. Tractors. No. 118,523; Aug. 19; v. 265; p. 446.
 Penn American Refining Co., Oil City, Pa. Fuel, lighting, &c. oils and paraffin-wax. No. 115,736; Aug. 19; v. 265; p. 442.
 Pinder, Carlotta, Chicago, Ill. Raisins, sugar-coated and chocolate-coated peanuts. No. 113,376; Aug. 19; v. 265; p. 441.
 Rose Drug Company, Vicksburg, Miss. Liquid tonic for liver and kidneys and pills for the liver. No. 119,866; Aug. 19; v. 265; p. 450.
 Schwarzenbach-Huber Company, New York, N. Y. Silk, woolen, and cotton piece goods, &c. No. 117,197; Aug. 19; v. 265; p. 444.
 Schmoll Fils & Co., New York, N. Y. Shoes of leather and rubber. No. 110,508; Aug. 19; v. 265; p. 443.
 Shepard Electric Crane & Hoist Co., Montour Falls, N. Y. Cranes and hoisting machinery. No. 110,403; Aug. 19; v. 265; p. 440.

Sperry Flour Company, San Francisco, Calif. Poultry food. No. 119,678-9; Aug. 19; v. 265; p. 449.
 Sperry Flour Company, San Francisco, Calif. Stock food. No. 119,677; Aug. 19; v. 265; p. 449.
 Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating-oils. No. 119,676; Aug. 19; v. 265; p. 449.
 Stearns-Hollinshead Co., Portland, Oreg. Cough-candies. No. 119,433; Aug. 19; v. 265; p. 448.
 Sterle Packing Co., San Diego, Calif. Canned sardines. No. 119,449; Aug. 19; v. 265; p. 448.
 Sterling Potato Brittle Co., Wilkes-Barre, Pa. Potato chips. No. 119,809; Aug. 19; v. 265; p. 450.
 Tapo Citrus Ass'n, Santa Susana, Calif. Fresh citrus fruits. No. 118,716; Aug. 19; v. 265; p. 447.
 Texas Company, Houston, Tex., and New York, N. Y. Flat roofing and roofing-cements. No. 119,479; Aug. 19; v. 265; p. 448.
 Thomas, Louis, Chicago, Ill. Liquid for scalds and burns. No. 119,755; Aug. 19; v. 265; p. 449.
 Thorndike and Gerriah Company, Boston, Mass. Dressed poultry. No. 118,288; Aug. 19; v. 265; p. 446.
 Towle Maple Products Company, Wilmington, Del., and St. Paul, Minn. Confection paste. No. 88,512; Aug. 19; v. 265; p. 439.
 U. T. Hungerford Brass & Copper Co., New York, N. Y. Steel tubing. No. 114,539; Aug. 19; v. 265; p. 441.
 Union Petroleum Company, Philadelphia, Pa. Oils, greases, &c. No. 104,290; Aug. 19; v. 265; p. 439.
 United States Rubber Company, New York, N. Y. Rubber boots and shoes. No. 105,530; Aug. 19; v. 265; p. 440.
 Venesta Limited, London, England. Composite or compound sheets of wood made of ply material. No. 110,082; Aug. 19; v. 265; p. 440.
 Voll, Leo G., Denver, Colo. Compound flour and syrup. No. 116,243; Aug. 19; v. 265; p. 442.
 Walsh, Thomas A., Yonkers, N. Y. Bacterial culture of *Bacillus bulgaricus*. No. 117,209; Aug. 19; v. 265; p. 444.
 Wash-Co. Alfalfa Milling Co., Riverton, Wyoming, Fort Calhoun, and Nebraska City, Nebr. Mixed live-stock feed. No. 118,719; Aug. 19; v. 265; p. 447.
 Washington Fruit & Produce Co., Yakima, Wash. Fresh apples. No. 119,463; Aug. 19; v. 265; p. 448.
 White-Stokes Co. Inc., Chicago, Ill. Cocoa, icing, cake-killer, &c. No. 117,362; Aug. 19; v. 265; p. 444.
 Whittier Citrus Association, Whittier, Calif. Fresh citrus fruits. No. 117,737; Aug. 19; v. 265; p. 445.
 Wolke Albert F., Louisville, Ky. Self-contained electric lighting and power plants. No. 115,891; Aug. 19; v. 265; p. 442.
 Wyeth Chemical Co., Dover, Del., and New York, N. Y. Hair remedy. No. 119,284; Aug. 19; v. 265; p. 447.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 19TH DAY OF AUGUST, 1919.

Acetylene-generator. L. Glodo. No. 1,313,510; Aug. 19; v. 265; p. 420.
 Acetylene-generator. F. A. Ruckman. No. 1,313,607; Aug. 19; v. 265; p. 382.
 Advertising device. H. K. Harris. No. 1,313,816; Aug. 19; v. 265; p. 421.
 Advertising device. H. K. Harris. No. 1,313,817; Aug. 19; v. 265; p. 421.
 Advertising or display device. J. Strandera. No. 1,313,351; Aug. 19; v. 265; p. 333.
 Aerial camera. F. A. Todd. No. 1,313,504; Aug. 19; v. 265; p. 374.
 Aerial ropeway and the like. W. H. Watkins. No. 1,313,357; Aug. 19; v. 265; p. 334.
 Aerial ropeways and the like. Tractor for. W. H. Watkins. No. 1,313,358; Aug. 19; v. 265; p. 335.
 Aeroplane. A. G. Leigh. No. 1,313,828; Aug. 19; v. 265; p. 423.
 Aeroplane-rudder. C. A. Strom. No. 1,313,839; Aug. 19; v. 265; p. 425.
 Aeroplanes. Controlling device for. C. R. Falcey. No. 1,313,689; Aug. 19; v. 265; p. 395.
 Aeroplanes. Controlling device for. C. R. Falcey. No. 1,313,681; Aug. 19; v. 265; p. 395.
 Aeroplane propeller and tractor. J. Ingella. No. 1,313,599; Aug. 19; v. 265; p. 380.
 Aeroplane-wheel bearing. T. Sinner. No. 1,313,646; Aug. 19; v. 265; p. 389.
 Aeroplane-wing structure. W. G. Tarrant. No. 1,313,563; Aug. 19; v. 265; p. 373.
 Air-inlet device. A. A. Crasius. No. 1,313,584; Aug. 19; v. 265; p. 378.
 Air-motor. S. Tridico. No. 1,313,842; Aug. 19; v. 265; p. 425.
 Air register and ventilators through which air passes. Constructive design of face-plates used for the purpose of covering openings in. C. B. Branson. No. 1,313,406; Aug. 19; v. 265; p. 354.
 Alarm. See—
 Automobile-alarm.
 Ammonia. Synthetic production of. F. J. Metzger. No. 1,313,314; Aug. 19; v. 265; p. 327.
 Ammonia. Synthetic production of. F. J. Metzger. No. 1,313,315; Aug. 19; v. 265; p. 327.
 Ammonia. Synthetic production of. F. J. Metzger. No. 1,313,316; Aug. 19; v. 265; p. 327.
 Amusement device. C. F. Zipl. No. 1,313,660; Aug. 19; v. 265; p. 391.
 Antisyphilitic arsenical preparation and making same. J. M. White. No. 1,313,657; Aug. 19; v. 265; p. 391.
 Article-holder. J. A. Dunn. No. 1,313,803; Aug. 19; v. 265; p. 418.
 Ash-conveyer-system tank. T. K. Webster, Jr. No. 1,313,436; Aug. 19; v. 265; p. 340.
 Automobile power plants. Protecting mechanism for steam. A. Doble. No. 1,313,527; Aug. 19; v. 265; p. 367.
 Automobile-radiator. O. H. Lober. No. 1,313,402; Aug. 19; v. 265; p. 360.
 Automobile-radiator attachment. J. J. Cavanaugh. No. 1,313,791; Aug. 19; v. 265; p. 416.
 Automobile-signal. F. W. Buck. No. 1,313,463; Aug. 19; v. 265; p. 354.
 Automobile-signal. H. K. Smith. No. 1,313,346; Aug. 19; v. 265; p. 332.
 Automobile-signal. J. M. White. No. 1,313,770; Aug. 19; v. 265; p. 412.
 Automobile turn-table, Travelling. R. B. Isenman. No. 1,313,480; Aug. 19; v. 265; p. 358.
 Automobiles. Device for preventing theft of. A. Knell, Jr. No. 1,313,544; Aug. 19; v. 265; p. 370.
 Automobile. Lock for shift-levers of. E. V. Noser. No. 1,313,412; Aug. 19; v. 265; p. 345.
 Automobiles. Water and steam system for steam-driven. F. I. du Pont. No. 1,313,076; Aug. 19; v. 265; p. 394.
 Autotralliers. Coupling and draw-bar for. C. A. Beblen. No. 1,313,451; Aug. 19; v. 265; p. 352.
 Bag-rack. A. A. Carlson. No. 1,313,267; Aug. 19; v. 265; p. 316.
 Ball. See—
 Ball. See—
 Ball. Artibolal. W. S. Ewert. No. 1,313,476; Aug. 19; v. 265; p. 357.
 Bar. See—
 Draft-bar.
 Barrel and method of making same. Welded steel. A. Kuerbo. No. 1,313,387; Aug. 19; v. 265; p. 340.
 Barrel-rack. E. M. Sell. No. 1,313,340; Aug. 19; v. 265; p. 331.
 Batteries. Cooling, ventilating, and condensing innocuous storage. C. H. Bedell and G. E. Edgar. No. 1,313,512; Aug. 19; v. 265; p. 363.
 Battery-supporting device. M. R. Hutchison and C. W. Norton. No. 1,313,384; Aug. 19; v. 265; p. 339.
 Bearing and oiling means therefor. R. H. Rice. No. 1,313,730; Aug. 19; v. 265; p. 406.
 Bearing. Journal. F. E. Buxton. No. 1,313,466; Aug. 19; v. 265; p. 355.
 Bearing. Waste-packed sleeve. J. F. Trudeau. No. 1,313,567; Aug. 19; v. 265; p. 392.
 Bed. Disappearing. G. W. Teasdale. No. 1,313,760; Aug. 19; v. 265; p. 410.
 Belt. E. L. Couch. No. 1,313,266; Aug. 19; v. 265; p. 318.
 Belt-fastener. C. E. Schwelsgood. No. 1,313,642; Aug. 19; v. 265; p. 388.
 Belt-guide. A. R. Crnddock. No. 1,313,267; Aug. 19; v. 265; p. 318.
 Belt-hook. J. M. Harmony. No. 1,313,818; Aug. 19; v. 265; p. 421.
 Bench. See—
 Repair-bench.
 Block. See—
 Cap-cover block.
 Board. See—
 Game-board.
 Board. Machine for making corrugated. M. L. Twomey. No. 1,313,844; Aug. 19; v. 265; p. 420.
 Boat-launching tackle or gear. Ship's. W. Bolman, F. W. Smith, and W. Jones. No. 1,313,789; Aug. 19; v. 265; p. 419.
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 Spring structure. W. Shannon. No. 1,313,341; Aug. 19; v. 265; p. 331.
 Spring wheel. G. Orbin. No. 1,313,501; Aug. 19; v. 265; p. 361.
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 Stay-bolt structure. H. E. D. Stafford and E. I. Dodds. No. 1,313,647; Aug. 19; v. 265; p. 389.
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 Steam and hot water boiler. J. W. Mosner and G. W. Crane. No. 1,313,722; Aug. 19; v. 265; p. 403.
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Stereotype-plates. Machine for trimming. C. Winkler. No. 1,313,775; Aug. 19; v. 265; p. 413.
 Stereotype's matrix and vertical mold for casting stereotype-plates from. J. J. B. Harris. No. 1,313,622; Aug. 19; v. 265; p. 387.
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 Stoneworking. Method of and apparatus for. D. W. Custer. No. 1,313,299; Aug. 19; v. 265; p. 319.
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 Stoves. Water-heater and auxiliary oven for. T. H. Stedman. No. 1,312,754; Aug. 19; v. 265; p. 409.
 Streplice. J. L. Hemp. No. 1,313,933; Aug. 19; v. 265; p. 387.
 Straw-spreader. H. L. Hitchfield and V. Speer. No. 1,313,637; Aug. 19; v. 265; p. 388.
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 Straw-spreading machine. M. Rapp. (Reissue.) No. 1,313,735; Aug. 19; v. 265; p. 406.
 Stump-puller. F. E. Kenney. No. 1,313,545; Aug. 19; v. 265; p. 370.
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 Switch. T. J. Dodge. No. 1,313,372; Aug. 19; v. 265; p. 337.
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 Talking-machines, &c. Manufacturing tone-arms for. F. Savane. No. 1,313,559; Aug. 19; v. 265; p. 373.
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 Textile-machine. E. F. Hathaway and C. Lea. No. 1,313,294; Aug. 19; v. 265; p. 323.
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 Tip. M. S. Snyder. No. 1,313,422; Aug. 19; v. 265; p. 347.
 Tire. J. W. and G. F. Burgess. No. 1,313,254; Aug. 19; v. 265; p. 316.
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 Tire. Automobile. M. A. K. Shotwell. No. 1,313,509; Aug. 19; v. 265; p. 362.
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 Tire-chain-fastening device. P. Casen. No. 1,313,368; Aug. 19; v. 265; p. 337.
 Tire-chains. Device for applying. H. E. Mortimer. No. 1,313,410; Aug. 19; v. 265; p. 344.
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 Title examiners. Means employed in key systems for. N. W. Wheeler. No. 1,313,617; Aug. 19; v. 265; p. 384.
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 Toilets. Flushing and cover-operating mechanism for. P. H. Sager. No. 1,313,740; Aug. 19; v. 265; p. 406.

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 Trolley-wire hoover. B. A. White. No. 1,313,656; Aug. 19; v. 265; p. 391.
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 Turbine. Elastic-fluid. C. Steensrup. No. 1,313,640; Aug. 19; v. 265; p. 390.
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 Washing golf-balls and other articles. Machine for. G. H. Lambert. No. 1,313,703; Aug. 19; v. 265; p. 399.
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 Watchcase. W. J. Larkin. No. 1,313,636; Aug. 19; v. 265; p. 387.
 Watch-protector. W. P. Devine. No. 1,313,798; Aug. 19; v. 265; p. 417.
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 Weather-strip. Automatic. W. J. Dillard and J. D. Taylor. No. 1,313,700; Aug. 19; v. 265; p. 418.
 Weed-destroyer. H. Mattson. No. 1,313,310; Aug. 19; v. 265; p. 326.
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 Wrapping-machine. E. L. Smith and A. E. Phelon. No. 1,313,863; Aug. 19; v. 265; p. 430.
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 Wrench-heads. Machine for forming. E. C. Smith. No. 1,313,345; Aug. 19; v. 265; p. 332.
 Wrench in which no detrimental play can obtain. Screw. N. M. Bernardi. No. 1,313,575; Aug. 19; v. 265; p. 376.

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 Aquarium. M. Stein. No. 53,719; Aug. 19; v. 265; p. 437.
 Aquarium and fountain. M. Stein. No. 53,718; Aug. 19; v. 265; p. 437.
 Automobile-body. H. W. Twyman. No. 53,722; Aug. 19; v. 265; p. 438.
 Automobile-radiator hood. G. W. Kerr. No. 53,714; Aug. 19; v. 265; p. 437.
 Bag for containing merchandise. J. H. Wilkins. No. 53,723; Aug. 19; v. 265; p. 438.
 Carton. P. K. Wrigley. No. 53,724; Aug. 19; v. 265; p. 438.
 Emblem, button, ring-top, pin, &c. C. Deau. No. 53,705; Aug. 19; v. 265; p. 435.
 Emblem, international patriotic. P. O. Tognelli. No. 53,720; Aug. 19; v. 265; p. 438.
 Flag, banner, pendant, sign, emblem, &c. I. M. Beemer. No. 53,699; Aug. 19; v. 265; p. 434.
 Flag, pennant, sign, emblem, &c. J. W. Bell, Jr. No. 53,700; Aug. 19; v. 265; p. 434.
 Flag, service. L. Bartelme. No. 53,698; Aug. 19; v. 265; p. 434.
 Hand-bag frame. W. Turton. No. 53,721; Aug. 19; v. 265; p. 438.
 Lighting-fixture. H. C. Adam. Nos. 53,696-7; Aug. 19; v. 265; p. 434.

Nut bowl and cracker. Combination. J. S. and M. O. Kepler. Nos. 53,711-12; Aug. 19; v. 265; p. 436.
 Nutcracker. J. S. and M. O. Kepler. No. 53,713; Aug. 19; v. 265; p. 436.
 Photo frame or stand. C. and D. Campbell. No. 53,704; Aug. 19; v. 265; p. 435.
 Pin and picture-frame. E. M. Dialynas. No. 53,707; Aug. 19; v. 265; p. 435.
 Sign-post. D. S. McDannell, Jr. (Relisue). No. 14,711; Aug. 19; v. 265; p. 432.
 Signal-horn casing. H. H. Boyce. No. 53,702; Aug. 19; v. 265; p. 435.
 Stand, beverage-dispensing. C. M. Earl. No. 53,708; Aug. 19; v. 265; p. 436.
 Statuette of figure. F. Bischoff. No. 53,701; Aug. 19; v. 265; p. 434.
 Statuette for similar article. R. Smith. No. 53,716; Aug. 19; v. 265; p. 437.
 Stove. A. Sokolowski. No. 53,717; Aug. 19; v. 265; p. 437.
 Tire. C. W. Greene. No. 53,709; Aug. 19; v. 265; p. 436.
 Tobacco-box. E. F. De Forest. No. 53,706; Aug. 19; v. 265; p. 435.
 Tooth brush. E. J. Samson. No. 53,715; Aug. 19; v. 265; p. 437.
 Turn-table, oven. E. P. Howe. No. 53,710; Aug. 19; v. 265; p. 436.

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Antiseptic, insecticide, and disinfectant for live stock. Parson's Chemical Works. No. 126,333; Aug. 19; v. 265; p. 454.
 Antiseptic ointment for burns, &c. Josephine W. Toombs. No. 126,362; Aug. 19; v. 265; p. 455.
 Antiseptics. Makitell Company. No. 126,313; Aug. 19; v. 265; p. 453.
 Belting, hose, packing, tires, certain named. United States Rubber Company. No. 126,305; Aug. 19; v. 265; p. 455.
 Beverage, non-alcoholic. A. Ginzburg. No. 126,285; Aug. 19; v. 265; p. 452.
 Beverage, non-intoxicating fruit. Montclair Mercantile Co. No. 126,329; Aug. 19; v. 265; p. 453.
 Beverages, maltless non-alcoholic. E. Post. No. 126,337; Aug. 19; v. 265; p. 454.
 Bottle stoppers and caps, jar-closures. Koscherak Siphon-Bottle Works. No. 126,306; Aug. 19; v. 265; p. 453.
 Bread. G. Jackson. No. 126,295; Aug. 19; v. 265; p. 453.
 Bread, biscuits, cakes. W. B. Ward. No. 126,368; Aug. 19; v. 265; p. 455.
 Briquet, fuel. Fuel Briquet Company. No. 126,279; Aug. 19; v. 265; p. 452.
 Brush holder or case, shaving. A. L. Holtzman. No. 126,280; Aug. 19; v. 265; p. 452.
 Brushes, shaving. Warner-Patterson Co. No. 126,369; Aug. 19; v. 265; p. 455.
 Brushes, timer for ignition systems. Earl L. Miller. No. 126,316; Aug. 19; v. 265; p. 453.
 Buttons, pearl. Sametog & Hilder Bros. No. 126,343; Aug. 19; v. 265; p. 454.
 Buttons, push, switches, fuses, &c. Göttinger, Fritz W. No. 126,329; Aug. 19; v. 265; p. 454.
 Candles, box confectionery company. No. 126,266; Aug. 19; v. 265; p. 452.
 Candles, K. O. Nyman. No. 126,328; Aug. 19; v. 265; p. 454.
 Candles, Ohio Confection Company. No. 126,330; Aug. 19; v. 265; p. 454.
 Candles, hard. E. J. Brach & Sons. No. 126,264; Aug. 19; v. 265; p. 451.
 Candy. Palmer Candy Company. No. 126,332; Aug. 19; v. 265; p. 454.
 Candy. Snyder Chaffee Co. No. 126,350; Aug. 19; v. 265; p. 454.
 Candy. Stampede Company. No. 126,352; Aug. 19; v. 265; p. 454.
 Candy. Standard Candy Company. No. 126,353; Aug. 19; v. 265; p. 454.
 Canned corn, canned beans and pork with tomato sauce. Indersleben Canning Co. No. 126,292; Aug. 19; v. 265; p. 452.
 Canned fish, fruit, and vegetables. West Coast Packing Co. No. 126,370; Aug. 19; v. 265; p. 455.
 Canned or preserved foods. Egan W. Hook & Co. No. 126,290; Aug. 19; v. 265; p. 452.
 Canned peaches. United Canneries Company of California. No. 126,363; Aug. 19; v. 265; p. 455.

Canned peaches, plums, &c. G. H. Hammond Company. No. 126,286; Aug. 19; v. 265; p. 452.
 Canned sardines. Booth Fisheries Co. Nos. 126,251-3; Aug. 19; v. 265; p. 451.
 Canned sardines. Lubec Sardine Co. Nos. 126,309-12; Aug. 19; v. 265; p. 453.
 Cards, playing. J. C. Gaffney. Nos. 126,280-2; Aug. 19; v. 265; p. 452.
 Cereal food drink. The John F. Bauer Co. No. 126,244; Aug. 19; v. 265; p. 451.
 Chicks and eggs. H. W. Kellogg. No. 126,301; Aug. 19; v. 265; p. 453.
 Cigarette-papers. A. B. Newman Co. No. 126,324; Aug. 19; v. 265; p. 453.
 Cigarettes. The American Tobacco Co. Nos. 126,288-9; Aug. 19; v. 265; p. 451.
 Cigarettes. Hills Brothers Company. No. 126,288; Aug. 19; v. 265; p. 452.
 Cigarettes. P. E. Hurst. No. 126,291; Aug. 19; v. 265; p. 452.
 Cigars. Stoddard, Gilbert & Co. Nos. 126,359-61; Aug. 19; v. 265; p. 455.
 Cigars, cheroots, little cigars. E. M. Schwars & Co. No. 126,345; Aug. 19; v. 265; p. 454.
 Cigars, cigarettes, tobacco, snuff. United Cigar Stores Company of America. No. 126,364; Aug. 19; v. 265; p. 455.
 Coal. Monroe Coal Mining Company. No. 126,319; Aug. 19; v. 265; p. 453.
 Coffee. G. Amisnek & Co. Nos. 126,240-3; Aug. 19; v. 265; p. 451.
 Construction material, certain named. Insulation Manufacturing Company. No. 126,293; Aug. 19; v. 265; p. 453.
 Cough syrup. A. F. Schambler. No. 126,344; Aug. 19; v. 265; p. 454.
 Cutlery, certain named. Bonney Vise & Tool Works, Inc. No. 126,260; Aug. 19; v. 265; p. 451.
 Dental cements, alloys, gold, &c. Fawcett & Fawcett. No. 126,275; Aug. 19; v. 265; p. 452.
 Dental enamel. L. S. Smith & Son Manufacturing Company. No. 126,349; Aug. 19; v. 265; p. 454.
 Deaks, combination portable. L. E. Myers. No. 126,322; Aug. 19; v. 265; p. 453.
 Dolls. E. Allison. No. 126,234; Aug. 19; v. 265; p. 451.
 Dolls. A. R. Stevens. No. 126,357; Aug. 19; v. 265; p. 454.
 Drinks, soft. Peninsula Products Company. No. 126,335; Aug. 19; v. 265; p. 454.
 Eux substitute. Newton Tea & Spice Co. No. 126,325; Aug. 19; v. 265; p. 453.
 Eggs. R. A. Jennings. No. 126,297; Aug. 19; v. 265; p. 453.
 Engine ignition-system timers. Internal-combustion-Zenite Metal Company. No. 126,374; Aug. 19; v. 265; p. 455.
 Fertilizers, chemical. Molassine Company. No. 126,317; Aug. 19; v. 265; p. 453.
 Floor-coverings, prepared. Consolium Company. No. 126,264; Aug. 19; v. 265; p. 452.

ALPHABETICAL LIST OF TRADE-MARKS.

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Flour, Buckwheat. C. A. Gambrill. Manfg Company. No. 126,284; Aug. 19; v. 265; p. 452.
 Flour, Wheat. Chippewa Milling Company. No. 126,261; Aug. 19; v. 265; p. 451.
 Flour, Wheat. Ottawa Milling Company. No. 126,331; Aug. 19; v. 265; p. 454.
 Flour, Wheat. Pillsbury Flour Mills Company. No. 126,336; Aug. 19; v. 265; p. 454.
 Food product, medicated. Virocacao Company. No. 126,367; Aug. 19; v. 265; p. 455.
 Food products in tins, glass, &c. R. B. Klingman. No. 126,304; Aug. 19; v. 265; p. 453.
 Foods, cereal breakfast. Postum Cereal Company. No. 126,358; Aug. 19; v. 265; p. 454.
 Foods, certain named. J. S. Brown Mercantile Co. No. 126,255; Aug. 19; v. 265; p. 451.
 Furniture. S. Karpen & Bros. No. 126,299; Aug. 19; v. 265; p. 453.
 Furniture, certain articles of. Keith-O'Brien Company. No. 126,300; Aug. 19; v. 265; p. 453.
 Furniture, certain named. Northern Furniture Company. No. 126,327; Aug. 19; v. 265; p. 454.
 Furniture-polish. Vanderpan Brothers. No. 126,366; Aug. 19; v. 265; p. 455.
 Furniture, &c. polish. S. T. Bowen. No. 126,256; Aug. 19; v. 265; p. 451.
 Garments, electric. William F. Caddock. No. 126,297; Aug. 19; v. 265; p. 452.
 Gases, medicinal. King Chemical Company. No. 126,303; Aug. 19; v. 265; p. 453.
 Grape-juice, non-alcoholic. Maurice R. Blackman. No. 126,248; Aug. 19; v. 265; p. 451.
 Grease, launching. Fiske Brothers Refining Co. No. 126,279; Aug. 19; v. 265; p. 452.
 Greases and oils, lubricating. Monarch Manufacturing Company. No. 126,318; Aug. 19; v. 265; p. 453.
 Ice-cream freezers. Simmons Hardware Company. No. 126,347; Aug. 19; v. 265; p. 454.
 Icing for use as a food. American Sugar Refining Company. No. 126,237; Aug. 19; v. 265; p. 451.
 Insecticide and disinfectant for live stock. Parsons Chemical Works. No. 126,334; Aug. 19; v. 265; p. 454.
 Instruments, scientific. Chicago Apparatus Company. No. 126,260; Aug. 19; v. 265; p. 451.
 Lathes, metal-working engine. The Cincinnati Lathe and Tool Company. No. 126,262; Aug. 19; v. 265; p. 452.
 Macaroni and spaghetti. Kansas City Macaroni Co. No. 126,298; Aug. 19; v. 265; p. 453.
 Magnets, permanent. Esterline Company. No. 126,273; Aug. 19; v. 265; p. 452.
 Medicinal preparation. A. Amamoto. No. 126,235; Aug. 19; v. 265; p. 451.
 Medicines for constipation, &c. G. W. Fillauer. No. 126,270; Aug. 19; v. 265; p. 452.
 Molasses. Pure Cane Molasses Corporation. No. 126,330; Aug. 19; v. 265; p. 454.
 Oil, growing and pressing hair. M. Riehl & Co. No. 126,341; Aug. 19; v. 265; p. 454.
 Oil, salad. H. G. Makris. No. 126,314; Aug. 19; v. 265; p. 453.
 Oils, Sinclair Refining Company. No. 126,348; Aug. 19; v. 265; p. 454.
 Oleomargarin. American Butterine Co. No. 126,236; Aug. 19; v. 265; p. 451.
 Oleomargarin. Miami Butterine Co. No. 126,315; Aug. 19; v. 265; p. 453.
 Oleomargarin. Otto F. Stiffel's Union Brewing Company. No. 126,358; Aug. 19; v. 265; p. 454.
 Paint and varnish, ready-mixed. William Call Bitton Company. No. 126,245; Aug. 19; v. 265; p. 451.
 Paints and painters' material, certain named. C. H. Cook Paint Company. No. 126,295; Aug. 19; v. 265; p. 452.

Painters' and decorators' tools and supplies. Ridgely Trimmer Company. No. 126,342; Aug. 19; v. 265; p. 454.
 Paper and cardboard. Eastern Manufacturing Company. No. 126,270; Aug. 19; v. 265; p. 452.
 Paper bags. Wortendyke Manufacturing Company. No. 126,372; Aug. 19; v. 265; p. 455.
 Paper, writing and printing. Charles Drury Jacobs. No. 126,296; Aug. 19; v. 265; p. 453.
 Parasol and umbrella tips, handles, &c. Celluloid Company. Nos. 126,257-9; Aug. 19; v. 265; p. 451.
 Pencils, penholders, lead. Eagle Pencil Company. No. 126,269; Aug. 19; v. 265; p. 452.
 Phonographs, cabinet. Music Master Co. No. 126,321; Aug. 19; v. 265; p. 453.
 Piece goods. Lasher, Whitman & Co. No. 126,308; Aug. 19; v. 265; p. 453.
 Plaster of Paris for dental, &c. purposes. H. H. Wiggin's Sons Company. No. 126,371; Aug. 19; v. 265; p. 455.
 Polishing and cleaning liquid. L. A. Block. No. 126,249; Aug. 19; v. 265; p. 451.
 Potato chips. W. Croft. No. 126,268; Aug. 19; v. 265; p. 452.
 Preparation for destroying rats, bedbugs, &c. Common Sense Manufacturing Co. No. 126,263; Aug. 19; v. 265; p. 452.
 Receipts, certain named. Clinton Elliott. No. 126,272; Aug. 19; v. 265; p. 452.
 Refrigerators. Alaska Refrigerator Company. No. 126,233; Aug. 19; v. 265; p. 451.
 Refrigerators. Simmons Hardware Company. No. 126,346; Aug. 19; v. 265; p. 454.
 Remedy, headache. F. Stephens. No. 126,356; Aug. 19; v. 265; p. 454.
 Roofings and building-papers, composition. Standard Paint Company. No. 126,335; Aug. 19; v. 265; p. 454.
 Roofing-cement. Insulating materials company. No. 126,294; Aug. 19; v. 265; p. 453.
 Shoes, ladies' and misses'. Helming-McKenzie Shoe Company. No. 126,287; Aug. 19; v. 265; p. 452.
 Shortening compound, &c. The N. K. Halfbanks Company. No. 126,274; Aug. 19; v. 265; p. 452.
 Shortening, vegetable. Edible Oil Co. No. 126,271; Aug. 19; v. 265; p. 452.
 Spices, whole, ground, and mixed. M. P. Kuczor & Co. No. 126,367; Aug. 19; v. 265; p. 453.
 Teas. Kelly-Taylor Company. No. 126,340; Aug. 19; v. 265; p. 454.
 Tires, pneumatic. Kelly-Springfield Tire Company. No. 126,302; Aug. 19; v. 265; p. 453.
 Tonic and system-purifier. General. C. M. Gaines. No. 126,283; Aug. 19; v. 265; p. 452.
 Tonic, laxative. Blackburn Products Co. No. 126,247; Aug. 19; v. 265; p. 451.
 Tonic, medicinal. Blackburn Products Co. No. 126,246; Aug. 19; v. 265; p. 451.
 Toys and sporting goods, certain named. A. G. Spalding & Bros. No. 126,351; Aug. 19; v. 265; p. 454.
 Toys, certain named. Zadek Feldstein Co. No. 126,373; Aug. 19; v. 265; p. 455.
 Trunks. National Veneer Products Company. No. 126,323; Aug. 19; v. 265; p. 453.
 Trunks, hand-bags, &c. G. Klobe. No. 126,305; Aug. 19; v. 265; p. 453.
 Varnishes, paints, japans, paint-driers. Standard Cooper-Bell Co. No. 126,354; Aug. 19; v. 265; p. 454.
 Wax and certain named vegetable waxes, paraffin. J. C. Francesconi & Company. No. 126,278; Aug. 19; v. 265; p. 452.
 Whisky. G. S. Nicholas & Son. No. 126,326; Aug. 19; v. 265; p. 454.

ALPHABETICAL LIST OF TRADE-MARK TITLES.

(REGISTRATION APPLIED FOR.)

Anhydrous salt. Compound. Darwin & Milner. No. 119,294; Aug. 19; v. 265; p. 447.
 Antiseptic powder. Oceanus Laboratories. No. 119,748; Aug. 19; v. 265; p. 449.
 Apples, fresh. Washington Fruit & Produce Co. No. 119,463; Aug. 19; v. 265; p. 448.
 Automobile-radiators. Ideal Sheet Metal Works. No. 112,065; Aug. 19; v. 265; p. 441.
 Bacteriological culture. T. A. Walsh. No. 117,209; Aug. 19; v. 265; p. 444.
 Braids. Barthels Manufacturing Company. No. 117,397; Aug. 19; v. 265; p. 444.
 Brake-beams for vehicles. Liberty Steel Products Co. No. 118,056; Aug. 19; v. 265; p. 446.
 Bread. Cable Draper Baking Co. No. 116,407; Aug. 19; v. 265; p. 442.
 Canned foods, dried beef, &c. D. E. Brooks & Co. No. 114,806; Aug. 19; v. 265; p. 442.
 Canned fruits and vegetables, teas, &c. J. F. Cramer. No. 70,824; Aug. 19; v. 265; p. 439.

Canned lobster, crabs, and fish. K. Miyachi. No. 108,531; Aug. 19; v. 265; p. 440.
 Canned salmon. Marathon Fishing & Packing Co. No. 119,421; Aug. 19; v. 265; p. 448.
 Canned sardines. Steele Packing Co. No. 119,449; Aug. 19; v. 265; p. 448.
 Candles. Illrose Co. No. 118,457; Aug. 19; v. 265; p. 446.
 Candles and chocolate. Mason, Au & Magenheimer Conf. Mfg. Co. No. 115,998; Aug. 19; v. 265; p. 442.
 Caramels, chocolates, &c. H. L. Johnson & Co. No. 110,375; Aug. 19; v. 265; p. 440.
 Charcoal. G. N. Meluert. No. 117,814; Aug. 19; v. 265; p. 445.
 Coats, trousers, waistcoats. Mayers-Hoffman Co. No. 117,942; Aug. 19; v. 265; p. 445.
 Cocoa, icing, &c. White-Stoken Co. No. 117,362; Aug. 19; v. 265; p. 444.
 Coffee. Basket Stores Company. No. 119,387; Aug. 19; v. 265; p. 447.

Confection paste. Towle Maple Products Company. No. 88,512; Aug. 19; v. 265; p. 439.
 Cough-candies. Stearns-Hollinshead Co. No. 119,453; Aug. 19; v. 265; p. 448.
 Crane and hoisting machinery. Shepard Electric Crane & Hoist Co. No. 110,403; Aug. 19; v. 265; p. 440.
 Cutlery—viz., razors. Geneva Cutlery Corporation. No. 113,764; Aug. 19; v. 265; p. 441.
 Devices to be attached to carburetors of internal-combustion engines. T. A. Edison, Jr. No. 119,035; Aug. 19; v. 265; p. 447.
 Doughnuts. Fleischmann's Vienna Model Bakery. No. 117,563; Aug. 19; v. 265; p. 445.
 Dyes, Soap. Lever Brothers Company. No. 119,658; Aug. 19; v. 265; p. 449.
 Egg substitute. Mountain States Manufacturing Co. No. 101,401; Aug. 19; v. 265; p. 439.
 Electric lighting and power plants. A. F. Wolke. No. 115,891; Aug. 19; v. 265; p. 442.
 Embalming fluid. Embalmers' Supply Co. No. 119,826; Aug. 19; v. 265; p. 449.
 Enamels, paints, &c. Northwestern Chemical Co. No. 110,485; Aug. 19; v. 265; p. 440.
 Fabrics, Textile. Cronwell Brothers. No. 118,106; Aug. 19; v. 265; p. 446.
 Fans for cooling engines of automobiles, &c. Automotive Parts Company. No. 118,726; Aug. 19; v. 265; p. 447.
 Feed. Wash Co. Alfalfa Milling Co. No. 118,719; Aug. 19; v. 265; p. 447.
 Fishing rods. Fred D. Divine Co. No. 117,155; Aug. 19; v. 265; p. 443.
 Flour, syrup, Compound. L. G. Voll. No. 116,243; Aug. 19; v. 265; p. 442.
 Flour, Wheat. Federal Milling Company. No. 119,827; Aug. 19; v. 265; p. 450.
 Flour, Wheat. Holt & Company. No. 111,176; Aug. 19; v. 265; p. 441.
 Food, Poultry. Sperry Flour Company. Nos. 119,678-9; Aug. 19; v. 265; p. 449.
 Food products. Feltmann, Watjen & Co. No. 119,599; Aug. 19; v. 265; p. 448.
 Food, Stock. Sperry Flour Company. No. 119,677; Aug. 19; v. 265; p. 449.
 Fruits, Fresh citrus. Tapo Citrus Ass'n. No. 118,716; Aug. 19; v. 265; p. 447.
 Fruits, Fresh. T. F. Lippitt. No. 107,410; Aug. 19; v. 265; p. 440.
 Fruits, Fresh citrus. Whittier Citrus Association. No. 117,757; Aug. 19; v. 265; p. 445.
 Furniture, &c., polish. W. J. Hienemann. No. 116,986; Aug. 19; v. 265; p. 443.
 Glove bleach. Charles McAdam Company. No. 119,077; Aug. 19; v. 265; p. 447.
 Gum and candy, Chewing. Mini Products Company. No. 109,279; Aug. 19; v. 265; p. 440.
 Hackaw blades. Goodell-Pratt Company. Nos. 119,556-7; Aug. 19; v. 265; p. 448.
 Hair-growing preparation. D. Franklin. No. 117,834; Aug. 19; v. 265; p. 445.
 Hair remedy. Wyeth Chemical Co. No. 119,284; Aug. 19; v. 265; p. 447.
 Handles, escutcheons, &c., Drawer and furniture. Foster, Merriam & Company. No. 110,460; Aug. 19; v. 265; p. 442.
 Hats, Felt. A. M. Davis. No. 114,879; Aug. 19; v. 265; p. 441.
 Ice-cream cones. G. G. Cornwell & Son. No. 119,407; Aug. 19; v. 265; p. 448.
 Ice-cream, frozen custards, ices. Hendler Creamery Co. No. 117,139; Aug. 19; v. 265; p. 443.
 Lotion for use as a depilatory. Hannibal Pharmacal Company. No. 110,801; Aug. 19; v. 265; p. 449.
 Magazine, Weekly. Ashwell, Davis & Co. No. 117,609; Aug. 19; v. 265; p. 445.
 Metal-working machinery. DeLancey Machine Works. No. 116,594; Aug. 19; v. 265; p. 443.

Milk, Sterilized. National Dairy Co. No. 117,059; Aug. 19; v. 265; p. 443.
 Napkins, Sanitary. Kimberly-Clark Company. No. 118,017; Aug. 19; v. 265; p. 446.
 Oil, Medicated. Carbo-Thymol Company. No. 119,099; Aug. 19; v. 265; p. 449.
 Oils and greases. Island Petroleum Company. No. 113,093; Aug. 19; v. 265; p. 441.
 Oils and paraffin-wax. Penn American Refining Co. No. 115,736; Aug. 19; v. 265; p. 442.
 Oils, greases, &c. Union Petroleum Company. No. 104,200; Aug. 19; v. 265; p. 439.
 Oils, Lubricating. Standard Oil Company. No. 119,676; Aug. 19; v. 265; p. 449.
 Ointment for pimples, &c. Biemo Company. No. 119,761; Aug. 19; v. 265; p. 449.
 Paper, Esaleck Manufacturing Company. No. 117,399; Aug. 19; v. 265; p. 445.
 Paper and writing-tablets. Adams, Cushing & Foster. No. 111,291; Aug. 19; v. 265; p. 441.
 Paper, Safety. Bankers Supply Co. Nos. 117,214-15; Aug. 19; v. 265; p. 444.
 Phonographs. Cupples Company. No. 111,938; Aug. 19; v. 265; p. 441.
 Piece goods. Finch, Van Slyke & McConville. No. 104,243; Aug. 19; v. 265; p. 439.
 Piece goods. Schwarzenbach-Haber Company. No. 117,197; Aug. 19; v. 265; p. 444.
 Potato chips. Sterling Potato Brittle Co. No. 119,869; Aug. 19; v. 265; p. 450.
 Poultry, Dressing. Thorndike and Gerrish Company. No. 118,288; Aug. 19; v. 265; p. 446.
 Pumps, Automobile and bicycle. Geo-Stapley Manufacturing Corporation. No. 118,500; Aug. 19; v. 265; p. 446.
 Pumping systems, &c. Latta-Martin Pump Co. Nos. 117,180-91; Aug. 19; v. 265; p. 444.
 Raisins, sugar-coated and chocolate-coated peanuts. C. Vander. No. 113,376; Aug. 19; v. 265; p. 441.
 Remedy for throat and nose diseases. J. W. Congblin. No. 118,245; Aug. 19; v. 265; p. 446.
 Roofing and roofing-cements. Felt, Texas Company. No. 119,479; Aug. 19; v. 265; p. 448.
 Rubber boots and shoes. United States Rubber Company. No. 105,549; Aug. 19; v. 265; p. 440.
 Rulers for scholastic purposes. Guide. T. Finlay. No. 99,211; Aug. 19; v. 265; p. 439.
 Scalds and burns, Liquid for. L. Thomas. No. 119,753; Aug. 19; v. 265; p. 449.
 Shoes, made of leather and rubber. Schmolli Fils & Co. No. 116,503; Aug. 19; v. 265; p. 443.
 Slate, Roofing. John D. Emack Co. No. 118,659; Aug. 19; v. 265; p. 447.
 Stoves, coolers, ventilators. H. McKinzie. No. 116,843; Aug. 19; v. 265; p. 445.
 Talking-machines. Columbia Mangle Company. No. 117,870; Aug. 19; v. 265; p. 445.
 Tonic. Rose Bruz Company. No. 119,866; Aug. 19; v. 265; p. 450.
 Tractors. S. C. Pandolfo. No. 118,523; Aug. 19; v. 265; p. 446.
 Tractors and tractor parts. General Ordnance Company. No. 118,226; Aug. 19; v. 265; p. 446.
 Tubing, Steel. U. T. Hungerford Brass & Copper Co. No. 114,539; Aug. 19; v. 265; p. 441.
 Underwear. High Rock Knitting Company. No. 118,517; Aug. 19; v. 265; p. 446.
 Underwear, Textile. L. Freireich. No. 115,282; Aug. 19; v. 265; p. 442.
 Valves, unions, &c. Atlas Valve Company. No. 118,037; Aug. 19; v. 265; p. 445.
 Wagon-loaders. Geo. Haiss Mfg. Co. No. 116,399; Aug. 19; v. 265; p. 443.
 Waist, Ladies'. Kessler Waist Co. No. 118,155; Aug. 19; v. 265; p. 446.
 Wood made of ply material. Sheets of. Venesta Limited. No. 110,082; Aug. 19; v. 265; p. 440.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 19, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 11: 1,313,854	37— 24: 1,313,695	73— 51: 1,313,493	103— 63: R. 14,707	139— 12: 1,313,506	175— 282: 1,313,641
2— 81: 1,313,855	29: 1,313,297	74— 7: 1,313,217	1,313,835	1,313,763	283: 1,313,791
81: 1,313,697	33: 1,313,408	13: 1,313,317	75: 1,313,350	85: 1,313,349	40: 1,313,857
84: 1,313,822	17: 1,313,659	17: 1,313,654	7: 1,313,353	1,313,350	68: 1,313,666
149: 1,313,262	33: 1,313,590	36: 1,313,255	44: 1,313,486	91: 1,313,323	311: 1,313,323
16: 1,313,460	36: 1,313,431	1,313,776	117: 1,313,357	140— 105: 1,313,509	379: 1,313,766
4— 18: 1,313,740	53: 1,313,816	38: 1,313,737	14: 1,313,302	119: 1,313,488	379: 1,313,770
5— 18: 1,313,760	1,313,817	39: 1,313,253	104: 1,313,358	141— 7: 1,313,703	337: 1,313,847
44: 1,313,428	67: 1,313,598	46: R. 14,718	248: 1,313,361	119: 1,313,706	337: 1,313,846
61: 1,313,341	1,313,609	48: 1,313,764	315: 1,313,531	331: 1,313,783	331: 1,313,690
22: 1,313,404	77: 1,313,445	51: 1,313,267	26: 1,313,283	9: 1,313,455	178— 24: 1,313,296
1,313,789	125: 1,313,548	1,313,829	28: 1,313,742	6: 1,313,606	179— 4: 1,313,413
100: 1,313,568	165: 1,313,366	54: 1,313,618	103: 1,313,527	3: 1,313,708	15: 1,313,483
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128: 1,313,505	155: 1,313,778	59: 1,313,423	20: 1,313,704	219: 1,313,710	81: 1,313,570
13— 18: 1,313,841	41— 21: 1,313,896	69: 1,313,768	26: 1,313,721	267: 1,313,268	139: 1,313,781
15— 26: R. 14,710	67: 1,313,566	78: 1,313,532	33: 1,313,524	339: 1,313,709	171: 1,313,406
59: 1,313,576	87: 1,313,727	81: 1,313,362	135: 1,313,275	7: 1,313,273	17: 1,313,392
60: 1,313,261	42— 22: 1,313,537	103: 1,313,530	299: 1,313,265	2: 1,313,409	18: 1,313,706
97: 1,313,613	11: 1,313,476	75— 28: 1,313,287	75— 89: R. 14,708	25: 1,313,759	64: 1,313,429
105: 1,313,726	30: 1,313,567	76— 78: 1,313,728	R. 14,709	57: 1,313,589	82: 1,313,544
112: 1,313,840	45— 11: 1,313,827	77— 2: 1,313,371	114— 16: 1,313,534	152— 1: 1,313,424	181— 27: 1,313,250
163: 1,313,111	52: 1,313,597	51— 3: 1,313,565	63: 1,313,502	6: 1,313,254	182— 2: 1,313,378
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30: 1,313,383	116: 1,313,662	33: 1,313,266	79: 1,313,663	8: 1,313,506	70: 1,313,383
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2— 1: 1,313,547	22: 1,313,668	149: 1,313,575	19: 1,313,251	11: 1,313,554	189: 28: 1,313,616
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1,313,421	48: 1,313,849	62: 1,313,894	1,313,463	21: R. 14,712	109: 13: 1,313,709
68: 1,313,799	57: 1,313,660	82: 1,313,714	1,313,738	31: R. 14,712	191— 43: 1,313,656
85: 1,313,403	61: 1,313,484	86: 1,313,731	65: 1,313,389	1,313,824	191— 1: 1,313,375
21— 2: 1,313,646	1,313,600	23: 1,313,711	19: 1,313,691	26: 1,313,792	3: 1,313,352
31: 1,313,405	66: 1,313,783	85: 1,313,449	52: 1,313,868	27: 1,313,868	10: 1,313,436
69: 1,313,489	77: 1,313,811	109: 1,313,625	32: 1,313,812	28: 1,313,707	11: 1,313,418
78: 1,313,430	100: 1,313,810	85— 1.5: 1,313,627	11: 1,313,867	35: 1,313,800	24: 1,313,487
220: 1,313,347	46: 1,313,637	1,313,627	19: 1,313,821	37: 1,313,501	29: 1,313,266
1,313,580	180: 1,313,584	1,313,647	20: 1,313,597	16: 1,313,635	45: 1,313,491
1,313,675	201: 1,313,514	7: 1,313,748	20: 1,313,590	32: 1,313,560	196— 26: 1,313,629
22— 4: 1,313,724	49— 59: 1,313,845	10: 1,313,765	78: 1,313,725	33: 1,313,389	204— 29: 1,313,374
5: 1,313,632	51— 4: 1,313,702	36.5: 1,313,459	108: 1,313,784	90.5: 1,313,284	1,313,582
6: 1,313,632	4: 1,313,490	12: 1,313,407	140: 1,313,692	2: 1,313,559	1,313,512
146: 1,313,259	8: 1,313,700	89— 2.7: 1,313,495	223: 1,313,722	9: 1,313,693	57: 1,313,513
216: 1,313,503	11: 1,313,260	16.4: 1,313,615	462: 1,313,326	14: 1,313,286	64: 1,313,274
21— 1: 1,313,379	1,313,402	16.6: 1,311,587	72: 1,313,608	32: 1,313,844	1,313,571
2: 1,313,626	12: 1,313,306	17: 1,313,243	43: 1,313,569	45.5: 1,313,320	60: 1,313,746
10: 1,313,370	3: 1,313,650	24: 1,313,515	59: 1,313,836	26: 1,313,494	1,313,761
13: 1,313,313	2: 1,313,459	27: 1,313,241	61: 1,313,634	45: 1,313,330	1,313,814
21: 1,313,313	3: 1,313,582	37: 1,313,464	65: 1,313,276	11: 1,313,562	44: 1,313,585
1,313,314	54— 56: 1,313,499	1,313,685	67: 1,313,278	24: 1,313,768	165: 1,313,470
1,313,316	55— 83: 1,313,510	15: 1,313,365	78: 1,313,414	27: 1,313,672	211— 7: 1,313,237
24: 1,313,657	56— 19: 1,313,456	13: 1,313,775	100: 1,313,762	7: 1,313,779	2: 1,313,498
1,313,661	74: 1,313,443	131: 1,313,545	166: 1,313,856	27.4: 1,313,615	8: 1,313,794
24— 11: 1,313,626	24: 1,313,366	17: 1,313,510	167: 1,313,561	28: 1,313,526	14: 1,313,280
73: 1,313,568	27: 1,313,304	33: 1,313,686	169: 1,313,354	29: 1,313,525	24: 1,311,351
81: 1,313,642	91: 1,313,798	44: 1,313,670	1,313,419	118: 1,313,369	28: 1,313,865
139: 1,313,846	105: 1,313,636	54.4: 1,314,723	1,313,424	1,313,640	212— 58: 1,313,741
218: 1,313,311	114: 1,313,291	54.5: 1,313,833	1,313,426	1,313,440	212— 67: 1,313,381
1,313,458	59— 95: 1,313,272	59: 1,314,472	1,313,427	1,313,757	1,313,382
16: 1,313,767	1: 1,313,278	68: 1,313,655	1,313,744	41: 1,313,829	1,313,431
46: 1,313,608	16: 1,313,767	1,313,658	174: 1,313,620	42: 1,313,902	1,313,452
53: 1,313,413	46: 1,313,676	92— 2: 1,313,403	185: 1,313,485	47: 1,313,214	1,313,453
67: 1,313,786	53: 1,313,676	94— 7: 1,313,463	1: 1,313,269	59: 1,313,277	1,313,677
69: 1,313,838	61— 67: 1,313,786	1: 1,313,248	17: 1,313,754	63: 1,313,481	214— 28: 1,313,619
77: 1,413,552	62— 69: 1,313,838	61: 1,313,248	85: 1,313,813	68: 1,313,325	51: 1,313,416
115: 1,313,363	71: 1,313,285	95— 12.5: 1,313,564	300: 1,313,345	86: 1,313,345	91: 1,313,388
10: 1,313,466	115: 1,313,363	21: 1,313,288	721: 1,313,788	93: 1,313,699	137: 1,313,715
24: 1,313,736	97— 4: 1,313,311	97: 1,313,395	128— 14.1: 1,313,745	99: 1,313,839	215— 14: 1,313,674
1,313,736	34: 1,313,242	36: 1,313,402	59: 1,313,448	2: 1,313,812	52: 1,313,603
27: 1,313,473	33: 1,313,802	64: 1,313,611	47: 1,313,341	6: 1,313,724	85: 1,313,264
102: 1,313,508	64: 1,313,611	102— 31: 1,313,401	231: 1,313,616	5: 1,313,787	4: 1,313,369
156: R. 14,713	31: 1,313,401	49: 1,313,469	257: 1,313,861	24: 1,313,292	29: 1,313,337
159: 1,313,322	49: 1,313,469	8: 1,313,557	1: 1,313,240	116: 1,313,621	59: 1,313,670
51: 1,313,549	11: 1,313,793	12: 1,313,280	131— 12: 1,313,280	132: 1,313,457	2: 1,313,538
79: 1,313,520	12: 1,313,437	1,313,793	1,313,793	161: 1,313,598	4: 1,313,539
98: 1,313,432	17: 1,313,461	12: 1,313,437	38: 1,313,467	171— 97: 1,313,583	8: 1,313,572
177: 1,313,482	69— 19: 1,313,497	101— 350: 1,313,433	22: 1,313,750	252: 1,313,431	39: 1,313,510
180: 1,313,385	70— 24: R. 14,714	102— 3: 1,313,546	134— 22: 1,313,345	313: 1,313,272	1,313,852
215: 1,313,263	53: 1,313,536	135— 53: 1,313,665	155: 53: 1,313,422	277: 1,313,537	5: 1,313,387
31— 34: 1,313,279	97: 1,313,720	29: 1,313,300	137— 75: 1,313,667	173— 313: 1,313,249	86: 1,313,791
40: 1,313,376	128: 1,313,412	36: 1,313,298	101: 1,313,373	359: 1,313,328	96: 1,313,623
66: 1,313,400	72— 14: 1,313,819	39: 1,313,651	104: 1,313,797	183: 1,313,319	107: 1,313,731
71: 1,313,443	66: 1,313,500	43: 1,313,801	1,313,811	277: 1,313,288	120: 1,313,653
19: R. 14,717	118: 1,313,581	61: 1,313,245	112: 1,313,624	1,313,671	7: 1,313,281
	137: 1,313,463	62: 1,313,718	16: 1,313,623	281: 1,313,038	222— 18: 1,313,281

223—	20: 1,313,777	240—	5: 1,313,516	244—	29: 1,313,680	248—	30: 1,313,446	252—	256: 1,313,730	275—	6: 1,313,595
21—	31: 1,313,717		9: 1,313,848		1,313,681		50: 1,313,515	259—	108: 1,313,830	277—	1: 1,313,478
	37: 1,313,556		39: 1,313,791		1,313,839		58: 1,313,340	261—	40: 1,313,521		32: 1,313,590
	1: 1,313,614		41: 1,313,718		1,313,689	250—	6: 1,313,860		41: 1,313,332	280—	12: 1,313,502
	1,313,843		44: 1,313,473		1,313,252		20: 1,313,651	262—	28: 1,313,809		13: 1,313,823
	29: 1,313,687		54: 1,313,296		1,313,563	251—	158: 1,313,658	265—	36: 1,313,614		49: 1,313,683
226—	9: 1,313,391		90: 1,313,739	246—	128: 1,313,318	253—	2: 1,313,843		71: 1,313,577	96: 1: 1,313,394	
	33: 1,313,396	241—	6: 1,313,356		1,313,780		94: 1,313,648	267—	19: 1,313,643	281—	7: 1,313,551
228—	34: 1,313,444		11: 1,313,818		1,313,781	254—	12: 1,313,664	270—	51: 1,313,713	283—	1: 1,313,374
229—	12: 1,313,397		12: 1,313,321		301: 1,314,756		25: 1,313,758		86: 1,313,713		36: 1,313,617
	23: 1,313,716	242—	55: 1,313,783		328: 1,313,586		51: 1,313,669	271—	3: 1,313,474	284—	5: 1,313,805
	93: 1,313,263		70: 1,313,631		434: 1,313,441		65: 1,313,543		87: 1,313,573	285—	25: 1,313,543
230—	22: 1,313,700		71: 1,313,651		458: 1,313,489		72: 1,313,339	272—	179: 1,313,688	287—	125: 1,313,391
	1: 1,313,354		107: 1,313,645		8: 1,313,456		172: 1,313,719	274—	23: 1,313,342	288—	15: 1,313,673
234—	11: 1,313,353	244—	1: 1,313,641		12: 1,313,329	255—	1: 1,313,367	275—	4: 1,313,715		35: 1,313,574
	62: 1,313,517		2: 1,313,327		13: 1,313,555	257—	125: 1,313,682		1,313,638	290—	53: 1,313,282
236—	45: 1,313,447		1,313,666		13: 1,313,555		151: 1,313,516		5: 1,313,427	295—	9: 1,313,348
238—	245: 1,313,771		12: 1,313,828	248—	6: 1,313,773		241: 1,313,639		1,313,735	296—	113: 1,313,772
	321: 1,313,747		11: 1,313,825		22: 1,313,908						
240—	1: 1,313,622		14: 1,313,290		24: 1,313,807						

NOV 8 1919

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF AUGUST, 1919.

- A. Mecky Company. (See Gerson, Nikolaus; assignor.)
A. Schrader's Son. (See Nielsen, Frederik; assignor.)
A. Wittnauer Co. (See Trommer, Charles F.; assignor.)
A. O. Smith Corporation. (See Smith, Charles S.; assignor.)
Abraham, Herbert, New York, N. Y., assignor to The Standard Paint Company. Bitumolized fabric. No. 1,311,941; Aug. 5; v. 265; p. 17.
Abrahamson, Brynjulv, Trondhjem, Norway. Sheet-iron plate. No. 1,312,937; Aug. 12; v. 265; p. 237.
Accornero, Louis K., and A. Gaydon, New York, N. Y. Landing device for aeroplanes. No. 1,312,507; Aug. 12; v. 265; p. 153.
Accounting Devices Company. (See Dunbar, Charles J.; assignor.)
Acme Cement Plaster Company. (See Pipe, Edward H.; assignor.)
Adams-Bagdoll Electric Company, The. (See Mezreo, Salvatore; assignor.)
Adams, Carl, East Rutherford, N. J. Elastic fabric. No. 1,313,037; Aug. 12; v. 265; p. 257.
Adams, Charles F. (See Scarlett and Adams.)
Adams, Henry T., assignor to Henry T. Adams Mfg. Co., Chicago, Ill. Loose-leaf bookbinder. No. 1,313,240; Aug. 19; v. 265; p. 313.
Adams, Samuel J., Montclair, N. J. Blotter and pen tray. No. 1,312,379; Aug. 5; v. 265; p. 98.
Adams & Westlake Co., The. (See Hamm, William S.; assignor.)
Addison, Simon L., assignor of sixty-two per cent. to E. M. Mallette and sixteen per cent. to W. Stern, Seattle, Wash. Vegetable-paring attachment. No. 1,314,111; Aug. 26; v. 265; p. 511.
Adkins, Frank, Wheeling, W. Va. Hose-nipple for air-hammers. No. 1,314,255; Aug. 26; v. 265; p. 535.
Addit, Frank W., St. Paul, Minn. Machine-gun. No. 1,313,038; Aug. 12; v. 265; p. 257.
Aeolian Company, The. (See Voley, Edwin S.; assignor.)
Aircraft Manufacturing Company, The. (See Ilucks, Wendell C.; assignor.)
Alraaf, Inner Tire Company. (See Grube, John H.; assignor.)
Ajax Metal Company, The. (See Wyatt, James R.; assignor.)
Akeley Camera. (See Akeley, Carl E.; assignor.)
Akeley, Carl E., assignor to Akeley Camera Inc., New York, N. Y. Motion-picture trench-camera. No. 1,313,243; Aug. 19; v. 265; p. 313.
Aklmoff, Nicholas W., Philadelphia, Pa., assignor to Vibration Specialty Company. Balancing appliance. No. 1,313,039; Aug. 12; v. 265; p. 257.
Aktiebolaget Svenska Kullagerfabriken. (See Palmgren, Nils A.; assignor.)
Aktieselskabet G. Hartmann. (See Westad and Hagg; assignors.)
Aladdin Lamp Syndicate Limited (In liquidation). (See Ott von Batorkez und Verinkhaz, Adolph; assignor.)
Albrecht, John H., Baltimore, Md. Support for wind-shields. No. 1,312,508; Aug. 12; v. 265; p. 153.
Alderman, Leighton H., and A. G. Smith, Pasadena, Calif. Ant-trap. No. 1,314,112; Aug. 26; v. 265; p. 511.
Aldridge, Arthur, and H. Terhune, assignors to Chambersburg Engineering Company, Chambersburg, Pa. Electromagnetically-controlled board drop-hammer. No. 1,311,942; Aug. 5; v. 265; p. 17.
Alexa, Victor, Chicago, Ill. Universal drafting-machine. No. 1,311,867; Aug. 5; v. 265; p. 3.
Alexander, Albert N., Bergenfield, N. J. Spark-plug. No. 1,313,040; Aug. 12; v. 265; p. 258.
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Wireless-telephone system. No. 1,313,041; Aug. 12; v. 265; p. 258.
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system. No. 1,313,042; Aug. 12; v. 265; p. 258.
Allen, Edward L., Pittsburgh, Pa. Garment-supporter. No. 1,312,718; Aug. 12; v. 265; p. 194.
Allen, Joseph S., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Combination organ-stop action. No. 1,311,865; Aug. 5; v. 265; p. 3.
Allen, Oglesby, Jr., Chicago, Ill. Ignition-plug. No. 1,314,490; Aug. 26; v. 265; p. 583.
Allenson, David, Riley, Kans. Folding-bed attachment for automobiles. No. 1,313,570; Aug. 26; v. 265; p. 465.
Allison, Daniel K., assignor to The J. H. Day Company, Cincinnati, Ohio. Machine for cooling bread. No. 1,312,294; Aug. 5; v. 265; p. 82.
Almen, August A., Minneapolis, Minn. Combination cot and bench. No. 1,312,209; Aug. 5; v. 265; p. 83.
Almquist, Carl G., Chicago, Ill. Counterbalance. No. 1,312,605; Aug. 12; v. 265; p. 184.
Althous, Albert C., Dublin, Pa. Heater. No. 1,314,113; Aug. 26; v. 265; p. 511.
Alvey, John A., assignor to Alvey Manufacturing Company, St. Louis, Mo. Machine for cutting macaroni, spaghetti, and similar articles. No. 1,314,300; Aug. 26; v. 265; p. 541.
Alvey Manufacturing Company. (See Alvey, John A.; assignor.)
Amato, Frank, Long Island City, N. Y. Automobile bumper. No. 1,313,043; Aug. 12; v. 265; p. 258.
Amberg Steel Company. (See Amberg, Walter E.; assignor.)
Amberg, Walter E., assignor to Amberg Steel Company, Chicago, Ill. Detachable link belt. No. 1,313,871; Aug. 26; v. 265; p. 465.
Amberg, Walter E., assignor to Amberg Steel Company, Chicago, Ill. Nut-making process. No. 1,314,036; Aug. 26; v. 265; p. 497.
Amberg, Walter E., assignor to Amberg Steel Company, Chicago, Ill. Tube-making process and machine. No. 1,314,037; Aug. 26; v. 265; p. 497.
American Assembling Machine Company. (See Juengst, Charles A.; assignor.)
American Bosch Magneto Corporation. (See Helms, Will, and Schwarzmann; assignors.)
American Bosch Magneto Corporation. (See Kazenmaier, August; assignor.)
American Bosch Magneto Corporation. (See Kazenmaier and Bauer; assignors.)
American Bosch Magneto Corporation. (See Kratz, Franz; assignor.)
American Bosch Magneto Corporation. (See Kratz and Schäfer; assignors.)
American Bosch Magneto Corporation. (See Schmidt, Karl; assignor.)
American Brake Shoe & Foundry Company. (See Jones, Harry; assignor.)
American Button & Fastener Company. (See Elliott, William E.; assignor.)
American Cap Company. (See Graham, Charles W.; assignor.) (Release.)
American Concrete Form Company. (See Belt and Smith; assignors.)
American Cyanamid Company. (See Elbert, John J.; assignor.)
American Cyanamid Company. (See Washburn, Frank S.; assignor.)
American Dairy Supply Company. (See Compton, Harry L.; assignor.)
American Guaranteed Tooth Company. (See Dover, George W.; assignor.)
American Linseed Company. (See Brigham, Henry M.; assignor.)
American Lithographic Company. (See Dietsche, Adolph; assignor.)
American Malze Products Company. (See Daly, Raymond E.; assignor.)
American Manganese Steel Company. (See Johnson, Frank E.; assignor.)
American Motorbus Corporation. (See Weaver, Harold H.; assignor.)
American Optical Company. (See Fellow, Arthur; assignor.)
American Power Shovel Company. (See Jackson, George W.; assignor.)
American Pressweld Radiator Corporation. (See Irwin, John A.; assignor.)
American Pressweld Radiator Corporation. (See Singer, Frank J.; assignor.)
American Pure Food Process Company, The. (See Schmitt, Edward D.; assignor.)
American Rolling Mill Company, The. (See Wilson, Dixon, and McLaughlin; assignors.)
American Steam Conveyor Corporation. (See Webster, Towner K., Jr.; assignor.)
American Steam Gauge & Valve Manufacturing Company. (See Hopkins, Frank H.; assignor.)
American Telephone and Telegraph Company. (See Carson, John H.; assignor.)
American Telephone and Telegraph Company. (See Osborne, Harold S.; assignor.)
American Telephone and Telegraph Company. (See Parker, Raymond D.; assignor.)

American Telephone and Telegraph Company. (See Pierce, Ralph E., assignor.)
 American Thermophone Company. (See Van Lynden, Robert A. H., assignor.)
 American Toyland Creators, Inc. (See Wiebe, Sigurd, assignor.)
 American Warp Drawing Machine Company. (See Hathaway and Lea, assignors.)
 Amiens, Louis E., assignor to Société Amiens Frères & Cie., Nantes-Chantenay, France. Receptacle. No. 1,312,466; Aug. 5; v. 265; p. 115.
 Anable, Clarence E. (See Miller, Arthur E., assignor.)
 Anable, Clarence E., Sacramento, Calif. Permutation-lock. No. 1,312,938; Aug. 12; v. 265; p. 237.
 Anable, Clarence E., Sacramento, Calif. Permutation-padlock. No. 1,312,939; Aug. 12; v. 265; p. 237.
 Anable, Clarence E., Sacramento, Calif. Combination-lock. No. 1,312,940; Aug. 12; v. 265; p. 238.
 Anasconda Copper Mining Company. (See Finlay, John S., assignor.)
 Anderson, Abraham. (See Nord and Anderson.)
 Anderson, Albin, assignor of one-half to E. Moberg, Rockford, Ill. Internal-combustion-engine valve. No. 1,314,457; Aug. 26; v. 265; p. 577.
 Anderson, Albin J., Kings Park, N. Y. Bayonet-trough hanger. No. 1,313,044; Aug. 12; v. 265; p. 259.
 Anderson, August, Berkeley, Calif. Massaging implement. No. 1,313,448; Aug. 19; v. 265; p. 352.
 Anderson, Carl P., Jamestown, N. Y. Gas-heater. No. 1,313,045; Aug. 12; v. 265; p. 259.
 Anderson, Charles M., Waterloo, Iowa. Tent-cup for milking machines. No. 1,312,941; Aug. 12; v. 265; p. 238.
 Anderson, Edward G., and A. H. Graham, Portland, Ore. Canvas-securing fastening-clamp for hatches of vessels. No. 1,312,466; Aug. 5; v. 265; p. 121.
 Anderson, Elder E., Minneapolis, Minn. Envelop cutting machine. No. 1,313,244; Aug. 19; v. 265; p. 314.
 Anderson, Ernest D., New York, N. Y. Machine for packing articles. No. 1,313,074; Aug. 26; v. 265; p. 485.
 Anderson, Ernest D., New York, N. Y. Multiple-cartoning machine. No. 1,313,975; Aug. 26; v. 265; p. 485.
 Anderson, Ernest G., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric switch. No. 1,312,380; Aug. 5; v. 265; p. 98.
 Anderson, Gustav B., Long Island, N. Y. Vending-machine. No. 1,313,046; Aug. 12; v. 265; p. 259.
 Anderson, Harry, and J. F. Kane, Chicago, Ill. Clamping device for paper-hangers' outfits. No. 1,313,047; Aug. 12; v. 265; p. 259.
 Anderson, John, Garfield township, Clay county, Kans. Mud-chain coupling. No. 1,314,114; Aug. 26; v. 265; p. 511.
 Anderson, John L., assignor of one-half to B. W. J. Wolford, Italy, Tex. Elevating-truck. No. 1,312,089; Aug. 5; v. 265; p. 44.
 Anderson, Nils H., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,312,820; Aug. 12; v. 265; p. 215.
 Anderson, Nils H., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,312,821; Aug. 12; v. 265; p. 215.
 Anderson, Otto W., assignor of twenty one-hundredths to H. T. Shepherd, twenty one-hundredths to N. J. Tiedemann, and twenty one-hundredths to W. W. Hoffman, Waterloo, Iowa. Composition gutter. No. 1,313,154; Aug. 12; v. 265; p. 281.
 Anderson, Fahr, Cambridge, Mass., assignor to Dorset Stamping & Manufacturing Company, Portland, Me. Safety-cone. No. 1,312,822; Aug. 12; v. 265; p. 215.
 Anderson, Peter M., Washington, D. C., assignor to Harrison Safety Roller Works, Philadelphia, Pa. Recording instrument. No. 1,314,179; Aug. 26; v. 265; p. 523.
 Anderson, William P., N. C. Clarke, and J. F. Whitelaw, Birmingham, England. Quick-locking device. No. 1,312,942; Aug. 12; v. 265; p. 238.
 Andreas, Frederick. (See Herrenbruck and Andreas.)
 Andreau, Roland L., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing synthetic camphor. No. 1,313,661; Aug. 19; v. 265; p. 391.
 Andrews, Benjamin, Houston, Tex. Deep-well pump. No. 1,313,245; Aug. 19; v. 265; p. 314.
 Andrews, Benjamin, Houston, Tex., and W. C. Averill, Jr., Merant, La. Apparatus for treating hydrocarbons. No. 1,312,467; Aug. 5; v. 265; p. 115.
 Andrews, George C., Minneapolis, Minn. Driving-gear for traction-wheels. No. 1,311,943; Aug. 5; v. 265; p. 17.
 Andrews, James M., assignor to Robert Galt Company, Brooklyn, N. Y. Machine for forming corrugated cartons. No. 1,314,115; Aug. 26; v. 265; p. 512.
 Andrist, Charles M., et al. trustees. (See Chalmers, Charles H., assignor.)
 Andrushev, John A., Amsterdam, N. Y. Diaphragm-controlling attachment for cameras. No. 1,313,872; Aug. 26; v. 265; p. 465.
 Anglo-American Textile Machinery Company. (See Johnson, William G., assignor.)
 Anla, Anthony, Corona, N. Y. Aeroplane. No. 1,312,300; Aug. 5; v. 265; p. 83.
 Anschütz & Co. (See Anschütz-Kaempfe, Hermann, assignor.)
 Anschütz-Kaempfe, Hermann, assignor to Anschütz & Co., Neumühlen, near Kiel, Germany. Boring-tool. No. 1,313,367; Aug. 19; v. 265; p. 336.

Antla, Thomas W., East Pittsburgh, Pa. Belt-shifting mechanism. No. 1,313,165; Aug. 12; v. 265; p. 281.
 Antisell, Frank L., Perth Amboy, N. J. Electrolytic process and anode. No. 1,313,246; Aug. 19; v. 265; p. 314.
 Anyello, John F., Shawano, Wis. Pail cover and strainer. No. 1,312,428; Aug. 5; v. 265; p. 108.
 Appel, Daniel, Cleveland Heights, Ohio. Internal-combustion engine. No. 1,311,944; Aug. 5; v. 265; p. 17.
 Apple, Vincent G., Dayton, Ohio. License-plate bracket for automobiles. No. 1,312,295; Aug. 5; v. 265; p. 82.
 Apple, Vincent G., Dayton, Ohio. Shaft-coupling. No. 1,312,296; Aug. 5; v. 265; p. 82.
 Applegreen, Andrew H., Seattle, Wash. Paint composition. No. 1,314,301; Aug. 26; v. 265; p. 548.
 Arbuckle, Samuel F., Indianapolis, Ind. Self-lubricating piston. (Reissue.) No. 1,4707; Aug. 19; v. 265; p. 431.
 Armour Fertilizer Works. (See Meyers, Herbert H., assignor.)
 Armour Fertilizer Works. (See Shoeld, Mark, assignor.)
 Armspear Manufacturing Co. (See Spear, Furman D., assignor.)
 Armstrong Cork Company. (See Fix, Frank C., assignor.)
 Armstrong, George E. (See Wood and Armstrong.)
 Armstrong, Louis E., Pensacola, Fla. Safe-saving device. No. 1,313,156; Aug. 12; v. 265; p. 251.
 Armstrong, Percy A. E., Loudonville, N. Y. Process of and apparatus for removing sand from hollow drill-rods and the like. No. 1,311,866; Aug. 5; v. 265; p. 3.
 Armstrong, Wesley J., assignor to McKinnon Dash Company, Buffalo, N. Y. Folding table. No. 1,313,602; Aug. 19; v. 265; p. 391.
 Army, John W., Tomahawk, Wis., assignor to A. B. Leith, Chicago, Ill. Occupant-propelled vehicle. No. 1,313,157; Aug. 12; v. 265; p. 281.
 Arnold-Crager Company, The. (See Graham, Henry W. B., assignor.)
 Arnold, Edward E., Greene, Coventry, assignor to Nitrogen Products Company, Providence, R. I. System for recovering cyanide and the like from cyanid-bearing material. No. 1,314,236; Aug. 26; v. 265; p. 535.
 Arnold, Edward E., Greene, Coventry, assignor to Nitrogen Products Company, Providence, R. I. Recovering cyanide and the like from cyanid-bearing material. No. 1,314,237; Aug. 26; v. 265; p. 535.
 Arnold, Fred W. (See Heinrichs, Cleveland J., assignor.)
 Aronson, I. Leonard. (See Simmons, Albert F., assignor.)
 Arrowsmith, James W., Morristown, N. J., assignor to Arrowsmith Manufacturing Company, Device for measuring the feet. No. 1,313,048; Aug. 12; v. 265; p. 259.
 Arrowsmith Manufacturing Company. (See Arrowsmith, James W., assignor.)
 Arter, William, assignor to The Parsons-Arter Machine Company, Worcester, Mass. Automatic reversing mechanism. No. 1,312,091; Aug. 5; v. 265; p. 45.
 Arter, William, assignor to The Parsons-Arter Machine Company, Worcester, Mass. Magnetic chuck. No. 1,312,092; Aug. 5; v. 265; p. 45.
 Arthur, James E., Dickson City, Pa. Domestic-boiler stand. No. 1,312,719; Aug. 12; v. 265; p. 194.
 Asakawa, Shozo, Kanagawa-Ken, Japan. Ship construction. No. 1,313,663; Aug. 19; v. 265; p. 392.
 Ash, Charles S., Geneva, N. Y. Wheel-hub. No. 1,314,360; Aug. 26; v. 265; p. 503.
 Ash, Charles S., Geneva, N. Y. Wire wheel. No. 1,314,361; Aug. 26; v. 265; p. 503.
 Ash, Charles S., Buffalo, N. Y., assignor, by mesne assignments, to Wire Wheel Corporation of America. Detachable wheel for automobiles. No. 1,313,976; Aug. 26; v. 265; p. 486.
 Ashley, John F., Dallas, Tex. Cultivator. No. 1,313,242; Aug. 19; v. 265; p. 313.
 Ashley, Walter J., Chicago, Ill. Automatic universal stereopticon. No. 1,313,241; Aug. 19; v. 265; p. 313.
 Ashton, Hannah, executrix. (See Ashton, Orrell.)
 Ashton, Orrell, deceased; H. Ashton, executrix. Swamp-scot, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for use in assembling soles on lasts. No. 1,312,509; Aug. 12; v. 265; p. 153.
 Ashton, Orrell, deceased, by H. Ashton, executrix. Swamp-scot, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Relasting-machine. No. 1,313,935; Aug. 26; v. 265; p. 477.
 Askew, Harvey H., Los Angeles, Calif. Railway-crossing. No. 1,312,090; Aug. 5; v. 265; p. 45.
 Associated Engineering and Supply Company. (See Stewart, Carlton D., assignor.)
 Associated Engineering and Supply Company. (See Weeks and Stewart, assignors.)
 Atanagoff, Leo, Milwaukee, Wis. Tie-holder. No. 1,312,071; Aug. 5; v. 265; p. 41.
 Atkins, William, Auburn, N. Y. Flow attachment for motor-tractors. No. 1,314,638; Aug. 26; v. 265; p. 497.
 Atkinson, Frank L., and N. Selar, Hoboken, N. J. Knock-down picture-frame. No. 1,313,778; Aug. 19; v. 265; p. 414.
 Atlas Car and Manufacturing Company. (See Wright, Schellentrager, and Martin, assignors.)
 Atwood, Benjamin S., Milford, Mass. Shuttle. No. 1,312,666; Aug. 12; v. 265; p. 184.
 Auto-Ordnance Corporation. (See Elkhoff, Theodore H., assignor.)

Automatic Electric Company. (See Blessing, John G., assignor.)
 Automatic Electric Company. (See Erickson, John, assignor.)
 Automatic Electric Company. (See Martin, Talbot O., assignor.)
 Automatic Electric Company. (See Schwartz, Michael, assignor.)
 Automatic Electric Company. (See Wicks, John, assignor.)
 Automatic Electric Company. (See Willis, Bernard D., assignor.)
 Automatic Electric Company. (See Yanoehowski and Hershey, assignors.)
 Automatic Inserting Machine Corporation. (See Penney and Huss, assignors.)
 Automatic Reelosing Circuit Breaker Company, The. (See Raney, Estelle C., assignor.)
 Automotive Development Co. (See Higgins, Merion J., assignor.)
 Averill, Willard C., Jr. (See Andrews and Averill.)
 Avery Company. (See Springer, William N., assignor.)
 Avery, John, Yonkers, N. Y. Device for and method of installing joint-filling material in concrete or other types of pavement. No. 1,313,873; Aug. 20; v. 265; p. 465.
 Ayers, Theodore S., St. Louis, Mo. Steam-condensation meter. No. 1,314,089; Aug. 26; v. 265; p. 497.
 Aythorpe, Ray E., and I. Wiersma, assignors of one-third to H. E. Kilmer, Grand Rapids, Mich. Matched-board layer. No. 1,313,664; Aug. 19; v. 265; p. 392.
 Ayres, George J., New York, N. Y. Hinge for doors. No. 1,312,607; Aug. 12; v. 265; p. 185.
 Ayres, Martha O., Biobanco, Colo. Kettle. No. 1,314,180; Aug. 26; v. 265; p. 524.
 B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
 B. F. Goodrich Company, The. (See Schwelsgood, Charles E., assignor.)
 B. W. J. Wolford. (See Anderson, John L., assignor.)
 Babb, Lawrence F., Whittier, Calif. Two-prong compound fishing-tool. No. 1,314,484; Aug. 26; v. 265; p. 582.
 Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
 Babcock & Wilcox Company, The. (See Jacobus and Jones, assignors.)
 Bachman, Frank H. (See Bachman, Ruben H. and F. H.)
 Bachman, Ruben H. and F. H., Allentown, Pa. Fastening device. No. 1,313,049; Aug. 12; v. 265; p. 260.
 Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Liquid fuel. No. 1,313,158; Aug. 12; v. 265; p. 281.
 Bacon, Raymond P., Pittsburgh, Pa., assignor to Metals Recovery Company, New York, N. Y. Sulfidation and flotation of ores. No. 1,312,608; Aug. 12; v. 265; p. 185.
 Baekeland, Leo H., Tonkers, assignor to General Bakelite Company, New York, N. Y. Treating tung-oil and coating or impregnating objects therewith. No. 1,312,093; Aug. 5; v. 265; p. 45.
 Baetz, Henry, St. Louis, Mo. Drying apparatus. No. 1,312,607; Aug. 12; v. 265; p. 173.
 Baler, George W. (See Eisenmann, Hotel, and Baler.)
 Bailey, Anna D., assignor to The G. H. Maaten Co. Inc., New York, N. Y. Life-preserver. No. 1,313,936; Aug. 26; v. 265; p. 477.
 Bailey, George D., assignor to Bailey Non-Stall Differential Corporation, Chicago, Ill. Differential releasing-clutch. No. 1,313,247; Aug. 19; v. 265; p. 314.
 Bailey Non-Stall Differential Corporation. (See Bailey, George D., assignor.)
 Bailie, George, Los Angeles, Calif. Lens-cleaner. No. 1,314,116; Aug. 26; v. 265; p. 512.
 Bain, Benjamin F., Pittsburgh, Pa. Toy. No. 1,314,238; Aug. 26; v. 265; p. 535.
 Baker, George, Goldfield, Colo. Sound-controlled dirigible torpedo. No. 1,312,510; Aug. 12; v. 265; p. 153.
 Baker, George R., London, and J. W. Owen, Plymouth, England. Bread-making. No. 1,312,094; Aug. 5; v. 265; p. 46.
 Baker, John K., Irwin, and T. E. McGuire, East Pittsburgh, Pa. Electric welding-tool. No. 1,313,572; Aug. 19; v. 265; p. 375.
 Baker, William S. G., London, England, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway-traffic-controlling apparatus. No. 1,313,977; Aug. 26; v. 265; p. 486.
 Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
 Bales, Solomon D., Seattle, Wash. Animal-trap. No. 1,312,943; Aug. 12; v. 265; p. 238.
 Balkwill, Wesley J., and W. F. Schweiger, assignor to Multipost Company, Rochester, N. Y. Stamp-feeding machine. No. 1,312,669; Aug. 12; v. 265; p. 185.
 Ball, George, Philadelphia, Pa., assignor to Whiting-Patterson Company, Incorporated. Envelop-machine. No. 1,313,248; Aug. 19; v. 265; p. 314.
 Ball, John D., Milwaukee, Wis., assignor to General Electric Company. Means for preventing voltage fluctuation on distribution-circuits. No. 1,313,050; Aug. 12; v. 265; p. 260.
 Ballard, Harrie A., Boston, assignor to The Phonograph Company, East Boston, Mass. Playing attachment for sithers. No. 1,314,117; Aug. 26; v. 265; p. 512.

Ballou, Walter B., North Attleboro, Mass. Belt-buckle. No. 1,312,070; Aug. 12; v. 265; p. 184.
 Baltimore Oil Engine Company. (See Wygodsky, Leon, assignor.)
 Bancroft, Albert F., Haverhill, Mass. Making shoes. No. 1,314,239; Aug. 26; v. 265; p. 535.
 Bangert, Henry J., Ferguson, Mo. Material-spreader. No. 1,312,226; Aug. 5; v. 265; p. 70.
 Barbee, James B., Central City, and O. J. Cross, Nederland, Colo. Jig. No. 1,312,429; Aug. 5; v. 265; p. 108.
 Barber, Howard M., Stonington, Conn., assignor, by mesne assignments, to C. H. Cottrell & Sons Company, New York, N. Y. Prolonging-press. No. 1,312,151; Aug. 5; v. 265; p. 56.
 Barile, Joseph, et al. (See Gentile, John R., assignor.)
 Barker, Pearl M., Chicago, Ill. Musical-instruction device. No. 1,313,449; Aug. 19; v. 265; p. 352.
 Barnes, Edwin H., assignor of one-third to I. M. Damrell and one-third to O. E. E. Blasser, Boston, Mass. Paint. No. 1,311,945; Aug. 5; v. 265; p. 17.
 Barnes, John A., West New Brighton, N. Y., and S. W. Schofield, Paterson, N. J., assignors to Locomotive Superheater Company, New York, N. Y. Superheater. No. 1,311,868; Aug. 5; v. 265; p. 3.
 Barnett, Morrisson J., San Francisco, Calif. Timer. No. 1,312,885; Aug. 12; v. 265; p. 227.
 Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Self-contained base single-observer height-measuring instrument of the range-finder type. No. 1,312,013; Aug. 5; v. 265; p. 30.
 Barr, Archibald, and W. Stroud, Anniesland, Glasgow, Scotland. Self-contained base single-observer height-measuring instrument of the range-finder type. No. 1,312,014; Aug. 5; v. 265; p. 30.
 Barrett Company, The. (See Hultberg, Gottfrid, assignor.)
 Barrett Company, The. (See Perry, Ray P., assignor.)
 Barrett Company, The. (See Rothermel, Curtis J., assignor.)
 Barrett, Ernest D., assignor to Barrett Motor Starter Corporation, New York, N. Y. Motor-starter. No. 1,313,018; Aug. 19; v. 265; p. 384.
 Barrett, Harry R., assignor of one-half to W. Bramwell, Philadelphia, Pa. Collapsible back-rest. No. 1,312,774; Aug. 12; v. 265; p. 205.
 Barrett Motor Starter Corporation. (See Barrett, Ernest D., assignor.)
 Barrieklow, Irvin E., San Francisco, Calif. Carburetor. No. 1,312,408; Aug. 5; v. 265; p. 116.
 Barrieklow, Irvin E., San Francisco, Calif. Carburetor. No. 1,312,469; Aug. 5; v. 265; p. 116.
 Barrow, Thomas, Wheatland, assignor to Blaw-Knox Company, Hoboken, Pa. Hollow sheet-metal structure and the manufacture thereof. No. 1,312,152; Aug. 5; v. 265; p. 56.
 Bartlett, Edwin E., Nashua, N. H. Arbor-press. No. 1,312,671; Aug. 12; v. 265; p. 185.
 Barton, Frederick C., Port Wayne, Ind., assignor to General Electric Company. Temperature-compensator for electrical control devices. No. 1,313,051; Aug. 12; v. 265; p. 260.
 Barton, George, Easthampton, Mass., assignor to H. W. Butterworth & Sons Company. Cloth-guiding device for textile-machines. No. 1,312,153; Aug. 5; v. 265; p. 57.
 Barton, Louis E., Niagara Falls, assignor to The Titanium Alloy Manufacturing Company, New York, N. Y. Pigment and paint. No. 1,313,874; Aug. 26; v. 265; p. 465.
 Baskin, Louis, New York, N. Y. Spark-plug. No. 1,312,511; Aug. 12; v. 265; p. 153.
 Basker Machinery Company. (See Wright, Wallace C., assignor.)
 Basham, John W., Columbia, Tenn. Inner tube. No. 1,312,072; Aug. 5; v. 265; p. 41.
 Bassinger, William H., Pasmac, N. J. Filing-cabinet. No. 1,312,672; Aug. 12; v. 265; p. 185.
 Batchelder, Frank R., assignor, by mesne assignments, to Mills Woven Cartridge Belt Company, Worcester, Mass. Carrier for machine-gun magazines. No. 1,311,869; Aug. 5; v. 265; p. 3.
 Bates, Arthur, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-upper-shaping machine. No. 1,312,470; Aug. 5; v. 265; p. 116.
 Bates, Lindell T., New York, N. Y. Depth-shell. No. 1,312,227; Aug. 5; v. 265; p. 70.
 Bates, Lindell T., New York, N. Y. Means for destroying vessels and protecting ships from torpedo attacks. No. 1,313,665; Aug. 19; v. 265; p. 392.
 Bauer, Eugen. (See Kasenmaier and Bauer.)
 Baum, Benjamin J., and C. W. Odermatt, San Francisco, Calif. Seated-paper-cup separator. No. 1,314,118; Aug. 26; v. 265; p. 512.
 Bauman, Max, New York, N. Y. Gem-setting. No. 1,313,052; Aug. 12; v. 265; p. 260.
 Baumann, Karl, Urmston, England, assignor to The British Westinghouse Electric and Manufacturing Company, Limited. Condensing steam-turbine plant. No. 1,312,512; Aug. 12; v. 265; p. 154.
 Bauwens, Seraphine P., Chicago, Ill., assignor, by mesne assignments, to Wirebound Patents Company, Kittery, Me. Wire-bound-box machine. No. 1,313,854; Aug. 19; v. 265; p. 428.

Bauwens, Seraphine F., Chicago, Ill., assignor, by mesne assignments, to Wirebound Patents Company, Kittery, Me. Wire-bound-box machine. No. 1,313,555; Aug. 19; v. 265; p. 428.

Bawden, William E., Chicago, Ill. Pillow. No. 1,312,886; Aug. 12; v. 265; p. 227.

Beach, Charles P., Littleton, N. H. Gear-remover. No. 1,313,511; Aug. 19; v. 265; p. 263.

Beach, Chester H., Racine, Wis. Rotary cloth-cutter. No. 1,314,382; Aug. 26; v. 265; p. 563.

Beach, Ralph L., East Orange, N. J., assignor to General Electric Company. Incandescent-lamp wrapper. No. 1,312,513; Aug. 12; v. 265; p. 154.

Beals, Wallace M., Avon, Mass. Turnbuckle. No. 1,312,450; Aug. 19; v. 265; p. 352.

Beam, Frank E., Toledo, Ohio. Machine for packing articles of paper-board and the like. No. 1,313,573; Aug. 19; v. 265; p. 375.

Beard, Willie L., Comanche, Tex. Peanut-harvester. No. 1,313,053; Aug. 12; v. 265; p. 260.

Beatty, William R., Chicago, Ill. Automobile-sunshade. No. 1,311,970; Aug. 5; v. 265; p. 4.

Beaver Company, The. (See Sidwell, Benjamin W., assignor.)

Beckman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Means for clamping stereotype-plates in plate-finishing machines. No. 1,312,073; Aug. 5; v. 265; p. 41.

Beck Duplicator Company, The. (See Klein, Adolf, assignor.)

Beck, Heinrich, Schenectady, N. Y., assignor to General Electric Company. Search-light arc-lamp. No. 1,313,666; Aug. 19; v. 265; p. 302.

Beck, John L., Springfield, Mass. Oil-burner. No. 1,312,673; Aug. 12; v. 265; p. 185.

Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort-oven. No. 1,312,301; Aug. 5; v. 265; p. 83.

Beckner, Noah J., assignor to Safety Patent Co., Yakima, Wash. Safety switch-lock. No. 1,313,978; Aug. 26; v. 265; p. 486.

Bejell, Charles H., New London, Conn., assignor to Electric Boat Company. Storage-battery installation. No. 1,313,513; Aug. 19; v. 265; p. 364.

Bejell, Charles H., and G. E. Edgar, New London, Conn., assignors to Electric Boat Company, New York, N. Y. Cooling, ventilating, and rendering innocuous storage batteries. No. 1,313,512; Aug. 19; v. 265; p. 363.

Beddingfield, John C., Carl, assignor of one-half to E. L. Williamson, Jefferson, Ga. Package-tie. No. 1,312,015; Aug. 5; v. 265; p. 30.

Beckhois, Hermann A., assignor to California Peach Growers (Inc.), Fresno, Calif. Device for cleansing and removing the skins from dried fruits, such as peaches and apricots, etc. No. 1,312,381; Aug. 5; v. 265; p. 99.

Behman, Lyle, Milwaukee, Wis. Automatic sign. No. 1,313,159; Aug. 12; v. 265; p. 281.

Behman, Ralph F., Minneapolis, Minn. Adjustable spark-plug tester. No. 1,312,016; Aug. 5; v. 265; p. 31.

Behrlink, Reuben, North Yakima, Wash. Carbureting apparatus. No. 1,312,228; Aug. 5; v. 265; p. 70.

Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for auto-trailers. No. 1,313,451; Aug. 19; v. 265; p. 352.

Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for trailers. No. 1,313,452; Aug. 19; v. 265; p. 352.

Behlen, Charles A., Cincinnati, Ohio. Coupling and draw-bar for trailers. No. 1,313,453; Aug. 19; v. 265; p. 352.

Behler, George C., Rochester, N. Y. Camera. No. 1,313,454; Aug. 19; v. 265; p. 352.

Beil, Alfred W., Milan, Tenn. Electric lighting device. No. 1,312,225; Aug. 5; v. 265; p. 70.

Beil, John E., New York, N. Y. Furnace. No. 1,313,779; Aug. 19; v. 265; p. 414.

Bellows, Edward A., Coalville, assignor of one-half to Kynoch, Limited, Wiltton, Birmingham, England. Hinge. No. 1,312,944; Aug. 12; v. 265; p. 238.

Bellows, Edward A., Coalville, assignor of one-half to Kynoch, Limited, Wiltton, Birmingham, England. Hinge. No. 1,312,945; Aug. 12; v. 265; p. 238.

Bellows, William S., Benton Harbor, Mich. Safety device for use in repairing the renewing insulators of high-voltage transmission-lines. No. 1,313,249; Aug. 19; v. 265; p. 315.

Belrow, Thomas H., et al., trustees. (See Standard, Maurice I., assignor.)

Belt, William M., and H. C. Smith, assignors, by mesne assignments, to American Concrete Forms Company, Bloomington, Ill. Centering. No. 1,314,040; Aug. 26; v. 265; p. 497.

Bennas, Maurice E., Charleston, W. Va. Rocking toy. No. 1,312,382; Aug. 5; v. 265; p. 98.

Bender, Henry J. (See Conroy and Bender.)

Benedek, Victor, Chicago, Ill. Soldering-iron furnace. No. 1,314,383; Aug. 26; v. 265; p. 563.

Benjamin, Bert R., Oak Park, Ill., assignor, by mesne assignments, to International Harvester Company. Grain-distributing mechanism. No. 1,312,302; Aug. 5; v. 265; p. 83.

Benjamin, Charles S., East Orange, N. J., assignor to General Chemical Company, New York, N. Y. Chipped alter cake and making same. No. 1,312,430; Aug. 5; v. 265; p. 108.

Benjamin Electric Manufacturing Company. (See Anderson, Ernest O. K., assignor.)

Benjamin, George H., New York, N. Y. Manufacturing steel. No. 1,314,384; Aug. 26; v. 265; p. 564.

Bennett, Clark. (See Hagen, Albert O., assignor.)

Bennett, Harry J., assignor of one-half to S. J. Michelson, Phoenix, Ariz. Apparatus for raising ships. No. 1,314,119; Aug. 26; v. 265; p. 512.

Bennett, Orlin, assignor to Pacific Coast Typewriter Company, Placerville, Calif. Telegraphic type-writer. No. 1,312,775; Aug. 12; v. 265; p. 205.

Benson & Hedges. (See Hicks, Richard W., assignor.)

Bentley, Edward M., Lawrence, N. Y. Rheostat. No. 1,313,853; Aug. 19; v. 265; p. 428.

Benz, Leonhardt W., New Orleans, La. Culvert construction. No. 1,313,607; Aug. 19; v. 265; p. 392.

Besser Corporation, The. (See Besser, Louis and H., assignors.)

Besser, Henry. (See Besser, Louis and H.)

Besser, Louis and H., assignors to The Besser Corporation, Brooklyn, N. Y. Lens for headlights. No. 1,314,458; Aug. 26; v. 265; p. 578.

Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines. No. 1,312,823; Aug. 12; v. 265; p. 215.

Berke, Steven R. (See Berkowitz, Steven R.)

Berkowitz, Steven R., (now by judicial change of name Steven Ross Berke,) Brookline, Mass. Formwork-hanger for concrete building construction. No. 1,314,481; Aug. 26; v. 265; p. 584.

Bernan, Theodore, Sioux City, Iowa. Light-support. No. 1,314,120; Aug. 26; v. 265; p. 513.

Bernard, Frank, Stockton, Calif. Air-valve attachment for disk wheels. No. 1,313,970; Aug. 26; v. 265; p. 486.

Bernardi, Neri M., Florence, Italy. Screw-wrench in which no detrimental play can obtain. No. 1,313,575; Aug. 19; v. 265; p. 376.

Beruler, Charles E., Iroquois Falls, Ontario, Canada. Lamp-extinguisher. No. 1,314,121; Aug. 26; v. 265; p. 513.

Berry, Arthur F., London, England. Magnetic material suitable for use in static transformers and other electrical apparatus. No. 1,313,954; Aug. 12; v. 265; p. 201.

Berry, George W., Brooklyn, N. Y. Aircraft-inclinometer. No. 1,312,303; Aug. 5; v. 265; p. 83.

Besser, Harry M., and M. Trach, Minneapolis, Minn. Folding table and bench. No. 1,314,240; Aug. 26; v. 265; p. 536.

Besocke, Richard, Chicago, Ill. Window-sash attachment. No. 1,314,241; Aug. 26; v. 265; p. 536.

Bessolo, William L., San Diego, Calif. Quick-adjustable wrench. No. 1,312,471; Aug. 5; v. 265; p. 116.

Bessonnet, George C., Chicago, Ill. Music-holder. No. 1,313,055; Aug. 12; v. 265; p. 201.

Bethenod, Joseph. (See Girard and Bethenod.)

Betta, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,312,780; Aug. 19; v. 265; p. 414.

Betta, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,313,781; Aug. 19; v. 265; p. 414.

Betta, Benjamin B., St. Louis, Mo. Railway-frog. No. 1,313,782; Aug. 19; v. 265; p. 414.

Bentler, Henry, Drake, N. D. Quack-grass rooter. No. 1,314,122; Aug. 26; v. 265; p. 513.

Bevin Brothers Manufacturing Company. (See Moard, Eric, assignor.)

Beyer, Max W., Edgewater, N. J. Camera attachment. No. 1,312,074; Aug. 12; v. 265; p. 156.

Beyer, Max W., Edgewater, N. J. Stereoscopic attachment for cameras. No. 1,312,075; Aug. 12; v. 265; p. 156.

Blanchini, Leone L., assignor to Società Italiana di Elettrotecnica, Rome, Italy. Compressing chlorine and other gases. No. 1,313,160; Aug. 12; v. 265; p. 281.

Blackett, Charles A., Cincinnati, Ohio. Machine-tool. No. 1,312,297; Aug. 5; v. 265; p. 82.

Blackley, Ross M. (See Patterson and Blackley.)

Black, William S., Franklin, Kans. Drill connection. No. 1,312,298; Aug. 5; v. 265; p. 82.

Blackington, Arthur G., Rye, N. Y. Flag-holder. No. 1,312,947; Aug. 12; v. 265; p. 239.

Blindner, Peter, Zoar, and E. T. Dieringer, Bolivar, Ohio. Wind-shield-cleaning device. No. 1,313,576; Aug. 19; v. 265; p. 376.

Blindsey, Charles R. (See Niles and Blindsey.)

Blirkenmaier, Theodore, St. Louis, Mo. Controlling mechanism for laundry-machines. No. 1,312,431; Aug. 5; v. 265; p. 109.

Birkigt, Marc, Bois-Colombes, France. Motor-vehicle. No. 1,312,383; Aug. 5; v. 265; p. 99.

Bjorge, Christen E. and E. E. Detroit, Mich. Cockroach-trap. No. 1,314,242; Aug. 26; v. 265; p. 536.

Bjorge, Edward E. (See Bjorge, Christen E. and E. E.)

Black, Robert C., Dunnellon, Fla. Toy gun. No. 1,314,450; Aug. 26; v. 265; p. 578.

Blackburn, Wilmoth E., Summit, N. J. Game apparatus. No. 1,313,783; Aug. 19; v. 265; p. 415.

Blackwood, Oswald H., Rolla, Mo., and F. Pearson, Chicago, Ill. Fountain-pen. No. 1,313,056; Aug. 12; v. 265; p. 261.

Bladel, John P. (See Metz, Harry J., assignor.)

Blair, Joseph, Dinuba, Calif. Brush-ruke. No. 1,313,057; Aug. 12; v. 265; p. 261.

Blaisdell, Robert W. (See Schwalbach, Robert, assignor.)

Blaisdell, Robert W., assignor of one-half to F. J. Mayer, Milwaukee, Wis. Shoe-relasting machine. No. 1,312,076; Aug. 12; v. 265; p. 186.

Blake, Charles C., Brookline, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass. Work-support. No. 1,314,385; Aug. 26; v. 265; p. 564.

Blakeslee, George S., Chicago, Ill. Washing-machine. No. 1,313,455; Aug. 19; v. 265; p. 353.

Blakeslee, George S., Chicago, Ill. Washing-machine. No. 1,314,041; Aug. 26; v. 265; p. 498.

Blasser, Olga E. E., et al. (See Barnes, Edwin B., assignor.)

Blauvelt, Frederic D., East Orange, N. J. Piston-ring. No. 1,313,784; Aug. 19; v. 265; p. 413.

Blaw-Knox Company. (See Barrow, Thomas, assignor.)

Blanch Process Company. (See Wheeler, Frank G., assignor.)

Blesing, John G., assignor to Automatic Electric Company, Chicago, Ill. Trunk-selecting switch. No. 1,312,514; Aug. 12; v. 265; p. 154.

Blizard, Charles E. (See Johnson and Blizard.)

Blocker Manufacturing Company. (See Greenstreet, Milfred L., assignor.)

Blood, Ruar B., assignor to G. Heldman and N. A. Street, Chicago, Ill. Phonograph. No. 1,313,250; Aug. 19; v. 265; p. 315.

Blum, Harold T., Amherst, Ohio. Antifreezeable bottle. No. 1,314,460; Aug. 26; v. 265; p. 578.

Blum, Harry, Johnstown, Pa. Safety-razor. No. 1,313,050; Aug. 26; v. 265; p. 486.

Blumberg, Gustav, and J. A. Rotkus, Baltimore, Md. Electric clock. No. 1,312,940; Aug. 12; v. 265; p. 239.

Boardman, Alfred E., Seattle, Wash. Automatic sprinkler. No. 1,312,515; Aug. 12; v. 265; p. 154.

Boeck, Percy A., New York, N. Y. Rotary kiln. No. 1,314,401; Aug. 26; v. 265; p. 578.

Boesch, Gustav, Danbury, Conn. Apparatus for applying lina to vehicle-wheels. No. 1,312,608; Aug. 12; v. 265; p. 174.

Bogda, Frank H., Horizon, Wis. Stanchion-alignment device. No. 1,312,677; Aug. 12; v. 265; p. 180.

Boman, Henry, Tulsa, Okla. Fishhook. No. 1,312,824; Aug. 12; v. 265; p. 215.

Bonnell, William A., Brooklyn, N. Y. Joint or coupling for electrical conduits. No. 1,313,456; Aug. 19; v. 265; p. 353.

Bonom, Alfred, Paterson, N. J. Reversible turbine. No. 1,313,058; Aug. 12; v. 265; p. 261.

Bonsted, Charles L., Moose Jaw, Saskatchewan, Canada. Aluminium-solder flux. No. 1,312,154; Aug. 5; v. 265; p. 57.

Bookwalter, Charles S., and F. A. Daubins, Washington, D. C. Submarine signaling apparatus. No. 1,313,765; Aug. 19; v. 265; p. 415.

Booth, Ernest S., Muskegon Heights, Mich. Supporting device. No. 1,312,230; Aug. 5; v. 265; p. 71.

Borel, Joseph, Jeannette, La. Projectile. No. 1,313,875; Aug. 26; v. 265; p. 465.

Borglin, Joseph N., Seattle, Wash. Ship-launching device. No. 1,313,785; Aug. 19; v. 265; p. 415.

Bozch, Pompeln, Elgin, Ill. Boring-machine. No. 1,314,181; Aug. 26; v. 265; p. 524.

Boston Blacking Company. (See Ordway, Joseph H., assignor.)

Boatwick, Arthur B., St. Albans, Vt. Chair. No. 1,312,720; Aug. 12; v. 265; p. 194.

Bourdon, Allen P., and L. H., assignors to Woodstock Manufacturing Company, Woodstock, Vt. Merry-go-round. No. 1,313,668; Aug. 19; v. 265; p. 393.

Bourdon, Leo R. (See Bourdon, Allen P. and L. R.)

Bonsfield, John H. A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Track-scale. No. 1,313,577; Aug. 19; v. 265; p. 376.

Bousquet, William J., Springfield, Mass. Guide and holder for flexible rules. No. 1,312,857; Aug. 12; v. 265; p. 227.

Bowden, William, Manchester, England. Liquid-meter. No. 1,312,095; Aug. 5; v. 265; p. 46.

Bowden, William, Manchester, England. Liquid-meter. No. 1,312,231; Aug. 5; v. 265; p. 71.

Bowery, Ernest, Oil Center, Calif. Oil-well-pump shoe. No. 1,312,825; Aug. 12; v. 265; p. 210.

Bowman, Abe, Long Beach, Calif. Transmission mechanism. No. 1,312,609; Aug. 12; v. 265; p. 174.

Bowman, Nathan W., Durand, Wis. Current-meter. No. 1,313,457; Aug. 19; v. 265; p. 353.

Bayer, Joseph A., and H. E. Bryant, Jacksonville, Fla. Turpentine-distilling apparatus. No. 1,312,826; Aug. 12; v. 265; p. 216.

Boyle, Charles W., Pittsburgh, Pa. Insect-trap. No. 1,312,096; Aug. 5; v. 265; p. 46.

Boyle, John L., Boston, Mass. Combined talking-machine and stereopticon. No. 1,313,100; Aug. 12; v. 265; p. 287.

Boyle, John L., Boston, Mass. Combined talking and picture-exhibiting machine. No. 1,313,214; Aug. 12; v. 265; p. 292.

Boyer, Emanuel J. (See Futer and Boyer.)

Boyer, Emanuel J., New Haven, Conn., assignor to Duplex Snap Fastener Co. Inc. Separable fastener. No. 1,313,458; Aug. 19; v. 265; p. 353.

Boorman, John W., Baltimore, Md. Flush-tank toilet. No. 1,313,161; Aug. 12; v. 265; p. 282.

Bradley, Mortimer L., Johnson City, Tenn. Cap for cross-pada. No. 1,314,123; Aug. 26; v. 265; p. 513.

Bradshaw, Edgar. (See Bridge and Bradshaw.)

Bradt, Harold J., Royal Oak, Mich. Mold for the manufacture of concrete tiles. No. 1,312,827; Aug. 12; v. 265; p. 216.

Brainerd, Claude L., Mount Vernon, S. D. Milk-strainer. No. 1,314,042; Aug. 26; v. 265; p. 498.

Bramwell, Walter. (See Barrett, Harry R., assignor.)

Brand, Charles F., Wheeling, W. Va. Snap-movement-valve mechanism. No. 1,314,243; Aug. 26; v. 265; p. 536.

Brand, Charles F., Wheeling, W. Va. Snap-movement-valve mechanism. No. 1,314,244; Aug. 26; v. 265; p. 536.

Brandt, Charles E., Wheeling, W. Va. Timing apparatus. No. 1,312,858; Aug. 12; v. 265; p. 227.

Branson, Charles H., Lincoln, Nebr. Constructive design of face-plates used for the purpose of covering openings in air-registers and ventilators through which air passes. No. 1,313,460; Aug. 19; v. 265; p. 354.

Brantley, James A., Sand Springs, Okla. Propelling mechanism for vehicles. No. 1,312,828; Aug. 12; v. 265; p. 210.

Brass, John F., Downers Grove, Ill. Sprinkler-head. No. 1,313,787; Aug. 19; v. 265; p. 415.

Breeze, Herbert J., Portland, Oreg. Wheel. No. 1,314,402; Aug. 26; v. 265; p. 578.

Breitenbach, Julius M., New York, N. Y. Stretcher-support. No. 1,312,516; Aug. 12; v. 265; p. 154.

Brent, Henry W., Baltimore, Md. Oil-burner. No. 1,313,059; Aug. 12; v. 265; p. 262.

Bresson, Henry J., Detroit, Mich. Water-closet bowl. No. 1,313,060; Aug. 12; v. 265; p. 262.

Brewer, Harry W., St. Louis, Mo. Printing-machine. No. 1,314,043; Aug. 26; v. 265; p. 498.

Brown, Douglas, Cleveland, Ohio. Steam-whistle. No. 1,313,251; Aug. 19; v. 265; p. 315.

Bridge & Beach Mfg. Co. (See Hecrenbruck and Andreas, assignors.)

Bridge, Robert, and E. Bradshaw, assignors to David Bridge and Company Limited, Castleton, England. Friction-clutch. No. 1,312,776; Aug. 12; v. 265; p. 206.

Brien, James T., Hooisick Falls, N. Y., assignor of one-half to J. C. Haswell, Dayton, Ohio; J. A. Brien, executrix. Float-valve. No. 1,312,678; Aug. 12; v. 265; p. 186.

Brien, Jennie A., executrix. (See Brien, James T.)

Brigham, Henry M., Brooklyn, N. Y., assignor to American Linseed Company. Artificial fuel and making same. No. 1,313,870; Aug. 26; v. 265; p. 466.

Brindle, Richard G., Chicago, Ill., assignor to Corn Products Refining Company. Product from steep-water and manufacturing the same. No. 1,313,163; Aug. 12; v. 265; p. 282.

Brindle, Richard G., and A. H. Flint, Chicago, Ill., assignors to Corn Products Refining Company. Product usable as fertilizer and manufacturing the same. No. 1,313,162; Aug. 12; v. 265; p. 282.

Brinton, William C., New York, N. Y. Motor-vehicle. No. 1,312,937; Aug. 26; v. 265; p. 477.

Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Planimeter. No. 1,314,463; Aug. 26; v. 265; p. 578.

British Westinghouse Electric and Manufacturing Company, The. (See Baumann, Karl, assignor.)

Broadbent, Alfred L., and R. G. Woodbridge, Jr., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del. Making propellant powder. No. 1,313,459; Aug. 19; v. 265; p. 354.

Broadwell, Harry M., assignor to Trumbull Electric Mfg. Co., Plainville, Conn. Quick-break switch. No. 1,314,302; Aug. 26; v. 265; p. 548.

Brody, David. (See Perez, Frank M., assignor.)

Brokenbush, Arthur R., assignor of one-half to F. J. Goodman, Fenelon Falls, Ontario, Canada. Tire-carrier for motor-cars. No. 1,312,829; Aug. 12; v. 265; p. 216.

Brong, Wallie J. (See Wright and Brong.)

Brooke Aircraft Company, The. (See Brooke, Thomas P., assignor.)

Brooke, Thomas P., Chicago, Ill., assignor to The Brooke Aircraft Company. Flying-boat. No. 1,313,232; Aug. 19; v. 265; p. 315.

Brooks, Edward J., East Orange, N. J. Strap-tightening tool. No. 1,313,669; Aug. 19; v. 265; p. 393.

Brooks, Howard, El Paso, Tex. Temperature-regulator. No. 1,313,938; Aug. 26; v. 265; p. 478.

Brosius, Edgar E., Pittsburgh, Pa. Machine for charging slabs, billets, etc. No. 1,313,619; Aug. 19; v. 265; p. 384.

Brousson, Robert P., London, England. Manufacture of gas. No. 1,313,514; Aug. 19; v. 265; p. 364.

Brown, Charles A. (See Lambert, Frank H., assignor.)

Brown, Charles A. (See Winslow, William H., assignor.)

Brown Company. (See Moore and Richter, assignors.)

Brown, David, New York, N. Y. Compartment-container. No. 1,312,472; Aug. 5; v. 265; p. 116.

Brown, Edgar F., Derby, Iowa. Seed-corn hanger. No. 1,314,303; Aug. 26; v. 265; p. 548.

Brown, Eugene, Colfax, Wash. Concrete-mixer. No. 1,314,124; Aug. 26; v. 265; p. 513.

Brown, James W., Omaha, Nebr. Clinker-tong. No. 1,313,788; Aug. 19; v. 265; p. 416.

Brown, Oscar W., Abilene, Kans. Welding-stand. No. 1,313,001; Aug. 12; v. 265; p. 262.
 Brown, Theophilus, and C. G. Strandlund, assignors to Deere & Company, Moline, Ill. Lever. No. 1,313,253; Aug. 19; v. 265; p. 315.
 Brown, Theophilus M., Seattle, Wash. Nut-tightener. No. 1,312,889; Aug. 12; v. 265; p. 227.
 Brown, Walter, assignor, by mesne assignments, to Webster Electric Company, Racine, Wis. Brush-holder and conductor-terminal. No. 1,314,182; Aug. 26; v. 265; p. 524.
 Brown, William H., Cleveland, Ohio. Knitting-needle. No. 1,313,461; Aug. 19; v. 265; p. 354.
 Brown, William J., Pittsburgh, Pa. Wall-paper-removing machine. No. 1,313,462; Aug. 19; v. 265; p. 354.
 Bruda, John, Detroit, Mich. Harness. No. 1,314,464; Aug. 26; v. 265; p. 579.
 Brueggeman, George F. A., St. Louis, Mo. Door. No. 1,312,155; Aug. 5; v. 265; p. 57.
 Brunzel, Paul G., New York, N. Y. Propelling mechanism. No. 1,312,679; Aug. 12; v. 265; p. 187.
 Bryson, Columbus, Princeton, Ore. Clutch control. No. 1,312,384; Aug. 5; v. 265; p. 99.
 Bryant, Henry E. (See Hoyer and Bryant.)
 Bryant, Richard S., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Rim for vehicle-wheels. No. 1,313,951; Aug. 26; v. 265; p. 486.
 Bryce, James W., Bloomfield, N. J., assignor to Computing Tabulating Recording Company, New York, N. Y. Weighing apparatus. No. 1,313,062; Aug. 12; v. 265; p. 262.
 Bryson, Tandy A., Troy, N. Y., assignor to Tollhurst Machine Works, Centrifugal drying-machine. No. 1,313,871; Aug. 5; v. 265; p. 4.
 Hubenhelm, Henry J., Pittsburgh, Pa. Car-truck. No. 1,314,183; Aug. 26; v. 265; p. 524.
 Buchholz, Frank W. (See Grover, George, assignor.)
 Buck, Frank W., De Kalb, Ill. Automobile-signal. No. 1,313,463; Aug. 19; v. 265; p. 354.
 Buck, H. L. (See Jordan, Bennett W., assignor.)
 Buckeye Traction Ditcher Company, The. (See George, Charles L., assignor.)
 Buckham, George T. (See Dawson and Buckham.)
 Buckham, George T., assignor to Vickers Limited, Westminster, London, England. Pedestal gun-mounting. No. 1,313,464; Aug. 19; v. 265; p. 354.
 Buckley, Claude W., Memphis, Tenn. Mud-shoe for vehicle-tires. No. 1,313,465; Aug. 19; v. 265; p. 355.
 Buckner, Levi G., and S. J. Sibley, Memphis, Tenn. Automatic signal apparatus to indicate failure of lubricating system. No. 1,312,007; Aug. 5; v. 265; p. 46.
 Buell, William H., New Haven, Conn. Priming charge. No. 1,312,156; Aug. 5; v. 265; p. 57.
 Buell, William H., New Haven, Conn., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Charge for primers. No. 1,311,872; Aug. 5; v. 265; p. 4.
 Buente, Charles F., Avalon, Pa. Collapsible core for molds. No. 1,312,157; Aug. 5; v. 265; p. 57.
 Buffalo Forge Company. (See Carrier, Willis H., assignor.)
 Bujnowski, Wladimir, Peru, Ill. Comb and brush. No. 1,313,063; Aug. 12; v. 265; p. 262.
 Bunker, Joseph E., Chicago, Ill. Wrench. No. 1,314,044; Aug. 26; v. 265; p. 498.
 Bulger, James J. (See Holtzman, George H., assignor.)
 Bulman, William, Kirkdale, E. W. Smith, Liverpool, and W. Jones, Southampton, England. Ship's-boat-launching tackle or gear. No. 1,313,789; Aug. 19; v. 265; p. 416.
 Buoy, Pearl A. (See Hamilton and Buoy.)
 Bunas, Norbert, Boothville, La. Hammer. No. 1,314,465; Aug. 26; v. 265; p. 579.
 Burch, Willie, Lowell, Mich. Railway-tie. No. 1,311,946; Aug. 5; v. 265; p. 18.
 Burchett, John H. P., Kew Gardens, England. Internal-combustion engine. No. 1,313,573; Aug. 19; v. 265; p. 378.
 Burdick, Charles L., Wood Green, London, England. Painting-machine. No. 1,313,670; Aug. 19; v. 265; p. 393.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Grain-harvesting machinery. No. 1,312,304; Aug. 5; v. 265; p. 84.
 Burgess, Edward W., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Corn-harvester. No. 1,312,432; Aug. 5; v. 265; p. 109.
 Burgess, John W. (See Burgess, John W. and G. F.)
 Burgess, John W. and G. F., Kansas City, Mo. Tire. No. 1,313,254; Aug. 19; v. 265; p. 316.
 Burhaus, Lee W., et al. (See Hickey, John F., assignor.)
 Burkett, Orrin V. (See HERSHEY, Grant W., assignor.)
 Burke, Henry T. (See Laxman and Burke.)
 Burkhardt, et al. (See Jones, Ora J., assignor.)
 Burlew, Gilderoy O., Newark, N. J. Dental abrasive or grinding disk. No. 1,314,123; Aug. 26; v. 265; p. 513.
 Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass. Electric switch. No. 1,312,777; Aug. 12; v. 265; p. 200.
 Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass. Fuse for electric switches. No. 1,312,792; Aug. 12; v. 265; p. 209.

Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Boston, Mass. Time element for circuit-controllers. No. 1,313,877; Aug. 26; v. 265; p. 466.
 Burns, James W. (See Mitcham and Burns.)
 Burroughs, Arthur S. (See Dutro and Burroughs.)
 Burrows, Robert J., assignor to Clark Equipment Company, Buchanan, Mich. Metal wheel. No. 1,312,890; Aug. 12; v. 265; p. 227.
 Burton Page Company, The. (See Frimand, Peter A., assignor.)
 Bushey, Eli J., New York, N. Y. Air-moistener. No. 1,312,948; Aug. 12; v. 265; p. 239.
 Busse, Edwin G., and A. P. Kissler, assignors to Chicago Railway Equipment Company, Chicago, Ill. Hall-anchor. No. 1,312,158; Aug. 5; v. 265; p. 58.
 Butkus, John A. (See Blumberg and Butkus.)
 Butler, George P., Lebanon, N. H. Machine for trimming tops. No. 1,313,004; Aug. 12; v. 265; p. 263.
 Butler, James M., et al. (See Dickenson, Robert C., assignor.)
 Butler, Jay W., Glencoe, Ill. Fusible link. No. 1,311,873; Aug. 5; v. 265; p. 4.
 Butler, John W., assignor of one-half to F. G. Metcalf, Bethel, Conn. Vaporiser. No. 1,314,396; Aug. 26; v. 265; p. 504.
 Butterick Publishing Company, The. (See Millard, Hannah G., assignor.)
 Buzton, Francis E., Indianapolis, Ind. Journal-bearing. No. 1,313,466; Aug. 19; v. 265; p. 355.
 Byrnes, Patrick J., and H. B. Osburn, Rochester, N. Y. Manufacturing shoes. No. 1,313,065; Aug. 12; v. 265; p. 263.
 C. B. Cottrell & Sons Company. (See Barber, Howard M., assignor.)
 C. C. Blake, Incorporated. (See Blake, Charles C., assignor.)
 C. H. Smith Company. (See Trotman, Walter G., assignor.)
 C. J. Bates & Son. (See Watrous, William R., assignor.)
 C. J. Tagliabue Manufacturing Company. (See Wright, William H., assignor.)
 Cadillac Motor Car Company. (See Ryerson, Charles S., assignor.)
 Cadillac Tool Co. (See Krueger, Henry R., assignor.)
 Caffrey, Peter C., Newark, N. J. Brush. No. 1,313,515; Aug. 19; v. 265; p. 364.
 Cahill, Robert B., Chicago, Ill. Disappearing towel-cabinet. No. 1,312,385; Aug. 5; v. 265; p. 99.
 Cahusac, Clarence N., Jersey City, N. J., assignor to Strom Avram & Slocum Inc., New York, N. Y. Electro-mechanical registering and resetting mechanism. No. 1,313,066; Aug. 12; v. 265; p. 263.
 Calne, Marshall, Harborton, Ohio. Machine for inverting pipe. No. 1,312,017; Aug. 5; v. 265; p. 51.
 Calderwood, Benjamin C., Valley Falls, E. I., assignor to Price-Campbell Cotton Picker Corporation, New York, N. Y. Journal-bearing mechanism for picking-fingers in cotton-picking machines. No. 1,313,255; Aug. 19; v. 265; p. 316.
 Caldwell, John, Cory, Pa. Mower-knife sharpener. No. 1,313,790; Aug. 19; v. 265; p. 416.
 California Peach Growers (Inc.). (See Beckwith, Herman A., assignor.)
 Camm, Charles E., Salt Lake City, Utah, assignor of one-half to W. H. Turner, Los Angeles, Calif. Electrically-heated garment. No. 1,312,830; Aug. 12; v. 265; p. 210.
 Camm, John A. (See Shields and Camm.)
 Cammen, Leon, New York, N. Y. Cooling system for internal-combustion motors. No. 1,313,620; Aug. 19; v. 265; p. 385.
 Camp, Orrin B., assignor of one-half to R. A. Lennon, Englewood, Calif. Fullering-block for rock-drill bits. No. 1,312,233; Aug. 5; v. 265; p. 71.
 Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Hopper-car. No. 1,314,045; Aug. 26; v. 265; p. 498.
 Campbell Besworth Machinery Company. (See Wilson, William, assignor.)
 Campbell, Charles L. (See Meyers, Campbell, and McSweeney.)
 Campbell, James H., assignor to The Columbus Glass Company, Lancaster, Ohio. Method and apparatus for manufacturing window-glass cylinders. No. 1,312,305; Aug. 5; v. 265; p. 84.
 Campbell, James H., assignor to The Columbus Glass Company, Lancaster, Ohio. Horse for glass-cylinders. No. 1,312,306; Aug. 5; v. 265; p. 84.
 Campbell, Jesse T., Elbridge, Teon. Gun/emplacement or fort. No. 1,314,466; Aug. 26; v. 265; p. 579.
 Campbell, Sterling H., St. Louis, Mo. Brake-rod jaw. No. 1,312,680; Aug. 12; v. 265; p. 187.
 Cannon, Vernon R., Sapulpa, Okla. Vice for holding vehicle-springs. No. 1,313,256; Aug. 19; v. 265; p. 316.
 Cantin, Kenneth A., Honolulu, Hawaii. Portable flashlight. No. 1,313,516; Aug. 19; v. 265; p. 364.
 Capello, Frank, Schenectady, N. Y., assignor to General Electric Company. Fire-plug. No. 1,313,671; Aug. 19; v. 265; p. 393.
 Carbonizing Engineering Company, The. (See Sebane, Charles F., assignor.)
 Carborundum Company, The. (See Clark, Bennett F., assignor.)

Carborundum Company, The. (See Fitzpatrick and Stephens, assignors.)
 Carlin, Arvid F., New York, N. Y. Shelf-support. No. 1,312,891; Aug. 12; v. 265; p. 228.
 Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company. Calculating-machine. No. 1,312,018; Aug. 5; v. 265; p. 31.
 Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company. Calculating-machine. No. 1,313,517; Aug. 19; v. 265; p. 364.
 Carlson, Amandus A., Barnesville, Minn. Bag-rack. No. 1,313,257; Aug. 19; v. 265; p. 316.
 Carlson, Anna. (See Carlson, Theodore A., assignor.)
 Carlson, Hjalmar G., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Making booster-casings and adapters for gas-nozzles or the like. No. 1,312,517; Aug. 12; v. 265; p. 154.
 Carlson, Theodore A., assignor to A. Carlson, Muskegon, Mich. Engine. No. 1,312,234; Aug. 5; v. 265; p. 71.
 Carlton, Jack C. (See Cockburn and Carlton.)
 Carmean, James H., and S. M., Kansas City, Mo. Electric heater. No. 1,313,258; Aug. 19; v. 265; p. 316.
 Carmean, Samuel M. (See Carmean, Samuel M. and J. H.)
 Carpenter, William J. (See Eaton, Reason B., assignor.)
 Carr, Oma, New York, N. Y., assignor of one-half to E. W. Deming, New Orleans, La. Method of and apparatus for evaporating liquids. No. 1,312,019; Aug. 5; v. 265; p. 31.
 Carrier, Albert H., Asherfield, N. C., assignor of one-half to E. W. Grove, St. Louis, Mo. Window-shade mounting. No. 1,313,672; Aug. 19; v. 265; p. 393.
 Carrier Engineering Corporation. (See Stacey, Alfred E., Jr., assignor.)
 Carrier, Willis H., assignor to Buffalo Forge Company, Buffalo, N. Y. Nozzle-flushing mechanism for air and gas washers and the like. No. 1,312,721; Aug. 12; v. 265; p. 194.
 Carroll, Edward W., Weston, W. Va. Safety attachment for cigar-cutters. No. 1,313,467; Aug. 19; v. 265; p. 355.
 Carse, James, Bedlington, England. Free-wheel mechanism for cycles and the like. No. 1,313,067; Aug. 12; v. 265; p. 263.
 Carson, John R., New York, N. Y., assignor to American Telephone and Telegraph Company. Translating-circuits. No. 1,312,433; Aug. 5; v. 265; p. 109.
 Carter, Alvin T., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Protective device for electric interlocking systems. No. 1,313,579; Aug. 26; v. 265; p. 466.
 Casablanca, Fernando, Sabadell, Barcelona, Spain. Spinning-frame. No. 1,313,164; Aug. 12; v. 265; p. 282.
 Case, Egerton R. (See Lentz, Gerald T., assignor.)
 Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Power-generating system. No. 1,313,673; Aug. 19; v. 265; p. 393.
 Cashen, Robert A., Meriden, Conn. Radiator-cap. No. 1,312,892; Aug. 12; v. 265; p. 228.
 Casper, Frank T., assignor to General Railway Signal Company, Gates, N. Y. Electromagnetic device. No. 1,313,578; Aug. 26; v. 265; p. 466.
 Caselman, Amos B., Washington, D. C. Suspensory. No. 1,313,165; Aug. 12; v. 265; p. 282.
 Caudle, Theron L., Wadsworth, N. C. Garment-supporter. No. 1,313,215; Aug. 12; v. 265; p. 292.
 Cavanaugh, John F., assignor to Connecticut Telephone & Electric Co., Inc., Meriden, Conn. Transformer-coil for ignition, &c. No. 1,312,407; Aug. 5; v. 265; p. 121.
 Cavanaugh, John F., Meriden, Conn., assignor to Connecticut Telephone & Electric Company, Inc. Circuit-interrupter. No. 1,313,856; Aug. 19; v. 265; p. 428.
 Cavanaugh, Joseph J., Los Angeles, Calif. Automobile-radiator attachment. No. 1,313,791; Aug. 19; v. 265; p. 416.
 Caviechi, Ercle, Quincy, Mass. Grinding or polishing machine. No. 1,312,235; Aug. 5; v. 265; p. 72.
 Cement-Gun Construction Company. (See Weber, Carl, assignor.)
 Cerro, Antonio, San Francisco, Calif. Apparatus for sorting articles according to relative buoyancy. No. 1,312,698; Aug. 5; v. 265; p. 47.
 Certus Parallelometer Company. (See Sorensen, Emil, assignor.)
 Cesen, Paul, Cleveland, Ohio. Tire-chain-fastening device. No. 1,313,365; Aug. 19; v. 265; p. 337.
 Challenger, George H., Westminster, London, and H. A. Savage, Bexley Heath, assignors to Vickers Limited, Westminster, England. Aircraft. No. 1,312,009; Aug. 5; v. 265; p. 47.
 Chalmers, Charles H., et al., trustees. (See Chalmers, Charles H., assignor.)
 Chalmers, Charles H., assignor to F. E. Holton, C. M. Andrist, J. M. Sieberg, and C. H. Chalmers, trustees. Minneapolis, Minn. Tractor. No. 1,312,160; Aug. 5; v. 265; p. 58.
 Chamberlin, John, London, England. Controlled lever-feed for machine-tools. No. 1,311,947; Aug. 5; v. 265; p. 18.
 Chambersburg Engineering Company. (See Aldridge and Terhune, assignors.)

Champion Spark Plug Company. (See Nason, George B., assignor.)
 Champion Spark Plug Company. (See Rohde, Otto C., assignor.)
 Champion Spark Plug Company. (See Stranahan, Robert A., assignor.)
 Chanard, Auguste, Paris, France. Receptacle for incendiary aerial bombs. No. 1,313,068; Aug. 12; v. 265; p. 263.
 Chandler, Willard R., Sumter, S. C. Brake-beam. No. 1,313,982; Aug. 26; v. 265; p. 487.
 Chapman, Clida, Cherryvale, Kans. Washing-machine. No. 1,312,831; Aug. 12; v. 265; p. 217.
 Chapman, Penrose E., and R. H. Robinson, St. Louis, Mo.; said Robinson assignor to said Chapman. Variably pitched and actuated bell. No. 1,312,610; Aug. 12; v. 265; p. 174.
 Chapman, William L., Brooklyn, N. Y. Fountain-pen. No. 1,312,651; Aug. 12; v. 265; p. 187.
 Charles Cory & Son. (See Wood, Frank W., assignor.)
 Charles J. Tagliabue Manufacturing Co. (See Roach, Alfred, assignor.)
 Chason, Daniel H., Elizabeth, N. J. Antirattling device for window-sashes. No. 1,313,069; Aug. 12; v. 265; p. 264.
 Chemical Construction Company. (See Hechenbleikner, Eugen, assignor.)
 Chenev, Charles H., Buffalo, N. Y. Paper jar or receptacle. No. 1,312,434; Aug. 5; v. 265; p. 109.
 Cherrick Manufacturing Company. (See Hirst, James, assignor.)
 Cherry, William H., Nillwood, Ill. Spike-puller. No. 1,311,948; Aug. 5; v. 265; p. 18.
 Chews, Philip S., Pittsburgh, Pa. Package. No. 1,312,611; Aug. 12; v. 265; p. 174.
 Chester, Ashmead H., Jacksonville, Ill. Diestock. No. 1,312,949; Aug. 12; v. 265; p. 239.
 Chicago-Cleveland Car Roofing Company. (See Russell, Thomas N., assignor.)
 Chicago Railway Equipment Company. (See Busse and Kissler, assignors.)
 Chile Exploration Company. (See Page, William K., assignor.)
 Choffel, Charles, assignor to L. Fourand, Paris, France. Apparatus intended to project powder. No. 1,314,357; Aug. 26; v. 265; p. 504.
 Christoffer Hannevig and Haanevig Brothers, A/S. (See Schröder-Nielsen, Thoralf, assignor.)
 Christoph, George W., Warehouse Point, Conn. Carbureting apparatus. No. 1,314,046; Aug. 26; v. 265; p. 498.
 Christy, Lloyd E., Monticello, Ind. Door latch and lock. No. 1,312,160; Aug. 5; v. 265; p. 58.
 Chrysl, William A. (See Kettering and Chrysl.)
 Church, Albert E., New Britain, Conn. Chuck. No. 1,314,126; Aug. 26; v. 265; p. 514.
 Churchill, William, New York, assignor to Corning Glass Works, Corning, N. Y. Headlight-cover glass. No. 1,312,950; Aug. 12; v. 265; p. 239.
 Cipolla, Joseph, Philadelphia, Pa. Spring bed-bottom. No. 1,312,612; Aug. 12; v. 265; p. 174.
 Cirelli, Francesco, Philadelphia, Pa. Sound-box. No. 1,314,127; Aug. 26; v. 265; p. 514.
 Cities Illuminating Company. (See Vincent, Sidney C., assignor.)
 Clapp, Albert L., Marblehead, assignor to The Metallite Company, Amesbury, Mass. Waterproofing sheet material. No. 1,312,082; Aug. 12; v. 265; p. 187.
 Clark, Arthur T., Saranac Lake, N. Y. Radiator. No. 1,313,518; Aug. 19; v. 265; p. 365.
 Clark, Bennett F., assignor to The Carborundum Company, Niagara Falls, N. Y. Grinding-machine. No. 1,314,304; Aug. 26; v. 265; p. 548.
 Clark, Christopher T., East Shore Park, Minn. Flat-surface-pressure device. No. 1,312,618; Aug. 12; v. 265; p. 186.
 Clark, Edgar H. (See Lundell and Clark.)
 Clark, Edwin W., Kansas City, Mo., assignor to Photo Motion Company. Shutter for motion-picture-projecting machines. No. 1,312,722; Aug. 12; v. 265; p. 195.
 Clark, Elmer A., Joliet, Ill. Dough-dividing machine. No. 1,314,245; Aug. 26; v. 265; p. 537.
 Clark, Emerson L., Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Pyrometer. No. 1,312,931; Aug. 12; v. 265; p. 240.
 Clark Equipment Company. (See Burrows, Robert J., assignor.)
 Clark, Mason E., Seattle, Wash. Device for laying out pipe-fangers. No. 1,314,184; Aug. 26; v. 265; p. 525.
 Clark, Omar E., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo. Rock-drill. No. 1,314,246; Aug. 26; v. 265; p. 537.
 Clarke, Norman C. (See Anderson, Clarke, and White-law.)
 Clasen, Henry P., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,312,778; Aug. 12; v. 265; p. 200.
 Clausen, Leon R., assignor to The Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Side-delivery rotary rake. No. 1,313,880; Aug. 26; v. 265; p. 466.
 Cleland, Evan F., et al. (See Patrick, Henry W., assignor.)
 Cleland, Forrest A., et al. (See Patrick, Henry W., assignor.)

Clements, Charles F., Florida, Ill. Grain-weigher. No. 1,312,532; Aug. 12; v. 265; p. 217.
 Clendenen, Bennett J., Miami, W. Va. Hammer. No. 1,314,247; Aug. 26; v. 265; p. 537.
 Clothier, Albert E. C., Swarthmore, Pa. Reverable cuff. No. 1,312,100; Aug. 5; v. 265; p. 47.
 Clough, James E., W. H. Stillwell, Paris, and A. R. Fugina, Louisville, Ky. Rail-contact circuit-controller. No. 1,312,101; Aug. 5; v. 265; p. 47.
 Clover Electrical Corporation. (See Clover, Howard K., assignor.)
 Clover, Howard K., Los Angeles, Calif., assignor, by means assignments, to Clover Electrical Corporation. Electrically-heated faucet. No. 1,313,519; Aug. 10; v. 265; p. 365.
 Coates, Ray G., Pasadena, Calif., assignor to Valley Mould and Iron Corporation, Sharpville, Pa. Removable-sided ingot-mold. No. 1,313,259; Aug. 19; v. 265; p. 317.
 Coates, Ray G., Pasadena, Calif., assignor to Valley Mould and Iron Corporation, Sharpville, Pa. Collapsible core for ingot-molds. No. 1,313,983; Aug. 26; v. 265; p. 487.
 Coats, Fred R., Springfield, Ill. Detachable reflector for vehicle-lamps. No. 1,314,047; Aug. 26; v. 265; p. 499.
 Cobb, John H., Fairfield, Conn. Sash-fastener. No. 1,312,893; Aug. 12; v. 265; p. 228.
 Cochell, Earl H. (See Cole, Luther E., assignor.)
 Cockburn, David, and D. MacNicol, assignors to Cockburns, Limited, Cardonald, near Glasgow, Scotland. Valve. No. 1,312,102; Aug. 5; v. 265; p. 47.
 Cockburn, Francis H., and J. C. Carlton, assignors to The Lodge & Shipley Machine Tool Company, Cincinnati, Ohio. Projector-turner. No. 1,313,166; Aug. 12; v. 265; p. 282.
 Cockburns, Limited. (See Cockburn and MacNicol, assignors.)
 Codell, William C., et al. (See Schumann, Alfred F., assignor.)
 Cody, Arthur P., Cleveland, Ohio. Bath-room fixture. No. 1,312,613; Aug. 12; v. 265; p. 175.
 Coffield, Thomas N., Edgewood, assignor to Liberty Radiator Company, Pittsburgh, Pa. Radiator. No. 1,314,048; Aug. 26; v. 265; p. 499.
 Cohen, Louis, Washington, D. C. Electrical signaling. No. 1,313,070; Aug. 12; v. 265; p. 204.
 Cohn, Samuel, New York, N. Y. Machine for stretching and drying tubular fabrics. No. 1,313,468; Aug. 10; v. 265; p. 355.
 Coker, Carl D., Detroit, Mich. Slide-closure. No. 1,313,580; Aug. 19; v. 265; p. 377.
 Cole, Francis J., Schenectady, N. Y. Locomotive tralling truck. No. 1,311,575; Aug. 5; v. 265; p. 4.
 Cole, John P., Somerville, Mass. Course-protractor. No. 1,313,520; Aug. 19; v. 265; p. 365.
 Cole, Luther E., assignor of one-half to E. H. Cochell, Sacramento, Calif. Locking means for incandescent lamps. No. 1,314,358; Aug. 26; v. 265; p. 504.
 Coleman, Clyde J., New Rochelle, N. Y. Combined moving picture machinery and phonographic apparatus. No. 1,312,103; Aug. 5; v. 265; p. 48.
 Coleman, Clyde J., New Rochelle, assignor to Stern-Coleman Diamond Machine Company, Inc., New York, N. Y. Polishing-machine. No. 1,313,200; Aug. 19; v. 265; p. 317.
 Collas, Alexander P., Detroit, Mich. Cooking apparatus. No. 1,312,833; Aug. 12; v. 265; p. 217.
 Collier, Frederick W., Worcester, Mass., assignor to Packmore Manufacturing Company, Washington, D. C. Brush-adjusting means for cleaning-machines. No. 1,313,261; Aug. 19; v. 265; p. 317.
 Colling, Ralph, San Francisco, Calif. Musical instrument. No. 1,312,614; Aug. 12; v. 265; p. 175.
 Collins, Cornelius, Hollingame, Calif. Metal partition construction. No. 1,313,581; Aug. 19; v. 265; p. 377.
 Colonna, Benito. (See Sartorius, Gandara, and Colonna, B., assignor.)
 Columbus Glass Company, The. (See Campbell, James H., assignor.)
 Columbus Glass Company, The. (See Moore, Charles T., assignor.)
 Combs, James M., Akron, Ohio. Bathing-suit or life-preserver. No. 1,314,185; Aug. 26; v. 265; p. 525.
 Combustion Service Corporation. (See Mauser, Allan M., assignor.)
 Commercial Specialty Company. (See Kimball, Don L., assignor.)
 Commonwealth Steel Company. (See Westlake, Charles T., assignor.)
 Como, Pasquale W. (See Talenti, Filippo, assignor.)
 Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Rimallin, Emile, assignor.)
 Compere, Dolphus E., Dallas, Tex. Mechanical device for concentration vision. No. 1,313,262; Aug. 19; v. 265; p. 317.
 Compton, Harry L., assignor to American Dairy Supply Company, Washington, D. C. Attached-bandle closure-disk. No. 1,313,674; Aug. 19; v. 265; p. 394.
 Compton, John H., Nottingham, England. Controlling-circuit of pallet-actuating magnets for automatic organs. No. 1,312,386; Aug. 5; v. 265; p. 99.
 Computing-Tabulating-Recording Company. (See Bryce, James W., assignor.)
 Condit, S. B., Jr. (See Schiffert, Daniel M., assignor.)
 Condit, Sears B., Jr. (See Burnham, George A., assignor.)
 Conger, Hugh E., and C. W. Waller, Chicago, Ill. Carcase-splitting machine. No. 1,313,579; Aug. 19; v. 265; p. 377.
 Conn, George H., Omaha, Nebr. Level. No. 1,313,263; Aug. 19; v. 265; p. 317.
 Connecticut Telephone & Electric Co. (See Cavanagh, John F., assignor.)
 Connolly, John J., Pittsburgh, assignor of one-third to T. H. Flynn, Knoxville, and one-third to F. A. Gallagher, Pittsburgh, Pa. Internal-combustion engine. No. 1,312,387; Aug. 5; v. 265; p. 99.
 Connor, Herschel M., and D. D. Miles, assignors of one-half to A. H. Herbert, one-fourth to M. C. Miles, and one-fourth to P. I. Connor, San Francisco, Calif. Carburetor. No. 1,313,521; Aug. 19; v. 265; p. 365.
 Connor, Pansy L., et al. (See Connor and Miles, assignors.)
 Connor, Robert A., assignor to Thordarson Electric Manufacturing Co., Chicago, Ill. Transformer. No. 1,314,305; Aug. 26; v. 265; p. 548.
 Continental Gas Company. (See Munger, Robert S., assignor.)
 Converse, Dan M., Albert, Kans. Detachable grain-beater. No. 1,312,388; Aug. 5; v. 265; p. 100.
 Converse, Dan M., Albert, Kans. Grain-beader attachment for tractors. No. 1,312,389; Aug. 5; v. 265; p. 100.
 Converse, Tommy J., Bellingham, Wash. Reinforcement for tire-casings. No. 1,313,792; Aug. 19; v. 265; p. 416.
 Cook, William E., New York, N. Y. Wire-uncoiling machine. No. 1,312,952; Aug. 12; v. 265; p. 240.
 Cook, William E., New York, N. Y. Collecting mechanism for carding-machines. No. 1,312,953; Aug. 12; v. 265; p. 240.
 Cook, William E., New York, N. Y. Insulated-wire-making machine. No. 1,312,954; Aug. 12; v. 265; p. 240.
 Cooney, Michael J., and H. J. Bender, Plainfield, N. J. Closure for containers. No. 1,313,204; Aug. 19; v. 265; p. 318.
 Coons, Oscar A., Patterson, La. Silo. No. 1,313,369; Aug. 19; v. 265; p. 337.
 Cooper, James J. G., Jacksonville, Fla. Toy cartridge. No. 1,311,940; Aug. 5; v. 265; p. 18.
 Cooper, James J. G., Jacksonville, Fla. Toy cartridge. No. 1,311,950; Aug. 5; v. 265; p. 18.
 Cooper, Michael. (See Siegel, Ernest, assignor.)
 Cooper, Simon, New York, N. Y., assignor to The Hobart M. Cable Company, Laporte, Ind. Method and apparatus for applying fluid-pressure. No. 1,312,615; Aug. 12; v. 265; p. 175.
 Copeman Development Company. (See Forshee, Frank, assignor.)
 Copeman Development Company. (See Hard, Merrill W., assignor.)
 Copeman Electric Store Company. (See Copeman, Lloyd G., assignor.)
 Copeman, Lloyd G., assignor to Copeman Electric Store Company, Flint, Mich. Adjustable thermometer. No. 1,312,854; Aug. 12; v. 265; p. 217.
 Corbitt, Thomas L., Johnston City, Ill. Thermal circuit-closer. No. 1,312,835; Aug. 12; v. 265; p. 217.
 Corcoran, Cornelius B., assignor to Underwood Type-writer Company, New York, N. Y. Type-writing machine. No. 1,312,161; Aug. 5; v. 265; p. 58.
 Corcoran, Cornelius B., assignor to Underwood Type-writer Company, New York, N. Y. Type-writing machine. No. 1,312,162; Aug. 5; v. 265; p. 58.
 Corn Products Refining Company. (See Brindle and Flint, assignors.)
 Corn Products Refining Company. (See Brindle, Richard G., assignor.)
 Corning Glass Works. (See Churchill, William, assignor.)
 Corona Typewriter Company. (See De Clamecy, Philippe, assignor.)
 Corona Typewriter Company. (See Ptermen, Otto, assignor.)
 Corona Typewriter Company. (See Rogers and Drake, assignors.)
 Corona Typewriter Company. (See Simpson, James E., assignor.)
 Corona Typewriter Company. (See Tucker, Benjamin W., assignor.)
 Corral, Herbert, Hellenburgh, Scotland, assignor to The Singer Manufacturing Company, Sewing-machine. No. 1,313,295; Aug. 19; v. 265; p. 318.
 Corrion, James H., Bay City, Mich. Train-control mechanism. No. 1,312,163; Aug. 5; v. 265; p. 58.
 Cortland Forging Company. (See Elsom, William J., assignor.)
 Cosden & Company. (See Francis and Morgan, assignors.)
 Cosgrove, John W., Medford, Mass., assignor, by means assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. No. 1,312,519; Aug. 12; v. 265; p. 185.
 Cosgrove, Patrick D., Cobram, Victoria, Australia. Suspension of vehicles. No. 1,313,167; Aug. 12; v. 265; p. 283.
 Costmeter Company. (See Quigley, John T., assignor.)
 Cottrill, Kenyon, assignor of three-fourths to C. S. Pierce, C. A. Lisenby, and R. J. Woodward, Fresno, Calif. Automobile speed-changing mechanism. No. 1,313,881; Aug. 26; v. 265; p. 407.
 Couch-Dean Corporation. (See Couch, Elbert L., assignor.)
 Couch, Elbert L., assignor to Couch-Dean Corporation, Hartford, Conn. Belt. No. 1,313,266; Aug. 19; v. 265; p. 318.
 Coughlin, Thomas J. (See McGinley and Conglin.)

Conlston, Harry, assignor to The Philadelphia Textile Machinery Company, Philadelphia, Pa. Stocking-drying machine. No. 1,312,236; Aug. 5; v. 265; p. 72.
 Conard & Neville. (See Lavolette, Felix, assignor.)
 Courbon, Jean, Lyon, France. Folding brasier. No. 1,312,307; Aug. 5; v. 265; p. 84.
 Coventry Ordnance Works, The. (See Redpath, Robert, assignor.)
 Cowan, Arthur E., Gloucester, Mass., assignor of one-fourth to G. Crosby, Glen Ridge, N. J. Culinary device. No. 1,312,616; Aug. 12; v. 265; p. 175.
 Cowan, Henry, New York, N. Y. Tea-ball. No. 1,313,582; Aug. 19; v. 265; p. 377.
 Cowles, A. W., et al. (See Johns, Paul H., assignor.)
 Cox, Archibald. (See Spencer, Arthur C., assignor.)
 Cox, James W., assignor to Pacific Flobb Tank Company, Chicago, Ill. Registering attachment for bush-tanks. No. 1,311,876; Aug. 5; v. 265; p. 5.
 Cox Multi-Miller Co. (See Ilunke, John, assignor.)
 Cox, Walter, assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Apparatus for rolling ribbed glass. No. 1,313,071; Aug. 12; v. 265; p. 264.
 Coy, William F., Boston, Mass. Power-generator. No. 1,311,577; Aug. 5; v. 265; p. 5.
 Craddock, Alvy R., Millard, Wash. Belt-gulde. No. 1,313,267; Aug. 19; v. 265; p. 318.
 Craig, Richard M., San Antonio, Tex. Advertising-sign. No. 1,312,237; Aug. 5; v. 265; p. 72.
 Cramblet, H. P., et al. (See Knyanagh, Enoch, assignor.)
 Crane Company. (See Farley, John A., assignor.)
 Crane, George W. (See Moser and Crane.)
 Crawford, Frank, Los Angeles, Calif. Self-oiling hub. No. 1,312,683; Aug. 12; v. 265; p. 187.
 Crawford, Milo, Springfield, Mo. Headlight-dimmer. No. 1,311,951; Aug. 5; v. 265; p. 18.
 Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Protection of transmission systems. No. 1,313,072; Aug. 12; v. 265; p. 264.
 Cressy, Anson H., Hartington, Nebr. Spark-plug. No. 1,313,522; Aug. 19; v. 265; p. 366.
 Crider, Samuel N. (See Smith and Crider.)
 Criegel, Albert A., Buffalo, N. Y. Centrifugal fan. No. 1,314,040; Aug. 26; v. 265; p. 499.
 Croll, Albert J., assignor to North East Electric Company, Rochester, N. Y. Field-magnet. No. 1,314,128; Aug. 26; v. 265; p. 514.
 Cromwell, John C., Cleveland, Ohio. Metal-casting apparatus. No. 1,312,104; Aug. 5; v. 265; p. 50.
 Crosby, Gorham. (See Cowan, Arthur E., assignor.)
 Cross, Otto J. (See Harbee and Cross.)
 Crossley, Noel, assignor of ten per cent. to M. J. Hunt, Bracebridge, Ontario, Canada. Combined eye shade and shield. No. 1,312,469; Aug. 19; v. 265; p. 355.
 Crossley, William H., Klamath Falls, Ore. Vehicle-spring. No. 1,314,248; Aug. 26; v. 265; p. 538.
 Crouse-Hinds Company. (See Smith, Elda O., assignor.)
 Crowe, Henry, Saltburn, England. Operating-gear for hydraulic valves. No. 1,313,523; Aug. 19; v. 265; p. 366.
 Crowell, William J., Jr., Wyncote, Pa. Calorimetric method of and apparatus for measuring steam-flow. No. 1,314,249; Aug. 26; v. 265; p. 538.
 Crowthey, Henry M., Kingman, Ariz. Spark-plug. No. 1,314,129; Aug. 26; v. 265; p. 514.
 Cry Patents Corporation. (See Wenderhold, William, assignor.)
 Cruikshank, James W., assignor to J. W. Cruikshank Engineering Company, Pittsburgh, Pa. Apparatus for annealing glass. No. 1,313,222; Aug. 12; v. 265; p. 298.
 Crusius, Arthur A., New York, N. Y. Air-inlet device. No. 1,313,584; Aug. 19; v. 265; p. 378.
 Crystal Washing Machine Company. (See Sperlich, Herman A., assignor.)
 Cuddihad, Bartholomew O., assignor of one-third to W. H. Gehr, Wadena, Minn. Potato-cutting machine. (Re-issue.) No. 14,704; Aug. 12; v. 265; p. 297.
 Cullings, Roswell E., Wilkesburg, Pa., assignor to West-house Electric & Manufacturing Company. Voltage-regulating system. No. 1,312,165; Aug. 5; v. 265; p. 59.
 Collison, Eleasha D., Chicago, Ill. Filler-cover. No. 1,314,306; Aug. 26; v. 265; p. 548.
 Cumming, William G., Montreal, Quebec, Canada. Tire-inflating mechanism. No. 1,312,074; Aug. 5; v. 265; p. 42.
 Cummins, Herbert H., and A. J. Mommert, St. Louis, Mo., assignors to McQuay-Norris Manufacturing Company. Pattern-drawing machine. No. 1,313,882; Aug. 26; v. 265; p. 407.
 Cundall, Powell & Mosher. (See Mosher, Willet H., assignor.)
 Cuninghame, Arthur B., Toledo, Ohio. Gas analyzing and recording apparatus. No. 1,311,932; Aug. 5; v. 265; p. 18.
 Cuninghame, Lloyd U. (See Taylor, Thomas E., assignor.)
 Cuninghame, William P., Norristown, Pa. Apparatus for casting chain-links. No. 1,312,955; Aug. 12; v. 265; p. 240.
 Cuninghame, William P., Cleveland, Ohio, assignor, by means assignments, to The Guardian Savings & Trust Company, trustee. Clamp. No. 1,313,268; Aug. 19; v. 265; p. 318.

Currier, Hiram D., Chicago, Ill., assignor to Kellogg Switchboard and Supply Company. Telephone system. No. 1,312,894; Aug. 12; v. 265; p. 228.
 Curtain Supply Company, The. (See Kipp, Alfred J., assignor.)
 Curtain Supply Company, The. (See Whitmore, Edward E., assignor.) (Re-issue.)
 Curtis, Almon W., Cortland, N. Y. Folding carriage-top. No. 1,312,836; Aug. 12; v. 265; p. 218.
 Curtis, Almon W., Cortland, N. Y. Folding carriage-top for automobiles. No. 1,312,837; Aug. 12; v. 265; p. 218.
 Curtis, W. R., et al. (See Sartain, Louis M., assignor.)
 Curtis, Walter, Willenden Green, London, England. Means for controlling the electric lighting of motor-vehicles. No. 1,313,583; Aug. 19; v. 265; p. 377.
 Coster, David W., Sydney, Australia, assignor to E. O. Townsend, Mansfield, Ohio. Method of and apparatus for stoneworking. No. 1,313,260; Aug. 19; v. 265; p. 310.
 Cutler-Hammer Mfg. Co., The. (See Evans, Clarence T., assignor.)
 Cutler-Hammer Mfg. Co., The. (See Henderson, Clark T., assignor.)
 Cutler-Hammer Mfg. Co., The. (See Klein, Charles J., assignor.)
 Cutler-Hammer Mfg. Co., The. (See Wiegand, Henry J., assignor.)
 D. Napier & Son. (See Mortimer, George, assignor.)
 D. Napier & Son Limited. (See Rowledge, Arthur J., assignor.)
 D. M. Sechler Implement & Carriage Company. (See England, Ernest E., assignor.)
 D. M. Sechler Implement & Carriage Company. (See Hartsock, Sherman C., assignor.)
 D'Orsay, Isabel, New York, N. Y. Apparatus for treating parts of the human body. No. 1,312,610; Aug. 12; v. 265; p. 176.
 Da Rosa, Edward L., Elk Grove, Calif. Self-serving store. No. 1,313,794; Aug. 19; v. 265; p. 417.
 Daehael, Harry P., Mountain View, Ark. Flour-sifter attachment. No. 1,314,467; Aug. 26; v. 265; p. 579.
 Dagg, Herbert W., Rochester, N. Y. Seal-lock. No. 1,313,270; Aug. 19; v. 265; p. 319.
 Dahl, Elmer R. (See Dahl, John C., assignor.)
 Dahl, John C., assignor of one-half to P. B. Dahl, Pine River, Minn. Broom attachment. No. 1,311,953; Aug. 5; v. 265; p. 18.
 Dahlberg, H. G. (See Shaw, John K., assignor.)
 Dain Manufacturing Company of Iowa, The. (See Clausen, Leon R., assignor.)
 Dally, Charles T., West Orange, N. J. Valve for use with corrosive liquids. No. 1,311,954; Aug. 5; v. 265; p. 19.
 Dalton, John B., Pittsburgh, Pa. Packaging ice-cream. No. 1,313,793; Aug. 19; v. 265; p. 416.
 Daly, Raymond E., Chicago, Ill., assignor to American Malt Products Company. Apparatus for crystallizing sugar. No. 1,312,308; Aug. 5; v. 265; p. 84.
 Damman, Edward, St. Louis, Mo. Wind or water power. No. 1,313,621; Aug. 19; v. 265; p. 385.
 Darnell, Ida M., et al. (See Barnes, Edwin R., assignor.)
 Daniel, Ulysses S., Beaumont, Tex. Attachment for motor-vehicles. No. 1,312,056; Aug. 12; v. 265; p. 241.
 Danielson, Frank, Chicago, Ill. Universal clamping-structure for internal-combustion engines. No. 1,312,617; Aug. 12; v. 265; p. 175.
 Danke, Arthur E., assignor of one-half to J. F. Stroebel, Neenah, Wis. Conveyor. No. 1,312,166; Aug. 5; v. 265; p. 59.
 Danner, Hugh C., Martinsburg, W. Va. Device for opening watchcases and other articles. No. 1,313,271; Aug. 19; v. 265; p. 319.
 Darker, Alfred H., Blackheath, assignor to J. Stone & Company, Limited, Deptford, England. Dynamo-electric machine and method of and apparatus for controlling the output thereof. No. 1,313,272; Aug. 19; v. 265; p. 319.
 Darling, Lewis A., Boston, Mass., assignor to Electric Service Supplies Company, Philadelphia, Pa. Power-generator. No. 1,311,878; Aug. 5; v. 265; p. 5.
 Dasen, Paul H., assignor of one-half to C. Otton, Ottosen, Iowa. Steering-rod-controlling device. No. 1,313,216; Aug. 12; v. 265; p. 292.
 Daubin, Freehold A. (See Rookwater and Daubin.)
 David Bridge and Company Limited. (See Bridge and Bradshaw, assignors.)
 Davidson, Arthur C., assignor to Waugh Draft Gear Company, Chicago, Ill. Platform buffing-gear. No. 1,312,167; Aug. 5; v. 265; p. 59.
 Davidson, Carl G., et al. (See Gentile, John B., assignor.)
 Davidson, John M., Xenia, Ohio. Attachment for lawn-mowers. No. 1,312,618; Aug. 12; v. 265; p. 176.
 Davidson, John R., assignor of one-half to B. E. McElheney, Monticello, Ga. Cotton-chopper. No. 1,314,307; Aug. 26; v. 265; p. 549.
 Davies, Evan W., Glamorganshire, Wales. Apparatus for manipulating metal ingots in rolling mills. No. 1,312,104; Aug. 5; v. 265; p. 48.
 Davis, Algie P., assignor of one-third to W. S. Davis, White Rock, Colo. Wire-holder. No. 1,313,795; Aug. 19; v. 265; p. 417.
 Davis, Charles B., New York, N. Y. Treating pearl buttons or blanks. No. 1,312,728; Aug. 12; v. 265; p. 196.

Davis, Joseph D., Washington, D. C. Concentrating nitric acid and apparatus therefor. No. 1,314,485; Aug. 26; v. 265; p. 582.

Davis, George H., West Orange, N. J. Perforated roll for musical instruments. No. 1,312,520; Aug. 12; v. 265; p. 155.

Davis, Henry P., New York, N. Y. Window-frame. No. 1,313,675; Aug. 19; v. 265; p. 394.

Davis, John O., Cushing, Okla. Railway tie. No. 1,312,020; Aug. 5; v. 265; p. 32.

Davis, Mack H., assignor of one-half to J. W. Noe, Flin. Tex. Fruit-cutting implement. No. 1,313,273; Aug. 19; v. 265; p. 319.

Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation. Phonograph transmission-rod. No. 1,312,957; Aug. 12; v. 265; p. 241.

Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation. Phonograph transmission. No. 1,312,958; Aug. 12; v. 265; p. 241.

Davis, William H., Bronxville, and F. E. Joss, Brooklyn, N. Y., assignors to Lektophone Corporation. Talking machine. No. 1,312,959; Aug. 12; v. 265; p. 241.

Davies, Winthrop S. (See Davis, Algie P., assignor.)

Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Limited, Westminster, London, England. Recoil and run-out apparatus for guns. No. 1,312,105; Aug. 5; v. 265; p. 48.

Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Limited, Westminster, London, England. Machine-gun. No. 1,312,106; Aug. 5; v. 265; p. 48.

Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Limited, Westminster, London, England. Firing mechanism of ordnance. No. 1,312,107; Aug. 5; v. 265; p. 48.

Dayton Engineering Laboratories Company, The. (See Kettering and Chryst, assignors.)

Dayton Engineering Laboratories Company, The. (See Langner, Lawrence, assignor.)

De Barros, Dlego D., São Paulo, Brazil. Means for reducing ores. No. 1,313,274; Aug. 19; v. 265; p. 329.

De Clamecy, Philippe, Charlestown, Mass., assignor to Corona Typewriter Company, Inc., Groton, N. Y. Foldable type-writing machine. No. 1,311,879; Aug. 5; v. 265; p. 5.

De Clercq, Augustus G., et al. (See Jones, Ora O., assignor.)

De Forest, Lee, New York, N. Y., assignor, by means assignments, to De Forest Radio Telephone and Telegraph Company. Method of and means for reproducing and amplifying weak pulsating currents. No. 1,314,250; Aug. 26; v. 265; p. 538.

De Forest, Lee, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y. Radiotelephony. No. 1,314,251; Aug. 26; v. 265; p. 538.

De Forest, Lee, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y. Oscillation-generator. No. 1,314,252; Aug. 26; v. 265; p. 538.

De Forest, Lee, assignor to De Forest Radio Telephone and Telegraph Company, New York, N. Y. Apparatus for use in wire or radio communications. No. 1,314,253; Aug. 26; v. 265; p. 538.

De Forest Radio Telephone and Telegraph Company. (See De Forest, Lee, assignor.)

De Laski and Thropp Circuit Woven Tire Company, The. (See Thropp, John E. and P. D., assignors.)

De Laval Steam Turbine Company. (See Peterson, Per A., assignor.)

De Laval Steam Turbine Company. (See Waller, Carl R., assignor.)

De Long, Jay. (See Potter, De Long, and Pike.)

De Long, Nelson, Chicago, Ill. Treating peat. No. 1,312,521; Aug. 12; v. 265; p. 155.

De Mesquita, Julius B., Brooklyn, N. Y. Safety-razor. No. 1,312,390; Aug. 5; v. 265; p. 100.

De Mill, David G., Tampa, Fla. Ball-cock. No. 1,313,797; Aug. 19; v. 265; p. 417.

De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Feeding mechanism for sewing-machines. No. 1,311,880; Aug. 5; v. 265; p. 5.

De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Edge-guide. No. 1,313,275; Aug. 19; v. 265; p. 320.

De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Differential feeding mechanism. No. 1,313,324; Aug. 19; v. 265; p. 366.

De Voe, Andrew J., Hackensack, N. J. Weather-indicator. No. 1,312,961; Aug. 12; v. 265; p. 242.

De Vore, James K., Atlanta, Ga. Apparatus for elevating water. No. 1,314,309; Aug. 26; v. 265; p. 549.

De Yenza, Mariano, Ithaca, N. Y. Egg-carrier. No. 1,312,238; Aug. 5; v. 265; p. 72.

Dean, Henry D., Benton Harbor, Mich. Ship-salvaging method and apparatus. No. 1,312,473; Aug. 5; v. 265; p. 117.

Debout, Albert. (See Pinet and Debout.)

Deelman, Henry W., Houston, Tex. Boring-tool. No. 1,313,371; Aug. 19; v. 265; p. 337.

Deere & Company. (See Brown and Strandlund, assignors.)

Deere & Company. (See Wilson, Frederick D., assignor.)

Delby, Desiré, San Francisco, Calif. Tobacco-pipe. No. 1,313,798; Aug. 19; v. 265; p. 417.

Delong, Jacob F., Lambertson, Minn. Grader. No. 1,314,308; Aug. 26; v. 265; p. 549.

Dembowsky, Emil, Metuchen, N. J. Engine. No. 1,312,838; Aug. 12; v. 265; p. 218.

Dembowsky, Emil, Metuchen, N. J. Free-flow and packing-less valve. No. 1,312,839; Aug. 12; v. 265; p. 218.

Demers, Nazaire, Worcester, Mass. Picker-check. No. 1,312,960; Aug. 12; v. 265; p. 242.

Demetz, Maurice G. (See Kruse, Theodore H., assignor.)

Deming, Eugene W. (See Carr, Oma, assignor.)

Dennington, Arthur R., East Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent lamp. No. 1,313,857; Aug. 19; v. 265; p. 428.

Denver Rock Drill Manufacturing Company, The. (See Clark, Omar E., assignor.)

Denver Rock Drill Manufacturing Company, The. (See Waugh, Daniel S., assignor.)

Derby, John H., New York, N. Y. Release-box. No. 1,312,895; Aug. 12; v. 265; p. 228.

Detroit Pressed Steel Company. (See Putnam, Alden L., assignor.) (Reissue.)

Devera, Clyde E., assignor to The McCaskey Register Company, Incorporated in 1914, Alliance, Ohio. Cost-recording appliance. No. 1,312,684; Aug. 12; v. 265; p. 187.

Devine Mfg. Co. (See Devine, William P., assignor.)

Devine, William P., Dorchester, assignor to Devine Mfg. Co., Inc., Boston, Mass. Watch-protector. No. 1,313,799; Aug. 19; v. 265; p. 417.

Dewey, William F., Kansas City, Mo. Burner and stove construction. No. 1,312,108; Aug. 5; v. 265; p. 48.

Diamond Match Company, The. (See Donnelly, Joseph C., assignor.)

Diaphone Signal Company Limited, The. (See Sims, Frederick L. H., assignor.)

Dick, Burns, assignor to Wagner Electric Manufacturing Company, St. Louis, Mo. Relay. No. 1,312,522; Aug. 12; v. 265; p. 155.

Dickenson, Robert C., assignor of one-fourth to W. E. Winston and one-fourth to J. M. Butler, Akron, Ohio. Trolley-guard. No. 1,314,330; Aug. 26; v. 265; p. 514.

Dickinson, William J., Erith, and A. H. Stark, Leytonstone, England. Motive-power means for utilizing the energy of air-currents. No. 1,312,021; Aug. 5; v. 265; p. 32.

Dieringer, Ernst T. (See Rimeler and Dieringer.)

Diesbach, Fritz G., administrator. (See Krauth, Albert.)

Dietrich, Albert E., Washington, D. C. Extracting cones from their baking-molds. No. 1,312,239; Aug. 5; v. 265; p. 72.

Dietrich, Julius F., Kennewick, Wash. Casein-drying apparatus. No. 1,313,939; Aug. 26; v. 265; p. 478.

Dietrichs, Charles, Little Ferry, N. J. Wall structure. No. 1,312,309; Aug. 5; v. 265; p. 85.

Dietsche, Adolph, Forest Hills, assignor to American Lithographic Company, New York, N. Y. Display-carton. No. 1,313,585; Aug. 19; v. 265; p. 378.

Dillard, William J., and J. D. Taylor, Portland, Ore. Automatic weather-strip. No. 1,313,799; Aug. 19; v. 265; p. 418.

Dillon, Curtis H., Milan, Mich., assignor to Dillon Steam Motors Corporation. Motor. No. 1,312,523; Aug. 12; v. 265; p. 156.

Dillon Steam Motors Corporation. (See Dillon, Curtis H., assignor.)

Di Majo, Simone, New York, N. Y. Ruling attachment for triangles. No. 1,313,168; Aug. 12; v. 265; p. 283.

Dion, Charles J., Minneapolis, Minn. Horseshoe. No. 1,312,685; Aug. 12; v. 265; p. 188.

Discher, Bert J., Flint, Mich. Toy vehicle. No. 1,313,470; Aug. 19; v. 265; p. 353.

Dixon, George W. (See Wilson, Dixon, and McLaughlin.)

Dixon, Thomas, Langley Park, England. Means for operating switches for tramways in mines, quarries, or the like. No. 1,313,580; Aug. 19; v. 265; p. 378.

Doble, Abner, assignor, by means assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Liquid-fuel-burning apparatus. No. 1,313,525; Aug. 19; v. 265; p. 366.

Doble, Abner, assignor, by means assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Combustion-heartb. No. 1,313,526; Aug. 19; v. 265; p. 367.

Doble, Abner, assignor, by means assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Protective mechanism for steam-automobile power plants. No. 1,313,527; Aug. 19; v. 265; p. 367.

Doble-Detroit Steam Motors Co. (See Doble, Abner, assignor.)

Dodds, Ethan I. (See Flannery and Dodds.)

Dodds, Ethan I. (See Stafford and Dodds.)

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Illuminating means. No. 1,312,310; Aug. 5; v. 265; p. 85.

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Means for and method of utilizing gas from electric storage batteries. No. 1,312,311; Aug. 5; v. 265; p. 85.

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Illuminating device. No. 1,312,312; Aug. 5; v. 265; p. 85.

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Lamp. No. 1,313,622; Aug. 19; v. 265; p. 285.

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,313,623; Aug. 19; v. 265; p. 285.

Dodge, Theodore J., Olympia, Wash. Swivel. No. 1,313,372; Aug. 19; v. 265; p. 337.

Doering, Henry H. (See Martin and Doering.)

Doea de Blje, Anne J. M. R. van der, The Hague, Netherlands. Furnace. No. 1,314,389; Aug. 26; v. 265; p. 565.

Doman, Albert E., Syracuse, N. Y. Making commutator-segments. No. 1,314,051; Aug. 26; v. 265; p. 499.

Domecq, Joseph, Los Angeles, Calif. Hose drier and stretcher. No. 1,313,169; Aug. 12; v. 265; p. 283.

Domina, John, Chicago, Ill. Fan. No. 1,312,023; Aug. 5; v. 265; p. 32.

Domke, Veron, Bremerton, Wash. Automobile-tire. No. 1,313,800; Aug. 19; v. 265; p. 418.

Donadio, Prospero, Brooklyn, N. Y. Safety-lock for revolvers. No. 1,313,073; Aug. 12; v. 265; p. 264.

Donnelly, Joseph C., Harborton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Machine for making card-matches. No. 1,313,471; Aug. 19; v. 265; p. 356.

Donnelly, Joseph C., Harborton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Means for treating match-splints with powdered material. No. 1,313,472; Aug. 19; v. 265; p. 316.

Donnelly, Laurence F., Lansford, Pa. Toilet utensil. No. 1,312,896; Aug. 12; v. 265; p. 229.

Doran, James A., Providence, R. I. Primer-detonator. No. 1,313,801; Aug. 19; v. 265; p. 418.

Dorer, Emma K., New York, N. Y. Game. No. 1,314,310; Aug. 26; v. 265; p. 549.

Dorr, Lucius B., Buffalo, N. Y. Airplane. No. 1,312,686; Aug. 12; v. 265; p. 188.

Dorsey, Edward W., Newark, Ohio. Rail connection. No. 1,312,620; Aug. 12; v. 265; p. 176.

Dorsey, Edward W., Newark, Ohio. Rail-lock. No. 1,312,621; Aug. 12; v. 265; p. 176.

Dorsey, Farnum F., assignor to North East Electric Company, Rochester, N. Y. Field-magnet. No. 1,314,132; Aug. 26; v. 265; p. 515.

Dorsey, Farnum F., Winchester, Mass., assignor to North East Electric Company, Rochester, N. Y. Ignition apparatus. No. 1,314,131; Aug. 26; v. 265; p. 514.

Dorstrom, Benjamin, Bristol, R. I. Fire-extinguisher bracket. No. 1,314,186; Aug. 26; v. 265; p. 525.

Doty, Vernon A., West Springfield, Mass. Automobile-signal. No. 1,312,109; Aug. 5; v. 265; p. 49.

Doughty, Charles, assignor of one-half to F. J. Homan, Denver, Colo. Luggage-carrier for automobiles. No. 1,312,524; Aug. 12; v. 265; p. 156.

Douglas, Harry A., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich. Reflecting electric lamp. No. 1,313,473; Aug. 19; v. 265; p. 356.

Douglas & Rudd Mfg. Co. (See Douglas, Harry A., assignor.)

Douglas, Harry A., assignor to Douglas & Rudd Mfg. Co., Bronson, Mich. Connector-switch. No. 1,314,050; Aug. 26; v. 265; p. 499.

Douglas, Leon F., San Rafael, Calif. Cinematography. No. 1,313,587; Aug. 19; v. 265; p. 378.

Dourte, George J., Denver, Colo. Valveless pump. No. 1,312,962; Aug. 12; v. 265; p. 242.

Dover, George W., Cranton, R. I., assignor, by means assignments, to American Guaranteed Tooth Company, Incorporated, Boston, Mass. Making false-teeth bakings from sheet metal. No. 1,313,528; Aug. 19; v. 265; p. 369.

Dover Stamping & Manufacturing Company. (See Anderson, Fahr, assignor.)

Dowl, John T., Milwaukee, Wis. Fruit-press. No. 1,312,813; Aug. 5; v. 265; p. 85.

Dowd, Bernard J., Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Platen-release mechanism. No. 1,312,024; Aug. 5; v. 265; p. 33.

Dowdy, Roy F., assignor to Safety Gas Lighter Corporation, Roanoke, Va. Electric gaslighter. No. 1,312,622; Aug. 12; v. 265; p. 176.

Downer, Clarence L., Idaho Falls, Idaho. Internal-combustion engine. No. 1,313,170; Aug. 12; v. 265; p. 285.

Downing, Philip R., Everett, Mass. Currency-counting tray. No. 1,313,074; Aug. 12; v. 265; p. 264.

Downs, George F., Buffalo, N. Y. Water-cooled door for furnaces. No. 1,312,168; Aug. 5; v. 265; p. 59.

Drake, Samuel H. (See Seagers and Drake.)

Draper Corporation. (See Jamieson, Robert, assignor.)

Draper Corporation. (See Rhoades, Alonzo E., assignor.)

Draper Corporation. (See Stimpson, Edward S., assignor.)

Dreia, Nikolaus S., St. Cloud, Minn. Automobile-lock. No. 1,312,435; Aug. 5; v. 265; p. 109.

Drummond, Charles W., San Francisco, Calif. Kaleidoscope. No. 1,313,848; Aug. 19; v. 265; p. 427.

Dryer, Lewis G., Cattaraugus, N. Y. Tractor attachment. No. 1,313,677; Aug. 19; v. 265; p. 394.

Du Brul, Napoleon, assignor to The Miller, Du Brul and Peters Manufacturing Co., Cincinnati, Ohio. Continuous cigarette-machine. No. 1,312,525; Aug. 12; v. 265; p. 156.

Du Mazuel, Edmond G. F. R., Washington, D. C. Foliating shell. No. 1,313,940; Aug. 26; v. 265; p. 478.

Du Pont, Francis I., Wilmington, Del. Water and steam system for steam-driven automobiles. No. 1,313,676; Aug. 19; v. 265; p. 394.

Dubrow, Frederick W., Sausalito, Calif. Artificial fish-bait. No. 1,314,082; Aug. 26; v. 265; p. 500.

Duchacek, Frank, Paterson, N. J. Jacquard-machine. No. 1,312,779; Aug. 12; v. 265; p. 207.

Duff, Maribha M., Arnold, Pa. Antiskidding attachment for wheels. No. 1,312,436; Aug. 5; v. 265; p. 110.

Dufour, George H., assignor to Marshall Field & Company, Chicago, Ill. Feeding device for presses. No. 1,313,474; Aug. 19; v. 265; p. 356.

Duke, John F., Shortlands, England. Nut. No. 1,313,075; Aug. 12; v. 265; p. 268.

Dukovic, John E., Chicago, Ill. Chain driving-belt. No. 1,312,171; Aug. 12; v. 265; p. 283.

Dunbar, Charles J., Kalamazoo, Mich., assignor to Accounting Devices Company, Chicago, Ill. Mechanical posting. No. 1,313,588; Aug. 19; v. 265; p. 378.

Dunbar, Mahlon L., Norwalk, Ohio, assignor to The Fire Extinguisher Company, Inc., Akron, Ohio. Fire-extinguisher. No. 1,314,468; Aug. 26; v. 265; p. 579.

Duncan, John W., and J. A. Shute, Greenwood, Miss. Mattress attachment. No. 1,312,110; Aug. 5; v. 265; p. 49.

Dundon, John H. (See Raab and Dundon.)

Dunlap, Elon, Diamond Springs, Calif. Yielding mount for plows and other tools. No. 1,313,802; Aug. 19; v. 265; p. 418.

Donn, James A., Saugus, Mass. Article-holder. No. 1,313,803; Aug. 19; v. 265; p. 418.

Duplex Printing Press Company. (See Bechman, Henry W., assignor.)

Duplex Snap Fastener Co. (See Boyler, Emanuel J., assignor.)

Duplex Snap Fastener Co. (See Puter and Boyler, assignors.)

Durham, Robert P., Chicago, Ill. Vessel construction. No. 1,313,529; Aug. 19; v. 265; p. 367.

Duryea, Charles E., Philadelphia, Pa. Internal-combustion engine. No. 1,313,276; Aug. 19; v. 265; p. 320.

Dutchess Tool Company. (See Van Houten, Frank H., assignor.)

Dutro, Orville V., and A. S. Burroughs, Spokane, Wash. Web-feeding mechanism for printing-presses. No. 1,312,063; Aug. 12; v. 265; p. 242.

Dwelle, Harold C., Lexington, N. C. Book. No. 1,312,022; Aug. 5; v. 265; p. 32.

Dyke, Francis R., Dartmouth, Nova Scotia, Canada. Buoy-lamp. No. 1,313,172; Aug. 12; v. 265; p. 283.

Dykes, O. P., et al. (See Sartain, Louis M., assignor.)

Ealing, Joseph. (See Spekerman, Ernest O., assignor.)

E. Leitz, Inc. (See Spindler, Ferdinand G., assignor.)

E. R. Estes & Sons. (See Estes, Webster C., assignor.)

E. I. du Pont de Nemours and Company. (See Andreau, Roland L., assignor.)

E. I. du Pont de Nemours and Company. (See Broadbent and Woodbridge, assignors.)

E. I. du Pont de Nemours and Company. (See Buell, William H., assignor.)

E. I. du Pont de Nemours and Company. (See Flaherty, Edmund M., assignor.)

E. I. du Pont de Nemours and Company. (See O'Neill, Arthur S., assignor.)

E. I. du Pont de Nemours and Company. (See Stine, Charles M., assignor.)

E. I. du Pont de Nemours & Company. (See Woodbridge, Richard G., Jr., assignor.)

E. I. du Pont de Nemours and Company. (See Woodbury, Clifford A., assignor.)

E. and T. Fairbanks and Company. (See Rousfield, John H., assignor.)

E. W. Bliss Company. (See Kruse, Peter, assignor.)

Eagle Harry J., Terre Haute, Ind. Signal. No. 1,313,678; Aug. 19; v. 265; p. 394.

Easley, Raleigh T., Tiptonville, Miss. Wagon-brake. No. 1,314,469; Aug. 26; v. 265; p. 579.

Eastman, Adelbert, New York, N. Y. Advertising device. No. 1,313,173; Aug. 12; v. 265; p. 284.

Eastman Kodak Company. (See Grass, Ernest, assignor.)

Eastman Kodak Company. (See Jones, John G., assignor.)

Eastman, Merle W., Cambridge, Mass. Motor for damper-regulators. No. 1,314,254; Aug. 26; v. 265; p. 539.

Easton, Fred M., San Bernardino, Calif. Sawing-machine. No. 1,312,064; Aug. 12; v. 265; p. 243.

Eaton, James F., Rochester, N. Y. Wheel-attaching apparatus. No. 1,314,187; Aug. 26; v. 265; p. 525.

Eaton, Reason H., Oswego, Kan., assignor of one-third to W. J. Carpenter, Kansas City, Mo. Nut-lock. No. 1,313,589; Aug. 19; v. 265; p. 379.

Ebner, George, and E. Jeschke, Bellevue, Ohio; said Ebner assignor to said Jeschke. Hand-truck. No. 1,313,883; Aug. 26; v. 265; p. 467.

Economy Rail Company. (See Speyer, Herbert E., assignor.)

Economy Sales Company. (See Stimpson, John T., assignor.)

Edgar, Grant E. (See Bedell and Edgar.)

Edge, Howard H., assignor to The Locomobile Company of America, Bridgeport, Conn. Valve. No. 1,313,858; Aug. 19; v. 265; p. 429.

Edison Storage Battery Company. (See Edison, Thomas A., assignor.)
 Edison Storage Battery Company. (See Hatchison and Norton, assignors.)
 Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, West Orange, N. J. Tube filling and tamping machine. No. 1,311,955; Aug. 5; v. 265; p. 19.
 Edmondson, Albert E., Ottawa, Ontario, Canada. Saw. No. 1,314,255; Aug. 26; v. 265; p. 539.
 Edward G. Budd Manufacturing Company. (See Ledwinka, Joseph, assignor.)
 Edward Packard and Company. (See Mills and Packard, assignors.)
 Edward V. Hartford, Inc. (See Kulsiek, Albert J. H., assignor.)
 Edwards, Eugene P., Plainfield, N. J. Vehicle. No. 1,313,536; Aug. 19; v. 265; p. 447.
 Edey, Cecil H. A. (See Heyermann, Charles L., assignor.)
 Ederfeld, William C., Flemington, N. J. Tube connecting and vulcanizing means. No. 1,314,256; Aug. 26; v. 265; p. 539.
 Eder, Cornelius D., Philadelphia, Pa. Electric-wave transmission. No. 1,314,311; Aug. 26; v. 265; p. 549.
 Ederhart, Raymond N., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Co. Condenser. No. 1,312,898; Aug. 12; v. 265; p. 229.
 Elano, Halvor O., Detroit Harbor, Wis. Submarine gun. No. 1,312,897; Aug. 12; v. 265; p. 229.
 Elckhoff, Theodore H., Cleveland, Ohio, assignor, by mesne assignments, to Auto-Ordinance Corporation, New York, N. Y. Firearm. No. 1,312,887; Aug. 12; v. 265; p. 188.
 Elfrid, Peter, Passaic, N. J. Attachment for fire-alarm boxes. No. 1,311,881; Aug. 5; v. 265; p. 6.
 Eisenhardt, William J., Baltimore, Md. Dispensing apparatus. No. 1,313,174; Aug. 12; v. 265; p. 284.
 Eisenmann, Charles W., J. R. Model, and G. W. Baler, assignors to C. W. Eisenmann and J. R. Model, Ciesna Park, Ill. Feed-regulator. No. 1,312,314; Aug. 5; v. 265; p. 86.
 Elster, Howard L., Philadelphia, Pa. Hand-sled. No. 1,314,053; Aug. 26; v. 265; p. 500.
 Ekland, Elmer, Jamestown, N. Y. Ice-pick. No. 1,313,804; Aug. 19; v. 265; p. 418.
 Elam, William E., Greenville, Miss. Printing-machine. No. 1,314,133; Aug. 26; v. 265; p. 515.
 Elbert, John J., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Apparatus and process for the production of ammonia. No. 1,313,884; Aug. 26; v. 265; p. 467.
 Elbert, John J., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Production of ammonia. No. 1,313,885; Aug. 26; v. 265; p. 467.
 Elbert, John J., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Purifying ammonia. No. 1,313,886; Aug. 26; v. 265; p. 467.
 Elborne, William, Peterborough, England. Chemical heat-producing means. No. 1,312,840; Aug. 12; v. 265; p. 218.
 Elder, Benjamin S., Durham, England. Punching-machine, drilling-machine, and the like. No. 1,313,277; Aug. 19; v. 265; p. 320.
 Electric Boat Company. (See Bedell, Charles H., assignor.)
 Electric Boat Company. (See Bedell and Edgar, assignors.)
 Electric Boat Company. (See Grieshaber, Hugo E., assignor.)
 Electric Clipper Company, The. (See White, Fred G., assignor.)
 Electric Highway Improvement Company, The. (See Huber, William E., assignor.)
 Electric Service Supplies Company. (See Darling, Lewis A., assignor.)
 Electro Dental Manufacturing Company. (See Russell, Percy, assignor.)
 Electro-Dynamic Company. (See Trudeau, John F., assignor.)
 Ellis, Giovanni E., New York, N. Y. Torpedo-boat. No. 1,312,391; Aug. 5; v. 265; p. 100.
 Ellis, Giovanni E., Washington, D. C. Protective device for ships. No. 1,312,841; Aug. 12; v. 265; p. 219.
 Elliott, William E., Grand Rapids, Mich., assignor to American Rutton & Fastener Company. Machine for applying fasteners. No. 1,313,941; Aug. 26; v. 265; p. 478.
 Elliott, William E., Grand Rapids, Mich., assignor to American Button & Fastener Company. Feeding mechanism for button-attaching machines. No. 1,313,942; Aug. 26; v. 265; p. 478.
 Ellis Drier & Elevator Company. (See Ellis, Hubert C., assignor.)
 Ellis, Hubert C., Evanston, assignor to Ellis Drier & Elevator Company, Chicago, Ill. Grain-drier. No. 1,313,279; Aug. 19; v. 265; p. 320.
 Ellis, Julius N., Pertham, New South Wales, Australia. Feed-water-regulating valve for steam-boilers. No. 1,313,373; Aug. 19; v. 265; p. 337.
 Elstinger, Francis W., and O. Schmitt, Hartford, Wis. Reeling and unreeing device. No. 1,311,956; Aug. 5; v. 265; p. 19.
 Elsom, William J., assignor to Cortland Forging Company, Cortland, N. Y. Vehicle-top. No. 1,313,076; Aug. 12; v. 265; p. 265.

Ely, Walter C., Terre Haute, Ind. Fuel feeder and spreader for furnaces. No. 1,312,526; Aug. 12; v. 265; p. 156.
 Emerson, Edward H., Mountain Lakes, N. J., assignor to Minerals Separation North American Corporation, New York, N. Y. Ore-concentrating process and apparatus. No. 1,311,882; Aug. 5; v. 265; p. 6.
 Emery, Frederick A., Haverhill, Mass. Heeling-machine. No. 1,314,071; Aug. 26; v. 265; p. 503.
 Emmerson, Kolman, and W. Nathanson, Chicago, Ill. Radiator. No. 1,313,677; Aug. 12; v. 265; p. 265.
 Emmerson, William A., Chattanooga, Okla. Oil-store. No. 1,314,312; Aug. 26; v. 265; p. 550.
 Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Electric ship propulsion. No. 1,313,078; Aug. 12; v. 265; p. 265.
 Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Electric ship propulsion. No. 1,313,079; Aug. 12; v. 265; p. 265.
 Emmons, Albert F., Swisecale, Pa., assignor of one-half to I. L. Aronson, Pittsburgh, Pa. Game-board. No. 1,312,315; Aug. 5; v. 265; p. 80.
 Engel, Abraham, New York, N. Y. Multiple mixing-valve. No. 1,313,590; Aug. 19; v. 265; p. 379.
 Engel, Karl, Arlington, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Producing soles for shoes. No. 1,313,887; Aug. 26; v. 265; p. 468.
 Englesson, John E., Kristinehamn, Sweden. Centrifugal governor. No. 1,313,175; Aug. 12; v. 265; p. 284.
 Englund, Ernst E., assignor to D. M. Seehler Implement & Carriage Company, Moline, Ill. Planter. No. 1,313,475; Aug. 19; v. 265; p. 359.
 England, Ernst E., assignor to D. M. Seehler Implement & Carriage Company, Moline, Ill. Planter. No. 1,314,054; Aug. 26; v. 265; p. 500.
 Enslin, Herbert E., Malden, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Method of and machine for marking shoe-uppers. No. 1,313,943; Aug. 26; v. 265; p. 479.
 Ensten, Louis H., Cleveland, Ohio. Knitted cap. No. 1,313,050; Aug. 12; v. 265; p. 266.
 Enstenens, Albert J., Terry, Mont., assignor of one-half to S. W. Loomis, Sioux Falls, S. D. Tool. No. 1,314,072; Aug. 26; v. 265; p. 503.
 Enterprise Railway Equipment Company. (See Campbell, Arlyle, assignor.)
 Erb, Arthur A. (See Gaines and Erb.)
 Erickson, John, assignor to Automatic Electric Company, Chicago, Ill. Measured-service telephone system. No. 1,312,688; Aug. 12; v. 265; p. 188.
 Erickson, John, assignor to Automatic Electric Company, Chicago, Ill. Measured-service telephone system. No. 1,312,665; Aug. 12; v. 265; p. 243.
 Errett, Charles, New York, N. Y., assignor to Public Service Cap Company, Brooklyn, N. Y. Package. No. 1,314,134; Aug. 26; v. 265; p. 515.
 Ertel, Henry C., Fort Wayne, Ind. Automatic cut-out for rain-amounts. No. 1,312,169; Aug. 5; v. 265; p. 60.
 Ervin, Charles W., and W. E. MacQuire, Anaconda, Mont. Mixer. No. 1,312,240; Aug. 5; v. 265; p. 72.
 Esnault-Pelterie, Robert, Honlogne-sur-Seine, France. Internal-combustion (turbo) engine. No. 1,312,809; Aug. 12; v. 265; p. 229.
 Estes, Webster C., assignor to E. R. Estes & Sons, New York, N. Y. Receptacle. No. 1,313,079; Aug. 19; v. 265; p. 394.
 Eubank, Jackson C., Chicago, Ill. Pneumatic tire. No. 1,311,883; Aug. 5; v. 265; p. 6.
 Eureka Air Compressor Co. (See Loppacker, Albert, assignor.)
 Evan L. Reed Manufacturing Company. (See Kroff, Leonard D., assignor.)
 Evans, Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electromagnetic blow-out device. No. 1,313,176; Aug. 12; v. 265; p. 284.
 Evans, Daniel L., and F. A. Phillips, Pottstown, Pa., assignors to Sanitary Manufacturing Corporation, Wilmington, Del. Cooler. No. 1,313,024; Aug. 19; v. 265; p. 385.
 Evans, Fred, assignor to H. E. Stevens, Jr., New York, N. Y. Seal-off-tap. No. 1,313,888; Aug. 26; v. 265; p. 468.
 Evans, Purd., assignor of one-half to S. L. Herndon, Lexington, Tenn. Overflow-pipe for injectors. No. 1,312,025; Aug. 5; v. 265; p. 33.
 Everlasting Valve Co. (See Wilson, Wylie G., assignor.)
 Eversen, Sam, Billings, Mont. Door-actuating mechanism for elevators. No. 1,313,559; Aug. 19; v. 265; p. 379.
 Ewald, Arno A., Oakfield, Wis. Tire-stapling machine. No. 1,312,026; Aug. 5; v. 265; p. 33.
 Ewert, Walter S., Los Angeles, Calif. Artificial ball. No. 1,313,476; Aug. 19; v. 265; p. 357.
 Expanded Wood Lath Corporation. (See Waller, John A., assignor.)
 F. A. Hardy & Company. (See Polinsky, Samuel H., assignor.)
 F. A. Nelder Company, The. (See Laible, Frank J., assignor.)
 F. B. Redington Company. (See Millmoe, Michael J., assignor.)
 F. L. Smith & Co. (See Fastling, Johan S., assignor.)
 F. N. Hurt Company, Limited. (See Palmer, Lyndon G., assignor.)

Faas, Walter, Fort Douglas, Utah. Universal level. No. 1,312,527; Aug. 12; v. 265; p. 156.
 Fairburn, John M. R., et al. (See Orrick, John W., assignor.)
 Fairley, Charles R., Hayes, England. Controlling device for aeroplanes. No. 1,313,681; Aug. 19; v. 265; p. 395.
 Falst, Michael J., Columbus, Ohio. Stovepipe-collar holder. No. 1,312,900; Aug. 12; v. 265; p. 229.
 Falkenau, Louis, Chicago, Ill. Smoking device. No. 1,313,280; Aug. 19; v. 265; p. 321.
 Falker, Henry W., Ashland, Pa. Gyroscopic screening device. No. 1,314,135; Aug. 26; v. 265; p. 515.
 Falley, Lewis H., Kansas City, Mo. Apparatus for de-watering and separating ores, sands, &c. No. 1,312,027; Aug. 5; v. 265; p. 33.
 Falley, Lewis H., Kansas City, Mo. Ore cleaning and concentrating apparatus. No. 1,312,028; Aug. 5; v. 265; p. 33.
 Fallolite Limited. (See Girode, Louis, assignor.)
 Fanning, Alfred N., Joplin, Mo. Combined sill and grate for pigs. No. 1,313,984; Aug. 26; v. 265; p. 487.
 Farber, Morris. (See Genovese, Rosario, assignor.)
 Faris, Harry N., Kansas City, Kans., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Trunk-circuits. No. 1,313,477; Aug. 19; v. 265; p. 357.
 Farley, Charles H., Hayes, England. Controlling device for aeroplanes. No. 1,313,680; Aug. 19; v. 265; p. 395.
 Farley, John A., Chicago, Ill., assignor to Crane Company. Drinking-fountain fixture. No. 1,312,623; Aug. 12; v. 265; p. 176.
 Farra, Francis J., Rochester, Minn. Safety-hook. No. 1,312,066; Aug. 12; v. 265; p. 243.
 Farrell, James F., et al., trustees. (See Stanard, Maurice L., assignor.)
 Fastling, Johan S., Frederiksborg, near Copenhagen, Denmark, assignor to F. L. Smith & Co., New York, N. Y. Rotary kiln. No. 1,313,281; Aug. 19; v. 265; p. 321.
 Faulk, James M., St. John, Kans. Attachment for wheels. No. 1,312,437; Aug. 5; v. 265; p. 110.
 Faulkner, Charles J., Hall Ground, Ga. Grapple. No. 1,312,241; Aug. 5; v. 265; p. 73.
 Fay, Charles H., Newark, N. J. Hydraulic hoist for ash-cans and the like. No. 1,314,267; Aug. 26; v. 265; p. 539.
 Fend, William B., New York, N. Y. Reinforced receptacle, tube, or the like and making the same. No. 1,312,780; Aug. 12; v. 265; p. 267.
 Fennwald, Andrew B., Westphalia, Mo. Automatic hose-coupling. No. 1,313,805; Aug. 19; v. 265; p. 419.
 Ferguson, George, Wollaston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Rubber sole for turn-shoes. No. 1,312,528; Aug. 12; v. 265; p. 157.
 Fernandez, Abel, Washington, D. C. Automatic cut-out switch. No. 1,314,470; Aug. 26; v. 265; p. 550.
 Feroldi, Enrico, Turin, Italy. Carburetor for explosion-engines. No. 1,314,313; Aug. 26; v. 265; p. 550.
 Ferria, Howard J., assignor to Hunt, Heim, Ferria & Company, Harvard, Ill. Pigeon. No. 1,312,242; Aug. 5; v. 265; p. 73.
 Ferria, Walter. (See Magle and Ferria.)
 Ferria, Walter C., assignor to The National Manufacturing Company, Lincoln, Neb. Steam-cooker. No. 1,311,957; Aug. 5; v. 265; p. 19.
 Ferry, Joseph P., Niles, Calif. Fruit-gatherer. No. 1,312,967; Aug. 12; v. 265; p. 243.
 Ferry, Thomas F., St. Louis, Mo. Producing wood-separators. No. 1,312,243; Aug. 5; v. 265; p. 73.
 Fetherstonhaugh, Edward J. (See Mahar and Fetherstonhaugh.)
 Fetter, Edward, Baltimore, Md. Vulcanizing apparatus and process. No. 1,312,029; Aug. 5; v. 265; p. 34.
 Flala, Joseph H., assignor to Standard Pneumatic Action Company, New York, N. Y. Player-piano for producing solo effects. No. 1,313,625; Aug. 19; v. 265; p. 385.
 Finch, Leon S., Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Making cyanogen compounds. No. 1,312,842; Aug. 12; v. 265; p. 219.
 Findelsen & Kropf Manufacturing Company. (See Rayfield, Charles L., assignor.)
 Finkelstein, Reuben, et al. (See Hankins, Butler J., assignor.)
 Finley, John S., Great Falls, assignor to Anaconda Copper Mining Company, Anaconda, Mont. Electrode-rack. No. 1,311,958; Aug. 5; v. 265; p. 20.
 Finley, Charles W., Battle Creek, Mich. Conduit-bushing. No. 1,312,901; Aug. 12; v. 265; p. 236.
 Finnegan, Ambrose J., Castalia, Iowa. Fender. No. 1,313,282; Aug. 19; v. 265; p. 321.
 Finney, Ellen M., Kansas City, Kans. Coaster. No. 1,313,081; Aug. 12; v. 265; p. 266.
 Firex Extinguisher Company, The. (See Dunbar, Mahlon L., assignor.)
 Fischel, George, New York, and L. Newman, Bronx, N. Y. Hand-fan. No. 1,314,314; Aug. 26; v. 265; p. 550.
 Fischer, Charles. (See Smith, Charles G., assignor.)
 Fischer, Paolo, Chicago, Ill. Indellistop-indicator. No. 1,314,258; Aug. 26; v. 265; p. 539.
 Fisher, Francis W., Ruhl, Idaho, and J. C. Olsen, Salt Lake City, Utah. Corrugator. No. 1,314,315; Aug. 26; v. 265; p. 550.
 Fisher, Harry L., New York, N. Y. Absorption-bottle. No. 1,312,620; Aug. 19; v. 265; p. 356.

Fisher, Herbert P., Los Angeles, Calif. Automatic water-heater. No. 1,312,724; Aug. 12; v. 265; p. 195.
 Fisk, Gustaf L., Harrisburg, Pa. Treating metal. No. 1,312,474; Aug. 5; v. 265; p. 117.
 Fisk, Henry M., deceased, Chicago, Ill.; N. A. Fisk, administrator. Vehicle rim and tire. No. 1,312,506; Aug. 5; v. 265; p. 123.
 Fisk, Nellie A., administrator. (See Fisk, Henry M.)
 Fitts, James L. (See Serrell, John A., assignor.)
 Fitzpatrick, John, and L. T. Stephens, assignors to The Carborendum Company, Niagara Falls, N. Y. Electric furnace. No. 1,313,986; Aug. 26; v. 265; p. 487.
 Flz, Frank C., Cincinnati, Ohio, assignor, by mesne assignments, to Armstrong Cork Company. Machine for preparing soles. No. 1,313,682; Aug. 19; v. 265; p. 395.
 Flaberty, Edmund M., Parlin, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Anesthesia ether and making the same. No. 1,312,475; Aug. 5; v. 265; p. 117.
 Flannery Bolt Company. (See Dodds, Ethan I., assignor.)
 Flannery Bolt Company. (See Flannery and Dodds, assignors.)
 Flannery Bolt Company. (See Stafford and Dodds, assignors.)
 Flannery, Howard J., Pittsburgh, Pa. Bolt. No. 1,312,781; Aug. 12; v. 265; p. 267.
 Flannery, John K., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt for boilers. No. 1,313,627; Aug. 19; v. 265; p. 386.
 Flatland, Martin, San Francisco, Calif. Electric switch-box. No. 1,314,269; Aug. 26; v. 265; p. 540.
 Fliset, Thorleif, Brooklyn, N. Y. Flashing-insert for roof construction. No. 1,313,283; Aug. 19; v. 265; p. 321.
 Flinn, Frederick B., Orange, N. J., assignor, by mesne assignments, to Pneumatic Process Plotation Company, New York, N. Y. Apparatus for separating ore materials from each other. No. 1,314,316; Aug. 26; v. 265; p. 550.
 Flint, Amos H. (See Brindle and Flint.)
 Flintkote Company, The. (See Overbury, Frederick C., assignor.)
 Flintkote Company, The. (See Spear, George A., assignor.)
 Floyd W. Robison Company. (See Robison, Floyd W., assignor.)
 Flues, Emil F., Buffalo, N. Y. Automatic compensating bolt for firearms of the breakdown type. No. 1,312,170; Aug. 5; v. 265; p. 60.
 Flynn, Thomas H., et al. (See Connolly, John J., assignor.)
 Fogz, Harold J., Liverpool, England. Building, made mainly of blocks of concrete or equivalent material. No. 1,312,908; Aug. 12; v. 265; p. 243.
 Foley, John P., Galesburg, Ill. Casket-handle. No. 1,312,171; Aug. 5; v. 265; p. 60.
 Follows, George H., Pittsburgh, Pa. Pocket-orderly. No. 1,313,374; Aug. 19; v. 265; p. 338.
 Fontaine, Albert C., Millbury, Mass. Air-controlling device for carburetors. No. 1,313,478; Aug. 19; v. 265; p. 357.
 Fook, Tom Y., Mesa, Ariz. Spring-hinge. No. 1,312,392; Aug. 5; v. 265; p. 100.
 Ford, Blon D., Cleveland, Ohio. Milling-machine cutter. No. 1,313,628; Aug. 19; v. 265; p. 386.
 Ford, George. (See Pickford and Ford.)
 Ford, Harry, Uttoxeter, England. Article adapted to be used as light-reflector, vase, or the like. No. 1,313,806; Aug. 19; v. 265; p. 419.
 Ford, Henry V., Dearborn, Mich. Engine and radiator assembly. No. 1,312,476; Aug. 5; v. 265; p. 117.
 Ford, Robert H., C. P. Richardson, A. L. Greenbaum, Chicago, Ill., and H. M. Priest, Dayton, Ohio. Reinforced-concrete cribbing. No. 1,312,689; Aug. 12; v. 265; p. 188.
 Ford, William B., Birmingham, Ala. Float-controlled valve for flushing-tanks and the like. No. 1,313,889; Aug. 26; v. 265; p. 468.
 Four River Shipbuilding Corporation et al. (See Peck, Harry H., assignor.)
 Foreman, Amos L., York, Pa. Bottle-cap. No. 1,314,318; Aug. 26; v. 265; p. 551.
 Foreman, Amos L., Baltimore, Md., assignor to Foreman Systems, Incorporated, Wilmington, Del. Bottle-crate. No. 1,314,317; Aug. 26; v. 265; p. 551.
 Foreman Systems, Incorporated. (See Foreman, Amos L., assignor.)
 Formanack, Joseph A., St. Louis, Mo. Shoe-heel. No. 1,314,319; Aug. 26; v. 265; p. 551.
 Forrest, Howard H., Kent, Ohio. Tire-mold. No. 1,312,436; Aug. 5; v. 265; p. 110.
 Forshee, Frank, assignor, by mesne assignments, to Cope-man Development Company, Flint, Mich. Grease-cup. No. 1,314,073; Aug. 26; v. 265; p. 504.
 Fortier, Charles L., Milwaukee, Wis. Automatic control device. No. 1,312,244; Aug. 5; v. 265; p. 73.
 Foster, Ernest H., Dungan Hills, N. Y. Apparatus for expanding superheater-tubes. No. 1,313,284; Aug. 19; v. 265; p. 321.
 Foucaud, Lucien. (See Choffel, Charles, assignor.)
 Foust, Theodore L., Terre Haute, Ind. Patient-handling apparatus for beds. No. 1,312,439; Aug. 5; v. 265; p. 110.

Fowler, Alfred B., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-scoring machine. No. 1,312,529; Aug. 12; v. 265; p. 157.

Fowler, Jonathan O., New York, N. Y. Convertible station and drawing-room car. No. 1,313,531; Aug. 19; v. 265; p. 368.

For Chemical Company, The. (See Larkin, Charles J., assignor.)

Fox, Edward F. (See Larkin and Fox.)

Fox, Ernie M. (See Larkin and Fox.)

Fox, Mac L., Columbiaville, Mich. Insecticide-distributor for cultivators. No. 1,312,989; Aug. 12; v. 265; p. 244.

Fox, William R., Jackson, Mich. Flexible shaft-coupling. No. 1,314,320; Aug. 26; v. 265; p. 551.

Foxboro Company, The. (See Bristol, Edgar H., assignor.)

Frankel, Sigmund, and E. Herrmann, Vienna, Austria, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Hormones and phosphatides and obtaining same. No. 1,314,321; Aug. 26; v. 265; p. 551.

Franc, Joseph M. E., St. Vallier, France. Washing, rinsing, and wringing machine. No. 1,312,393; Aug. 5; v. 265; p. 101.

Francart, Henri, Herne Hill, London, England. Furnace, kiln, oven, and the like. No. 1,314,455; Aug. 26; v. 265; p. 583.

Francis, Charles K., and D. G. Morgan, assignors of one-half to Cosden & Company, Tulsa, Okla. Refining petroleum products. No. 1,313,629; Aug. 19; v. 265; p. 286.

Francis, Earl H., Kansas City, Mo. Automatic cut-out for film-reelwinds. No. 1,314,055; Aug. 26; v. 265; p. 500.

Frank, Edwin, Philadelphia, Pa. Measuring-tape. No. 1,312,172; Aug. 5; v. 265; p. 60.

Frankland, Alexander J., Berkeley, Calif. Sanitary spoon. No. 1,312,111; Aug. 5; v. 265; p. 49.

Frank, George J., Alameda, Calif. Writing-pad. No. 1,313,944; Aug. 26; v. 265; p. 479.

Fraser, Le Roy B., New Haven, Conn. Method of and apparatus for imposing form elements. No. 1,313,082; Aug. 12; v. 265; p. 266.

Fraser, Bert C., Wichita, Kans. Counterbalancing-hook. No. 1,313,807; Aug. 19; v. 265; p. 419.

Fraser, James W., Cleveland, Ohio. Coaling system. No. 1,313,375; Aug. 19; v. 265; p. 338.

Frederick, Ernest O. (See Speckerman, Ernest O.)

Freedman, Louis A., New York, N. Y. Winding mechanism for talking-machines. No. 1,312,624; Aug. 12; v. 265; p. 177.

Freeman, Charles H., Bloomington, Ill. Eccentric-driven pump. No. 1,314,322; Aug. 26; v. 265; p. 551.

French & Hecht. (See Hecht, Joseph L., assignor.)

French, James C., Kenosha, Wis., assignor to F. C. Austin, Chicago, Ill. Mixing-machine. No. 1,314,300; Aug. 26; v. 265; p. 545.

French, Theodore H. (See Gregor and French.)

Frinault, Peter A., Wilmette, assignor to The Huron Paper Company, Chicago, Ill. Milling-machine. No. 1,311,959; Aug. 5; v. 265; p. 20.

Frings, Francis A., London, England. Duplex pea. No. 1,312,440; Aug. 5; v. 265; p. 110.

Fronefield, Joseph M. (See Porter, Milton J., assignor.)

Fruehauf Trailer Company. (See Hartwick, Ernest F., assignor.)

Fugina, Arthur R. (See Clough, Stillwell, and Fugina.)

Fuhrmann, Warren, Westfield, N. J., assignor, by mesne assignments, to Wilkinson Brothers and Company, Incorporated, New York, N. Y. Signal printing means for calculators. No. 1,313,177; Aug. 12; v. 265; p. 284.

Fuller, Ernest L., Malden, Mass., assignor to Technical Supply Company, Scranton, Pa. Drifting apparatus. No. 1,314,323; Aug. 26; v. 265; p. 552.

Fuller, Frank A., assignor to The J. E. Mergott Company, Newark, N. J. Cigar-holder and ash-receptacle. No. 1,312,530; Aug. 12; v. 265; p. 157.

Fuller, Frederick L., assignor to The National Cash Register Company, Dayton, Ohio. Registering and recording mechanism. No. 1,311,884; Aug. 5; v. 265; p. 6.

Fuller, Kenneth D., Whittier, Calif. Rod-hanger. No. 1,313,808; Aug. 19; v. 265; p. 419.

G. H. Masten Co., The. (See Bailey, Anna D., assignor.)

Gagnier, Joseph H., Fall River, Mass. Step-ladder. No. 1,312,725; Aug. 12; v. 265; p. 195.

Gaines, Arthur E., and A. A. Erb, Denver, Colo. Artificial leg. No. 1,314,130; Aug. 26; v. 265; p. 515.

Gairing, Emil, assignor to The Gairing-Needham Tool Co., Inc., Detroit, Mich. Floating-tool holder. No. 1,311,960; Aug. 5; v. 265; p. 20.

Gairing, Emil, assignor to The Gairing-Needham Tool Co., Inc., Detroit, Mich. Gage for floating-tool holders. No. 1,311,961; Aug. 5; v. 265; p. 20.

Gairing-Needham Tool Company, The. (See Gairing, Emil, assignor.)

Galan, John, Elmhurst, N. Y. Molding apparatus for buildings. No. 1,313,630; Aug. 19; v. 265; p. 386.

Gallagher, Frank A., et al. (See Connolly, John J., assignor.)

Gallmeister, Sigmund H., Rochester, N. Y. Camera. No. 1,313,285; Aug. 19; v. 265; p. 321.

Galt, Hugh A., Barberton, Ohio. Process and product for utilizing alter cake and similar substances. No. 1,312,782; Aug. 12; v. 265; p. 207.

Galt, Hugh A., Barberton, Ohio. Process and product for utilizing alter cake and similar substances. No. 1,312,783; Aug. 12; v. 265; p. 207.

Galt, Hugh A., Barberton, Ohio. Manufacture of glass. No. 1,312,784; Aug. 12; v. 265; p. 207.

Gamble, Bertus D., Pittsburgh, Pa. Explosion-engine. No. 1,314,137; Aug. 26; v. 265; p. 510.

Gambie, Joseph W., assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Liquid-weighting apparatus. No. 1,312,902; Aug. 12; v. 265; p. 230.

Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making cord tires and tire-making cord bands therefor. No. 1,313,280; Aug. 19; v. 265; p. 322.

Gandara, Jose F. (Sartorius, Gandara, and Colonna.)

Garami, Joseph, Newark, N. J. Baby-carriage or perambulator. No. 1,313,683; Aug. 19; v. 265; p. 306.

Garbis, Spiro D., Calcutta, India. Treasure-box and the like with keyless lock and metal seal. No. 1,312,970; Aug. 12; v. 265; p. 244.

Garblach, Theodore W., Carter, Mont. Funnel. No. 1,312,531; Aug. 12; v. 265; p. 157.

Gardner, Arthur W. (See Ross, Robert H., assignor.)

Gardner, Edmund J., Vaillant, Okla. Safety attachment. No. 1,312,843; Aug. 12; v. 265; p. 219.

Gardner, Joseph, Tucuman, N. Mex. Connecting-rod. No. 1,313,684; Aug. 19; v. 265; p. 396.

Gare, Thomas, Sudbury, England. Apparatus for the manufacture of stabbed sheet metal. No. 1,313,809; Aug. 19; v. 265; p. 419.

Garner, William R., Erie, Pa. Engine drive-wheel. No. 1,313,178; Aug. 12; v. 265; p. 285.

Garnet Carter Co. (See Rose, Frederick C., assignor.)

Garrett, Robert E., Nashville, Tenn. Gear-cutting machine. No. 1,312,245; Aug. 5; v. 265; p. 73.

Garwood Company. (See Karitsky, John, assignor.)

Gary, Patrick W. H. (See Meyer, Frederick W., assignor.)

Gas Power Machinery Company. (See Grine, Harry A., assignor.)

Gaydon, Adolphe. (See Accornero and Gaydon.)

Gear Improvement Company. (See Williams, Harvey D., assignor.)

Geary, William H., Medicine Hat, Alberta, Canada. Internal-combustion engine. No. 1,312,971; Aug. 12; v. 265; p. 244.

Gee, William J., London, England. Separating solids from suspension in liquids and apparatus therefor. No. 1,312,310; Aug. 5; v. 265; p. 86.

Geht, W. H. (See Cuddigan, Bartholomew O., assignor.) (Reissue.)

Gehringer, John, Ann Arbor, Mich. Weed-exterminator. No. 1,312,246; Aug. 5; v. 265; p. 73.

Gelger, William A., Chicago, Ill., assignor to W. H. Minor, Chazy, N. Y. Stop-casting. No. 1,314,188; Aug. 26; v. 265; p. 525.

Gelser, Leonard, Cincinnati, Ohio. Pedal-locking mechanism. No. 1,312,247; Aug. 5; v. 265; p. 74.

Gelst, William, St. Louis, Mo. Glare-protector. No. 1,313,083; Aug. 12; v. 265; p. 260.

General Bakelite Company. (See Bakeland, Leo H., assignor.)

General Briquetting Company. (See Vogel, Felix A., assignor.)

General Chemical Company. (See Benjamin, Charles S., assignor.)

General Electric Company. (See Alexanderson, Ernst F. W., assignor.)

General Electric Company. (See Ball, John D., assignor.)

General Electric Company. (See Barton, Frederick C., assignor.)

General Electric Company. (See Beach, Ralph L., assignor.)

General Electric Company. (See Beck, Heinrich, assignor.)

General Electric Company. (See Capello, Frank, assignor.)

General Electric Company. (See Case, Frank E., assignor.)

General Electric Company. (See Creighton, Elmer E. F., assignor.)

General Electric Company. (See Emmet, William L. R., assignor.)

General Electric Company. (See Hall, Chester L., assignor.)

General Electric Company. (See Hall, Albert W., assignor.)

General Electric Company. (See Langmuir, Irving, assignor.)

General Electric Company. (See Lemp, Hermann, assignor.)

General Electric Company. (See Loewenstein, Louis C., assignor.)

General Electric Company. (See Macmillan, Campbell, assignor.)

General Electric Company. (See Payne, John H., Jr., assignor.)

General Electric Company. (See Quackenbush, Harvey E. and C. L., assignors.)

General Electric Company. (See Rice, Richard H., assignor.)

General Electric Company. (See Sanborn, Hugh D., assignor.)

General Electric Company. (See Sargent, Howard R., assignor.)

General Electric Company. (See Schnacholl, Erich, assignor.)

General Electric Company. (See Steenstrup, Christian, assignor.)

General Electric Company. (See Stock, Henry W., assignor.)

General Railway Signal Company. (See Carter, Ainslie T., assignor.)

General Railway Signal Company. (See Casper, Frank T., assignor.)

General Refractories Company. (See Hepler, Irvin F., assignor.)

General Research Laboratories. (See Knox and Mallet, assignors.)

Genovese, Rosario, assignor of one-half to M. Farber, New York, N. Y. Toy aeroplane. No. 1,313,840; Aug. 19; v. 265; p. 427.

Genter, Helen C., administratrix. (See Genter, Jacob H.)

Genter, Jacob H., deceased, Newburgh, N. Y.; H. C. Genter, administratrix. Film-reviewer. No. 1,313,084; Aug. 12; v. 265; p. 266.

Genille, John H., assignor, by mesne assignments, of two-fifths to C. G. Davidson and two-fifths to J. Barile, Manchester, N. H. Shoe. No. 1,314,074; Aug. 26; v. 265; p. 504.

George, Charles L., assignor to The Hockeye Traction Ditcher Company, Findlay, Ohio. Internal pipe-wrench. No. 1,313,479; Aug. 19; v. 265; p. 357.

George Cutter Company. (See McWilliams, Arthur C., assignor.)

George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Metal-heating furnace. No. 1,311,962; Aug. 5; v. 265; p. 21.

Gerard, H. H., et al. (See Kavanaugh, Enoch, assignor.)

Gerke, Frederick, New York, N. Y. Spark-plug. No. 1,312,317; Aug. 5; v. 265; p. 80.

Gerlach, Oscar, Danville, Ill. Economizing metallic reductions. No. 1,313,287; Aug. 19; v. 265; p. 322.

Gerlach, Oscar, Danville, and C. B. Lihme, Chicago, Ill., assignors to The Industrial Research Laboratories. Process and machine for reclaiming retort-waste. No. 1,312,173; Aug. 5; v. 265; p. 60.

Gerson, Nikolaos, assignor to A. Mecky Company, Philadelphia, Pa. Attachment for water or fluid heaters with faucets. No. 1,314,324; Aug. 26; v. 265; p. 552.

Gesder, Paeschke & Frey Co. (See Kempter, Philip, assignor.)

Giardino, Liborio G., Campello, Mass. Picture-hanger. No. 1,312,903; Aug. 12; v. 265; p. 230.

Gibbs, Benedict T., Jr., assignor to Morden Frog & Crossing Works, Chicago, Ill. Reinforcement for frogs and crossings. No. 1,313,480; Aug. 19; v. 265; p. 357.

Gilbert, Walter R., London, England. Apparatus for reproducing the motions of the upper part of vessels in motion. No. 1,313,085; Aug. 19; v. 265; p. 396.

Giletti, Secondo, San Francisco, Calif. Concrete ship. No. 1,313,592; Aug. 19; v. 265; p. 379.

Gilman, George H., assignor of one-half to H. M. Robertson, St. Paul, Minn. Body-bolster for railway-cars. No. 1,312,726; Aug. 12; v. 265; p. 195.

Gilman, George H., Claremont, N. H., assignor to Sullivan Machinery Company, Boston, Mass. Drilling apparatus. No. 1,313,850; Aug. 19; v. 265; p. 429.

Gillis & Geoghegan. (See Murdoch, Franklin P., assignor.)

Gilman, Frank L., and J. R. Wilson, Pasadena, Calif. Automatic gas-burner. No. 1,312,441; Aug. 5; v. 265; p. 111.

Gilman, John H., assignor to Klag & Hamilton Company, Ottawa, Ill. Elevator for corn, &c. (Reissue.) No. 1,314,705; Aug. 12; v. 265; p. 297.

Gilmore, Calvin L., Dallas, Tex. Combined roost and nest. No. 1,314,075; Aug. 26; v. 265; p. 504.

Gindrat, Louis R., Baltimore, Md. Clutch. No. 1,314,260; Aug. 26; v. 265; p. 540.

Gioriano, Pedro, Buenos Aires, Argentina. Marker. No. 1,312,248; Aug. 5; v. 265; p. 74.

Girardeau, Emile, and J. Bethenod, Paris, France. Device for auxiliary starting for high-power radiotelegraphic stations. No. 1,312,972; Aug. 12; v. 265; p. 244.

Girodo, Louis, London, assignor to Fallolite Limited, Westminster, England. Acetylene-generator. No. 1,313,810; Aug. 19; v. 265; p. 420.

Givens, J. J., et al. (See Sartain, Louis M., assignor.)

Gladish, Frank L., Detroit, Mich. Tractor. No. 1,314,391; Aug. 26; v. 265; p. 565.

Glasfke, Paul E., Denver, Colo. Adjustable stilt. No. 1,312,904; Aug. 12; v. 265; p. 230.

Glamco, Paul, Brooklyn, N. Y. Father's purse. No. 1,314,392; Aug. 26; v. 265; p. 565.

Glass, Perley R., Brookline, assignor to P. R. Glass Company, Boston, Mass. Folding-machine. No. 1,312,532; Aug. 12; v. 265; p. 158.

Glass, Perley R., Brookline, assignor to P. R. Glass Company, Boston, Mass. Folding-machine. No. 1,312,533; Aug. 12; v. 265; p. 158.

Glatz, Joseph, Philadelphia, Pa. Electric fuse-plug. No. 1,312,288; Aug. 19; v. 265; p. 322.

Gleason, James E., trustee. (See Williams, Harvey D., assignor.)

Gleason, Kate. (See Miller, George A., assignor.)

Glickerman, Jacob I., Chicago, Ill. Scaling-strip-soldering golde. No. 1,312,318; Aug. 5; v. 265; p. 86.

Gidden, Harvey L., Natick, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Cut-sole rack. No. 1,313,289; Aug. 19; v. 265; p. 322.

Globe Machine & Stamping Company, The. (See Root, Ralph H., assignor.)

Glover, Irvin N., Bailey, N. C. Medicated salt brick. No. 1,314,076; Aug. 26; v. 265; p. 504.

Goddard, Robert H., Worcester, Mass. Magazine-rocket. No. 1,311,885; Aug. 5; v. 265; p. 7.

Goforth, J. A., et al. (See Sartain, Louis M., assignor.)

Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)

Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y. Hose coupling. No. 1,312,625; Aug. 12; v. 265; p. 177.

Goldie, William, Wilkesburg, Pa. Reinforcing means for concrete structures. No. 1,312,908; Aug. 12; v. 265; p. 231.

Good Inventions Co. (See Good, John, assignor.)

Good, John, assignor to Good Inventions Co., Brooklyn, N. Y. Fuel-charge-supply apparatus. No. 1,314,056; Aug. 26; v. 265; p. 500.

Goodman, Fred J. (See Brokenshire, Arthur R., assignor.)

Goodman, Nathan, and H. Grubman, New York, N. Y. Making resorcinol. No. 1,314,138; Aug. 26; v. 265; p. 516.

Goodyear's India Rubber Glove Manufacturing Company, The. (See Mahoney, Jeremiah L., assignor.)

Goodyear's Metallic Rubber Shoe Company, The. (See Worley, Trowbridge, Wortenberg, and Lee, assignors.)

Goolman, Eva S. (See Goolman, Fred R., assignor.)

Goolman, Fred R., Birmingham, assignor to E. S. Goolman, Syracuse, N. Y. Toy automatic player-piano. No. 1,314,180; Aug. 26; v. 265; p. 526.

Gooley, James, Wilmington, Del. Coupling for hose of air-lines. No. 1,313,225; Aug. 12; v. 265; p. 294.

Gorion, Alexander W., Crossfield, Alberta, Canada. Hanger for sliding doors. No. 1,312,973; Aug. 12; v. 265; p. 244.

Gorton, George, and G. E. Gustafson, Racine, Wis.; said Gustafson assignor to said Gorton. Metal-working machine. No. 1,312,394; Aug. 5; v. 265; p. 101.

Goss Printing Press Company. (See Goss, Samuel G., assignor.)

Goss Printing Press Company. (See Lang, Robert, assignor.)

Goss Printing Press Company. (See Seymour, Ralph C., assignor.)

Goss Printing Press Company, The. (See Walker, Joseph J., assignor.)

Goss, Samuel G., Glencoe, Ill., assignor to Goss Printing Press Company. Sheet-handling machine. No. 1,311,886; Aug. 5; v. 265; p. 7.

Goudet, Charles, assignor to the Firm of Societe d'Etudes Chimiques, pour l'Industrie, Geneva, Switzerland. Process and apparatus for fractional distillation of liquids. No. 1,312,974; Aug. 12; v. 265; p. 245.

Gough, John J., Heaton, Ky. Auxiliary air-supply for internal-combustion engines. No. 1,312,975; Aug. 12; v. 265; p. 245.

Gouinlock, Walter F., Toronto, Ontario, Canada. Greenhouse. No. 1,313,811; Aug. 19; v. 265; p. 420.

Gow, Colin C., London, England. Maximum-demand controller and load-indicator for electric-power installations. No. 1,314,471; Aug. 26; v. 265; p. 580.

Graf, Max, New York, N. Y. Coal-hole cover. No. 1,312,305; Aug. 5; v. 265; p. 101.

Graham, Archie H. (See Anderson and Graham.)

Graham, Charles W., Allendale, N. J., assignor to American Can Company, New York, N. Y. Can-end and gasket assembling machine. (Reissue.) No. 1,314,708; Aug. 19; v. 265; p. 431.

Graham, Charles W., Allendale, N. J., assignor to American Can Company, New York, N. Y. Applying gaskets or ring-liners. (Reissue.) No. 1,314,709; Aug. 19; v. 265; p. 432.

Graham Copy-Holder Company, The. (See Graham, Elmer, assignor.)

Graham, Elmer, assignor to The Graham Copy-Holder Company, Wray, Colo. Copy-holder. No. 1,313,812; Aug. 19; v. 265; p. 420.

Graham, Henry W. B., deceased; M. Graham, executrix; said inventor assignor to The Arnold-Croager Company, New London, Ohio. Brick-mold. No. 1,314,057; Aug. 26; v. 265; p. 500.

Graham, Margaret, executrix. (See Graham, Henry W. B.)

Granger, Danus D., New London, Ohio. Rubber heel. No. 1,314,393; Aug. 26; v. 265; p. 565.

Granitz, William, Kewanee, Wis. Can body and top. No. 1,312,626; Aug. 12; v. 265; p. 177.

Grant, Charles H., New York, N. Y. Toy aeroplane. No. 1,313,290; Aug. 19; v. 265; p. 322.

Grant, Melville M., Alliance, Ohio. Draft device for furnaces. No. 1,312,319; Aug. 5; v. 265; p. 86.

Grantham, E. L., et al. (See Waller, Gen F., assignor.)

Graphoscope Company. (See White, Joseph R., assignor.)

Grass, Ernest, assignor to Eastman Kodak Company, Rochester, N. Y. Etching. No. 1,313,233; Aug. 12; v. 265; p. 296.

Gratieux, Fernand. (See Harriot and Gratieux.)

Gravell, James H., Brooklyn, N. Y., assignor to Thomson Spot Welder Company, Boston, Mass. Electric welding. No. 1,312,344; Aug. 12; v. 265; p. 219.

Gravell, James H., Philadelphia, Pa., assignor to Thomson Spot Welder Company, Boston, Mass. Electric welding-machine. No. 1,312,345; Aug. 12; v. 265; p. 219.

Gray, Charles B., Knoxville, Tenn. Machine for cutting sheet-form material. No. 1,313,481; Aug. 19; v. 265; p. 358.

Gray, Harry M., Los Angeles, Calif. Reusing previously-used soapuds. No. 1,312,477; Aug. 5; v. 265; p. 117.

Gray, John G. (See Gray, John and J. G.)

Gray, James H., New York, N. Y. Electric furnace. No. 1,313,890; Aug. 26; v. 265; p. 468.

Gray, John, London, England, and J. G. Gray, Glasgow, Scotland. Gyrostatic apparatus. No. 1,313,532; Aug. 19; v. 265; p. 365.

Gray National Teletograph Company. (See Tiffany, George S., assignor.)

Gray, William B., Louisville, Ky. Conduit. No. 1,313,179; Aug. 12; v. 265; p. 285.

Green, Charles L., San Bernardino, Calif. Tractor-drive. No. 1,314,077; Aug. 26; v. 265; p. 504.

Greenbaum, Alexander L. (See Ford, Richardson, Greenbaum, and Priest.)

Greene, Holdridge G., assignor to Triumph Trap Co., Oneida, N. Y. Spring trap. No. 1,312,690; Aug. 12; v. 265; p. 189.

Greene, John A., Atascadero, Calif. Combined anidrona, radiator, and ventilator. No. 1,313,985; Aug. 12; v. 265; p. 297.

Greenlee, Warren R., Pasadena, Calif. Well equipment. No. 1,312,442; Aug. 5; v. 265; p. 111.

Greenstreet, Milfred L., assignor to Hoker Manufacturing Company, Maplewood, Mo. Hoisting toy. No. 1,312,171; Aug. 5; v. 265; p. 99.

Greenwalt, Leonard, Antioch, Neb. Gun-sight. No. 1,311,983; Aug. 5; v. 265; p. 21.

Greenwood, Harold C., Putney, London, England. Synthetic production of ammonia. No. 1,312,534; Aug. 12; v. 265; p. 158.

Grezer, August W., Meriden, Conn., and T. H. French, assignors, by means assignments, to The Mantle Lamp Company of America, Chicago, Ill. Lamp burner. No. 1,312,478; Aug. 5; v. 265; p. 118.

Greiner, Henry, Bridgeport, Conn. Sugar-dispensing device. No. 1,312,329; Aug. 5; v. 265; p. 87.

Greene, Charles W., assignor, by means assignments, to The Standard Parts Company, Cleveland, Ohio. Transversely split demountable rim. No. 1,312,535; Aug. 12; v. 265; p. 158.

Greyer, Joseph F., New York, N. Y. Printing and marking apparatus. No. 1,312,321; Aug. 5; v. 265; p. 87.

Grier, John M., Salt Lake City, Utah. Ornamental-curling-setting apparatus. No. 1,314,325; Aug. 26; v. 265; p. 552.

Griesche, Gustav, Berkeley, Calif. Flashing device for drums. No. 1,314,261; Aug. 26; v. 265; p. 540.

Grieshaber, Hugo E., Groton, Conn., assignor to Electric Boat Company. Spray-shield for submarine boats. No. 1,314,058; Aug. 26; v. 265; p. 501.

Grieshaber, Hugo E., Groton, Conn., assignor to Electric Boat Company. Spray-shield for submarine boats. No. 1,314,059; Aug. 26; v. 265; p. 501.

Griffith, A. J. (See Griffith, Jacob K., assignor.)

Griffith, Jacob K., assignor to A. J. Griffith, Pittston, Pa. Art of casting. No. 1,313,593; Aug. 19; v. 265; p. 379.

Griggs, Anthony, Worcester, Mass. Railway-switch. No. 1,314,262; Aug. 26; v. 265; p. 540.

Griller, Ernest M. (See Neuberth and Griller.)

Grimes, William B., Opp, Ala. Plov. No. 1,314,394; Aug. 26; v. 265; p. 599.

Grine, Harry A., Collinsville, Okla., assignor to Gas Power Machinery Company, Los Angeles, Calif. Making producer-gas. No. 1,313,180; Aug. 12; v. 265; p. 285.

Groch, Frank, Cobalt, Ontario, Canada. Apparatus for recovering pulp fibers, &c., from liquids containing them. No. 1,312,970; Aug. 12; v. 265; p. 245.

Groff, Howard M., Frankford, Pa. Mechanical time-fuse. No. 1,312,112; Aug. 5; v. 265; p. 49.

Grob, John, Chicago, Ill. Pipe-cleaning machine. No. 1,313,550; Aug. 19; v. 265; p. 427.

Gross, Daniel N., South Fort Smith, Ark. Gas heating stove. No. 1,313,813; Aug. 19; v. 265; p. 420.

Grosvener, William M., Ridgewood, N. J., assignor to Perkins Gine Company. Adhesive. No. 1,311,004; Aug. 5; v. 265; p. 21.

Grosvener, William M., New York, N. Y., assignor to Perkins Gine Company. Vegetable glue and making the same. No. 1,311,963; Aug. 5; v. 265; p. 21.

Groszold, Frederick E., Eau Claire, Wis. Coal-chute. No. 1,312,498; Aug. 5; v. 265; p. 121.

Grove, E. W. (See Carrier, Albert H., assignor.)

Grover, George, assignor of one-half to F. W. Buchholz, South Norwalk, Conn. Cooking basket. No. 1,312,075; Aug. 5; v. 265; p. 42.

Grube, John H., assignor to Airsafe Inner Tire Company, Los Angeles, Calif. Tire-liner mold. No. 1,312,027; Aug. 12; v. 265; p. 177.

Grubman, Benjamin. (See Goodman and Grubman.)

Gruettler, John R. (See Loew and Gruettler.)

Gruettler, John R., assignor to The Loew Manufacturing Company, Cleveland, Ohio. Bottle-cleaning apparatus. No. 1,313,814; Aug. 19; v. 265; p. 420.

Grumbos, John, et al. (See Santacroce, Agostino, assignor.)

Grundmann, William, St. Louis, Mo. Patella-split. No. 1,313,181; Aug. 12; v. 265; p. 285.

Grunnet, Martin, assignor of one-half to H. Sells, Chicago, Ill. Switch-lock. No. 1,312,977; Aug. 12; v. 265; p. 245.

Grush, Charles E. (See Russell and Grush.)

Guardian Saving & Trust Company, The, trustee. (See Cunningham, William P., assignor.)

Guettler, Herbert. (See Hussey, William J., assignor.)

Gulliaume, Charles E., Sèvres, France. Compensating balance-spring for chronometers and watches. No. 1,313,291; Aug. 19; v. 265; p. 322.

Gulf Refining Company. (See Miller, Albert E., assignor.)

Gunn, Charles H., Emeryville, Calif. Sectional casing for pneumatic tires. No. 1,312,978; Aug. 12; v. 265; p. 246.

Gustafson, Adolph P., assignor to M. Schulz Company, Chicago, Ill. Tracking device for automatic musical instruments. No. 1,313,226; Aug. 12; v. 265; p. 294.

Gustafson, George E. (See Barton, George, assignor.)

Gyde, Alfred M., Bridgeport, Conn. Lathe-chuck. No. 1,312,028; Aug. 12; v. 265; p. 177.

H. A. Weymann and Son. (See Weymann, Harry W., assignor.)

H. B. Smith Company, The. (See Reed, Richard D., assignor.)

H. B. Wiggin's Sons Company. (See Wiggin, Rollin H., assignor.)

H. C. Fry Glass Company. (See Scholes, Samuel R., assignor.)

H. W. Butterworth & Sons Company. (See Barton, George, assignor.)

Haberland, Oscar F., Philadelphia, Pa. Upsetting explosive toy. No. 1,311,887; Aug. 5; v. 265; p. 7.

Hachmann, Frederick, assignor of fifty-one one-hundredths to H. C. Stifel, St. Louis, Mo. Container. No. 1,312,029; Aug. 12; v. 265; p. 178.

Hackett, Charles W., Atlanta, Ga., assignor of one-half to F. D. Hackett, North Wilkesboro, N. C. Combination tie-plate and rail-brace. No. 1,312,905; Aug. 12; v. 265; p. 231.

Hackett, Frank D. (See Hackett, Charles W., assignor.)

Haentjens, Otto, Hazelton, Pa. Centrifugal pump. No. 1,312,970; Aug. 12; v. 265; p. 246.

Hagen, Albert O., assignor of one-half to C. Bennett, Detroit, Mich. Stabilizer for airplanes. No. 1,314,395; Aug. 26; v. 265; p. 599.

Hagerstrom, John A., Scranton, Pa., assignor to Victor Typewriter Company, New York, N. Y. Type-writer ribbon-spool and mount therefor. No. 1,313,931; Aug. 19; v. 265; p. 380.

Hagerstrom, John A., assignor to Technical Supply Company, Scranton, Pa. Disappearing edge strip for drafting-tables and the like. No. 1,314,060; Aug. 26; v. 265; p. 501.

Hagg, Erik L. (See Westad and Hagg.)

Hahn, John H., Sank City, Wis. Counter display case and cabinet. No. 1,313,865; Aug. 19; v. 265; p. 430.

Hais, Hugo, assignor to The Morgan Engineering Company, Alliance, Ohio. Hydraulic intensifier. No. 1,312,322; Aug. 5; v. 265; p. 87.

Haldeman, Frederick, Portland, Ore. Heating apparatus. No. 1,314,390; Aug. 26; v. 265; p. 599.

Hale & Kilburn Corporation. (See Lambert, Albert L., assignor.)

Hale & Kilburn Corporation. (See Ruchlmann, Louis E., assignor.)

Hall, Gustave A., Tarbes, France. Wick-holder. No. 1,312,536; Aug. 12; v. 265; p. 158.

Hall, Chester L., Fort Wayne, Ind., assignor to General Electric Company. Charging system for storage batteries. No. 1,312,960; Aug. 12; v. 265; p. 248.

Hall, Everett E. (See Merrill and Hall.)

Hall, Henry L., and C. A. Sharp, Crickwood, England. Building and fitting of same for the application of finishes to surfaces. No. 1,313,376; Aug. 19; v. 265; p. 338.

Hall, Holmes, et al. (See My, Harry E., assignor.)

Hall, William L. (See Smith, Louis, assignor.)

Hallowell, Howard T., Philadelphia, Pa. Metal bench structure. No. 1,313,182; Aug. 12; v. 265; p. 285.

Halsey, Edward S., Yonkers, N. Y. Individual thermo-static control for radiators. No. 1,312,113; Aug. 5; v. 265; p. 49.

Hambek, Frank M., Lidgerwood, N. D. Change-speed gearing. No. 1,312,981; Aug. 12; v. 265; p. 246.

Hamblin & Russell Manufacturing Company. (See Ryerson, Eugene H., assignor.)

Hamel, Albert H. (See Shepherd, Arthur W., assignor.)

Hamel Shoe Machinery Company. (See Scarlett and Adams, assignors.)

Hamilton, Harry G. (See Medley, Harry L., assignor.)

Hamilton, John M., and P. A. Buoy, Los Angeles, Calif. Roller-bearing spring-insert. No. 1,313,183; Aug. 12; v. 265; p. 286.

Hamilton, John R., Yonkers, assignor to Sypho-Chemical Sprinkler Corporation, Croton-on-Hudson, N. Y. Automatic fire-extinguishing apparatus. No. 1,313,292; Aug. 19; v. 265; p. 322.

Hamlin, Allen L. (See Rose and Hamlin.)

Hamlin, Ben M., assignor to J. V. Meyerling Trunk Company, Chicago, Ill. Hatbox for trunks. No. 1,313,223; Aug. 12; v. 265; p. 294.

Hamm, William S., Hubbard Woods, Ill., assignor to The Adams & Westlake Co. Lamp-chimney holder. No. 1,311,888; Aug. 5; v. 265; p. 7.

Hammerschmidt, Louis M., trustee. (See Wescott, Dana E., assignor.)

Hammond, John H., Jr., Gloucester, Mass. Electric-wave-relaying system. No. 1,313,860; Aug. 19; v. 265; p. 429.

Hampsher, Wallace S., Chicago, Ill. Curtain-distucc. No. 1,313,237; Aug. 12; v. 265; p. 296.

Hampson, John J., London, England. Machine for filling or loading fabrics. No. 1,313,686; Aug. 19; v. 265; p. 396.

Hand, Emilie. (See Rushton and Hand.)

Handley, Samuel E., Chicago, Ill. Machinist's testing device. No. 1,313,080; Aug. 12; v. 265; p. 267.

Hanlon, John H., Somerville, Mass. Drifting-valve for locomotives. No. 1,312,906; Aug. 12; v. 265; p. 231.

Hanna, David H. (See White and Hanna.)

Hanna Engineering Works. (See Krause, William P., assignor.)

Hannab, Mary H., Chicago, Ill. Means for fastening rugs on carpets. No. 1,312,323; Aug. 5; v. 265; p. 87.

Hannon, Joseph J., Maynard, Mass. Milk-bottle container. No. 1,311,066; Aug. 5; v. 265; p. 21.

Hanovia Chemical & Manufacturing Company. (See Quimby and Robinson, assignors.)

Hanriot, René, Neuilly-sur-Seine, and F. Gratieux, Paris, assignors to Societe R. Hanriot et Cie., Billancourt, France. Aeroplane. No. 1,311,967; Aug. 5; v. 265; p. 21.

Hanriot, René, Neuilly-sur-Seine, and F. Gratieux, Paris, assignors to Societe R. Hanriot et Cie., Billancourt, France. Aeroplane. No. 1,311,968; Aug. 5; v. 265; p. 22.

Hansen, Elgil A., Frederiksberg, near Copenhagen, Denmark. Low-water-alarm apparatus for steam-boilers. No. 1,312,175; Aug. 5; v. 265; p. 61.

Hansen-Ellehammer, Jacob C., Copenhagen, Denmark. Steam-engine. No. 1,313,278; Aug. 19; v. 265; p. 320.

Hansen, Jens P., Copenhagen, Denmark. Combined printing, enlarging, and diminishing apparatus for photographic use. No. 1,313,815; Aug. 19; v. 265; p. 421.

Hansen, Rose C., Philadelphia, Pa. Latch-key carrier. No. 1,313,851; Aug. 19; v. 265; p. 427.

Hanson, Lewis, assignor to Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ontario, Canada. Casement-window stay. No. 1,312,727; Aug. 12; v. 265; p. 196.

Hard, Merrill W., assignor, by means assignments, to Copeman Development Company, Flint, Mich. Shank and handle. No. 1,314,078; Aug. 26; v. 265; p. 504.

Hardin, Andrew J., Chattahoochee, Fla. Insect-trap. No. 1,313,986; Aug. 26; v. 265; p. 487.

Harding, Charles E., assignor of one-third to H. B. Lane, Sioux Falls, S. D. Transmission-gear lock. No. 1,312,728; Aug. 12; v. 265; p. 196.

Hardinge Brothers. (See Hardinge, Franklin, assignor.)

Hardinge, Franklin, Oak Park, assignor to Hardinge Brothers, Chicago, Ill. Counter-shaft. No. 1,311,060; Aug. 5; v. 265; p. 22.

Harkom, John W., Melbourne, Quebec, Canada. Sight for firearms and the like. No. 1,314,472; Aug. 26; v. 265; p. 590.

Harman, Arthur C., Delta, Iowa. Farm-gate latch. No. 1,312,479; Aug. 5; v. 265; p. 118.

Harmony, John M., Des Arc, Ark. Belt-hook. No. 1,313,818; Aug. 19; v. 265; p. 421.

Harper, Charles W., Spring Valley, N. Y. Spoon-holding clip. No. 1,312,396; Aug. 5; v. 265; p. 159.

Harpman, Charles A., Youngstown, Ohio. Direction-indicator for vehicles. No. 1,312,537; Aug. 12; v. 265; p. 159.

Harriman, David R., Jr. (See Redmond, Harriman, and Richardson.)

Harris Automatic Press Company, The. (See Harrold, Charles W., assignor.)

Harris, Henry K., Westminster, London, England. Advertising device. No. 1,313,816; Aug. 19; v. 265; p. 421.

Harris, Henry K., London, England. Advertising device. No. 1,313,817; Aug. 19; v. 265; p. 421.

Harris, John J. B., Broadheath, England, assignor, by means assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Stereotype's matrix and vertical mold for casting stereotype-plates from it. No. 1,313,632; Aug. 19; v. 265; p. 387.

Harris, Mark, New York, N. Y. Combination letter-sheet and envelope. No. 1,313,298; Aug. 19; v. 265; p. 323.

Harris, Robert L., and G. H. Smith, Jacksonville, Fla. Railway-crossing signal. No. 1,311,970; Aug. 5; v. 265; p. 22.

Harris, William A., Greenville, S. C. Low-pressure alarm for pneumatic tubes. No. 1,313,533; Aug. 19; v. 265; p. 368.

Harrison, Edith. (See Moody and Harrison.)

Harrison, Herbert C., Lockport, N. Y. Radiator construction. No. 1,314,263; Aug. 26; v. 265; p. 540.

Harrison, Nathan C., Newtonville, Mass. Abrasive material and making same. No. 1,314,061; Aug. 26; v. 265; p. 501.

Harrison Safety Boiler Works. (See Anderson, Peter M., assignor.)

Harrison Safety Boiler Works. (See Gamble, Joseph W., assignor.)

Harrison, Victor B., Toronto, Ontario, Canada. Sharpening device. No. 1,312,838; Aug. 12; v. 265; p. 159.

Harrold, Charles W., Warren, assignor to The Harris Automatic Press Company, Niles, Ohio. Sheet-feeder. No. 1,312,539; Aug. 12; v. 265; p. 159.

Harrold, Charles W., Warren, assignor to The Harris Automatic Press Company, Niles, Ohio. Sheet-feeder. No. 1,312,540; Aug. 12; v. 265; p. 159.

Hart, Clarence B. (See Hluek, Henry M., assignor.)

Hart, Edwin J., Philadelphia, Pa. Automatic stoker. No. 1,312,397; Aug. 5; v. 265; p. 101.

Hart & Hegeman Manufacturing Company, The. (See Vossler, Henry, assignor.)

Hart & Hegeman Manufacturing Company, The. (See Stirling, Clarence C., assignor.)

Hartshorn, Louis G., New York, N. Y. Petcock-wrench. No. 1,311,889; Aug. 5; v. 265; p. 7.

Hartford Machine Gun Company, The. (See Reising, Eugene G., assignor.)

Hartshorne, Percy H. (See Wilks and Hartshorne.)

Hartshorne, William D., Methuen, Mass., assignor to The Textet Corporation, Lawrence, Mass. Textile art. No. 1,313,594; Aug. 19; v. 265; p. 380.

Hartsock, Sherman C., assignor to D. M. Sechler Implement & Carriage Company, Moline, Ill. Fertilizer-distributor. No. 1,313,595; Aug. 19; v. 265; p. 380.

Hartwell, Ernest F., assignor to Fruehauf Trailer Company, Detroit, Mich. Supporting-jack. No. 1,313,087; Aug. 12; v. 265; p. 267.

Harvey, Louis R., Stockton, Calif. Tractor. No. 1,312,982; Aug. 12; v. 265; p. 244.

Harvey, Richard S., Washington, D. C. Projectile. No. 1,312,114; Aug. 5; v. 265; p. 49.

Haskins, Butler J., assignor of three-fourths to A. Josephson, R. Finkelstein, Kansas City, Mo., and A. H. Rablin, Chicago, Ill. Electrical block train-stopping and signal-setting system. No. 1,312,249; Aug. 5; v. 265; p. 74.

Hassel, Nels H., Pasadena, Calif. Menu-holder. No. 1,313,377; Aug. 19; v. 265; p. 338.

Haswell, John C. (See Brien, James T., assignor.)

Hathaway, Edgar F., and C. Lea, Boston, Mass., assignors to American Warp Drawing Machine Company, Textile-machine. No. 1,313,294; Aug. 19; v. 265; p. 323.

Hathaway, Joseph D., Montreal, Quebec, Canada. Cover for fuses of projectiles. No. 1,313,988; Aug. 12; v. 265; p. 267.

Hatmaker, William T., Dayton, Ohio. Gasoline-dispensing pump. (Reissue.) No. 1,314,702; Aug. 5; v. 265; p. 123.

Hau, Wallace F., Meadville, Pa. Locomotive-grate. No. 1,312,631; Aug. 5; v. 265; p. 34.

Hausser, Gustav W., Jackson, Tenn. Awl-arm. No. 1,312,845; Aug. 12; v. 265; p. 219.

Havens, Neil F., Alexandria, Va. Hoisting mechanism. No. 1,312,115; Aug. 5; v. 265; p. 50.

Hawes, Robert W., Brunswick, Ga. Scaffold. No. 1,312,298; Aug. 5; v. 265; p. 102.

Hawkins, Owen, Globe, Ariz. Ore-separator. No. 1,312,324; Aug. 5; v. 265; p. 67.

Hayden, Clyde C., Okmulgee, Okla. Pulley. No. 1,314,100; Aug. 26; v. 265; p. 529.

Hayden, Henry A., assignor to Hayden Inventions Corporation, Westfield, N. J. Cleaning implement. No. 1,313,184; Aug. 12; v. 265; p. 286.

Hayden, Henry A., assignor to Hayden Inventions Corporation, Westfield, N. J. Brush. No. 1,313,185; Aug. 12; v. 265; p. 286.

Hayden Inventions Corporation. (See Hayden, Henry A., assignor.)

Hayes, Stanley W., Richmond, Ind. Switch-stand. No. 1,312,691; Aug. 12; v. 265; p. 189.

Hayes, Stanley W., Richmond, Ind. Connection for track appliances. No. 1,314,002; Aug. 26; v. 265; p. 501.

Hayhurst, Walter, Woodlands Aerclinton, England. Vessel for containing acids and other liquids. No. 1,313,810; Aug. 19; v. 265; p. 421.

Healey, Patrick J., Jersey City, N. J. Sewer-cleaning device. No. 1,313,378; Aug. 19; v. 265; p. 338.

Hehn, John E. (See Reynolds and Hehn.)

Hechtelkner, Ingenuit, assignor to Chemical Construction Company, Charlotte, N. C. Making phosphoric acid. No. 1,313,379; Aug. 19; v. 265; p. 339.

Hecht, Joseph L., assignor to French & Hecht, Davenport, Iowa. Traction-wheel. No. 1,312,176; Aug. 5; v. 265; p. 61.

Heck, Charles M., Raleigh, N. C. Incubator. No. 1,314,473; Aug. 26; v. 265; p. 580.

Heeren, Reinhard L., Brooklyn, N. Y. Detachable reversible ruff. No. 1,314,326; Aug. 26; v. 265; p. 552.

Heffron, Isaac, Galveston, Tex. Cargo-sling. No. 1,314,397; Aug. 26; v. 265; p. 666.

Hegardt, Axel E., Philadelphia, Pa. Flexible rule. No. 1,313,482; Aug. 19; v. 265; p. 358.

Heldman, George, et al. (See Blood, Burr B., assignor.)

Heiligenstein, Gus, Altamont, Ill. Railway-crossing signal. No. 1,312,630; Aug. 12; v. 265; p. 178.
 Heitrichs, Cleveland J., assignor of one-half to F. W. Arnold, St. Louis, Mo. Lock for motor-vehicles and the like. No. 1,313,891; Aug. 26; v. 265; p. 468.
 Helms, Otto, C. M. Wild, Southwick, and W. E. Schwarzmans, Springfield, Mass., assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Electrical condenser and mounting therefor. No. 1,312,983; Aug. 12; v. 265; p. 247.
 Helmsing, Raymond A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. High-frequency-carrier telephony. No. 1,313,483; Aug. 19; v. 265; p. 358.
 Heltman, Ernest, West Hoboken, N. J. Washline-support. No. 1,312,541; Aug. 12; v. 265; p. 159.
 Heller, Henry, Winona, Minn. Anti-kid device. No. 1,312,729; Aug. 12; v. 265; p. 196.
 Hellmuth, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,312,755; Aug. 12; v. 265; p. 207.
 Hellmuth, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,312,756; Aug. 12; v. 265; p. 208.
 Hellstrom, Frank O., Bismarck, N. D. Building-block mold. No. 1,312,631; Aug. 12; v. 265; p. 178.
 Hellweg, Henry, assignor of one-half to L. Schlesinger, Milwaukee, Wis. Trunk-fastening. No. 1,313,087; Aug. 19; v. 265; p. 396.
 Helm, Clyde D., assignor to Oil Mill Machinery & Manufacturing Co., Fort Worth, Tex. Saw-gummer. No. 1,313,238; Aug. 12; v. 265; p. 297.
 Helm, John, St. Louis, Mo. Evaporator. No. 1,311,990; Aug. 5; v. 265; p. 7.
 Hemp, Joseph L., St. Louis, Mo. Storepipe. No. 1,313,633; Aug. 19; v. 265; p. 357.
 Hemphill, Eli M., assignor of one-half to G. W. McCracken, Moundsville, W. Va. Valve-cage-lifting tool. No. 1,314,264; Aug. 26; v. 265; p. 541.
 Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor-controller. No. 1,313,688; Aug. 19; v. 265; p. 396.
 Henderson, John, Chicago, Ill. Fuselage. No. 1,313,689; Aug. 19; v. 265; p. 397.
 Hendrick, Charles, New York, N. Y. Hand-loom. No. 1,313,594; Aug. 19; v. 265; p. 380.
 Hendrickson, William A., assignor to McWhorter Manufacturing Company, Riverton, N. J. Potato-picker mechanism for potato-planters. No. 1,312,984; Aug. 12; v. 265; p. 247.
 Hendrickson, William A., assignor to McWhorter Manufacturing Company, Riverton, N. J. Potato-picker mechanism for potato-planters. No. 1,314,393; Aug. 26; v. 265; p. 566.
 Hendron, James J., Chicopee Falls, Mass. Game apparatus. No. 1,313,484; Aug. 19; v. 265; p. 358.
 Hengst, Lewis O., Oakmont, Pa. Forming-tool. No. 1,313,380; Aug. 19; v. 265; p. 339.
 Henry T. Adams Mfg. Co. (See Adams, Henry T., assignor.)
 Henry, Virginia H., Montgomery, Ala. Dropping-stopper for medicine-bottles. No. 1,313,087; Aug. 26; v. 265; p. 488.
 Hepler, Irvin F., Narberth, Pa., assignor to General Refractories Company, New York, N. Y. Measuring and mixing apparatus. No. 1,313,892; Aug. 26; v. 265; p. 468.
 Herbert, Albert H., et al. (See Connor and Miles, assignors.)
 Herbst, William R., Columbus, Ind. Screen for inclosed-automobile bottles. No. 1,312,542; Aug. 12; v. 265; p. 159.
 Hercules Powder Company. (See Finch, Leon S., assignor.)
 Herndon, S. L. (See Evans, Paul, assignor.)
 Herr, Herbert T., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Geared-turbine installation. No. 1,312,907; Aug. 12; v. 265; p. 231.
 Herrenbrunck, Herman, and F. Andreas, assignors to Bridge & Beach Mfg. Co., St. Louis, Mo. Stove-door. No. 1,311,891; Aug. 5; v. 265; p. 8.
 Herrman, Edmund. (See Frankeel and Herrman.)
 Hesse, Frederick C., Waltham, Mass. Timer-casing. No. 1,312,985; Aug. 12; v. 265; p. 247.
 Hershey, Grant W., assignor of one-half to O. V. Burkett, Fremont, Ohio. Starting-crank lock. No. 1,313,485; Aug. 19; v. 265; p. 358.
 Hershey, Harry E. (See Vanochowski and Hershey.)
 Hess, Francis E., Blackwell, Okla. Straw-toothpick-making machine. No. 1,313,820; Aug. 19; v. 265; p. 422.
 Hess, Maximilian, assignor of one-half to F. A. Leatherman, Nashville, Tenn. Pipe-organ. No. 1,314,327; Aug. 26; v. 265; p. 552.
 Hess, Wendell, Jr., assignor to W. & L. E. Gurley, Troy, N. Y. Sender for water-stage recorders. No. 1,313,690; Aug. 19; v. 265; p. 397.
 Hess, William A., Perry, Okla. Post-mold. No. 1,313,893; Aug. 26; v. 265; p. 469.
 Heuberg, Harry H., Sheldahl, Iowa. Wire-splicing tool. No. 1,314,079; Aug. 26; v. 265; p. 505.
 Hey, Edmund A., La Grange, Ill., assignor to The Williams Sealing Corporation, Waterbury, Conn. Filling device for bottle-capping machines. No. 1,311,992; Aug. 5; v. 265; p. 8.

Heyermans, Charles L., assignor of one-half to C. H. A. Elye, London, England. Steering mechanism for motor-vehicles. No. 1,312,909; Aug. 12; v. 265; p. 231.
 Heyl & Paterson, Inc. (See Paterson and Bickley, assignors.)
 Hiller, George A., East Rochester, assignor to K. Gleason, Pittsford, N. Y. Draft-bar. No. 1,313,381; Aug. 19; v. 265; p. 339.
 Heywood, Fannie B., administratrix. (See Heywood, Henry H.)
 Heywood, Henry H., deceased; F. H. Heywood, administratrix, Atlanta, Ga. Device for climbing steel columns. No. 1,312,309; Aug. 5; v. 265; p. 102.
 Heya, John J., Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Last. No. 1,312,543; Aug. 12; v. 265; p. 160.
 Hickey, John F., assignor of thirty per cent. to T. I. Hickey and thirty per cent. to L. W. Burbans, Port Henry, N. Y. Isolating-bucket. No. 1,314,328; Aug. 26; v. 265; p. 553.
 Hickey, Thomas L., et al. (See Hickey, John F., assignor.)
 Hickingbottom, William, Toronto, Ontario, Canada. Composition of matter for preventing static electrical effects in printing. No. 1,314,191; Aug. 26; v. 265; p. 526.
 Hicks, Richard W., Bronxville, assignor to Benson & Hedges, Inc., New York, N. Y. Container. No. 1,314,395; Aug. 26; v. 265; p. 567.
 Hidden, Charles H., assignor to Nitrogen Products Company, Providence, R. I. Hydrolysing cyanid to ammonia. No. 1,312,110; Aug. 5; v. 265; p. 50.
 Higgsell, Frederick, New York, N. Y. Burette. No. 1,314,265; Aug. 26; v. 265; p. 541.
 Hill, Earl V., Chicago, Ill. Ventilator for cars. No. 1,312,177; Aug. 5; v. 265; p. 61.
 Hill, Harriet, New York, N. Y., assignor to Paper Utilties Corporation. Paper-vessel-making machinery. No. 1,314,192; Aug. 26; v. 265; p. 526.
 Hill, Howard H., assignor of one-half to M. Maybury, Montreal, N. J. Brush-suspending device. No. 1,312,178; Aug. 5; v. 265; p. 61.
 Hill, Joe H., assignor of one-third to J. S. Inlow, Oklahoma, Okla. Lock for automobiles. No. 1,314,329; Aug. 26; v. 265; p. 553.
 Hiller, George A., East Rochester, assignor to K. Gleason, Pittsford, N. Y. Draft-gear for trailers. No. 1,313,382; Aug. 19; v. 265; p. 339.
 Hilton, Thomas, Hammersmith, London, England. Bedstead, settee, and the like. No. 1,312,443; Aug. 5; v. 265; p. 111.
 Hiltz, George S., New York, N. Y. Ticking mechanism for printing-telegraph receivers. No. 1,313,295; Aug. 19; v. 265; p. 323.
 Hink, Henry M., assignor to C. H. Hart, Brooklyn, N. Y. Mold for the formation of candle sticks. No. 1,312,325; Aug. 5; v. 265; p. 88.
 Hinkle, Jonathan G. E., Bethany, Mo. Anesthetic-machine. No. 1,312,117; Aug. 5; v. 265; p. 50.
 Hipwood, George, New York, N. Y. Crutch. No. 1,314,193; Aug. 26; v. 265; p. 526.
 Hirst, James, Melrose, Mass., assignor to Charnack Manufacturing Company, Pawtucket, R. I. Warp-delivering means for looms. No. 1,312,847; Aug. 12; v. 265; p. 219.
 Hixson, Calvin D., Hlawatha, Kans. Coop. No. 1,313,601; Aug. 19; v. 265; p. 397.
 Hobart M. Cable Company, The. (See Cooper, Simon, assignor.)
 Hobbs, Robert F., Great Neck, N. Y. Toltet article. (Re-issue.) No. 1,471,010; Aug. 19; v. 265; p. 432.
 Hodges, Edward R., Irvington, assignor to Spilldorf Electrical Company, Newark, N. J. Flow-distributor mechanism. No. 1,311,893; Aug. 5; v. 265; p. 8.
 Hodel, John S. (See Eisenmann, Hodel, and Haler.)
 Hoffman, George E., Pensacola, Fla. Submarine vessel. No. 1,313,534; Aug. 19; v. 265; p. 368.
 Hoffmann, Ignatz, Ford City, Pa. Machine for the manufacture of paper excelsior. No. 1,312,986; Aug. 12; v. 265; p. 247.
 Hofstatter, Ernest W., Nyack, N. Y. Shock-absorber. No. 1,314,266; Aug. 26; v. 265; p. 541.
 Holland, Alfred. (See Struble, Alfred, assignor.)
 Hoke, Harry A., Altoona, Pa. Crosshead wrist-pin for locomotives. No. 1,312,987; Aug. 12; v. 265; p. 247.
 Holmboe, Laurence S., Oklahoma, Okla. Talking-machine. No. 1,312,250; Aug. 5; v. 265; p. 74.
 Holman, Walter W., et al. (See Anderson, Otis W., assignor.)
 Holmes, Harvey L. (See Leese, Thaddeus S., assignor.)
 Holt, Harold E. S., Farnborough, England. Aerial illuminating device. No. 1,312,499; Aug. 5; v. 265; p. 121.
 Holton, F. E., et al., trustees. (See Chalmers, Charles H., assignor.)
 Holtzman, George H., assignor of one-fourth to J. J. Bolger, Wichita, Kans. Automobile-door handle. No. 1,314,490; Aug. 26; v. 265; p. 597.
 Homan, F. J. (See Dougherty, Charles, assignor.)
 Honhorst, William C., Newport, Ky. Steel alloy. No. 1,313,894; Aug. 26; v. 265; p. 469.
 Hoover, David B., Pottstown, Pa. Screen for stone, slag, or the like. No. 1,314,194; Aug. 26; v. 265; p. 526.
 Hopkins, Arthur C., assignor to Mid-West Manufacturing Company, Minneapolis, Minn. Commutator. No. 1,311,894; Aug. 5; v. 265; p. 8.

Hopkins, Charles E., New York, N. Y. Stereotype-metal conveyor. No. 1,313,895; Aug. 26; v. 265; p. 469.
 Hopkins, Frank H., Somerville, assignor to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Intermittent-grip device. No. 1,312,187; Aug. 12; v. 265; p. 208.
 Hopkins, William A. (See Stebbins and Hopkins.)
 Hopkinson, Ernest, New York, N. Y. Tire-making and apparatus therefor. No. 1,312,505; Aug. 5; v. 265; p. 123.
 Horluchi, Hirotsuke, Taiwan, Japan. Vertical cylindrical water-tube boiler. No. 1,313,692; Aug. 19; v. 265; p. 397.
 Horn, Lloyd R., Little Rock, Ark. Engine-valve. No. 1,312,730; Aug. 12; v. 265; p. 196.
 Hornung, John C., Chicago, Ill. Motion-transmitting apparatus. No. 1,312,692; Aug. 12; v. 265; p. 189.
 Horr, John V. (See Hipich and Horr.)
 Horsley, Sherman, Richmond, Mo. Lamp. No. 1,312,731; Aug. 12; v. 265; p. 196.
 Horsch, Annie M., administratrix. (See Horsch, Walter E.)
 Horsch, Walter E., deceased; A. M. Horsch, administratrix; assignor to The Measuregraph Company, St. Louis, Mo. Counter attachment. No. 1,312,693; Aug. 12; v. 265; p. 189.
 Hosea, Luzena, Indianapolis, Ind. Athletic belt. No. 1,312,400; Aug. 5; v. 265; p. 102.
 Hosken, William H., Warland, Mont. Slaughtering apparatus. No. 1,313,583; Aug. 19; v. 265; p. 339.
 Hough, Arthur, New York, N. Y. Condenser. No. 1,312,118; Aug. 5; v. 265; p. 50.
 Hough, Arthur, New York, N. Y. Apparatus for nitration of organic liquids. No. 1,312,119; Aug. 5; v. 265; p. 50.
 House Hardware Company. (See House, Thomas M., assignor.)
 House, Henry A., Jr., assignor to Wire Wheel Corporation of America, Buffalo, N. Y. Wheel. No. 1,313,988; Aug. 26; v. 265; p. 488.
 House, Thomas M., Richmond, assignor to Seward Trunk and Bag Company, Petersburg, Va. Drawer-lock. No. 1,312,022; Aug. 5; v. 265; p. 34.
 House, Thomas M., assignor to House Hardware Company, Richmond, Va. Paper-roll holder. No. 1,314,267; Aug. 26; v. 265; p. 541.
 Howard, Wallace E., Chicago, Ill. Automobile-inclosure. No. 1,313,186; Aug. 12; v. 265; p. 286.
 Howe, Olaf L., Missoula, Mont. Water-motor. No. 1,312,320; Aug. 5; v. 265; p. 88.
 Hubbell, Isaac, Peoria, Ill. Mining-bit. No. 1,312,732; Aug. 12; v. 265; p. 197.
 Huber, William E., East Cleveland, assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Apparatus for bonding rails and the like. No. 1,312,401; Aug. 5; v. 265; p. 102.
 Hucks, Hentfield C., London, assignor to The Aircraft Manufacturing Company Limited, Westminster, London, England. Means for starting the engines of aeroplanes. No. 1,313,693; Aug. 19; v. 265; p. 397.
 Huerta, Hilario, St. Louis, Mo. Advertising device. No. 1,312,632; Aug. 12; v. 265; p. 178.
 Huggins, Merion J., assignor to Automotive Development Co., Inc., New York, N. Y. Speed-controlling mechanism for automobiles. No. 1,313,535; Aug. 19; v. 265; p. 368.
 Huggins, Merion J., assignor to Automotive Development Co., Inc., New York, N. Y. Speed-controlling mechanism for automobiles. No. 1,314,003; Aug. 26; v. 265; p. 601.
 Huggins, Merion J., assignor to Automotive Development Co., Inc., New York, N. Y. Gear-shifting mechanism for automobiles. No. 1,314,139; Aug. 26; v. 265; p. 516.
 Huggins, Merion J., Bridgeport, Conn., and R. B. Huggins, Middletown, N. Y. Counterboring-tool. No. 1,312,033; Aug. 5; v. 265; p. 34.
 Huggins, Richard R. (See Huggins, Merion J. and R. B.)
 Huhn, Anton. (See Stebbins and Hopkins, assignors.)
 Hult, Sven, Stockholm, Sweden, assignor to Norsk Elektrisk Metallindustri Aktieselskab, Sundløkke, Kongsberg, Norway. Rolling zinc. No. 1,312,480; Aug. 5; v. 265; p. 118.
 Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Method of and means for amplifying electrical variations. No. 1,313,187; Aug. 12; v. 265; p. 287.
 Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Means for producing alternating currents. No. 1,313,188; Aug. 12; v. 265; p. 287.
 Hultberg, Gottfried, Chicago, Ill., assignor to The Barrett Company. Shingle-machine. No. 1,313,224; Aug. 12; v. 265; p. 294.
 Humphrey, Alfred H., New York, N. Y. Gas-store. No. 1,311,895; Aug. 5; v. 265; p. 8.
 Huneke, John, Melrose Park, assignor to Cox Multi-Mailer Co., Chicago, Ill. Stenciling apparatus. No. 1,312,481; Aug. 5; v. 265; p. 118.
 Hunnicutt, James G., Atlanta, Ga. Rail-cleaning device. No. 1,314,330; Aug. 26; v. 265; p. 553.
 Hunt, Helm, Ferris & Co. (See Ferris, Howard J., assignor.)
 Hunt, Jonathan A., Salem, Mass. Needle for sound-reproducing machines. No. 1,312,848; Aug. 12; v. 265; p. 220.
 Hunt, Jonathan A., Salem, Mass. Needle for sound-reproducing machines. No. 1,312,849; Aug. 12; v. 265; p. 220.

Hunt, Mary J. (See Crossley, Noel, assignor.)
 Hutton, William C., Providence, R. I. Collapsible tube. No. 1,313,189; Aug. 12; v. 265; p. 287.
 Hunter, Albert, Vancouver, Wash. Tool-holder. No. 1,313,597; Aug. 19; v. 265; p. 380.
 Hunter, George D., Bloomington, Ind., assignor to Sullivan Machinery Company, Claremont, N. H. Stone-channelling machine. No. 1,313,821; Aug. 19; v. 265; p. 422.
 Hunter, John, Barrow-in-Furness, England. Gas-burner. No. 1,313,694; Aug. 19; v. 265; p. 398.
 Hupp, Incorporated. (See Hupp, Irvin, assignor.)
 Hupp, Irvin, Chicago, Ill., assignor to Hupp, Incorporated. Flexible coupling. No. 1,314,331; Aug. 26; v. 265; p. 553.
 Hurtt, Spencer M., Ridley Park, Pa., assignor to The Mynol Chemical Company. Point for nerve-canals of teeth. No. 1,312,120; Aug. 5; v. 265; p. 51.
 Hussey, William J., Sturgeon Falls, Ontario, Canada, assignor to H. Guettler, Chicago, Ill. Barking apparatus. No. 1,312,033; Aug. 12; v. 265; p. 178.
 Hutchison, Miller R., and C. W. Norton, assignors to Edison Storage Battery Company, West Orange, N. J. Battery-supporting device. No. 1,313,384; Aug. 19; v. 265; p. 339.
 Hyatt Roller Bearing Division, United Motors Corporation. (See Weiss and Koth, assignors.)
 Iams, Abraham M., Gary, Ind. Furnace. No. 1,311,896; Aug. 5; v. 265; p. 8.
 Ihmcke, Charles G., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Tool-holder. No. 1,311,867; Aug. 5; v. 265; p. 9.
 Ile, William, New York, N. Y. Attachment-plug. No. 1,313,089; Aug. 12; v. 265; p. 267.
 Imhoff, Harry G., Waterloo, Iowa. Pneumatic tire. No. 1,312,482; Aug. 5; v. 265; p. 118.
 Indianapolis Manufacturing Company. (See Nordyke, Horace W., assignor.)
 Indianapolis Manufacturing Company. (See Nordyke and Norris, assignors.)
 Industrial Inventions Limited. (See Parry, Frank, assignor.)
 Industrial Research Laboratories, The. (See Gerlach and Libme, assignors.)
 Ingella, James, Muskegon, Mich. Propeller-wheel. No. 1,313,598; Aug. 19; v. 265; p. 380.
 Ingella, James, Muskegon, Mich. Aeroplane propeller and tractor. No. 1,313,599; Aug. 19; v. 265; p. 380.
 Ingersoll-Rand Company. (See Ihmcke, Charles G., assignor.)
 Ingersoll-Rand Company. (See Slater, Fred M., assignor.)
 Ingersoll-Rand Company. (See Smith, William A., assignor.)
 Ingram, Joseph D., Amarillo, Tex. Motor-vehicle. No. 1,312,733; Aug. 12; v. 265; p. 197.
 Inlow, John S. (See Hill, Joe H., assignor.)
 International Conveyor Corporation. (See Stuart, Francis L., assignor.)
 International Cork Company. (See Jackson, William, assignor.)
 International Harvester Company. (See Benjamin, Bert R., assignor.)
 International Harvester Company. (See Burgess, Edward W., assignor.)
 International Harvester Company. (See Lindgren, Alexis C., assignor.)
 International Harvester Company. (See Mowry, Edward, assignor.)
 International Harvester Company. (See Sperry, Herbert R., assignor.)
 Invincible Stopper Company. (See Porter, George A., assignor.)
 Ireland, Ward S., St. Louis, Mo., and W. E. Lippert, Cincinnati, Ohio, assignors to National Shortband Machine Company, St. Louis, Mo. Type-writing machine. No. 1,312,179; Aug. 5; v. 265; p. 62.
 Irach, Jacob, New York, N. Y. Amusement device. No. 1,312,988; Aug. 12; v. 265; p. 248.
 Irwin, Alexander G. and W. G. Windolpe, Manitoba, Canada. Door-latch. No. 1,314,268; Aug. 26; v. 265; p. 541.
 Irwin, John A., assignor to American Pressweld Radiator Corporation, Detroit, Mich. Radiator. No. 1,314,064; Aug. 26; v. 265; p. 502.
 Irwin, William G. (See Irwin, Alexander G. and W. G.)
 Isaman, Richard B., Clarion, Pa. Traveling automobile turn-table. No. 1,313,460; Aug. 19; v. 265; p. 358.
 Isherwood, Harold. (See Pollen and Isherwood.)
 Isko Company, The. (See Tibbitts, Milton, assignor.)
 Ives, George R., West Pike, Ulysses, Pa. Brick-clearing machine. No. 1,312,969; Aug. 12; v. 265; p. 248.
 J. Stone & Company. (See Daker, Alfred H., assignor.)
 J. D. Wallace & Co. (See Wallace, John H., assignor.)
 J. E. Mergott Company, The. (See Fuller, Franz A., assignor.)
 J. H. Day Company, The. (See Allison, Daniel K., assignor.)
 J. V. Meyerling Trunk Company. (See Hamlin, Ben M., assignor.)
 J. W. Crnkshank Engineering Company. (See Crnkshank, James W., assignor.)
 Jubel Burns & Sons. (See Schnuck, Edward F., assignor.)

Jackson, Clarence S., Brooklyn, N. Y. Closure for tubes. No. 1,314,065; Aug. 26; v. 265; p. 502.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,217; Aug. 12; v. 265; p. 292.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,218; Aug. 12; v. 265; p. 292.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Tractor. No. 1,313,219; Aug. 12; v. 265; p. 293.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Bucket structure for excavating and like machines. No. 1,313,220; Aug. 12; v. 265; p. 295.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Boom and bucket control for loading and excavating machines. No. 1,313,221; Aug. 12; v. 265; p. 293.

Jackson, George W., Chicago, Ill., assignor, by mesne assignments, to American Power Shovel Company, Milwaukee, Wis. Loading-machine. No. 1,313,696; Aug. 19; v. 265; p. 398.

Jackson, James, London, Ontario, Canada. Child's vehicle. No. 1,312,444; Aug. 5; v. 265; p. 111.

Jackson, John L., River Forest, Ill. Indicator for pneumatic tires. No. 1,311,898; Aug. 5; v. 265; p. 9.

Jackson, Lucian C., Buffalo, N. Y. Internal-combustion engine. No. 1,314,487; Aug. 26; v. 265; p. 583.

Jackson, Mark A., Audubon, N. J. Roof structure. No. 1,313,989; Aug. 26; v. 265; p. 488.

Jackson, William, New York, assignor to International Cork Company, Brooklyn, N. Y. Feeding attachment for crown-cork-making machines. No. 1,313,990; Aug. 26; v. 265; p. 489.

Jackson, William G., Richmond, Calif. Sanitary drinking-fountain. No. 1,314,066; Aug. 26; v. 265; p. 502.

Jacobus, David S., Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam-boiler economizer and method of operating the same. No. 1,314,140; Aug. 26; v. 265; p. 516.

Jacobus, David S., Jersey City, N. J., and W. A. Jones, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Steam-boiler economizer. No. 1,313,991; Aug. 26; v. 265; p. 488.

James, George R., Hickman Mills, Mo. Milk-strainer. No. 1,313,992; Aug. 26; v. 265; p. 488.

Jameson, Robert, assignor to Draper Corporation, Hopedale, Mass. Loom-seat. No. 1,312,251; Aug. 5; v. 265; p. 74.

Janin, Albert S., assignor, by mesne assignments, to The Janin Co., Inc., New York, N. Y. Aeroplane structure. No. 1,312,910; Aug. 12; v. 265; p. 232.

Janin Co., Inc. (See Janin, Albert S., assignor.)

Jarvis, Harold, Toronto, Ontario, Canada. Self-closing tap. No. 1,314,195; Aug. 26; v. 265; p. 527.

Jay, William H., Mohridge, S. D. Combination-lock. No. 1,313,536; Aug. 19; v. 265; p. 368.

Jayne, Irving, Edwail, Wash. Internal-combustion engine. No. 1,313,634; Aug. 19; v. 265; p. 387.

Jeffrey Manufacturing Company, The. (See Jeffrey, Robert H., assignor.)

Jeffrey, Robert H., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining-machine. No. 1,313,093; Aug. 26; v. 265; p. 489.

Jenkins, William L., Jr. (See Jenkins, William L., Sr., and W. L., Jr.)

Jenkins, William L., Sr., and W. L., Jr., Niles, Ohio. Doubler. No. 1,313,635; Aug. 19; v. 265; p. 387.

Jenny, Walter P., Washington, D. C. War vessel. No. 1,313,945; Aug. 26; v. 265; p. 479.

Jenny, Walter P., Washington, D. C. Fin-guard for vessels. No. 1,313,946; Aug. 26; v. 265; p. 479.

Jennings, Valerius T., Chicago, Ill. Portable electric lamp. No. 1,313,299; Aug. 19; v. 265; p. 323.

Jerolaman, Henry F., Chicago, Ill. Mechanism for operating freight-car doors. No. 1,312,180; Aug. 5; v. 265; p. 62.

Jeschke, Edward. (See Ebner and Jeschke.)

Jeter, John T., Dallas, assignor to Vulcan Iron Works, Wilkes-Barre, Pa. Gear-ring for rotary kilns. No. 1,312,262; Aug. 5; v. 265; p. 75.

Jockman, Charles H., Ansonia, Conn. Splash-feed oil-cup. No. 1,313,385; Aug. 19; v. 265; p. 340.

Johnson, Johan P., Fannalund, Enköpings, Sweden. Cam-wheel transmission. No. 1,312,328; Aug. 5; v. 265; p. 88.

Johns, Paul H., assignor of one-fourth to F. Johnson, one-fourth to A. W. Cowles, Utica, and one-fourth to E. W. Morgan, Winona, Minn. Manure-loader. No. 1,313,297; Aug. 19; v. 265; p. 324.

Johnson Acetylene Gas Company. (See Rockman, Floyd A., assignor.)

Johnson, Andrew G., Stillman Valley, Ill. Map-box and map. No. 1,312,445; Aug. 5; v. 265; p. 111.

Johnson, Benjamin I., Garoyne, N. D. Spark-plug. No. 1,312,850; Aug. 12; v. 265; p. 220.

Johnson, Carl F., Milwaukee, Wis. Automatic control device. No. 1,312,253; Aug. 5; v. 265; p. 75.

Johnson, Charles R., New York, N. Y. Wheelbarrow. No. 1,312,990; Aug. 12; v. 265; p. 248.

Johnson, Charles H., Sacramento, Calif. Game-board. No. 1,313,600; Aug. 19; v. 265; p. 380.

Johnson, Claude M., New York, N. Y. Wave-motor. No. 1,314,401; Aug. 26; v. 265; p. 507.

Johnson, Ella, Nocatee, Fla. Bottle-closure. No. 1,312,544; Aug. 12; v. 265; p. 160.

Johnson, Forrest W., assignor of one-half to F. M. Wilson, Hartman, Colo. Feed-grinder. No. 1,312,446; Aug. 5; v. 265; p. 112.

Johnson, Frank E., Salt Lake City, Utah, assignor to American Manganese Steel Company, Chicago, Ill. Screen. No. 1,312,545; Aug. 12; v. 265; p. 160.

Johnson, Fred, et al. (See Johns, Paul H., assignor.)

Johnson, Frederick G. L., assignor to Vickers Limited, Westminster, London, England. Shell-fuse. No. 1,313,298; Aug. 19; v. 265; p. 324.

Johnson, James T., Chicago, Ill. Automatic spark-arrester for saws. No. 1,312,121; Aug. 5; v. 265; p. 51.

Johnson, John E., Ruth, Nev. Automobile-tire enlarger. No. 1,311,971; Aug. 5; v. 265; p. 22.

Johnson, Oliver W., Cleveland, Ohio. Ground-engaging surface of traction-wheels. No. 1,311,972; Aug. 5; v. 265; p. 22.

Johnson, Oscar R., Providence, R. I. Lingerie-clasp. No. 1,313,209; Aug. 19; v. 265; p. 324.

Johnson, Ralph C., Chicago, Ill. Landing-gear for flying-machines. No. 1,313,696; Aug. 19; v. 265; p. 398.

Johnson, Thomas C., and C. E. Wizard, assignors to Winchester Repeating Arms Co., New Haven, Conn. Break-down shotgun. No. 1,314,196; Aug. 26; v. 265; p. 527.

Johnson, Joseph E., Norfolk, Va. Douche. No. 1,312,851; Aug. 12; v. 265; p. 220.

Jones, Arthur L., Auburn, N. Y. Camera. No. 1,312,122; Aug. 5; v. 265; p. 51.

Jones, Ernest H., London, England. Electrode for electric arc soldering. No. 1,312,254; Aug. 5; v. 265; p. 75.

Jones, Everett W., Los Angeles, Calif. Window-lent. No. 1,314,474; Aug. 26; v. 265; p. 680.

Jones, George, Manor Park, England. Driving arrangement of electric motors. No. 1,313,537; Aug. 19; v. 265; p. 369.

Jones, George A. E., assignor to United States Electric Company, New London, Conn. Electric rivet-heating appliance. No. 1,313,538; Aug. 19; v. 265; p. 369.

Jones, George A. E., assignor to United States Electric Company, New London, Conn. Apparatus for heating rivets. No. 1,313,539; Aug. 19; v. 265; p. 369.

Jones, Harry, Suffern, N. Y., assignor to American Brake Shoe & Foundry Company, Mahwah, N. J. Brake-shoe. No. 1,313,540; Aug. 19; v. 265; p. 369.

Jones, Jacob, Klingling, Mont. assignor of one-half to T. Thels, Hütte, Mont. Flashbook. No. 1,312,734; Aug. 12; v. 265; p. 197.

Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Attachment for coating-machines. No. 1,312,034; Aug. 5; v. 265; p. 35.

Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Wrapping process. No. 1,313,234; Aug. 12; v. 265; p. 296.

Jones, John M. (See Orbin, George, assignor.)

Jones, John M., St. Joseph, Mo. Resilient tire. No. 1,313,541; Aug. 19; v. 265; p. 369.

Jones, Joseph W., assignor to Jones Motrola, Inc., New York, N. Y. Winding device for the spring-motors of talking-machines. No. 1,312,151; Aug. 5; v. 265; p. 62.

Jones, Llewellyn L., Battle Creek, Mich. Funnel. No. 1,313,386; Aug. 19; v. 265; p. 340.

Jones, Lloyd, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Shear mechanism. No. 1,312,182; Aug. 5; v. 265; p. 62.

Jones Motrola, Inc. (See Jones, Joseph W., assignor.)

Jones, Ora O., assignor of one-third to J. Borkhardt and one-third to A. G. de Clercq, Chicago, Ill. Electrical safety device. No. 1,314,332; Aug. 26; v. 265; p. 653.

Jones, Owen H., Hartford, Conn. Ball-cock. No. 1,312,329; Aug. 5; v. 265; p. 88.

Jones, Pearl N., Pittsburgh, and J. W. Welch, Oakland, Pa. Control of electric motors. No. 1,312,183; Aug. 5; v. 265; p. 62.

Jones, Richard E., Hagerstown, Md. Fastener. No. 1,314,402; Aug. 26; v. 265; p. 507.

Jones, Walter A., Falls City, Nebr. Roller tube and sheet joint. No. 1,313,542; Aug. 19; v. 265; p. 370.

Jones, William. (See Bulman, Smith, and Jones.)

Jones, William A. (See Jacobus and Jones.)

Jopson, William G., Abington, assignor to Anglo-American Textile Machinery Company, Boston, Mass. Pneumatic separator. No. 1,311,973; Aug. 5; v. 265; p. 23.

Jordan, Bennett W., Mulline, assignor of one-half to H. L. Buck, Horry county, S. C. Automatic heat and cold regulator alarm. No. 1,312,123; Aug. 5; v. 265; p. 51.

Josephson, Archie, et al. (See Haskins, Butler J., assignor.)

Joss, Frederick E. (See Davis and Joss.)

Joyce, Stephen V., New York, N. Y. Chute for proportioning and forwarding materials. No. 1,313,852; Aug. 19; v. 265; p. 328.

Judge, Fred, Hastings, England. Camera for composite heliography. No. 1,312,694; Aug. 12; v. 265; p. 189.

Juengst, Charles A., Croton Falls, N. Y., assignor, by mesne assignments, to American Assembling Machine Company, Delivery mechanism. No. 1,313,487; Aug. 19; v. 265; p. 359.

Juat, John H., Syracuse, N. Y. Valve-grinder. No. 1,312,001; Aug. 19; v. 265; p. 381.

Kearbo, Agnar, Cleveland, Ohio. Welded-steel barrel and method of making same. No. 1,313,387; Aug. 19; v. 265; p. 340.

Kable, Gottlieb L., Bohemia, N. Y. Engine-starter. No. 1,314,403; Aug. 26; v. 265; p. 508.

Kahlenberg Brothers Company. (See Kahlenberg, William R., assignor.)

Kahlenberg, William R., assignor to Kahlenberg Brothers Company, Two Rivers, Wis. Reversible starter for internal-combustion engines. No. 1,312,402; Aug. 5; v. 265; p. 102.

Kahu, Julius, assignor to United Metal Hose Company, Inc., New York, N. Y. Steam-hose. No. 1,314,333; Aug. 26; v. 265; p. 554.

Kaiser, Richard C., New Rochelle, and N. J. Milano, New York, N. Y., and said Milano assignor to said Kaiser. Display device. No. 1,313,897; Aug. 26; v. 265; p. 469.

Kalamassoo Loose Leaf Binder Co. (See Wigginton, George P., assignor.)

Kalbfleisch Corporation, The. (See Kee, William J., assignor.)

Kalemba, Jan, San, W. Va. Rail-bender. No. 1,314,334; Aug. 26; v. 265; p. 554.

Kallina, Looser, New York, N. Y. Woman's garment. No. 1,313,697; Aug. 19; v. 265; p. 398.

Kallina, Steve, Braddock, Pa. Trolley. No. 1,312,076; Aug. 5; v. 265; p. 42.

Kane, Joseph F. (See Anderson and Kane.)

Kano, Tatsuo, et al. (See Yamamoto, Yoshitaro, assignor.)

Kaplan, Mordueh L., Brooklyn, N. Y., assignor, by mesne assignments, to National Carbon Company, Inc., Cleveland, Ohio. Flash-light. No. 1,311,899; Aug. 5; v. 265; p. 9.

Kar Engineering Company, The. (See Karasick, Samuel, assignor.)

Karasick, Samuel, assignor to the Kar Engineering Company, New York, N. Y. Fixture for magnetic chucks. No. 1,312,646; Aug. 12; v. 265; p. 160.

Karitzky, John, Garwood, N. J., assignor to Garwood Company, Tube-changer. No. 1,313,191; Aug. 12; v. 265; p. 287.

Kasley, Alexander T., Swiswale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Generating pressure. No. 1,313,698; Aug. 19; v. 265; p. 398.

Katske, Albert, Milwaukee, Oreg. Necktie-holder. No. 1,313,822; Aug. 19; v. 265; p. 422.

Kaufman, Jacob. (See Hirsch and Hirsch, assignors.)

Kaufman, Sidney L. (See Schoradt, Fredrick W. B., assignor.)

Kaufman, Sidney L. (See Schoradt, Fredrick W. B., assignor.)

Kavanagh, Enoch, assignor of one-fourth to H. P. Cramblet and one-fourth to H. H. Gerard, Des Moines, Iowa. Adjustable punch-holder. No. 1,313,699; Aug. 19; v. 265; p. 399.

Kavvas, Nicholas, and W. K. Zweers, Brooklyn, N. Y. Butter-dispensing apparatus. No. 1,312,547; Aug. 12; v. 265; p. 160.

Kasenmaler, August, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Electrical speed-indicator. No. 1,312,992; Aug. 12; v. 265; p. 248.

Kasenmaler, August, and E. Bauer, Stuttgart, Germany, assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Starting system for engines. No. 1,312,991; Aug. 12; v. 265; p. 248.

Keating, George A. (See McQuilvey and Keating.)

Kee, William J., Metuchen, N. J., assignor to The Kalbfleisch Corporation, New York, N. Y. Making salt cake and sulfuric acid from bitter cake. No. 1,313,192; Aug. 12; v. 265; p. 287.

Keeran, Samuel H., Phoenix, Ariz. Car-replacer. No. 1,313,193; Aug. 12; v. 265; p. 287.

Keeler, Clyde C., assignor to Watson Wagon Company, Canastota, N. Y. Motor-vehicle. No. 1,312,993; Aug. 12; v. 265; p. 249.

Keim, Archer. (See Schlichter and Keim.)

Keith, James L., St. Louis, Mo. Railway-train stop. No. 1,312,077; Aug. 5; v. 265; p. 42.

Keller, Emil E., East Rochester, N. Y. Vehicle steering mechanism. No. 1,312,788; Aug. 12; v. 265; p. 208.

Keller, Joseph F., New York, assignor to Keller Mechanical Engraving Company, Brooklyn, N. Y. Die sinking, engraving, and reproducing device for milling-machines. No. 1,313,543; Aug. 19; v. 265; p. 370.

Keller Mechanical Engraving Company. (See Keller, Joseph F., assignor.)

Keller, Thomas, Paris, Ky. Rail-brace. No. 1,314,404; Aug. 26; v. 265; p. 508.

Kellogg, John F., Guthrie, Okla. Ore-concentrator. No. 1,314,335; Aug. 26; v. 265; p. 554.

Kellogg Switchboard and Supply Company. (See Allen, Joseph S., assignor.)

Kellogg Switchboard and Supply Company. (See Corrier, Hiram D., assignor.)

Kellogg Switchboard and Supply Company. (See Faris, Harry N., assignor.)

Kellow, Warren G., Los Angeles, Calif. Adjustable eye-lifting device for dolls. No. 1,312,447; Aug. 5; v. 265; p. 112.

Kelly, Daniel X., St. Louis, Mo. Aeroplane. No. 1,312,548; Aug. 12; v. 265; p. 161.

Kelly, Edwin, Casanova, Wis. Mechanism for unloading wagons. No. 1,313,388; Aug. 19; v. 265; p. 340.

Kelly, George J. (See Murdoch and Kelly.)

Kelly, John P., Pittsfield, Mass. Lubricator for air-compressors. No. 1,312,330; Aug. 5; v. 265; p. 68.

Kelly, Louis N., Lancaster, N. Y. Automobile-wheel sled. No. 1,313,823; Aug. 19; v. 265; p. 422.

Kelly-Springfield Tire Co. (See McClenathen, Robert, assignor.)

Kelso, Ralph S. (See Moffatt and Kelso.)

Keltonk, Stephen, Conemaugh, Pa. Inkstand. No. 1,312,184; Aug. 5; v. 265; p. 62.

Kenna, Charles F., assignor of one-third to B. Peres, Albuquerque, N. Mex. Bomb. No. 1,313,300; Aug. 19; v. 265; p. 324.

Kemp, Charles, New York, N. Y. Door-jamb-lock staple-structure. No. 1,314,336; Aug. 26; v. 265; p. 554.

Kempler, Philip, assignor to Goulder, Paeschke & Frey Co., Milwaukee, Wis. Shipping-cage for films and the like. No. 1,314,269; Aug. 26; v. 265; p. 542.

Kempton, Willard H., Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Forming composite plates. No. 1,312,789; Aug. 12; v. 265; p. 208.

Kendall, Edward P., Rowdolpham, Me. Potato-harvester. No. 1,314,270; Aug. 26; v. 265; p. 542.

Kendall, Zeb. (See Pinger, Leo, assignor.)

Kenney, Frank E., assignor of one-half to F. A. Sweeney, Portland, Oreg. Stump-puller. No. 1,313,545; Aug. 19; v. 265; p. 370.

Kent, George S., Buffalo, N. Y. Boiler-furnace. No. 1,312,185; Aug. 5; v. 265; p. 63.

Keyson, George T., Lock No. 4, Pa. Shipping-case. No. 1,312,408; Aug. 5; v. 265; p. 103.

Kerr, George W., and L. A. Pratt, Racine, Wis. Automobile-hood clamp. No. 1,312,078; Aug. 5; v. 265; p. 42.

Kessler, Louis, assignor to Non-Explosive Can and Tube Company, Chicago, Ill. Filler-tube and closure therefor for receptacles. No. 1,312,095; Aug. 12; v. 265; p. 189.

Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Engine starting system. No. 1,312,549; Aug. 12; v. 265; p. 161.

Kleckhefer, John W., assignor to Kleckhefer Paper Company, Milwaukee, Wis. Paper tube and making the same. No. 1,313,598; Aug. 26; v. 265; p. 470.

Kleckhefer Paper Company. (See Kleckhefer, John W., assignor.)

Klefer, Karl, Cincinnati, Ohio. Filling-machine. No. 1,313,301; Aug. 19; v. 265; p. 324.

Kliles, Edward B., London, England. Rubber tire. No. 1,312,124; Aug. 5; v. 265; p. 51.

Killman, Bud, Dixon, Ky. Bomb-dropping machine. No. 1,312,911; Aug. 12; v. 265; p. 232.

Kilmer, Harvey E. (See Aylworth and Wiersma, assignors.)

Kilpatrick, Robert L., Hempstead, Tex. Plow. No. 1,313,194; Aug. 12; v. 265; p. 288.

Kimball, Don L., assignor to Commercial Specialty Company, Inc., Portland, Oreg. Soap-dispenser. No. 1,312,912; Aug. 12; v. 265; p. 232.

Kimball, Perley L., assignor to The Vermont Farm Machine Company, Bellows Falls, Vt. Speed-indicator. No. 1,313,389; Aug. 19; v. 265; p. 340.

Kimney, Eugene L., Syracuse, N. Y. Resilient wheel. No. 1,314,337; Aug. 26; v. 265; p. 554.

King, Albert T., Wimbledon, and F. A. Mason, London, England. Manufacture of acetate. No. 1,312,186; Aug. 5; v. 265; p. 63.

King, Charles B., Detroit, Mich. Pump. No. 1,313,700; Aug. 19; v. 265; p. 399.

King & Hamilton Company. (See Gilman, John B., assignor.) (Release.)

King, Jesse C., Montreal, Quebec, Canada. Electrode and making same. No. 1,312,255; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,256; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,257; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,258; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,259; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,260; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,261; Aug. 5; v. 265; p. 75.

King, Jesse C., Montreal, Quebec, Canada. Electrode. No. 1,312,262; Aug. 5; v. 265; p. 75.

King, Percival E., Vancouver, British Columbia, Canada. Umbrella. No. 1,313,899; Aug. 26; v. 265; p. 470.

King, Tullie, Reynoldsburg, Ohio. Wire-splicing tool. No. 1,313,488; Aug. 19; v. 265; p. 359.

Kinsman, George N., Alpena, S. D. Plow share or lay holder. No. 1,312,696; Aug. 12; v. 265; p. 190.

Kipp, Alfred J., Milwaukee, Wis., assignor to The Curtin Supply Company, Chicago, Ill. Diaphragm buffing mechanism. No. 1,313,302; Aug. 19; v. 265; p. 324.

Kirby, Arthur, East Greenwich, London, England. Burner for liquid fuel. No. 1,312,735; Aug. 12; v. 265; p. 197.

Kircher, Paul, Chicago, Ill., assignor, by mesne assignments, to Massey Concrete Products Corporation, Cribbing. No. 1,312,331; Aug. 5; v. 265; p. 88.

Kirton, Charles, Ogden, Utah. Method and machine for peeling tomatoes. No. 1,312,332; Aug. 5; v. 265; p. 89.

Kirkpatrick, Marion E., Apache, Okla. Corn-heading machine. No. 1,314,080; Aug. 26; v. 265; p. 505.

Kishida, Kelsuke. (See Tejlma and Kishida.)

Kissinger, Jerome N. (See Kissinger, Roger and J. N.)

Kissinger, Roger and J. N., Lykens, Pa. Dirigible head. No. 1,312,736; Aug. 12; v. 265; p. 197.

Kitchen, Peter, et al. (See Krizek, Joseph, assignor.)

Kitchen, Samuel R., Buffalo, N. Y. Spring-mattress and the like. No. 1,312,125; Aug. 5; v. 265; p. 51.

Kittel, Berthold. (See Smith, George, assignor.)

Kittelson, Hjalmer C., assignor to Pressed Steel Automobile Lug Company, Inc., Minneapolis, Minn. Mud-lug for automobile-tires. No. 1,312,483; Aug. 5; v. 265; p. 118.

Kjølsetad, Andreas, Heggdø, near Christiansia, Norway. Apparatus for the refilling of ditches or drains. No. 1,312,852; Aug. 12; v. 265; p. 220.

Klarman, Louis, North Bergen, N. J. Waste-pipe cleaner. No. 1,312,404; Aug. 5; v. 265; p. 103.

Klason Company. (See Wheeler, John H., assignor.)

Klein, Adolf, New York, N. Y., assignor to The Beck Duplicator Company, Spindle. No. 1,314,141; Aug. 26; v. 265; p. 510.

Klein, Charles J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,312,550; Aug. 12; v. 265; p. 161.

Klein, Charles J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Attachment-plug. No. 1,312,551; Aug. 12; v. 265; p. 161.

Klein, Charles J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,313,761; Aug. 19; v. 265; p. 399.

Klein, John, Washington, D. C. Dumping-vehicle. No. 1,314,405; Aug. 26; v. 265; p. 508.

Klema, Joseph N., Austin, Minn. Lantern. No. 1,313,390; Aug. 19; v. 265; p. 340.

Kling, George J., St. Paul, Minn. Bread-board. No. 1,313,900; Aug. 26; v. 265; p. 470.

Knell, Andrew, Jr., Baltimore, Md. Device for preventing theft of automobiles. No. 1,313,544; Aug. 19; v. 265; p. 370.

Knott, Conrad. (See Weis and Knott.)

Knowling, George, Jr., St. John, Newfoundland. Demountable rim. No. 1,313,824; Aug. 19; v. 265; p. 422.

Knox, William J., New York, N. Y., and J. P. Mallet, Elizabeth, New York, N. Y. Apparatus for ozone generation. No. 1,312,484; Aug. 5; v. 265; p. 119.

Kohler, Henry L., St. Louis, Mo. Clay-blender and making same. No. 1,312,853; Aug. 12; v. 265; p. 221.

Kohn, Leo M. (See MacFarland, Allison M., assignor.)

Konigsberg, Joseph, assignor to L. Konigsberg, New York, N. Y. Guide for pipe-cutters. No. 1,312,187; Aug. 5; v. 265; p. 63.

Konigsberg, Lena. (See Konigsberg, Joseph, assignor.)

Konikoff, Harry R., New York, N. Y. Adjustable dress-form. No. 1,313,303; Aug. 19; v. 265; p. 325.

Kopp, William, Richmond Hill, N. Y. Combination knock-down structure. No. 1,314,271; Aug. 26; v. 265; p. 542.

Koppers Company, The. (See Becker, Joseph, assignor.)

Koppers Company, The. (See Van Ackeren, Josef, assignor.)

Korkus, Maciej, Providence, R. I. Receptacle-lock. No. 1,312,854; Aug. 12; v. 265; p. 221.

Koros, Clarence C., Johnstown, Pa. Switch-throw. No. 1,313,995; Aug. 26; v. 265; p. 489.

Kors, Charles H., Philadelphia, Pa. Binder. No. 1,314,338; Aug. 26; v. 265; p. 554.

Kosinski, Thomas M., Chicago, Ill. Tie-holder. No. 1,311,900; Aug. 5; v. 265; p. 10.

Kostedt, Oscar U. (See Weinholt, Paul, assignor.)

Kozar, Ladislav G., Middletown, Pa. Synchronizing apparatus. No. 1,314,081; Aug. 26; v. 265; p. 505.

Kozlatek, Joseph, New Kensington, Pa. Toy. No. 1,313,994; Aug. 26; v. 265; p. 489.

Kraft, Henry P. (See Schweinert and Kraft.)

Kramb, William J., Rochester, N. Y. Collar-button. No. 1,313,996; Aug. 26; v. 265; p. 480.

Kramer, Andrew A. (See Livingston, Winfield S., assignor.)

Kramer Rotary Harrow Company. (See Rapp, Mathew, assignor.)

Kratz, Franz, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Electric switch. No. 1,311,974; Aug. 5; v. 265; p. 23.

Kratz, Franz, and M. Schäfer, Stuttgart, Germany, assignors, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Internal-combustion motor. No. 1,313,090; Aug. 12; v. 265; p. 263.

Krause, Robert J., Dehesa, Calif. Container and sealing ring therefor. No. 1,312,913; Aug. 12; v. 265; p. 232.

Krause, William P., assignor to Hanna Engineering Works, Chicago, Ill. Cup-leather parking. No. 1,313,997; Aug. 26; v. 265; p. 489.

Krauth, Albert, deceased, Hamilton, Ohio; F. G. Diesbach, administrator. Music-stand. No. 1,312,485; Aug. 5; v. 265; p. 119.

Kretzer, Sidney D., St. Louis, Mo. Lighting-rod coupling. No. 1,313,391; Aug. 19; v. 265; p. 341.

Krieger, Hugo, New York, N. Y. Lens-grinding machine. No. 1,313,502; Aug. 19; v. 265; p. 399.

Kriegelsheim, Heinrich, assignor to The Permutit Company, New York, N. Y. Water-purifying material and making same. No. 1,312,552; Aug. 12; v. 265; p. 161.

Krisak, Joseph, Halling, assignor of one-third to P. Kitchen and one-third to J. I. Placek, McKinley county, N. Mex. Apparatus for securing alcohol from baking bread. No. 1,314,082; Aug. 26; v. 265; p. 505.

Kroff, Leonard D., assignor to Evan L. Reed Manufacturing Company, Sterling, Ill. Rack for seed-packets. No. 1,311,975; Aug. 5; v. 265; p. 23.

Kroff, Leonard D., assignor to Evan L. Reed Manufacturing Company, Sterling, Ill. Display-rack for goods. No. 1,311,976; Aug. 5; v. 265; p. 23.

Krueger, Henry R., assignor to Cadillac Tool Co., Detroit, Mich. Underboring-tool. No. 1,312,737; Aug. 12; v. 265; p. 198.

Krueger, Theodore H., Bridgeport, Conn. Moistening device for gummed tape, labels, and the like. No. 1,312,486; Aug. 5; v. 265; p. 119.

Krueger, W. G., et al., trustees. (See Standard, Maurice L., assignor.)

Kruger, Harry B. (See Stranders, Jollen, assignor.)

Krupa, Michael, assignor of one-fourth to J. Dringel, Jerome, Pa. Locking device for coal-cutting trucks. No. 1,311,901; Aug. 5; v. 265; p. 10.

Kruse, John, New Orleans, La. Rendering wood insect-repellent. No. 1,312,634; Aug. 12; v. 265; p. 178.

Kruse, Peter, assignor to E. W. Bliss Company, Brooklyn, N. Y. Machine for seaming heads or ends on cans. No. 1,313,998; Aug. 26; v. 265; p. 489.

Kruse, Theodore H., assignor of one-half to M. G. Demetz, Arvada, Colo. Copy-holder. No. 1,312,935; Aug. 5; v. 265; p. 35.

Kushish, John, Indian Orchard, Mass. Flying-machine. No. 1,313,825; Aug. 19; v. 265; p. 422.

Kushner, Joseph E., Newark, N. J. Spark-plug. No. 1,314,406; Aug. 26; v. 265; p. 508.

Kushlek, Albert J. H., Richmond Hill, N. Y., assignor to Edward W. Hartford, Inc. attaching device for shock-absorbers and the like. No. 1,314,272; Aug. 26; v. 265; p. 542.

Kyle, William D., Milwaukee, Wis. Insulator-bracket. No. 1,311,977; Aug. 5; v. 265; p. 23.

Kynoch, Limited. (See Bellow, Edward A., assignor.)

L. A. Young Industries. (See Young, Leonard A., assignor.)

Lack, Fred S., Padurub, Ky. Vehicle-wheel. No. 1,313,480; Aug. 19; v. 265; p. 359.

Lafferty, Robert C., New York, N. Y. Cooking and serving device for fruits. No. 1,313,947; Aug. 26; v. 265; p. 479.

Laible, Frank J., assignor to The F. A. Nelder Company, Augusta, Ky. Vehicle-curtain light. No. 1,313,999; Aug. 26; v. 265; p. 490.

Laidley, William E., assignor to C. F. Mead, Cleveland, Ohio. Electric signal system. No. 1,314,339; Aug. 26; v. 265; p. 555.

Lai Datta, Rasik, Calcutta, India. Recovery of sulfur. No. 1,313,370; Aug. 19; v. 265; p. 337.

Lamar, William P., Atlanta, Ga. Passenger and freight transfer system. No. 1,313,091; Aug. 12; v. 265; p. 268.

Lambert, Albert L., assignor to Hale & Kilburn Corporation, Philadelphia, Pa. Hinged seat-cushion. No. 1,312,913; Aug. 12; v. 265; p. 233.

Lambert, Frank B., Chicago, assignor, by mesne assignments, to C. A. Brown, Hinsdale, Ill. Ruloing brick. No. 1,311,978; Aug. 5; v. 265; p. 24.

Lambert, George H., Asheville, N. C. Machine for washing golfballs and other articles. No. 1,313,708; Aug. 19; v. 265; p. 399.

Lander, Frank E., Blackheath, London, assignor to Vickers Limited, Westminster, England. Means for parting the moorings of submarine mines or mine-sweeping ropes or cables. No. 1,312,405; Aug. 5; v. 265; p. 103.

Lander, Frank E., Lewisham, London, assignor to Vickers Limited, Westminster, London, England. Safety device. No. 1,313,546; Aug. 19; v. 265; p. 370.

Landis, Frank F., Waynesboro, Pa. Secondary electric clock. No. 1,313,304; Aug. 19; v. 265; p. 325.

Landstad, Halvor F. (See Pollen and Landstad.)

Lane, Helen B. (See Harding, Charles E., assignor.)

Lane, Philander E., Atlantic City, N. J. Machine for and method of scarifying metal. No. 1,313,901; Aug. 26; v. 265; p. 470.

Lang, George W., Litchfield, Nebr. Power attachment. No. 1,314,083; Aug. 26; v. 265; p. 505.

Lang, Hubert, Chicago, Ill., assignor to Goss Printing Press Company, Printing-press. No. 1,312,487; Aug. 5; v. 265; p. 119.

Lange, William L. (See Rettberg and Lange.)

Langguth, Joseph G., Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-interrupter. No. 1,313,092; Aug. 12; v. 265; p. 268.

Langley, Arthur H., Oakland, Calif. Trolley-wire finding and replacing device. No. 1,312,697; Aug. 12; v. 265; p. 190.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system. No. 1,313,093; Aug. 12; v. 265; p. 268.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. System for amplifying variable currents. No. 1,313,094; Aug. 12; v. 265; p. 268.

Langner, Lawrence, New York, N. Y., assignor to The Dayton Engineering Laboratories Company. Magneto. No. 1,314,197; Aug. 26; v. 265; p. 527.

Languepin, Emile, Paris, France. Electrode for electric arc welding. No. 1,314,273; Aug. 26; v. 265; p. 542.

Lansky, Anthony, Jr., Brooklyn, N. Y. Antislipping attachment for crutches and canes. No. 1,314,000; Aug. 26; v. 265; p. 490.

Larkin, Charles J., Cherokee, E. F. Fox, and E. M. Fox, said Larkin assignor to The Fox Chemical Company, Des Moines, Iowa. Hog-roller. No. 1,314,274; Aug. 26; v. 265; p. 543.

Larkin, William J., assignor to Waterbury Clock Co., Waterbury, Conn. Watchcase. No. 1,313,636; Aug. 19; v. 265; p. 387.

Larner, Chester W., Cleveland, Ohio. Position-indicator for plunger-valves. No. 1,314,340; Aug. 26; v. 265; p. 555.

Larner, Chester W., Philadelphia, Pa. Taper-plug valve. No. 1,314,341; Aug. 26; v. 265; p. 555.

Larrabee, Clinton E., Binghamton, N. Y. Synchronizing clock system. No. 1,313,305; Aug. 19; v. 265; p. 325.

Larsen, Adolf. (See Stokke and Larsen.)

Larsen, James M., Chicago, Ill. Transmission mechanism for motor-vehicles. No. 1,313,392; Aug. 19; v. 265; p. 341.

Larson, Albert W., assignor to Stenman Electric Valve Grinder Company, Worcester, Mass. Valve-grinder. No. 1,313,490; Aug. 19; v. 265; p. 359.

Larson, Charles O., Sioux Falls, S. D. Automatic shut-off for stand-boilers. No. 1,314,007; Aug. 26; v. 265; p. 502.

Larson, Fredrik F., Waterbury, Conn. Pen and pencil clip. No. 1,313,826; Aug. 19; v. 265; p. 423.

Larszeler, Herman G., New Rochelle, N. Y. Concrete-mold. No. 1,312,393; Aug. 19; v. 265; p. 341.

Larries, George C., Springfield, Mass. Toy cannon. No. 1,312,698; Aug. 12; v. 265; p. 190.

Lasserre, Charles W., Fernandina, Fla. Broad-gage attachment for vehicles. No. 1,313,394; Aug. 19; v. 265; p. 341.

Latham, Mattie E., Montevideo, Ala. Automatic elevator-door closer. No. 1,312,500; Aug. 5; v. 265; p. 121.

Latimer, Henry G., Jr., Auburn, N. Y. Automobile-seat. No. 1,312,501; Aug. 5; v. 265; p. 121.

Latimer, Joseph B. (See Michon, Joseph H. M., assignor.) (Reissue.)

Lauterbur, Frank N., Sidney, Ohio. Tractor. No. 1,313,095; Aug. 12; v. 265; p. 268.

Lavender, Stephen J., Barnevill, Ga. Fuel-economizer for internal-combustion engines. No. 1,313,096; Aug. 12; v. 265; p. 269.

Laviolette, Felix, assignor of one-half to Connard & Neville, Green Bay, Wis. Dirigible headlight. No. 1,312,914; Aug. 12; v. 265; p. 232.

Lawrence, George A., Waburn, assignor to The Turner Tanning Machinery Company, Leabody, Mass. Pneumatic roll. No. 1,314,342; Aug. 26; v. 265; p. 555.

Laxman, Grant I., and H. T. Burkey, Tulsa, Okla. Cloth-rack. No. 1,313,827; Aug. 19; v. 265; p. 423.

Lazzell, James A., Columbus, Ind. Furnace feed-chute. No. 1,313,491; Aug. 19; v. 265; p. 359.

Le Bourgeois, William H., New Orleans, La. Antirattling device. No. 1,314,001; Aug. 26; v. 265; p. 490.

Le Crocq, Byron K., Edinboro, Ill. Apparatus for making stereotypes. No. 1,314,275; Aug. 26; v. 265; p. 543.

Lea, Charles. (See Hathaway and Lea.)

Leak, John M., assignor to The Samuel Winslow Skate Mfg. Co., Worcester, Mass. Roll or wheel for roller-skates. No. 1,312,855; Aug. 12; v. 265; p. 221.

Leat, George M., New Orleans, La. Cistern. No. 1,312,738; Aug. 12; v. 265; p. 198.

Leatherman, Frank A. (See Hess, Maximus, assignor.)

Leaver, Edmund S., assignor of one-half to C. E. Van Buren, Tucson, Ariz. Apparatus for extracting metals from their ores. No. 1,312,488; Aug. 5; v. 265; p. 119.

Lebb, States L., Charleston, S. C. Hydroplane-boat. No. 1,312,036; Aug. 5; v. 265; p. 35.

Leblanc, Felix, St. Adolphe, Manitoba, Canada. Skate-fastener. No. 1,312,739; Aug. 12; v. 265; p. 198.

Lebow, Simon, Bellaire, Ohio. Device for smoothing and slating pipe. No. 1,312,333; Aug. 5; v. 265; p. 89.

Ledwidge, Christopher J., Hot Springs, Ark. Vehicle-signal. No. 1,314,407; Aug. 26; v. 265; p. 508.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Sheet-metal wheel. No. 1,311,979; Aug. 5; v. 265; p. 24.

Lee, Bernard S., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wax-thread sewing-machine. No. 1,312,704; Aug. 19; v. 265; p. 400.

Lee, Clifford. (See Worley, Trowbridge, Wartenberg, and Lee.)

Lee, Hugh W., assignor to Sir W. G. Armstrong, Whitworth and Company, Limited, Newcastle-upon-Tyne, England. Pedestal gun-mounting. No. 1,312,037; Aug. 5; v. 265; p. 35.

Lee, Jennette, Northampton, Mass. Therapeutic apparatus. No. 1,314,002; Aug. 26; v. 265; p. 490.

Leese, Thaddeus S., Avalon, Pa., assignor of one-half to H. L. Holmes, Geneva, N. Y. Fluid-regulating valve. No. 1,314,003; Aug. 26; v. 265; p. 490.

Leggett, Joseph P., Carthage, Mo. Spring bed-bottom and manufacture of the same. No. 1,313,902; Aug. 26; v. 265; p. 470.

Lehman, Joseph H., Hasbrouck Heights, N. J. Electric make-and-break device. No. 1,311,902; Aug. 5; v. 265; p. 10.

Leigh, Alfredo G., Santiago, Chile. Aeroplane. No. 1,313,828; Aug. 19; v. 265; p. 423.

Leiman, George W. (See Leiman, William H. and G. W.)

Leiman, William H. and G. W., Newark, N. J. Sand-blast machine. No. 1,313,306; Aug. 19; v. 265; p. 325.

Leith, Alexander B. (See Arney, John W., assignor.)

Lektophone Corporation. (See Davis and Jones, assignors.)

Leland, Ragnarvald, Hirsch Hills, Saskatchewan, Canada. Stamp for simulating animal-tracks. No. 1,314,276; Aug. 26; v. 265; p. 543.

Lemp, Hermann, Erie, Pa., assignor to General Electric Company. Controlling means for engine-generator-driven vehicles. No. 1,313,097; Aug. 12; v. 265; p. 269.

Lenfesty, Gerald T. D., assignor of one-third to E. R. Case, Toronto, Ontario, Canada. Demountable motor-vehicle frame. No. 1,313,429; Aug. 19; v. 265; p. 348.

Lennon, Roy A. (See Camp, Orrin B., assignor.)

Leuz, William A., Lebanon, Mo. Photoprint-washer. No. 1,313,395; Aug. 19; v. 265; p. 342.

Leonard, Alvin, Carbondale, Pa. Workman's collapsible trestle or table. No. 1,312,994; Aug. 12; v. 265; p. 240.

Leonard, Howard G., Jackson, Mich. Differential. No. 1,312,856; Aug. 12; v. 265; p. 221.

Lerch, William G., assignor to Miller Rubber Company, Akron, Ohio. Reed. No. 1,313,705; Aug. 19; v. 265; p. 400.

Leschander, Austin C., Port Blakeley, Wash. Staple. No. 1,311,903; Aug. 5; v. 265; p. 10.

Lesko, James F. (See Matha and Lesko.)

Leford, Emile, Meudon, France. Means for supporting radiators on aeroplanes. No. 1,313,195; Aug. 12; v. 265; p. 288.

Leumann, Richard, assignor to the Firm of Sapal Société Anonyme des Fileuses Automatiques, Lausanne, Switzerland. Glue-applying apparatus for labels, wrappers, and the like. No. 1,313,098; Aug. 12; v. 265; p. 269.

Leverich, Sylvester P., Marion, Iowa. Wire-grip. No. 1,312,635; Aug. 12; v. 265; p. 179.

Lewis, Barnett, New York, N. Y. Binding-strip for seat-covers. No. 1,314,408; Aug. 26; v. 265; p. 508.

Lewis, Frank D., West Orange, N. J., assignor, by mesne assignments, to Pathe Freres Phonograph Company, New York, N. Y. Stay-arm. No. 1,312,636; Aug. 12; v. 265; p. 179.

Lewis, Joseph, Winnipeg, Manitoba, Canada. Attachment to printing-machines. No. 1,312,293; Aug. 5; v. 265; p. 76.

Lewis, Lee D., Tulsa, Okla. Wrench. No. 1,312,406; Aug. 5; v. 265; p. 103.

Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch and Signal Company, Swissvale, Pa. Railway-coupling signal and control thereof. No. 1,312,407; Aug. 5; v. 265; p. 103.

Lewis, William. (See Peterson, Erick W., assignor.)

Leyland Motors (1914) Ltd. (See Thomas, John G. P., assignor.)

Liberty Radiator Company. (See Coffield, Thomas N., assignor.)

Lihme, Christian B. (See Gerlach and Lihme.)

Lille, Edwin C., Denver, Colo. Promoting combustion. No. 1,312,916; Aug. 12; v. 265; p. 233.

Limbach, Gustave A., New York, N. Y. Garment hanger and lock. No. 1,312,553; Aug. 12; v. 265; p. 101.

Lindgren, Alexus C., Moline, Ill., assignor, by mesne assignments, to International Harvester Company. Wheeled plow. No. 1,312,189; Aug. 5; v. 265; p. 63.

Lindley, Edward A., Spokane, Wash. Apparatus for coating or impregnating posts. No. 1,312,857; Aug. 12; v. 265; p. 221.

Lippert, Walter E. (See Ireland and Lippert.)

Liskeny, Carl A., et al. (See Cottrill, Kenyon, assignor.)

Lister, Charles H., assignor to Minnesota Manufacturers' Association, North St. Paul, Minn. Spiral chute. No. 1,312,995; Aug. 12; v. 265; p. 249.

Lister, George, Tow Law, England. Chimney-pot, due-top, and the like. No. 1,312,996; Aug. 12; v. 265; p. 249.

Litchfield, Henry L., and V. Speer, Waterloo, Iowa; said Speer assignor to said Litchfield. Straw-spreader. No. 1,313,637; Aug. 19; v. 265; p. 385.

Litchfield, Henry L., and V. Speer, Waterloo, Iowa; said Speer assignor to said Litchfield. Spreader. No. 1,313,638; Aug. 19; v. 265; p. 385.

Little, Orton C., Menasha, Wis. Humidifier. No. 1,312,997; Aug. 12; v. 265; p. 249.

Littlefield, Augustine P., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Sewing-machine. No. 1,312,637; Aug. 12; v. 265; p. 179.

Livengood, Winfield S., assignor to A. A. Kramer, Kansas City, Mo., Truck-hoist. No. 1,312,489; Aug. 5; v. 265; p. 119.

Lo Cascio, Pasquale, Brooklyn, N. Y., Permutation-pallock. No. 1,312,790; Aug. 12; v. 265; p. 208.

Lohr, George H., Toledo, Ohio, Automobile-radiator. No. 1,313,492; Aug. 19; v. 265; p. 360.

Locke, Frank L. B., Harpenden, England, Machine for the manufacture of candles and the like. No. 1,312,189; Aug. 5; v. 265; p. 63.

Lockhart, James F., assignor to S. L. Lockhart, Kansas City, Mo., Cooking vessel for exhaust-pipes of internal-combustion engines. No. 1,314,004; Aug. 26; v. 265; p. 491.

Lockhart, S. L. (See Lockhart, James F., assignor.)

Lockhart, T. M., et al. (See Sartain, Louis M., assignor.)

Lockwood, Louis S., Buffalo, assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., Double-tracker musical instrument. No. 1,314,008; Aug. 26; v. 265; p. 602.

Locomotive Company of America, The. (See Edge, Howard H., assignor.)

Locomotive Stoker Company. (See Lower, Nathan M., assignor.)

Locomotive Stoker Company. (See Ryan, Edward, assignor.)

Locomotive Superheater Company. (See Barnes and Schofield, assignors.)

Loefer, James H., Washington, D. C., Holding means for portable apparatus. No. 1,313,307; Aug. 19; v. 265; p. 325.

Lodge & Shipley Machine Tool Company, The. (See Cockburn and Carlton, assignors.)

Loew, Charles H., and J. R. Gruetter, assignors to The Loew Manufacturing Company, Cleveland, Ohio, Bottle washer. No. 1,313,706; Aug. 19; v. 265; p. 400.

Loew Manufacturing Company, The. (See Gruetter, John R., assignor.)

Loew Manufacturing Company. (See Loew and Gruetter, assignors.)

Loewenherz, Emanuel, Chicago, Ill., Tooth-cleaning device. No. 1,312,334; Aug. 5; v. 265; p. 59.

Loewenstein, Louis C., Lynn, Mass., assignor to General Electric Company, Volume-corrector. No. 1,313,099; Aug. 12; v. 265; p. 269.

Logan, Thomas P., Columbus, Ohio, Manifold-heater. No. 1,312,554; Aug. 12; v. 265; p. 161.

Loker, Charles W., Birmingham, Ala., Leak-detector for pneumatic-tire valves. No. 1,313,493; Aug. 19; v. 265; p. 369.

Lorigora, Nicholas, Laredo, Tex., Torpedo-controlling apparatus. No. 1,313,100; Aug. 12; v. 265; p. 270.

Loomis, Hurdett, assignor to G. L. Loomis, Hartford, Conn., Making cellulose. No. 1,311,980; Aug. 5; v. 265; p. 24.

Loomis, Grace L. (See Loomis, Hurdett, assignor.)

Loomis, Sydney W. (See Eastoness, Albert J., assignor.)

Loppacker, Albert, assignor to Enreka Air Compressor Co., Bloomfield, N. J., Air-pump and cleaning device. No. 1,314,277; Aug. 26; v. 265; p. 513.

Louden, Edgar W., Philadelphia, Pa., Automatic balancing means for high-speed rotors. No. 1,314,005; Aug. 26; v. 265; p. 491.

Loudenbeck, Harry C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., Making piston-packing. No. 1,314,142; Aug. 26; v. 265; p. 516.

Loudenbeck, Harry C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., Brake-cylinder piston-packing. No. 1,314,143; Aug. 26; v. 265; p. 517.

Lower, Nathan M., Pittsburgh, Pa., assignor to Locomotive Stoker Company, Schenectady, N. Y., Locomotive stoker mechanism. No. 1,312,858; Aug. 12; v. 265; p. 222.

Lowrance, William T., Monte Vista, Colo., Fence-post. No. 1,312,448; Aug. 5; v. 265; p. 112.

Lucius, Christian V., Massillon, Ohio, Tank-vehicle. No. 1,311,981; Aug. 5; v. 265; p. 24.

Lucke, Charles E., New York, N. Y., Apparatus for burning explosive gaseous mixtures. No. 1,313,196; Aug. 12; v. 265; p. 288.

Luebbert, William M., San Francisco, Calif., Hanger. No. 1,313,547; Aug. 19; v. 265; p. 371.

Luedke, Arthur C., Milwaukee, Wis., Furnace-flue-closing device. No. 1,314,475; Aug. 26; v. 265; p. 580.

Luhrman, Albert H., Cincinnati, Ohio, Storage-battery connection. No. 1,312,038; Aug. 5; v. 265; p. 35.

Lumley, Harold J., Buffalo, N. Y., Hot-water heater. No. 1,312,408; Aug. 5; v. 265; p. 104.

Lundberg, Adolf, Stockholm, Sweden, Apparatus for delivering toilet paper piece by piece. No. 1,312,449; Aug. 5; v. 265; p. 112.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y., Telephone exchange system. No. 1,312,126; Aug. 5; v. 265; p. 32.

Lundell, Alben E., and E. H. Clark, assignors to Western Electric Company, Incorporated, New York, N. Y., Signaling system. No. 1,312,791; Aug. 12; v. 265; p. 208.

Lundgren, Fred, Los Angeles, Calif., Lubricating and cooling device for internal-combustion engines. No. 1,312,190; Aug. 5; v. 265; p. 64.

Luiz, William H., Philadelphia, Pa., Quilting-machine. No. 1,313,308; Aug. 19; v. 265; p. 326.

Luxmore, William, Chicago, Ill., Casting device. No. 1,313,602; Aug. 19; v. 265; p. 381.

Lyman, Henry D., Minneapolis, Minn., Display device. No. 1,313,548; Aug. 19; v. 265; p. 371.

Lynn, Joseph J., Moose Jaw, Saskatchewan, Canada, Door-catch. No. 1,311,982; Aug. 5; v. 265; p. 24.

M. Schula Company. (See Gustafson, Adolph P., assignor.)

MacAndrews & Forbes Company. (See Meigs, Charles H., assignor.)

MacDougall, Harry W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., Telephone-exchange system. No. 1,312,795; Aug. 12; v. 265; p. 209.

MacEachern, Peter A. (See MacRae and MacEachern.)

MacFarland, Allison M., assignor to L. M. Kohn, Buffalo, N. Y., Sheet-folding machine. No. 1,313,712; Aug. 19; v. 265; p. 401.

MacFarland, Allison M., assignor to L. M. Kohn, Buffalo, N. Y., Sheet-folding machine. No. 1,313,713; Aug. 19; v. 265; p. 402.

MacGahan, Paul, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, Electrical protective device. No. 1,312,796; Aug. 12; v. 265; p. 209.

MacGulre, William E. (See Ervin and MacGulre.)

MacInnes, Nell, Chicago, Ill., Rack for umbrellas and the like. No. 1,313,896; Aug. 26; v. 265; p. 469.

MacKenzie, Fred L., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Machine for inserting fastenings. No. 1,312,567; Aug. 12; v. 265; p. 162.

MacMonagle, Roy O. (See Meyer and MacMonagle.)

MacNicol, Donald. (See Cockburn and MacNicol.)

MacNeil, Lachlan D., and P. A. MacEachern, Neozari, Mexico, Settling-tank. No. 1,313,714; Aug. 19; v. 265; p. 402.

MacKenzie, Fred L., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., Fastening-inserting machine. No. 1,313,903; Aug. 26; v. 265; p. 471.

Mackintosh, Edith M., et al. (See Mackintosh, Edward D., assignor.)

Mackintosh, Edward D., Brooklyn, assignor to S. S. Hepworth Company, New York, and E. M. Mackintosh, Brooklyn, N. Y., Lining for centrifugal machines. No. 1,313,227; Aug. 12; v. 265; p. 294.

MacLeod, Walter, Cincinnati, Ohio, Furnace for melting metals. No. 1,312,129; Aug. 5; v. 265; p. 52.

Macmillan, Campbell, Schenectady, N. Y., assignor to General Electric Company, Electric ship propulsion. No. 1,313,102; Aug. 12; v. 265; p. 270.

Madison-Kipp Lubricator Company. (See Putnam, William H., assignor.)

Mac, Anton, New Haven, Conn., Pillers. No. 1,313,399; Aug. 19; v. 265; p. 342.

Maegly, Frederick C., Chicago, Ill., Celled carton. No. 1,313,948; Aug. 26; v. 265; p. 480.

Maeland, Johannes. (See Stokke and Larsen, assignor.)

Magie, William E., Buffalo, N. Y., and W. Ferris, Milwaukee, Wis., Leakage-return for hydraulic transmissions. No. 1,312,701; Aug. 12; v. 265; p. 191.

Magill, Frederick B., St. Marys, Ohio, Gun-sight. No. 1,313,549; Aug. 19; v. 265; p. 371.

Maher, Charles P., and E. J. Fetherstonhaugh, Montreal, Quebec, Canada, Detachable heel. No. 1,313,400; Aug. 19; v. 265; p. 342.

Mahoney, Jeremiah L., New Haven, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Joliet, Ill., Joints for vulcanized rubber parts. No. 1,314,343; Aug. 26; v. 265; p. 555.

Mahoney, Jeremiah L., New Haven, Conn., assignor to The Goodyear's India Rubber Glove Mfg. Co., Mold for vulcanizing rubber articles. No. 1,314,344; Aug. 26; v. 265; p. 556.

Mahoney, Joseph P., Salt Lake City, Utah, Automobile-brake. No. 1,313,103; Aug. 12; v. 265; p. 270.

Makner, Louis. (See Mountford, Clarence E., assignor.)

Mallet, John P. (See Knox and Mallet.)

Mallette, E. Michael. (See Addison, Simon L., assignor.)

Mallinckrodt, John F., Salt Lake City, Utah, Pan-dilling machine. No. 1,312,040; Aug. 12; v. 265; p. 180.

Mambourg Continuous Iron and Steel Furnace Co., The. (See Mambourg, Leopold, assignor.)

Mambourg, Leopold, assignor to The Mambourg Continuous Iron and Steel Furnace Co., Lancaster, Ohio, Smelting and refining ore. No. 1,313,309; Aug. 19; v. 265; p. 320.

Mandel, Harry H. (See Patua, Alexander, assignor.)

Mann, Orrville C., Oak Park, Ill., Ventilator. No. 1,313,401; Aug. 19; v. 265; p. 312.

Mantle, Joseph G. C., New York, N. Y., assignor to Stern-Coleman Diamond Machine Co., Inc., Polishing-machine. No. 1,313,402; Aug. 19; v. 265; p. 343.

Mantle Lamo Company of America, The. (See Gregor and French, assignors.)

Marchese, Antonietta. (See Marchese, Concettina and A.)

Marchese, Concettina and A., Brooklyn, N. Y., Inserting openwork in fabrics. No. 1,313,198; Aug. 12; v. 265; p. 288.

Marconi Wireless Telegraph Company of America. (See Weagant, Roy A., assignor.)

Markem Machine Company. (See Putnam, Fred A., assignor.)

Marsden, Joshua H., Huddersfield, England, Machine for sandpapering or smoothing wood moldings. No. 1,312,193; Aug. 5; v. 265; p. 64.

Marsden, Mark W., Philadelphia, Pa., Treatment of rice-straw for recovery of its values. No. 1,318,403; Aug. 19; v. 265; p. 343.

Marsh, Francis J., Gill, Kans., Electrical railway signaling system. No. 1,313,904; Aug. 26; v. 265; p. 471.

Marshall Field & Company. (See Dufour, George H., assignor.)

Marten, Thomas H., New York, N. Y., Ship's davit. No. 1,313,404; Aug. 19; v. 265; p. 343.

Martens, Joseph, New York, N. Y., Bomb or shell. No. 1,314,413; Aug. 26; v. 265; p. 569.

Martin, August, and H. H. Hoerling, Chicago, Ill.; said Hoerling assignor to said Martin, Extracting machine. No. 1,312,337; Aug. 5; v. 265; p. 89.

Martin, Charles C. (See Wright, Schellentrager, and Martin.)

Martin, Eugene, Toulouse, France, Protecting device for ammunition. No. 1,314,199; Aug. 26; v. 265; p. 527.

Martin, Haskon A., assignor to The National Cash Register Company, Dayton, Ohio, Ticket-issuing machine. No. 1,314,345; Aug. 26; v. 265; p. 566.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill., Automatic private-branch exchange telephone system. No. 1,312,558; Aug. 12; v. 265; p. 162.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill., Measured-service telephone system. No. 1,312,702; Aug. 12; v. 265; p. 191.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill., Repeater for automatic telephone systems. No. 1,314,454; Aug. 26; v. 265; p. 577.

Martyn, Clarence, Mather, Wis., Excavator. No. 1,313,715; Aug. 19; v. 265; p. 402.

Martyn, Harry N., Rye, N. Y., Apparatus for delineating character according to the character of the hand. No. 1,312,860; Aug. 12; v. 265; p. 222.

Marz, Joseph J., St. Louis, Mo., Pad-support for pressing machines. No. 1,312,641; Aug. 12; v. 265; p. 180.

Mason, Frank G., Los Angeles, Calif., Guard device. No. 1,314,144; Aug. 26; v. 265; p. 517.

Mason, Frederick A. (See King and Mason.)

Mason, James H. (See Thorston, Elmer A., assignor.)

Mason, John H., Heaven, Okla., Emergency-hub. No. 1,313,405; Aug. 19; v. 265; p. 343.

Mason, Mittie, Washington, D. C., Cover for latrine-seats. No. 1,313,236; Aug. 12; v. 265; p. 296.

Masser, Allan M., assignor to Combination Service Corporation, Chicago, Ill., Grate-bar. No. 1,314,009; Aug. 26; v. 265; p. 492.

Massy Concrete Products Corporation. (See Kireher, Paul, assignor.)

Mastrangelo, Frank, Fitchburg, Mass., Tailor's rule. No. 1,314,085; Aug. 26; v. 265; p. 506.

Matha, Albert, and J. F. Lesko, Chicago, Ill., Burglar-alarm and lock. No. 1,314,086; Aug. 26; v. 265; p. 506.

Mathes, Robert C., assignor to Western Electric Company, Incorporated, New York, N. Y., Vacuum-tube repeater. No. 1,313,406; Aug. 19; v. 265; p. 343.

Mathias, Bertson M., Minneapolis, Minn., Mud-lug. No. 1,314,087; Aug. 26; v. 265; p. 506.

Matterson, George F. (See Chew, Harry L., assignor.)

Matthew, William H., Zanesville, Ohio, Danger-signal. No. 1,314,088; Aug. 26; v. 265; p. 506.

Matthews, Leslie, Plainfield, N. J., Score-board. No. 1,313,104; Aug. 12; v. 265; p. 270.

Mattson, Edward. (See Mattson, Henry and E.)

Mattson, Henry, Hansboro, N. D., Weed-destroyer. No. 1,313,310; Aug. 19; v. 265; p. 326.

Mattson, Henry and E. Hutchinson, Minn., Combination hay and manure book. No. 1,312,703; Aug. 12; v. 265; p. 191.

Maxim, Hudson, Hopatcong, N. J., Propulsion of automobile torpedoes. No. 1,311,984; Aug. 5; v. 265; p. 25.

Maxim, Hudson, Hopatcong borough, N. J., Roadway and apparatus for its manufacture. No. 1,313,000; Aug. 12; v. 265; p. 250.

Maxted, Edward H., Walsall, England, Process and apparatus for the hydrogenation of oils, fats, and like materials. No. 1,313,407; Aug. 19; v. 265; p. 344.

May Department Stores Company. (See Pokorny, Joseph, assignor.)

May, Harry E., assignor of one-third to H. Hall, one-fourth to W. D. O'Hannon, and one-twelfth to W. M. May, Sedalia, Mo., Gas-engine. No. 1,313,001; Aug. 12; v. 265; p. 250.

May, William M., et al. (See May, Harry E., assignor.)

Maybury, Maxwell. (See Hill, Howard H., assignor.)

Mayer, Fred J. (See Haldell, Robert W., assignor.)

Mayer, Louis, Kaukauna, Wis., Power-hammer guide-head. No. 1,313,002; Aug. 12; v. 265; p. 250.

Mayer, Virgilus A., Wollaston, Mass., Calculator. No. 1,312,797; Aug. 12; v. 265; p. 210.

Mazzeo, Salvatore, assignor to The Adams-Bagnall Electric Company, Cleveland, Ohio, Head-lamp. No. 1,313,716; Aug. 19; v. 265; p. 402.

McAuliffe, John W., Pelham, N. Y., Clear with self-contained holder. No. 1,312,490; Aug. 5; v. 265; p. 120.

McCauley, George L., assignor to Packard Motor Car Company, Detroit, Mich., Hydrocarbon-motor. No. 1,312,555; Aug. 12; v. 265; p. 162.

McCauley, George L., assignor to Packard Motor Car Company, Detroit, Mich., Hydrocarbon-motor. No. 1,312,555; Aug. 12; v. 265; p. 162.

McCauley, Charles G., Washington, D. C., Adjustable rail-brace. No. 1,312,264; Aug. 5; v. 265; p. 70.

McClain, William J., Jr., Bellaire, Ohio, Paving-brick. No. 1,314,278; Aug. 26; v. 265; p. 543.

McClatchy, Albert H., Baltimore, Md., Book-cover protector. No. 1,311,983; Aug. 5; v. 265; p. 25.

McClennath, Robert, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y., Machine for and process of forming rubber tires. No. 1,312,491; Aug. 5; v. 265; p. 120.

McClennath, Robert, Cuyahoga Falls, Ohio, assignor to Kelly-Springfield Tire Co., New York, N. Y., Inner-tube deflator. No. 1,313,603; Aug. 19; v. 265; p. 381.

McConnell, Lert, Grand River, Iowa, Cattle-guard. No. 1,312,793; Aug. 12; v. 265; p. 209.

McConnell, Thomas, New Kensington, Pa., Vacuum apparatus. No. 1,314,409; Aug. 26; v. 265; p. 569.

McCormick, Frank L., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., Double-tracker musical instrument. No. 1,312,917; Aug. 12; v. 265; p. 233.

McCracken, G. W. (See Hemphill, E. H., assignor.)

McCrory, Pierce H., Lakeland, Fla., assignor of one-half to C. H. R. Woodward, Portsmouth, N. H., Making drain-tiles. No. 1,314,279; Aug. 26; v. 265; p. 543.

McCrory, Harry F., Reno, Nev., Sparking device for explosive-engines. No. 1,312,038; Aug. 12; v. 265; p. 170.

McCreary, Walter E., Altoona, Pa., Automobile magneto contact. No. 1,312,704; Aug. 12; v. 265; p. 209.

McClulloch, John A., near McKeesport, assignor to National Tube Company, Pittsburgh, Pa., Pipe-joint. No. 1,314,410; Aug. 26; v. 265; p. 569.

McCullough, Thomas, Medicine Lodge, Kans., Ironing-board. No. 1,314,411; Aug. 26; v. 265; p. 569.

McCurdy, Arthur W., Victoria, British Columbia, Canada, Device for coating surfaces. No. 1,313,197; Aug. 12; v. 265; p. 288.

McDonald, William H., London, Ark., Well-cover. No. 1,312,556; Aug. 12; v. 265; p. 162.

McDonnell, George P., St. Louis, Mo., Signalling sealing device for valves, &c. No. 1,312,101; Aug. 5; v. 265; p. 64.

McDonough, Thomas P. (See Zaccard and McDonough.)

McElhenny, R. E. (See Davidson, John R., assignor.)

McGinley, Frederick D., and T. J. Coughlin, Syracuse, N. Y., Track-sanding device. No. 1,314,008; Aug. 26; v. 265; p. 527.

McGladrick, Timothy, Lincoln, N. H., Arm-cushion for crutches and fastenings therefor. No. 1,312,930; Aug. 5; v. 265; p. 34.

McGovern, Bernard R., Frenchville, Pa., Rail-joint. No. 1,314,412; Aug. 26; v. 265; p. 569.

McGrath, Arthur C., Sioux City, Iowa, Linotype-machine. No. 1,314,006; Aug. 26; v. 265; p. 491.

McGrath, George E., Chicago, Ill., Catch-basin for downspouts. No. 1,312,089; Aug. 12; v. 265; p. 180.

McGrath, Justin, San Francisco, Calif., Ship construction. No. 1,314,009; Aug. 26; v. 265; p. 503.

McGruer, Ewing, Lambeth, London, England, Hollow spar, wooden tube, and the like. No. 1,314,007; Aug. 26; v. 265; p. 491.

McGuckin, Hugh, Syracuse, N. Y., Anchor for guy-rods. No. 1,312,918; Aug. 12; v. 265; p. 233.

McGuire, Thomas E. (See Baker and McGuire.)

McIlroy, George D., assignor to J. S. Wakefield, Okla-homa, Okla., Sanitary closet-cabinet. No. 1,312,192; Aug. 5; v. 265; p. 64.

McInerney, Joseph P., St. Louis, Mo., Portable house. No. 1,312,700; Aug. 12; v. 265; p. 191.

McIntyre, Joseph J., Brooklyn, N. Y., Aerial bomb. No. 1,312,998; Aug. 12; v. 265; p. 249.

McKee, Garnet W., Rockford, Ill., Automatic temperature control for gas-furnaces and the like. No. 1,312,039; Aug. 12; v. 265; p. 179.

McKee, Ralph H., Ridgefield Park, N. J., Making phenol. No. 1,312,127; Aug. 5; v. 265; p. 52.

McKenna, Terrence L., Ludon, Colo., Resilient wheel. No. 1,313,707; Aug. 19; v. 265; p. 400.

McKeogh, Thomas J., assignor to Sherwin-Williams Company, Limited, Montreal, Quebec, Canada, Package. No. 1,313,397; Aug. 19; v. 265; p. 342.

McKeown, Samuel C., East Orange, assignor to Spittford Electrical Company, Newark, N. J., Brush-holder. No. 1,311,991; Aug. 5; v. 265; p. 10.

McKerlie, John E., Waterford, Ontario, Canada, Soap-cutter. No. 1,312,235; Aug. 5; v. 265; p. 89.

McKillop, James W. A., Montreal, Quebec, Canada, Power-transmitting device. No. 1,312,009; Aug. 12; v. 265; p. 250.

McKillop, Robert W. (See Orrock, John W., assignor.)

McKinnon Dash Company. (See Armstrong, Wesley J., assignor.)

McKisick, William H., Tulsa, Okla., Drainage-valve for deep-well pumps. No. 1,314,070; Aug. 26; v. 265; p. 508.

McKoy, Edwin A., New Orleans, La., Cutter-head. No. 1,313,710; Aug. 19; v. 265; p. 401.

McKoy, Edwin A., and G. D. Moore, New Orleans, La. Disintegrating and conserving mechanism. No. 1,312,450; Aug. 5; v. 265; p. 112.

McKoy, Edwin A., and G. D. Moore, New Orleans, La. Stump-harvester. No. 1,313,708; Aug. 19; v. 265; p. 400.

McKoy, Edwin A., and G. D. Moore, New Orleans, La. Method of harvesting stumps. No. 1,313,709; Aug. 19; v. 265; p. 401.

McLaughlin, William E. (See Wilson, Dixon, and McLaughlin.)

McMahon, John W., Winthrop, Mass. Window-fastener. No. 1,314,488; Aug. 26; v. 265; p. 583.

McManus, Lewis H., Houston, Tex. Vehicle-indicator. No. 1,313,398; Aug. 19; v. 265; p. 342.

McMillan, William H., Los Angeles, Calif. Direction-indicator. No. 1,314,084; Aug. 26; v. 265; p. 606.

McMurry, Edward A., Chicago, Ill. Expression organ-keyboard. No. 1,313,711; Aug. 19; v. 265; p. 401.

McNaughton, Don A., Maryville, Tenn. Combustion-indicator. No. 1,311,905; Aug. 5; v. 265; p. 10.

McNaughton, Robert L., Milnot, N. D. Sack-holder. No. 1,312,330; Aug. 5; v. 265; p. 80.

McNeill, Roderick P., Seattle, Wash. Scraper. No. 1,312,128; Aug. 5; v. 265; p. 52.

McNeill Chair Company. (See McNeill, Harry, assignor.)

McNeill, Harry, assignor to McNeill Chair Company, Sheboygan, Wis. Combination telephone-support and chair. No. 1,313,491; Aug. 19; v. 265; p. 360.

McNulty, Thomas E., San Francisco, Calif. Ballot-box. No. 1,313,191; Aug. 12; v. 265; p. 270.

McPherson, Duncan A., et al. (See Sjogren, George, assignor.)

McQuarrie, James L. (See Scribner and McQuarrie.)

McQuay-Norris Manufacturing Company. (See Cummings and Mummert, assignors.)

McQuay-Norris Manufacturing Company. (See Mummert, Arden J., assignor.)

McQuiver, William H., and G. A. Keating, Buffalo, N. Y. Demountable wheel. No. 1,312,859; Aug. 12; v. 265; p. 222.

McSweeney, Frank H. (See Meyers, Campbell, and McSweeney.)

McWhorter Manufacturing Company. (See Hendrickson, William A., assignor.)

McWilliams, Arthur C., Chicago, Ill. assignor to George Cutter Company, South Bend, Ind. Film-socket for series lamps. No. 1,314,008; Aug. 26; v. 265; p. 491.

Mead, Carl P. (See Laidley, William E., assignor.)

Meadville Wrench Company. (See Smith, Edward C., assignor.)

Mesahl, Philip J., Summit, N. J. Operating and controlling mechanism for player-pianos. No. 1,312,194; Aug. 5; v. 265; p. 94.

Mesahl, Philip J., Summit, N. J. Player-piano. No. 1,312,195; Aug. 5; v. 265; p. 95.

Mesahl, Philip J., Summit, N. J. Mechanism for player-pianos. No. 1,312,196; Aug. 5; v. 265; p. 95.

Measuragraph Company, The. (See Hoesch, Walter E., assignor.)

Mebane, Charles F., Cleveland, Ohio, assignor to The Carbonizing Engineering Company. Composition for case-hardening. No. 1,312,339; Aug. 5; v. 265; p. 90.

Mechanical Rubber Company, The. (See Morron, John D., assignor.)

Medley, Harry L., Los Angeles, Calif., assignor to one-third to H. G. Hamilton, Youngstown, Ohio. Artificial ball. No. 1,312,451; Aug. 5; v. 265; p. 113.

Meliga, Charles H., Philadelphia, Pa., assignor to MacAndrews & Forbes Company, Camden, N. J. Fire-extinguishing apparatus. No. 1,312,559; Aug. 12; v. 265; p. 165.

Melkleham, William J., Denver, Colo. Fan-belt retainer. No. 1,313,829; Aug. 19; v. 265; p. 423.

Mellink, Charles F., Toledo, Ohio. Electric welding. No. 1,312,039; Aug. 5; v. 265; p. 35.

Melersieck, Erwin, Lockport, N. Y. Automatic train control. No. 1,312,919; Aug. 12; v. 265; p. 233.

Melander, Alexander. (See Von Arco and Melander.)

Meltner, Elmer. (See Sperry and Meltner.)

Meklenburg, Wincenty P., Adena, Ohio. Garbage-receptacle. No. 1,313,003; Aug. 12; v. 265; p. 250.

Melulek, Joseph, Bayonne, N. J. Footrest for rocking-chairs. No. 1,314,080; Aug. 26; v. 265; p. 507.

Melton, Pink J., Memphis, Tex. Maltz-header. No. 1,313,001; Aug. 12; v. 265; p. 251.

Mercer, Henry H., Claremont, N. H., assignor to Sullivan Machinery Company. Piston-controlling mechanism. No. 1,313,501; Aug. 19; v. 265; p. 431.

Mercier, Henri, Paris, France. Automatic throttle for high-compression motors. No. 1,312,040; Aug. 5; v. 265; p. 33.

Merkel, Charles E., Marion, Ohio. Clevis. No. 1,313,311; Aug. 19; v. 265; p. 326.

Merrill, Charles F., Jasper, Mo., and E. E. Hall, Bayard, Kans. Fly-trap for rattle. No. 1,312,130; Aug. 5; v. 265; p. 52.

Meschmoller, William F., New Dorp, N. Y. Outlet-box fitting. No. 1,314,346; Aug. 26; v. 265; p. 556.

Messer, George F., Aberdeen, Wash. Dirigible headlight for automobiles. No. 1,312,560; Aug. 12; v. 265; p. 163.

Messiter, William F., Brooklyn, N. Y. Cap-cover block. No. 1,313,717; Aug. 19; v. 265; p. 402.

Metalite Company, The. (See Clapp, Albert L., assignor.)

Metals Recovery Company. (See Bacon, Raymond F., assignor.)

Metcalfe, Frank G. (See Butler, John W., assignor.)

Meta, Harry J., Davenport, Iowa, assignor to one-half to J. P. Bladel, Rock Island, Ill. Attachment for corn-planters. No. 1,311,985; Aug. 5; v. 265; p. 25.

Metzger, Floyd J., New York, N. Y. Production of formates. No. 1,313,312; Aug. 19; v. 265; p. 326.

Metzger, Floyd J., New York, N. Y. Production and extraction of cyanide. No. 1,313,313; Aug. 19; v. 265; p. 326.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,314; Aug. 19; v. 265; p. 327.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,315; Aug. 19; v. 265; p. 327.

Metzger, Floyd J., New York, N. Y. Synthetic production of ammonia. No. 1,313,316; Aug. 19; v. 265; p. 327.

Meyer, Charles L., and R. O. MacMonagle, Omaha, Nebr. Mold for concrete columns. No. 1,313,005; Aug. 12; v. 265; p. 251.

Meyer, Frederick W., Jersey City, N. J., assignor to one-half to W. H. Gary, New York, N. Y. Water-tank electric display-sign. No. 1,313,550; Aug. 19; v. 265; p. 371.

Meyers, Frank W., C. L. Campbell, and F. H. McSweeney, Houston, Tex. Lint separator and cleaner. No. 1,312,708; Aug. 12; v. 265; p. 210.

Meyers, Herbert H., Pittsburgh, Pa., assignor to Armour Fertilizer Works, Chicago, Ill. Contact process for making sulfuric acid. No. 1,314,280; Aug. 26; v. 265; p. 544.

Meyner, Walter, New York, N. Y. Self-illuminating notebook. No. 1,313,551; Aug. 19; v. 265; p. 371.

Milano, Nicholas J. (See Kaiser and Milano.)

Milaud, Joseph O., Fort Kent, Me. Internal-expanding brake. No. 1,313,317; Aug. 19; v. 265; p. 327.

Michelson, Albert A., Chicago, Ill. Optical range-finder. No. 1,313,495; Aug. 19; v. 265; p. 350.

Michelson, Lellm J. (See Bennett, Harry J., assignor.)

Michon, Joseph H. M., Washington, D. C. Expandible wheel-rim. No. 1,314,414; Aug. 26; v. 265; p. 570.

Michon, Joseph H. M., Washington, D. C. Collapsible wheel-rim. No. 1,314,415; Aug. 26; v. 265; p. 570.

Michon, Joseph H. M., Washington, D. C. Collapsible wheel-rim. No. 1,314,416; Aug. 26; v. 265; p. 570.

Michon, Joseph H. M., Baltimore, Md., assignor to one-eighth to J. H. Latimer, Washington, D. C. Expandible wheel-rim. (Reissue.) No. 1,471,2; Aug. 19; v. 265; p. 452.

Mid-West Manufacturing Company, The. (See Hopkins, Arthur C., assignor.)

Middleton, Claude E., Eagle Grove, Iowa. Traction-wheel. No. 1,312,740; Aug. 12; v. 265; p. 198.

Mikola, James G., Birchwood, Wis. Cue-tip. No. 1,314,347; Aug. 26; v. 265; p. 556.

Miles, Don D. (See Connor and Miles.)

Miles, Edward J., Newton, Iowa. Vise. No. 1,311,986; Aug. 5; v. 265; p. 25.

Miles, Myrtle C., et al. (See Connor and Miles, assignors.)

Miles, Vester, Engeland, S. C. Water-elevating device. No. 1,313,718; Aug. 19; v. 265; p. 403.

Millard, Hannah G., assignor to The Butterick Publishing Company, New York, N. Y. Dressmaker's pattern outfit. No. 1,313,496; Aug. 19; v. 265; p. 360.

Miller, Albert E., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Purifying oil. No. 1,311,987; Aug. 5; v. 265; p. 25.

Miller, Andrew B., Baldwin, Wis. Dry-cleaning and washing machine. No. 1,313,497; Aug. 19; v. 265; p. 361.

Miller, Arthur E., and C. E. Anable, Sacramento, Calif. One-way screw or bolt. No. 1,312,409; Aug. 5; v. 265; p. 104.

Miller, Arthur E., and C. E. Anable, Sacramento, Calif. Safety-crank for automobiles. No. 1,312,410; Aug. 5; v. 265; p. 104.

Miller, Du Hrol and Peters Manufacturing Co., The. (See Du Hrol, Napoleon, assignor.)

Miller, George F., New York, N. Y. Joint for filter-press devices. No. 1,313,318; Aug. 19; v. 265; p. 327.

Miller, James R., Okmulgee, Okla. Process and apparatus for refining oils. No. 1,312,265; Aug. 5; v. 265; p. 76.

Miller, Julius J., St. Joseph, Mich. Internal-combustion-engine ignition-indicator. No. 1,313,319; Aug. 19; v. 265; p. 327.

Miller, Nick B., Fairfield, Manitoba, Canada. Mousetrap. No. 1,314,200; Aug. 26; v. 265; p. 528.

Miller, Norman H., New York, N. Y. Packing for piston-rods, plungers, pistons, &c. No. 1,313,320; Aug. 19; v. 265; p. 327.

Miller Rubber Company. (See Lorch, William G., assignor.)

Miller, Theodore, Waco, Tex. Converter and smelter. No. 1,314,348; Aug. 26; v. 265; p. 556.

Miller, Thomas S., South Orange, N. J. Winding engine. No. 1,313,719; Aug. 19; v. 265; p. 403.

Milliken, Foster, Lawrence, N. Y. Alloy. No. 1,314,417; Aug. 26; v. 265; p. 570.

Millner, Harry L., Morganston, N. C. Gas-producer. No. 1,312,411; Aug. 5; v. 265; p. 104.

Mills, E. H., et al., trustees. (See Stanard, Maurice L., assignor.)

Mills, Herbert S. (See Oveson, Carl A., assignor.)

Mills, Joseph E., Los Angeles, Calif. Suspenders. No. 1,313,321; Aug. 19; v. 265; p. 328.

Mills, Willie G., and C. T. Packard, assignors to Edward Packard and Company, Limited, Ipswich, England. Chamber used in the manufacture of sulfuric acid. No. 1,312,741; Aug. 12; v. 265; p. 198.

Mills, Willie G., and C. T. Packard, assignors to Edward Packard and Company, Limited, Ipswich, England. Chamber used in the manufacture of sulfuric acid. No. 1,312,742; Aug. 12; v. 265; p. 199.

Mills Woven Cartridge Belt Company. (See Hatchelder, Frank R., assignor.)

Milnor, Michael J., assignor to F. B. Redington Company, Chicago, Ill. Driving-wheel. No. 1,312,704; Aug. 12; v. 265; p. 191.

Milner, William H. (See Gelger, William A., assignor.)

Milner, William H. (See Mitchell, John R., assignor.)

Milner, William H. (See O'Connor, John F., assignor.)

Minerals Separation American Syndicate (1913) Limited. (See Seale and Shellshour, assignors.)

Minerals Separation North American Corporation. (See Emerson, Edward H., assignor.)

Minerals Separation North American Corporation. (See Seale and Shellshour, assignors.)

Minnesota Manufacturers' Association. (See Lister, Charles H., assignor.)

Minnich, Mary C. (See Minnich, Simon B., assignor.)

Minnich, Simon B., assignor to M. C. Minnich, Landisville, Pa. Press. No. 1,312,225; Aug. 12; v. 265; p. 294.

Minol Chemical Company, The. (See Hurtt, Spencer M., assignor.)

Minsk, Clarence, New York, N. Y. Stirring device. No. 1,313,830; Aug. 19; v. 265; p. 428.

Miskey, Julius, Dayton, Ohio. Automobile-lamp control mechanism. No. 1,314,281; Aug. 26; v. 265; p. 544.

Mitcham, James L., and J. W. Burns, Rockdale, Tex. Scoop. No. 1,313,408; Aug. 19; v. 265; p. 344.

Mitchell, Ewen H., assignor to one-third to A. E. Short and one-third to H. O. Short, Bedford, England. Airship of rigid type. No. 1,314,349; Aug. 26; v. 265; p. 557.

Mitchell, Ewen H., assignor to one-third to A. E. Short and one-third to H. O. Short, Bedford, England. Airship of rigid type. No. 1,314,350; Aug. 26; v. 265; p. 557.

Mitchell, John C., East Orange, N. J. Dumping-bucket. No. 1,312,705; Aug. 12; v. 265; p. 192.

Mitchell, John R., Evanston, Ill., assignor to W. H. Miner, Chary, N. Y. Buffer-plate for passenger-cars. No. 1,311,988; Aug. 5; v. 265; p. 25.

Mitchell, John R., Evanston, Ill., assignor to W. H. Miner, Chary, N. Y. Insulation for refrigerator-cars and the like. No. 1,314,090; Aug. 26; v. 265; p. 507.

Mitchell Manufacturing Company. See Mitchell, William, assignor.)

Mitchell, Oscar J., Ingersoll, Ontario, Canada. Combined wagon and horse body for motors with movable attachments. No. 1,312,561; Aug. 12; v. 265; p. 163.

Mitchell, Robert G., Mount Vernon, N. Y. Sound reproducing and recording apparatus. No. 1,313,720; Aug. 19; v. 265; p. 403.

Mitchell, William, assignor to Mitchell Manufacturing Company, Milwaukee, Wis. Carrier-boom. No. 1,314,010; Aug. 26; v. 265; p. 492.

Mitchell, William H., East St. Johnsbury, Vt. Chain mat for wheel-liners. No. 1,311,989; Aug. 5; v. 265; p. 25.

Mizusawa, Isamu, et al. (See Yamamoto, Yoshitaro, assignor.)

Moard, Eric, assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn. Signaling device. No. 1,313,006; Aug. 12; v. 265; p. 251.

Moberg, Emil. (See Anderson, Albin, assignor.)

Moers, Emil G., Nymegen, Netherlands. Preparing sub-imate. No. 1,312,743; Aug. 12; v. 265; p. 199.

Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine and trimming mechanism therefor. No. 1,312,412; Aug. 5; v. 265; p. 104.

Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Trimming mechanism for sewing-machines. No. 1,312,413; Aug. 5; v. 265; p. 105.

Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Take-up mechanism for sewing-machines. No. 1,313,721; Aug. 19; v. 265; p. 402.

Moffatt, James R., and R. S. Kelso, assignors to Union Special Machine Company, Chicago, Ill. Thread-nipper. No. 1,312,709; Aug. 12; v. 265; p. 191.

Mojoanier Bros. Co. (See Mojoanier, Julius J., assignor.)

Mojoanier, Julius J., Oak Park, assignor to Mojoanier Bros. Co., Chicago, Ill. Extraction flask or tube. No. 1,312,340; Aug. 5; v. 265; p. 90.

Miller, Sune, Gottenborg, Sweden. Cooling utensil. No. 1,311,990; Aug. 5; v. 265; p. 26.

Monte, Fred, Newark, N. J. Dish-washing machine. No. 1,312,414; Aug. 5; v. 265; p. 105.

Moore, Charles T., assignor to The Columbus Glass Company, Lancaster, Ohio. Capping-off device. No. 1,312,341; Aug. 5; v. 265; p. 90.

Moore, George, Erie, Pa. Vise. No. 1,314,351; Aug. 26; v. 265; p. 557.

Moore, George D. (See McKoy and Moore.)

Moore, Hugh K., and O. A. Richter, assignors to Brown Company, Berlin, N. H. Making carbon bisulfide. No. 1,312,800; Aug. 12; v. 265; p. 210.

Moore, Lavern E., Palo Alto, Calif. Folding ladder. No. 1,314,201; Aug. 26; v. 265; p. 528.

Moore, Richard S., Rockdale, Tex. Aerial conveyer. No. 1,314,202; Aug. 26; v. 265; p. 528.

Moran, Arthur E., Canton, Mont. Device for pulling automobiles out of mudholes. No. 1,312,070; Aug. 5; v. 265; p. 42.

Moran, Frank B., Dallas, Tex. Faucet. No. 1,313,105; Aug. 12; v. 265; p. 271.

Mordeo Frog & Crossing Works. (See Gibbs, Benedict T., Jr., assignor.)

Moreton Accessories Company. (See Moreton, Henry H., assignor.)

Moreton, Henry H., Stony Point, N. Y., assignor to Moreton Accessories Company. Manifold for internal-combustion engines. No. 1,314,091; Aug. 26; v. 265; p. 507.

Moreton, Henry H., Stony Point, N. Y., assignor to Moreton Company. Vehicle-wheel. No. 1,314,092; Aug. 26; v. 265; p. 507.

Morey, William E., Chicago, Ill., assignor to Rodger Ballast Car Company. Convertible freight-car. No. 1,311,906; Aug. 5; v. 265; p. 11.

Morgan Construction Company. (See George, Jerome R., assignor.)

Morgan, David G. (See Francis and Morgan.)

Morgan, E. W., et al. (See Johns, Paul H., assignor.)

Morgan, Edmund C., Chicago, Ill. Mining-machine. No. 1,314,011; Aug. 26; v. 265; p. 492.

Morgan Engineering Company, The. (See Haiss, Hugo, assignor.)

Morinarty, Daniel, Oakland, Calif. Vehicle-wheel. No. 1,312,415; Aug. 5; v. 265; p. 105.

Morin, Albert, Asnières, France. Construction of light-weight engines. No. 1,314,352; Aug. 26; v. 265; p. 557.

Morin, Alfred C., Paris, France. Making metal wheels. No. 1,313,322; Aug. 19; v. 265; p. 328.

Morison, Donald R., Hartlepool, England. Apparatus for filtering liquids. No. 1,312,041; Aug. 5; v. 265; p. 36.

Morison, Donald R., Hartlepool, England. Apparatus for heating boiler feed-water. No. 1,313,100; Aug. 12; v. 265; p. 280.

Morral, Samuel E. and W. W. Morral, Ohio. Corn-busking machine. No. 1,314,353; Aug. 26; v. 265; p. 558.

Morral, William W. (See Morral, Samuel E. and W. W.)

Morris, Saul. (See Purcell, Thomas C., assignor.)

Morris, Thomas J., Springfield, Mass. Sectional support. No. 1,312,861; Aug. 12; v. 265; p. 222.

Morrison, Cary A., Delaware, Ohio. Elastic non-inflatable tire. No. 1,313,007; Aug. 12; v. 265; p. 251.

Morron, John D., Lakewood, Ohio, assignor to The Mechanical Rubber Company. Recovering rubber solvent. No. 1,312,452; Aug. 5; v. 265; p. 113.

Morrow, Alexander H., Pittsburgh, Pa. Heater or boiler. No. 1,312,801; Aug. 12; v. 265; p. 210.

Morse, Thomas, Bexley, near Sydney, New South Wales, Australia. Luggage-carrier. No. 1,312,562; Aug. 12; v. 265; p. 164.

Mortestad, Einar, Tordeeb, near Moss, Norway. Condenser. No. 1,312,416; Aug. 5; v. 265; p. 106.

Mortimer, George, Somerset, assignor to D. Napier & Son, Limited, London, England. Locking and adjusting device. No. 1,313,409; Aug. 19; v. 265; p. 344.

Mortimer, Harry E., St. Louis, Mo. Device for applying tire-chains. No. 1,313,410; Aug. 19; v. 265; p. 344.

Morton, Burdell M., Koshkonong, Ma. Automatic rail-power. No. 1,312,131; Aug. 5; v. 265; p. 93.

Mosher, Willet H., assignor to Goodall, Powell & Mosher, Inc., Buffalo, N. Y. Trolley for hoisting apparatus, &c. No. 1,312,417; Aug. 5; v. 265; p. 106.

Moskowitz, Rudolph, Detroit, Mich. Toy. No. 1,312,563; Aug. 12; v. 265; p. 164.

Mosler, Arthur R., New York, N. Y. Gasket. No. 1,312,338; Aug. 5; v. 265; p. 90.

Moener, John W., and G. W. Crane, Syracuse, N. Y. Steam and hot-water boiler. No. 1,313,722; Aug. 19; v. 265; p. 405.

Moss, Charles, New York, N. Y. Non-skid and armor device for automobile-tires. No. 1,314,145; Aug. 26; v. 265; p. 517.

Mountford, Clarence E., Brooklyn, assignor to one-half to L. Malanet, New York, N. Y. Seamless chain and method of constructing the same. No. 1,313,949; Aug. 26; v. 265; p. 480.

Mowers, William E., York, Pa. Valve-grinding tool. No. 1,314,012; Aug. 26; v. 265; p. 492.

Mowry, Edward, Sterling, Ill., assignor, by means assignments, to International Harvester Company. Hay-loader. No. 1,312,342; Aug. 5; v. 265; p. 90.

Mokey, James A., Chicago, Ill., assignor, by means assignments, to International Harvester Company. Removable standard for wagon-holsters. No. 1,312,343; Aug. 5; v. 265; p. 91.

Mueller, Arnold, Denver, Colo. Control means for automobile low-speed levers. No. 1,314,418; Aug. 26; v. 265; p. 570.

Mueller, Herman C., Milwaukee, Wis. Armature-winding mechanism. No. 1,312,564; Aug. 12; v. 265; p. 164.

Mueller, Otto, Elfton, Fla. Cultivator. No. 1,312,418; Aug. 5; v. 265; p. 106.

Muller, Jean P., Le Havre, France. Igniting device. No. 1,314,419; Aug. 26; v. 265; p. 571.

Mallally, John B., Seattle, Wash. Envelop-moistener. No. 1,313,723; Aug. 19; v. 265; p. 403.
 Multiport Company. (See Balkwill and Schweiger, assignors.)
 Mulvey, Bernard B., New Haven, Conn. Cartridge-feeding device. No. 1,314,013; Aug. 26; v. 265; p. 492.
 Mumford, Russell W., New York, N. Y., assignor to Refining Products Corporation, Wilmington, Del. Making sugar. No. 1,314,203; Aug. 26; v. 265; p. 528.
 Mumford, Russell W., New York, N. Y., assignor to Refining Products Corporation, Wilmington, Del. Making purifying preparations. No. 1,314,204; Aug. 26; v. 265; p. 528.
 Mummert, Arden J. (See Cummings and Mummert.)
 Mummert, Arden J., assignor to McQuay-Norris Manufacturing Company, St. Louis, Mo. Piston lubrication. No. 1,313,905; Aug. 26; v. 265; p. 471.
 Mundy, Herbert C., and E. Harrison, Los Angeles, Calif. Garden-tool. No. 1,313,200; Aug. 12; v. 265; p. 289.
 Munger, Robert S., Birmingham, Ala., assignor to Continental Gln Company, Cotton-cleaver. No. 1,311,907; Aug. 5; v. 265; p. 11.
 Munter, Charles, New York, N. Y. Body-conformer. No. 1,312,744; Aug. 12; v. 265; p. 199.
 Murdoch, Everett C., Berkeley, Calif., and G. J. Kelly, Haverhill, Mass. Pyrophoric gas-lighter. No. 1,312,862; Aug. 12; v. 265; p. 222.
 Murdoch, Franklin P., East Orange, N. J., assignor to Gillis & George, New York, N. Y. Hanger for radiators. No. 1,311,908; Aug. 5; v. 265; p. 11.
 Murdoch, George J., Newark, N. J. Self-sealing fuel-tank. No. 1,312,745; Aug. 12; v. 265; p. 199.
 Murphy, Charles P., Cleveland, Ohio. Leaf-spring. No. 1,314,282; Aug. 26; v. 265; p. 544.
 Murphy, Walter P. (See Sisson, Vinton E., assignor.)
 Murphy, Walter P., Chicago, Ill. Sheet-metal end structure for railway-cars. No. 1,313,106; Aug. 12; v. 265; p. 271.
 Murphy, Walter P., Chicago, Ill. Combined uncoupling-lever and coupling-positioning device. No. 1,314,283; Aug. 26; v. 265; p. 544.
 Mustor, Gerald F., Brooklyn, N. Y. Packing. No. 1,313,201; Aug. 12; v. 265; p. 289.
 Mustor, Gerald F., Brooklyn, N. Y. Packing. No. 1,313,202; Aug. 12; v. 265; p. 289.
 Myers, Alfred B., Gates, Oreg. Pressure-retaining valve. No. 1,312,453; Aug. 5; v. 265; p. 113.
 Myers, Perry E., Monroe, La. Hinge. No. 1,313,411; Aug. 19; v. 265; p. 344.
 Myers, Roy R., Chicago, Ill. Device for oiling handsaws. No. 1,314,420; Aug. 26; v. 265; p. 571.
 Myrick, John M., Youngstown, Ohio. Insecticide or compound for destroying cotton boll-weevil. No. 1,313,724; Aug. 19; v. 265; p. 404.
 Nantz, John H., Samson, Ala. Refrigerator. No. 1,313,552; Aug. 19; v. 265; p. 371.
 Narber, Simon D., Marshalltown, Iowa. Soap-holder. No. 1,312,420; Aug. 5; v. 265; p. 106.
 Narasewicz, Konstanty, Chicago, Ill. Caster. No. 1,312,863; Aug. 12; v. 265; p. 223.
 Nason, George B., assignor to Champion Spark Plug Company, Toledo, Ohio. Display-cabinet. No. 1,313,498; Aug. 19; v. 265; p. 361.
 Nathanson, William. (See Emmerman and Nathanson.)
 National Binding Machine Company. (See Rideout, Arthur E., assignor.)
 National Carbon Company. (See Clark, Emerson L., assignor.)
 National Carbon Company. (See Kaplan, Mordoch L., assignor.)
 National Cash Register Company, The. (See Fuller, Frederick L., assignor.)
 National Cash Register Company, The. (See Skerl, Francis, assignor.)
 National Cash Register Company, The. (See Martin, Haakon A., assignor.)
 National Manufacturing Company, The. (See Ferris, Walton C., assignor.)
 National Shorthand Machine Company. (See Ireland and Lippert, assignors.)
 National Tube Company. (See McCulloch, John A., assignor.)
 Naughton, John J., Brooklyn, N. Y. Time-controlled stove-lighter. No. 1,314,354; Aug. 26; v. 265; p. 558.
 Navin, Frank, Salt Lake City, Utah. Separating the petroleum contents from petroleum-bearing sands or shale. No. 1,312,260; Aug. 5; v. 265; p. 76.
 Neale, Robert M. (See Nelson, Lewis D., assignor.)
 Neckerman, William M., Youngstown, Ohio. Pipe-making apparatus. No. 1,312,107; Aug. 5; v. 265; p. 65.
 Needham, Houghton L., Chicago, Ill. Boiler-tube cleaner. No. 1,313,725; Aug. 19; v. 265; p. 404.
 Nelson, Henry W., Ashby, Minn. Window-cash fastener. No. 1,312,864; Aug. 12; v. 265; p. 223.
 Nelson, John, and A. Schelwer, Erie, Pa. Cue-up. No. 1,312,198; Aug. 5; v. 265; p. 65.
 Nelson, Lewis D., assignor of one-half to R. M. Neale, Union City, Mich. Air-heating attachment for internal-combustion engines. No. 1,313,632; Aug. 19; v. 265; p. 388.
 Nethercutt, Charles A., Burnetts Creek, Ind. Tire-guard. No. 1,312,344; Aug. 5; v. 265; p. 91.

Newberth, Franklin G., Ansonia, and E. M. Grilley, assignors to The Waterbury Jewel Company, Waterbury, Conn. Pipe-cover. No. 1,312,042; Aug. 5; v. 265; p. 36.
 New Idea Spreader Co. (See Synck, Henry, assignor.)
 New Idea Spreader Company. (See Rollman, Bruce B., assignor.)
 New Jersey Zinc Company. (See Rowand, Lewis O., assignor.)
 Newhall, Henry B., Jr., executor. (See Plelater, Henry W., assignor.)
 Newkirk, Gilbert A., Denver, Colo. Life-insurance-computing packet. No. 1,314,146; Aug. 26; v. 265; p. 517.
 Newman, Jacob W., New Orleans, La. Combination-fastener. No. 1,312,421; Aug. 5; v. 265; p. 106.
 Newman, Louis. (See Fischbein and Newman.)
 Newman, Malcolm A., Florenceville, Tex. Thread-cutting tool. No. 1,312,345; Aug. 5; v. 265; p. 91.
 Newton, Charles H., Plainville, Conn. Valve-remover. No. 1,314,355; Aug. 26; v. 265; p. 558.
 Newton, George B., Haddam, Kans. Trace-end carrier. No. 1,313,499; Aug. 19; v. 265; p. 361.
 Nicol, Norman C., Buffalo, N. Y. Hinge. No. 1,313,726; Aug. 19; v. 265; p. 404.
 Nielsen, Frederik, Boston, Mass., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Inflating-valve. No. 1,313,553; Aug. 19; v. 265; p. 372.
 Nielsen, Frederik, Boston, Mass., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Inflating-valve. No. 1,313,554; Aug. 19; v. 265; p. 372.
 Niemann, Harry N., Armstrong, Iowa. Compressed-air grease-gun. No. 1,312,642; Aug. 12; v. 265; p. 180.
 Niles, William L., and C. R. Birdsey, assignors to United States Gypsum Company, Chicago, Ill. Floor construction of the like. No. 1,313,500; Aug. 19; v. 265; p. 361.
 Niewinski, Victor, St. Paul, Minn. Adjustable saw-frame. No. 1,313,107; Aug. 12; v. 265; p. 271.
 Niles, Irving F., Plainfield, N. J., assignor to R. Hoe and Co., New York, N. Y. Sheet-feeding mechanism. No. 1,312,865; Aug. 12; v. 265; p. 223.
 Nimirick, Harold C., Everett, Wash. Motor-cycle stand. No. 1,314,421; Aug. 26; v. 265; p. 571.
 Nitrogen Products Company. (See Arnold, Edward E., assignor.)
 Nitrogen Products Company. (See Hadden, Charles P., assignor.)
 Nitrogen Products Company. (See Williams, Roger, assignor.)
 Nixdorf, William H., Jr. (See Wilkinson and Nixdorf.)
 Nixon, William, Dixon, Ill. Display-stand. No. 1,312,043; Aug. 5; v. 265; p. 36.
 Nobles, Milton A., Philadelphia, assignor, by mesne assignments, to W. S. Russell, trustee, Carlisle, Pa. Gas-detector. No. 1,313,323; Aug. 19; v. 265; p. 328.
 Noe, John W. (See Davis, Mack H., assignor.)
 Noft, Harry R., and F. J. Schwimmer, Toledo, Ohio. Combined rotary earth-boring and draw machine. No. 1,312,865; Aug. 12; v. 265; p. 165.
 Noleless, Typewriter Company, The. (See Anderson, Nils H., assignor.)
 Non-Explosive Can and Tube Company. (See Kessler, Louis, assignor.)
 Nord, Sverre, and A. Anderson, Seklu, Wash. Loading-boom. No. 1,313,108; Aug. 12; v. 265; p. 271.
 Nordblad, Ernst, South Bend, Ind. Hosiery. No. 1,314,356; Aug. 26; v. 265; p. 558.
 Nordlyke, Addison H., and J. E. Norris, assignors to Indianapolis Manufacturing Company, Indianapolis, Ind. Wood-strip-cutting machine. No. 1,313,325; Aug. 19; v. 265; p. 328.
 Nordlyke, Horace W., assignor to Indianapolis Manufacturing Company, Indianapolis, Ind. Separator for storage batteries. No. 1,313,324; Aug. 19; v. 265; p. 328.
 Norris, Alexander, Dexter City, Ohio. Convertible self-grinding hoe. No. 1,312,802; Aug. 12; v. 265; p. 211.
 Norris, John E. (See Nordlyke and Norris.)
 Norsk Elektrisk Metalindustri Aktieselskab. (See Hult, Sven, assignor.)
 North East Electric Company. (See Croll, Albert J., assignor.)
 North East Electric Company. (See Dorsey, Farnum F., assignor.)
 North, Thomas K., Westminster, London, assignor to Vickers Limited, Westminster, England. Submarine mine. No. 1,312,346; Aug. 5; v. 265; p. 91.
 North-Western Expanded Metal Co. (See Turner, Edgar A., assignor.)
 Northover, Harry R., Winnipeg, Manitoba, Canada. Machine for filling the magazines of machine-guns. No. 1,313,727; Aug. 19; v. 265; p. 404.
 Norton, Charles W. (See Nuttison and Norton.)
 Norton, William F., Chicago, Ill. Vehicle-body. No. 1,312,422; Aug. 5; v. 265; p. 106.
 Noser, Emil V., St. Louis, Mo. Lock for shift-levers of automobiles. No. 1,313,412; Aug. 19; v. 265; p. 345.
 Noyes, Jesse D., Pleasantville, Pa. Gripping-tool. No. 1,311,991; Aug. 5; v. 265; p. 26.
 Nutting, Louis B., Pelham, N. Y., assignor to Power Specialty Company, New York, N. Y. Anchoring means for superheaters. No. 1,313,326; Aug. 19; v. 265; p. 328.

Nyblom, Ture L., Sattahj-Strömgren, Sweden. Weighing apparatus. No. 1,312,132; Aug. 5; v. 265; p. 53.
 O'Bannon, William D. (See May, Harry E., assignor.)
 O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Antifriction-bearing. No. 1,314,014; Aug. 26; v. 265; p. 493.
 O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Universal joint for shafting. No. 1,314,015; Aug. 26; v. 265; p. 493.
 O'Neill, Arthur S., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing propellant explosives. No. 1,311,909; Aug. 5; v. 265; p. 11.
 O'Neill, Arthur S., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Propellant explosive. No. 1,311,910; Aug. 5; v. 265; p. 11.
 O'Neill, James D., Montreal, Quebec, Canada. Track-scale. No. 1,314,423; Aug. 26; v. 265; p. 571.
 O'Neill, William F., Wilkesburg, Pa. Cabinet-type switch-panel. No. 1,313,565; Aug. 19; v. 265; p. 372.
 Onkes, Lars E., Elk Point, S. D. Harrow. No. 1,313,008; Aug. 12; v. 265; p. 251.
 Obee, Harvey, et al. (See Sjogren, George, assignor.)
 Oederatt, Clarence W. (See Baum and Oederatt.)
 Ofeldt, George, Philadelphia, Pa. Shaft-coupling. No. 1,313,109; Aug. 12; v. 265; p. 271.
 Officer, Charles B., Claremont, N. H., assignor to Sullivan Machinery Company, Mining-machine. No. 1,313,869; Aug. 19; v. 265; p. 431.
 Ogden, William H., Philadelphia, Pa. Sealing-wax applicator. No. 1,312,347; Aug. 5; v. 265; p. 91.
 Ogle, Thomas, Bramley, near Leeds, England. Machine for drying barks or warps of yarn, woven or felted fabrics, leather and fibrous materials. No. 1,312,348; Aug. 5; v. 265; p. 91.
 Ohlson, Olaf, West Newton, assignor to Waltham Watch Company, Waltham, Mass. Time-fuse for artillery-projectiles. No. 1,312,803; Aug. 12; v. 265; p. 211.
 Ohnell, Ernst J., Brooklyn, N. Y. Measuring instrument. No. 1,312,566; Aug. 12; v. 265; p. 165.
 Oil Mill Machinery & Manufacturing Co. (See Helm, Clyde D., assignor.)
 Olnek, Frederick, Edmonton, Alberta, Canada. Automatic gate. No. 1,312,267; Aug. 5; v. 265; p. 77.
 Olsen, James C. (See Fisher and Olsen.)
 Olson, John J., Belview, Minn. Derrick. No. 1,314,357; Aug. 26; v. 265; p. 558.
 Olsson, Zacharias, Brooklyn, N. Y. Apparatus for ascertaining the fusing temperature of materials. No. 1,314,422; Aug. 26; v. 265; p. 571.
 Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,312,866; Aug. 12; v. 265; p. 223.
 Orbin, George, assignor of one-third to J. M. Jones, Milwaukee, Wis. Spring-wheel. No. 1,313,501; Aug. 19; v. 265; p. 361.
 Ordway, Joseph H., Brookline, assignor to Boston Blacking Company, Cambridge, Mass. Machine for use in manufacturing stiffeners for boots and shoes. No. 1,312,567; Aug. 12; v. 265; p. 165.
 Ormsby, James L., Jersey City, N. J. Portable ash-sifter. No. 1,314,424; Aug. 26; v. 265; p. 571.
 Orrock, John W., Montreal, assignor to J. M. R. Fairbairn, Westmount, for himself and in trust for R. W. McKillop, Montreal, Quebec, Canada, and said Orrock. Smoke-jack. No. 1,314,016; Aug. 26; v. 265; p. 493.
 Osborn, E. Lemuel, Seattle, Wash. Wave-motor. No. 1,314,147; Aug. 26; v. 265; p. 517.
 Osborn, Herbert L., Seattle, Wash. Combination-trunk. No. 1,312,044; Aug. 5; v. 265; p. 36.
 Osborne, Harold S., New York, N. Y., assignor to American Telephone and Telegraph Company. Composite ringing apparatus. No. 1,313,413; Aug. 19; v. 265; p. 345.
 Osburn, Benjamin B. (See Byrnes and Osburn.)
 Oserchuk, William, Allentown, Pa. Toy. No. 1,314,205; Aug. 26; v. 265; p. 528.
 Osmun, Orelle R., Covington, Ky. Lifting-jack. No. 1,312,568; Aug. 12; v. 265; p. 165.
 Ostry, David, New York, N. Y. Iron-stand. No. 1,312,349; Aug. 5; v. 265; p. 92.
 Osten, Charles, New Haven, Conn. Combined button and belt loop. No. 1,313,640; Aug. 19; v. 265; p. 388.
 Oster, Matthew C., Denton, Mont. Door and gate operating mechanism. No. 1,314,206; Aug. 26; v. 265; p. 529.
 Oster, Matthew C., Roy, Mont. Door and operating means therefor. No. 1,314,207; Aug. 26; v. 265; p. 529.
 Ott von Rotkork and Verlinkhat, Adolph, Baron, West Kensington, London, assignor to Aladdin Lamp Syndicate Limited, (in liquidation), London, England. Machine for cutting electric bulbs and regenerating them. No. 1,313,545; Aug. 19; v. 265; p. 426.
 Ottewill, Victor G., Withrow, Minn. Internal-combustion engine. No. 1,313,414; Aug. 19; v. 265; p. 345.
 Ottlinger, Leon, New York, N. Y. Fastening device. No. 1,312,199; Aug. 5; v. 265; p. 65.
 Otto, Maximilian J., New York, N. Y. Fluid heating and cooking stove. No. 1,312,804; Aug. 12; v. 265; p. 211.
 Ottosen, Christopher. (See Dassen, Paul H., assignor.)
 Overbury, Frederick C., Hilldale, N. J., assignor to The Flintkote Company, Boston, Mass. Method and apparatus for making prepared roofing elements. No. 1,314,476; Aug. 26; v. 265; p. 561.

Overbury, Frederick C., Hilldale, N. J., assignor to The Flintkote Company, Boston, Mass. Method and means for making prepared roofing elements. No. 1,314,477; Aug. 26; v. 265; p. 561.
 Overman, Benjamin F., San Antonio, Tex. Shade-bracket. No. 1,314,358; Aug. 26; v. 265; p. 558.
 Oveson, Carl A., assignor to H. S. Mills, Chicago, Ill. Woodworking-machine. No. 1,313,850; Aug. 26; v. 265; p. 480.
 Owen, Joseph W. (See Baker and Owen.)
 Owens, Jesse C., Los Angeles, Calif. Muffler-valve ball-cock. No. 1,313,831; Aug. 19; v. 265; p. 424.
 P. R. Glass Company. (See Glass, Percy R., assignor.)
 Pacific Coast Typewriter Company. (See Bennett, Orin, assignor.)
 Pacific Flush Tank Company. (See Cox, James W., assignor.)
 Package Machinery Company. (See Smith and Phelou, assignors.)
 Package Machinery Company. (See Smith, Elmer L., assignor.)
 Packard, Charles T. (See Mills and Packard.)
 Packard Motor Car Company. (See McCain, George L., assignor.)
 Packmore Manufacturing Company. (See Collier Frederick W., assignor.)
 Padilla, Rafael, Habana, Cuba. Advertising device. No. 1,313,110; Aug. 12; v. 265; p. 272.
 Page, William K., Orange, N. J., assignor to Chille Exploration Company, New York, N. Y. Belt conveyor. No. 1,313,111; Aug. 12; v. 265; p. 272.
 Paige, James H., Manchester, N. H. Shaking-mixer. No. 1,312,569; Aug. 12; v. 265; p. 164.
 Pakeman, Harry, Niles, Ohio. Suction fly-catcher. No. 1,313,203; Aug. 12; v. 265; p. 290.
 Palmer, Charles S., Pittsburgh, Pa. Treating petroleum residues. No. 1,313,009; Aug. 12; v. 265; p. 282.
 Palmer, Lyndon C., Buffalo, N. Y., assignor to F. N. Hart Company, Limited, Toronto, Ontario, Canada. Box-making machine. No. 1,312,570; Aug. 12; v. 265; p. 166.
 Palmgren, Nils A., assignor to Aktiebolaget Srenska Kullagerfabriken, Gottenborg, Sweden. Determining the pressure between two bodies. No. 1,312,805; Aug. 12; v. 265; p. 211.
 Pangborn, Leo D., Eau Claire, Wis. Skce-skoot. No. 1,313,502; Aug. 19; v. 265; p. 362.
 Paper Utilities Corporation. (See Hill, Harriet, assignor.)
 Paragon Binder Corporation. (See Webster, Bradford, assignor.)
 Parker, Arthur. (See Parker, Fred and A.)
 Parker, Charles L., Newark, N. J. Safety-catch for pins, brooches, and the like. No. 1,313,010; Aug. 12; v. 265; p. 252.
 Parker, Fred and A., Wilmerding, Pa. Toy. No. 1,313,327; Aug. 19; v. 265; p. 329.
 Parker, Humphrey P., Dunedin, New Zealand. Aeroplane and the like. No. 1,312,571; Aug. 12; v. 265; p. 164.
 Parker, Raymond D., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Secret-signal-system. No. 1,312,572; Aug. 12; v. 265; p. 166.
 Parker, Roy T., Buffalo, N. Y. Spring-clamp. No. 1,312,746; Aug. 12; v. 265; p. 199.
 Park, Frank E., Buffalo, N. Y. Saw-vise. No. 1,313,728; Aug. 19; v. 265; p. 404.
 Parsons, Edward T., Newark, N. J. Flour-sifting apparatus. No. 1,313,729; Aug. 19; v. 265; p. 404.
 Patrick, Henry W., assignor of one-fourth to E. F. Cleland and one-fourth to F. A. Cleland, Mansfield, Ohio. Combined gaseous-fuel and water-vapor burning heating apparatus. No. 1,312,080; Aug. 5; v. 265; p. 43.
 Pass & Seymour. (See Thompson, Don N., assignor.)
 Pass, Wendell, Export, Pa. Saddler's implement. No. 1,313,556; Aug. 19; v. 265; p. 372.
 Pathe Freres Phonograph Company. (See Lewis, Frank D., assignor.)
 Patterson, Ralph J., Berlin, N. H. Electric homidifier. No. 1,313,832; Aug. 19; v. 265; p. 424.
 Patterson, William J., and R. M. Buckley, assignors to Heyl & Patterson, Inc., Pittsburgh, Pa. Coal-cleaning apparatus. No. 1,312,807; Aug. 12; v. 265; p. 222.
 Patus, Alexander, assignor of one-half to H. H. Mandel, South Bend, Ind. Respirator. No. 1,312,200; Aug. 5; v. 265; p. 65.
 Paulsen, Peter, Schlewig, Iowa. Stock-waterer. No. 1,312,350; Aug. 5; v. 265; p. 92.
 Paxton, Sherman H., St. Paul, Minn. Ink-applying device. No. 1,313,833; Aug. 19; v. 265; p. 424.
 Payne, John H., Jr., Schenectady, N. Y., assignor to General Electric Company. Radiotelephone system. No. 1,313,112; Aug. 12; v. 265; p. 272.
 Pearson, Fred. (See Blackwood and Pearson.)
 Pease, Edward L., Darlington, England. Tubular heat-interchanging apparatus. No. 1,312,045; Aug. 5; v. 265; p. 36.
 Pease, Edward L., Darlington, England. Oilled heat-interchanging apparatus. No. 1,313,730; Aug. 19; v. 265; p. 403.
 Peck, Arthur K., et al. (See Peck, Harry H., assignor.)
 Peck, Arthur K., executor. (See Peck, Harry H.)

Peck, Harry H., deceased, Cambridge; A. K. Peck, executor, Boston, assignor of one-half to Fore River Shipbuilding Corporation, Quincy, three-eighths to A. K. Peck, Boston, Mass., and one-eighth to N. A. Thompson, Jr., Optical Instrument. No. 1,314,478; Aug. 26; v. 265; p. 581.

Peck, Harry H., deceased, Cambridge; A. K. Peck, executor, Boston, assignor of one-half to Fore River Shipbuilding Corporation, Quincy, three-eighths to A. K. Peck, Boston, Mass., and one-eighth to N. A. Thompson, Jr., Optical Instrument. No. 1,314,479; Aug. 26; v. 265; p. 581.

Peck, Harry H., deceased, Cambridge; A. K. Peck, executor, Boston, assignor of one-half to Fore River Shipbuilding Corporation, Quincy, three-eighths to A. K. Peck, Boston, Mass., and one-eighth to N. A. Thompson, Jr., Optical Instrument. No. 1,314,480; Aug. 26; v. 265; p. 582.

Peck, Lawrence W., Wichita, Kans. Measuring apparatus. No. 1,312,351; Aug. 5; v. 265; p. 92.

Pederson, Peder, Port Oxford, Oreg. Nut-vise. No. 1,314,017; Aug. 26; v. 265; p. 493.

Pelzer, William S., trustee. (See Stokes, Frederick W. S., assignor.)

Pellow, Arthur, assignor to American Optical Company, Southbridge, Mass. Lens-forming process. No. 1,312,920; Aug. 12; v. 265; p. 234.

Penny, Harold D., Pelham, N. Y., and G. F. Ross, Jersey City, N. J., assignors to Automatic Inserting Machine Corporation, New York, N. Y. Sheet-feeding mechanism. No. 1,314,359; Aug. 26; v. 265; p. 559.

Pennsylvania Wire Glass Company. (See Cox, Walter, assignor.)

Peoples, James E., Alva, Okla. Hydraulic transmission. No. 1,313,415; Aug. 19; v. 265; p. 345.

Perrine, Theodore A., Toledo, Ohio. Lock for motor-vehicles. No. 1,314,426; Aug. 26; v. 265; p. 572.

Perec, Hishin. (See Kamm, Charles F., assignor.)

Perez, Frank M., Brooklyn, assignor, by mesne assignments, to D. Brody, New York, N. Y. Receptacle for display. No. 1,313,606; Aug. 26; v. 265; p. 471.

Perkett, Louis F., assignor to Traverse City Refrigerator Co., Traverse City, Mich. Refrigerator construction. No. 1,312,808; Aug. 12; v. 265; p. 223.

Perkins Blue Company. (See Grover, William M., assignor.)

Perkins, Harry J., Grand Rapids, Mich. Grinding-machine. No. 1,311,992; Aug. 5; v. 265; p. 26.

Permutt Company, The. (See Kriegelsheim, Heinrich, assignor.)

Perna, Joseph, Philadelphia, Pa. Excavator and hoist and traveler or trolley therefor. No. 1,312,569; Aug. 12; v. 265; p. 224.

Perry, Frank, Tipton, England, assignor to Industrial Inventions Limited, Tipton, Stafford, England. Incandescent-gas lighting. No. 1,312,046; Aug. 5; v. 265; p. 37.

Perry, Ray P., Upper Montclair, N. J., assignor to The Barrett Company. Castable material in subdivided form. No. 1,312,261; Aug. 5; v. 265; p. 66.

Perry, Ray P., Upper Montclair, N. J., assignor to The Barrett Company. Retainer member for roofing-fabric rolls. No. 1,312,202; Aug. 5; v. 265; p. 66.

Persons-Arter Machine Company, The. (See Arter, William, assignor.)

Petermann, Otto, Grotton, N. Y., assignor to Corona Type-writer Company, Inc. Type-writing machine. No. 1,311,911; Aug. 5; v. 265; p. 11.

Peterson, Harriett L., Portland, Oreg. Combined secret pocket and hose-supporter. No. 1,313,229; Aug. 12; v. 265; p. 295.

Peterson, Johann G., Jersey City, N. J. Electrical attachment-plug. No. 1,313,328; Aug. 19; v. 265; p. 329.

Peterson, Per A., assignor to De Laval Steam Turbine Company, Trenton, N. J. Flexible gear-wheel. No. 1,311,912; Aug. 5; v. 265; p. 11.

Peterson, William T., San Jose, Calif. Bottle-closure. No. 1,313,503; Aug. 19; v. 265; p. 302.

Petit, Andre, Habana, Cuba. Tilting platform for side-dumping cars. No. 1,313,416; Aug. 19; v. 265; p. 345.

Pettersen, Ludvik M. (See Stensrud, Bernt, assignor.)

Petterson, Erick W., Jamestown, assignor to W. Lewis, Utica, N. Y. Spring bed or seat. No. 1,312,870; Aug. 12; v. 265; p. 224.

Petry, Jacob, Pittsburgh, Pa. Making dental molds. No. 1,313,907; Aug. 26; v. 265; p. 471.

Pfefferle, Edward A., Burley, Idaho. Type-writer carriage and platen-actuator. No. 1,313,951; Aug. 26; v. 265; p. 480.

Phelon, Arthur E. (See Smith and Phelon.)

Phelps, Edwin S., Elizabeth, N. J. Recording time-lock. No. 1,314,427; Aug. 26; v. 265; p. 572.

Phelps, James C., Springfield, Mass. Outlet-cap and making the same. No. 1,313,329; Aug. 19; v. 265; p. 329.

Philadelphia Textile Machinery Company. (See Coulton, Harry, assignor.)

Phillippi, Frank A. (See Evans and Phillippi.)

Phillips, Gordon, Cobalt, Ontario, Canada. Air-compressor. No. 1,314,360; Aug. 26; v. 265; p. 559.

Phillips, Gordon, Cobalt, Ontario, Canada. Water-head-producing device. No. 1,314,361; Aug. 26; v. 265; p. 559.

Phoenix-Hermetic Company. (See Tallafiero, Thomas L., assignor.)

Phonoharp Company, The. (See Ballard, Harrie A., assignor.)

Photo Motion Company. (See Clark, Edwin W., assignor.)

Picard, Aldric, Oldtown, Me. Combined tea and coffee pot. No. 1,312,203; Aug. 5; v. 265; p. 66.

Picard, René, Paris, France. Mileage and time indicator for vehicles. No. 1,312,747; Aug. 12; v. 265; p. 199.

Pichot, Adé, Drenne, Léontine, Angers, France. Trap for flies and the like. No. 1,312,573; Aug. 12; v. 265; p. 167.

Pichoud, Jean, New York, N. Y. Vehicle-spring. No. 1,311,913; Aug. 5; v. 265; p. 12.

Pickford, Isaac W., assignor to G. Ford, Brooklyn, N. Y. Mail-routing case. No. 1,312,133; Aug. 5; v. 265; p. 53.

Pierce, C. S., et al. (See Cottrill, Kenyon, assignor.)

Pierce, Ralph E., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Secret-signaling system. No. 1,312,574; Aug. 12; v. 265; p. 167.

Pifer, John H., Larimore, N. D. Four-wheel-drive truck. No. 1,314,043; Aug. 26; v. 265; p. 507.

Pike, Floyd. (See Potter, De Long, and Pike.)

Pike, Robert D., San Francisco, Calif. Manufacturing magnesite refractories. No. 1,312,871; Aug. 12; v. 265; p. 224.

Pilora, Bruno, and R. O. Stange, Honolulu, Hawaii; said Pilora assignor to said Stange. Drying banana. No. 1,313,557; Aug. 10; v. 265; p. 372.

Podstafte, Anders A., Frederiksberg, near Copenhagen, Denmark. Apparatus for impregnating liquids with carbonic-acid or other gases. No. 1,314,148; Aug. 26; v. 265; p. 518.

Pinet, Albert, and A. Debout, Paris, France. Apparatus for the distillation of coal. No. 1,312,352; Aug. 5; v. 265; p. 92.

Pinger, Leo, Fallon, Nev., assignor of one-half to Z. Kendall, San Francisco, Calif. Roller-grizzly. No. 1,313,011; Aug. 12; v. 265; p. 252.

Pipe, Edward H., assignor to Arme Cement Plaster Company, St. Louis, Mo. Form for building blocks. No. 1,314,018; Aug. 26; v. 265; p. 493.

Piscek, Joseph I., et al. (See Kriek, Joseph, assignor.)

Piscesor, Joseph, Brainerd, Minn. Car construction. No. 1,312,134; Aug. 5; v. 265; p. 53.

Planche, Etienne, Flitot, Mich. Tire-carrier. No. 1,311,903; Aug. 5; v. 265; p. 26.

Plister, Henry W., Westfield, N. J., assignor to H. B. Newhall, Jr., executor. Conduit and cable clamp. No. 1,313,113; Aug. 12; v. 265; p. 272.

Pneumatic Process Flotation Company. (See Flinn, Frederick R., assignor.)

Pocock, Sidney J., Essex, England. Child's combined rotary chair and play-table. No. 1,313,350; Aug. 19; v. 265; p. 329.

Poetsch, Max, Clinton, N. J. Burling or examining machine. No. 1,313,012; Aug. 12; v. 265; p. 252.

Poffenberger, Henry, Pontiac, Mich. Machine for bending leaf-springs. No. 1,312,268; Aug. 5; v. 265; p. 77.

Pollon, George W., Tarrytown, N. Y. Micrometer-callipers. No. 1,312,643; Aug. 12; v. 265; p. 180.

Pokorny, Joseph, assignor to May Department Stores Company, St. Louis, Mo. Window-awning. No. 1,314,362; Aug. 26; v. 265; p. 559.

Polasky, Samuel H., assignor to F. A. Hardy & Company, Chicago, Ill. Shield for welders and the like. No. 1,313,908; Aug. 26; v. 265; p. 472.

Pollen, Arthur H., London, and H. F. Landstad, York, England. Apparatus for determining and correcting the course of aircraft. No. 1,314,429; Aug. 26; v. 265; p. 573.

Pollen, Arthur H., London, and H. F. Landstad, York, England. Bomb-dropping sight for aircraft. No. 1,314,428; Aug. 26; v. 265; p. 572.

Pollen, Arthur H., London, and H. Isherwood, York, England. Electric fire control for guns. No. 1,314,298; Aug. 26; v. 265; p. 529.

Polysu, Constantine C., Tonnerre, France. Method and apparatus for casing wells. No. 1,313,013; Aug. 12; v. 265; p. 252.

Poole, Alfonso S., Danville, Va. Loom attachment. No. 1,314,149; Aug. 26; v. 265; p. 518.

Poole, Arthur F., Kenilworth, Ill., assignor to Wahl Company, Wilmington, Del. Calculating-machine. No. 1,314,094; Aug. 26; v. 265; p. 507.

Pope, Joseph H., Hamilton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Jack. No. 1,313,909; Aug. 26; v. 265; p. 472.

Porter, George A., assignor to Invincible Stopper Company, Boston, Mass. Non-refillable bottle. No. 1,313,910; Aug. 26; v. 265; p. 472.

Porter, Hazel L., Rochester, N. Y. Tottling-shuttle. No. 1,314,209; Aug. 26; v. 265; p. 529.

Porter, Wilsey M., and E. H. Sprague, Sacramento, Calif. Repair-bench. No. 1,313,604; Aug. 19; v. 265; p. 381.

Porter, Milton J., assignor of one-half to J. M. Froese, Wayne, Pa. Post-office box. No. 1,314,363; Aug. 26; v. 265; p. 560.

Porter, William G., et al. (See Waller, Oen F., assignor.)

Posternak, Swigel, Chené-Bougeries, near Geneva, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Organic phosphorus compound from plants. No. 1,313,014; Aug. 12; v. 265; p. 253.

Potter, John, J. De Long, and F. Pike, Grand Ledge, Mich. Machine for upholstering chair-seats. No. 1,314,430; Aug. 26; v. 265; p. 573.

Potter, Joseph L. and J. Le R., Indianapolis, Ind. Excavating apparatus. No. 1,313,911; Aug. 26; v. 265; p. 472.

Potter, Joseph Le R. (See Potter, Joseph L. and J. Le R.)

Power, Richard F., Doveridge, England. Aerial-observation instrument. No. 1,311,994; Aug. 5; v. 265; p. 26.

Power, Richard F., Doveridge, England. Signaling device. No. 1,311,995; Aug. 5; v. 265; p. 26.

Power Specialty Company. (See Nutting, Louis B., assignor.)

Powers Accounting Machine Company. (See Powers, James, assignor.)

Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Record-card feed. No. 1,312,806; Aug. 12; v. 265; p. 212.

Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Counter for accounting machines. No. 1,312,807; Aug. 12; v. 265; p. 212.

Pratt, George L., assignor to M. L. Pratt, Atlanta, Ga. Measuring device. No. 1,313,731; Aug. 19; v. 265; p. 405.

Pratt, George W., Oakland, Calif. Policeman's nippers and handcuffs combined. (Reissue.) No. 1,471,4; Aug. 19; v. 265; p. 432.

Pratt, John S. (See Redmond, James E., assignor.) (Reissue.)

Pratt, Margaret L. (See Pratt, George L., assignor.)

Pray, Lucian A. (See Kerr and Pray.)

Pressed Steel Automobile Lug Company. (See Kittelson, Halmer C., assignor.)

Price-Campbell Cotton Picker Corporation. (See Calderwood, Benjamin C., assignor.)

Price, Russell C., Frankfort, Ind. Automobile-lock. No. 1,312,204; Aug. 5; v. 265; p. 66.

Priest, Henry M. (See Ford, Richardson, Greenbaum, and Priest.)

Pritchard, Albert R., New York, N. Y. Extension waste-basket. No. 1,312,575; Aug. 12; v. 265; p. 167.

Prokash, Ferdinand, Vienna, Austria. Testing-lamp. No. 1,313,952; Aug. 26; v. 265; p. 481.

Prouty, George W., Milton, Mass. Tinker-punch. No. 1,312,492; Aug. 5; v. 265; p. 120.

Prouty, Theodore C., Aurora, Ill., assignor, by mesne assignments, to The Van Sickles Company. Speed-indicating device. No. 1,314,364; Aug. 26; v. 265; p. 560.

Public Service Cap Company. (See Errett, Charles, assignor.)

Pulver, Frank F., Rochester, assignor of one-half to L. H. Pulver, Adams Basin, N. Y. Film-winding mechanism for cameras. No. 1,311,996; Aug. 5; v. 265; p. 27.

Pulver, Libbie H. (See Pulver, Frank F., assignor.)

Purcell, Thomas C., assignor of one-half to S. Morris, Chinese Camp, Calif. Pedal control for motor-vehicles. No. 1,314,210; Aug. 26; v. 265; p. 529.

Purdy, Fred A., Vancouver, British Columbia, Canada. Railway-ticket and form therefor. No. 1,312,205; Aug. 5; v. 265; p. 66.

Pure Coal Briquettes Limited. (See Sntelliffe, Edgar R., assignor.)

Purshagen, William, St. Louis, Mo. Detachable shoe element. No. 1,311,914; Aug. 5; v. 265; p. 12.

Puter, Stephen A. D., Berkely, Calif., and E. J. Boyler, New Haven, Conn., assignors to Duplex Snap Fastener Co., Inc. Separable fastener. No. 1,313,331; Aug. 19; v. 265; p. 330.

Putnam, Alden L., assignor to Detroit Pressed Steel Company, Detroit, Mich. Forming tapering cross-section disks. (Reissue.) No. 1,471,3; Aug. 19; v. 265; p. 432.

Putnam, Fred A., Melrose, assignor to Markem Machine Company, Boston, Mass. Making printed impressions. No. 1,314,211; Aug. 26; v. 265; p. 530.

Putnam, William H., assignor to Madison-Kipp Lubricator Company, Madison, Wis. Lubricator. No. 1,313,204; Aug. 12; v. 265; p. 290.

Quackenbush, Clinton L. (See Quackenbush, Harvey E. and C. L.)

Quackenbush, Harvey E. and C. L., Bloomfield, N. J., assignors, by mesne assignments, to General Electric Company. Glass-blowing apparatus. No. 1,313,205; Aug. 12; v. 265; p. 290.

Quass, Ralph L., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system for telephone-exchanges. No. 1,312,808; Aug. 12; v. 265; p. 212.

Quigley, John T., assignor to Costmeter Company, Boston, Mass. Index equipment. No. 1,314,425; Aug. 26; v. 265; p. 572.

Quimby, Walker S., and F. W. Robinson, assignors to Hanovia Chemical & Manufacturing Company, Newark, N. J. Apparatus for building up objects of quartz glass. No. 1,314,212; Aug. 26; v. 265; p. 530.

R. Hoe and Co. (See Niles, Irving F., assignor.)

Raab, Henry C., Garrettville, and J. H. Dundon, Youngstown, Ohio. Valve. No. 1,312,644; Aug. 12; v. 265; p. 180.

Rabin, Allen H. (See Haskins, Butler J., assignor.)

Radjkoor, Gyoka, and W. H. H. Zentmyer, Philadelphia, Pa. Locking device for automobiles. No. 1,312,354; Aug. 5; v. 265; p. 93.

Raffo, Paul L., New York, N. Y. Drawing-board attachment. No. 1,313,732; Aug. 19; v. 265; p. 405.

Raid, Harry L. (See Stubbjare and Raid.)

Ralney, Paul M., Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Distributing apparatus. No. 1,311,915; Aug. 5; v. 265; p. 12.

Ramsher, John C., Shenandoah, Pa. Film winding and rewinding apparatus. No. 1,313,733; Aug. 19; v. 265; p. 405.

Ranek, James C., Elmira, N. Y. Gage-wheel for garden-rakes. No. 1,314,365; Aug. 26; v. 265; p. 560.

Radd, James H., North Tonawanda, N. Y. Index. No. 1,312,206; Aug. 5; v. 265; p. 66.

Randall, Charles A., Halleybury, Ontario, Canada. Ore-classifier. No. 1,313,734; Aug. 19; v. 265; p. 405.

Randall, Raymond G., assignor of one-fourth to E. F. Wolcott and one-fourth to C. Wolcott, Grianell, Iowa. Method of and apparatus for mixing concrete. No. 1,312,207; Aug. 5; v. 265; p. 67.

Raney, Estelle C., assignor to The Automatic Reclining Circuit Breaker Company, Columbus, Ohio. Circuit-controlling mechanism. No. 1,312,454; Aug. 5; v. 265; p. 113.

Ranney, Clark E., Tulsa, Okla. Well-tube-draining device. No. 1,312,423; Aug. 5; v. 265; p. 107.

Rapp, Mathew, Morton, Ill. Straw-spreading machine. (Reissue.) No. 1,471,5; Aug. 19; v. 265; p. 433.

Rapp, Mathew, assignor to Kramer Rotary Harrow Company, Morton, Ill. Straw-spreader. No. 1,313,735; Aug. 19; v. 265; p. 406.

Rasch, Gottlieb. (See Sulwinski and Rasch.)

Rasmussen, Christian, Cleveland, Ohio. Electric-circuit maker and breaker. No. 1,312,208; Aug. 5; v. 265; p. 67.

Ratcliff, John M. (See Wright and Ratcliff.)

Rauch, Otto, New Braunfels, Tex. Farm implement. No. 1,312,748; Aug. 12; v. 265; p. 200.

Rayfield, Charles L., assignor to Findelsen & Kropf Manufacturing Company, Chicago, Ill. Carburetor. No. 1,312,749; Aug. 12; v. 265; p. 200.

Rayfield, Charles L., assignor to Findelsen & Kropf Manufacturing Company, Chicago, Ill. Carburetor. No. 1,312,750; Aug. 12; v. 265; p. 200.

Raymond, Lillian C., Detroit, Mich. Kitchen-fork. No. 1,313,417; Aug. 19; v. 265; p. 346.

Rea, Stanley O., Toronto, Ontario, Canada. Poultry-feeder. No. 1,312,576; Aug. 12; v. 265; p. 167.

Reid, Newton N., Albuquerque, N. Mex. Olintment. No. 1,312,047; Aug. 5; v. 265; p. 37.

Reber, John G., deceased, Chicago, Ill., by Sefton Manufacturing Corporation, Millbrook, N. Y., and Chicago, Ill. Parking box or rarton. (Reissue.) No. 1,471,6; Aug. 19; v. 265; p. 433.

Reidfield, Casper L., Chicago, Ill. Stereotyping-machine. No. 1,313,114; Aug. 12; v. 265; p. 272.

Redmond, George H., D. H. Harriman, Jr., and O. L. Richardson, Griffin, Ga.; said Harriman assignor to The Terrell Machine Company, Charlotte, N. C. Bobbin or quill cleaning attachment for looms. No. 1,312,750; Aug. 12; v. 265; p. 200.

Redmond, James E., Crandall, Ga., assignor to J. S. Pratt, Toledo, Ohio. Scraping and excavating apparatus. (Reissue.) No. 1,471,7; Aug. 19; v. 265; p. 433.

Redpath, Robert, assignor to The Coventry Ordnance Works, Limited, Coventry, England. Cartridge-feed mechanism especially applicable for automatic guns. No. 1,312,048; Aug. 5; v. 265; p. 37.

Redrup, Charles B., Leeds, England. Valve-gear of internal-combustion engines. No. 1,312,577; Aug. 12; v. 265; p. 167.

Reed, Richard D., assignor to The H. B. Smith Company, Westfield, Mass. Roller. No. 1,312,353; Aug. 5; v. 265; p. 93.

Reed, William R., Baltimore, Md. Grain-conveyer. No. 1,313,418; Aug. 19; v. 265; p. 346.

Reeve, Sidney A., New Brighton, N. Y. Musical notation. No. 1,313,915; Aug. 12; v. 265; p. 253.

Refining Products Corporation. (See Mumford, Russell W., assignor.)

Regan, Joseph C., New Britain, assignor to The Trumhull Electric Mfg. Co., Plainville, Conn. Electric switch. No. 1,313,641; Aug. 19; v. 265; p. 388.

Reid, Charles P., Louisville, Ky.-Broom. No. 1,313,206; Aug. 12; v. 265; p. 290.

Reid, James E., Moorestown, N. J., and F. W. Side, Camden, N. J.; said Side assignor to said Reid. Hot-air dental syringe. No. 1,313,561; Aug. 19; v. 265; p. 429.

Reid, John T., Lovelock, Nev. Pneumatic folding attachment for keeping damaged vessels afloat. No. 1,312,355; Aug. 5; v. 265; p. 93.

Reid, John T., Lovelock, Nev. Submersible cargo carrier or transport. No. 1,312,356; Aug. 5; v. 265; p. 93.

Reid, William, Chicago, Ill. Lightning-arrester. No. 1,311,916; Aug. 5; v. 265; p. 12.

Reiff, George J., Hatboro, Pa. Window construction. No. 1,313,239; Aug. 12; v. 265; p. 297.

Reizart, Channcey, Easton, Pa., assignor to Taylor-Wharton Iron and Steel Company, High Bridge, N. J. Apparatus for forming hollow articles. No. 1,314,366; Aug. 26; v. 265; p. 590.

Reis, Julius M., New York, N. Y. Embroidery. No. 1,314,213; Aug. 26; v. 265; p. 530.

Reischmann, Joseph A., Jr., Milwaukee, Wis. Signal device. No. 1,311,997; Aug. 5; v. 265; p. 27.

Reising, Eugene G., East Hartford, Conn. Assignor to The Hartford Marine Gun Company, Hartford, Conn. Firing pin for firearms. No. 1,313,912; Aug. 26; v. 265; p. 472.

Remar, Albert, Maynard, Ohio. Railway tie and chair. No. 1,312,049; Aug. 5; v. 265; p. 37.

Renner, Henry M., Junction City, Kans. Shoe-closure. No. 1,314,234; Aug. 26; v. 265; p. 544.

Rennerfelt, Ivar, Djursbohm, Sweden. Electric furnace. No. 1,313,834; Aug. 19; v. 265; p. 424.

Rettinger, William N., Brooklyn, N. Y. Rettinger, William P., and W. L. Lange, Brooklyn, N. Y. Banjo and similar stringed instruments. No. 1,312,209; Aug. 5; v. 265; p. 67.

Rettinger, William N., Bourbon, Ind. Wire cable. No. 1,312,872; Aug. 12; v. 265; p. 224.

Reuthe, Gustav, Sayville, N. Y. Antenna arrangement for wireless signalling or the like. No. 1,314,095; Aug. 26; v. 265; p. 508.

Revere Rubber Company. (See Thatcher, Sheldon P., assignor.)

Rey, Henri D., Avarus, Island of Marotonga, Cook Islands. Vehicle-wheel. No. 1,313,913; Aug. 26; v. 265; p. 472.

Reynolds, John N., Greenwich, Conn., and J. F. Hearn, Passaic, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone switching apparatus. No. 1,314,214; Aug. 26; v. 265; p. 530.

Reynolds, Joy S., Seattle, Wash. Cutting torch tip. No. 1,313,605; Aug. 19; v. 265; p. 381.

Rhodes, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Beam-locking device for looms. No. 1,312,269; Aug. 5; v. 265; p. 77.

Rhodes, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Harness-motion for looms. No. 1,312,731; Aug. 12; v. 265; p. 200.

Rhodes, Thurman A., Altamont, Ill. Crate-opener. No. 1,312,873; Aug. 12; v. 265; p. 224.

Riley, Richard H., Swampscott, Mass., assignor to General Electric Company. Bearing and oiling means therefor. No. 1,313,739; Aug. 19; v. 265; p. 406.

Rieh, George H., assignor to Rich Steel Products Company, Little Creek, Mich. Rivet set. No. 1,314,215; Aug. 26; v. 265; p. 530.

Rich Steel Products Company. (See Rieh, George H., assignor.)

Richardson, Charles P. (See Ford, Richardson, Greenbaum, and Priest.)

Richardson, Oliver L. (See Richmond, Harriman, and Richardson.)

Richardson, William D., assignor to Swift and Company, Chicago, Ill. Solidifying normally solid substances. No. 1,312,424; Aug. 5; v. 265; p. 107.

Richardson, H. L., et al., trustees. (See Stanard, Maurice L., assignor.)

Richter, George A. (See Moore and Richter.)

Riddle, Zala, and N. F. Wilkins, Innsbruck, Calif. Air-brake apparatus. No. 1,312,357; Aug. 5; v. 265; p. 93.

Ridout, Arthur E., Chicago, Ill., assignor to National Binding Machine Company, New York, N. Y. Strip-serving device. No. 1,314,216; Aug. 26; v. 265; p. 531.

Riley, Lynn G., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,312,752; Aug. 12; v. 265; p. 201.

Rimailho, Emile, assignor to Compagnie des Forges et Aciéries de la Marine et d'Homécourt, Paris, France. Device for feeding buffers for ordnance with liquids. No. 1,313,835; Aug. 19; v. 265; p. 424.

Ringer, Luther, assignor to The Stimmen Automatic Railway Signal Company, Buffalo, N. Y. Signal system for single-track railways. No. 1,312,921; Aug. 12; v. 265; p. 234.

Ripich, Louis J., Cleveland, and J. V. Horr, assignors of one-third to J. Kaufman, East Cleveland, Ohio. Safety device for machinery. No. 1,312,210; Aug. 5; v. 265; p. 67.

Rissler, Albin P. (See Ruess and Rissler.)

Robards, Edward J., Alexandria, Minn. Road-scraper. No. 1,313,115; Aug. 12; v. 265; p. 273.

Robert Gair Company. (See Andrews, James M., assignor.)

Roberts, Arthur, Evanston, Ill. Regenerative coke-oven. No. 1,313,297; Aug. 12; v. 265; p. 290.

Roberts, Arthur, Evanston, Ill. Regenerative coke-oven. No. 1,313,298; Aug. 12; v. 265; p. 290.

Roberts, Fred T., Cleveland, Ohio. Flush-tank bulb. No. 1,313,914; Aug. 26; v. 265; p. 473.

Roberts, John H., Syracuse, assignor of one-half to C. W. Salisbury, Cortland, N. Y. Coin-controlled newspaper-vending machine. No. 1,314,217; Aug. 26; v. 265; p. 531.

Roberts, John W., Passaic, N. J. Textile apparatus. No. 1,312,874; Aug. 12; v. 265; p. 225.

Roberts, William E., Riverdale, Oreg. Gas-engine. No. 1,313,836; Aug. 19; v. 265; p. 424.

Roberts, William T., Buckingham, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for utilizing fastenings. No. 1,312,578; Aug. 12; v. 265; p. 108.

Robertson, Bedford S. (See St. Clair and Robertson.)

Robertson, Henry M. (See Gilman, George H., assignor.)

Robinette, Calvin A., Bowling Green, Ohio. Shade and curtain bracket. No. 1,313,915; Aug. 26; v. 265; p. 473.

Robinson, Ernest R., Carneys Point, N. J. Butter-fat gauge. No. 1,312,358; Aug. 5; v. 265; p. 94.

Robinson, Frederic W. (See Quimby and Robinson.)

Robinson, Robert P., Dallas, Tex. Stake support and brace. No. 1,312,359; Aug. 5; v. 265; p. 94.

Robinson, Roland H. (See Chapman and Robinson.)

Robinson, Roland H. (See Chapman, Penrose E., assignor.)

Robison, Floyd W., assignor to Floyd W. Robison Company, Detroit, Mich. Treating coffee. No. 1,313,209; Aug. 12; v. 265; p. 291.

Rockwood Sprinkler Company of Massachusetts. (See Carlson, Hjalmar G., assignor.)

Rodger Ballast Car Company. (See Morey, William E., assignor.)

Rodrigues, Mannel R., Brooklyn, N. Y. Electric receptacle. No. 1,314,218; Aug. 26; v. 265; p. 532.

Rorsch, Alfred, assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Indicating and recording instrument. No. 1,313,333; Aug. 19; v. 265; p. 330.

Rossler & Haasler Chemical Co., The. (See Sargent, Ralph N., assignor.)

Rogers, Guy A., Portland, Oreg. Combined brake and jack for vehicles. No. 1,311,998; Aug. 5; v. 265; p. 27.

Rohle, Otto C., assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plug. No. 1,313,419; Aug. 19; v. 265; p. 346.

Rokosz, Walter, Calumet, Mich. Resilient wheel. No. 1,311,999; Aug. 5; v. 265; p. 27.

Rolfe, Charles A., Redlands, Calif. Golf-club. No. 1,313,504; Aug. 19; v. 265; p. 362.

Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Electrical measuring instrument. No. 1,312,753; Aug. 12; v. 265; p. 201.

Roller-Smith Company. (See Roller, Frank W., assignor.)

Roller-Smith Company. (See Spurrier, John R., assignor.)

Rollman, Bruce B., Pittsburgh, Pa., assignor to New Idea Spreader Company, Coldwater, Ohio. Gearbox for manure-spreaders. No. 1,313,110; Aug. 12; v. 265; p. 273.

Romer, Gleason W., Lake Helen, Fla. Photographic-print washer. No. 1,312,050; Aug. 5; v. 265; p. 37.

Hooker, Johannes G. F., Vrijeban, near Delft, Netherlands. Marking-machine. No. 1,313,010; Aug. 12; v. 265; p. 253.

Root, Ralph R., assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Lamp-socket. No. 1,312,360; Aug. 5; v. 265; p. 94.

Rose, Charles M., New York, N. Y., and A. L. Hamlin, East Orange, N. J. Signal device. No. 1,313,917; Aug. 26; v. 265; p. 473.

Rose, Daniel A., Hills, Iowa. Automobile-extractor. No. 1,312,579; Aug. 12; v. 265; p. 108.

Rose, Frederick C., assignor to Garnet Carter Co. Inc., Chattanooga, Tenn. Trade-stimulating means. No. 1,312,922; Aug. 12; v. 265; p. 234.

Rose, James R., Edgeworth, Pa. Apparatus for producing combustible fuel. No. 1,312,875; Aug. 12; v. 265; p. 225.

Rosenberg, Benjamin, Brooklyn, N. Y. Spark-plug electrode. No. 1,313,334; Aug. 19; v. 265; p. 330.

Rosenwasser, Morris, Astoria, N. Y. Legging. No. 1,312,923; Aug. 12; v. 265; p. 234.

Ross, Amos A., Haskell, Okla. Cotton-picker. No. 1,314,090; Aug. 26; v. 265; p. 508.

Ross, Charley C., Springfield, Mo. Gate-latch. No. 1,312,051; Aug. 5; v. 265; p. 37.

Ross, Robert H., assignor of one-fourth to A. W. Gardner, Yarmouth, Nova Scotia, Canada. Buckle. No. 1,313,210; Aug. 12; v. 265; p. 291.

Rothermel, Curtis J., Philadelphia, Pa., assignor to The Barrett Company. Retainer member for roofing-fabric rolls. No. 1,312,211; Aug. 5; v. 265; p. 67.

Rothermel, Curtis J., Philadelphia, Pa., assignor to The Barrett Company. Screen. No. 1,314,219; Aug. 26; v. 265; p. 532.

Rotsart, Medard J. E., Portland, Oreg. Printer's-border-mitering jig. No. 1,313,600; Aug. 19; v. 265; p. 382.

Routin, Joseph L., Paris, France. Support for aiming devices, telemeters, and other applications. No. 1,312,000; Aug. 5; v. 265; p. 27.

Rowand, Lewis G., Brooklyn, assignor to New Jersey Zinc Company, New York, N. Y. Apparatus for separating ore by flotation. No. 1,312,754; Aug. 12; v. 265; p. 201.

Rowe, John, Casey, Inwa. Mud-shoe for automobiles. No. 1,312,924; Aug. 12; v. 265; p. 234.

Rowland, Robert A., Westview, Ohio. Machine for cutting round tubs or bowls. No. 1,314,019; Aug. 26; v. 265; p. 494.

Rowledge, Arthur J., assignor to D. Napier & Son Limited, London, England. Fluid-tight plug or socket. No. 1,312,001; Aug. 5; v. 265; p. 27.

Royal Typewriter Company. (See Dowd, Bernard J., assignor.)

Ruckman, Floyd A., Columbia City, assignor to Johnson Acetylene Gas Company, Crawfordsville, Ind. Acetylene-generator. No. 1,313,607; Aug. 19; v. 265; p. 382.

Rudin, Karl V., Stockholm, Sweden. Step-by-step mechanism in calculating-machines. No. 1,312,002; Aug. 5; v. 265; p. 28.

Rudolph Wurliatzer Manufacturing Company, The. (See Lockwood, Louis S., assignor.)

Rudolph Wurliatzer Manufacturing Company, The. (See McCormick, Frank L., assignor.)

Ruehlmann, Louis E., assignor to Hale & Kilburn Corporation, Philadelphia, Pa. Panel-retaining means. No. 1,312,925; Aug. 12; v. 265; p. 235.

Ruggles, Wells M., Wakefield, Mich. Handle for one-man crosscut-saws. No. 1,312,423; Aug. 5; v. 265; p. 107.

Rushton, Edwin E., assignor to E. Hand, Los Angeles, Calif. Liquid-fuel smelter. No. 1,314,150; Aug. 26; v. 265; p. 518.

Rushton, Herbert J., Southfields, England. Means for supporting ceramic ware while being fired in ovens. No. 1,313,018; Aug. 12; v. 265; p. 253.

Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Driving wheel and crank. No. 1,313,737; Aug. 19; v. 265; p. 406.

Russ, George F. (See Tenney and Russ.)

Russell, Arthur L., Boston, and C. E. Grush, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Stretching-machine. No. 1,313,917; Aug. 26; v. 265; p. 473.

Russell, Arthur L., Boston, and C. E. Grush, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Upper-stretching machine. No. 1,313,918; Aug. 26; v. 265; p. 474.

Russell, Percy, assignor to Electro Dental Manufacturing Company, Philadelphia, Pa. Dental implement. No. 1,312,270; Aug. 5; v. 265; p. 77.

Russell, Thomas N., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car end construction. No. 1,313,953; Aug. 26; v. 265; p. 481.

Russell, W. S., trustee. (See Nobles, Milton A., assignor.)

Ryan, Edward, Chicago, Ill., assignor to Locomotive Stoker Company, Pittsburgh, Pa. Locomotive-tender. No. 1,311,917; Aug. 5; v. 265; p. 12.

Ryan, Frederick H., Boston, Mass. Center-punch. No. 1,313,335; Aug. 19; v. 265; p. 330.

Ryan, James, Indianapolis, Ind. Liquid-level indicator. No. 1,313,738; Aug. 19; v. 265; p. 406.

Ryerson, Charles S., Norfolk, Va. Lamp-mounting. No. 1,313,739; Aug. 19; v. 265; p. 406.

Ryerson, Charles S., assignor to Cadillac Motor Car Company, Detroit, Mich. Carburetor. No. 1,314,020; Aug. 26; v. 265; p. 494.

Ryerson, Eugene H., assignor to Hamblin & Russell Manufacturing Company, Worcester, Mass. Handle for kitchen utensils. No. 1,313,211; Aug. 12; v. 265; p. 291.

S. S. Hepworth Company et al. (See Mackintosh, Edward D., assignor.)

Sadaris, Spyro, et al. (See Santacrose, Agostino, assignor.)

Safety Gas Lighter Corporation. (See Dowdy, Roy F., assignor.)

Safety Patent Co. (See Beckner, Noah J., assignor.)

Sager, Peter H., Marianna, Fla. Flushing and cover-operating mechanism for toilets. No. 1,313,740; Aug. 19; v. 265; p. 406.

Saint Joseph Railway, Light, Heat and Power Company. (See Stephens, Fred, assignor.)

Saint Joseph Railway, Light, Heat and Power Company, St. Joseph, Mo. Car. No. 1,314,373; Aug. 26; v. 265; p. 562.

Salisbury, Charles W. (See Roberts, John H., assignor.)

Salust, Ernest M., Wayne township, Owen county, Ind. Seed-corn hanger. No. 1,312,271; Aug. 5; v. 265; p. 77.

Saloun, Martin, Chicago, Ill. Aerial bomb. No. 1,312,212; Aug. 5; v. 265; p. 67.

Sanmarone, Amato N., Cleveland, Ohio. Cable-coupling. No. 1,312,435; Aug. 5; v. 265; p. 113.

Samuel Winslow Skate Mfg. Co., The. (See Lenke, John M., assignor.)

Sandborn, Hugh D., Swampscott, Mass., assignor to General Electric Company. Constant-current regulator. No. 1,313,117; Aug. 12; v. 265; p. 273.

Sandborn, John A., Oakland, Calif. Railway-track. No. 1,312,645; Aug. 12; v. 265; p. 181.

Sandstrom, Theodore, Indianapolis, Ind. Short-turn-gear mechanism. No. 1,313,934; Aug. 26; v. 265; p. 481.

Sanitary Manufacturing Corporation. (See Evans and Phillips, assignors.)

Santacrose, Agostino, assignor of three-tenths to J. Grumbos and three-tenths to S. Sadaris, Elvira, Ohio. Rubber heel. No. 1,313,118; Aug. 12; v. 265; p. 273.

Santacrose, Agostino, assignor of three-tenths to J. Grumbos and three-tenths to S. Sadaris, Elvira, Ohio. Sole. No. 1,313,119; Aug. 12; v. 265; p. 273.

Sapal Société Anonyme des Filieuses Automatiques. (See Leumann, Richard, assignor.)

Sargent, Frank P., San Francisco, Calif. Aeroplane Safety Device. No. 1,314,220; Aug. 26; v. 265; p. 532.

Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Plug-receptacle for use with rugs. No. 1,313,120; Aug. 12; v. 265; p. 273.

Sargent, Ralph N., Perth Amboy, N. J., assignor to The Roessler & Haasler Chemical Co., New York, N. Y. Molding. No. 1,313,558; Aug. 19; v. 265; p. 373.

Sarls, Joseph H., Releit, Wis. Driving-belt. No. 1,312,580; Aug. 12; v. 265; p. 168.

Sartain, Louis M., assignor of three-tenths to W. R. Curtis, one-tenth to G. P. Dykes, one-tenth to J. J. Givens, one-tenth to J. A. Goforth, and one-tenth to T. M. Lockhart, Coalmont, Tenn. Rail-joint. No. 1,314,151; Aug. 26; v. 265; p. 518.

Sartorius, Otton, J. F. Gandara, and H. Colonna, El Paso, Tex. Film for cameras. No. 1,312,052; Aug. 5; v. 265; p. 37.

Sass, August H., Milwaukee, Wis. Window-scaffold. No. 1,312,755; Aug. 12; v. 265; p. 201.

Saum, Robert J., assignor to The Western Tool & Manufacturing Company, Springfield, Ohio. Tool-holder. No. 1,313,336; Aug. 19; v. 265; p. 330.

Savage, Frederick, London, England. Manufacturing tone-arms for talking-machines and the like. No. 1,313,559; Aug. 19; v. 265; p. 373.

Savage, Harold A. (See Challenger and Savage.)

Sawtell, Albert H., Providence, R. I. Thruout-controller device. No. 1,313,919; Aug. 26; v. 265; p. 474.

Saxe, Sigmond, New York, N. Y. Tanning process. (Re-issue.) No. 14,719; Aug. 26; v. 265; p. 584.

Saylor, John F., Dodge City, Kans. Wrench. No. 1,312,454; Aug. 5; v. 265; p. 113.

Scanlon, Thomas J., El Paso, Tex. Derrick. No. 1,313,741; Aug. 19; v. 265; p. 407.

Scarlett, William E., East Lynn, and C. F. Adams, North Beverly, assignors to Hamel Shoe Machinery Company, Lynn, Mass. Lasting-machine. No. 1,313,121; Aug. 12; v. 265; p. 274.

Schad, Jacob, Bloomington, Ill. Detachable eaves-trough. No. 1,313,742; Apr. 19; v. 265; p. 407.

Schäfer, Max. (See Kratz and Schäfer.)

Schäfer, Jacob, Brooklyn, N. Y. Roller-handle. No. 1,312,135; Aug. 5; v. 265; p. 54.

Schelwer, Albert. (See Nelson and Schelwer.)

Schellentrager, Eugene W. (See Wright, Schellentrager, and Martin.)

Schenck, James K., Seattle, Wash. Disappearing window-screen. No. 1,314,221; Aug. 26; v. 265; p. 532.

Schies, John, Anderson, Ind. Apparatus for feeding and delivering glass. No. 1,312,870; Aug. 12; v. 265; p. 225.

Schiffert, Daniel M., Boston, assignor to S. B. Condit, Jr., Brookline, Mass. Circuit-breaker. No. 1,312,126; Aug. 5; v. 265; p. 54.

Schinscholl, Erich, Ashland, N. H., assignor to General Electric Company. Electric-lamp carrier. No. 1,313,337; Aug. 19; v. 265; p. 331.

Schlage, Walter R., Berkeley, Calif. Door-lock. No. 1,313,920; Aug. 26; v. 265; p. 474.

Schlesinger, Louis. (See Hellweg, Henry, assignor.)

Schlichter, Walter F., Pittstown, and A. Kelm, Spring City, Pa. Automatic railway safety-gate. No. 1,313,338; Aug. 19; v. 265; p. 331.

Schloss, Edwin G., New York, N. Y. Folding table. No. 1,312,137; Aug. 5; v. 265; p. 54.

Schmaele, John, Jr. (See Thierfelder and Schmaele, Jr.)

Schmid, Peter, Basel, Switzerland. Producing foam or froth baths for ungumming silk and silk wastes. No. 1,313,235; Aug. 12; v. 265; p. 296.

Schmidt, Jesse, Tracy, Calif. Saw-oller. No. 1,313,743; Aug. 19; v. 265; p. 407.

Schmidt, Karl, Stuttgart, Germany, assignor, by mesne assignments, to American Bosch Magneto Corporation, New York, N. Y. Spark-gap apparatus. No. 1,314,132; Aug. 26; v. 265; p. 518.

Schmidt, Martin W., St. Louis, Mo. Flag-holder. No. 1,312,426; Aug. 5; v. 265; p. 108.

Schmidt, Oscar. (See Mlanger and Schmidt.)

Schmitt, Edward D., assignor, by mesne assignments, to The American Pure Food Process Company, Baltimore, Md. Means for retaining gaskets in jar-caps. No. 1,312,581; Aug. 12; v. 265; p. 168.

Schmitz, Richard, Chicago, Ill., assignor to Schmitz Engine Company. Valve for hydrocarbon-engines. No. 1,312,003; Aug. 5; v. 265; p. 28.

Schmitz, William R., Columbus, Ohio. Electric switch. No. 1,313,015; Aug. 12; v. 265; p. 254.

Schmitz Engine Company. (See Schmitz, Richard, assignor.)

Schneble, Frank, New York, N. Y. Tire. No. 1,312,582; Aug. 12; v. 265; p. 168.

Schneider, Alwin, Leisburg, Switzerland. Lathe-gearing. No. 1,313,955; Aug. 26; v. 265; p. 481.

Schneider & Cie. (See Schneider, Eugene, assignor.)

Schneider, Eugene, assignor to Schneider & Cie., Paris, France. Machine for restraughtening gun-charge cases. No. 1,313,560; Aug. 19; v. 265; p. 373.

Schneider, Eugene, assignor to Schneider & Co., Paris, France. Liquid transmission. No. 1,314,153; Aug. 26; v. 265; p. 519.

Schouck, Edward F., Greenburg, N. Y., assignor to Jabez Burns & Sons. Coffee-roaster. No. 1,313,020; Aug. 12; v. 265; p. 254.

Schoell, Eugene F., New Britain, Conn. Curial-fastener. No. 1,312,138; Aug. 5; v. 265; p. 54.

Schofield, Samuel W. (See Barnes and Schofield.)

Scholes, Samuel R., Beaver, assignor to H. C. Fry Glass Company, Rochester, Pa. Decomposing potassium silicate. No. 1,312,053; Aug. 5; v. 265; p. 38.

Schoradt, Fredrick W. B., assignor to S. L. Kaufman, Kittanning, Pa. Adding and type-writing machine. No. 1,313,230; Aug. 12; v. 265; p. 295.

Schoradt, Fredrick W. B., assignor to S. L. Kaufman, Kittanning, Pa. Adding machine. No. 1,313,231; Aug. 12; v. 265; p. 295.

Schoshusen, Arthur, assignor to E. Schoshusen, Pittsburg, Kans. Boot leg form. No. 1,313,505; Aug. 19; v. 265; p. 362.

Schoshusen, Elia. (See Schoshusen, Arthur, assignor.)

Schranz, Samuel, St. Louis, Mo. Fly-trap. No. 1,313,837; Aug. 19; v. 265; p. 424.

Schröder-Nielsen, Thoralf, Horten, assignor to Christoffer Hannevig and Hannevig Brothers A/S, Christiansia, Norway. Boat-davit. No. 1,312,272; Aug. 5; v. 265; p. 77.

Schubert, Walter E., Brooklyn, N. Y. Spark-plug. No. 1,313,744; Aug. 19; v. 265; p. 407.

Schuler, John, Cleveland, Ohio. Insect-destroyer. No. 1,314,367; Aug. 26; v. 265; p. 560.

Schumacher, Frank W., Shawano, Wis. Wire-stretcher. No. 1,313,339; Aug. 19; v. 265; p. 331.

Schumann, Albert G., et al. (See Schumann, Alfred F., assignor.)

Schumann, Alfred F., assignor of one-third to W. C. Codd and one-third to A. G. Schumann, Baltimore, Md. Water-cooled valve. No. 1,313,122; Aug. 12; v. 265; p. 274.

Schurmann, Henry F., Chicago, Ill. Egg-filler. No. 1,312,502; Aug. 5; v. 265; p. 122.

Schwagermann, William, Yonkers, N. Y., assignor to Ward Leonard Electric Company. Electric controlling apparatus. No. 1,312,273; Aug. 5; v. 265; p. 78.

Schwalbach, Robert, assignor of one-half to R. W. Haisdel, Milwaukee, Wis. Shoe-tip perforator. No. 1,313,955; Aug. 26; v. 265; p. 481.

Schwartz, Constantine P., Cleveland, Ohio. Leaf-spring. No. 1,312,130; Aug. 5; v. 265; p. 54.

Schwartz, Constantine P., Indianapolis, Ind. Leaf-spring. No. 1,312,140; Aug. 5; v. 265; p. 54.

Schwartz, Michael, assignor to Automatic Electric Company, Chicago, Ill. Selective ringing telephone system. No. 1,312,706; Aug. 12; v. 265; p. 192.

Schwartz, Nathan, New York, N. Y. Gas-mask and respirator. No. 1,313,715; Aug. 19; v. 265; p. 407.

Schwarzmann, Wolfgang E. (See Helms, Wild, and Schwarzmann.)

Schweizer, William F. (See Balkwill and Schweizer.)

Schwehner, Maximilian C., West Hoboken, and H. P. Kraft, Ridgewood, N. J. Pressure-gage. No. 1,312,457; Aug. 5; v. 265; p. 114.

Schweissend, Charles E., Akron, Ohio, assignor to The H. F. Goodrich Company, New York, N. Y. Belt-fastener. No. 1,313,642; Aug. 19; v. 265; p. 388.

Schwimmer, Fredrick J. (See Nott and Schwimmer.)

Sclar, Nathan. (See Atkinson and Sclar.)

Scott, David J., et al., executors. (See Scott, David J., assignor.)

Scott, David J., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Multicolor offset-press. No. 1,313,123; Aug. 12; v. 265; p. 274.

Scott, Gertrude M., Scotts Mills, Ore. Hot-water bottle. No. 1,313,021; Aug. 12; v. 265; p. 254.

Scott, Isabella, et al., executors. (See Scott, David J., assignor.)

Scott, Walter, Sheridan, Wyo. Coupling device. No. 1,312,581; Aug. 12; v. 265; p. 169.

Scott and Williams. (See Swinglehurst, Harry, assignor.)

Serlinier, Charles E., Jericho, Vt., and J. L. McQuarrie, Montclair, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Signalling system. No. 1,312,809; Aug. 12; v. 265; p. 212.

Servenior, Arthur, Richmond, Va. Grinding-machine. No. 1,314,154; Aug. 26; v. 265; p. 519.

Seuthorp, William J., Detroit, Mich. Bedside-table. No. 1,312,271; Aug. 5; v. 265; p. 78.

Seagers, Harry M., and S. H. Drake, Groton, N. Y., assignors to Corona Typewriter Company, Inc. Stand. No. 1,311,918; Aug. 5; v. 265; p. 13.

Seale, Harry V., and W. Shellshar, Broken Hill, New South Wales, Australia, assignors, by mesne assignments, to Minerals Separation North American Corporation, Concentration of ores. No. 1,311,919; Aug. 5; v. 265; p. 13.

Seale, Harry V., East Maitland, New South Wales, Australia, and W. Shellshar, Namin, Burma, India, assignors to Minerals Separation American Syndicate (1913) Limited, London, England. Concentration of ores. No. 1,311,920; Aug. 5; v. 265; p. 13.

Sears Willard T., New York, N. Y. Punch-press. No. 1,312,213; Aug. 5; v. 265; p. 68.

Seaton, Benjamin C., Nashville, Tenn. Leaf-spring. No. 1,314,021; Aug. 26; v. 265; p. 494.

Sefton Manufacturing Corporation. (See Reber, John G., assignor.) (Helms.)

Sefton Manufacturing Corporation. (See Twomley, Melvan L., assignor.)

Selberg, John M., et al., trustees. (See Chalmers, Charles H., assignor.)

Sella, Hugo. (See Grunnet, Martin, assignor.)

Seldin, Jacob J., Syracuse, N. Y. Tailor's steaming-iron. No. 1,313,124; Aug. 12; v. 265; p. 275.

Seliga, Edward M., St. Louis, Mo. Automobile-headlight. No. 1,312,054; Aug. 5; v. 265; p. 38.

Sell, Emanuel M., Independence, Kans. Barrel-rack. No. 1,313,340; Aug. 19; v. 265; p. 331.

Sella, William H., Buffalo, N. Y. Bolt-remover for corn-bushers. No. 1,312,301; Aug. 5; v. 265; p. 94.

Sera, Ryumatsu, Indian Wells, Calif. Beet topping and harvesting machine. No. 1,314,155; Aug. 26; v. 265; p. 519.

Serduk, Ewilybly, Avonlea, Saskatchewan, Canada. Automatic gate. No. 1,312,877; Aug. 12; v. 265; p. 225.

Serra, Bartolome, V. M., and J. Buenos Aires, Argentina. Type-making machine. No. 1,313,302; Aug. 5; v. 265; p. 94.

Serra, José. (See Serra, Bartolome, V. M., and J.)

Serra, Melchor. (See Serra, Bartolome, V. M., and J.)

Serra, Vincente. (See Serra, Bartolome, V. M., and J.)

Serrell, John A., North Plainfield, and J. L. Fitts, Pennsaken township, Camden county, N. J., said Fitts assignor to Warren Webster & Co. Steam-heating apparatus. No. 1,312,275; Aug. 5; v. 265; p. 78.

Seward Trunk and Bag Company. (See House, Thomas M., assignor.)

Sexton, Isaac E., Boston, Mass. Riveted receptacle. No. 1,313,022; Aug. 12; v. 265; p. 254.

Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,312,365; Aug. 5; v. 265; p. 95.

Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Controlling device for filled-bag-sewing apparatus. No. 1,314,368; Aug. 26; v. 265; p. 560.

Seymour, Ralph C., Larchmont, N. Y., assignor to Goss Printing Press Company. Folding-machine. No. 1,312,458; Aug. 5; v. 265; p. 114.

Shaler, Abraham. (See Shaler, Saul, assignor.)

Shaler, Clarence A., Waupun, Wis. Vulcanizing apparatus. No. 1,312,364; Aug. 5; v. 265; p. 95.

Shaler, Saul, assignor of one-half to A. Shaler, New York, N. Y. Combination-padlock. No. 1,314,431; Aug. 26; v. 265; p. 573.

Shannon, Woodford, Louisville, Ky. Spring structure. No. 1,313,341; Aug. 19; v. 265; p. 331.

Sharp, Cecil A. (See Hall and Sharp.)

Sharpsack, Lord B., Detroit, Mich. Rotary ventilator. No. 1,314,432; Aug. 26; v. 265; p. 573.

Shattuck, Frederick A., Norwich, N. Y. Lubricating system. No. 1,312,365; Aug. 5; v. 265; p. 95.

Shaw, George A., Toronto, Ontario, Canada. Hand-grenade. No. 1,312,004; Aug. 5; v. 265; p. 28.

Shaw, James, Chicago, Ill. Internal-combustion engine. No. 1,313,608; Aug. 19; v. 265; p. 382.

Shaw, John K., Minneapolis, assignor to H. G. Dahlberg, St. Paul, Minn. Ornamental panel or covering. No. 1,312,050; Aug. 5; v. 265; p. 98.

Shaw, John K., Minneapolis, assignor to H. G. Dahlberg, St. Paul, Minn. Corner for buildings. No. 1,313,420; Aug. 19; v. 265; p. 346.

Shaw, John K., Minneapolis, assignor to H. G. Dahlberg, St. Paul, Minn. Side wall and corner for buildings. No. 1,313,421; Aug. 19; v. 265; p. 346.

Shaw, Solomon B., Grand Rapids, Mich. Signal. No. 1,313,609; Aug. 19; v. 265; p. 382.

Shawnee Mower Company. (See Worthington, Charles C., assignor.)

Shean, Jeremiah W., Yonkers, N. Y. Nut-lock. No. 1,312,810; Aug. 12; v. 265; p. 212.

Sheard, John T., Hiley Carr, near Sheffield, England. Manufacture of sulfate of ammonia. No. 1,313,023; Aug. 12; v. 265; p. 254.

Sheeks, Horace M., and F. W. Stein, Atchison, Kans. Electrotherapeutical apparatus. No. 1,313,957; Aug. 26; v. 265; p. 482.

Sheets, Fred M., Kansas City, Mo. Nut-lock. No. 1,314,433; Aug. 26; v. 265; p. 574.

Shellshar, Wilton. (See Seale and Shellshar.)

Shelton, Hiram H., Burlington, Vt. Timer. No. 1,313,501; Aug. 19; v. 265; p. 373.

Shepard, Isaac R., River Junction, Fla. Metal screen. No. 1,313,562; Aug. 19; v. 265; p. 373.

Shepherd, Arthur W., assignor of one-half to A. H. Hamel, St. Louis, Mo. Internal-combustion engine. No. 1,312,585; Aug. 12; v. 265; p. 169.

Shepherd, Harry T., et al. (See Anderson, Otis W., assignor.)

Sherman, Clifton W., Buffalo, N. Y. Draft-rigging. No. 1,314,369; Aug. 26; v. 265; p. 561.

Sherman, Guy, Bremerton, Wash. Clamp for sheets. No. 1,312,926; Aug. 12; v. 265; p. 235.

Sherman, Howard H., Battle Creek, Mich. Scrap-winding reel. No. 1,312,057; Aug. 5; v. 265; p. 38.

Sherwin-Williams Company. (See McKeogh, Thomas J., assignor.)

Shields, Frank S., and J. A. Camm, Cleveland, Ohio. Machine-tool. No. 1,312,276; Aug. 5; v. 265; p. 78.

Shields, Frank S., and J. A. Camm, Cleveland, Ohio. Dividing-head for milling-machines. No. 1,312,277; Aug. 5; v. 265; p. 78.

Shion, Jeanette C., Paducah, Ky. Card game. No. 1,312,278; Aug. 5; v. 265; p. 79.

Shipton, James D., Vancouver, British Columbia, Canada. Electric melting-furnace. No. 1,313,746; Aug. 19; v. 265; p. 408.

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electrode. No. 1,313,125; Aug. 12; v. 265; p. 275.

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electric-furnace electrode. No. 1,313,126; Aug. 12; v. 265; p. 275.

Short, Albert E., et al. (See Mitchell, Ewen H., assignor.)

Short, Hugh O., et al. (See Mitchell, Ewen H., assignor.)

Shotwell, Marcus A. K., Miami, Fla. Automobile-tire. No. 1,313,506; Aug. 19; v. 265; p. 382.

Shoun, Daniel B. (See Shoun, David M. and D. B.)

Shoun, David M. and D. B., Mountain City, Tenn. Wire-fence tool. No. 1,314,484; Aug. 26; v. 265; p. 574.

Shortleff, Ralph, St. Louis, Mo. Fine-stop. No. 1,314,222; Aug. 26; v. 265; p. 532.

Shuster, Elmore F., New Haven, Conn. Wire straightening and cutting-off machine. No. 1,313,024; Aug. 12; v. 265; p. 255.

Shute, John A. (See Duncan and Shute.)

Shutta, Samuel B. (See Wendell and Shutta.)

Shwab, Hugh M., Louisville, Ky. Gage. No. 1,314,435; Aug. 26; v. 265; p. 574.

Sibley, James T., Newark, N. J. Combined tool-arm and stop device for talking-machines. No. 1,313,342; Aug. 19; v. 265; p. 331.

Sibley, Samuel J. (See Buckner and Sibley.)

Side, Frederick W. (See Held and Side.)

Sidwell, Benjamin W., Buffalo, N. Y., assignor to The Beaver Company. Size for wood-bber products. No. 1,313,343; Aug. 19; v. 265; p. 332.

Siegel, Ernest, assignor of one-half to M. Cooper, New York, N. Y. Shock-absorber. No. 1,313,643; Aug. 19; v. 265; p. 389.

Sigler, Boyd A., Sioux Falls, S. D. Aerial bomb. No. 1,312,005; Aug. 5; v. 265; p. 28.

Silver, Conover T., New York, N. Y. Automobile-hood. No. 1,314,436; Aug. 26; v. 265; p. 574.

Silver, Herman, Minneapolis, Minn. Cupola-ventilator for bars and the like. No. 1,312,656; Aug. 12; v. 265; p. 169.

Silverthorne, Frank H., New York, N. Y. Ink-bottle stopper. No. 1,314,489; Aug. 26; v. 265; p. 583.

Silverthorne, Mary W., Martins, S. C. Portable combined cotton picking, ginning, condensing, and compressing machine. No. 1,314,437; Aug. 26; v. 265; p. 574.

Simmen Automatic Railway Signal Company, The. (See Ringer, Luther, assignor.)

Simoo, Adolph, London, England. Watch and other bracelet. No. 1,313,644; Aug. 19; v. 265; p. 389.

Simon, Adolph, London, England. Slack-absorber for brackets or the like. No. 1,313,645; Aug. 19; v. 265; p. 389.

Simpson, James E., Brooklyn, assignor to Corona Typewriter Company, Inc., Groton, N. Y. Line-ruling device for type-writing machines. No. 1,311,921; Aug. 5; v. 265; p. 13.

Simpson, John T., assignor to Economy Sales Company, Chicago, Ill. Furnace-grate and vaporizer construction. No. 1,313,127; Aug. 12; v. 265; p. 273.

Simpson, William F., Hualpai, New Zealand. Harness for agricultural implements. No. 1,313,921; Aug. 26; v. 265; p. 474.

Sims, Frederick L. H., Toronto, Ontario, Canada. Hall-anchor. No. 1,313,747; Aug. 19; v. 265; p. 408.

Sims, Frederick L. H., assignor to The Diaphone Signal Company, Limited, Toronto, Ontario, Canada. Key-bolt. No. 1,313,748; Aug. 19; v. 265; p. 408.

Singer, Frank J., assignor to American Pressweld Radiator Corporation, Detroit, Mich. Radiator. No. 1,313,212; Aug. 12; v. 265; p. 291.

Singer Manufacturing Company, The. (See Corral, Herbert, assignor.)

Singer Manufacturing Company, The. (See De Voe, Albert H., assignor.)

Sion, Charles J., and H. G. Wells, Crisfield, Md. Can-closure. No. 1,312,587; Aug. 12; v. 265; p. 169.

Sir W. G. Armstrong, Whitworth and Company. (See Lee, Hugh W., assignor.)

Sirrine, Joseph E., Greenville, S. C. Oiling device for allent chains. No. 1,314,455; Aug. 26; v. 265; p. 574.

Sison, Vinton E., assignor to W. P. Murphy, Chicago, Ill. Sheet-steel car end. No. 1,313,128; Aug. 12; v. 265; p. 275.

Sizer, Albert W., Hesle, near Kingston-upon-Hull, England. Press. No. 1,312,811; Aug. 12; v. 265; p. 213.

Sjogren, George, assignor to H. Obee and D. A. McPherson, Toronto, Ontario, Canada. Oil-can spout. No. 1,314,156; Aug. 26; v. 265; p. 519.

Steel, Francesco, assignor to The National Cash Register Company, Dayton, Ohio. Ticket-machine. No. 1,313,958; Aug. 26; v. 265; p. 482.

Sketchley, Fred A., East Saugus, Mass. Train-control system. No. 1,314,439; Aug. 26; v. 265; p. 575.

Skidmore, Benjamin, Jr., Chicago, Ill. Suction and pressure creating apparatus. No. 1,312,588; Aug. 12; v. 265; p. 169.

Skidmore, Benjamin, Jr., Chicago, Ill. Hydroturbine vacuum-pump. No. 1,312,707; Aug. 12; v. 265; p. 192.

Skinner, Allan D., Erie, Pa. Steam-engine. No. 1,312,148; Aug. 5; v. 265; p. 55.

Slack, Willie F., Manchester, N. H. Artificial tooth. No. 1,312,141; Aug. 5; v. 265; p. 55.

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Fluid-current meter. No. 1,311,922; Aug. 5; v. 265; p. 13.

Slocum Avram & Slocum. (See Cabuase, Clarence N., assignor.)

Sloper, Thomas, Devizes, England. Aeroplane-wheel bearing. No. 1,313,646; Aug. 19; v. 265; p. 389.

Small, Chesley T., St. Louis, Mo. Can-brushing machine. No. 1,312,659; Aug. 12; v. 265; p. 170.

Small, Fred K., Lisbon Falls, Me. Pneumatic tire. No. 1,313,749; Aug. 19; v. 265; p. 408.

Small, Frederick E., Kansas City, Mo. Ore-concentrating machine. No. 1,314,379; Aug. 26; v. 265; p. 561.

Small, Frederick E., Kansas City, Mo. Ore-concentrating machine. No. 1,314,371; Aug. 26; v. 265; p. 561.

Smallwood, Alfred, Highgate, London, England. Furnace for heating and treating articles. No. 1,312,927; Aug. 12; v. 265; p. 235.

Smallwood, Alfred, Highgate, London, England. Furnace for treating articles. No. 1,312,928; Aug. 12; v. 265; p. 235.

Smallwood, Alfred, Highgate, London, England. Apparatus for cooling liquids. No. 1,312,929; Aug. 12; v. 265; p. 236.

Smallwood, Alfred, Highgate, London, England. Apparatus for cooling liquids. No. 1,312,930; Aug. 12; v. 265; p. 236.

Smart, Edward N., Madison, Nehr. Surgical appliance. No. 1,313,844; Aug. 19; v. 265; p. 432.

Smirle, Robert J., San Francisco, Calif. Wire-uncoiling apparatus. No. 1,312,058; Aug. 5; v. 265; p. 38.

Smith, Alfred B., Topeka, Kans. Rim-tool. No. 1,312,590; Aug. 12; v. 265; p. 170.

Smith, Andrew, Pescadero, Calif. Plate-tongs. No. 1,312,142; Aug. 5; v. 265; p. 55.

Smith, Arthur J., New York, N. Y. Hairpin. No. 1,313,750; Aug. 19; v. 265; p. 408.

Smith, Arthur E., New York, N. Y. Golf-bag holder. No. 1,313,959; Aug. 26; v. 265; p. 482.

Smith, Ashury G. (See Alderman and Smith.)

Smith, Charles G., Washington, D. C., assignor to C. Fischer, Brooklyn, N. Y. Magnetic speedometer. No. 1,312,681; Aug. 5; v. 265; p. 43.

Smith, Charles G., Washington, D. C., assignor to C. Fischer, Brooklyn, N. Y. Magnetic speedometer. No. 1,312,682; Aug. 5; v. 265; p. 43.

Smith, Charles G., Washington, D. C., assignor to C. Fischer, Brooklyn, N. Y. Magnetic speedometer. No. 1,312,683; Aug. 5; v. 265; p. 43.

Smith, Charles E., assignor to A. O. Smith Corporation, Milwaukee, Wis. Tube-forming apparatus. No. 1,313,025; Aug. 12; v. 265; p. 255.

Smith, Charles L., Kokomo, Ind. Stove. No. 1,314,440; Aug. 26; v. 265; p. 575.

Smith, Clarence E., Worcester, Mass. Carrier or cover for canisters or water-bottles, &c. No. 1,311,923; Aug. 5; v. 265; p. 14.

Smith, Edith K. (See Smith, Hampton, K., assignor.)

Smith, Edward C., assignor to Meadville Wrench Company, Meadville, Pa. Machine for forming wrench-heads. No. 1,313,345; Aug. 19; v. 265; p. 332.

Smith, Elda G., assignor to Cronse-Hlods Company, Syracuse, N. Y. Conduit outlet-box. No. 1,314,372; Aug. 26; v. 265; p. 561.

Smith, Elmer L., assignor to Package Machinery Company, Springfield, Mass. Strip feeding and cutting mechanism. No. 1,313,862; Aug. 19; v. 265; p. 429.

Smith, Elmer L., and A. E. Phelon, assignors to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,313,863; Aug. 19; v. 265; p. 430.

Smith, Elmer L., and A. E. Phelon, assignors to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,313,864; Aug. 19; v. 265; p. 430.

Smith, Evander A., Houston, Tex. Carpenter's implement. No. 1,312,006; Aug. 5; v. 265; p. 28.

Smith, Francis W. (See Hulman, Smith, and Jones.)

Smith, George J., Grand Rapids, Mich. Potato-plaster. No. 1,312,214; Aug. 5; v. 265; p. 68.

Smith, George, assignor of one-half to R. Kittel, London, England. Money-box. No. 1,313,922; Aug. 26; v. 265; p. 475.

Smith, Glenn B. (See Harris and Smith.)

Smith, Hampton K., Union, S. C., assignor to E. K. Smith, Automobile-signal. No. 1,313,346; Aug. 19; v. 265; p. 332.

Smith, Harald, Copenhagen, Denmark. Vibration-transferring means. No. 1,313,751; Aug. 19; v. 265; p. 408.

Smith, Henry, Philadelphia, Pa. Fastener for wearing-appeal. No. 1,311,924; Aug. 5; v. 265; p. 14.

Smith, Henry C., St. Marys, Ohio. Shear. No. 1,313,960; Aug. 26; v. 265; p. 482.

Smith, Herbert E., Spokane, Wash. Mail-exchanging device. No. 1,312,059; Aug. 5; v. 265; p. 38.

Smith, Herman C., Waterloo, Iowa. Lifting-tongs for jars. No. 1,313,752; Aug. 19; v. 265; p. 469.
 Smith, Herschel C. (See Belt and Smith.)
 Smith, John W., Chicago, Ill. Detachable heel. No. 1,313,026; Aug. 12; v. 265; p. 255.
 Smith, Lenious D., Heils, Oreg. Grain-treating apparatus. No. 1,313,027; Aug. 12; v. 265; p. 255.
 Smith, Louis, assignor of one-half to W. L. Hall, Chicago, Ill. Proof and transfer press. No. 1,312,366; Aug. 5; v. 265; p. 95.
 Smith, Swan, St. Paul, Minn. Printing-press. No. 1,314,025; Aug. 26; v. 265; p. 405.
 Smith, Walter H., Wilkesburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Relay. No. 1,312,757; Aug. 12; v. 265; p. 202.
 Smith, William A., Easton, Pa., assignor to Ingersoll-Rand Company. Jersey City, N. J. Percussive tool. No. 1,311,925; Aug. 5; v. 265; p. 14.
 Smith, William S., and S. N. Crider, Hagerstown, Md. Drive belt. No. 1,313,028; Aug. 12; v. 265; p. 255.
 Smith, William M., Evansville, Ind. Explosive shell. No. 1,313,129; Aug. 12; v. 265; p. 276.
 Smith, Marvin, Lawrenceville, Va. Meter. No. 1,314,285; Aug. 26; v. 265; p. 545.
 Smuck, Frank N., Kitchener, Ontario, Canada. Rowing device. No. 1,313,124; Aug. 12; v. 265; p. 276.
 Snyder, Henry C., Jr., Edinburg, Kans. Dual-power transmission for cycle-bags of mowing-machines. No. 1,313,961; Aug. 26; v. 265; p. 482.
 Snyder, Martin S., Calgary, Alberta, Canada. Tip. No. 1,313,422; Aug. 19; v. 265; p. 347.
 Società Italiana di Elettrolitica. (See Blanchet, Leon L., assignor.)
 Société Amieuz Frères & Cie. (See Amieuz, Louis E., assignor.)
 Société d'Etudes Chimiques pour l'Industrie. (See Gondet, Charles, assignor.)
 Société R. Hanriot et Cie. (See Hanriot and Gratteux, assignors.)
 Society of Chemical Industry in Basle. (See Posternak, Society of Chemical Industry in Basle. (See Fraenkel and Herrmann, assignors.)
 Soderquist, John, Beloit, Wis. Furnace-flue cleaner. No. 1,312,814; Aug. 12; v. 265; p. 213.
 Sokol, Arthur, New York, N. Y. Calendar. No. 1,312,591; Aug. 12; v. 265; p. 170.
 Sonneborn, Sol S., Brooklyn, N. Y. Lightning-arrester for high-tension lines. No. 1,312,646; Aug. 12; v. 265; p. 181.
 Sonnemann, Carl, New York, N. Y. Multiple-sliding machine. No. 1,313,753; Aug. 19; v. 265; p. 409.
 Sopowick, Joseph, Cedar Rapids, Iowa. Combination lawn-edge trimmer. No. 1,313,960; Aug. 19; v. 265; p. 430.
 Sorenson, Emil, New York, N. Y., assignor to Certus Parallelometer Company, Inc. Anchor for removable bridges for teeth. No. 1,314,224; Aug. 26; v. 265; p. 533.
 Sorenson, Emil, assignor to Certus Parallelometer Company, New York, N. Y. Dental parallelometer. No. 1,314,223; Aug. 26; v. 265; p. 533.
 Sosa, Joseph, New York, N. Y. Window-panel-supporting frame. No. 1,313,341; Aug. 19; v. 265; p. 332.
 Souchek, Louis, Holyrood, Kans. Shield for tractors. No. 1,314,225; Aug. 26; v. 265; p. 533.
 Spang, Harold H., Leechburg, Pa. Sheet-metal-cutting machine. No. 1,314,286; Aug. 26; v. 265; p. 545.
 Sparks, William, Jackson, Mich., assignor to The Sparks-Wilbington Company. Signal. No. 1,312,060; Aug. 5; v. 265; p. 30.
 Sparks-Wilbington Company, The. (See Sparks, William, assignor.)
 Spaulding, George T., Cambridge, N. Y. Identification-tag. No. 1,312,215; Aug. 5; v. 265; p. 68.
 Spaulding, Philip H., Hinsdale, Ill. End-gate fastener. No. 1,312,279; Aug. 5; v. 265; p. 79.
 Spear, George A., Medford, assignor, by mesne assignments, to The Plinkote Company, Boston, Mass. Sheet material for inner-soles. No. 1,312,758; Aug. 12; v. 265; p. 202.
 Spear, Furman D., assignor to Armspear Manufacturing Co., New York, N. Y. Signal-lamp. No. 1,314,097; Aug. 26; v. 265; p. 508.
 Speckerman, Ernest O. (now by judicial change of name E. O. Fredericks), assignor to E. Fredericks, Inc., New York, N. Y. Hair-waving means and producing same. No. 1,313,332; Aug. 12; v. 265; p. 293.
 Speer, James R., Trappe, Md. Carbon-chrome-nickel steel. No. 1,314,022; Aug. 26; v. 265; p. 494.
 Speer, Victor. (See Litchfield and Speer.)
 Spencer, Arthur C., Washington, D. C., assignor of one-third to A. Cox, New York, N. Y. Manufacture of potash and cement. No. 1,312,592; Aug. 12; v. 265; p. 170.
 Spencer, Charles E., Chicago, and R. C. Spencer, Jr., River Forest, Ill. Casement-window adjuster. No. 1,314,023; Aug. 26; v. 265; p. 494.
 Spencer, Charles E. (See Spencer, Robert C., Jr., assignor.)
 Spencer, Henry W., London, England. Feed-water regulator for steam-boilers. No. 1,312,583; Aug. 12; v. 265; p. 166.
 Spencer, Jesse F., Tappanish, Wash. Pirigible headlight. No. 1,312,812; Aug. 12; v. 265; p. 213.

Spencer, Ora, Logan, Ohio. Switch-operating mechanism. No. 1,312,813; Aug. 12; v. 265; p. 213.
 Sperlich, Herman A., Highland Park, assignor to Crystal Washing Machine Company, Detroit, Mich. Gearing for washing-machines. No. 1,313,423; Aug. 19; v. 265; p. 347.
 Sperry, Elmer A., and E. Meltner, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Torpedo-gyroscope. No. 1,312,084; Aug. 5; v. 265; p. 44.
 Sperry, Elmer A., assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Stabilizing-gyroscope. No. 1,312,085; Aug. 5; v. 265; p. 44.
 Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Gyroscope Company. Electrical and gyroscope apparatus for torpedoes. No. 1,314,157; Aug. 26; v. 265; p. 510.
 Sperry Gyroscope Company. (See Sperry, Elmer A., assignor.)
 Sperry Gyroscope Company, The. (See Sperry and Meltner, assignors.)
 Sperry, Herbert R., Chicago, Ill., assignor, by mesne assignments, to International Harvester Company. Plow connection. No. 1,312,280; Aug. 5; v. 265; p. 79.
 Speyer, Herbert E., Knoxville, Tenn., assignor to Economy Rail Company. Railway-track. No. 1,314,024; Aug. 26; v. 265; p. 494.
 Spielberger, Abe R., Atlanta, Ga. Fountain-comb. No. 1,314,158; Aug. 26; v. 265; p. 510.
 Spis, Nicholas, Auburn, N. Y. Wheel. No. 1,313,318; Aug. 19; v. 265; p. 333.
 Spindler, Ferdinand G., assignor to E. Letts, Inc., New York, N. Y. Hamacrometer. No. 1,313,902; Aug. 26; v. 265; p. 483.
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 Spiltdorf Electrical Company. (See McKeown, Samuel C., assignor.)
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 Sprague, Edward H. (See Porter and Sprague.)
 Springer, William N., assignor to Avery Company, Peoria, Ill. Gang-plow. No. 1,312,281; Aug. 5; v. 265; p. 79.
 Sprong, Severn D., Brooklyn, N. Y. Reactance-coil. No. 1,314,373; Aug. 26; v. 265; p. 561.
 Spurrier, John R., Bethel, Pa., assignor to Roller-Smith Company. Circuit-breaker. No. 1,312,282; Aug. 5; v. 265; p. 79.
 Staab, Henry A., Milwaukee, Wis. Soap-faker. No. 1,314,026; Aug. 26; v. 265; p. 495.
 Stacey, Alfred E., Jr., Chicago, Ill., assignor to Carrier Engineering Corporation, New York, N. Y. Drying material. No. 1,312,759; Aug. 12; v. 265; p. 202.
 Stafford, Benjamin E. D., and E. J. Heids, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,313,647; Aug. 19; v. 265; p. 389.
 Stahl, Frank W., Denver, Colo. Type-writing machine. No. 1,312,790; Aug. 12; v. 265; p. 202.
 Stahlhuth, Ernst H. W., Columbus, Ind. Camera-fader. No. 1,312,283; Aug. 5; v. 265; p. 79.
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 Stallsmith, David G., Logan, Ohio. Railway brake-beam. No. 1,314,287; Aug. 26; v. 265; p. 545.
 Standard, Maurice L., assignor to W. O. Krueger, E. H. Mills, F. H. Standard, M. J. Standard, J. F. Belrose, J. F. Farrell, and H. L. Richardson, trustees, Kansas City, Mo. Steam-generator. No. 1,313,903; Aug. 26; v. 265; p. 483.
 Standard, Maurice L., et al., trustees. (See Standard, Maurice L., assignor.)
 Standard Parts Company, The. (See Bryant, Richard S., assignor.)
 Standard Parts Company, The. (See Gressle, Charles W., assignor.)
 Standard Patat Company, The. (See Abraham, Herbert, assignor.)
 Standard Pneumatic Action Company. (See Flala, Joseph H., assignor.)
 Stange, Robert O. F. (See Pilors and Stange.)
 Standard, F. H., et al., trustees. (See Standard, Maurice L., assignor.)
 Stanton, Gay A., Battle Creek, Mich. Spring suspension for vehicles. No. 1,312,284; Aug. 5; v. 265; p. 80.
 Stark, Arthur H. (See Dickinson and Stark.)
 Starnes, Joseph E., Live Oak, Fla. Spark-arrester. No. 1,312,761; Aug. 12; v. 265; p. 202.
 St. Clair, Walter, and H. S. Robertson, Rocky Mount, Va. Stomach-pump attachment. No. 1,313,010; Aug. 19; v. 265; p. 285.
 Stebbins, Frank H., and W. A. Hopkins, assignors to A. Hahn, Minneapolis, Minn. Clutch for steering-control systems. No. 1,312,708; Aug. 12; v. 265; p. 192.
 Steedman, Thomas H., Trefonteln, Johannesburg, South Africa. Water heater and auxiliary oven for stoves. No. 1,313,754; Aug. 19; v. 265; p. 409.
 Steele, Edward F., Terre Haute, Ind. Clear and cigarette holder and stub-ejector. No. 1,313,132; Aug. 12; v. 265; p. 276.
 Steele, Hugh C., Minneapolis, Minn. Traction-belt. No. 1,313,964; Aug. 26; v. 265; p. 483.
 Steenrod, Irvin, Montoursville, Pa. Centering device for circular saws. No. 1,313,123; Aug. 12; v. 265; p. 276.

Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,313,648; Aug. 19; v. 265; p. 389.
 Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,313,649; Aug. 19; v. 265; p. 390.
 Steffens, Fred, St. Joseph, Mo., assignor of one-half to Stelger, Jakob, Ebnat-Kappel, Switzerland. Roller-skate. No. 1,314,159; Aug. 26; v. 265; p. 520.
 Stein, Fred W. (See Sheeks and Stein.)
 Stengel, Charles, Hamilton, Ohio. Ball-cock. No. 1,314,160; Aug. 26; v. 265; p. 520.
 Stenman Electric Valve Grinder Company. (See Larson, Albert W., assignor.)
 Stensrud, Bernt, assignor to L. M. Peterson, Philadelphia, Pa. Brush. No. 1,314,441; Aug. 26; v. 265; p. 575.
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 Stern-Coleman Diamond Machine Company. (See Coleman, Clyde J., assignor.)
 Stern-Coleman Diamond Machine Co. (See Mantle, Joseph G. C., assignor.)
 Stern, Harry H., Moscow, Idaho. Tire. No. 1,313,424; Aug. 19; v. 265; p. 347.
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 Stevens, Henry E., Jr. (See Evans, Fred, assignor.)
 Stevens, Robert C., Erie, Pa. Steam-heated piston. No. 1,312,285; Aug. 5; v. 265; p. 80.
 Stevens, Sylvester G., Duluth, Minn. Differential coupling. No. 1,312,709; Aug. 12; v. 265; p. 192.
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 Stewart, Benjamin, Erie, Pa. Pneumatic arch and heel support. No. 1,313,924; Aug. 26; v. 265; p. 475.
 Stewart, Carlton D. (See Weeks and Stewart.)
 Stewart, Carlton D., Berkeley, assignor to Associated Engineering and Supply Company, San Francisco, Calif. Fuel-oil-regulating system. No. 1,314,161; Aug. 26; v. 265; p. 520.
 Stewart, Reid T., Pittsburgh, Pa. Fuel-supply system for internal-combustion engines. No. 1,313,925; Aug. 26; v. 265; p. 475.
 Stewart, Sanford O., St. Louis, Mo. Aeroplane-stabilizer. No. 1,314,027; Aug. 26; v. 265; p. 495.
 Stickney, Burnham C. (See Thomas and Stickney.)
 Stiffel, Herman C. (See Bachmann, Frederick, assignor.)
 Stillwell, Wilcox H. (See Clough, Stillwell, and Fugina.)
 Stimpson, Edward S., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,313,349; Aug. 19; v. 265; p. 333.
 Stimpson, Edward S., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Feeler-motion for looms. No. 1,313,350; Aug. 19; v. 265; p. 333.
 Stine, Charles M., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing explosive compounds and product thereof. No. 1,311,926; Aug. 5; v. 265; p. 14.
 Stine, Charles M., Chester, Pa., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company. Composition for detonators. No. 1,313,650; Aug. 19; v. 265; p. 390.
 Stirling, Clarence C., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Electric switch. No. 1,314,098; Aug. 26; v. 265; p. 508.
 Stirling, John, Grabow, Ia. Plow attachment. No. 1,313,011; Aug. 19; v. 265; p. 285.
 Stock, Henry W., Erie, Pa., assignor to General Electric Company. Locomotive. No. 1,312,216; Aug. 5; v. 265; p. 68.
 Stocks, Harry B., Stockport, England. Scooter. No. 1,313,134; Aug. 12; v. 265; p. 277.
 Stodder, Edward D., New Rochelle, N. Y. Submarine observatory. No. 1,313,838; Aug. 19; v. 265; p. 425.
 Stolber, George W., Detroit, Mich. Combined door-check and door-closing device. No. 1,313,612; Aug. 19; v. 265; p. 383.
 Stokes, Charles L., Millong, via Young, New South Wales, Swigel, assignor.)
 Australia. Oil-feed control for carbureters. No. 1,313,131; Aug. 12; v. 265; p. 276.
 Stokes, Frederick W. S., London, England, assignor to W. S. Pelree, trustee, U. S. Army. Projectile. No. 1,313,926; Aug. 26; v. 265; p. 475.
 Stokke, Thorolf, and A. Larsen, assignors of one-third to J. Maeland, Hilleraag, near Stavanger, Norway. Opening mechanism for hermetic boxes and the like. No. 1,314,162; Aug. 26; v. 265; p. 520.
 Stone, Thomas C., Phoenix, Ariz. Internal-combustion engine. No. 1,313,135; Aug. 12; v. 265; p. 277.
 Storr, Charles E. N., London, England. Float-controlled apparatus for maintaining a constant level of liquid. No. 1,313,029; Aug. 12; v. 265; p. 256.
 Stover, Edgar J., York, Pa. Car-coupling. No. 1,312,593; Aug. 12; v. 265; p. 170.
 Stover, Jordan H., Noddy, N. J. Electrolyzer. No. 1,312,756; Aug. 12; v. 265; p. 201.
 Stranahan, Robert A., assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plug. No. 1,313,425; Aug. 19; v. 265; p. 347.
 Stranders, Julien, Brooklyn, assignor to H. B. Krueger, New York, N. Y. Advertising or display device. No. 1,313,351; Aug. 19; v. 265; p. 333.
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 Straub, Harry B., London, assignor to Thos. Firth and Sons Limited, Sheffield, England. Projectile. No. 1,312,762; Aug. 12; v. 265; p. 203.

Straub, Harry B., London, assignor to Thos. Firth and Sons Limited, Sheffield, England. Projectile. No. 1,312,763; Aug. 12; v. 265; p. 203.
 Straub, Eduard, Sulgen, Switzerland. Furnace for burning liquid fuels having the tendency to burn with a strongly-sooting flame. No. 1,313,136; Aug. 12; v. 265; p. 277.
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 Straub, Oscar I., U. S. Army. Projectile. No. 1,312,765; Aug. 12; v. 265; p. 204.
 Strauss, David A., Milwaukee, Wis. Fastener for storm-sashes, window-screens, &c. No. 1,313,927; Aug. 26; v. 265; p. 476.
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 Strockert, Marthe R. L., Washington, D. C. Brass-fire-core. No. 1,312,459; Aug. 5; v. 265; p. 114.
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 Strom, Carl A., Floral Park, N. Y. Aeroplane-rudder. No. 1,313,839; Aug. 19; v. 265; p. 425.
 Strom, Carl E., and C. Swanson, New Britain, Conn. Safety window-catch. No. 1,313,840; Aug. 19; v. 265; p. 425.
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 Struble, Alfred, assignor of one-half to A. Holland, Fargo, N. D. Machine for treating snut. No. 1,312,047; Aug. 12; v. 265; p. 151.
 Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Conveyor. No. 1,312,061; Aug. 5; v. 265; p. 39.
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 Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Reclaiming and conveying apparatus. No. 1,313,352; Aug. 19; v. 265; p. 333.
 Stuart, Francis L., Baltimore, Md. Apparatus for loading and unloading. No. 1,313,928; Aug. 26; v. 265; p. 476.
 Stubbare, Joe A., and H. J. Rajff, Columbus, Mont. Form for hollow molded walls. No. 1,314,009; Aug. 26; v. 265; p. 508.
 Stuer, Jules, Methuen, Mass. Stop-motion for looms. No. 1,313,755; Aug. 19; v. 265; p. 409.
 Suckert, Harold C., New York, N. Y. Oil-level tester for engine crank-cases. No. 1,314,028; Aug. 26; v. 265; p. 495.
 Sullivan Machinery Company. (See Gilman, George H., assignor.)
 Sullivan Machinery Company. (See Hunter, George D., assignor.)
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 Sullivan Machinery Company. (See Officer, Charles H., assignor.)
 Sullivan, Maurice P., Torrington, Conn., assignor to Spiltdorf Electrical Company, Newark, N. J. Spark-plug. No. 1,313,426; Aug. 19; v. 265; p. 345.
 Sulwinski, Joseph, and G. Haach, Decatur, Ill. Boiler. No. 1,312,062; Aug. 5; v. 265; p. 40.
 Summers, Bertrand S., Port Huron, Mich. Scutcher. No. 1,313,841; Aug. 19; v. 265; p. 425.
 Supice, Henry H., New York, N. Y. Apparatus for obscuring submerged submarine boats and the like. No. 1,312,595; Aug. 12; v. 265; p. 171.
 Surbaugh, John S., Vincennes, Ind. Shovel, scoop, &c. No. 1,312,766; Aug. 12; v. 265; p. 204.
 Sutcliffe, Edgar R., Leigh, England, assignor to Pure Coal Briquettes Limited, Cardiff, Wales. Press applicable for the production of briquets and for other purposes. No. 1,312,367; Aug. 5; v. 265; p. 95.
 Sutcliffe, John, Rimdel, British Columbia, Canada. Railway-crossing gate. No. 1,313,756; Aug. 19; v. 265; p. 409.
 Sutton, Francis A., Oakhurst, Ashford, England, assignor to C. C. Williams, acting chief of ordnance, U. S. Army, trustee. Fuse for projectiles. No. 1,313,651; Aug. 19; v. 265; p. 390.
 Sutton, Josiah C., Mount Pleasant, Mich. Heating-stove. No. 1,314,442; Aug. 26; v. 265; p. 575.
 Swan, John H., Chicago, Ill. Expansion-motor. No. 1,314,376; Aug. 26; v. 265; p. 562.
 Swanson, Carl. (See Strom and Swanson.)
 Swanson, Selvior A., North Tonawanda, N. Y. Pneumatic action for automatic musical instruments. No. 1,314,163; Aug. 26; v. 265; p. 520.
 Swarts, Guy E., Detroit, Mich. Adjustable drill-jig. No. 1,312,767; Aug. 12; v. 265; p. 204.
 Sweeney, Frank A. (See Kenney, Frank E., assignor.)
 Sweeney, James P., Saugerties, N. Y. Can-opener. No. 1,314,226; Aug. 26; v. 265; p. 533.
 Sweet, Charles H., Elkhart, Ind. Nut-lock. No. 1,314,164; Aug. 26; v. 265; p. 521.
 Sweetland, Ernest J., Montclair, N. J., assignor, by mesne assignments, to United Filters Corporation, Filter. No. 1,313,929; Aug. 26; v. 265; p. 476.
 Swift and Company. (See Richardson, William D., assignor.)
 Swindler, Samuel C., Pratt, Kans. Automatic sign. No. 1,313,757; Aug. 19; v. 265; p. 419.
 Swinglehurst, Harry, Orange, N. J., assignor to Scott and Williams Inc., Boston, Mass. Knitting-machine needle-dial. No. 1,314,377; Aug. 26; v. 265; p. 562.

Synck, Henry, assignor to New Idea Spreader Co., Coldwater, Ohio. Manure-spreader. No. 1,313,427; Aug. 19; v. 265; p. 348.

Sypho-Chemical Sprinkler Corporation. (See Hamilton, John R., assignor.)

Taggart, Dawson M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,312,768; Aug. 12; v. 265; p. 204.

Tallaferrro, Thomas L., assignor to Phoenix-Hermetic Company, Chicago, Ill. Lacquering sheet metal. No. 1,312,815; Aug. 12; v. 265; p. 214.

Talmage, Charles H., New Bedford, Mass. Tidal-power plant. No. 1,313,965; Aug. 26; v. 265; p. 483.

Tankersley, William, Denver, Colo. Collapsible umbrella. No. 1,313,966; Aug. 26; v. 265; p. 483.

Tannas, Elmer A., Ambrose, N. D. Self-feeding cottoner. No. 1,313,613; Aug. 19; v. 265; p. 383.

Tanner, Adalfoe M., Devils Lake, N. D. Invalld lifter and conveyor. No. 1,313,428; Aug. 19; v. 265; p. 348.

Tanner, Harry L., assignor to Sperry Gyroscope Company, Brooklyn, N. Y. Gyroscopic pendulum for aeroplanes, torpedoes, and the like. No. 1,312,086; Aug. 5; v. 265; p. 44.

Tarnow, George E., Chicago, Ill. Bow-holder. No. 1,313,137; Aug. 12; v. 265; p. 277.

Tarrant, Walter G., Hydes, England. Aeroplane-wing structure. No. 1,313,503; Aug. 19; v. 265; p. 373.

Tausig, Leo, New York, N. Y. Vehicle-frame. No. 1,312,845; Aug. 12; v. 265; p. 181.

Taylor, Cecil H., Detroit, Mich. Radiator. No. 1,313,632; Aug. 19; v. 265; p. 390.

Taylor, John D. (See Dillard and Taylor.)

Taylor, John K., Windsor, Ontario, Canada. Tool. No. 1,313,758; Aug. 19; v. 265; p. 410.

Taylor, John W., Philadelphia, Pa. Antiselective fuse. No. 1,313,930; Aug. 26; v. 265; p. 470.

Taylor, Robert A., Cincinnati, Ohio. Carton and blank therefor. No. 1,312,710; Aug. 12; v. 265; p. 193.

Taylor, Thomas E., assignor of one-half to L. U. Cunningham, Kansas City, Mo. Air-cleaning attachment for air-compressors. No. 1,314,443; Aug. 26; v. 265; p. 575.

Taylor-Wharton Iron and Steel Company. (See Reigart, Chauncey, assignor.)

Taylor, William, Lowell, Ind. Not-lock. No. 1,313,750; Aug. 19; v. 265; p. 410.

Teadale, George W., St. Louis, Mo. Disappearing bed. No. 1,313,760; Aug. 19; v. 265; p. 410.

Technical Supply Company. (See Fuller, Ernest L., assignor.)

Technical Supply Company. (See Hagerstrom, John A., assignor.)

Tegeler, Alois, Nashua, Iowa. Adjustable wazon-longue bounds. No. 1,313,907; Aug. 26; v. 265; p. 484.

Telcova, Antonio M., Ipanema, São Paulo, Brazil. Electrical furnace. No. 1,313,701; Aug. 12; v. 265; p. 410.

Telima, Jukichi, Ube, and K. Kishida, Toyohigashi, Yamaguchi, Japan. Apparatus for excluding dense fog. No. 1,312,286; Aug. 5; v. 265; p. 80.

Tenny, Clarence J. (See Tenny, William N. and C. J.)

Tenny, William N. and C. J., Sherman, Calif. Combination latch hasp and staple. No. 1,312,981; Aug. 12; v. 265; p. 236.

Terhone, Howard. (See Aldridge and Terhone.)

Terrel Machine Company, The. (See Redmond, Harriman, and Richardson, assignors.)

Tikmer, Paul G., New York, N. Y. Valve. No. 1,314,378; Aug. 26; v. 265; p. 562.

Tetzel, Edmund, Jr. (See Torner and Tetzel.)

Text Corporation, The. (See Hartshorne, William D., assignor.)

Thacher, Sheldon P., Weehawken, N. J., assignor to Revere Rubber Company. Vulcanizing rubber and product obtained thereby. No. 1,312,144; Aug. 5; v. 265; p. 55.

Thels, Thille. (See Jones, Jacob, assignor.)

Thels, George J., Aurora, Ill. Ear-protector. No. 1,312,493; Aug. 5; v. 265; p. 120.

Thierfelder, Richard E., and J. Schmaele, Jr., Milwaukee, Wis. Preservative composition for treating rubber fabric. No. 1,312,007; Aug. 5; v. 265; p. 29.

Theobald, John L., New York, N. Y., assignor to Toledo Scale Company, Toledo, Ohio. Automatic weighing scale. No. 1,313,614; Aug. 19; v. 265; p. 385.

Thomas, Charles, Victoria, British Columbia, Canada. Internal-combustion engine. No. 1,313,762; Aug. 19; v. 265; p. 411.

Thomas, Edmund P., Centralla, Wash. Shock-absorber. No. 1,313,763; Aug. 19; v. 265; p. 411.

Thomas, Edward, New York, N. Y., and R. C. Stickney, Elizabeth, N. J., assignors, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Type-writing machine. No. 1,312,145; Aug. 5; v. 265; p. 55.

Thomas, John G. P., London, assignor to Leyland Motors (1914) Ltd., Leyland, England. Electric starting and ignition system. No. 1,313,574; Aug. 19; v. 265; p. 376.

Thomas, John H., Mount Vernon, N. Y. Surgical-bandage fastener. No. 1,313,138; Aug. 12; v. 265; p. 277.

Thomas-Oberkirch Company. (See Thomas, William M., assignor.)

Thomas, William M., assignor, by mesne assignments, to Thomas-Oberkirch Company Limited, New York, N. Y. Method of and apparatus for photographic exposures and projection. No. 1,313,615; Aug. 19; v. 265; p. 384.

Thompson, Charles F., Washington, D. C. Resetting mechanism for counting-machines. No. 1,312,008; Aug. 5; v. 265; p. 29.

Thompson, Don N., Syracuse, assignor to Pass & Seymour, Inc., Solvay, N. Y. Lamp-socket. No. 1,313,139; Aug. 12; v. 265; p. 278.

Thompson, Gustav F. (See Vert, Jesse F., assignor.)

Thompson, John D., Rochester, N. Y. Signal. No. 1,312,217; Aug. 5; v. 265; p. 68.

Thompson, Newell A., Jr., et al. (See Peck, Harry H., assignor.)

Thompson, Oscar A., Redwing, Kans. Spark-intensifier. No. 1,312,368; Aug. 5; v. 265; p. 96.

Thomson Spot Welder Company. (See Gravell, James H., assignor.)

Thordarson Electric Manufacturing Co. (See Connor, Robert A., assignor.)

Thoreau, John W., Geddes, S. D. Changeable sign. No. 1,314,165; Aug. 26; v. 265; p. 521.

Thorpe, Clyde A., Adel, Iowa. Tile-cutting machine. No. 1,313,213; Aug. 12; v. 265; p. 291.

Thorp, James M., Alameda, Calif. Explosion oil-engine. No. 1,312,460; Aug. 5; v. 265; p. 114.

Thos. Firth and Sons Limited. (See Straug, Harry B., assignor.)

Thrift, Homer C., Goose Creek, Tex. Pipe-pulling device. No. 1,312,009; Aug. 5; v. 265; p. 29.

Thropp, John E. and P. D., assignors to The De Lask and Thropp Circular Woven Tire Company, Trenton, N. J. Apparatus for impregnating fabric. No. 1,312,878; Aug. 12; v. 265; p. 225.

Thropp, Peter D. (See Thropp, John E. and P. D.)

Thrower, Albert J., Dexter, Mo. Cotton-picker. No. 1,312,010; Aug. 5; v. 265; p. 29.

Thuman, Francis J., Baltimore, Md. Hull of water-craft. No. 1,312,369; Aug. 5; v. 265; p. 96.

Thornton, Elmer A., assignor of one-half to J. H. Mason, Norfolk, Nebr. Flexible pitman. No. 1,313,764; Aug. 19; v. 265; p. 411.

Tibbets, Milton, Detroit, Mich., assignor, by mesne assignments, to The Iako Company, Chicago, Ill. Refrigerating apparatus. No. 1,312,932; Aug. 12; v. 265; p. 236.

Tiedemann, Nicholas J., et al. (See Anderson, Otis W., assignor.)

Tiffany, George S., Summit, N. J., assignor to Gray National Teletograph Company, New York, N. Y. Teletographic apparatus. No. 1,312,506; Aug. 12; v. 265; p. 171.

Tilden, Ellsworth, Duluth, Minn. Sounding signal device for automobiles. No. 1,312,370; Aug. 5; v. 265; p. 96.

Tilman, Joseph T., Minneapolis, Minn. Envelop sealing and stamping machine. No. 1,312,507; Aug. 12; v. 265; p. 171.

Tingley, Philo B., New York, N. Y. Re-aligning mechanism for writing-machines. No. 1,312,063; Aug. 5; v. 265; p. 40.

Tirrell, Allen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vibrating contact relay for electrical regulators. No. 1,312,508; Aug. 5; v. 265; p. 122.

Titanium Alloy Manufacturing Company, The. (See Barton, Louis E., assignor.)

Tobin, John E., Mansfield, Ohio. Track elevating and ballasting machine. No. 1,313,353; Aug. 19; v. 265; p. 334.

Todd, Frederick A., Butte, Mont. Aerial camera. No. 1,313,564; Aug. 19; v. 265; p. 374.

Toledo Scale Company. (See Theobald, John L., assignor.)

Tolentini, Filippo, assignor to P. W. Como, Woodlawn, Pa. Ointment and preparing same. No. 1,314,444; Aug. 26; v. 265; p. 575.

Tollhurst Machine Works. (See Bryson, Tandy A., assignor.)

Tolman, Scott H., Boston, Mass. Hydroaeroplane. No. 1,314,227; Aug. 26; v. 265; p. 533.

Torkelson, Isak O., assignor of one-half to L. O. Torkelson, New Brighton, N. Y. Combination milk and mail box. No. 1,313,354; Aug. 19; v. 265; p. 334.

Torkelson, Lars O. (See Torkelson, Isak O., assignor.)

Torner, Isaac, and E. Tetzel, Jr., Terre Haute, Ind. Plastic-mold. No. 1,313,355; Aug. 19; v. 265; p. 334.

Towle, Urban A. (See Whitmore, George C., assignor.)

Townsend, Charles L., Norwood, Ohio. Machine for trimming and finishing rubber gaskets and similar articles. No. 1,314,029; Aug. 26; v. 265; p. 495.

Townsend, Edwin O. (See Custer, David W., assignor.)

Townsend, Ervin D., Jamestown, N. Y. Wilmotree. No. 1,313,430; Aug. 19; v. 265; p. 348.

Townsend, James L., Manquin, Va. Fertilizer-distributing apparatus. No. 1,313,653; Aug. 19; v. 265; p. 390.

Trach, Morris. (See Besner and Trach.)

Traum, David, New York, N. Y. Loom for beadwork. No. 1,313,765; Aug. 19; v. 265; p. 411.

Travers City Refrigerator Co. (See Perkett, Louis F., assignor.)

Travis, Maud C., Dora, Ala. Twin bottle-holder. No. 1,314,379; Aug. 26; v. 265; p. 563.

Tregobing, Joseph H., Greeley, Colo. Leaf-spring-lubricating tool. No. 1,313,505; Aug. 19; v. 265; p. 374.

Tridiro, Salvatore, Brooklyn, N. Y. Air-motor. No. 1,313,842; Aug. 19; v. 265; p. 425.

Tritton, William A., Lincoln, England. Armor-plating. No. 1,312,371; Aug. 5; v. 265; p. 96.

Triumph Trap Co. (See Greene, Holdridge G., assignor.)

Trommer, Charles F., assignor to A. Wittman Co., New York, N. Y. Wrist-watch. No. 1,313,843; Aug. 19; v. 265; p. 426.

Trotman, Walter G., West Springfield, Mass., assignor to C. H. Smith Company, Springfield, Mass. Seam. No. 1,311,927; Aug. 5; v. 265; p. 14.

Trowbridge, Ernest C., Gloucester, Mass. Medicine-dispenser. No. 1,313,566; Aug. 19; v. 265; p. 374.

Trowbridge, John H. (See Worley, Trowbridge, Wurtenberg, and Lee.)

Trudeau, John F., assignor to Electro-Dynamic Company, Bayonne, N. J. Waste-packed sleeve-bearing. No. 1,313,507; Aug. 19; v. 265; p. 362.

Trumbull Electric Mfg. Co. (See Broadwell, Harry M., assignor.)

Trumbull Electric Mfg. Co., The. (See Regan, Joseph C., assignor.)

Trussed Concrete Steel Company of Canada. (See Hanson, Lewis, assignor.)

Tschanz, Otto, Berne, Switzerland. Driving mechanism for railway-vehicles with electric motors rigidly mounted on spring-supported frames. No. 1,311,028; Aug. 5; v. 265; p. 14.

Tucker, Benjamin W., South Orange, N. J., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,311,029; Aug. 5; v. 265; p. 15.

Tapper, Russell E., Cohasset, Mass. Curtain-light. No. 1,312,087; Aug. 5; v. 265; p. 44.

Turbayne, William A., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Automatic regulator. No. 1,314,166; Aug. 26; v. 265; p. 521.

Turgeon, Edward, Thompsonville, Conn. Safety appliance for elevators. No. 1,314,228; Aug. 26; v. 265; p. 533.

Turnbull, Lawrence W., Wilkesburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Brush-holding device. No. 1,312,769; Aug. 12; v. 265; p. 204.

Turner, Archibald and H. J., Leicester, England. Producing endless elastic bands. No. 1,312,770; Aug. 12; v. 265; p. 204.

Turner, Edgar A., assignor to North-Western Expanded Metal Co., Chicago, Ill. Piston for internal-combustion engines. No. 1,312,879; Aug. 12; v. 265; p. 226.

Turner, Edgar A., assignor to North-Western Expanded Metal Co., Chicago, Ill. Piston for internal-combustion engines. No. 1,312,880; Aug. 12; v. 265; p. 226.

Turner, Hugh J. (See Turner, Archibald and H. J.)

Turner Tanning Machinery Company, The. (See Lawrence, George A., assignor.)

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Straight-air emergency-valve device. No. 1,311,930; Aug. 5; v. 265; p. 15.

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Fluid-pressure brake. No. 1,312,649; Aug. 12; v. 265; p. 181.

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Pump-lubricator. No. 1,312,650; Aug. 12; v. 265; p. 182.

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Electro-pneumatic brake. No. 1,313,030; Aug. 12; v. 265; p. 226.

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Fluid-pressure brake. No. 1,314,168; Aug. 26; v. 265; p. 521.

Turner, Walter V., Wilkesburg, Pa., assignor to The Westinghouse Air Brake Company, Wilkesburg, Pa. Temperature-control locomotive-cylinder. No. 1,314,107; Aug. 26; v. 265; p. 521.

Turner, William J., San Francisco, Calif. Sprinkler-head. No. 1,314,169; Aug. 26; v. 265; p. 521.

Turver, William H. (See Camm, Charles E., assignor.)

Twombly, Melvan L., Chicago, Ill., assignor, by mesne assignments, to Sifton Manufacturing Corporation, Milbrook, N. Y. Machine for making corrugated board. No. 1,313,844; Aug. 19; v. 265; p. 426.

Twyman, Frank, London, England, and H. Workman, Glasgow, Scotland. Production of color cinematographic bands and means therefor. No. 1,312,088; Aug. 5; v. 265; p. 44.

U. S. Industrial Alcohol Co. (See Backhaus, Arthur A., assignor.)

U. S. Light & Heat Corporation. (See Turbayne, William A., assignor.)

Ulam, Ora U., Chester, W. Va. Alarm for tin-cleaning machines. No. 1,313,766; Aug. 19; v. 265; p. 412.

Ulrich, Charles B., Jamestown, N. Y. Trolling attachment for fishing-lines. No. 1,313,507; Aug. 19; v. 265; p. 374.

Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)

Underwood Computing Machine Company. (See Thomas and Stickney, assignors.)

Underwood Typewriter Company. (See Corcoran, Cornelius H., assignor.)

Underwood Typewriter Company. (See White, William L., assignor.)

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

Union Special Machine Company. (See Moffatt, James H., assignor.)

Union Special Machine Company. (See Moffatt and Kelso, assignors.)

Union Special Machine Company. (See Onderdonk, Lansing, assignor.)

Union Special Machine Company. (See Seymour, Dudley S., assignor.)

Union Switch & Signal Company, The. (See Baker, William S. G., assignor.)

Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)

United Engineering & Foundry Company. (See Jones, Lloyd, assignor.)

United Filters Corporation. (See Sweetland, Ernest J., assignor.)

United Metal Hose Company. (See Kahn, Julius, assignor.)

United Shoe Machinery Corporation. (See Ashton, Orrell, assignor.)

United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)

United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)

United Shoe Machinery Corporation. (See Engel, Karl, assignor.)

United Shoe Machinery Corporation. (See Enslin, Herbert E., assignor.)

United Shoe Machinery Corporation. (See Ferguson, George, assignor.)

United Shoe Machinery Corporation. (See Fowler, Alfred H., assignor.)

United Shoe Machinery Corporation. (See Gilden, Harvey L., assignor.)

United Shoe Machinery Corporation. (See Hays, John J., assignor.)

United Shoe Machinery Company. (See Littlefield, Augustine F., assignor.)

United Shoe Machinery Corporation. (See MacKenzie, Fred L., assignor.)

United Shoe Machinery Corporation. (See Pope, Joseph H., assignor.)

United Shoe Machinery Corporation. (See Roberts, William T. H., assignor.)

United Shoe Machinery Corporation. (See Russell and Grush, assignors.)

United Shoe Machinery Corporation. (See Warren, Frank H., assignor.)

United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)

United States Electric Company. (See Jones, George A. E., assignor.)

United States Gypsum Company. (See Niles and Birdsey, assignors.)

United States Gypsum Company. (See Utzman, Clarence W., assignor.)

Universal Machine Company. (See Urschel, Bertis H., assignor.)

Upton, John F., Sapulpa, Okla. Valve for air-starter systems. No. 1,313,767; Aug. 19; v. 265; p. 412.

Urbanek, Joseph, Chicago, Ill. Car-indicator. No. 1,312,146; Aug. 5; v. 265; p. 55.

Urich, Benjamin, Milwaukee, Wis. Puncture-closing device for tires. No. 1,313,568; Aug. 19; v. 265; p. 431.

Urschel, Bertis H., assignor to Universal Machine Company, Bowling Green, Ohio. Universal joint. No. 1,313,508; Aug. 19; v. 265; p. 363.

Utzman, Clarence W., assignor to United States Gypsum Company, Chicago, Ill. Floor construction. No. 1,312,287; Aug. 5; v. 265; p. 80.

Valley Mould and Iron Corporation. (See Coates, Ray G., assignor.)

Van Ackeren, Josef, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort-oven. No. 1,312,372; Aug. 5; v. 265; p. 96.

Van Alstyn, Albert T., Grand Rapids, Mich. Garter. No. 1,313,356; Aug. 19; v. 265; p. 334.

Van Harnveld, Charles E. (See Leaver, Edmond S., assignor.)

Van Houten, Frank H., assignor to Dutches Tool Company, Beacon, N. Y. Oiler for dough-divider cylinders. No. 1,314,170; Aug. 26; v. 265; p. 522.

Van Lynden, Robert A. B., Utrecht, Netherlands, assignor, by mesne assignments, to American Thermophone Company, Boston, Mass. Thermic telephone. No. 1,312,504; Aug. 5; v. 265; p. 122.

Van Sicken Company, The. (See Prouty, Theodore C., assignor.)

Vanderlip, Louis C., Elkhart, Ind. Pneumatic-conveyer hopper. No. 1,312,810; Aug. 12; v. 265; p. 214.

Velilla M. Gildardo, Progreso, Yucatan, Mexico. Dental appliance. No. 1,313,631; Aug. 12; v. 265; p. 256.

Vermont Farm Machine Company, The. (See Kimball, Percy L., assignor.)
 Vert, Jesse F., assignor of one-half to G. F. Thompson. Malta, Mont. Sewer-trap. No. 1,312,711; Aug. 12; v. 265; p. 193.
 Vibration Specialty Company. (See Akimoff, Nicolas W., assignor.)
 Vickers Limited. (See Buckham, George T., assignor.)
 Vickers Limited. (See Challenger and Savage, assignors.)
 Vickers Limited. (See Dawson and Buckham, assignors.)
 Vickers Limited. (See Johnson, Frederick G. L., assignor.)
 Vickers Limited. (See Lander, Frank E., assignor.)
 Vickers Limited. (See North, Thomas K., assignor.)
 Vickers Limited. (See Watt, George E., assignor.)
 Victor Talking Machine Company. (See Winans, Daniel M., assignor.) (Reissue.)
 Victor Typewriter Company. (See Hagerstrom, John A., assignor.)
 Villamor, Timoteo, Merida, Mex. Machine for scraping vegetable-stalks. No. 1,314,100; Aug. 26; v. 265; p. 509.
 Vincent Alward Company, The. (See Vincent, William W., assignor.)
 Vincent, Sidney C., Baltimore, Md. assignor, by mesne assignments, to Citrus Illuminating Company, New York, N. Y. Gas-cook. No. 1,313,140; Aug. 12; v. 265; p. 274.
 Vincent, William W., assignor to The Vincent-Alward Company, Kenosha, Wis. Wire-forming machine. No. 1,313,509; Aug. 19; v. 265; p. 303.
 Vogel, Edward J., San Francisco, Calif. Golf-club holder. No. 1,314,171; Aug. 26; v. 265; p. 522.
 Vogel, Felix A., assignor to General Briquetting Company, New York, N. Y. Briquetting dust. No. 1,312,218; Aug. 5; v. 265; p. 68.
 Vogeler, John, New York, N. Y. Drumhead-tightener. No. 1,312,771; Aug. 12; v. 265; p. 205.
 Vogelzang, Fritz, Charlottenburg, near Berlin, Germany. Door-lock. No. 1,312,210; Aug. 5; v. 265; p. 69.
 Volz, Chris L., Cleveland, Ohio. Electrical apparatus. No. 1,312,091; Aug. 5; v. 265; p. 40.
 Von Arco, Georg, and A. Meissner, Berlin, Germany. High-frequency generator for telegraphy and telephony. No. 1,314,101; Aug. 26; v. 265; p. 509.
 Von Arco, Georg, and A. Meissner, Berlin, Germany. Connection for electric relays working with localized gas-gap. No. 1,314,102; Aug. 26; v. 265; p. 509.
 Vosler, Henry, assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Insulating-washer. No. 1,314,103; Aug. 26; v. 265; p. 509.
 Votey, Edwin S., Summit, N. J., assignor to The Aeolian Company, Hlanislmo device for pianos. No. 1,313,141; Aug. 12; v. 265; p. 278.
 Votey, Edwin S., Summit, N. J., assignor to The Aeolian Company. Record cabinet. No. 1,314,481; Aug. 26; v. 265; p. 582.
 Vulcan Iron Works. (See Jeter, John T., assignor.)
 W. & L. E. Gurler. (See Hessa, Wendell Jr., assignor.)
 Waechter, Louis E. F., New York, N. Y. Watch. No. 1,314,172; Aug. 26; v. 265; p. 522.
 Wacker, Frederick G., Chicago, Ill. Metallic receptacle. No. 1,314,445; Aug. 26; v. 265; p. 576.
 Wacker, George W., Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y. Portable electric light. No. 1,312,220; Aug. 5; v. 265; p. 69.
 Wacker, George W., Rutherford, N. J., assignor to National Carbon Company, Inc., New York, N. Y. Portable electric light. No. 1,312,221; Aug. 5; v. 265; p. 69.
 Wadsworth, Henry L., Lexington, Mass. Sound recording and reproducing machine. No. 1,312,461; Aug. 5; v. 265; p. 114.
 Wagner Electric Manufacturing Company. (See Dick, Burns, assignor.)
 Wahl Company. (See Poole, Arthur F., assignor.)
 Wahl Company, The. (See Wahl, John C., assignor.)
 Wahl, John C., Chicago, Ill., assignor to The Wahl Company, Wilmington, Del. Pen-clip. No. 1,314,104; Aug. 26; v. 265; p. 510.
 Wahl, John C., Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del. Calculating machine. No. 1,314,105; Aug. 26; v. 265; p. 510.
 Wahlstrom, Charles S., Boulder, Colo. Truss-pad. No. 1,312,232; Aug. 5; v. 265; p. 69.
 Walt, Henry H., Chicago, Ill. Dynamo-electric machine. No. 1,313,431; Aug. 19; v. 265; p. 348.
 Wakefield, Charles S., Hampstead, London, England. Temporary or portable structure or building. No. 1,312,065; Aug. 5; v. 265; p. 40.
 Wakefield, James S. (See Mellvay, George D., assignor.)
 Walden, Harley A., West Terre Haute, Ind. Grate dumping and handling apparatus. No. 1,313,142; Aug. 12; v. 265; p. 278.
 Wales, Rowland T., Seward, N. J. Mold for concrete construction. No. 1,312,462; Aug. 5; v. 265; p. 115.
 Walker, John H., Lexington, Ky. Combination tool. No. 1,313,432; Aug. 19; v. 265; p. 349.
 Wall, Willie F., San Francisco, Calif. Pen-point. No. 1,312,712; Aug. 12; v. 265; p. 193.
 Wallace, Charles, Los Angeles, Calif. Cleaning and polishing composition. No. 1,314,482; Aug. 26; v. 265; p. 582.

Wallace, John D., assignor to J. D. Wallace & Co., Chicago, Ill. Sawing appliance. No. 1,314,291; Aug. 26; v. 265; p. 545.
 Waller, Carl R., Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y. Governing mechanism for fluid-pressure motors. No. 1,311,931; Aug. 5; v. 265; p. 15.
 Waller, Charles W. (See Conger and Waller.)
 Waller, John A., Highland Park, assignor to Expanded Wood Lath Corporation, Cook county, Ill. Expanded wood lath. No. 1,314,106; Aug. 26; v. 265; p. 510.
 Waller, John A., Chicago, assignor to Expanded Wood Lath Corporation, Cook county, Ill. Expanded board lath. No. 1,314,107; Aug. 26; v. 265; p. 510.
 Waller, Oen F., Aberdeen, S. D., assignor to E. L. Grantham and W. G. Porter, Aberdeen, S. D. Safety apparatus for trucks, etc. No. 1,314,173; Aug. 26; v. 265; p. 522.
 Wallesverd, Carl, Hersey, Wis. Harrow attachment. No. 1,314,292; Aug. 26; v. 265; p. 546.
 Wallman Otto F., Stratford, Wis. Letter-carrier. No. 1,312,096; Aug. 5; v. 265; p. 40.
 Wallwin, Josiah M., Warwick, England. Gas and air mixer. No. 1,312,147; Aug. 5; v. 265; p. 55.
 Walser, Joseph J., assignor to The Gas Printing Press Company, Chicago, Ill. Inking mechanism. No. 1,313,433; Aug. 19; v. 265; p. 349.
 Walsh, Edward M., Manette, Wash. Stamp-receiver. No. 1,312,713; Aug. 12; v. 265; p. 193.
 Walsh, John M., Petaluma, Calif. Street-telephone. No. 1,313,616; Aug. 19; v. 265; p. 384.
 Walsh, Stafford P., San Francisco, Calif. Focusing attachment for camera. No. 1,314,030; Aug. 26; v. 265; p. 496.
 Walter, Ernest, Montclair, N. J. Making porous concrete. No. 1,313,981; Aug. 26; v. 265; p. 476.
 Walters, Henry F., Chicago, Ill. Saw-guard. No. 1,312,651; Aug. 12; v. 265; p. 182.
 Walham Watch Company. (See Ohlson, Olaf, assignor.)
 Walby, Arthur H., New York, N. Y. Ice-box. No. 1,314,108; Aug. 26; v. 265; p. 510.
 Wanamaker, Roscoe L., Toledo, Ohio. Railway despatch-deliverer. No. 1,312,652; Aug. 12; v. 265; p. 182.
 Ward Leonard Electric Company. (See Schwagermann, William, assignor.)
 Warfringe, Karl H. (See Werner and Warfringe.)
 Warren, Frank H., Swampscott, Mass. assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. No. 1,312,598; Aug. 12; v. 265; p. 171.
 Warren Webster & Co. (See Serrell and Flitts, assignors.)
 Warshaw, Alexander, Cambridge, Mass. Shirt. No. 1,313,052; Aug. 26; v. 265; p. 470.
 Washburn, Frank S., Ite, assignor to American Cyanamid Company, New York, N. Y. Method of and apparatus for producing phosphoric acid and compounds of the same. No. 1,314,229; Aug. 26; v. 265; p. 534.
 Waterbury Clock Co. (See Larkins, William J., assignor.)
 Waterbury Jewel Company, The. (See Neubeth and Grilley, assignors.)
 Waters, Daniel E., St. Paul, Minn. Display-sign. No. 1,313,434; Aug. 19; v. 265; p. 349.
 Watkins, William H., Hanwell, England. Aerial ropeway and the like. No. 1,313,357; Aug. 19; v. 265; p. 334.
 Watkins, William H., Hanwell, England. Tractor for aerial ropeways and the like. No. 1,313,358; Aug. 19; v. 265; p. 335.
 Watrous, William R., assignor to C. J. Bates & Son, Chester, Conn. Machine implement. No. 1,312,653; Aug. 12; v. 265; p. 182.
 Watson, Daniel M., Portland, Oreg. Pump. No. 1,313,359; Aug. 19; v. 265; p. 335.
 Watson Wagon Company. (See Kessler, Clyde C., assignor.)
 Watt, George E., assignor to Vickers Limited, Westminster, London, England. Cutting device for cables, chains, and the like. No. 1,313,435; Aug. 19; v. 265; p. 349.
 Waugh, Daniel S., assignor to The Beaver Rock Drill Manufacturing Company, Denver, Colo. Motor. No. 1,314,288; Aug. 26; v. 265; p. 545.
 Waugh Draft Gear Company. (See Davidson, Arthur C., assignor.)
 Weizant, Roy A., Roselle Park, N. J., assignor to Marconi Wireless Telegraph Company of America. Receiver of electrical oscillations. No. 1,313,654; Aug. 19; v. 265; p. 360.
 Wearn, James S., Linwood, Christchurch, New Zealand. Indoor game of skill. No. 1,314,293; Aug. 26; v. 265; p. 546.
 Weaver, Charlie B., Los Angeles, Calif. Knife-sharpener. No. 1,312,654; Aug. 12; v. 265; p. 182.
 Weaver, Harold H., New York, N. Y., assignor to American Motorbus Corporation, Omnibus. No. 1,312,288; Aug. 5; v. 265; p. 80.
 Webb, Howard R., Cincinnati, Ohio. Artificial limb. No. 1,312,599; Aug. 12; v. 265; p. 171.
 Webb, Jean F. Sr., New York, N. Y. Parachute attachment for firing-machines. No. 1,314,446; Aug. 26; v. 265; p. 576.
 Weber, Carl, assignor to Cement-Gun Construction Company, Chicago, Ill. Holding-clip for concrete-reinforcement. No. 1,311,932; Aug. 5; v. 265; p. 15.

Webster, Bradford, assignor, by mesne assignments, to Paragon Binder Corporation, Newark, N. J. Perforator. No. 1,312,067; Aug. 5; v. 265; p. 40.
 Webster Electric Company. (See Brown, Walter, assignor.)
 Webster, John A., Rutherford, N. J. Vending-machine. No. 1,312,032; Aug. 12; v. 265; p. 250.
 Webster, Tower K., Jr., Evanston, assignor to American Steam Conveyor Corporation, Chicago, Ill. Tank for ash-conveyer systems. No. 1,313,436; Aug. 19; v. 265; p. 349.
 Weeks, Shirley S., Oakland, and C. D. Stewart, Berkeley, assignors to Associated Engineering and Supply Company, San Francisco, Calif. Furnace draft-regulator. No. 1,314,174; Aug. 26; v. 265; p. 522.
 Welgel, Frank P., Flandreau, S. D. Horse's nose protector or shield. No. 1,311,933; Aug. 5; v. 265; p. 15.
 Weimar, William, Appleton, Wis. Treatment of fibrous material. No. 1,313,437; Aug. 19; v. 265; p. 350.
 Weinberg, Isaac H., New York, N. Y. Umbrella and parasol. No. 1,314,230; Aug. 26; v. 265; p. 531.
 Weinheim, Emil, New York, N. Y. Process and apparatus for producing smooth-surfaced coating on textile fabrics. No. 1,313,655; Aug. 19; v. 265; p. 360.
 Weinhold, Paul, assignor of one-half to O. G. Kostedt, St. Louis, Mo. Toy pistol. No. 1,311,934; Aug. 5; v. 265; p. 16.
 Weis, Julius, St. Paul, Minn. Safety-pin. No. 1,313,846; Aug. 19; v. 265; p. 426.
 Weiser, Simon, Houston, Tex. Tire-bandage. No. 1,313,143; Aug. 12; v. 265; p. 278.
 Weiss, Jay G., Montclair, and C. Knuth, Newark, assignors to Hyatt Roller Bearing Division, United Motors Corporation, Harrison, N. J. Roll-grinding machine. No. 1,312,881; Aug. 12; v. 265; p. 226.
 Weitzell, Harry M., Legrand, Iowa. Harrow and attachment therefor. No. 1,313,144; Aug. 12; v. 265; p. 279.
 Weldie, William R., North East, Md. Pliers. No. 1,312,148; Aug. 5; v. 265; p. 56.
 Wells, Frank E. (See Wells, Willet C. and F. E.)
 Wells, Henry G. (See Sloan and Wells.)
 Wells, Willet C. and F. E., Columbus, Ohio. Furnace for converting energy of fuel into force. No. 1,314,175; Aug. 26; v. 265; p. 523.
 Welsh, James W. (See Jones and Welsh.)
 Wendell, Carl A., Rockville Center, N. Y., and S. B. Shutta, Marietta, Pa. Gas-burner. No. 1,313,300; Aug. 19; v. 265; p. 335.
 Wendrich, William, New York, N. Y., assignor to Cru Patents Corporation. Photographic-printing apparatus. No. 1,312,280; Aug. 5; v. 265; p. 81.
 Wendrich, David L., Harrisburg, Pa. Sash-fastener. No. 1,312,933; Aug. 12; v. 265; p. 236.
 Werner, Victor G., Boden, and K. H. Warfringe, Stockholm, Sweden. Inductive wireless telephone system for railways and the like. No. 1,312,068; Aug. 5; v. 265; p. 41.
 Wersel, Frank B., Jr., Cincinnati, Ohio. Davenport-bed. No. 1,311,109; Aug. 26; v. 265; p. 511.
 Wertz, Le Roy, Milford, Mo. Kerosene-vaporizer for motor-cars. No. 1,314,447; Aug. 26; v. 265; p. 576.
 Westcott, Dana E., assignor to L. M. Hammerichmidt, trustee, South Bend, Ind. Cut-out for electric-lighting systems. No. 1,313,438; Aug. 19; v. 265; p. 350.
 West, Harry H., Plymouth, Pa. Machine for forming tatting-braid. No. 1,313,439; Aug. 19; v. 265; p. 350.
 Westad, Abraham G., and E. L. Hegg, Hvoslof, assignors to Aktieselskabet G. Hartmann, Christiania, Norway. Sieve for wood-pulp plants. No. 1,313,145; Aug. 12; v. 265; p. 279.
 Western Electric Company. (See Clausen, Henry P., assignor.)
 Western Electric Company. (See Lundell, Alben E., assignor.)
 Western Electric Company. (See Luodell and Clark, assignors.)
 Western Electric Company. (See MacDongall, Harry W., assignor.)
 Western Electric Company. (See Mathes, Robert C., assignor.)
 Western Electric Company. (See Quass, Ralph L., assignor.)
 Western Electric Company. (See Rainey, Paul M., assignor.)
 Western Electric Company. (See Reynolds and Hearn, assignors.)
 Western Electric Company. (See Scribner and McQuarrie, assignors.)
 Western Electric Company. (See Taggart, Dawson M., assignor.)
 Western Electric Company. (See Wilbur, Ray S., assignor.)
 Western Electric Company. (See Williams, Samuel R., Jr., assignor.)
 Western Tool & Manufacturing Company, The. (See Saum, Robert J., assignor.)
 Westervelt, Vincent, Bloomington, N. J. Curtain-bracket. No. 1,313,768; Aug. 19; v. 265; p. 412.
 Westinghouse Air Brake Company, The. (See Loudenbeck, Harry C., assignor.)
 Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)
 Westinghouse Electric & Manufacturing Co. (See Ehrhart, Raymond N., assignor.)

Westinghouse Electric & Manufacturing Company. (See Cullings, Roswell E., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Hellmuth, Rudolf E., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Herr, Herbert T., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Kasley, Alexander T., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Kempton, Willard H., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Languth, Joseph O., assignor.)
 Westinghouse Electric & Manufacturing Company. (See MacGahan, Paul, assignor.)
 Westinghouse Electric & Manufacturing Company. (See Riley, Lynn G., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Smith, Walter H., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Tirrell, Allen A., assignor.)
 Westinghouse Electric & Manufacturing Company. (See Turnbull, Lawrence W., assignor.)
 Westinghouse Lamp Company. (See Dennington, Arthur R., assignor.)
 Westlake, Charles T., St. Louis, Mo. Internal-combustion engine. No. 1,313,033; Aug. 12; v. 265; p. 256.
 Westlake, Charles T., assignor to Commonwealth Steel Company, St. Louis, Mo. Double-roll crusher. No. 1,314,031; Aug. 26; v. 265; p. 496.
 Weymann, Harry W., Philadelphia, Pa., assignor to H. A. Weymann and Son. Banjo attachment. No. 1,312,832; Aug. 12; v. 265; p. 220.
 Whalen, James, Omaha, Nebr. Valve and ignition mechanism for gas-stoves. No. 1,312,655; Aug. 12; v. 265; p. 182.
 Wheary, George H., Racine, Wis. Trunk-drawer construction. No. 1,312,714; Aug. 12; v. 265; p. 193.
 Wheary, George H., Racine, Wis. Trunk collar and track. No. 1,313,769; Aug. 19; v. 265; p. 412.
 Wheary, George H., Racine, Wis. Automobile wardrobe-trunk holder. No. 1,313,668; Aug. 26; v. 265; p. 481.
 Wheeler, Frank G., assignor to Hensch Process Company, Appleton, Wis. Indicating device for electrolytic cells. No. 1,312,494; Aug. 5; v. 265; p. 120.
 Wheeler, John H., Plymouth, Wis. Cheese-box. No. 1,312,772; Aug. 12; v. 265; p. 205.
 Wheeler, Newberry W., East Cleveland, Ohio. Means employed in key systems for title examiners. No. 1,313,617; Aug. 19; v. 265; p. 381.
 Wheelock, Herbert K., Long Beach, Calif. Spraying and burning apparatus. No. 1,312,934; Aug. 12; v. 265; p. 237.
 Wheelock, John H., Worcester, Mass. assignor to Klaxon Company, Newark, N. J. Sound-producer. No. 1,312,373; Aug. 5; v. 265; p. 97.
 Whitaker, John H., Dennysville, N. J. Pump. No. 1,314,448; Aug. 26; v. 265; p. 576.
 Whitaker, Lester C., Santa Rosa, Calif. Time-switch for electric circuits. No. 1,313,440; Aug. 19; v. 265; p. 350.
 White, Archibald, Dunbar, Pa. Pipe-wrench. No. 1,312,290; Aug. 5; v. 265; p. 81.
 White, Bert A., Detroit, Mich. Trolley-wire hanger. No. 1,313,436; Aug. 19; v. 265; p. 361.
 White, David J., and D. H. Hanna, Oil City, Pa. Conductions frog for railways. No. 1,313,441; Aug. 19; v. 265; p. 350.
 White, Fred G., Kansas City, Mo., assignor, by mesne assignments, to The Electric Clipper Company, Fredonia, Kans. Hair clipper. No. 1,311,935; Aug. 5; v. 265; p. 16.
 White, Jerry M., Boston, Mass. Automobile-signal. No. 1,313,770; Aug. 19; v. 265; p. 412.
 White, John M., Meridian, Miss. Antipyphilitic medicinal preparation and making the same. No. 1,313,657; Aug. 19; v. 265; p. 361.
 White, Joseph H., assignor to The Graphoscope Company, Washington, D. C. Picture-projecting apparatus. No. 1,312,374; Aug. 5; v. 265; p. 97.
 White, Richard P., Chicago, Ill. Rail-car for vessels. (Reissue.) No. 14,703; Aug. 5; v. 265; p. 123.
 White, Richard P., Chicago, Ill. Tank-car. No. 1,313,361; Aug. 19; v. 265; p. 335.
 White, William L., Birmingham, Ala., assignor to Underwood Typewriter Company, New York, N. Y. Type-writer. No. 1,312,483; Aug. 12; v. 265; p. 226.
 Whitlaw, John F. (See Anderson, Clarke, and Whitlaw.)
 Whiting, Alonzo A. (See Whiting, Roy D. and A. A.)
 Whiting-Patterson Company. (See Hall, George, assignor.)
 Whiting, Roy D. and A. A., Chicago, Ill. Pouring-stopper for liquid-containers. No. 1,314,176; Aug. 26; v. 265; p. 525.
 Whitman, Herbert G. (See Whitman, John C., assignor.)
 Whitman, John C., Sugar Creek township, Venango county, assignor of one-half to H. G. Whitman, Franklin, Pa. Filtration of petroleum-oil. No. 1,312,375; Aug. 5; v. 265; p. 97.
 Whitmore, Edward E., assignor to The Curtain Supply Company, Chicago, Ill. Diaphragm-buffing mechanism. (Reissue.) No. 14,706; Aug. 12; v. 265; p. 298.

Whitmore, George C., assignor of one-half to U. A. Towle, Portland, Me. Brake-band. No. 1,311,936; Aug. 5; v. 265; p. 16.

Whyte, Samuel, Redhill, England. Resharpening dies. No. 1,314,440; Aug. 26; v. 265; p. 576.

Whyte, Samuel, Redhill, England. Resharpening dies. No. 1,314,450; Aug. 26; v. 265; p. 576.

Wicker, Claude W., Memphis, Tenn. Cotton-lint condenser and sizer. No. 1,312,291; Aug. 5; v. 265; p. 81.

Wicks, John, Columbus, Ohio, assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,314,455; Aug. 26; v. 265; p. 577.

Wickstrom, Joseph H., Beresford, S. D. Hog-watering trough. No. 1,313,146; Aug. 12; v. 265; p. 279.

Wiede, Sigurd, Brooklyn, assignor to American Toyland Creators, Inc., New York, N. Y. Submersible toy submarine. No. 1,312,656; Aug. 12; v. 265; p. 183.

Wiegand, Edwin L., Youngstown, Ohio. Empacing process and apparatus. No. 1,312,657; Aug. 12; v. 265; p. 183.

Wiegand, Henry J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Gear-shifting mechanism. No. 1,313,362; Aug. 19; v. 265; p. 335.

Wierama, Lambert. (See Aylworth and Wierama.)

Wiese, Edwin W., Thienaville, Wis. Debit and credit slip. No. 1,314,032; Aug. 26; v. 265; p. 496.

Wiggin, Rollie H., East Orange, N. J., assignor to H. R. Wiggin's Sons Company, Bloomfield, N. J. Producing wall covering and product thereof. No. 1,313,658; Aug. 19; v. 265; p. 391.

Wiginton, George F., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Loose-sheet device. No. 1,313,933; Aug. 26; v. 265; p. 477.

Wilbur, Ray S., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,312,773; Aug. 12; v. 265; p. 205.

Wilcox, Lloyd E., Green, Kans. Lifting-jack. No. 1,314,451; Aug. 26; v. 265; p. 576.

Wild, Charles E. (See Helms, Wild, and Schwarzmann.)

Willey, Edward M., Canonbury, London, England. Device for cutting screw-threads by chasers. No. 1,313,548; Aug. 19; v. 265; p. 374.

Wilkerson, William H., Jr., Washington, D. C. Bottle attachment. No. 1,314,294; Aug. 26; v. 265; p. 546.

Wilkins, Norman F. (See Riddle and Wilkins.)

Wilkinson, Albert H. J., Twickenham, England. Vise or like work-holder. No. 1,312,011; Aug. 5; v. 265; p. 29.

Wilkinson Brothers and Company. (See Fuhrmann, Warren, assignor.)

Wilkinson, Howard A., and W. H. Nirdorf, Jr., Onelda, N. Y. Control for toll lights. No. 1,313,847; Aug. 19; v. 265; p. 426.

Wilks, Arthur H., Olton, near Birmingham, and P. H. Hartshorne, Birmingham, England. Internal-combustion engine. No. 1,313,599; Aug. 19; v. 265; p. 375.

Willcox, Edwin W., Dover, N. J. Treatment of waste sulfate liquors. No. 1,312,293; Aug. 5; v. 265; p. 81.

Williams, Henry J., Kenosha, Wis. Poultry-fountain. No. 1,314,033; Aug. 26; v. 265; p. 496.

Williams, Clarence C., trustee. (See Sutton, Francis A., assignor.)

Williams, Edward T., New York, N. Y. Refrigerating-machine. No. 1,312,600; Aug. 12; v. 265; p. 172.

Williams, Edward T., New York, N. Y. Air-cooled condenser for refrigerating-machines. No. 1,313,363; Aug. 19; v. 265; p. 336.

Williams, Ernest S., Toronto, Ontario, Canada. Sanitary serving device. No. 1,313,364; Aug. 19; v. 265; p. 336.

Williams, George A., Salt Lake City, Utah. Signaling device for vehicles. No. 1,314,289; Aug. 26; v. 265; p. 545.

Williams, Harvey D., Wallingford, Conn., assignor, by mesne assignments, to J. E. Gleason, trustee, Rochester, N. Y. Gear-cutting tool. No. 1,313,934; Aug. 12; v. 265; p. 257.

Williams, Harvey D., Wallingford Conn., assignor to Gear Improvement Company, Inc., New York, N. Y. Internal gear. No. 1,313,035; Aug. 12; v. 265; p. 257.

Williams, Hugh R., Chicago, Ill. Knob-attaching means. No. 1,313,147; Aug. 12; v. 265; p. 279.

Williams, John K., Jacksonville, Fla. Permutation-lock. No. 1,312,376; Aug. 5; v. 265; p. 97.

Williams, Milton F., St. Louis, Mo. Combined disintegrating and separating device. No. 1,312,658; Aug. 12; v. 265; p. 183.

Williams, Payton, Johnetta, Pa. Rail-joint. No. 1,313,771; Aug. 19; v. 265; p. 412.

Williams, Roger, assignor to Nitrogen Products Company, Providence, R. I. Process of and means for fixing atmospheric nitrogen. No. 1,314,231; Aug. 26; v. 265; p. 534.

Williams, Samuel H., Jr., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic switch-control circuits. No. 1,312,884; Aug. 12; v. 265; p. 227.

Williams Sealing Corporation, The. (See Hey, Edmund A., assignor.)

Williams, William E., Chicago, Ill. Manufacturing piston-rings. No. 1,311,937; Aug. 5; v. 265; p. 16.

Williamson, E. L. (See Bellaghe, John C., assignor.)

Williamson, John D., Jr., Philadelphia, Pa. Electrical steering-gear. No. 1,312,935; Aug. 12; v. 265; p. 237.

Williamson, Oscar C., Mountain View, Calif. Screen-door book. No. 1,313,969; Aug. 26; v. 265; p. 484.

Willis, Bernard D., assignor to Automatic Electric Company, Chicago, Ill. Substation telephone-circuit. No. 1,313,570; Aug. 19; v. 265; p. 375.

Willis, George M., Chicago, Ill. Treatment of ores and minerals. No. 1,313,970; Aug. 26; v. 265; p. 484.

Willms, Lee W. Y., Chicago, Ill. Metatarsal and anterior foot-support. No. 1,313,442; Aug. 19; v. 265; p. 350.

Wilson, Floyd M. (See John, Forrest W., assignor.)

Wilson, Fred G., Brooklyn, N. Y. Roller-bearing. No. 1,312,936; Aug. 12; v. 265; p. 237.

Wilson, Frederick D., assignor to Deere and Company, Moline, Ill. Mowing-machine. No. 1,313,443; Aug. 19; v. 265; p. 351.

Wilson, Joseph H., G. W. Dixon, and W. E. McLaughlin, assignors to The American Rolling Mill Company, Middletown, Ohio. Metal-working machine. No. 1,313,365; Aug. 19; v. 265; p. 336.

Wilson, Joseph R. (See Gilman and Wilson.)

Wilson, Lydell L., Randolph, N. Y. Bed construction for railways. No. 1,312,427; Aug. 5; v. 265; p. 108.

Wilson, Robert G., Orndorff, W. Va. Hand bean and corn planter. No. 1,312,817; Aug. 12; v. 265; p. 214.

Wilson, William, Boston, Mass., assignor to Campbell Boscworth Machinery Company, Portland, Me. Sewing-machine. No. 1,312,659; Aug. 12; v. 265; p. 183.

Wilson, Wylie G., Elizabeth, N. J., assignor, by mesne assignments, to Everlasting Valve Co. Silencer. No. 1,313,971; Aug. 26; v. 265; p. 485.

Willson, Harry J., Seattle, Wash. Buckle. No. 1,314,290; Aug. 26; v. 265; p. 545.

Wimpey, Harry E., Gorlag, England. Director apparatus for use on aircraft. No. 1,313,934; Aug. 26; v. 265; p. 477.

Winans, Daniel M., Binghamton, N. Y. Vehicle-top support. No. 1,313,772; Aug. 19; v. 265; p. 413.

Winans, Daniel M., Binghamton, N. Y., assignor to Victor Talking Machine Company, Camden, N. J. Phonograph stop device. (Reissue.) No. 1,471,818; Aug. 19; v. 265; p. 433.

Winchester Repeating Arms Co. (See Johnson and Willard, assignors.)

Winer, Andrew A., Ocala, Fla. Electric drop-light. No. 1,313,773; Aug. 19; v. 265; p. 413.

Winkler, Carl, Berne, Switzerland. Mold for stereotype-plates and the like. No. 1,313,774; Aug. 19; v. 265; p. 413.

Winkler, Carl, Berne, Switzerland. Machine for trimming stereotype-plates. No. 1,313,775; Aug. 19; v. 265; p. 413.

Winkler, Carl, Berne, Switzerland. Impression-cylinder for printing-machines. No. 1,314,452; Aug. 26; v. 265; p. 576.

Winkley, Erastus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Feed mechanism. No. 1,313,148; Aug. 12; v. 265; p. 279.

Winnalov, William H., River Forest, assignor of one-half to C. A. Brown, Hinsdale, Ill. Carburation. No. 1,312,660; Aug. 12; v. 265; p. 183.

Winston, Overton, Minneapolis, Minn. Headlight. No. 1,312,715; Aug. 12; v. 265; p. 193.

Winston, Overton, Minneapolis, Minn. Headlight. No. 1,314,034; Aug. 26; v. 265; p. 496.

Winston, William E., et al. (See Dickenson, Robert C., assignor.)

Wire Wheel Corporation of America. (See Ash, Charles S., assignor.)

Wire Wheel Corporation of America. (See Honse, Henry A., Jr., assignor.)

Wirebonds Patents Company. (See Banwana, Seraphine F., assignor.)

Wirt, Charles, Philadelphia, Pa. Electric-lighting apparatus. No. 1,314,295; Aug. 26; v. 265; p. 546.

Wise, Maxwell M., Detroit, Mich. Coating metals. No. 1,312,716; Aug. 12; v. 265; p. 194.

Witherow, Harry M., Johnson Creek, Wis. Retractable step. No. 1,313,444; Aug. 19; v. 265; p. 351.

Witt, William F., Chicago, Ill. Means for spraying water. No. 1,311,938; Aug. 5; v. 265; p. 16.

Wühr, Gottlieb, New York, N. Y. Windmill. No. 1,314,232; Aug. 26; v. 265; p. 534.

Wojcik, Joseph J., Pulaski, Wis. Grain-measuring and sack-filling device. No. 1,313,149; Aug. 12; v. 265; p. 280.

Wojtyn, Waleaty, New Kensington, Pa. Farmer's truck and plow. No. 1,314,177; Aug. 26; v. 265; p. 523.

Wolcott, Charles, et al. (See Randall, Raymond G., assignor.)

Wolcott, Eugene F., et al. (See Randall, Raymond G., assignor.)

Wolcott, William W., Georgetown, Colo. Oil and acid feeding device for flotation processes. No. 1,314,296; Aug. 26; v. 265; p. 547.

Wolf, Fred W., Detroit, Mich., assignor, by mesne assignments, to The Iako Company, Chicago, Ill. Refrigerating apparatus. No. 1,314,233; Aug. 26; v. 265; p. 534.

Wolf, Fred W., assignor, by mesne assignments, to The Iako Company, Chicago, Ill. Expansion-valve. No. 1,314,234; Aug. 26; v. 265; p. 534.

Wolf, John, Topeka, Kans. Lock. No. 1,312,601; Aug. 12; v. 265; p. 172.

Wolf, John, Topeka, Kans. Trunk. No. 1,314,035; Aug. 26; v. 265; p. 497.

Wollesen, Jacob F., Lockwood, Calif. Variable-speed transmission. No. 1,313,036; Aug. 12; v. 265; p. 257.

Wunder, Enos G., Altoona, Kans. Label-holder. No. 1,313,659; Aug. 19; v. 265; p. 391.

Wood, Frank W., Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y. Gun-fire-control apparatus. No. 1,312,602; Aug. 12; v. 265; p. 172.

Wood, Frank W., Montclair, N. J., assignor to Charles Cory & Son, Inc., New York, N. Y. Signaling apparatus. No. 1,312,603; Aug. 12; v. 265; p. 172.

Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Web-controlling and tension device. No. 1,314,178; Aug. 26; v. 265; p. 523.

Wood Newspaper Machinery Corporation. (See Harris, John J. B., assignor.)

Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)

Wood, Reginald J. C., and G. E. Armstrong, Los Angeles, Calif. Debit-time-limit relay. No. 1,314,453; Aug. 26; v. 265; p. 582.

Wood, Rodney J., Dayton, Ohio. Credit-slip. No. 1,313,150; Aug. 12; v. 265; p. 280.

Woodbridge, Joseph L., Philadelphia, Pa. Means for transmission of power. No. 1,312,604; Aug. 12; v. 265; p. 173.

Woodbridge, Richard G., Jr. (See Broadbent and Woodbridge.)

Woodbridge, Richard G., Jr., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making propellant powder. No. 1,312,465; Aug. 5; v. 265; p. 119.

Woodbury, Clifford A., Middletown township, Delaware county, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Bursting charge for containers intended to be exploded and forgoing said charges. No. 1,312,464; Aug. 5; v. 265; p. 115.

Woodruff, Will R., Staigon, Neb. Vermin-extirminator. No. 1,312,223; Aug. 5; v. 265; p. 69.

Woodstock Manufacturing Company. (See Bourdon, Allan P. and L. R., assignors.)

Woodward, Christopher H. R. (See McCrary, Pierce R., assignor.)

Woodward, R. J., et al. (See Cottrill, Kenyon, assignor.)

Worden, Dudley, Perdsale, Wash. Saw attachment. No. 1,312,601; Aug. 12; v. 265; p. 174.

Workman, Harold. (See Twyman and Workman.)

Worley, Floyd, et al. (See Trowbridge, C. Wartenberg, Nagsatuck, Conn., and C. Lee, New Brunswick, N. J., assignors to The Goodyear's Metallic Rubber Shoe Company. Brake and drive-control mechanism. No. 1,311,939; Aug. 5; v. 265; p. 16.

Worplis, Alfred, New York, N. Y. Transmission mechanism. No. 1,313,776; Aug. 19; v. 265; p. 413.

Worthington, Charles C., Dunnfield, N. J., assignor to Shawnee Mower Company, New York, N. Y. Lawn-mower. No. 1,313,972; Aug. 26; v. 265; p. 485.

Wotherspoon, William W., New York, N. Y. Apparatus for charging compartments with gas, &c. No. 1,312,224; Aug. 5; v. 265; p. 70.

Wright, Frederick A., and W. J. Brong, Dickson City, Pa. Electrical grade-crossing signal. No. 1,313,445; Aug. 19; v. 265; p. 351.

Wright, Harvey W., and J. M. Ratcliff, Florence, Ala. Gear-wheel. No. 1,312,816; Aug. 12; v. 265; p. 214.

Wright, John W., Toronto, Ontario, Canada. Picture-hook. No. 1,313,366; Aug. 19; v. 265; p. 336.

Wright, Melvin C., Harris, Ill. Clamp for hog olers or tanks. No. 1,313,446; Aug. 19; v. 265; p. 351.

Wright, Morris S., Worcester, Mass. Pneumatic action for musical instruments. No. 1,312,495; Aug. 5; v. 265; p. 120.

Wright, Samson D., E. W. Schellentrager, and C. C. Martin, said Schellentrager and said Martin assignors to Atlas Car and Manufacturing Company, Cleveland, Ohio. Truck. No. 1,313,151; Aug. 12; v. 265; p. 280.

Wright, Wallace C., assignor to Basler Machinery Company, Lynn, Mass. Machine for leather flexing and tempering. No. 1,313,510; Aug. 19; v. 265; p. 363.

Wright, William H., Indianapolis, Ind., assignor to C. J. Tagliabue Manufacturing Company, Brooklyn, N. Y. Pressure-governor for gas-mains. No. 1,313,447; Aug. 19; v. 265; p. 351.

Wrienerberg, Charles. (See Worley, Trowbridge, Wrienerberg, and Lee.)

Wyatt, James R., assignor to The Ajax Metal Company, Philadelphia, Pa. Induction-furnace having unidirectional circulation. No. 1,312,669; Aug. 5; v. 265; p. 41.

Wyatt, James R., assignor to The Ajax Metal Company, Philadelphia, Pa. Form for outlining electric-furnace channels. No. 1,313,571; Aug. 19; v. 265; p. 375.

Wygodsky, Leon, assignor to Baltimore Oil Engine Company, Baltimore, Md. Internal-combustion engine. No. 1,312,605; Aug. 12; v. 265; p. 173.

Yager, Harvey J., Seattle, Wash. Electrically-operated railway crossing and signal. No. 1,312,377; Aug. 5; v. 265; p. 97.

Yamada, Thomas, New York, N. Y. Stabilizer for airplanes. No. 1,312,225; Aug. 5; v. 265; p. 70.

Yamamoto, Yoshitaro, Kobe, assignor of one-fourth to I. Mizusawa, Hyogo Ken, and one-fourth to T. Kano, Kobe, Japan. Deodorizing and decoloring bean-sour. No. 1,314,298; Aug. 26; v. 265; p. 547.

Yanochowski, George A., Chicago, Ill., and H. E. Hershey, White Water, Kans., assignors to Automatic Electric Company, Chicago, Ill. Telephone system. No. 1,314,458; Aug. 26; v. 265; p. 577.

Yarrow, Harold E., Glasgow, Scotland. Air-valve for furnaces using liquid fuel. No. 1,312,378; Aug. 5; v. 265; p. 97.

Yarrow, Harold E., Scotstoun, Glasgow, Scotland. Cooling device for steam-generating apparatus of submarine vessels. No. 1,312,602; Aug. 12; v. 265; p. 184.

Yarrow, Harold E., Glasgow, Scotland. Turbine-blade. No. 1,313,152; Aug. 12; v. 265; p. 280.

Yernaux, Joseph E., Puteaux, France. Screening apparatus. No. 1,312,664; Aug. 12; v. 265; p. 184.

Yondelman, Alexander, New York, N. Y. Tip-attaching implement. No. 1,312,292; Aug. 5; v. 265; p. 81.

Young Brothers Company. (See Young, George A., assignor.)

Young, George A., assignor to Young Brothers Company, Detroit, Mich. Oven-wall. No. 1,312,663; Aug. 12; v. 265; p. 184.

Young, Hugo H., Loudonville, Ohio. Movable foot-rail. No. 1,311,940; Aug. 5; v. 265; p. 17.

Young, Leonard A., Highland Park, assignor to L. A. Young Industries, Inc., Detroit, Mich. Rim-strip. No. 1,313,973; Aug. 26; v. 265; p. 485.

Young, Sanford C., Hartford, W. Va. Ballot-ball punch. No. 1,312,070; Aug. 5; v. 265; p. 41.

Youngblood, Joseph C., Atwood, Kans. Sectional de-mountable rim. No. 1,314,110; Aug. 26; v. 265; p. 511.

Younis, Joshua A., Baldwin Harbor, N. Y. Ejector for cigarette and cigar holders. No. 1,314,450; Aug. 26; v. 265; p. 577.

Yunker, Ervin L., Dodge City, Kans. Washboard. No. 1,314,297; Aug. 26; v. 265; p. 547.

Zaccard, Felix, and T. P. McDonough, Chicago, Ill. Life-saving apparel. No. 1,314,299; Aug. 26; v. 265; p. 547.

Zachry, John L., Atlanta, Ga. Water-heater. No. 1,312,012; Aug. 5; v. 265; p. 30.

Zajls, Frank, Chester, Pa. Nutcracker. No. 1,312,149; Aug. 5; v. 265; p. 56.

Zann, George F., San Bernardino, Calif. Rolling-stock. No. 1,312,465; Aug. 5; v. 265; p. 115.

Zboyan, Julia E., Lyons, N. J. Sink attachment. No. 1,313,153; Aug. 12; v. 265; p. 280.

Zentmyer, William H., II. (See Radulikov and Zentmyer.)

Ziemer, Frederick, Freeport, N. Y. Tool-head fastener. No. 1,312,819; Aug. 12; v. 265; p. 214.

Zimlich, Joseph G., Cleveland, Ohio. Barrel-rack. No. 1,312,150; Aug. 5; v. 265; p. 56.

Zimmerman, Amos M., Akron, Pa. Garment corner-turning and edge-crossing machine. No. 1,313,777; Aug. 19; v. 265; p. 414.

Zion, John E., Enid, Okla. Callipering device. No. 1,312,606; Aug. 12; v. 265; p. 173.

Zipf, Carl F., Johnstown, Pa. Amusement device. No. 1,313,660; Aug. 19; v. 265; p. 391.

Zoeller, Milton G., Kansas City, Mo. Feed-mill. No. 1,312,717; Aug. 12; v. 265; p. 194.

Zweeres, William K. (See Kargus and Zweeres.)

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Adam, Harry C., St. Louis, Mo. Lighting-fixture. Nos. 53,696-7; Aug. 19; v. 265; p. 434.

Ajax Rubber Company. (See Reid, Elmer A., assignor.)

American Electrical Heater Company. (See Kuhn and Hand, assignors.)

Aronson, Louis V., Newark, N. J. Article of manufacture. No. 53,725; Aug. 26; v. 265; p. 584.

Art Hand-Bag Frame Co., The. (See Turton, William, assignor.)

Bamforth, Harry. (See Vogler, Fred G., assignor.)

Baranelli, Francesco, Brooklyn, N. Y. Doll's cradle. No. 53,676; Aug. 5; v. 265; p. 123.

Bartelmeh, Leonard, Wilkesburg, Pa. Service-bag. No. 53,698; Aug. 19; v. 265; p. 434.

Bandler, Arthur S., et al. (See Samson, Edwin J., assignor.)

Beemer, Idalyne M., Los Angeles, Calif. Flag, banner, pennant, sign, emblem, or article of a similar nature. No. 53,699; Aug. 19; v. 265; p. 434.

Bell, John W., Jr., Brooklyn, N. Y. Flag, pennant, sign, emblem, or article of a similar nature. No. 53,700; Aug. 19; v. 265; p. 434.

Berge, Joseph, assignor to Champion Ignition Company, Flint, Mich. Odometer face-plate. No. 53,726; Aug. 26; v. 265; p. 584.

Birch, Richard J. (See Breitensteil, Arthur, assignor.)

Bischitz, Ferdinand, assignor to Elektra Toy & Novelty Co., New York, N. Y. Statuette or figure. No. 53,701; Aug. 19; v. 265; p. 434.

Blood, Louis H. (See Osterlein and Blood.)

Bowling Green Rubber Company, The. (See Greene, Charles W., assignor.)

Boyle, Harrison H., Forest Hills, N. Y. Casing for signal-horns. No. 53,702; Aug. 19; v. 265; p. 435.

Boye Needle Company, The. (See Flannery, John L., Jr., assignor.)

Boyles, Charles H., Seattle, Wash. Anchor. No. 53,703; Aug. 19; v. 265; p. 435.

Brady, James H., assignor to Visible Measure Gasoline Dispenser Company of America, Louisville, Ky. Gasoline-dispenser. No. 53,671; Aug. 5; v. 265; p. 124.

Breitenstein, Arthur, Akron, assignor to R. J. Birch, Cleveland, Ohio. Tire-casing. No. 53,672; Aug. 6; v. 265; p. 124.

Breitenstein, Arthur, Akron, assignor to R. J. Birch, Cleveland, Ohio. Tire-casing. No. 53,727; Aug. 26; v. 265; p. 584.

Bunting, James H., assignor to Susquehanna Silk Mills, New York, N. Y. Textile fabric. No. 53,728; Aug. 26; v. 265; p. 584.

Campbell, Charles and D., Philadelphia, Pa. Photo frame or stand. No. 53,704; Aug. 19; v. 265; p. 435.

Campbell, Duncan. (See Campbell, Charles and D.)

Champion Ignition Company. (See Herge, Joseph, assignor.)

Cole, Roy E., assignor to Liberty Motor Car Company, Detroit, Mich. Lamp-front frame. No. 53,673; Aug. 5; v. 265; p. 124.

Connor, Martha H., Baltimore, Md., assignor to Tin Decorating Company of Baltimore. Sifter-top can or similar receptacle. No. 53,674; Aug. 6; v. 265; p. 124.

Daudy, Marc H., assignor to North American Lace Company, Philadelphia, Pa. Lace. Nos. 53,729-31; Aug. 26; v. 265; p. 585.

Davies, Isaac R., Lakewood, Ohio. Vehicle-tire. Nos. 53,735-7; Aug. 5; v. 265; p. 124.

De Forest, Ella F., New Canaan, Conn. Tobacco-box. No. 53,709; Aug. 19; v. 265; p. 435.

Dean, Calvin, Providence, R. I. Emblem, button, ring-top, pin, or article of similar nature. No. 53,705; Aug. 19; v. 265; p. 435.

Dialynas, Emmanuel M., Baltimore, Md. Pin and picture-frame. No. 53,707; Aug. 19; v. 265; p. 435.

Dwyer, Joseph F., Seattle, Wash. Casing for a ticket-dispensing machine. No. 53,678; Aug. 5; v. 265; p. 125.

Earl, Charles M., Detroit, Mich. Beverage-dispensing stand. No. 53,708; Aug. 19; v. 265; p. 436.

Elektra Toy & Novelty Co. See Bischitz, Ferdinand, assignor.)

Emery, Elias J., Malden, Mass. Tap for boots, shoes, or similar articles. No. 53,732; Aug. 26; v. 265; p. 585.

Fitz Gerald, Harold G., Los Angeles, Calif. Bracket. No. 53,679; Aug. 5; v. 265; p. 125.

Flannery, John L., Jr., assignor to The Boye Needle Company, Chicago, Ill. Display-cabinet. No. 53,690; Aug. 6; v. 265; p. 125.

Frater, George E., Upper Sandusky, Ohio. Badge, emblem, or similar article of manufacture. No. 53,733; Aug. 26; v. 265; p. 585.

Friedline, William H., Meyerdale, assignor to Modernola Co., Johnstown, Pa. Graphophone-case. No. 53,734; Aug. 26; v. 265; p. 585.

Greene, Charles W., assignor to The Bowling Green Rubber Company, Toledo, Ohio. Tire. No. 53,709; Aug. 19; v. 265; p. 436.

Hand, Jay A. (See Kuhn and Hand.)

Hardin, Richard L. (See Smith, Ray, assignor.)

Hathaway, Charles F., Rochester, N. Y. Child's vehicle. No. 53,735; Aug. 26; v. 265; p. 586.

Haupt, Mathias P., Spokane, Wash. Toy tank. No. 53,681; Aug. 5; v. 265; p. 125.

Hayne, John T., Detroit, Mich. Running-board for automobiles. No. 53,736; Aug. 26; v. 265; p. 586.

Hayne, John T., Detroit, Mich. Mat for automobile running-boards. No. 53,737; Aug. 26; v. 265; p. 586.

Hoffbauer, Carl F., Montclair, N. J. Peb, pendant, brooch, pin, or similar article. No. 53,738; Aug. 26; v. 265; p. 586.

Hollenbeck, Fred R., Tacoma, Wash. Badge, emblem, button, pin, ring-top, watch-charm, or similar article. No. 53,739; Aug. 26; v. 265; p. 586.

Howe, Ernest P., Clinton, Mass. Oven turn-table. No. 53,710; Aug. 19; v. 265; p. 436.

International Committee of The Young Men's Christian Associations, The. (See Pratt, Harold I., assignor.)

Ishman, Charles C. (See Whitaker and Ishman.)

Jacobs, Michael H., Brooklyn, N. Y. Liquid-soap fixture. No. 53,682; Aug. 5; v. 265; p. 125.

Jordan, Roy E., Newark, N. J. Towel-rack. No. 53,683; Aug. 5; v. 265; p. 125.

Kaskel, Jesse. (See Weber and Kaskel.)

Kepler, Jesse S., Dayton, Ohio, and M. O. Kepler, New York, N. Y. Combination nut bowl and cracker. Nos. 53,711-12; Aug. 19; v. 265; p. 436.

Kepler, Jesse S., Dayton, Ohio, and M. O. Kepler, New York, N. Y. Nutcracker. No. 53,713; Aug. 19; v. 265; p. 436.

Kepler, Milton O. (See Kepler, Jesse S. and M. O.)

Kerr, George W., Racine, Wis. Radiator-hood for automobile. No. 53,714; Aug. 19; v. 265; p. 437.

King, Charles S., New Rochelle, assignor to Sanford Narrow Fabric Co., New York, N. Y. Edging. No. 53,740; Aug. 26; v. 265; p. 587.

Klotz, Frederick, Reading, Pa. Glass flytrap. No. 53,741; Aug. 26; v. 265; p. 587.

Kopp, Nicholas, Pittsburgh, Pa. Glass shade or bowl for lighting-fixtures. No. 53,742; Aug. 26; v. 265; p. 587.

Krupicka, Ella, assignor to Susquehanna Silk Mills, New York, N. Y. Textile fabric. No. 53,743; Aug. 26; v. 265; p. 587.

Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Electrical heater. No. 53,684; Aug. 5; v. 265; p. 126.

Libby, McNeill & Libby. (See Taylor, Leroy J., assignor.)

Liberty Motor Car Company. (See Cole, Roy E., assignor.)

Litman, Max, Springfield, Mass. Radiator-core. No. 53,744; Aug. 26; v. 265; p. 587.

Lunt, George C., Greenfield, Mass. Spoon, fork, or similar article. No. 53,685; Aug. 5; v. 265; p. 126.

Malleable Iron Fittings Company. (See Pickop, George H., assignor.)

Martell, Leonard R., Detroit, Mich. Compression, combustion, and spark-plug tester. No. 53,686; Aug. 5; v. 265; p. 126.

McDannell, Oscar S., Jr., Moline, Ill. Sign-post. (Re-issue.) No. 14,711; Aug. 19; v. 265; p. 432.

Miller, William S., Meyerdale, Pa. Washing-machine tub. No. 53,745; Aug. 26; v. 265; p. 587.

Modernola Company. (See Friedline, William H., assignor.)

Moore, Thomas M., New York, N. Y. Bottle-stopper. No. 53,746; Aug. 26; v. 265; p. 587.

North America Lace Company. (See Daudy, Marc H., assignor.)

Odenkirk, Harry C., Cleveland, Ohio. Waste-water trap. No. 53,747; Aug. 26; v. 265; p. 587.

Osterlein, Charles D., and L. H. Blood, assignors to The Osterlein Machine Company, Cincinnati, Ohio. Milling-machine frame. No. 53,687; Aug. 5; v. 265; p. 126.

Osterlein Machine Company, The. (See Osterlein and Blood, assignors.)

Oversmith, Clarence D., Lima, Ohio. Advertising display-case. No. 53,688; Aug. 5; v. 265; p. 126.

Pickop, George H., New Haven, Conn. Fitting. Nos. 53,689-90; Aug. 5; v. 265; p. 126.

Pratt, Harold I., Glen Cove, assignor to The International Committee of The Young Men's Christian Associations, New York, N. Y. Pin, bracelet, or badge. No. 53,748; Aug. 26; v. 265; p. 588.

Reid, Elmer A., Trenton, N. J., assignor to Ajax Rubber Company, Inc., Milbrook, N. Y. Tire-casing. Nos. 53,749-50; Aug. 26; v. 265; p. 588.

Riviera, Samuel, Philadelphia, Pa. Shoe ornament. No. 53,751; Aug. 26; v. 265; p. 588.

Roiland, Wreatha J., Lawton, Okla. Pin. No. 53,752; Aug. 26; v. 265; p. 588.

Samson, Edwin J., assignor of one-third to H. R. Voigtlander and one-third to A. S. Handler, New York, N. Y. Tooth-brush. No. 53,715; Aug. 19; v. 265; p. 437.

Sanford Narrow Fabric Co. (See King, Charles S., assignor.)

Schaffer, Henry J., assignor to J. Schaffer, Brooklyn, N. Y. Ash-can, garbage-can, or like receptacle. No. 53,691; Aug. 5; v. 265; p. 127.

Schaffer, Jacob. (See Schaffer, Henry J., assignor.)

Smith, Ray, assignor to R. L. Hardin, Portland, Oreg. Statuette or similar article. No. 53,710; Aug. 19; v. 265; p. 437.

Sokolowski, Aleksander, Peru, Ill. Stone. No. 53,717; Aug. 19; v. 265; p. 437.

Stein, Morris, Philadelphia, Pa. Aquarium and fountain. No. 53,718; Aug. 19; v. 265; p. 437.

Stein, Morris, Philadelphia, Pa. Aquarium. No. 53,719; Aug. 19; v. 265; p. 437.

Stokes, Robert J., assignor to Thermold Rubber Company, Trenton, N. J. Vehicle-tire. Nos. 53,692-3; Aug. 5; v. 265; p. 127.

Susquehanna Silk Mills. (See Bunting, James H., assignor.)

Susquehanna Silk Mills. (See Krupicka, Ella, assignor.)

Taylor, Leroy J., assignor to Libby, McNeill & Libby, Chicago, Ill. Bottle or jar. No. 53,694; Aug. 6; v. 265; p. 127.

Thermold Rubber Company. (See Stokes, Robert J., assignor.)

Tin Decorating Company of Baltimore. (See Connor, Martha H., assignor.)

Tognelli, Plus O., Lincoln, Calif. International patriotic emblem. No. 53,720; Aug. 19; v. 265; p. 438.

Turtton, William, Newark, N. J., assignor to The Art Hand Bag Frame Co., New York, N. Y. Hand-bag frame. No. 53,721; Aug. 19; v. 265; p. 438.

Twyman, B. Wickliffe, Muncie, Ind. Automobile-body. No. 53,722; Aug. 19; v. 265; p. 438.

Vaney, Joseph N., Brookfield, Ill. Phonograph-cabinet. Nos. 53,733-4; Aug. 26; v. 265; pp. 588-9.

Visible Measure Gasoline Dispenser Company of America. (See Brady, James H., assignor.)

Vogler, Fred G., assignor to H. Bamforth, New York, N. Y. Emblem, an article of manufacture. No. 53,755; Aug. 26; v. 265; p. 589.

Voigtlander, Herman R., et al. (See Samson, Edwin J., assignor.)

Weber, Isaac N., and J. Kaskel, New York, N. Y. Doll, statuette, sculpture, or other article of similar nature. Nos. 53,756-7; Aug. 26; v. 265; p. 589.

Whitaker, Lawrence L., and C. C. Ishman, Windber, Pa. No. 53,758; Aug. 26; v. 265; p. 589.

Wilkins, John H., Washington, D. C. Bag for containing merchandise. No. 53,723; Aug. 19; v. 265; p. 438.

Wiltz, Albert, Addy, Wash. Fluid-pump casing. No. 53,695; Aug. 5; v. 265; p. 127.

Wolter, Antoine E., Everett, Wash. Automobile-radiator ornament. No. 53,759; Aug. 26; v. 265; p. 589.

Wrigley, Philip K., Chicago, Ill. Carton. No. 53,724; Aug. 19; v. 265; p. 438.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. H. Newman Co., New York, N. Y. Cigarette-papers. No. 126,324; Aug. 19; v. 265; p. 453.

A. G. Spalding & Bros., New York, N. Y. Certain named toys and sporting goods. No. 126,351; Aug. 19; v. 265; p. 454.

A. V. Victorius & Co. Inc., New York, N. Y. Hosiery for men and women. No. 126,498; Aug. 26; v. 265; p. 631.

Alaska Refrigerator Company, The, Muskegon Heights, Mich. Refrigerators. No. 126,233; Aug. 19; v. 265; p. 451.

Albany Chemical Co., Albany, N. Y. Egg-preservation. No. 126,375; Aug. 26; v. 265; p. 627.

Allison, Estelle, New York, N. Y. Dolls. No. 126,234; Aug. 19; v. 265; p. 451.

Amamoto, Aigi, Nagasaki, Japan. Medicinal preparation for treating certain named diseases and disorders. No. 126,235; Aug. 19; v. 265; p. 451.

American Butterline Co., Jersey City, N. J. Oleomargarin. No. 126,236; Aug. 19; v. 265; p. 451.

American Sugar Refining Company, Jersey City, N. J., and New York, N. Y. Iceing for use as a food. No. 126,237; Aug. 19; v. 265; p. 451.

American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Meringue-powder. No. 126,376; Aug. 26; v. 265; p. 627.

American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Honey. No. 126,377; Aug. 26; v. 265; p. 627.

American Tobacco Co., The, New York, N. Y. Cigarettes. Nos. 126,238-9; Aug. 19; v. 265; p. 451.

Architectural Service Corporation, Philadelphia, Pa. Loose-leaf sheets containing certain data used in building. No. 126,378; Aug. 26; v. 265; p. 627.

Ashford Underwear Co., Limited, The, Ashford, England. Certain named clothing. No. 126,379; Aug. 26; v. 265; p. 627.

Atterley Company, Chicago, Ill. Powder-puffs. No. 126,380; Aug. 26; v. 265; p. 627.

Apatis, Maggie L., Nebo, N. C. Preparation for treatment of certain named diseases. No. 126,381; Aug. 26; v. 265; p. 627.

Blackburn Products Co., The, Dayton, Ohio. Medicinal tonic. No. 126,240; Aug. 19; v. 265; p. 451.

Blackburn Products Co., The, Dayton, Ohio. Laxative tonic. No. 126,247; Aug. 19; v. 265; p. 451.

Blackman, Maurice R., Philadelphia, Pa. Non-alcoholic grape-juice. No. 126,248; Aug. 19; v. 265; p. 451.

Block, Louis A., New Orleans, La. Polishing and cleaning liquid for certain named surfaces. No. 126,249; Aug. 19; v. 265; p. 451.

Bonner, James J., Boston, Mass. Disinfectant. No. 126,388; Aug. 26; v. 265; p. 627.

Bonney Vise & Tool Works, Inc., Philadelphia and Allentown, Pa., and New York, N. Y. Certain named cutlery. No. 126,250; Aug. 19; v. 265; p. 451.

Booth, Carlos C., Youngstown, Ohio. Antiseptic and germicide. No. 126,389; Aug. 26; v. 265; p. 627.

Booth Fisheries Co., Chicago, Ill. Canned sardines. Nos. 126,251-3; Aug. 19; v. 265; p. 451.

Bowen, Stephen T., Chicago, Ill. Liquid polish for furniture, etc. No. 126,256; Aug. 19; v. 265; p. 451.

Ballard, Margaret G., Wheeling, W. Va. Hand-cleaning paste. No. 126,391; Aug. 26; v. 265; p. 627.

Busch, August A., Jr., Sappington, Mo. Natural spring table-water. No. 126,392; Aug. 26; v. 265; p. 627.

C. A. Gambrell Manufacturing Company, Baltimore, Md. Self-rising buckwheat-flour. No. 126,284; Aug. 19; v. 265; p. 452.

C. R. Cook Paint Company, Kansas City, Mo. Certain named paints and painters' materials. No. 126,265; Aug. 19; v. 265; p. 452.

California Vegetable Union, Los Angeles, Calif. Dry Bermuda onions. No. 126,393; Aug. 26; v. 265; p. 627.

Calina Hair Restorative Company, Albany, N. Y. Hair-tonic preparation. No. 126,394; Aug. 26; v. 265; p. 627.

Carter, Lillian, St. Louis, Mo. Liquid nail-polish. No. 126,395; Aug. 26; v. 265; p. 627.

Celluloid Company, The, New York, N. Y. Canes, parasols, umbrellas, etc. Nos. 126,257-9; Aug. 19; v. 265; p. 451.

Celluloid Company, The, New York, N. Y. Watches, clocks, watch and clock cases and dials. Nos. 126,396-8; Aug. 26; v. 265; p. 627.

Ceronylon Company, The, Boston, Mass. Thread-waxing compound. No. 126,399; Aug. 26; v. 265; p. 627.

Chicago Apparatus Company, Chicago, Ill. Scientific instruments. No. 126,260; Aug. 19; v. 265; p. 451.

Chipsman Knitting Mills, Easton, Pa. Hosiery. No. 126,400; Aug. 26; v. 265; p. 627.

Chippewa Milling Company, Montevideo, Minn. Wheat-flour. No. 126,261; Aug. 19; v. 265; p. 451.

Cincinnati Lathe and Tool Company, The, Cincinnati, Ohio. Metal-working engine-lathes. No. 126,262; Aug. 19; v. 265; p. 452.

Cleveland Tractor Company, The, Euclid, Ohio. Tractors and parts thereof. No. 126,401; Aug. 26; v. 265; p. 627.

Common Sense Manufacturing Co., Inc., Buffalo, N. Y. Preparation for destroying rats, bedbugs, etc. No. 126,263; Aug. 19; v. 265; p. 452.

Congoleum Company, Philadelphia, Pa. Prepared floor-coverings, etc. No. 126,264; Aug. 19; v. 265; p. 452.

Continental File Corporation, Anderson, Ind. New and recut files. No. 126,402; Aug. 26; v. 265; p. 627.

Cox Confectionery Company, Boston, Mass. Candles. No. 126,266; Aug. 19; v. 265; p. 452.

Craddock, William F., Seattle, Wash., assignor to Vit-O-Net Manufacturing Company. Garments for imparting electric heat and radiation to the human body for therapeutic purposes. No. 126,267; Aug. 19; v. 265; p. 452.

Cravenette Co., U. S. A., The, Hoboken, N. J. Water-proofed fabrics. No. 126,403; Aug. 26; v. 265; p. 627.

Crawford, Thomas F., Pleasantville, N. J. Liquid dental preparation. No. 126,404; Aug. 26; v. 265; p. 628.

Crockett, Carrie, Topeka, Kans. Hair-tonics, shampooing-balm, and pressing-oil. No. 126,405; Aug. 26; v. 265; p. 628.

Croft, William, Salem, N. H. Potato chips. No. 126,268; Aug. 19; v. 265; p. 452.

Crown Perfumery Company, The, New York, N. Y. Perfumed soaps. No. 126,406; Aug. 26; v. 265; p. 628.

Curtis & Marble Machine Co., Worcester, Mass. Certain named machinery appertaining to the textile industry. No. 126,407; Aug. 26; v. 265; p. 628.

Debbare Manufacturing Co., Chicago, Ill. Washing tablets and compound. No. 126,408; Aug. 26; v. 265; p. 628.

Delikat, Thomas, Newark, N. J. Insecticide. No. 126,409; Aug. 26; v. 265; p. 628.

Deming Company, The, Salem, Ohio. Machines for spraying trees, plants, etc. No. 126,410; Aug. 26; v. 265; p. 628.

Dr. L. D. Le Gear Medicine Co., St. Louis, Mo. Preparations for certain named ailments of horses, poultry, etc. No. 126,444; Aug. 26; v. 265; p. 629.

Dr. T. J. Halle & Company, Fitzgerald, Ga. Preparation for influenza, colds, etc. No. 126,428; Aug. 26; v. 265; p. 628.

Dr. T. J. Kling-Clarence W. Kling, D. D. S., Inc., Boston, Mass. Mouth-wash. No. 126,438; Aug. 26; v. 265; p. 629.

Dyene Chemical Co., Baltimore, Md. Dye for coating straw hats, etc. No. 126,411; Aug. 26; v. 265; p. 628.

E. Greenfield's Sons, Brooklyn and New York, N. Y. Chocolate candles. No. 126,426; Aug. 26; v. 265; p. 628.

E. J. Brach & Sons, Chicago, Ill. Hard candles. No. 126,254; Aug. 19; v. 265; p. 451.

E. J. Brach & Sons, Chicago, Ill. Hard candles. No. 126,390; Aug. 26; v. 265; p. 627.

E. M. Schwarz & Co., Inc., New York, N. Y. Cigars, cheroots, and little cigars. No. 126,345; Aug. 19; v. 265; p. 454.

Eagle Pencil Company, New York, N. Y. Lead-pencils, penholders, etc. No. 126,269; Aug. 19; v. 265; p. 452.

Eastern Manufacturing Company, Bangor, Me. Bond and writing papers. No. 126,270; Aug. 19; v. 265; p. 452.

Edible Oil Co., Incorporated, Louisville, Ky. Vegetable shortening. No. 126,271; Aug. 19; v. 265; p. 452.

Elder, Mabel F., St. Louis, Mo. Face-creams. No. 126,412; Aug. 26; v. 265; p. 628.

Elder Manufacturing Co., St. Louis, Mo. Certain named clothing. No. 126,413; Aug. 26; v. 265; p. 628.

Elliott, Clinton, New York, N. Y. Certain named receptacles for food products. No. 126,272; Aug. 19; v. 265; p. 452.

Engineering Magazine Company, The, New York, N. Y. Certain named prints and publications. No. 126,228; Aug. 5; v. 265; p. 141.

Erms Chemical Manufacturing Company, Needham, Mass. Waterproof compound for cloth. No. 126,414; Aug. 26; v. 265; p. 628.

Esterline Company, The, Indianapolis, Ind. Permanent magnets. No. 126,273; Aug. 19; v. 265; p. 452.
 Evan W. Hook & Co., Inc., Baltimore, Md. Certain named canned or preserved foods. No. 126,290; Aug. 19; v. 265; p. 452.
 Fawcett & Fawcett, Brooklyn, N. Y. Certain named dental, medical, and surgical appliances. No. 126,275; Aug. 19; v. 265; p. 452.
 Federal Soap Fastener Corporation, New York, N. Y. Snap and placket fasteners. Nos. 126,416-18; Aug. 26; v. 265; p. 628.
 Filer, Albert J., Detroit, Mich. Dyspepsia-tablets. No. 126,419; Aug. 26; v. 265; p. 628.
 Fillauer, George W., Chattanooga, Tenn. Medicines for constipation, biliousness, &c. No. 126,276; Aug. 19; v. 265; p. 452.
 Fluke Brothers Refining Co., New York, N. Y. Lard-ingrease. No. 126,277; Aug. 19; v. 265; p. 452.
 Five Points Drug Co., Birmingham, Ala. Mouth-wash. No. 126,420; Aug. 26; v. 265; p. 628.
 Frank Kats Hat Co., Inc., New York, N. Y. Men's, women's, and children's hats of cloth, felt, or straw. No. 126,437; Aug. 26; v. 265; p. 629.
 Fuel Briquet Company, New York, N. Y., and Trenton, N. J. Fuel-briquets. No. 126,279; Aug. 19; v. 265; p. 452.
 G. Amisack & Co., Inc., San Francisco, Calif. Coffee. Nos. 126,240-3; Aug. 19; v. 265; p. 451.
 G. H. Hammond Company, The, Chicago, Ill. Canned peaches, plums, apricots, pineapples. No. 126,286; Aug. 19; v. 265; p. 452.
 G. S. Nicholas & Son, Ltd., New York, N. Y. Whisky. No. 126,326; Aug. 19; v. 265; p. 454.
 Gaffney, James C., New York, N. Y. Playing-cards. Nos. 126,280-2; Aug. 19; v. 265; p. 452.
 Gaines, Clarence M., Bowling Green, Ky. General tonic and system-purifier. No. 126,283; Aug. 19; v. 265; p. 452.
 Gates, William, Norfolk, Va. Candy cough-drops. No. 126,421; Aug. 26; v. 265; p. 628.
 Geneva Tractor Company, The, Geneva, Ohio. Certain named attachments for converting automobiles into tractors and parts thereof. No. 126,422; Aug. 26; v. 265; p. 628.
 Gernert, Chas. H., Bridgeport, Conn. Sales-cards for use on groceries, &c. No. 126,423; Aug. 26; v. 265; p. 628.
 Ginsburg, Alexander, New York, N. Y. Non-alcoholic malt-beverage. No. 126,285; Aug. 19; v. 265; p. 452.
 Greene, Frank A., Boston, Mass. Medicinal preparation used as a nerve-tonic. No. 126,425; Aug. 26; v. 265; p. 628.
 H. B. Wiggin's Sons Company, Bloomfield, N. J. Plaster of Paris for dental, &c. purposes. No. 126,371; Aug. 19; v. 265; p. 455.
 Hall, William, New York, N. Y. Certain named knitted garments. No. 126,429; Aug. 26; v. 265; p. 628.
 Harriet Hubbard Ayer, New York, N. Y. Certain named pharmaceutical toilet preparations. Nos. 126,392-4; Aug. 26; v. 265; p. 627.
 Hays Manufacturing Co., Rogers, Ark. Hair-tonic. No. 126,430; Aug. 26; v. 265; p. 628.
 Helming-McKenzie Shoe Company, The, Cincinnati, Ohio. Ladies' and misses' shoes. No. 126,287; Aug. 19; v. 265; p. 452.
 Henri Gutmann Silks Corporation, New York, N. Y. Silk piece goods. No. 126,427; Aug. 26; v. 265; p. 628.
 Hills Brothers Company, The, New York, N. Y. Cigarettes. No. 126,288; Aug. 19; v. 265; p. 452.
 Hinds, Aurelius S., Portland, Me. Toilet soap. No. 126,432; Aug. 26; v. 265; p. 628.
 Hines, Samuel L., Madison, N. J. Chemical carbon-removers, tire-casings, and other rubber goods. No. 126,281; Aug. 12; v. 265; p. 301.
 Holtzman, Abraham L., Philadelphia, Pa. Holder or case for shaving brushes. No. 126,289; Aug. 19; v. 265; p. 452.
 Hubbard Fertilizer Company of Baltimore City, Baltimore, Md. Fertilizers. No. 126,434; Aug. 26; v. 265; p. 628.
 Hurst, Percy E., Croydon, England. Cigarettes. No. 126,291; Aug. 19; v. 265; p. 452.
 Indurrieden Canning Co., Chicago, Ill. Canned corn, canned beans and pork with tomato sauce. No. 126,292; Aug. 19; v. 265; p. 452.
 Insulating Manufacturing Company, Salt Lake City, Utah. Certain named construction materials. No. 126,293; Aug. 19; v. 265; p. 453.
 Insulating Materials Company, Detroit, Mich. Roofing-cement for repair of roofs. No. 126,294; Aug. 19; v. 265; p. 453.
 Israel, Miller & Co., Fall River, Mass., and New York, N. Y. Certain named clothing for women, misses, and children. No. 126,435; Aug. 26; v. 265; p. 629.
 J. Early Wood, Inc., New York, N. Y. Certain named chemicals. No. 126,305; Aug. 26; v. 265; p. 631.
 J. C. Ayer Co., Lowell, Mass. Hair-tonic. No. 126,395; Aug. 26; v. 265; p. 627.
 J. C. Ayer Co., Lowell, Mass. Preparation for treatment of affections of the lungs and throat. No. 126,386; Aug. 26; v. 265; p. 627.

J. C. Ayer Co., Lowell, Mass. General tonic and preparation for treating diseases arising from certain conditions of the system. No. 126,387; Aug. 26; v. 265; p. 627.
 J. C. Francesconi & Company, New York, N. Y. Paraffin-wax and certain named vegetable waxes, &c. No. 126,278; Aug. 19; v. 265; p. 452.
 J. L. Owea Company, Minneapolis, Minn. Grain cleaners and separators. No. 126,400; Aug. 26; v. 265; p. 629.
 J. S. Brown Mercantile Co., Denver, Colo. Certain named foods. No. 126,255; Aug. 19; v. 265; p. 451.
 Jackson, Genevieve, Los Angeles, Calif. Bread. No. 126,295; Aug. 19; v. 265; p. 453.
 Jacobs, Charles D., New York, N. Y. Writing and printing paper. No. 126,296; Aug. 19; v. 265; p. 453.
 James H. Rhodes & Company, Chicago, Ill. Felt wheels and cotton buffa. No. 126,470; Aug. 26; v. 265; p. 630.
 Jennings, Raymond A., Mattoon, Ill. Eggs. No. 126,297; Aug. 19; v. 265; p. 453.
 John F. Bauer Co., The, Elmira, N. Y. Cereal food-drink. No. 126,244; Aug. 19; v. 265; p. 451.
 John Hunsell Cutlery Company, Turners Falls, Mass. Certain named knives made wholly or partly of precious metals or plated with same. No. 126,471; Aug. 26; v. 265; p. 630.
 John Russell Cutlery Company, Turners Falls, Mass. Certain named cutlery and table knives and forks. No. 126,472; Aug. 26; v. 265; p. 630.
 John Russell Cutlery Company, Turners Falls, Mass. Certain named tableware made wholly or partly of or plated with precious metals. No. 126,473; Aug. 26; v. 265; p. 630.
 Joseph Gitter Co., New York, N. Y. Ladies' hats. No. 126,424; Aug. 26; v. 265; p. 628.
 Joseph Krieg-Fink Co., Inc., Jersey City, N. J. Non-intoxicating maltless beverage. No. 126,440; Aug. 26; v. 265; p. 629.
 Josephson, Henry, Elizabeth, N. J. Powdered cleaner for white shoes. No. 126,436; Aug. 26; v. 265; p. 629.
 Kansas City Macaroni Co., Kansas City, Mo. Macaroni and spaghetti. No. 126,298; Aug. 19; v. 265; p. 453.
 Keith-O'Brien Company, Salt Lake City, Utah. Certain named furniture. No. 126,300; Aug. 19; v. 265; p. 453.
 Kellogg, Elias W., Milwaukee, Wis. Chicka and eggs. No. 126,301; Aug. 19; v. 265; p. 453.
 Kelly-Springfield Tire Company, New York, N. Y. Pneumatic tires of rubber and fabric. No. 126,302; Aug. 19; v. 265; p. 453.
 Kerr, Archie H., Raleigh, N. C. Medicinal preparation for hoars. No. 126,229; Aug. 5; v. 265; p. 141.
 King Chemical Company, Inc., New York, N. Y. Medicinal gases for treatment of diseases of the throat, nose, and lungs. No. 126,303; Aug. 19; v. 265; p. 453.
 Kingman, Russell B., Orange, N. J., and San Francisco, Calif. Certain named food products in tins, glass, and packages. No. 126,304; Aug. 19; v. 265; p. 453.
 Kluge, Gustav, Chicago, Ill. Trunks, hand-bags, suitcases, and pocket-books. No. 126,305; Aug. 19; v. 265; p. 453.
 Koch, Stephen, New Brunswick, N. J. Healing-salve. No. 126,439; Aug. 26; v. 265; p. 629.
 Koscherak Siphon Bottle Works, Hoboken, N. J. Bottle stoppers and caps and jar-closures. No. 126,306; Aug. 19; v. 265; p. 453.
 Kryger, Andrew A., Milwaukee, Wis. Cough remedies and ointments. No. 126,441; Aug. 26; v. 265; p. 629.
 L. B. Evans' Son Company, Wakefield, Mass. Play leather shoes for children. No. 126,415; Aug. 26; v. 265; p. 628.
 Laboud Soap Products Company, Inc., The, New York, N. Y. Soap. No. 126,442; Aug. 26; v. 265; p. 629.
 Lawrenceburg Roller Mills Co., Lawrenceburg, Ind. Self-rising flour. No. 126,443; Aug. 26; v. 265; p. 629.
 Lee S. Smith & Son Manufacturing Company, Pittsburgh, Pa. Dental enamel. No. 126,349; Aug. 19; v. 265; p. 454.
 Lents, William G., West Hoboken, N. J. Fumigating-candles. No. 126,445; Aug. 26; v. 265; p. 629.
 Leshner, Whitman & Co., Inc., New York, N. Y. Piece goods. No. 126,308; Aug. 19; v. 265; p. 453.
 Levitt, Michael L., Philadelphia, Pa. Eye-lotions. No. 126,446; Aug. 26; v. 265; p. 629.
 Lubee Sardine Co., Lubee, Me. Canned sardines. Nos. 126,309-12; Aug. 19; v. 265; p. 453.
 Lucas Laboratories, Inc., The, New York, N. Y. Intravenous injections. No. 126,447; Aug. 26; v. 265; p. 629.
 Ludden, William, Boston, Mass. Ointment for diseases of the skin. No. 126,448; Aug. 26; v. 265; p. 629.
 Langer, Mary E., Newark, N. J. Therapeutic salve or ointment for lesions, &c. No. 126,449; Aug. 26; v. 265; p. 629.
 M. N. Mayehoff, Incorporated, Norwalk, Conn. Certain named clothing for men and women. No. 126,230; Aug. 5; v. 265; p. 141.
 M. P. Kuezer & Co., Inc., New York, N. Y. Whole, ground, and mixed spices. No. 126,307; Aug. 19; v. 265; p. 453.
 Makitot Company, Rochester, N. Y. Antiseptics. No. 126,313; Aug. 19; v. 265; p. 453.
 Makris, Basil G., New York, N. Y. Salad-oil, &c. No. 126,314; Aug. 19; v. 265; p. 453.
 Malinda Riche & Co., Jacksonville, Fla. Growing and pressing hair-oil. No. 126,341; Aug. 19; v. 265; p. 454.

Maouling Abrasive Company, Inc., Troy, N. Y. Abrasive paper and cloth. No. 126,451; Aug. 26; v. 265; p. 629.
 McCord, Clarence S., Seattle, Wash. Bread, cakes, sandwiches, pies. No. 126,450; Aug. 26; v. 265; p. 629.
 Miami Butterine Co., The, Cincinnati, Ohio. Oleomargarin. No. 126,315; Aug. 19; v. 265; p. 453.
 Miller, Earl L., Overbrook, Kans. Timer-brushes for ignition systems. No. 126,316; Aug. 19; v. 265; p. 453.
 Minnesota Paper Company, St. Paul, Minn. Mailing-envelopes. No. 126,452; Aug. 26; v. 265; p. 629.
 Mittelsaetdt, Emma T., New York, N. Y. Hair-oils. No. 126,453; Aug. 26; v. 265; p. 629.
 Molassine Company Limited, The, Greenwich, England. Chemical fertilizers. No. 126,317; Aug. 19; v. 265; p. 453.
 Moller, Conrad G., New Canaan township, Fairfield county, Conn. Soaps. No. 126,454; Aug. 26; v. 265; p. 629.
 Monarch Manufacturing Company, Council Bluffs, Iowa, and Toledo, Ohio. Lubricating greases and oils. No. 126,318; Aug. 19; v. 265; p. 453.
 Monroe Coal Mining Company, Cambria township, Cambria county, and Philadelphia, Pa. Coal. No. 126,319; Aug. 19; v. 265; p. 453.
 Montclair Mercantile Co., The, Detroit, Mich. Non-intoxicating maltless fruit beverage. No. 126,320; Aug. 19; v. 265; p. 453.
 Music Master Co., Sturgis, Mich. Cabinet-phonographs. No. 126,321; Aug. 19; v. 265; p. 453.
 Myers, Lewis E., Valparaiso, Ind. Combination portable desks. No. 126,322; Aug. 19; v. 265; p. 453.
 N. K. Fairbank Company, The, Union township, near Guttenberg, N. J., and Chicago, Ill. Shortening compound, &c. No. 126,274; Aug. 19; v. 265; p. 452.
 National Veneer Products Company, Mishawaka, Ind. Trunks. No. 126,323; Aug. 19; v. 265; p. 453.
 Newton Tea & Spice Co., The, Cincinnati, Ohio. Mixture to be used in place of eggs in baking and cooking. No. 126,325; Aug. 19; v. 265; p. 453.
 Nitrate Agencies Company, New York, N. Y. Crude colors. No. 126,455; Aug. 26; v. 265; p. 629.
 Nitrate Agencies Company, New York, N. Y. Drugs consisting of egg-preserved and insecticides. No. 126,456; Aug. 26; v. 265; p. 629.
 Northern Warren Corporation, New York, N. Y. Cuticle-remover and nail-polish, both liquid. No. 126,458; Aug. 26; v. 265; p. 629.
 Northern Chemical Works, Chicago, Ill. Powder for dissolving soot from furnaces, boilers, &c. No. 126,457; Aug. 26; v. 265; p. 629.
 Northern Furniture Company, Sheboygan, Wis. Certain named furniture. No. 126,327; Aug. 19; v. 265; p. 454.
 Nyman, Knute O., Cincinnati and Springfield, Ohio. Candles. No. 126,328; Aug. 19; v. 265; p. 454.
 Oettinger, Fritz W., New Rochelle and New York, N. Y. Electric push-buttons, switches, fuses, &c. No. 126,329; Aug. 19; v. 265; p. 454.
 Ohio Confection Company, The, Cleveland, Ohio. Candies. No. 126,330; Aug. 19; v. 265; p. 454.
 Oswego River Paper Mills, Phoenix, N. Y. Toilet-paper. No. 126,459; Aug. 26; v. 265; p. 629.
 Ottawa Milling Company, Kansas City, Mo., and Ottawa, Kans. Wheat-flour. No. 126,331; Aug. 19; v. 265; p. 454.
 Otto F. Stiffel's Union Brewing Company, St. Louis, Mo. Oleomargarin. No. 126,358; Aug. 19; v. 265; p. 454.
 Otto Heinemann Phonograph Supply Co., Inc., New York, N. Y. Certain named sound-records, talking-machines, phonographs, &c. No. 126,431; Aug. 26; v. 265; p. 628.
 Pacific Coast Borax Company, New York, N. Y.; Chicago, Ill., and Oakland, Calif. Toilet and bath powder. No. 126,461; Aug. 26; v. 265; p. 629.
 Palmer Candy Company, Sioux City, Iowa. Candy. No. 126,332; Aug. 19; v. 265; p. 454.
 Palmolive Company, The, Milwaukee, Wis. Toilet powders. No. 126,462; Aug. 26; v. 265; p. 629.
 Parsons's Chemical Works, Grand Ledge, Mich. Antiseptic, insecticide, and disinfectant for live stock. No. 126,333; Aug. 19; v. 265; p. 454.
 Parsons Chemical Works, Grand Ledge, Mich. Insecticide and disinfectant for live stock. No. 126,334; Aug. 19; v. 265; p. 454.
 Peninsular Chemical Co., Detroit, Mich. Face and talcum powders. No. 126,463; Aug. 26; v. 265; p. 629.
 Peninsular Products Company, Wilmington, Del. Soft drinks. No. 126,335; Aug. 19; v. 265; p. 454.
 Philadelphia Specialty Co., Philadelphia, Pa. Silver-polish. No. 126,464; Aug. 26; v. 265; p. 629.
 Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat-flour. No. 126,336; Aug. 19; v. 265; p. 454.
 Pittsburgh Hy-Product Coke Company. Motor-fuel in liquid form. No. 126,465; Aug. 26; v. 265; p. 629.
 Pneumo-Phthisine Chemical Company, Chicago, Ill. Medicinal plaster for the alleviation of pneumonia, &c. No. 126,466; Aug. 26; v. 265; p. 630.
 Ponzio Brothers, Philadelphia, Pa. Metal-polish. No. 126,467; Aug. 26; v. 265; p. 630.
 Post, Edward, Baltimore, Md. Maltless carbonated non-alcoholic beverages. No. 126,337; Aug. 19; v. 265; p. 454.
 Postum Cereal Company, Battle Creek, Mich. Cereal breakfast foods. No. 126,338; Aug. 19; v. 265; p. 454.

Pross, Earle P., Chicago, Ill. Head-supports, &c., for reinforced concrete constructions. No. 126,468; Aug. 26; v. 265; p. 630.
 Price-Booker Manufacturing Co., Houston, Tex. Certain named foods. No. 126,339; Aug. 12; v. 265; p. 301.
 Pure Case Molasses Corporation, New York, N. Y. Molasses. No. 126,339; Aug. 19; v. 265; p. 454.
 Refining Products Corporation, New York, N. Y. Decolorizing-carbon. No. 126,469; Aug. 26; v. 265; p. 630.
 Rely-Taylor Company, The, New Orleans, La. Teas. No. 126,340; Aug. 19; v. 265; p. 454.
 Ridgely Trimmer Company, Springfield, Ohio. Certain named painters' and decorators' tools and supplies. No. 126,342; Aug. 19; v. 265; p. 454.
 Rutherford Co. Creamery Assn., Murfreesboro, Tenn. Creamery-butter. No. 126,474; Aug. 26; v. 265; p. 630.
 S. Karpen & Bros., Chicago, Ill. Certain named furniture. No. 126,299; Aug. 19; v. 265; p. 453.
 Samatag & Hilder Bros., New York, N. Y. Pearl buttons. No. 126,343; Aug. 19; v. 265; p. 454.
 Schambler, Augustin F., Manchester, N. H. Cough-syrup. No. 126,344; Aug. 19; v. 265; p. 454.
 Schofield Oil Co., The, New York, N. Y. Lubricating-oils. Nos. 126,475-6; Aug. 26; v. 265; p. 630.
 Schrock, Otto E., Cleveland, Ohio. Hair-tonic, nail and cuticle lotion, &c. No. 126,477; Aug. 26; v. 265; p. 630.
 Sheffield Farms Co., Inc., New York, N. Y. Evaporated and condensed milk. No. 126,478; Aug. 26; v. 265; p. 630.
 Siebert, Albert F., Dayton, Ohio. Spark-plugs. No. 126,479; Aug. 26; v. 265; p. 630.
 Sierra Chemical Company, Los Angeles, Calif. Water-softening compound. No. 126,480; Aug. 26; v. 265; p. 630.
 Silverstein Bros., New York, N. Y. Skirts, undershirts, and dresses. No. 126,481; Aug. 26; v. 265; p. 630.
 Simmons Hardware Company, St. Louis, Mo. Refrigerators. No. 126,346; Aug. 19; v. 265; p. 454.
 Simmons Hardware Company, St. Louis, Mo. Ice-cream freezers. No. 126,347; Aug. 19; v. 265; p. 454.
 Sims, Julia A., Canton, Miss. Hair and temple-hair grower and pressing-oil. No. 126,482; Aug. 26; v. 265; p. 630.
 Sinclair Refining Company, Chicago, Ill. Certain named oils and greases. No. 126,348; Aug. 19; v. 265; p. 454.
 Smith, Frederick K., New York, N. Y. Perfumes. No. 126,483; Aug. 26; v. 265; p. 630.
 Snyder Chaffee Co., The, Columbus, Ohio. Candy. No. 126,350; Aug. 19; v. 265; p. 454.
 Southern Feed Company, Inc., Newport News, Va. Stock feeds. No. 126,484; Aug. 26; v. 265; p. 630.
 Stampede Company, The, St. Paul, Minn. Candy. No. 126,352; Aug. 19; v. 265; p. 454.
 Standard Bedding Co., The, Milwaukee, Wis. Mattresses and pillows. No. 126,485; Aug. 26; v. 265; p. 630.
 Standard Candy Company, Nashville, Tenn. Candy. No. 126,353; Aug. 19; v. 265; p. 454.
 Standard Cooper-Bell Co., Chicago, Ill. Varnishes, painted japans, paint-driers. No. 126,354; Aug. 19; v. 265; p. 454.
 Standard Paint Company, Roundbrook, N. J., and New York, N. Y. Composition roofings and building-papers. No. 126,355; Aug. 19; v. 265; p. 454.
 Standard Tobacco Company, Inc., New York, N. Y. Cigarettes. No. 126,486; Aug. 26; v. 265; p. 630.
 Stanley D. Subers Co., Philadelphia, Pa. Oil. No. 126,492; Aug. 26; v. 265; p. 630.
 Star Company, New York, N. Y. Newspaper-section. No. 126,487; Aug. 26; v. 265; p. 630.
 Starr Piano Company, The, Richmond, Ind. Phonographs. No. 126,488; Aug. 26; v. 265; p. 630.
 Stein, Samuel, Pittsburgh, Pa. Non-alcoholic beverages. No. 126,489; Aug. 26; v. 265; p. 630.
 Stephens, Franklin, Atlantic City, N. J. Headache remedy. No. 126,356; Aug. 19; v. 265; p. 454.
 Stetson Shoe Company, Inc., Weymouth, Mass. Leather boots and shoes. No. 126,490; Aug. 26; v. 265; p. 630.
 Stevens, Abbie B., Atlanta, Ga. Dolls. No. 126,357; Aug. 19; v. 265; p. 454.
 Stoddard, Gilbert & Co., Inc., New Haven, Conn. Cigars. Nos. 126,359-61; Aug. 19; v. 265; p. 455.
 Straus Brothers Company, Ligonier, Ind. Publication. No. 126,491; Aug. 26; v. 265; p. 630.
 Therrien, Joseph, Humford, Me. Liniment. No. 126,493; Aug. 26; v. 265; p. 630.
 Toombs, Josephine W., Boston, Mass. Antiseptic ointments for burns, &c. No. 126,362; Aug. 19; v. 265; p. 455.
 Ulmer Leather Co. Leather belting. No. 126,494; Aug. 26; v. 265; p. 630.
 United Canneries Company of California, Oakland, Calif. Canned peaches. No. 126,363; Aug. 19; v. 265; p. 455.
 United Cigar Stores Company of America, Jersey City, N. J. Cigars, cigarettes, tobacco, and snuff. No. 126,364; Aug. 19; v. 265; p. 455.
 United Drug Company, Boston, Mass. Perfumery. Nos. 126,495-6; Aug. 26; v. 265; p. 630.
 United States Rubber Company, New Brunswick, N. J., and New York, N. Y. Certain named belting, hose, machinery packing, and tires. No. 126,365; Aug. 19; v. 265; p. 455.

Vanderjag Brothers, Denver, Colo. Furniture-polish. Whitaker Paper Company, The, Cincinnati, Ohio. Paper. No. 126,366; Aug. 19; v. 265; p. 455.
 Veteran Shoe Company, San Diego, Calif. Leather shoes for men. No. 126,497; Aug. 26; v. 265; p. 630.
 Virocacao Company Inc., The, New York, N. Y. Certain named food. No. 126,367; Aug. 19; v. 265; p. 455.
 Vit-O-Nut Manufacturing Company. (See Caddick, William F., assignor.)
 W. T. Wellisch & Co., San Francisco, Calif. Publication. No. 126,499; Aug. 26; v. 265; p. 631.
 Ward, William H., Buffalo, N. Y. Bread, biscuits, cake. No. 126,368; Aug. 19; v. 265; p. 455.
 Warner Patterson Company, Chicago, Ill. Shaving-brushes. No. 126,369; Aug. 19; v. 265; p. 455.
 West Coast Packing Co., Los Angeles, Calif. Canned fish, fruit, and vegetables. No. 126,370; Aug. 19; v. 265; p. 455.
 Westcott Chuck Company, Oneida, N. Y. Lathe and drill chucks. No. 126,500; Aug. 26; v. 265; p. 631.

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Alfred Putnam & Company, New York, N. Y. "Thorber Brand Asparagus." (For Asparagus.) No. 21,372; Aug. 5; v. 265; p. 143.
 Alfred Putnam & Company, New York, N. Y. "Windham Corn." (For Corn.) No. 21,373; Aug. 5; v. 265; p. 143.
 Alfred Putnam & Company, New York, N. Y. "Thorber California Style Bartlett Peas." (For Peas.) No. 21,374; Aug. 5; v. 265; p. 143.
 Alfred Putnam & Company, New York, N. Y. "Extra Choice California Peaches Heavy Syrup." (For Peaches.) No. 21,375; Aug. 5; v. 265; p. 143.
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 Anaheim Orange & Lemon Association, Anaheim, Calif. "Merlotia." (For Valencia.) No. 21,377; Aug. 5; v. 265; p. 143.
 Anaheim Orange & Lemon Association, Anaheim, Calif. "Annelum Gloriana." (For Extra Fancy Valencia.) No. 21,378; Aug. 5; v. 265; p. 143.
 Anaheim Orange & Lemon Association, Anaheim, Calif. "Bellaria." (For Oranges.) No. 21,379; Aug. 5; v. 265; p. 143.
 Anaheim Orange & Lemon Association, Anaheim, Calif. "Favorita." (For Oranges.) No. 21,380; Aug. 5; v. 265; p. 143.
 Anaheim Orange & Lemon Association, Anaheim, Calif. "Sonita." (For Valencia.) No. 21,381; Aug. 5; v. 265; p. 143.
 Anti-Pyorrhea Chemical Company, St. Louis, Mo. "Platite." (For Compositions for Fitting False Teeth.) No. 21,382; Aug. 5; v. 265; p. 143.
 Arlington Cannery, Arlington, Calif. "Arlington." (For Canned Tomatoes.) No. 21,383; Aug. 5; v. 265; p. 143.
 Armour and Company, Chicago, Ill. "Leta Blanca." (For a Preparation Consisting of Pork Sausage and Cereal Preserved in Lard.) No. 21,384; Aug. 5; v. 265; p. 143.
 Auerbach, Louis, Cleveland, Ohio. "Million & Hair Tonic." (For Hair-Tonic.) No. 21,385; Aug. 5; v. 265; p. 143.
 Baker Packing Company, Chicago, Ill. "Dellala." (The Name Tells.) (For Corned Beef.) No. 21,386; Aug. 5; v. 265; p. 143.
 Bee Confection Co., The, Dayton, Ohio. "Juley Fruit." (For Non-Alcoholic Beverages.) No. 21,387; Aug. 5; v. 265; p. 143.
 Benedict, J. E., Portsmouth, Ohio. "Spot Slide." (For Garment Spotter.) No. 21,388; Aug. 5; v. 265; p. 143.
 Blousemakers, Inc., The, New York, N. Y. "Miro-Crepe." (For Blouses.) No. 21,390; Aug. 5; v. 265; p. 143.
 Blousemakers, Inc., The, New York, N. Y. "Shadow-Crepe." (For Blouses.) No. 21,391; Aug. 5; v. 265; p. 143.
 Boedeker & Co., Cincinnati, Ohio. "Boedeker's Superior Grape-Wine." (For a Beverage.) No. 21,392; Aug. 5; v. 265; p. 143.
 Buckley Macaroni Company, Inc., Kensington, Conn. "International Brand." (For Macaroni.) No. 21,393; Aug. 5; v. 265; p. 143.
 Huber, Pfaff & Co., Cincinnati, Ohio. "Sunset Chocolates." (For Chocolates.) No. 21,394; Aug. 5; v. 265; p. 143.
 Huber, Pfaff & Co., Cincinnati, Ohio. "Virginia Chocolates." (For Chocolates.) No. 21,395; Aug. 5; v. 265; p. 143.
 Cee & Vee Products Co., Buffalo, N. Y. "Kant-Rust Sordax Lubricant." (For Lubricants.) No. 21,396; Aug. 5; v. 265; p. 143.
 Charles N. Miller Company, Boston, Mass. "Mary Jones Deans." (For Candy.) No. 21,397; Aug. 5; v. 265; p. 143.
 Cohen, Mann & Kahn, Los Angeles, Calif. "Liberty." (For Cantaloupe.) No. 21,398; Aug. 5; v. 265; p. 143.

Colker, Abraham, Atlanta, Ga. "Florida Mellow Fruit Chewing Gum." (For Chewing-Gum.) No. 21,399; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Atlanta, Ga. "Florida Spearmint Chewing Gum." (For Chewing-Gum.) No. 21,400; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "White Lily Chewing Gum." (For Chewing-Gum.) No. 21,401; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Spearmint Chewing Gum." (For Chewing-Gum.) No. 21,402; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Pepper-Mint Chewing Gum." (For Chewing-Gum.) No. 21,403; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Kentucky Peppermint Chewing Gum." (For Chewing-Gum.) No. 21,404; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Kentucky Spearmint Chewing Gum." (For Chewing-Gum.) No. 21,405; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Kentucky Fruit Frappe Chewing Gum." (For Chewing-Gum.) No. 21,406; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Atlanta, Ga. "Florida Peppermint Chewing Gum." (For Chewing-Gum.) No. 21,407; Aug. 5; v. 265; p. 143.
 Colker, Abraham, Newport, Ky. "Spearmint Chewing Gum." (For Chewing-Gum.) No. 21,408; Aug. 5; v. 265; p. 143.
 Crutchfield & Woolfolk, Pittsburgh, Pa. "Yucca Brand Pink Meat Cantaloupes." (For Cantaloupes.) No. 21,409; Aug. 5; v. 265; p. 143.
 Davis & Geck, Inc., Brooklyn, N. Y. "Trench Tubes." (For Trench-Tubes.) No. 21,410; Aug. 5; v. 265; p. 143.
 Dead Shot Chemical Company, Oklahoma, Okla. "Dead Shot Non-Poisonous Insecticide." (For a Powder for Killing and Destroying All Kinds of Insects.) No. 21,411; Aug. 5; v. 265; p. 143.
 Dead Shot Chemical Company, Oklahoma, Okla. "Dead Shot Rat Killer." (For a Powder for Killing and Destroying Rats.) No. 21,412; Aug. 5; v. 265; p. 144.
 Dexter, Eugene A., Springfield, Mass. "Dexter's Mother's Bread." (For Bread.) No. 21,413; Aug. 5; v. 265; p. 144.
 Donald Company, The, Grand Island, N-br. "Rob Roy." (For Tea.) No. 21,414; Aug. 5; v. 265; p. 144.
 Edison Brothers, Philadelphia, Pa. "De Luxe." (For Oleomargarin.) No. 21,415; Aug. 5; v. 265; p. 144.
 Florence Manufacturing Company, Northampton, Mass. "Prophy-lactic Penetrator Hair Brush." (For Hair-Brushes.) No. 21,416; Aug. 5; v. 265; p. 144.
 General Candy Co., Milwaukee, Wis. "Brunswick Chocolates." (For Chocolates.) No. 21,417; Aug. 5; v. 265; p. 144.
 General Fruit Syrup Co., Baltimore, Md. "Gen Co Brand." (For Crushed Fruits—Namely, Raspberry.) No. 21,424; Aug. 5; v. 265; p. 144.
 George Borgfeldt & Co., New York, N. Y. "Movie." (For Building-Blocks and Construction Toys.) No. 21,419; Aug. 5; v. 265; p. 144.
 George W. Blabon Company, The, Philadelphia, Pa. "Blabon Art Linoleums." (For Linoleums.) No. 21,418; Aug. 5; v. 265; p. 144.
 Goldberg, David N., Chicago, Ill. "Vanity Fair." (For a Non-Alcoholic Beverage.) No. 21,420; Aug. 5; v. 265; p. 144.
 Golland, Morris, New York, N. Y. "Fard Overcoat." (For Men's Overcoats.) No. 21,425; Aug. 5; v. 265; p. 144.
 Gradiaz-Annla & Co., Inc., New York, N. Y. "Don Julian." (For Cigars.) No. 21,426; Aug. 5; v. 265; p. 144.
 Greensburg Brewing Company, Greensburg, Pa. "White Label." (For Non-Intoxicating Beverages.) No. 21,421; Aug. 5; v. 265; p. 144.
 Grivas, John B., Chicago, Ill. "Grivas Special Sauce." (For Sauce.) No. 21,422; Aug. 5; v. 265; p. 144.

Gurney, Edmund, New York, N. Y. "Perfect Sure-Fit Fastener." (For Snap-Buttons or Garment-Fasteners.) No. 21,423; Aug. 5; v. 265; p. 144.
 Hammer & Co., San Francisco, Calif. "Eagle." (For Gasolene.) No. 21,427; Aug. 5; v. 265; p. 144.
 Hammer & Co., San Francisco, Calif. "Eagle." (For Kerosene.) No. 21,428; Aug. 5; v. 265; p. 144.
 Hammer & Co., San Francisco, Calif. "Eagle." (For Olive-Oil.) No. 21,429; Aug. 5; v. 265; p. 144.
 Hammer & Co., San Francisco, Calif. "Eagle." (For Salad-Oil.) No. 21,430; Aug. 5; v. 265; p. 144.
 Hedger-Buck Company, Stockton, Calif. "Hedger Fancy Blend Coffee." (For Coffee.) No. 21,432; Aug. 12; v. 265; p. 303.
 Howard & Casey Co., Mount Vernon, Ill. "Scout." (For Coffee.) No. 21,431; Aug. 12; v. 265; p. 303.
 Hore, Stephen M., New York, N. Y., assignor to Ka-Zu Beverage Co., Inc. "Victory Punch." (For Victory Punch Tablets.) No. 21,433; Aug. 12; v. 265; p. 303.
 Hudson County Tobacco Co., Jersey City, N. J. "84." (For Cigars and Tobacco.) No. 21,434; Aug. 12; v. 265; p. 303.
 Incarnone, Mario, New York, N. Y. "Bloom of Youth." (For a Facial Liquid Rouge.) No. 21,436; Aug. 12; v. 265; p. 303.
 Indian Head Products Corporation, Buffalo, N. Y. "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) No. 21,437; Aug. 12; v. 265; p. 303.
 Iroquois Beverage Co., Buffalo, N. Y. "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) No. 21,438; Aug. 12; v. 265; p. 303.
 Johnson, Charles W., Springfield, Mass. "Photo Flowers." (For Folders Containing Photographs of Flowers.) No. 21,439; Aug. 12; v. 265; p. 303.
 Ka-Zu Beverage Co., Inc. (See Hore, Stephen M., assignor.)
 Kelly, W. H., St. Paul, Minn. "Hair-Zo." (For Hair-Tonic.) No. 21,440; Aug. 12; v. 265; p. 303.
 Klar, Adolph, New York, N. Y. "Hold-Tight." (For Hair-Wavers.) No. 21,441; Aug. 12; v. 265; p. 303.
 Kolb, George O., Hartford, Conn. "Kolb's Scotch Loaf." (For Bread.) No. 21,442; Aug. 12; v. 265; p. 303.
 La Sierra Heights Canning Co., Los Angeles, Calif. "La Libertad." (For Tomato Paste with Basilico.) No. 21,443; Aug. 12; v. 265; p. 303.
 Lawrence Airplane Model and Supply Company, Chicago, Ill. "Military Biplane." (For Toy Airplanes, Model Airplanes, and Scale Models of Airplanes.) No. 21,444; Aug. 12; v. 265; p. 303.
 Leach, Edgar M., Columbus, Ohio. "Ka-O-Ka Nerve and Blood Remedy." (For a Nerve and Blood Remedy.) No. 21,451; Aug. 12; v. 265; p. 303.
 Lortie, C. & H., Brooklyn, N. Y. "Lortie's Laundry Marvel The Wonder Washing Powder." (For a Washing Powder.) No. 21,445; Aug. 12; v. 265; p. 303.
 Lubric Oil Company, The, Cleveland, Ohio. "Koolmotor." (For Lubricating-Oil.) No. 21,446; Aug. 12; v. 265; p. 303.
 Lubric Oil Company, The, Cleveland, Ohio. "Supero." (For Lubricating-Oil.) No. 21,447; Aug. 12; v. 265; p. 303.
 MacDonald & Co., San Francisco, Calif. "Macdonald's East Indies Tea." (For Tea.) No. 21,448; Aug. 12; v. 265; p. 303.
 Maddux, Frank A., Jeannette, Pa. "Victor." (For Non-Intoxicating Beverage.) No. 21,449; Aug. 12; v. 265; p. 303.
 Mari, E. & O., Winfield Junction, N. Y. "La Perferita." (For Musical-Instrument Strings Made of Gut.) No. 21,455; Aug. 12; v. 265; p. 303.
 Massaro Macaroni Co., Fulton, N. Y. "Have Brand Macaroni." (For Macaroni.) No. 21,450; Aug. 12; v. 265; p. 303.
 Major, Joseph, Detroit, Mich. "Joseph Major." (For a Preparation for Spanish Influenza, La Grippe, Lung, and Blood.) No. 21,452; Aug. 12; v. 265; p. 303.
 Milwaukee Paper Box Co., Milwaukee, Wis. "Fairle Dream." (For Chocolate Candy.) No. 21,453; Aug. 12; v. 265; p. 303.
 Milwaukee Paper Box Company, Milwaukee, Wis. "Hard Center Chocolates." (For Chocolate Candy.) No. 21,454; Aug. 12; v. 265; p. 303.
 Milwaukee Paper Box Company, Milwaukee, Wis. "National Pride." (For Chocolate Candy.) No. 21,455; Aug. 12; v. 265; p. 303.
 Milwaukee Paper Box Company, Milwaukee, Wis. "Talked of Package." (For Chocolate Candy.) No. 21,456; Aug. 12; v. 265; p. 303.

Milwaukee Paper Box Company, Milwaukee, Wis. "Brazil Nuts in Cream." (For Chocolate Candy.) No. 21,457; Aug. 12; v. 265; p. 303.
 Milwaukee Paper Box Company, Milwaukee, Wis. "Colonial Chocolates." (For Chocolate Candy.) No. 21,458; Aug. 12; v. 265; p. 303.
 Murphy, Charles E., Chillicothe, Mo. "Moon Shine Magic Cleaner." (For Cleaning Fluid.) No. 21,459; Aug. 12; v. 265; p. 303.
 Naco Products Co., New York, N. Y. "Naco." (For a Preparation for Whitening or Bleaching Clothes and other Articles of Fabric, &c.) No. 21,460; Aug. 12; v. 265; p. 303.
 N. Seligman Merchandise Co., Inc., New York, N. Y. "Milady." (For Human-Hair Nets.) No. 21,478; Aug. 12; v. 265; p. 304.
 Ohio Beverage Company, The, Columbus, Ohio. "Ohio Club." (For Ginger-Ale.) No. 21,461; Aug. 12; v. 265; p. 303.
 Owl Supply Company, Boston, Mass. "Owl Clips." (For Paper-Clips.) No. 21,462; Aug. 12; v. 265; p. 303.
 Ornard Citrus Ass'n, Buena Vista, Calif. "Ornard." (For Lemons.) No. 21,463; Aug. 12; v. 265; p. 303.
 Pan-America Supply Company, Inc., New York, N. Y. "Paseo." (For Greases.) No. 21,464; Aug. 12; v. 265; p. 303.
 Paper Specialty Co., The, Wausau, Wis. "Parasolk." (For Barber Head-Rest Paper.) No. 21,465; Aug. 12; v. 265; p. 303.
 Pasadena Orange Growers' Association, Pasadena, Calif. "Lucious." (For Oranges.) No. 21,466; Aug. 12; v. 265; p. 303.
 Peppas Mina E., San Francisco, Calif. "La Ta'O." (For Hair Remedy.) No. 21,466; Aug. 12; v. 265; p. 303.
 Pioneer Paper Company, Los Angeles, Calif. "Polly-Ana." (For Bread.) No. 21,470; Aug. 12; v. 265; p. 303.
 Pioneer Paper Company, Los Angeles, Calif. "Guaranteed." (For Bread.) No. 21,471; Aug. 12; v. 265; p. 303.
 Planters Nut & Chocolate Company, Wilkes-Barre, Pa. "Planters Pennant Peanuts." (For Peanuts.) No. 21,467; Aug. 12; v. 265; p. 303.
 Rooke, Bert G., Lindsay, Calif. "Sunshine Special." (For Oranges.) No. 21,472; Aug. 12; v. 265; p. 304.
 Rooke, Bert G., Lindsay, Calif. "Sunshine Special." (For Fresh Grapes.) No. 21,473; Aug. 12; v. 265; p. 304.
 Sackheim, Max, New York, N. Y. "Monogram No. 2." (For Cigars.) No. 21,474; Aug. 12; v. 265; p. 304.
 Santiago Orange Growers Association, Orange, Calif. "Epicure Brand." (For Valencia Oranges.) No. 21,475; Aug. 12; v. 265; p. 304.
 Santiago Orange Growers Ass'n. "Epicure." (For Valencia Oranges.) No. 21,476; Aug. 12; v. 265; p. 304.
 Shepard, Abraham D., Chicago, Ill. "Ox-Wa." (For Charged Table-Waters.) No. 21,482; Aug. 12; v. 265; p. 304.
 Steel Packing Co., San Diego, Calif. "Steele Brand." (For Canned Sardines.) No. 21,477; Aug. 12; v. 265; p. 304.
 Steele Packing Co., San Diego, Calif. "Steele Brand." (For Canned Spinach.) No. 21,479; Aug. 12; v. 265; p. 304.
 Steele Packing Co., San Diego, Calif. "Kentworth." (For Canned Sardines.) No. 21,480; Aug. 12; v. 265; p. 304.
 Sunkist Candy Co., Los Angeles, Calif. "Sunkist." (For Candy.) No. 21,481; Aug. 12; v. 265; p. 304.
 V. L. Blahnik and Sons, Chicago, Ill. "Bronchiline." (For a Medical Compound—Namely, Bronchiline.) No. 21,389; Aug. 5; v. 265; p. 143.
 Vellner, Eugene, Philadelphia, Pa. "Vellner's Albinol." (For Soap.) No. 21,483; Aug. 12; v. 265; p. 304.
 Webster, Frank H., Los Angeles, Calif. "Duro-lac." (For a Polishing and Cleaning Compound for Automobiles, Furniture, and All Varnished or Enamelled Surfaces Requiring a High Polish.) No. 21,484; Aug. 12; v. 265; p. 304.
 Whittier Citrus Association, Whittier, Calif. "Whittier Brand." (For Oranges.) No. 21,485; Aug. 12; v. 265; p. 304.
 Wright, George C., Keene, N. H. "Hub-Knot." (For Powdered Washing Compound.) No. 21,486; Aug. 12; v. 265; p. 304.
 Yukon Mill & Grain Co., Yukon, Okla. "Yukon's Best." (For Pancake-Flour.) No. 21,487; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

A-C Manufacturing Co., Chicago, Ill. "Save Your Spokes—A Sure Cure for Loose Spokes in Auto, Buggy, and Wagon Wheels—Tighten Your Spokes Without Removing Your Rims or Tires—Any One Can Use—No Tools Necessary." (For Spoke Compound.) No. 5,135; Aug. 5; v. 265; p. 144.

Anglo-American Mill Company, Owensboro, Ky. "Let Us Place You Here." (For Flour-Mills.) No. 5,136; Aug. 5; v. 265; p. 144.

B. V. D. Company, The, New York, N. Y. "Yes, Sir! That Label Guarantees You B. V. D. Quality." (For Athletic Underwear.) No. 5,137; Aug. 5; v. 265; p. 144.

H. V. D. Company, The, New York, N. Y. "It's Great Boys, To Climb Into H. V. D." (For Athletic Underwear.) No. 5,138; Aug. 5; v. 265; p. 144.

H. V. D. Company, The, New York, N. Y. "Take It From Me, Insist On H. V. D." (For Athletic Underwear.) No. 5,139; Aug. 5; v. 265; p. 144.

H. V. D. Company, The, New York, N. Y. "Yes, dear, I asked for H. V. D. and here's the label." (For Athletic Underwear.) No. 5,140; Aug. 5; v. 265; p. 144.

Carraloe, Eugene, Philadelphia, Pa. "Jug-L-Ball." (For a Game.) No. 5,142; Aug. 5; v. 265; p. 144.

Cream of Wheat Co., Minneapolis, Minn. "Welcome Home, Boys." (For Cream of Wheat Breakfast Food.) No. 5,143; Aug. 5; v. 265; p. 144.

Cream of Wheat Co., Minneapolis, Minn. "Menu." (For Cream of Wheat Breakfast Food.) No. 5,144; Aug. 5; v. 265; p. 144.

George W. Baker Shoe Company, Brooklyn, N. Y. "Quality without Extravagance—Style without Experiment." (For Footwear.) No. 5,141; Aug. 5; v. 265; p. 144.

Gooch Milling & Elevator Co., Lincoln, Nebr. "Gooch's Best Flour." (For Bread.) No. 5,145; Aug. 5; v. 265; p. 144.

Gooch Milling & Elevator Co., Lincoln, Nebr. "Gooch's Best Self-Rising Pancake-Flour." (For Pancake-Flour.) No. 5,146; Aug. 5; v. 265; p. 144.

Hall, L. W., Irwin and Mifflinburg, Pa. "Mentholyptine." (For Medicinal Preparations.) No. 5,149; Aug. 5; v. 265; p. 144.

Knickerbocker Watch Co., New York, N. Y. "Daynite." (For Watches.) No. 5,147; Aug. 5; v. 265; p. 144.

Knickerbocker Watch Co., New York, N. Y. "Day-Night." (For Watches.) No. 5,148; Aug. 5; v. 265; p. 144.

Moore, Gales P. (See Rogers, Robert F., assignor.) Nat House Incorporated, The, Seattle, Wash. "The Chief Nut." (For Nut and Fruit Bars.) No. 5,150; Aug. 12; v. 265; p. 304.

Nat House Incorporated, The, Seattle, Wash. "Bar of Bars." (For Nut and Fruit Bars.) No. 5,151; Aug. 12; v. 265; p. 304.

Reuter, Clifford S., New York, N. Y. "Black Cat." (For Furniture.) No. 5,152; Aug. 12; v. 265; p. 304.

Rogers, Robert F., New York, N. Y., assignor, by mesne assignments, to G. P. Moore, Bristol, Conn. "Ball Bearings." (For Ball-Bearings.) No. 5,153; Aug. 12; v. 265; p. 304.

Rubber & Celluloid Products Company, New York, N. Y. "Rubberet." (For Paint and Varnish Brushes.) No. 5,154; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "The Thrift Family." (For Clothing.) No. 5,155; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "Tommy Thrift." (For Clothing.) No. 5,156; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "Vera Thrift." (For Clothing.) No. 5,157; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "Mr. Thrift." (For Clothing.) No. 5,158; Aug. 12; v. 265; p. 304.

Samuel Stores, Inc., The, New York, N. Y. "Mrs. Thrift." (For Clothing.) No. 5,159; Aug. 12; v. 265; p. 304.

Sunbeam Chemical Company, Chicago, Ill. "The Charm of Youthful Colors." (For Dye-Soap.) No. 5,160; Aug. 12; v. 265; p. 304.

Troy Underwear Co., Inc., Troy, N. Y. "Taco Union Suits." (For Union-Suits.) No. 5,161; Aug. 12; v. 265; p. 304.

W. A. Shaffer Pen Company, Fort Madison, Iowa; New York, N. Y.; Chicago, Ill.; Kansas City, Mo., and San Francisco, Calif. "Always Writes All Ways." (For Pencils and Fountain-Pens.) No. 5,162; Aug. 12; v. 265; p. 304.

Whitlock Cordage Co., New York, N. Y. "Ropeconomy." (For Ropes and Cordage.) No. 5,163; Aug. 12; v. 265; p. 304.

DISCLAIMERS.

Weeks, Frank W., New York, N. Y.; disclaimer filed by the assignor, by mesne assignments, Animated Target Company, Inc. Cinematograph target apparatus. No. 1,197,567; disclaimer filed Aug. 7, 1919; v. 265; p. 311.

Wolfsberg, Richard, and S. C. Smith, Los Angeles, Calif.; disclaimer filed by assignor, Krantz Manufacturing Company, Inc. Circuit-breaker. No. 1,253,761; disclaimer filed Aug. 2, 1919; v. 265; p. 151.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF AUGUST, 1919.

Abrasive material and making same. N. C. Harrison. No. 1,314,061; Aug. 26; v. 265; p. 501.

Accounting machine, Counter for. J. Powers. No. 1,312,807; Aug. 12; v. 265; p. 212.

Acetals, Manufacture of. A. T. King and F. A. Mason. No. 1,312,186; Aug. 5; v. 265; p. 63.

Acetylene-generator. F. A. Ruckman. No. 1,313,607; Aug. 19; v. 265; p. 382.

Acetylene-generator. L. Girodo. No. 1,313,810; Aug. 19; v. 265; p. 420.

Acid and apparatus therefor, Concentrating nitric. J. D. Davis. No. 1,314,485; Aug. 26; v. 265; p. 582.

Acid and compounds of the same, Method of and apparatus for producing phosphoric. F. S. Washburn. No. 1,314,229; Aug. 26; v. 265; p. 534.

Acid, Chamber used in the manufacture of sulfuric. W. Mills and C. T. Packard. No. 1,312,741; Aug. 12; v. 265; p. 198.

Acid, Chamber used in the manufacture of sulfuric. W. G. Mills and C. T. Packard. No. 1,312,742; Aug. 12; v. 265; p. 199.

Acid, Contact process for making sulfuric. H. H. Meyers. No. 1,314,280; Aug. 26; v. 265; p. 544.

Adding and type-writing machine. F. W. B. Schoradt. No. 1,313,230; Aug. 12; v. 265; p. 295.

Adding-machine. F. W. B. Schoradt. No. 1,313,231; Aug. 12; v. 265; p. 295.

Adhesive. W. M. Grosvenor. No. 1,311,964; Aug. 5; v. 265; p. 21.

Adjustable drill-jig. G. E. Swartz. No. 1,312,767; Aug. 12; v. 265; p. 204.

Adjustable stiff. P. E. Glafcke. No. 1,312,904; Aug. 12; v. 265; p. 230.

Advertising device. A. Eastman. No. 1,313,173; Aug. 12; v. 265; p. 284.

Advertising device. H. K. Harris. No. 1,313,816; Aug. 19; v. 265; p. 421.

Advertising device. H. K. Harris. No. 1,313,817; Aug. 19; v. 265; p. 421.

Advertising device. H. Huerta. No. 1,312,632; Aug. 12; v. 265; p. 178.

Advertising device. R. Padilla. No. 1,313,110; Aug. 12; v. 265; p. 272.

Advertising or display device. J. Strandera. No. 1,313,351; Aug. 19; v. 265; p. 333.

Aerial bomb. J. J. McIntyre. No. 1,312,998; Aug. 12; v. 265; p. 249.

Aerial bomb. B. A. Sigler. No. 1,312,005; Aug. 5; v. 265; p. 28.

Aerial bomb. M. Soloun. No. 1,312,212; Aug. 5; v. 265; p. 67.

Aerial bombs, Receptacle for incendiary. A. Chanard. No. 1,313,068; Aug. 12; v. 265; p. 263.

Aerial camera. F. A. Todd. No. 1,313,564; Aug. 19; v. 265; p. 374.

Aerial reconcey. R. S. Moore. No. 1,314,202; Aug. 26; v. 265; p. 528.

Aerial illuminating device. H. E. S. Holt. No. 1,312,409; Aug. 5; v. 265; p. 121.

Aerial-observation instrument. R. F. Power. No. 1,311,994; Aug. 5; v. 265; p. 26.

Aerial ropeway and the like. W. H. Watkins. No. 1,313,357; Aug. 19; v. 265; p. 334.

Aerial ropeways and the like, Tractor for. W. H. Watkins. No. 1,313,358; Aug. 19; v. 265; p. 335.

Aeroplane. A. Anla. No. 1,312,300; Aug. 5; v. 265; p. 83.

Aeroplane. R. Haeriot and F. Gratioux. No. 1,311,967; Aug. 5; v. 265; p. 21.

Aeroplane. R. Haeriot and F. Gratioux. No. 1,311,968; Aug. 5; v. 265; p. 22.

Aeroplane. D. X. Kelly. No. 1,312,548; Aug. 12; v. 265; p. 161.

Aeroplane. A. G. Leigh. No. 1,313,828; Aug. 19; v. 265; p. 423.

Aeroplane and the like. H. F. Parker. No. 1,312,571; Aug. 12; v. 265; p. 166.

Aeroplane, Controlling device for. C. R. Falrey. No. 1,313,681; Aug. 19; v. 265; p. 395.

Aeroplane landing device. L. R. Accornero and A. Gaydon. No. 1,312,507; Aug. 12; v. 265; p. 153.

Aeroplane propeller and tractor. J. Ingells. No. 1,313,599; Aug. 19; v. 265; p. 380.

Aeroplane-rudder. C. A. Strom. No. 1,313,830; Aug. 19; v. 265; p. 425.

Aeroplane safety device. F. P. Sargent. No. 1,314,220; Aug. 26; v. 265; p. 532.

Aeroplane-stabilizer. S. O. Stewart. No. 1,314,027; Aug. 26; v. 265; p. 495.

Aeroplane structure. A. S. Janin. No. 1,312,910; Aug. 12; v. 265; p. 232.

Aeroplane-wheel bearing. T. Sloper. No. 1,313,646; Aug. 19; v. 265; p. 389.

Aeroplane-wing structure. W. G. Tarrant. No. 1,313,563; Aug. 19; v. 265; p. 373.

Aeroplane, Controlling device for. C. R. Falrey. No. 1,313,680; Aug. 19; v. 265; p. 395.

Aeroplane, Means for supporting radiators on. E. Letord. No. 1,313,195; Aug. 12; v. 265; p. 288.

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Furnace for converting energy of fuel into force. W. C. and F. E. Wells. No. 1,314,175; Aug. 26; v. 265; p. 523.

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Furnace for melting metals. W. Macleod. No. 1,312,129; Aug. 5; v. 265; p. 52.

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Furnace-grate and vaporiser construction. J. T. Simpson. No. 1,313,127; Aug. 12; v. 265; p. 275.

Furnace having unidirectional circulation, Induction. J. R. Wyatt. No. 1,312,069; Aug. 5; v. 265; p. 41.

Furnace, kiln, oven, and the like. H. Francart. No. 1,314,480; Aug. 26; v. 265; p. 583.

Furnaces, Fuel feeder and spreader for. W. C. Ely. No. 1,312,520; Aug. 12; v. 265; p. 156.

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Gage. H. M. Shwab. No. 1,314,435; Aug. 26; v. 265; p. 574.

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Gate fastener. End. P. H. Spaulding. No. 1,312,279; Aug. 5; v. 265; p. 79.

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Glare-protector. W. Geist. No. 1,313,083; Aug. 12; v. 265; p. 266.

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 Rilm-tool. A. B. Smith. No. 1,312,590; Aug. 12; v. 265; p. 176.
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 Finger-ring.
 Piston-ring.
 Rivet-heating appliance. Electric. G. A. E. Jones. No. 1,313,535; Aug. 19; v. 265; p. 369.
 Rivet-net. G. R. Hieb. No. 1,314,215; Aug. 26; v. 265; p. 530.
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 Riveted receptacle. L. E. Seaton. No. 1,313,022; Aug. 12; v. 265; p. 254.
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 Roadway and apparatus for its manufacture. H. Maxlin. No. 1,313,600; Aug. 12; v. 265; p. 250.
 Rock-drill. O. E. Clark. No. 1,314,240; Aug. 26; v. 265; p. 537.
 Rock-drill bits. Fullering-block for. O. B. Camp. No. 1,312,233; Aug. 5; v. 265; p. 71.
 Rocket. Magazine. R. H. Goddard. No. 1,311,865; Aug. 5; v. 265; p. 7.
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 Phonograph transmission-rod.
 Connecting-rod.
 Rod-hanger. K. D. Fuller. No. 1,313,508; Aug. 19; v. 265; p. 419.
 Roof construction. Flashing-insert for. T. Fildet. No. 1,313,283; Aug. 10; v. 265; p. 321.
 Roof structure. M. A. Jackson. No. 1,313,980; Aug. 26; v. 265; p. 448.
 Roofing elements. Method and apparatus for making prepared. F. C. Overbury. No. 1,314,470; Aug. 26; v. 265; p. 581.

Roofing elements, Method and means for making prepared. F. C. Overbury. No. 1,314,477; Aug. 20; v. 265; p. 581.

Roofing-fabric rolls, Retainer member for. R. P. Perry. No. 1,312,202; Aug. 5; v. 265; p. 66.

Roofing-fabric rolls, Retainer member for. C. J. Rothermel. No. 1,312,211; Aug. 5; v. 265; p. 67.

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Roll-grinding machine. J. G. Weiss and C. Knoch. No. 1,312,881; Aug. 12; v. 265; p. 220.

Roller-bearing spring-insert. J. M. Hamilton and P. A. Buoy. No. 1,313,183; Aug. 12; v. 265; p. 286.

Rotary cloth-cutter. C. H. Beach. No. 1,314,382; Aug. 26; v. 265; p. 563.

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Rotary kiln. J. S. Fastling. No. 1,313,281; Aug. 19; v. 265; p. 321.

Rotary ventilator. J. H. Sharpneck. No. 1,314,432; Aug. 26; v. 265; p. 573.

Rowing device. F. N. Smuck. No. 1,313,130; Aug. 12; v. 265; p. 276.

Rubber and product obtained thereby, Vulcanizing. S. P. Thacher. No. 1,312,144; Aug. 5; v. 265; p. 55.

Rubber articles, Mold for vulcanizing. J. L. Mahoney. No. 1,314,344; Aug. 26; v. 265; p. 556.

Rubber fabric, Preservative composition for treating. R. E. Thierfelder and J. Schmaele. No. 1,312,007; Aug. 5; v. 265; p. 29.

Rubber gaskets and similar articles, Machine for trimming and finishing. C. L. Townsend. No. 1,314,029; Aug. 26; v. 265; p. 495.

Rubber heel. D. D. Granger. No. 1,314,393; Aug. 26; v. 265; p. 565.

Rubber heel. A. Santacrose. No. 1,313,118; Aug. 12; v. 265; p. 273.

Rubber parts, Jointure for vulcanized. J. L. Mahoney. No. 1,314,343; Aug. 26; v. 265; p. 555.

Rubber sole for turn-shoes. G. Ferguson. No. 1,312,528; Aug. 12; v. 265; p. 157.

Rubber solvent, Recovering. J. D. Morron. No. 1,312,452; Aug. 5; v. 265; p. 113.

Rugs on carpets, Means for fastening. M. H. Hannah. No. 1,312,323; Aug. 5; v. 265; p. 87.

Rule, Flexible. A. E. Hegardt. No. 1,313,482; Aug. 19; v. 265; p. 358.

Rule, Tailor's. F. Mastrangelo. No. 1,314,085; Aug. 26; v. 265; p. 500.

Sack-holder. L. J. McNaughton. No. 1,312,336; Aug. 5; v. 265; p. 89.

Saddler's implement. W. Pass. No. 1,313,556; Aug. 19; v. 265; p. 372.

Safe-saving device. L. E. Armstrong. No. 1,313,156; Aug. 12; v. 265; p. 281.

Safety attachment. E. J. Gardner. No. 1,312,843; Aug. 12; v. 265; p. 219.

Safety-can. P. Anderson. No. 1,312,822; Aug. 12; v. 265; p. 215.

Safety device. F. E. Lander. No. 1,313,546; Aug. 19; v. 265; p. 370.

Safety device for machinery. L. J. Ripich and J. V. Horro. No. 1,312,210; Aug. 5; v. 265; p. 67.

Safety-hook. F. J. Faera. No. 1,312,966; Aug. 12; v. 265; p. 243.

Safety switch-lock. N. J. Beckner. No. 1,313,978; Aug. 26; v. 265; p. 486.

Salt cake and sulfuric acid from niter cake, Making. W. J. Kee. No. 1,313,192; Aug. 12; v. 265; p. 287.

Sand-blast machine. W. H. and G. W. Leiman. No. 1,313,306; Aug. 19; v. 265; p. 325.

Sandpapering or smoothing wood moldings, Machine for. J. R. Marsden. No. 1,312,193; Aug. 5; v. 265; p. 64.

Sanitary serving device. E. S. Williams. No. 1,313,364; Aug. 19; v. 265; p. 336.

Sash attachment, Window. R. Besocke. No. 1,314,241; Aug. 26; v. 265; p. 536.

Sash-fastener. J. H. Cobb. No. 1,312,893; Aug. 12; v. 265; p. 228.

Sash-fastener. D. L. Wenrick. No. 1,312,933; Aug. 12; v. 265; p. 236.

Sashes, Antirattling device for window. D. H. Chason. No. 1,313,069; Aug. 12; v. 265; p. 264.

Saw. A. E. Edmondson. No. 1,314,255; Aug. 26; v. 265; p. 539.

Saw attachment. D. Worden. No. 1,312,641; Aug. 12; v. 265; p. 184.

Saw-frame, Adjustable. V. Niewinski. No. 1,313,107; Aug. 12; v. 265; p. 271.

Saw-guard. H. F. Walters. No. 1,312,651; Aug. 12; v. 265; p. 182.

Saw-kummet. C. D. Helm. No. 1,313,238; Aug. 12; v. 265; p. 297.

Saws, Automatic spark-arrester for. J. T. Johnson. No. 1,312,121; Aug. 5; v. 265; p. 51.

Saws, Centering device for circular. I. Steenrod. No. 1,313,133; Aug. 12; v. 265; p. 276.

Saws, Handle for one-man crosscut. W. M. Ruggles. No. 1,312,425; Aug. 5; v. 265; p. 107.

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Scraper. R. P. McNeill. No. 1,312,128; Aug. 5; v. 265; p. 52.

Scraping and excavating apparatus. J. E. Redmond. (Relasne.) No. 1,317,717; Aug. 19; v. 265; p. 433.

Scraping vegetable stalks, Machine for. T. Villamor. No. 1,314,100; Aug. 26; v. 265; p. 509.

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Disappearing window-screen.
Metal screen.

Screen. F. E. Johnson. No. 1,312,545; Aug. 12; v. 265; p. 160.

Screen. C. J. Rotbermel. No. 1,314,219; Aug. 26; v. 265; p. 532.

Screen for stone, slag, or the like. D. B. Hoover. No. 1,314,194; Aug. 26; v. 265; p. 526.

Screening apparatus. J. E. Yernaux. No. 1,312,664; Aug. 12; v. 265; p. 184.

Screw or bolt, One-way. A. E. Miller and C. E. Anshie. No. 1,312,409; Aug. 5; v. 265; p. 104.

Screw-threads by chasers, Device for cutting. E. M. Willey. No. 1,313,568; Aug. 19; v. 265; p. 374.

Scutcher. B. S. Summers. No. 1,313,841; Aug. 19; v. 265; p. 425.

Seal-lock. H. W. Daggs. No. 1,313,270; Aug. 19; v. 265; p. 319.

Sealing-wax applicator. W. H. Ogden. No. 1,312,347; Aug. 5; v. 265; p. 91.

Seam. W. O. Trotman. No. 1,311,927; Aug. 5; v. 265; p. 14.

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Senta, Machine for upholstering chair. J. Potter, J. De Long, and F. Pike. No. 1,314,430; Aug. 26; v. 265; p. 573.

Sectional support. T. J. Morris. No. 1,312,861; Aug. 12; v. 265; p. 222.

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Seed-packets, Rack for. L. D. Kroff. No. 1,311,975; Aug. 5; v. 265; p. 23.

Self-feeding container. E. A. Tannaas. No. 1,313,613; Aug. 19; v. 265; p. 383.

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Separating solids from suspension in liquids and apparatus therefor. J. W. Gee. No. 1,312,316; Aug. 5; v. 265; p. 86.

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Ore-separator.
Pneumatic separator.

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Settling-tank. L. D. MacRea and P. A. MacEachern. No. 1,313,714; Aug. 19; v. 265; p. 402.

Sewer-cleaning device. I. J. Healey. No. 1,313,378; Aug. 19; v. 265; p. 338.

Sewer-trap. J. F. Vert. No. 1,312,711; Aug. 12; v. 265; p. 193.

Sewing apparatus, Controlling device for filled-bag. D. S. Seymour. No. 1,314,368; Aug. 26; v. 265; p. 560.

Sewing-machine. H. Corral. No. 1,313,265; Aug. 19; v. 265; p. 318.

Sewing-machine. A. F. Littlefield. No. 1,312,637; Aug. 12; v. 265; p. 179.

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Sewing machine and trimming mechanism therefor. J. R. Moffatt. No. 1,312,412; Aug. 5; v. 265; p. 104.

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Sewing-machines, Feeding mechanism for. J. Berger, Jr. No. 1,312,823; Aug. 12; v. 265; p. 215.

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Sewing-machines, Take-up mechanism for. J. R. Moffatt. No. 1,313,721; Aug. 19; v. 265; p. 403.

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Shade and curtain bracket. C. A. Roblnette. No. 1,313,915; Aug. 26; v. 265; p. 473.

Shade-bracket. B. P. Overman. No. 1,314,358; Aug. 26; v. 265; p. 538.

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Shaft-coupling. O. Ofeldt. No. 1,313,109; Aug. 12; v. 265; p. 271.

Shaft-coupling, Flexible. W. R. Fox. No. 1,314,320; Aug. 26; v. 265; p. 551.

Shaffing, Universal joint for. J. F. O'Connor. No. 1,314,015; Aug. 26; v. 265; p. 493.

Shaking mixer. J. H. Falge. No. 1,312,569; Aug. 12; v. 265; p. 166.

Shank and handle. M. W. Hard. No. 1,314,078; Aug. 26; v. 265; p. 504.

Sharpener, Knife. C. B. Weaver. No. 1,312,654; Aug. 12; v. 265; p. 182.

Sharpening device. V. B. Harrison. No. 1,312,538; Aug. 12; v. 265; p. 159.

Shear. H. C. Smith. No. 1,313,900; Aug. 26; v. 265; p. 482.

Shear mechanism. L. Jones. No. 1,312,182; Aug. 5; v. 265; p. 62.

Sheet-feeder. C. W. Harrold. No. 1,312,539; Aug. 12; v. 265; p. 159.

Sheet-feeder. C. W. Harrold. No. 1,312,540; Aug. 12; v. 265; p. 159.

Sheet-feeding mechanism. I. F. Niles. No. 1,312,865; Aug. 12; v. 265; p. 223.

Sheet-feeding mechanism. H. D. Penney and G. F. Russ. No. 1,314,359; Aug. 26; v. 265; p. 559.

Sheet-form material, Machine for cutting. C. B. Gray. No. 1,313,481; Aug. 19; v. 265; p. 358.

Sheet-handling machine. S. O. Gosa. No. 1,311,886; Aug. 5; v. 265; p. 7.

Sheet-iron plate. B. Abrahamson. No. 1,312,937; Aug. 12; v. 265; p. 237.

Sheet metal, Apparatus for the manufacture of stabbed. T. Gare. No. 1,313,809; Aug. 19; v. 265; p. 419.

Sheet-metal-cutting machine. H. H. Spang. No. 1,314,286; Aug. 26; v. 265; p. 545.

Sheet metal, Lacquering. T. L. Talliaferro. No. 1,312,815; Aug. 12; v. 265; p. 214.

Sheet-metal structure and the manufacture thereof, Hollow. T. Barrow. No. 1,312,152; Aug. 5; v. 265; p. 56.

Sheet-metal wheel. J. Ledwinka. No. 1,311,979; Aug. 5; v. 265; p. 24.

Sheet-steel car end. V. E. Nilsson. No. 1,313,128; Aug. 12; v. 265; p. 275.

Shelf-support. A. F. Carlin. No. 1,312,891; Aug. 12; v. 265; p. 228.

Shell, Depth. L. T. Bates. No. 1,312,227; Aug. 5; v. 265; p. 70.

Shell, Explosive. W. M. Smith. No. 1,313,129; Aug. 12; v. 265; p. 270.

Shell, Foliating. E. O. F. R. du Masnel. No. 1,313,940; Aug. 26; v. 265; p. 478.

Shells or the like, Making booster-casings and adapters for gas. H. G. Carlson. No. 1,312,517; Aug. 12; v. 265; p. 155.

Shield, stand. H. L. Elsie. No. 1,314,053; Aug. 26; v. 265; p. 500.

Shingle-machine. O. Hultberg. No. 1,313,224; Aug. 12; v. 265; p. 291.

Ship, Concrete. S. Gillett. No. 1,313,592; Aug. 19; v. 265; p. 379.

Ship construction. S. Asakawa. No. 1,313,663; Aug. 19; v. 265; p. 392.

Ship construction. J. McGrath. No. 1,314,069; Aug. 26; v. 265; p. 503.

Ship-launching device. J. N. Horglin. No. 1,313,786; Aug. 19; v. 265; p. 415.

Ship propulsion, Electric. W. L. R. Emmet. No. 1,313,078; Aug. 12; v. 265; p. 265.

Ship propulsion, Electric. W. L. R. Emmet. No. 1,313,079; Aug. 12; v. 265; p. 265.

Ship propulsion, Electric. C. Macmillan. No. 1,313,102; Aug. 12; v. 265; p. 270.

Ship-salvaging method and apparatus. H. D. Deam. No. 1,312,473; Aug. 5; v. 265; p. 117.

Ships, Apparatus for raising. H. J. Bennett. No. 1,314,119; Aug. 26; v. 265; p. 512.

Ship's davit. T. H. Marten. No. 1,313,404; Aug. 19; v. 265; p. 343.

Ships, Protective device for. G. E. Ella. No. 1,312,841; Aug. 12; v. 265; p. 219.

Shipping-case. G. T. Kenyon. No. 1,312,403; Aug. 5; v. 265; p. 103.

Shipping-case for films and the like. P. Kempter. No. 1,314,269; Aug. 26; v. 265; p. 542.

Shirt. A. Warshawer. No. 1,313,932; Aug. 26; v. 265; p. 476.

Shock-absorber. E. W. Hofstatter. No. 1,314,266; Aug. 26; v. 265; p. 541.

Shock-absorber. E. Siegel. No. 1,313,843; Aug. 19; v. 265; p. 389.

Shock-absorber. E. P. Thomas. No. 1,313,763; Aug. 19; v. 265; p. 411.

Shock-absorbers and the like, Attaching device for. A. J. H. Kniskerk. No. 1,314,272; Aug. 26; v. 265; p. 542.

Shoe. J. H. Gentile. No. 1,314,074; Aug. 26; v. 265; p. 504.

Shoe-closure. H. M. Renner. No. 1,314,284; Aug. 26; v. 265; p. 544.

Shoe element, Detachable. W. Purnhagen. No. 1,311,914; Aug. 5; v. 265; p. 12.

Shoe-heel. J. A. Formanack. No. 1,314,319; Aug. 26; v. 265; p. 551.

Shoe-relasting machine. R. W. Haisdel. No. 1,312,970; Aug. 12; v. 265; p. 186.

Shoe-tip perforator. R. Schwalbach. No. 1,313,956; Aug. 26; v. 265; p. 481.

Shoe-upper-shaping machine. A. Bates. No. 1,312,470; Aug. 5; v. 265; p. 116.

Shoe-uppers, Method of and machine for marking. H. E. Enalla. No. 1,313,943; Aug. 26; v. 265; p. 479.

Shoes, Making. A. F. Bancroft. No. 1,314,239; Aug. 26; v. 265; p. 535.

Shoes, Manufacturing. P. J. Byrnes and B. H. Osburn. No. 1,313,065; Aug. 12; v. 265; p. 263.

Shoes, Producing soles for. K. Engel. No. 1,313,887; Aug. 26; v. 265; p. 468.

Shotgun, Breakdown. T. C. Johnson and C. E. Billaard. No. 1,314,180; Aug. 26; v. 265; p. 527.

Shovel, scoop, &c. J. S. Surbaugh. No. 1,312,766; Aug. 12; v. 265; p. 204.

Shuttle. R. S. Atwood. No. 1,312,660; Aug. 12; v. 265; p. 184.

Shuttle, Tattling. M. L. Porter. No. 1,314,209; Aug. 26; v. 265; p. 529.

Side-delivery rotary rake. L. R. Clausen. No. 1,313,880; Aug. 26; v. 265; p. 466.

Sifter attachment, Flour. H. P. Dachselt. No. 1,314,467; Aug. 26; v. 265; p. 579.

Sifting apparatus, Flour. E. T. Parsons. No. 1,313,729; Aug. 19; v. 265; p. 404.

Sign, Advertising. R. B. Craig. No. 1,312,237; Aug. 5; v. 265; p. 72.

Sign, Automatic. S. C. Swindler. No. 1,313,757; Aug. 19; v. 265; p. 410.

Sign, Changeable. J. W. Thoreau. No. 1,314,165; Aug. 26; v. 265; p. 521.

Sign, Display. D. E. Waters. No. 1,313,434; Aug. 19; v. 265; p. 349.

Signal. See—
Automobile-signal.
Railway-crossing signal.
Danger-signal.
Vehicle-signal.

Electrical grade-crossing signal.

Signal. H. J. Eagle. No. 1,313,078; Aug. 19; v. 265; p. 304.

Signal. S. B. Shaw. No. 1,313,009; Aug. 19; v. 265; p. 382.

Signal, W. Sparks. No. 1,312,060; Aug. 5; v. 265; p. 39.

Signal. J. D. Thompson. No. 1,312,217; Aug. 5; v. 265; p. 68.

Signal apparatus to indicate failure of lubricating systems, Automatic. L. G. Hunkner and S. J. Shiley. No. 1,312,097; Aug. 5; v. 265; p. 46.

Signal device. J. A. Reischmann, Jr. No. 1,311,997; Aug. 5; v. 265; p. 27.

Signal device. C. M. Rose and A. L. Hamlin. No. 1,313,017; Aug. 12; v. 265; p. 253.

Signaling apparatus. F. W. Wood. No. 1,312,603; Aug. 12; v. 265; p. 172.

Signaling apparatus, Submarine. C. S. Bookwalter and F. A. Daubin. No. 1,313,785; Aug. 19; v. 265; p. 419.

Signaling device. E. Moard. No. 1,313,006; Aug. 12; v. 265; p. 251.

Signaling device. R. F. Power. No. 1,311,995; Aug. 5; v. 265; p. 26.

Signaling, Electrical. L. Cohen. No. 1,313,070; Aug. 12; v. 265; p. 204.

Signal system, Electric. W. E. Laidley. No. 1,314,339; Aug. 26; v. 265; p. 555.

Signalling, &c. Antenna arrangement for wireless. G. Reuthe. No. 1,314,095; Aug. 26; v. 265; p. 508.

Signalling system. A. E. Lundell and E. H. Clark. No. 1,312,701; Aug. 12; v. 265; p. 208.

Signalling system. C. E. Scribner and J. L. McQuarrie. No. 1,312,809; Aug. 12; v. 265; p. 212.

Signalling system, Electrical railway. F. J. Marsh. No. 1,313,904; Aug. 26; v. 265; p. 471.

Signalling system, Secret. R. D. Parker. No. 1,312,572; Aug. 12; v. 265; p. 166.

Signalling system, Secret. R. E. Pierce. No. 1,312,574; Aug. 12; v. 265; p. 167.

Signalling system, Wireless. E. F. W. Alexanderson. No. 1,313,042; Aug. 12; v. 265; p. 258.

Signalling system, Wireless. J. Langmuir. No. 1,313,093; Aug. 12; v. 265; p. 268.

Silencer. W. G. Wilson. No. 1,313,971; Aug. 26; v. 265; p. 485.

Silk and silk-wastes, Producing foam or froth baths for ungumming. P. Schmid. No. 1,313,235; Aug. 12; v. 265; p. 296.

Silo. O. A. Coons. No. 1,313,369; Aug. 19; v. 265; p. 337.

Sink attachment. J. E. Zboyan. No. 1,313,153; Aug. 12; v. 265; p. 280.

Skate, Roller. J. Stelger. No. 1,314,159; Aug. 26; v. 265; p. 520.

Skates. Roll or wheel for roller. J. M. Lenke. No. 1,312,555; Aug. 12; v. 265; p. 221.

Skeel-skeel. L. D. Pangborn. No. 1,313,502; Aug. 19; v. 265; p. 362.

Slabs, billets, &c. Machine for charging. E. E. Brosius. No. 1,313,619; Aug. 19; v. 265; p. 384.

Slaghtering apparatus. W. H. Hasken. No. 1,313,383; Aug. 19; v. 265; p. 339.

Sled, Automobile-wheel. L. N. Kelly. No. 1,313,828; Aug. 19; v. 265; p. 422.

Slicing machine, Multiple. C. Sonnemann. No. 1,313,753; Aug. 19; v. 265; p. 409.

Slide-closure. C. D. Coker. No. 1,313,580; Aug. 19; v. 265; p. 377.

Smoke-jack. J. W. Orrock. No. 1,314,016; Aug. 26; v. 265; p. 493.

Smoking device. L. Falkenau. No. 1,313,280; Aug. 19; v. 265; p. 321.

Smot, Machine for treating. A. Struble. No. 1,312,647; Aug. 12; v. 265; p. 151.

Soap-cutter. J. E. McKelvie. No. 1,312,335; Aug. 5; v. 265; p. 89.
 Soap-floater. H. A. Staab. No. 1,314,020; Aug. 26; v. 265; p. 405.
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 Vehicle, Dumping. J. Klein. No. 1,314,405; Aug. 26; v. 265; p. 568.
 Vehicle-frame. L. Taussig. No. 1,312,648; Aug. 12; v. 265; p. 181.
 Vehicle frame, Demountable motor. G. T. D. Lenfestey. No. 1,313,429; Aug. 19; v. 265; p. 348.

Vehicle-indicator. I. R. McManus. No. 1,313,398; Aug. 19; v. 265; p. 342.
 Vehicle lock, Motor. T. A. Perdue. No. 1,314,420; Aug. 26; v. 265; p. 572.
 Vehicle, Motor. M. Birkgit. No. 1,312,383; Aug. 5; v. 265; p. 99.
 Vehicle, Motor. W. C. Brinton. No. 1,313,937; Aug. 26; v. 265; p. 477.
 Vehicle, Motor. J. D. Ingram. No. 1,312,733; Aug. 12; v. 265; p. 197.
 Vehicle, Motor. C. C. Keebler. No. 1,312,993; Aug. 12; v. 265; p. 249.
 Vehicle-signal. C. J. Ledwidge. No. 1,314,407; Aug. 26; v. 265; p. 568.
 Vehicle, Occupant-propelled. J. W. Arney. No. 1,313,157; Aug. 12; v. 265; p. 281.
 Vehicle rim and tire. H. M. Flek. No. 1,312,506; Aug. 5; v. 265; p. 122.
 Vehicle-spring. W. H. Crossley. No. 1,314,248; Aug. 26; v. 265; p. 538.
 Vehicle-spring. J. Pichoud. No. 1,311,913; Aug. 5; v. 265; p. 12.
 Vehicle-springs, Vise for holding. V. R. Cannon. No. 1,313,256; Aug. 19; v. 265; p. 316.
 Vehicle steering mechanism. E. E. Keller. No. 1,312,788; Aug. 12; v. 265; p. 208.
 Vehicle, Tank. C. V. Lucius. No. 1,311,981; Aug. 5; v. 265; p. 24.
 Vehicle-top. W. J. Elsom. No. 1,313,076; Aug. 12; v. 265; p. 265.
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 Vehicle-wheel. H. E. Moretan. No. 1,314,002; Aug. 26; v. 265; p. 507.
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 Vehicles and the like, Lock for motor. C. J. Heinrichs. No. 1,313,891; Aug. 26; v. 265; p. 468.
 Vehicles, Attachment for motor. U. S. Daniel. No. 1,312,950; Aug. 12; v. 265; p. 241.
 Vehicles, Broad-gauge attachment for. C. W. Lasserre. No. 1,313,394; Aug. 19; v. 265; p. 341.
 Vehicles, Combined brake and jack for. G. A. Rogers. No. 1,311,998; Aug. 5; v. 265; p. 27.
 Vehicles, Controlling means for engine-generator-driven. H. Lamp. No. 1,313,097; Aug. 12; v. 265; p. 269.
 Vehicles, Means for controlling the electric lighting of motor. W. Curtis. No. 1,313,583; Aug. 19; v. 265; p. 377.
 Vehicles, Mileage and time indicator for. R. Picard. No. 1,312,747; Aug. 12; v. 265; p. 199.
 Vehicles, Pedal control for motor. T. C. Purcell. No. 1,314,210; Aug. 26; v. 265; p. 529.
 Vehicles, Propelling mechanism for. J. A. Brantley. No. 1,312,828; Aug. 12; v. 265; p. 216.
 Vehicles, Signaling device for. G. A. Williams. No. 1,314,280; Aug. 26; v. 265; p. 545.
 Vehicles, Spring suspension for. G. A. Stanton. No. 1,312,284; Aug. 5; v. 265; p. 80.
 Vehicles, Steering mechanism for motor. C. L. Heyer-mann. No. 1,312,909; Aug. 12; v. 265; p. 231.
 Vehicles, Suspension of. P. D. Cosgrove. No. 1,313,167; Aug. 12; v. 265; p. 283.
 Vehicles, Transmission mechanism for motor. J. M. Larsen. No. 1,313,392; Aug. 19; v. 265; p. 341.
 Vehicles with electric motors rigidly mounted on spring-supported frames, Driving mechanism for railway. O. Tschanz. No. 1,311,928; Aug. 5; v. 265; p. 14.
 Vending-machine. G. R. Anderson. No. 1,313,046; Aug. 12; v. 265; p. 259.
 Vending-machine. J. A. Webster. No. 1,313,932; Aug. 12; v. 265; p. 250.
 Vending machine, Coin-controlled newspaper. J. H. Roberts. No. 1,314,217; Aug. 26; v. 265; p. 531.
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 Car-ventilator. Rotary ventilator.
 Ventilator. O. C. Mann. No. 1,313,401; Aug. 19; v. 265; p. 342.
 Ventilator for barns and the like, Capola. H. Silver. No. 1,312,586; Aug. 12; v. 265; p. 169.
 Vermis-exterminator. W. R. Woodruff. No. 1,312,223; Aug. 5; v. 265; p. 69.
 Vessel construction. R. P. Durham. No. 1,313,529; Aug. 19; v. 265; p. 367.
 Vessel for containing acids and other liquids. W. Hayhurst. No. 1,313,819; Aug. 19; v. 265; p. 421.
 Vessel, Submarine. G. E. Hoffman. No. 1,313,334; Aug. 19; v. 265; p. 368.
 Vessels afloat, Pneumatic folding attachment for keeping damaged. J. T. Reid. No. 1,312,355; Aug. 5; v. 265; p. 93.
 Vessels, Rail-car for. R. P. White. (Reissue) No. 1,4703; Aug. 5; v. 265; p. 123.
 Vessels, Canvas-securing fastening-clamp for hatches of. E. G. Anderson and A. H. Graham. No. 1,312,496; Aug. 5; v. 265; p. 121.
 Vessels, Fin-guard for. W. P. Jenney. No. 1,313,946; Aug. 26; v. 265; p. 479.
 Vibration-transferring means. H. Smith. No. 1,313,751; Aug. 19; v. 265; p. 408.
 Vise. E. J. Miles. No. 1,311,956; Aug. 5; v. 265; p. 25.

Vise. G. Moore. No. 1,314,351; Aug. 26; v. 265; p. 557.
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 Vise, Saw. F. E. Farr. No. 1,313,728; Aug. 19; v. 265; p. 404.
 Voltage-regulating system. R. E. Cullings. No. 1,312,165; Aug. 5; v. 265; p. 59.
 Volume-corrector. L. C. Loewenstein. No. 1,313,099; Aug. 12; v. 265; p. 269.
 Vulcanizing apparatus. C. A. Shaler. No. 1,312,364; Aug. 5; v. 265; p. 95.
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 Wagon-brake. R. T. Hawley. No. 1,314,469; Aug. 26; v. 265; p. 579.
 Wagon-tongue bounds, Adjustable. A. Tegeler. No. 1,313,967; Aug. 26; v. 265; p. 484.
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 Wall structure. C. Dietrichs. No. 1,312,309; Aug. 5; v. 265; p. 85.
 Walls, Form for hollow molded. J. A. Stubbjare and H. L. Ralf. No. 1,314,099; Aug. 26; v. 265; p. 508.
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 Washboard. E. L. Yunker. No. 1,314,297; Aug. 26; v. 265; p. 547.
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 Insulating-washer. Photoprint-washer.
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 Washing golf-balls and other articles, Machine for. G. H. Lambert. No. 1,313,703; Aug. 19; v. 265; p. 399.
 Washing-machine. G. S. Blakeslee. No. 1,313,433; Aug. 19; v. 265; p. 353.
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 Washing, rinsing, and wringing machine. J. M. E. Franc. No. 1,312,393; Aug. 5; v. 265; p. 101.
 Washboard-support. E. Heltman. No. 1,312,541; Aug. 12; v. 265; p. 159.
 Waste-pipe cleaner. L. Klarmann. No. 1,312,404; Aug. 5; v. 265; p. 103.
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 Watchcase. W. J. Larkin. No. 1,313,030; Aug. 19; v. 265; p. 387.
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 Water-elevating device. V. Miles. No. 1,313,719; Aug. 19; v. 265; p. 403.
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 Water-heater, Automatic. H. P. Fisher. No. 1,312,727; Aug. 12; v. 265; p. 195.
 Water heater, Hot. H. J. Lumley. No. 1,312,408; Aug. 5; v. 265; p. 104.
 Water-motor. O. L. Howe. No. 1,312,326; Aug. 5; v. 265; p. 88.
 Water or fluid heaters with faucets, Attachment for. N. Gerson. No. 1,314,324; Aug. 26; v. 265; p. 552.
 Water-purifying material and making same. H. Kriegshelm. No. 1,312,552; Aug. 12; v. 265; p. 161.
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 Water-tube boiler, Vertical cylindrical. H. Horvath. No. 1,313,692; Aug. 19; v. 265; p. 397.
 Watering trough, Hogg. J. H. Wickstrom. No. 1,313,146; Aug. 12; v. 265; p. 279.
 Waterproofing sheet material. A. L. Clapp. No. 1,312,682; Aug. 12; v. 265; p. 187.
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 Weather-indicator. A. J. De Voe. No. 1,312,961; Aug. 12; v. 265; p. 242.

Weather-strip, Automatic. W. J. Dillard and J. D. Taylor. No. 1,313,799; Aug. 19; v. 265; p. 418.
 Web controlling and tension device. H. A. W. Wood. No. 1,314,178; Aug. 26; v. 265; p. 523.
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 Weed-exterminator. J. Gebringer. No. 1,312,246; Aug. 5; v. 265; p. 73.
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 Welding, Electric. C. F. Mellink. No. 1,312,039; Aug. 5; v. 265; p. 35.
 Welding, Electrode for electric-arc. E. Languepie. No. 1,314,273; Aug. 26; v. 265; p. 542.
 Welding-machine, Electric. J. H. Gravel. No. 1,312,845; Aug. 12; v. 265; p. 219.
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 Well-cover. W. B. McDonald. No. 1,312,556; Aug. 12; v. 265; p. 102.
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 Well-tube-draining device. C. E. Ranney. No. 1,312,423; Aug. 5; v. 265; p. 107.
 Wells, Method and apparatus for casing. C. C. Polysu. No. 1,313,013; Aug. 12; v. 265; p. 252.
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 Demountable wheel. Propeller-wheel.
 Driving-wheel. Resilient wheel.
 Engine drive-wheel. Sheet-metal wheel.
 Flexible gear-wheel. Spring-wheel.
 Garden-rake gear-wheel. Traction-wheel.
 Gear-wheel. Vehicle-wheel.
 Metal wheel.
 Wheel. H. J. Breeze. No. 1,314,462; Aug. 26; v. 265; p. 578.
 Wheel. H. A. House, Jr. No. 1,313,968; Aug. 26; v. 265; p. 488.
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 Wheel-rim, Collapsible. J. H. M. Michon. No. 1,314,416; Aug. 26; v. 265; p. 570.
 Wheel-rim, Expandable. J. H. M. Michon. (Reissue) No. 1,4712; Aug. 19; v. 265; p. 432.
 Wheel-rim, Expandable. J. H. M. Michon. No. 1,314,414; Aug. 26; v. 265; p. 569.
 Wheel transmission. Cam. J. P. Johansson. No. 1,312,328; Aug. 5; v. 265; p. 88.
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 Wheels, Ground-engaging surface of traction. O. W. Johnson. No. 1,311,972; Aug. 5; v. 265; p. 22.
 Wheels, Rim for vehicle. R. S. Bryant. No. 1,313,981; Aug. 26; v. 265; p. 486.
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 Wheelbarrow. C. B. Johnson. No. 1,312,990; Aug. 12; v. 265; p. 248.
 Whiffletree. E. D. Townsend. No. 1,313,430; Aug. 19; v. 265; p. 348.
 Whistle, Steam. D. Brews. No. 1,313,251; Aug. 19; v. 265; p. 315.
 Wick holder. G. A. Hallvèges. No. 1,312,536; Aug. 12; v. 265; p. 158.
 Windshield-cleaning device. P. Hinder and E. T. Dieringer. No. 1,313,578; Aug. 19; v. 265; p. 376.
 Windshield support. J. H. Albrecht. No. 1,312,508; Aug. 12; v. 265; p. 153.
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 Winding mechanism for talking-machines. L. A. Freedman. No. 1,312,624; Aug. 12; v. 265; p. 177.
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 Window-shade mounting. A. H. Carrier. No. 1,313,672; Aug. 19; v. 265; p. 393.
 Window stay. Chasement. L. Hanson. No. 1,312,727; Aug. 12; v. 265; p. 196.
 Wire-bound-box machine. S. F. Bauwens. No. 1,313,854; Aug. 19; v. 265; p. 428.
 Wire-bound-box machine. S. F. Bauwens. No. 1,313,855; Aug. 19; v. 265; p. 428.
 Wire cable. W. N. Rettinger. No. 1,312,872; Aug. 12; v. 265; p. 224.
 Wire-fence tool. D. M. and D. B. Shoun. No. 1,314,434; Aug. 26; v. 265; p. 574.
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 Wire-holder. A. P. Davis. No. 1,313,795; Aug. 19; v. 265; p. 417.
 Wire-making machine, insulated. W. E. Cook. No. 1,312,954; Aug. 12; v. 265; p. 240.
 Wire or radio communications. Apparatus for use in. L. de Forest. No. 1,314,253; Aug. 26; v. 265; p. 538.
 Wire-splicing tool. H. H. Heuberger. No. 1,314,079; Aug. 26; v. 265; p. 565.
 Wire-splicing tool. T. King. No. 1,313,488; Aug. 19; v. 265; p. 359.
 Wire straightening and cutting-off machine. E. K. Shuster. No. 1,313,024; Aug. 12; v. 265; p. 255.
 Wire-stretcher. F. W. Schumacher. No. 1,313,339; Aug. 19; v. 265; p. 331.
 Wire-uncoiling apparatus. R. J. Smirle. No. 1,312,058; Aug. 5; v. 265; p. 38.
 Wire-uncoiling machine. W. E. Cook. No. 1,312,062; Aug. 12; v. 265; p. 240.
 Wireless telephone system for railways and the like. Inductive. V. G. Werner and K. H. Warfringe. No. 1,312,068; Aug. 5; v. 265; p. 41.
 Wood-fiber products. Size for. B. W. Sidwell. No. 1,313,343; Aug. 19; v. 265; p. 332.
 Wood-pulp plants. Sieve for. A. G. Westad and E. L. Hagg. No. 1,313,145; Aug. 12; v. 265; p. 279.
 Wood separators. Producing. T. F. Ferry. No. 1,312,243; Aug. 5; v. 265; p. 73.
 Wood-strip-cutting machine. A. H. Nurdyke and J. E. Norris. No. 1,313,325; Aug. 19; v. 265; p. 328.
 Woodworking-machine. C. A. Oveson. No. 1,313,950; Aug. 26; v. 265; p. 480.
 Work-support. C. C. Blake. No. 1,314,385; Aug. 26; v. 265; p. 564.
 Wrapping-machine. E. L. Smith and A. E. Phelon. No. 1,313,868; Aug. 19; v. 265; p. 430.
 Wrapping-machine. E. L. Smith and A. E. Phelon. No. 1,313,864; Aug. 19; v. 265; p. 430.
 Wrapping process. J. G. Jones. No. 1,313,234; Aug. 12; v. 265; p. 296.
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 Pipe-wrench.
 Wrench. J. E. Baker. No. 1,314,044; Aug. 26; v. 265; p. 498.
 Wrench. L. D. Lewis. No. 1,312,406; Aug. 5; v. 265; p. 103.
 Wrench. J. F. Saylor. No. 1,312,456; Aug. 5; v. 265; p. 113.
 Wrench-heads. Machine for forming. E. C. Smith. No. 1,313,345; Aug. 19; v. 265; p. 332.
 Wrench in which no detrimental play can obtain. Screw. N. M. Bernardi. No. 1,313,575; Aug. 19; v. 265; p. 376.
 Wrench. Petcock. L. G. Hartdorn. No. 1,311,880; Aug. 5; v. 265; p. 7.
 Writing-machines. Re-aligning mechanism for. P. H. Tingley. No. 1,312,008; Aug. 5; v. 265; p. 40.
 Writing-pad. G. J. Franks. No. 1,313,944; Aug. 26; v. 265; p. 470.
 Zinc. Refining. S. Hultdt. No. 1,312,480; Aug. 5; v. 265; p. 118.
 Zithers. Playing attachment for. H. A. Ballard. No. 1,314,117; Aug. 26; v. 265; p. 512.

ALPHABETICAL LIST OF DESIGNS.

- Advertising display-case. C. D. Oversmith. No. 53,688; Aug. 5; v. 265; p. 126.
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 Aquarium. M. Stein. No. 53,710; Aug. 19; v. 265; p. 437.
 Aquarium and fountain. M. Stein. No. 53,718; Aug. 19; v. 265; p. 437.
 Article of manufacture. L. V. Arnson. No. 53,725; Aug. 26; v. 265; p. 584.
 Ash-can, garbage-can, or like receptacle. H. J. Schaffer. No. 53,691; Aug. 5; v. 265; p. 127.
 Automobile-body. B. W. Twyman. No. 53,722; Aug. 19; v. 265; p. 438.
 Automobile-radiator hood. G. W. Kerr. No. 53,714; Aug. 19; v. 265; p. 437.
 Automobile-radiator ornament. A. E. Wolter. No. 53,739; Aug. 26; v. 265; p. 589.
 Automobile running-boards. Mat for. J. T. Hayne. No. 53,737; Aug. 26; v. 265; p. 586.
 Automobiles. Running-board for. J. T. Hayne. No. 53,736; Aug. 26; v. 265; p. 586.
 Badge, emblem, button, pin, ring-top, watch-charm, or similar article. F. B. Hollenbeck. No. 53,739; Aug. 26; v. 265; p. 586.
 Badge, emblem, or similar article of manufacture. G. E. Frater. No. 53,733; Aug. 26; v. 265; p. 585.
 Bag for containing merchandise. J. H. Wilkins. No. 53,723; Aug. 19; v. 265; p. 438.
 Boots, shoes, or similar articles. Tap for. E. J. Emery. No. 53,732; Aug. 26; v. 265; p. 585.
 Bottle or jar. L. J. Taylor. No. 53,694; Aug. 5; v. 265; p. 127.
 Bottle-stopper. T. M. Moore. No. 53,746; Aug. 26; v. 265; p. 587.
 Bracket. H. G. Fltz Gerald. No. 53,679; Aug. 5; v. 265; p. 123.
 Can or similar receptacle. Sifter-top. M. H. Connor. No. 53,674; Aug. 5; v. 265; p. 124.
 Carton. P. K. Wrigley. No. 53,724; Aug. 19; v. 265; p. 438.
 Compression, combustion, and spark-plug tester. L. B. Martell. No. 53,686; Aug. 5; v. 265; p. 126.
 Display-cabinet. J. L. Flannery, Jr. No. 53,680; Aug. 5; v. 265; p. 125.
 Doll, statuette, sculpture, or other article of similar nature. I. S. Weber and J. Kaskel. Nos. 53,756-7; Aug. 26; v. 265; p. 589.
 Doll's cradle. F. Baranillo. No. 53,670; Aug. 5; v. 265; p. 123.
 Edging. C. S. King. No. 53,740; Aug. 26; v. 265; p. 586.
 Electrical heater. F. Kuhn and J. A. Hand. No. 53,684; Aug. 5; v. 265; p. 126.
 Emblem, an article of manufacture. F. G. Vogler. No. 53,755; Aug. 26; v. 265; p. 589.
 Emblem, button, ring-top, pin, &c. C. Dean. No. 53,705; Aug. 19; v. 265; p. 435.
 Emblem. International patriotic. P. O. Tognelli. No. 53,720; Aug. 19; v. 265; p. 438.
 Fabric. Textile. J. H. Bunting. No. 53,728; Aug. 26; v. 265; p. 584.
 Fabric. Textile. E. Krupicka. No. 53,743; Aug. 26; v. 265; p. 587.
 Fitting. G. B. Pickop. Nos. 53,689-90; Aug. 5; v. 267; pp. 126-7.
 Flag, banner, pennant, sign, emblem, &c. I. M. Beemer. No. 53,699; Aug. 19; v. 268; p. 434.
 Flag, pennant, sign, emblem, &c. J. W. Bell, Jr. No. 53,700; Aug. 19; v. 265; p. 434.
 Flag. Service. L. Bartelmeh. No. 53,698; Aug. 19; v. 265; p. 434.
 Flytrap. Glass. F. Klotz. No. 53,741; Aug. 26; v. 265; p. 586.
 Fob, pendant, brooch, pin, or similar article. C. F. Hoffbauer. No. 53,738; Aug. 26; v. 265; p. 586.
 Gasoline-dispenser. J. H. Brady. No. 53,671; Aug. 5; v. 265; p. 124.
 Graphophone-case. W. H. Friedline. No. 53,734; Aug. 26; v. 265; p. 585.
 Hand-bag frame. W. Turton. No. 53,721; Aug. 19; v. 265; p. 438.
 Lare. M. H. Daudy. Nos. 53,729-31; Aug. 26; v. 265; p. 585.
 Lamp-front frame. H. E. Cole. No. 53,673; Aug. 5; v. 265; p. 124.
 Lighting-fixture. H. C. Adam. Nos. 53,696-7; Aug. 10; v. 265; p. 434.
 Lighting-fixture. Glass shade or bowl for. N. Kopp. No. 53,742; Aug. 26; v. 265; p. 587.
 Milling-machine frame. C. D. Oesterleu and L. H. Blood. No. 53,687; Aug. 5; v. 265; p. 126.
 Nut bowl and cracker. Combination. J. S. and M. O. Kepler. Nos. 53,711-12; Aug. 19; v. 265; p. 436.
 Nutcracker. J. S. and M. O. Kepler. No. 53,713; Aug. 19; v. 265; p. 436.
 Odometer face-plate. J. Berge. No. 53,726; Aug. 26; v. 265; p. 584.
 Phonograph-cabinet. J. N. Vasey. Nos. 53,753-4; Aug. 26; v. 265; pp. 588-9.
 Photo frame or stand. C. and D. Campbell. No. 53,704; Aug. 19; v. 265; p. 435.
 Pin. W. J. Ralund. No. 53,752; Aug. 26; v. 265; p. 588.
 Pin. L. L. Whitaker and C. C. Ishman. No. 53,758; Aug. 26; v. 265; p. 589.
 Pin and picture-frame. E. M. Dialynas. No. 53,707; Aug. 19; v. 265; p. 435.
 Pin, brassard, or badge. H. I. Pratt. No. 53,748; Aug. 26; v. 265; p. 588.
 Pump casing. Fuld. A. Wiltz. No. 53,695; Aug. 5; v. 265; p. 127.
 Radiator-core. M. Litman. No. 53,744; Aug. 26; v. 265; p. 587.
 Shoe ornament. S. Kivells. No. 53,751; Aug. 26; v. 265; p. 588.
 Sign-post. D. S. McDannell, Jr. (Release). No. 14,711; Aug. 19; v. 265; p. 432.
 Signal-horn casing. H. H. Boyce. No. 53,702; Aug. 19; v. 265; p. 435.
 Soap fixture. Liquid. M. H. Jacobs. No. 53,682; Aug. 5; v. 265; p. 125.
 Spoon, fork, or similar article. G. C. Lunt. No. 53,685; Aug. 5; v. 265; p. 126.
 Stand. Beverage-dispensing. C. M. Earl. No. 53,708; Aug. 19; v. 265; p. 436.
 Statuette or figure. F. Blachitz. No. 53,701; Aug. 19; v. 265; p. 434.
 Statuette or similar article. R. Smith. No. 53,716; Aug. 19; v. 265; p. 437.
 Stove. A. Sokolowaki. No. 53,717; Aug. 19; v. 265; p. 437.
 Ticket-dispensing machines. Casing for. J. F. Dwyer. No. 53,678; Aug. 5; v. 265; p. 125.
 Tire. C. W. Greene. No. 53,709; Aug. 19; v. 265; p. 436.
 Tire-casing. A. Breitenstein. No. 53,672; Aug. 5; v. 265; p. 124.
 Tire-casing. A. Breitenstein. No. 53,727; Aug. 26; v. 265; p. 584.
 Tire-casing. E. A. Reid. Nos. 53,749-50; Aug. 26; v. 265; p. 588.
 Tire. Vehicle. I. R. Davies. Nos. 53,675-7; Aug. 5; v. 265; p. 124.
 Tire. Vehicle. B. J. Stokes. Nos. 53,692-3; Aug. 5; v. 265; p. 127.
 Tobacco-box. E. F. De Forest. No. 53,706; Aug. 19; v. 265; p. 435.
 Tooth-brush. E. J. Samson. No. 53,715; Aug. 19; v. 265; p. 437.
 Towel-rack. R. E. Jordan. No. 53,683; Aug. 5; v. 265; p. 125.
 Toy tank. M. P. Haupt. No. 53,681; Aug. 5; v. 265; p. 125.
 Trap. Waste-water. H. C. Odenkirk. No. 53,747; Aug. 26; v. 265; p. 587.
 Turn-table. Oven. E. P. Howe. No. 53,710; Aug. 19; v. 265; p. 436.
 Vehicle. Child's. C. F. Hathaway. No. 53,735; Aug. 26; v. 265; p. 586.
 Washing-machine tub. W. S. Miller. No. 53,745; Aug. 26; v. 265; p. 587.

ALPHABETICAL LIST OF TRADE-MARKS.

Abrasive materials and tools. Wonder Stone Co. No. 126,304; Aug. 26; v. 265; p. 631.
 Antiseptic and germicide. C. C. Booth. No. 126,389; Aug. 26; v. 265; p. 627.
 Antiseptic, insecticide, and disinfectant for live stock. Parson's Chemical Works. No. 126,333; Aug. 19; v. 265; p. 451.
 Antiseptic ointment for burns, &c. Josephine W. Toombs. No. 126,302; Aug. 19; v. 265; p. 453.
 Antiseptics. Makitol Company. No. 126,313; Aug. 19; v. 265; p. 453.
 Architectural, &c., data, Loose-leaf sheets containing. Architectural Service Corporation. No. 126,378; Aug. 26; v. 265; p. 627.
 Automobiles into tractors and parts thereof, Attachments for converting. Geneva Tractor Company. No. 126,422; Aug. 26; v. 265; p. 628.
 Bedding. The Standard Bedding Co. No. 126,485; Aug. 26; v. 265; p. 630.
 Belting, hose, packing, tires, Certain named. United States Rubber Company. No. 126,365; Aug. 19; v. 265; p. 453.
 Belting, Leather. Ulmer Leather Co. No. 126,494; Aug. 26; v. 265; p. 630.
 Beverage, Non-alcoholic. A. Ginzburg. No. 126,285; Aug. 19; v. 265; p. 452.
 Beverage, Non-intoxicating. Joseph Krieg-Fink Co. No. 126,440; Aug. 26; v. 265; p. 629.
 Beverage, Non-intoxicating fruit. Montelaise Mercantile Co. No. 126,320; Aug. 19; v. 265; p. 453.
 Beverages, Malicious non-alcoholic. E. Post. No. 126,337; Aug. 19; v. 265; p. 454.
 Beverages, Non-alcoholic. S. Stein. No. 126,439; Aug. 26; v. 265; p. 630.
 Boots and shoes, Leather. The Stetson Shoe Company. No. 126,490; Aug. 26; v. 265; p. 630.
 Bottle stoppers and caps, Jar-closures. Koscherak Siphon-Bottle Works. No. 126,306; Aug. 19; v. 265; p. 453.
 Bread. G. Jackson. No. 126,295; Aug. 19; v. 265; p. 453.
 Bread, biscuits, cakes. W. H. Ward. No. 126,368; Aug. 19; v. 265; p. 453.
 Bread, cakes, sandwiches, pies. C. S. McCord. No. 126,450; Aug. 26; v. 265; p. 629.
 Briquets, Fuel. Fuel Briquet Company. No. 126,279; Aug. 19; v. 265; p. 452.
 Brush holder or case, Shaving. A. L. Holtzman. No. 126,289; Aug. 19; v. 265; p. 452.
 Brushes, Shaving. Warner-Patterson Co. No. 126,360; Aug. 19; v. 265; p. 453.
 Brushes, Timer for ignition systems. Earl L. Miller. No. 126,316; Aug. 19; v. 265; p. 453.
 Butter, Creamery. Rutherford Co. Creamery Assn. No. 126,474; Aug. 26; v. 265; p. 630.
 Buttons, Pearl. Samstag & Hilder Bros. No. 126,343; Aug. 19; v. 265; p. 451.
 Buttons, switches, fuses, &c. Push. F. W. Dettinger. No. 126,329; Aug. 19; v. 265; p. 454.
 Candles. Cox Confectionery Company. No. 126,266; Aug. 19; v. 265; p. 452.
 Candles. K. O. Nymann. No. 126,328; Aug. 19; v. 265; p. 454.
 Candles. Ohio Confection Company. No. 126,330; Aug. 19; v. 265; p. 454.
 Candles, Chocolate. E. Greenfield's Sons. No. 126,426; Aug. 26; v. 265; p. 628.
 Candles, Hard. E. J. Hrach & Sons. No. 126,254; Aug. 19; v. 265; p. 451.
 Candles, Hard. E. J. Hrach & Sons. No. 126,390; Aug. 26; v. 265; p. 627.
 Candy. Palmer Candy Company. No. 126,332; Aug. 19; v. 265; p. 454.
 Candy. Snyder Chaffee Co. No. 126,350; Aug. 19; v. 265; p. 454.
 Candy. Stampede Company. No. 126,352; Aug. 19; v. 265; p. 454.
 Candy. Standard Candy Company. No. 126,353; Aug. 19; v. 265; p. 454.
 Candles, Fumigating. W. G. Lentz. No. 126,445; Aug. 26; v. 265; p. 629.
 Canned corn, canned beans and pork with tomato sauce. Iodierrieden Canning Co. No. 126,292; Aug. 19; v. 265; p. 452.
 Canned fish, fruit, and vegetables. West Coast Packing Co. No. 126,370; Aug. 19; v. 265; p. 453.
 Canned or preserved foods. Evan W. Hook & Co. No. 126,290; Aug. 19; v. 265; p. 452.
 Canned peaches. United Canneries Company of California. No. 126,363; Aug. 19; v. 265; p. 453.

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Canned peaches, plums, &c. G. H. Hammond Company. No. 126,286; Aug. 19; v. 265; p. 452.
 Canned sardines. Booth Fisheries Co. Nos. 126,351-3; Aug. 19; v. 265; p. 451.
 Canned sardines. Lubee Sardine Co. Nos. 126,309-12; Aug. 19; v. 265; p. 453.
 Carbon-remover. Chemical. S. L. Illies. No. 126,433; Aug. 26; v. 265; p. 628.
 Cards, Pictorial correspondence. J. M. Williamson. No. 126,503; Aug. 26; v. 265; p. 631.
 Cards, Playing. J. C. Gaffney. Nos. 126,280-2; Aug. 19; v. 265; p. 452.
 Cereal food drink. The John F. Baner Co. No. 126,244; Aug. 19; v. 265; p. 451.
 Chemicals, medicines, &c. J. Early Wood, Inc. No. 126,505; Aug. 26; v. 265; p. 631.
 Chicks and eggs. E. W. Kellogg. No. 126,301; Aug. 19; v. 265; p. 453.
 Chucks, Lathe and drill. Westcott Chuck Company. No. 126,500; Aug. 26; v. 265; p. 631.
 Cigarette-papers. A. B. Newman Co. No. 126,324; Aug. 19; v. 265; p. 453.
 Cigarettes. The American Tobacco Co. Nos. 126,238-9; Aug. 19; v. 265; p. 451.
 Cigarettes. Hills Brothers Company. No. 126,288; Aug. 19; v. 265; p. 452.
 Cigarettes. P. H. Hurst. No. 126,291; Aug. 19; v. 265; p. 452.
 Cigarettes. Standard Tobacco Company. No. 126,486; Aug. 26; v. 265; p. 630.
 Cigars. Stoddard, Gilbert & Co. Nos. 126,359-61; Aug. 19; v. 265; p. 305.
 Cigars, cheroots, little cigars. E. M. Schwarz & Co. No. 126,345; Aug. 19; v. 265; p. 454.
 Cigars, cigarettes, tobacco, snuff. United Cigar Stores Company of America. No. 126,304; Aug. 19; v. 265; p. 455.
 Cleaner for white shoes. Powdered. H. Josephson. No. 126,436; Aug. 26; v. 265; p. 629.
 Cleansing paste. Hand. M. G. Bullard. No. 126,391; Aug. 26; v. 265; p. 627.
 Clothing, Certain named. Ashford Underwear Co. No. 126,379; Aug. 26; v. 265; p. 627.
 Clothing, Certain named. Elder Manufacturing Co. No. 126,413; Aug. 26; v. 265; p. 628.
 Clothing, Certain named. M. N. Mayhoff Co., Incorporated. No. 126,239; Aug. 5; v. 265; p. 141.
 Coal. Monroe Coal Mining Company. No. 126,319; Aug. 19; v. 265; p. 453.
 Coats, suits, &c. Women's, misses' and children's. Israel Miller & Co. No. 126,435; Aug. 26; v. 265; p. 629.
 Coffee. H. Amisack & Co. Nos. 126,240-3; Aug. 19; v. 265; p. 451.
 Colors, Crude. Nitrate Agencies Company. No. 126,455; Aug. 26; v. 265; p. 629.
 Concrete constructions, Head-supports and bar-spacers for reinforced. E. P. Press. No. 126,469; Aug. 26; v. 265; p. 630.
 Construction material, Certain named. Insulation Manufacturing Company. No. 126,293; Aug. 19; v. 265; p. 453.
 Cough-drops, Candy. W. Gates. No. 126,421; Aug. 26; v. 265; p. 628.
 Cough remedies and ointments. A. A. Krygier. No. 126,441; Aug. 26; v. 265; p. 629.
 Cough-syrup. A. F. Schambler. No. 126,344; Aug. 19; v. 265; p. 454.
 Creams, Face. M. F. Elder. No. 126,412; Aug. 26; v. 265; p. 628.
 Cuticle-remover and nail-polish, Liquid. Northam Warren Corporation. No. 126,458; Aug. 26; v. 265; p. 629.
 Cutlery, Certain named. Bonney Vice & Tool Works, Inc. No. 126,250; Aug. 19; v. 265; p. 451.
 Decolorizing-carbon. Refining Products Corporation. No. 126,469; Aug. 26; v. 265; p. 630.
 Dental cements, alloys, gold, &c. Fawcett & Fawcett. No. 126,275; Aug. 19; v. 265; p. 452.
 Dental enamel. L. S. Smith & Son Manufacturing Company. No. 126,340; Aug. 19; v. 265; p. 454.
 Dental preparation. T. F. Crawford. No. 126,404; Aug. 26; v. 265; p. 628.
 Desks, Combination portable. L. E. Myers. No. 126,322; Aug. 19; v. 265; p. 453.
 Disinfectant. J. J. Bonner. No. 126,388; Aug. 26; v. 265; p. 627.
 Dolls. E. Allison. No. 126,234; Aug. 19; v. 265; p. 451.
 Dolls. A. B. Sterens. No. 126,357; Aug. 19; v. 265; p. 454.
 Drinks, Soft. Peninsula Products Company. No. 126,335; Aug. 19; v. 265; p. 454.

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Dye for coating straw hats, &c. Dyene Chemical Co. No. 126,411; Aug. 26; v. 265; p. 628.
 Egg-preservative. Albany Chemical Co. No. 126,375; Aug. 26; v. 265; p. 627.
 Egg-preservatives and insecticides. Nitrate Agencies Company. No. 126,456; Aug. 26; v. 265; p. 629.
 Egg substitute. Newton Tea & Spice Co. No. 126,325; Aug. 19; v. 265; p. 453.
 Eggs. R. A. Jennings. No. 126,297; Aug. 19; v. 265; p. 453.
 Engine ignition-system. Timera. Internal-combustion. Zenite Metal Company. No. 126,374; Aug. 19; v. 265; p. 455.
 Envelopes, Mailing. Minnesota Wax Paper Company. No. 126,452; Aug. 26; v. 265; p. 629.
 Eye-lotions. M. L. Levitt. No. 126,446; Aug. 26; v. 265; p. 629.
 Feeds, Stock. Southern Feed Company. No. 126,484; Aug. 26; v. 265; p. 630.
 Fertilizers. The Hubbard Fertilizer Company of Baltimore City. No. 126,434; Aug. 26; v. 265; p. 628.
 Fertilizers, Chemical. Molassine Company. No. 126,317; Aug. 19; v. 265; p. 453.
 Files, New and recut. Continental File Corporation. No. 126,402; Aug. 26; v. 265; p. 627.
 Floor-coverings, Prepared. Congoleum Company. No. 126,264; Aug. 19; v. 265; p. 452.
 Flour, Buckwheat. C. A. Gambrell. Man'g Company. No. 126,284; Aug. 19; v. 265; p. 452.
 Flour, Self-rising. Lawrenceburg Roller Mills Co. No. 126,443; Aug. 26; v. 265; p. 629.
 Flour, Wheat. Chippewa Milling Company. No. 126,261; Aug. 19; v. 265; p. 451.
 Flour, Wheat. Ottawa Milling Company. No. 126,331; Aug. 19; v. 265; p. 454.
 Flour, Wheat. Pillsbury Flour Mills Company. No. 126,336; Aug. 19; v. 265; p. 454.
 Food product, Medicated. Vitrocac Company. No. 126,367; Aug. 19; v. 265; p. 455.
 Food products in tins, glass, &c. R. B. Kingman. No. 126,304; Aug. 19; v. 265; p. 453.
 Foods, Cereal breakfast. Postum Cereal Company. No. 126,338; Aug. 19; v. 265; p. 454.
 Foods, Certain named. Price-Hooker Manufacturing Co. No. 126,255; Aug. 19; v. 265; p. 451.
 Foods, Certain named. Price-Hooker Manufacturing Co. No. 126,232; Aug. 12; v. 265; p. 301.
 Fuel, Motors. Pittsburgh By-Product Coke Company. No. 126,465; Aug. 26; v. 265; p. 629.
 Furniture. S. Karpen & Bros. No. 126,299; Aug. 19; v. 265; p. 453.
 Furniture, Certain articles of. Keith-O'Brien Company. No. 126,300; Aug. 19; v. 265; p. 453.
 Furniture, Certain named. Northern Furniture Company. No. 126,327; Aug. 19; v. 265; p. 454.
 Furniture-polish. Vanderpan Brothers. No. 126,306; Aug. 19; v. 265; p. 455.
 Furniture, &c., polish. S. T. Bowen. No. 126,256; Aug. 19; v. 265; p. 451.
 Garments, Electric. William F. Caddock. No. 126,267; Aug. 19; v. 265; p. 452.
 Gases, Medicinal. King Chemical Company. No. 126,303; Aug. 19; v. 265; p. 453.
 Grain cleaners and separators. J. L. Owens Company. No. 126,460; Aug. 26; v. 265; p. 629.
 Grape-juice, Non-alcoholic. Maurice K. Blackman. No. 126,248; Aug. 19; v. 265; p. 451.
 Grease, Lubricating. Flake Brothers Refining Co. No. 126,279; Aug. 19; v. 265; p. 452.
 Greases and oils, Lubricating. Monarch Manufacturing Company. No. 126,318; Aug. 19; v. 265; p. 453.
 Hair-grower and pressing-oil. J. A. Sims. No. 126,462; Aug. 26; v. 265; p. 630.
 Hair-nets. E. T. Mittelstaedt. No. 126,453; Aug. 26; v. 265; p. 629.
 Hair-cream. J. C. Ayer Co. No. 126,385; Aug. 26; v. 265; p. 627.
 Hair-cream. Hays Manufacturing Co. No. 126,430; Aug. 26; v. 265; p. 628.
 Hair-cream preparation. Calina Hair Restorative Company. No. 126,394; Aug. 26; v. 265; p. 627.
 Hair-tonics, &c. C. Crockett. No. 126,405; Aug. 26; v. 265; p. 628.
 Hats, Ladies'. J. Glitter Co. No. 126,424; Aug. 26; v. 265; p. 628.
 Hats, Men's, women's, and children's. Frank Katz Hat Co. No. 126,437; Aug. 26; v. 265; p. 629.
 Honey. The American Sugar Refining Company. No. 126,377; Aug. 26; v. 265; p. 627.
 Hosiery. Chipman Knitting Mills. No. 126,400; Aug. 26; v. 265; p. 627.
 Hosiery. A. V. Victorina & Co. No. 126,498; Aug. 26; v. 265; p. 631.
 Ice-cream freezer. Simmons Hardware Company. No. 126,347; Aug. 19; v. 265; p. 454.
 Icing for use as a food. American Sugar Refining Company. No. 126,237; Aug. 19; v. 265; p. 451.
 Insecticide. T. Delikat. No. 126,409; Aug. 26; v. 265; p. 628.
 Insecticide and disinfectant for live stock. Parsons Chemical Works. No. 126,334; Aug. 10; v. 265; p. 454.
 Instruments, Scientific. Chicago Apparatus Company. No. 126,260; Aug. 19; v. 265; p. 451.
 Intravenous injections. Lucas Laboratories. No. 126,447; Aug. 26; v. 265; p. 629.

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Knitted garments. W. Hall. No. 126,420; Aug. 26; v. 265; p. 628.
 Knives, Table and fruit. John Russell Cutlery Company. No. 126,471; Aug. 26; v. 265; p. 630.
 Lathes, Metal-working engine. The Cincinnati Lathe and Tool Company. No. 126,262; Aug. 19; v. 265; p. 452.
 Liniment for sprains, rheumatism, &c. J. Therrien. No. 126,403; Aug. 26; v. 265; p. 630.
 Macaroni and spaghetti. Kansas City Macaroni Co. No. 126,298; Aug. 19; v. 265; p. 453.
 Magnets, Permanent. Esterline Company. No. 126,273; Aug. 19; v. 265; p. 452.
 Medicinal preparation. A. Amamoto. No. 126,235; Aug. 19; v. 265; p. 451.
 Medicinal preparations for hogs. A. H. Kerr. No. 126,229; Aug. 5; v. 265; p. 141.
 Medicinal preparation used as a nerve-tonic. F. A. Greene. No. 126,425; Aug. 26; v. 265; p. 628.
 Medicines for constipation, &c. G. W. Fillauer. No. 126,276; Aug. 19; v. 265; p. 452.
 Merino-powder. American Sugar Refining Company. No. 126,376; Aug. 26; v. 265; p. 627.
 Metal-polish. Ponsie Brothers. No. 126,467; Aug. 26; v. 265; p. 630.
 Milk, Evaporated and condensed. Sheffield Farms Co. No. 126,478; Aug. 26; v. 265; p. 630.
 Molasses. Pure Cane Molasses Corporation. No. 126,339; Aug. 19; v. 265; p. 454.
 Mouth-wash. Five Points Drug Co. No. 126,420; Aug. 26; v. 265; p. 628.
 Mouth-wash. Dr. T. J. King-Clarence W. King, D. D. S. No. 126,438; Aug. 26; v. 265; p. 629.
 Nail-polish, Liquid. L. Carter. No. 126,305; Aug. 26; v. 265; p. 627.
 Newspaper-section. Star Company. No. 126,487; Aug. 26; v. 265; p. 630.
 Oil for saturating, softening purposes, cotton, wool, and silk. Stanley D. Subera Chemical Co. No. 126,492; Aug. 26; v. 265; p. 630.
 Oil, Growing and pressing hair. M. Riehl & Co. No. 126,341; Aug. 19; v. 265; p. 451.
 Oil, Salad. H. G. Makris. No. 126,314; Aug. 19; v. 265; p. 453.
 Oils, Lubricating. The Schofield Oil Co. Nos. 126,475-6; Aug. 26; v. 265; p. 630.
 Ointment for certain named affections and diseases. W. H. Whitmore. No. 126,502; Aug. 26; v. 265; p. 631.
 Ointment for diseases of the skin. W. Ludden. No. 126,448; Aug. 26; v. 265; p. 629.
 Oleomargarin. American Butterline Co. No. 126,236; Aug. 19; v. 265; p. 451.
 Oleomargarin. Miami Butterline Co. No. 126,315; Aug. 19; v. 265; p. 453.
 Oleomargarin. Otto F. Stifel's Union Brewing Company. No. 126,358; Aug. 19; v. 265; p. 454.
 Onions, Dry Bermuda. California Vegetable Union. No. 126,393; Aug. 26; v. 265; p. 627.
 Paint and varnish, Ready-mixed. William Call Bitmo Company. No. 126,245; Aug. 19; v. 265; p. 451.
 Paints and painting material, Certain named. C. R. Cook Paint Company. No. 126,265; Aug. 19; v. 265; p. 452.
 Painters' and decorators' tools and supplies. Ridgely Trimmer Company. No. 126,342; Aug. 19; v. 265; p. 454.
 Pallets, spatulas, knives. John Russell Cutlery Company. No. 126,472; Aug. 26; v. 265; p. 630.
 Paper and cardboard. Eastern Manufacturing Company. No. 126,270; Aug. 19; v. 265; p. 452.
 Paper and cloth, Abrasive. Manning Abrasive Company. No. 126,451; Aug. 26; v. 265; p. 629.
 Paper bags. Wortendyke Manufacturing Company. No. 126,372; Aug. 19; v. 265; p. 455.
 Paper, Toilet. Oswego River Paper Mills. No. 126,450; Aug. 26; v. 265; p. 629.
 Paper, Writing and printing. Charles Drury Jacobs. No. 126,296; Aug. 19; v. 265; p. 453.
 Paper, Writing and printing. The Whitaker Paper Company. No. 126,501; Aug. 26; v. 265; p. 631.
 Paracel and umbrella tips, handles, &c. Cellinold Company. Nos. 126,257-9; Aug. 19; v. 265; p. 451.
 Pencil, penholders, Lead. Eagle Pencil Company. No. 126,269; Aug. 19; v. 265; p. 452.
 Perfumery. United Drug Company. Nos. 126,495-6; Aug. 26; v. 265; p. 630.
 Perfumes. F. K. Smith. No. 126,483; Aug. 26; v. 265; p. 630.
 Phonographs. The Starr Piano Company. No. 126,488; Aug. 26; v. 265; p. 630.
 Phonographs, Cabinet. Music Master Co. No. 126,321; Aug. 19; v. 265; p. 453.
 Piece goods. Lesher, Whitman & Co. No. 126,308; Aug. 19; v. 265; p. 453.
 Plaster, Medicinal. Pneumo-Phthysine Chemical Company. No. 126,486; Aug. 26; v. 265; p. 630.
 Plaster of Paris for dental, &c., purposes. H. B. Wiggin's Sons Company. No. 126,271; Aug. 19; v. 265; p. 453.
 Polishing and cleaning liquid. L. A. Block. No. 126,249; Aug. 19; v. 265; p. 451.
 Potato chips. W. Croft. No. 126,268; Aug. 19; v. 265; p. 452.
 Powder-puffs. Atterley Company. No. 126,380; Aug. 26; v. 265; p. 627.

Powder, Toilet and bath. Pacific Coast Borax Company. No. 126,461; Aug. 26; v. 265; p. 629.
 Powders, Face and talcum. Peninsula Chemical Co. No. 126,463; Aug. 26; v. 265; p. 629.
 Powders, Toilet. The Palmolive Company. No. 126,462; Aug. 26; v. 265; p. 629.
 Preparation for destroying rats, bedbugs, &c. Common Sense Manufacturing Co. No. 126,283; Aug. 19; v. 265; p. 452.
 Preparation for destroying worms of horses, &c. poultry prescription, &c. Dr. L. D. Le Gier Medicine Co. No. 126,444; Aug. 26; v. 265; p. 629.
 Preparation for indigestion, &c. Dr. T. J. Halle & Company. No. 126,428; Aug. 26; v. 265; p. 628.
 Preparation for the treatment of all lung troubles, &c. M. L. Austin. No. 126,381; Aug. 26; v. 265; p. 627.
 Preparation for treatment of lung and throat affections. J. C. Ayer Co. No. 126,386; Aug. 26; v. 265; p. 627.
 Paints and publications. Certain named. Engineering Magazine Company. No. 126,228; Aug. 6; v. 265; p. 141.
 Publication, Monthly. Straus Brothers Company. No. 126,401; Aug. 26; v. 265; p. 630.
 Publication, Monthly. W. T. Welisch & Co. No. 126,499; Aug. 26; v. 265; p. 631.
 Receipts, Certain named. Clinton Elliott. No. 126,272; Aug. 19; v. 265; p. 452.
 Refrigerators. Alaska Refrigerator Company. No. 126,233; Aug. 19; v. 265; p. 451.
 Refrigerators. Simmons Hardware Company. No. 126,346; Aug. 10; v. 265; p. 454.
 Remedy, Headache. F. Stephens. No. 126,356; Aug. 19; v. 265; p. 454.
 Roofing compound. Insulating materials Company. No. 126,204; Aug. 19; v. 265; p. 453.
 Roofing and building papers. Composition. Standard Paint Company. No. 126,355; Aug. 19; v. 265; p. 454.
 Rubber goods. Patches for repairing inner tubes, tire-rasings, and other. P. Hoerr. No. 126,231; Aug. 12; v. 265; p. 301.
 Sales-cards. C. H. Gernert. No. 126,423; Aug. 26; v. 265; p. 628.
 Salve, Healing. S. Koch. No. 126,439; Aug. 26; v. 265; p. 629.
 Salve or ointment for felons, &c. M. E. Lurger. No. 126,449; Aug. 26; v. 265; p. 629.
 Shoes, Children's play leather. L. B. Evans' Son Company. No. 126,415; Aug. 26; v. 265; p. 628.
 Shoes, Ladies' and misses'. Helming-McKenzie Shoe Company. No. 126,287; Aug. 19; v. 265; p. 452.
 Shoes, Men's leather. Veterans Shoe Company. No. 126,497; Aug. 26; v. 265; p. 630.
 Shortening compound, &c. The N. K. Hairbanks Company. No. 126,274; Aug. 19; v. 265; p. 452.
 Shortening, Vegetable. Edible Oil Co. No. 126,271; Aug. 19; v. 265; p. 452.
 Silk piece goods. Henri Gutmann Silks Corporation. No. 126,427; Aug. 26; v. 265; p. 628.
 Silver-polish. Philadelphia Specialty Co. No. 126,464; Aug. 26; v. 265; p. 629.
 Skirts, underskirts, dresses. Silfstein Bros. No. 126,481; Aug. 26; v. 265; p. 630.
 Snap and placket fasteners. Federal Snap Fastener Corporation. No. 126,416-18; Aug. 26; v. 265; p. 628.
 Soap. Lahoud Soap Products Company. No. 126,442; Aug. 26; v. 265; p. 629.
 Soap, Toilet. A. S. Hinds. No. 126,432; Aug. 26; v. 265; p. 628.
 Soaps. C. G. Moller. No. 126,454; Aug. 26; v. 265; p. 629.

Soaps, Perfumed. Crown Perfumery Company. No. 126,406; Aug. 26; v. 265; p. 628.
 Soot-dissolving powder. Northern Chemical Works. No. 126,457; Aug. 26; v. 265; p. 629.
 Sound-records, talking-machines, phonographs, &c. Otto Heinemann Phonograph Supply Co. No. 126,431; Aug. 26; v. 265; p. 628.
 Spark-plugs. A. F. Siebert. No. 126,479; Aug. 26; v. 265; p. 630.
 Spices, Whole, ground, and mixed. M. P. Kuczor & Co. No. 126,307; Aug. 19; v. 265; p. 453.
 Spraying trees, plants, &c. Machines for. The Deming Company. No. 126,410; Aug. 26; v. 265; p. 628.
 Tablets and compound, Washing. Delbare Manufacturing Co. No. 126,408; Aug. 26; v. 265; p. 628.
 Tablets, Dyspepsia. A. J. Filler. No. 126,419; Aug. 26; v. 265; p. 628.
 Tableware of precious or plated metals. John Russell Cutlery Company. No. 126,473; Aug. 26; v. 265; p. 630.
 Teas. Rely-Taylor Company. No. 126,340; Aug. 19; v. 265; p. 454.
 Textile-industry machinery, Certain named. Curtis & Marble Machine Co. No. 126,407; Aug. 26; v. 265; p. 628.
 Thread-waxing compound. The Ceroxylon Company. No. 126,399; Aug. 26; v. 265; p. 627.
 Tires, Pneumatic. Kelly-Springfield Tire Company. No. 126,302; Aug. 19; v. 265; p. 453.
 Toilet preparations. O. E. Schrock. No. 126,477; Aug. 26; v. 265; p. 630.
 Toilet preparations, Certain named. Harriet Hubbard Ayer. No. 126,382-4; Aug. 26; v. 265; p. 627.
 Tonic and medicinal preparation, General. J. C. Ayer Co. No. 126,387; Aug. 26; v. 265; p. 627.
 Tonic and system-purifier, General. C. M. Galles. No. 126,283; Aug. 19; v. 265; p. 452.
 Tonic, Laxative. Blackburn Products Co. No. 126,247; Aug. 19; v. 265; p. 451.
 Tonic, Medicinal. Blackburn Products Co. No. 126,240; Aug. 19; v. 265; p. 451.
 Toys and sporting goods, Certain named. A. G. Spalding & Bros. No. 126,351; Aug. 19; v. 265; p. 454.
 Toys, Certain named. Zadek Feldstein Co. No. 126,373; Aug. 19; v. 265; p. 455.
 Tractors and parts thereof. The Cleveland Tractor Company. No. 126,401; Aug. 26; v. 265; p. 627.
 Trunks. National Vender Products Company. No. 126,323; Aug. 19; v. 265; p. 453.
 Trunks, hand-bags, &c. O. Kluge. No. 126,305; Aug. 19; v. 265; p. 453.
 Varnishes, paints, japans, paint-driers. Standard Cooper-Bell Co. No. 126,354; Aug. 19; v. 265; p. 454.
 Watches, clocks, &c. The Celluloid Company. Nos. 126,396-8; Aug. 26; v. 265; p. 627.
 Water. Natural spring table. A. A. Busch, Jr. No. 126,392; Aug. 26; v. 265; p. 627.
 Water-softening compound. Sierra Chemical Company. No. 126,480; Aug. 26; v. 265; p. 630.
 Waterproof compound for cloth. Erwa Chemical Manufacturing Company. No. 126,414; Aug. 26; v. 265; p. 628.
 Waterproofed fabrics. The Cravenette Co., E. S. A. No. 126,403; Aug. 26; v. 265; p. 627.
 Was and certain named vegetable waxes. Paraffin. J. C. Francesconi & Company. No. 126,278; Aug. 19; v. 265; p. 452.
 Wheels and cotton bolls, Felt. James H. Rhodes & Company. No. 126,470; Aug. 26; v. 265; p. 630.
 Whisky. G. S. Nicholas & Son. No. 126,326; Aug. 19; v. 265; p. 454.

ALPHABETICAL LIST OF LABELS.

"Anahelm Gloriana." (For Extra Fancy Valencia.) Anaheim Orange & Lemon Association. No. 21,378; Aug. 5; v. 265; p. 143.
 "Arlington." (For Canned Tomatoes.) Arlington Cannery. No. 21,383; Aug. 5; v. 265; p. 143.
 "Bishop Art Linoleums." (For Linoleums.) The George W. Hanson Company. No. 21,418; Aug. 5; v. 265; p. 144.
 "Bloss of Youth." (For a Facial Liquid Rouge.) M. Incarbene. No. 21,456; Aug. 12; v. 265; p. 303.
 "Boedeker's Superior Grade Wine." (For a Beverage.) Boedeker & Co. No. 21,392; Aug. 5; v. 265; p. 143.
 "Brazil Nuts in Cream." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,457; Aug. 12; v. 265; p. 303.
 "Bronchiline." (For a Medical Compound—Namely, Bronchiline.) V. L. Hahn and Sons. No. 21,389; Aug. 5; v. 265; p. 143.
 "Brunswick Chocolates." (For Chocolates.) General Candy Co. No. 21,417; Aug. 5; v. 265; p. 144.
 "Colonial Chocolates." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,458; Aug. 12; v. 265; p. 303.
 "De Luxe." (For Oleomargarin.) Edson Brothers. No. 21,415; Aug. 5; v. 265; p. 144.

"Dead Shot Non-Poisonous Insecticide." (For a Powder for Killing and Destroying All Kinds of Insects.) Dead Shot Chemical Company. No. 21,411; Aug. 5; v. 265; p. 143.
 "Dead Shot Rat Killer." (For a Powder for Killing and Destroying Rats.) Dead Shot Chemical Company. No. 21,412; Aug. 5; v. 265; p. 144.
 "Delicia." (For Oranges.) Anaheim Orange & Lemon Association. No. 21,379; Aug. 5; v. 265; p. 143.
 "Delicia, The Name Tells." (For Corned Beef.) Baker Packing Company. No. 21,386; Aug. 5; v. 265; p. 143.
 "Dexter's Mother's Bread." (For Bread.) E. A. Dexter. No. 21,413; Aug. 5; v. 265; p. 144.
 "Don Julian." (For Cigars.) Gradiaz-Angels & Co., Inc. No. 21,423; Aug. 5; v. 265; p. 144.
 "Duro-lac." (For a Polishing and Cleaning Compound for Automobiles, Furniture, and All Varnished or Enamelled Surfaces Requiring a High Polish.) F. B. Webster. No. 21,484; Aug. 12; v. 265; p. 304.
 "Eagle." (For Gasoline.) Hammer & Co. No. 21,427; Aug. 5; v. 265; p. 144.
 "Eagle." (For Kerosene.) Hammer & Co. No. 21,428; Aug. 5; v. 265; p. 144.
 "Eagle." (For Olive-Oil.) Hammer & Co. No. 21,429; Aug. 5; v. 265; p. 144.

ALPHABETICAL LIST OF LABELS.

"Eagle." (For Salad-Oil.) Hammer & Co. No. 21,430; Aug. 5; v. 265; p. 144.
 "84." (For Cigars and Tobacco.) Hudson County Tobacco Co. No. 21,434; Aug. 12; v. 265; p. 303.
 "Epicure." (For Valencia Oranges.) Santiago Orange Growers Ass'n. No. 21,476; Aug. 12; v. 265; p. 304.
 "Everite Brand." (For Valencia Oranges.) Santiago Orange Growers Association. No. 21,475; Aug. 12; v. 265; p. 304.
 "Extra Choice California Peaches Heavy Syrup." (For Peaches.) Alfred Putnam & Company. No. 21,375; Aug. 5; v. 265; p. 143.
 "Fairie Dream." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,453; Aug. 12; v. 265; p. 303.
 "Favorita." (For Oranges.) Anaheim Orange & Lemon Association. No. 21,380; Aug. 5; v. 265; p. 143.
 "Florida Mellow Fruit Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,399; Aug. 5; v. 265; p. 143.
 "Florida Peppermint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,407; Aug. 5; v. 265; p. 143.
 "Florida Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,400; Aug. 5; v. 265; p. 143.
 "Ford Overcoat." (For Men's Overcoats.) M. Golland. No. 21,425; Aug. 5; v. 265; p. 144.
 "Gen Co Brand." (For Crushed Fruits—Namely, Raspberry.) General Fruit & Syrup Co. No. 21,424; Aug. 5; v. 265; p. 144.
 "Grivas Special Sauce." (For Sauce.) J. B. Grivas. No. 21,422; Aug. 5; v. 265; p. 144.
 "Guar-n-teed." (For Bread.) Pioneer Paper Company. No. 21,471; Aug. 12; v. 265; p. 303.
 "Hair-Zo." (For Hair-Tonic.) W. H. Kelly. No. 21,440; Aug. 12; v. 265; p. 303.
 "Hard Center Chocolate." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,454; Aug. 12; v. 265; p. 303.
 "Helges Fancy Blend Coffee." (For Coffee.) Helges-Buck Company. No. 21,432; Aug. 12; v. 265; p. 303.
 "Hold-Tight." (For Hair-Waxers.) A. Klar. No. 21,441; Aug. 12; v. 265; p. 303.
 "International Brand." (For Macaroni.) Buckley Macaroni Company, Inc. No. 21,393; Aug. 5; v. 265; p. 143.
 "Iroquois Indian Head." (For a Non-Intoxicating Beverage.) Indian Head Products Corporation. No. 21,437; Aug. 12; v. 265; p. 303.
 "Iroquois Indian Head." (For Non-Intoxicating Beverage.) Iroquois Beverage Co. No. 21,438; Aug. 12; v. 265; p. 303.
 "Joseph Major." (For a Preparation for Spanish Influenza, La Grippe, Lung, and Blood.) J. Major. No. 21,452; Aug. 12; v. 265; p. 303.
 "Juicy Fruit." (For Non-Alcoholic Beverages.) The Bee Bee Confection Co. No. 21,387; Aug. 5; v. 265; p. 143.
 "Kant-Rost Spring Lubricant." (For Lubricants.) Cee & Vee Products Co. No. 21,396; Aug. 5; v. 265; p. 143.
 "Ke-O-Ka Nerve and Blood Remedy." (For a Nerve and Blood Remedy.) E. M. Leach. No. 21,451; Aug. 12; v. 265; p. 303.
 "Kenilworth." (For Canned Sardines.) Steel Packing Co. No. 21,480; Aug. 12; v. 265; p. 304.
 "Kentucky Fruit-Frappe Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,406; Aug. 5; v. 265; p. 143.
 "Kentucky Peppermint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,404; Aug. 5; v. 265; p. 143.
 "Kentucky Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,405; Aug. 5; v. 265; p. 143.
 "Kolb's Scotch Loaf." (For Bread.) G. O. Kolb. No. 21,442; Aug. 12; v. 265; p. 303.
 "Koolmotor." (For Lubricating-Oil.) The Lubric Oil Company. No. 21,446; Aug. 12; v. 265; p. 303.
 "La Libertad." (For Tomato Paste with Basilico.) La Sierra Heights Canning Co. No. 21,443; Aug. 12; v. 265; p. 303.
 "La Preferita." (For Musical-Instrument Strings Made of Gut.) E. & O. Marl. No. 21,435; Aug. 12; v. 265; p. 303.
 "La Ta'O." (For Hair Remedy.) N. F. Peppas. No. 21,466; Aug. 12; v. 265; p. 303.
 "Lata Blanca." (For a Preparation Consisting of Pork Sausage and Cereal Preserved in Liquid.) Armour and Company. No. 21,384; Aug. 5; v. 265; p. 143.
 "Liberty." (For Cantaloupes.) Cohen, Mann & Kahn. No. 21,398; Aug. 5; v. 265; p. 143.
 "Lortie's Laundry Marvel The Wonder Washing Powder." (For a Washing-Powder.) C. & H. Lortie. No. 21,445; Aug. 12; v. 265; p. 303.
 "Luscious." (For Oranges.) Pasadena Orange Growers' Association. No. 21,469; Aug. 12; v. 265; p. 303.
 "MacDonald's East Indian Tea." (For Tea.) MacDonald & Co. No. 21,448; Aug. 12; v. 265; p. 303.
 "Mary James Deares." (For Candy.) Charles N. Miller Company. No. 21,397; Aug. 5; v. 265; p. 143.
 "Meritoria." (For Valencia.) Anaheim Orange & Lemon Association. No. 21,377; Aug. 5; v. 265; p. 143.

"Milady." (For Human-Hair Nets.) N. Seligman Merchandise Co., Inc. No. 21,478; Aug. 12; v. 265; p. 304.
 "Military Biplane." (For Toy Airplanes, Model Airplanes, and Scale Models of Airplanes.) Lawrence Airplane Model and Supply Company. No. 21,444; Aug. 12; v. 265; p. 303.
 "Million \$ Hair Tonic." (For Hair Tonic.) L. Auerbach. No. 21,385; Aug. 5; v. 265; p. 143.
 "Mirro-Crepe." (For Blouses.) The Blousemakers, Inc. No. 21,390; Aug. 5; v. 265; p. 143.
 "Monogram N° 3." (For Cigars.) M. Sackheim. No. 21,474; Aug. 12; v. 265; p. 304.
 "Moon Shine Magic Cleaner." (For Cleaning Fluid.) C. E. Murphy. No. 21,459; Aug. 12; v. 265; p. 303.
 "Movie." (For Building-Blocks and Construction Toys.) George Borgfeldt & Co. No. 21,419; Aug. 5; v. 265; p. 144.
 "Naco." (For a Preparation for Whitening or Bleaching Clothes and other Articles of Fabric, &c.) Naco Products Co. No. 21,460; Aug. 12; v. 265; p. 303.
 "National Pride." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,455; Aug. 12; v. 265; p. 303.
 "Ohio Club." (For Ginger-Ale.) The Ohio Beverage Company. No. 21,461; Aug. 12; v. 265; p. 303.
 "Owl Clips." (For Paper-Clips.) Owl Supply Company. No. 21,462; Aug. 12; v. 265; p. 303.
 "Os-Wa." (For Charged Table-Water.) A. D. Shepard. No. 21,482; Aug. 12; v. 265; p. 304.
 "Oxnard." (For Lemons.) Oxnard Citrus Ass'n. No. 21,463; Aug. 12; v. 265; p. 303.
 "Parasilk." (For Barber Head-Rest Paper.) The Paper Specialty Co. No. 21,465; Aug. 12; v. 265; p. 303.
 "Paaco." (For Greases.) Pan-America Supply Company, Inc. No. 21,464; Aug. 12; v. 265; p. 303.
 "Peppermint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,403; Aug. 5; v. 265; p. 143.
 "Perfect Sure-Fit Fastener." (For Snap-Buttons or Garment-Fasteners.) E. Gurney. No. 21,426; Aug. 5; v. 265; p. 144.
 "Photo Flowers." (For Folders Containing Photographs of Flowers.) C. W. Johnson. No. 21,439; Aug. 12; v. 265; p. 303.
 "Ply Brand Macaroni." (For Macaroni.) Massaro Macaroni Company. No. 21,450; Aug. 12; v. 265; p. 303.
 "Planters Peanut Peanuts." (For Peanuts.) Planters Nut & Chocolate Company. No. 21,467-8; Aug. 12; v. 265; p. 303.
 "Platite." (For Compositions for Fitting False Teeth.) Anti-Pyorrhea Chemical Company. No. 21,382; Aug. 5; v. 265; p. 143.
 "Polly-Ann." (For Bread.) Pioneer Paper Company. No. 21,470; Aug. 12; v. 265; p. 303.
 "Propyl-lac-tic Penetrator Hair Brush." (For Hair-Brushes.) Florence Manufacturing Company. No. 21,416; Aug. 5; v. 265; p. 144.
 "Rob Roy." (For Tea.) The Donald Company. No. 21,414; Aug. 5; v. 265; p. 144.
 "Rob-Knot." (For a Powdered Washing Compound.) G. C. Wright. No. 21,466; Aug. 12; v. 265; p. 304.
 "Sage and Wildroots." (For a Hair-Tonic Preparation.) (For a Hair-Tonic Preparation.) No. 21,370; Aug. 5; v. 265; p. 143.
 "Scout." (For Coffee.) Howard & Casey Co. No. 21,431; Aug. 12; v. 265; p. 303.
 "Shado-Crepe." (For Blouses.) The Blousemakers, Inc. No. 21,391; Aug. 5; v. 265; p. 143.
 "Sonia." (For Valencia.) Anaheim Orange & Lemon Association. No. 21,381; Aug. 5; v. 265; p. 143.
 "Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,402; Aug. 5; v. 265; p. 143.
 "Spearmint Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,405; Aug. 5; v. 265; p. 143.
 "Spot Slide." (For Garment-Spotter.) J. F. Benedict. No. 21,388; Aug. 5; v. 265; p. 143.
 "Steel Brand." (For Canned Sardines.) Steel Packing Co. No. 21,477; Aug. 12; v. 265; p. 304.
 "Steel Brand." (For Canned Spinach.) Steel Packing Co. No. 21,479; Aug. 12; v. 265; p. 304.
 "Sunkist." (For Candy.) Sunkist Candy Co. No. 21,481; Aug. 12; v. 265; p. 304.
 "Sunset Chocolates." (For Chocolates.) Huhr, Pfaff & Co. No. 21,394; Aug. 5; v. 265; p. 143.
 "Sunshine Special." (For Oranges.) H. G. Rooke. No. 21,472; Aug. 12; v. 265; p. 304.
 "Sunshine Special." (For Fresh Grapes.) B. O. Rooke. No. 21,473; Aug. 12; v. 265; p. 304.
 "Supero." (For Lubricating-Oil.) The Lubric Oil Company. No. 21,447; Aug. 12; v. 265; p. 303.
 "Talked of Package." (For Chocolate Candy.) Milwaukee Paper Box Company. No. 21,456; Aug. 12; v. 265; p. 303.
 "Thurber Brand Asparagus." (For Asparagus.) Alfred Putnam & Company. No. 21,372; Aug. 5; v. 265; p. 143.
 "Thurber California Style Bartlett Pears." (For Pears.) Alfred Putnam & Company. No. 21,374; Aug. 5; v. 265; p. 143.
 "Trench Tubes." (For Trench Tubes.) Davis & Geck, Inc. No. 21,410; Aug. 5; v. 265; p. 143.
 "Vanity Fair." (For a Non-Alcoholic Beverage.) D. N. Goldberg. No. 21,420; Aug. 5; v. 265; p. 144.

ALPHABETICAL LIST OF LABELS.

- "Vellner's Albiol." (For Soap.) E. Vellner. No. 21,453; Aug. 12; v. 265; p. 304.
 "Victor." (For Non-Intoxicating Beverages.) F. A. Maddam. No. 21,449; Aug. 12; v. 265; p. 303.
 "Victory Punch." (For Victory Punch Tablets.) S. M. Hoyer. No. 21,433; Aug. 12; v. 265; p. 303.
 "Virginia Chocolates." (For Chocolates.) Buhr, Pfaff & Co. No. 21,395; Aug. 5; v. 265; p. 143.
 "White Label." (For Non-Intoxicating Beverages.) Greensburg Brewing Company. No. 21,421; Aug. 5; v. 265; p. 144.
 "White Lily Chewing Gum." (For Chewing-Gum.) A. Colker. No. 21,401; Aug. 5; v. 265; p. 143.
 "Whittier Brand." (For Oranges.) Whittier Citrus Association. No. 21,455; Aug. 12; v. 265; p. 304.
 "Windham Corn." (For Corn.) Alfred Putnam & Company. No. 21,373; Aug. 5; v. 265; p. 143.
 "Yucca Brand Pink Meat Cantaloupes." (For Cantaloupes.) Crutchfield & Woolfolk. No. 21,409; Aug. 5; v. 265; p. 143.
 "Yukon's Best." (For Pancake-Flour.) Yukon Mill & Grain Co. No. 21,457; Aug. 12; v. 265; p. 304.

ALPHABETICAL LIST OF PRINTS.

- "Always Writes All Ways." (For Pencils and Fountain Pens.) W. A. Sheaffer Pen Company. No. 5,162; Aug. 12; v. 265; p. 304.
 "Ball Bearings." (For Ball-Bearings.) R. F. Rogers. No. 5,153; Aug. 12; v. 265; p. 304.
 "Bar of Bars." (For Nut and Fruit Bars.) The Nut House Incorporated. No. 5,151; Aug. 12; v. 265; p. 304.
 "Black Cat." (For Furniture.) C. S. Reuter. No. 5,152; Aug. 12; v. 265; p. 304.
 "Day-Night." (For Watches.) Knickerbocker Watch Co. No. 5,148; Aug. 5; v. 265; p. 144.
 "Daylite." (For Watches.) Knickerbocker Watch Co. No. 5,147; Aug. 5; v. 265; p. 144.
 "Gooch's Best Flour." (For Bread.) Gooch Milling & Elevator Co. No. 5,145; Aug. 5; v. 265; p. 144.
 "Gooch's Best Self Rising Pancake-Flour." (For Pancake-Flour.) Gooch Milling & Elevator Co. No. 5,146; Aug. 5; v. 265; p. 144.
 "It's Great, Boys, To Climb Into B. V. D." (For Athletic Underwear.) The B. V. D. Company. No. 5,138; Aug. 5; v. 265; p. 144.
 "Jug-L-Ball." (For a Game.) E. Carraine. No. 5,142; Aug. 5; v. 265; p. 144.
 "Let Us Place You Here." (For Flour Mills.) Anglo-American Mill Company. No. 5,136; Aug. 5; v. 265; p. 144.
 "Mentholyptine." (For Medicinal Preparations.) L. W. Hall. No. 5,149; Aug. 5; v. 265; p. 144.
 "Menu." (For Cream of Wheat Breakfast Food.) Cream of Wheat Co. No. 5,144; Aug. 5; v. 265; p. 144.
 "Mr. Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,158; Aug. 12; v. 265; p. 304.
 "Mrs. Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,159; Aug. 12; v. 265; p. 304.
 "Quality Without Extravagance—Style Without Experiment." (For Footwear.) George W. Baker Shoe Company. No. 5,141; Aug. 5; v. 265; p. 144.
 "Ropeconomy." (For Ropes and Cordage.) Whitlock Cordage Co. No. 5,163; Aug. 12; v. 265; p. 304.
 "Save Your Spokes—A Sure Cure for Loose Spokes in Auto, Buggy and Wagon Wheels—Tighten Your Spokes Without Removing Your Rims or Tires—Any One Can Use—No Tools Necessary." (For Spoke Compound.) A-C Manufacturing Co. No. 5,135; Aug. 5; v. 265; p. 144.
 "Take It From Me, Insist On B. V. D!" (For Athletic Underwear.) The B. V. D. Company. No. 5,139; Aug. 5; v. 265; p. 144.
 "The Charm of Youthful Colors." (For Dye-Soap.) Sonbeam Chemical Company. No. 5,160; Aug. 12; v. 265; p. 304.
 "The Chief Nut." (For Nut and Fruit Bars.) The Nut House Incorporated. No. 5,150; Aug. 12; v. 265; p. 304.
 "The Thrift Family." (For Clothing.) The Samuel Stores, Inc. No. 5,155; Aug. 12; v. 265; p. 304.
 "Tommy Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,156; Aug. 12; v. 265; p. 304.
 "Tucio Union Suits." (For Union-Suits.) Troy Underwear Co. Inc. No. 5,161; Aug. 12; v. 265; p. 304.
 "Vera Thrift." (For Clothing.) The Samuel Stores, Inc. No. 5,157; Aug. 12; v. 265; p. 304.
 "Welcome Home, Boys." (For Cream of Wheat Breakfast Food.) Cream of Wheat Co. No. 5,143; Aug. 5; v. 265; p. 144.
 "Yes, dear, I asked for B. V. D. and here's the label." (For Athletic Underwear.) The B. V. D. Company. No. 5,140; Aug. 5; v. 265; p. 144.
 "Yes, Sir! That Label Guarantees Your B. V. D. Quality." (For Athletic Underwear.) The B. V. D. Company. No. 5,137; Aug. 5; v. 265; p. 144.

DISCLAIMERS.

Cinematograph target apparatus. F. W. Weeks. No. 1,197,567; date of patent Sept. 5, 1916; disclaimer filed Aug. 7, 1919; v. 265; p. 311.

Circuit-breaker. R. Wolfberg and S. C. Smith. No. 1,253,761; date of patent Jan. 15, 1918; disclaimer filed Aug. 2, 1919; v. 265; p. 151.

CLASSIFICATION OF PATENTS

AUGUST, 1919.

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 6: 1,312,557	13— 18: 1,314,100	21— 68: 1,313,960	24— 73: 1,314,114	33— 12: 1,313,996	40—145: 2: 1,312,903
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36: 1,314,071	19: 1,313,206	72: 1,313,913	85: 1,312,421	45: 1,313,984	41: 1,313,723
47: 1,312,026	26: 1,314,710	73: 1,313,988	108: 1,313,996	51: 1,313,549	42: 1,313,233
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1,312,954		28: 1,312,782
47: 1,312,567		1,312,763
50: 1,313,098		29: 1,312,004
51: 1,313,197		1,312,764
53: 1,312,081		1,312,765
54: 4: 1,313,074		1,312,840
1,314,723		1,313,300
54: 5: 1,313,633		1,313,926
59: 1,313,472		1,313,940
68: 1,312,111		36: 1,313,112
1,313,882		1,313,803
1,313,655		1,313,088
1,313,958		1,313,298
70: 1,312,040		38: 1,313,129
1,312,815		39: 1,312,651
1,314,476		1,313,930
1,314,477		43: 1,313,801
70: 1: 1,312,718		51: 1,312,131
2: 1,311,980		60: 1,312,423
1,313,403		1,314,070
21: 1,313,145	103- 51: 1,312,825	1,313,245
122: 1,311,932		62: 1,313,713
2: 1,313,964		63: R. 14,707
5: 1,313,234		67: 1,313,835
6: 1,313,974		73: 1,314,147
1,313,973		75: 1,313,350
7: 1,313,963		77: 1,314,448
5: 1,314,115		79: 1,312,962
39: 1,312,370		79: 1,312,442
60: 1,314,192		7: 1,313,253
61: 1,313,248		20: 1,313,091
80: 1,312,780		44: 1,313,486
94: 1,313,898		52: 1,314,016
94- 1: 1,312,518	104- 92: 1,314,010	117: 1,312,357
11: 1,314,278		263: 1,313,193
38: 1,312,396		14: R. 14,706
39: 1,313,573		1,313,302
2: 1,312,064		1,312,715
9: 1,312,052		35: 1,312,218
12: 5: 1,313,564		49: 1,311,928
31: 1,313,285		104: 1,313,358
32: 1,312,122		150: 1,314,202
42: 1,314,000		155: 1,312,417
64: 1,313,872		174: 1,311,573
75: 1,312,289		198: 1,314,183
86: 1,312,671		230: 1,312,726
150: 1,312,875		243: 1,311,906
97: 1,312,060		248: 1,313,361
1,313,366		250: 1,314,045
4: 1,313,311		281: 1,312,463
10: 1,312,418		315: 1,313,531
12: 1,314,313		341: 1,314,375
1,314,380		404: 1,312,134
14: 1,314,365		410: 1,313,106
26: 1,313,194		1,313,128
34: 1,313,242		411: 1,313,803
36: 1,313,802		9: 1,312,871
1,314,177		10: 1,312,853
42: 1,313,200		
46: 1,314,307		
64: 1,313,811		
69: 1,314,038		
70: 1,313,281		

175- 284: 1,312,550	184- 58: 1,312,650	204- 64: 1,312,480	215- 62: 1,312,910	230- 11: 1,312,049	242- 77: 1,312,067
293: 1,312,580	70: 1,312,585	1,312,590	65: 1,312,400	14: 1,312,707	91: 1,311,956
1,312,591	108: 1,312,595	1,312,600	80: 1,312,913	17: 1,312,579	96: 1,312,579
294: 1,312,598	37: 1,312,623	1,312,610	85: 1,312,264	22: 1,312,700	107: 1,312,645
1,312,599	49: 1,312,641	1,312,620	119: 1,312,877	24: 1,312,099	131: 1,312,447
1,312,600	10: 1,312,689	1,312,630	11: 1,312,772	32: 1,312,160	1,312,919
1,312,601	40: 1,312,728	1,312,640	3: 1,312,399	33: 1,312,314	128: 1,312,054
1,312,602	56: 1,312,500	1,312,650	6: 1,312,399	1: 1,312,354	129: 1,312,173
1,312,603	60: 1,312,591	1,312,660	12: 1,312,468	2: 1,312,354	1,312,911
1,312,604	1: 1,311,900	1,312,670	22: 1,312,317	11: 1,312,333	1,312,911
1,312,605	1,312,680	1,312,680	28: 1,312,238	34: 1,311,952	2: 1,312,900
1,312,606	1,312,690	1,312,690	29: 1,312,337	1: 1,311,979	1,312,910
1,312,607	1,312,700	1,312,700	39: 1,312,572	2: 1,311,984	1,312,910
1,312,608	1,312,710	1,312,710	56: 1,312,679	44: 1,312,747	1,312,910
1,312,609	1,312,720	1,312,720	60: 1,312,636	50: 1,312,078	1,312,910
1,312,610	1,312,730	1,312,730	13: 1,312,942	59: 1,312,018	1,312,910
1,312,611	1,312,740	1,312,740	17: 1,312,942	1,312,018	1,312,910
1,312,612	1,312,750	1,312,750	21: 1,312,539	1,312,018	1,312,910
1,312,613	1,312,760	1,312,760	4: 1,312,445	1,312,018	1,312,910
1,312,614	1,312,770	1,312,770	6: 1,312,925	1,312,018	1,312,910
1,312,615	1,312,780	1,312,780	8: 1,312,572	1,312,018	1,312,910
1,312,616	1,312,790	1,312,790	10: 1,312,641	1,312,018	1,312,910
1,312,617	1,312,800	1,312,800	12: 1,312,254	1,312,018	1,312,910
1,312,618	1,312,810	1,312,810	21: 1,312,270	1,312,018	1,312,910
1,312,619	1,312,820	1,312,820	38: 1,312,347	1,312,018	1,312,910
1,312,620	1,312,830	1,312,830	100: 1,312,554	1,312,018	1,312,910
1,312,621	1,312,840	1,312,840	144: 1,312,078	1,312,018	1,312,910
1,312,622	1,312,850	1,312,850	1: 1,312,467	1,312,018	1,312,910
1,312,623	1,312,860	1,312,860	29: 1,312,519	1,312,018	1,312,910
1,312,624	1,312,870	1,312,870	38: 1,312,137	1,312,018	1,312,910
1,312,625	1,312,880	1,312,880	46: 1,312,430	1,312,018	1,312,910
1,312,626	1,312,890	1,312,890	48: 1,312,433	1,312,018	1,312,910
1,312,627	1,312,900	1,312,900	49: 1,312,296	1,312,018	1,312,910
1,312,628	1,312,910	1,312,910	8: 1,312,387	1,312,018	1,312,910
1,312,629	1,312,920	1,312,920	6: 1,312,470	1,312,018	1,312,910
1,312,630	1,312,930	1,312,930	32: 1,312,992	1,312,018	1,312,910
1,312,631	1,312,940	1,312,940	40: 1,312,587	1,312,018	1,312,910
1,312,632	1,312,950	1,312,950	41: 1,312,009	1,312,018	1,312,910
1,312,633	1,312,960	1,312,960	46: 1,312,392	1,312,018	1,312,910
1,312,634	1,312,970	1,312,970	50: 1,312,466	1,312,018	1,312,910
1,312,635	1,312,980	1,312,980	55: 1,312,626	1,312,018	1,312,910
1,312,636	1,312,990	1,312,990	57: 1,312,269	1,312,018	1,312,910
1,312,637	1,313,000	1,313,000	71: 1,312,022	1,312,018	1,312,910
1,312,638	1,313,010	1,313,010	115: 1,311,944	1,312,018	1,312,910
1,312,639	1,313,020	1,313,020	117: 1,312,645	1,312,018	1,312,910
1,312,640	1,313,030	1,313,030	131: 1,312,024	1,312,018	1,312,910
1,312,641	1,313,040	1,313,040	156: 1,312,131	1,312,018	1,312,910
1,312,642	1,313,050	1,313,050	207: 1,312,264	1,312,018	1,312,910
1,312,643	1,313,060	1,313,060	235: 1,312,771	1,312,018	1,312,910
1,312,644	1,313,070	1,313,070	243: 1,312,412	1,312,018	1,312,910
1,312,645	1,313,080	1,313,080	250: 1,312,905	1,312,018	1,312,910
1,312,646	1,313,090	1,313,090	254: 1,312,747	1,312,018	1,312,910
1,312,647	1,313,100	1,313,100	259: 1,312,158	1,312,018	1,312,910
1,312,648	1,313,110	1,313,110	264: 1,312,310	1,312,018	1,312,910
1,312,649	1,313,120	1,313,120	265: 1,312,311	1,312,018	1,312,910
1,312,650	1,313,130	1,313,130	266: 1,312,312	1,312,018	1,312,910
1,312,651	1,313,140	1,313,140	267: 1,312,313	1,312,018	1,312,910
1,312,652	1,313,150	1,313,150	268: 1,312,314	1,312,018	1,312,910
1,312,653	1,313,160	1,313,160	269: 1,312,315	1,312,018	1,312,910
1,312,654	1,313,170	1,313,170	270: 1,312,316	1,312,018	1,312,910
1,312,655	1,313,180	1,313,180	271: 1,312,317	1,312,018	1,312,910
1,312,656	1,313,190	1,313,190	272: 1,312,318	1,312,018	1,312,910
1,312,657	1,313,200	1,313,200	273: 1,312,319	1,312,018	1,312,910
1,312,658	1,313,210	1,313,210	274: 1,312,320	1,312,018	1,312,910
1,312,659	1,313,220	1,313,220	275: 1,312,321	1,312,018	1,312,910
1,312,660	1,313,230	1,313,230	276: 1,312,322	1,312,018	1,312,910
1,312,661	1,313,240	1,313,240	277: 1,312,323	1,312,018	1,312,910
1,312,662	1,313,250	1,313,250	278: 1,312,324	1,312,018	1,312,910
1,312,663	1,313,260	1,313,260	279: 1,312,325	1,312,018	1,312,910
1,312,664	1,313,270	1,313,270	280: 1,312,326	1,312,018	1,312,910
1,312,665	1,313,280	1,313,280	281: 1,312,327	1,312,018	1,312,910
1,312,666	1,313,290	1,313,290	282: 1,312,328	1,312,018	1,312,910
1,312,667	1,313,300	1,313,300	283: 1,312,329	1,312,018	1,312,910
1,312,668	1,313,310	1,313,310	284: 1,312,330	1,312,018	1,312,910
1,312,669	1,313,320	1,313,320	285: 1,312,331	1,312,018	1,312,910
1,312,670	1,313,330	1,313,330	286: 1,312,332	1,312,018	1,312,910
1,312,671	1,313,340	1,313,340	287: 1,312,333	1,312,018	1,312,910
1,312,672	1,313,350	1,313,350	288: 1,312,334	1,312,018	1,312,910
1,312,673	1,313,360	1,313,360	289: 1,312,335	1,312,018	1,312,910
1,312,674	1,313,370	1,313,370	290: 1,312,336	1,312,018	1,312,910
1,312,675	1,313,380	1,313,380	291: 1,312,337	1,312,018	1,312,910
1,312,676	1,313,390	1,313,390	292: 1,312,338	1,312,018	1,312,910
1,312,677	1,313,400	1,313,400	293: 1,312,339	1,312,018	1,312,910
1,312,678	1,313,410	1,313,410	294: 1,312,340	1,312,018	1,312,910
1,312,679	1,313,420	1,313,420	295: 1,312,341	1,312,018	1,312,910
1,312,680	1,313,430	1,313,430	296: 1,312,342	1,312,018	1,312,910
1,312,681	1,313,440	1,313,440	297: 1,312,343	1,312,018	1,312,910
1,312,682	1,313,450	1,313,450	298: 1,312,344	1,312,018	1,312,910
1,312,683	1,313,460	1,313,460	299: 1,312,345	1,312,018	1,312,910
1,312,684	1,313,470	1,313,470	300: 1,312,346	1,312,018	1,312,910
1,312,685	1,313,480	1,313,480	301: 1,312,347	1,312,018	1,312,910
1,312,686	1,313,490	1,313,490	302: 1,312,348	1,312,018	1,312,910
1,312,687	1,313,500	1,313,500	303: 1,312,349	1,312,018	1,312,910
1,312,688	1,313,510	1,313,510	304: 1,312,350	1,312,018	1,312,910
1,312,689	1,313,520	1,313,520	305: 1,312,351	1,312,018	1,312,910
1,312,690	1,313,530	1,313,530	306: 1,312,352	1,312,018	1,312,910
1,312,691	1,313,540	1,313,540	307: 1,312,353	1,312,018	1,312,910
1,312,692	1,313,550	1,313,550	308: 1,312,354	1,312,018	1,312,910
1,312,693	1,313,560	1,313,560	309: 1,312,355	1,312,018	1,312,910
1,312,694	1,313,570	1,313,570	310: 1,312,356	1,312,018	1,312,910
1,312,695	1,313,580	1,313,580	311: 1,312,357	1,312,018	1,312,910
1,312,696	1,313,590	1,313,590	312: 1,312,358	1,312,018	1,312,910
1,312,697	1,313,600	1,313,600	313: 1,312,359	1,312,018	1,312,910
1,312,698	1,313,610	1,313,610	314: 1,312,360	1,312,018	1,312,910
1,312,699	1,313,620	1,313,620	315: 1,312,361	1,312,018	1,312,910
1,312,700	1,313,630	1,313,630	316: 1,312,362	1,312,018	1,312,910
1,312,701	1,313,640	1,313,640	317: 1,312,363	1,312,018	1,312,910
1,312,702	1,313,650	1,313,650	318: 1,312,364	1,312,018	1,312,910
1,312,703	1,313,660	1,313,660	319: 1,312,365	1,312,018	1,312,910
1,312,704	1,313,670	1,313,670	320: 1,312,366	1,312,018	1,312,910
1,312,705	1,313,680	1,313,680	321: 1,312,367	1,312,018	1,312,910
1,312,706	1,313,690	1,313,690	322: 1,312,368	1,312,018	1,312,910
1,312,707	1,313,700	1,313,700	323: 1,312,369	1,312,018	1,312,910
1,312,708	1,313,710	1,313,710	324: 1,312,370	1,312,018	1,312,910
1,312,709	1,313,720	1,313,720	325: 1,312,371	1,312,018	1,312,910
1,312,710	1,313,730	1,313,730	326: 1,312,372	1,312,018	1,312,910
1,312,711	1,313,740	1,313,740	327: 1,312,373	1,312,018	1,312,910
1,312,712	1,313,750	1,313,750	328: 1,312,374	1,312,018	1,312,910
1,312,713	1,313,760	1,313,760	329: 1,312,375	1,312,018	1,312,910
1,312,714	1,313,770	1,313,770	330: 1,312,376	1,312,018	1,312,910
1,312,715	1,313,780	1,313,780	331: 1,312,377	1,312,018	1,312,910
1,312,716	1,313,790	1,313,790	332: 1,312,378	1,312,018	1,312,910
1,312,717	1,313,800	1,313,800	333: 1,312,379	1,312,018	1,312,910
1,312,718	1,313,810	1,313,810	334: 1,312,380	1,312,018	1,312,910
1,312,719	1,313,820	1,313,820	335: 1,312,381	1,312,018	1,312,910
1,312,720	1,313,830	1,313,830	336: 1,312,382	1,312,018	1,312,910
1,312,721	1,313,840	1,313,840	337: 1,312,383	1,312,018	1,312,910
1,312,722	1,313,850	1,313,850	338: 1,312,384	1,312,018	1,31

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